

ANTI TERROR EQUIPMENT



PKI ELECTRONIC INTELLIGENCE GmbH GERMANY

Contents

Dear Customer	page	3
PKI Product Range	page	4
PKI Development	page	5
PKI Products in the Seventies and Today	page	6 - 7
Interception and Monitoring Systems	page	8 - 41
Counter Surveillance	page	42 - 51
Video and Night Vision Systems	page	52 - 94
Jamming Systems	page	95 - 105
Police, Customs and Military Equipment	page	106 - 195
Training Program	page	196 - 201

Dear Customer,

With this catalogue **PKI Electronic Intelligence GmbH** has enlarged its product range considerably. For more than 40 years we have been specialists for surveillance systems. Substantial orders from government departments reflect the worldwide requirements due to terrorist attacks. **PKI** stays abreast of these changes and has become specialized supplier for many international departments. For this reason we offer a wide range of anti-terror equipment. Now it is much easier for government departments to find and purchase discretely the necessary equipment according to their approved budgets. Mutual confidence and long-time experience is indispensable in this field. **PKI Electronic Intelligence GmbH** offers all these conditions and will meet your individual requirements and produce sample devices on request.

We hope you will find our program interesting and will be pleased to answer your enquiries.

We are looking forward to a fruitful business relation.

Your PKI-team



PKI Product Range

Professional Equipment for Emergency Aid

Intelligent Jamming Systems

**Systems for Interception and Monitoring
of IT and Radio Transmissions**

**Video and Night Vision Systems using
Image Intensifying and IR Cameras**

**Mechanical and Electronic Devices for
Police, Customs and Military Departments**

**Custom-made and Portable Devices for
Digital Audio/Video Transmission,
Receivers and Recorders**

GPS, GSM Navigation and Tracing Systems

Protective Clothing

**Systems for Optical and Wireless Detection,
Inspection and Analysis**

All Types of Devices for Counter Surveillance

X-ray Inspection Systems

Electronic Devices for Prisons

Professional Maintenance and Training Program

PKI Development

PKI Electronic Intelligence GmbH has been engaged in the development and production of surveillance systems for more than 40 years. Our main project at the moment is the development of wireless energy transmission, especially for our monitoring devices. This will allow unlimited operation of a monitoring system without integrated power source. Furthermore it is possible to activate the device from outside.

Nowadays the systems use stray magnetic fields by which the received power is reduced depending on distance which has a drastic impact on their efficiency. The magnetic coupled systems mainly work at the antinodal point, in order to increase the range and transmitted power. We expect to be able to launch a fail-safe product in 1-2 years. **PKI** has also improved their proven laser monitoring systems. Automatically working digital filters suppress noise levels resulting in interference-free receipt of voice signals.

PKI Electronic Intelligence GmbH worked hard on difficult in- and outdoor monitoring systems. This product range comprises various versions of stethoscopes as well as completely wireless audio/video surveillance devices of 20 mm Ø for fixation on windows. Even higher windows can be reached by our newly developed CO₂ launcher.

Furthermore we would like to point out our mobile Audio/Video CCD-LED night vision camera with video glasses and earphone. This device allows completely unobtrusive monitoring at a distance of up to 100 m under no-light conditions.

The recording technology of Audio/Video signals has been revolutionized by micro memory cards. **PKI** offers all imaginable constructions, some of them not bigger than a fingertip, camouflaged in watches, sunglasses or pens.

Our GSM/GPS developments are interesting as well. These allow mobile audio/video surveillance from all over the world, indicating the exact location and this in a housing not bigger than a matchbox.

PKI Products in the Seventies and Today

PKI has been producing equipment for protection of a country against internal and external threats since 1968. Of course the technology has experienced tremendous changes in the course of more than 40 years. Hereunder we will give you some brief explanations.

Transmitting and receiving monitoring devices

These so-called "bugs" are still used nowadays. However analogue technology has been replaced by digital technology. This new digital technology offers completely different possibilities such as GPS and GSM.



The receiving units have also made great strides. Even here the digital devices dominate the market. Especially the enlarged frequency ranges and increased input sensitivity have to be pointed out.



Electronic Stethoscope

These devices have always proved to be indispensable. Outdoor surveillance is still very popular.



Recording devices

Secret voice recording is still of utmost importance. The devices have been revolutionized by digital technology.



Detecting devices

Various constructions have been developed in order to detect so-called "tapping bugs". Most of them are designed as hand-held and/or portable devices.



Phone monitoring

Phone monitoring is still the easiest and most effective method to obtain important information. GSM-systems now allow this from all over the world.



Jammer

Formerly these devices were limited to the UHF-range. By means of today's modern digital technology much higher interception frequencies can be achieved which increases the need for efficient jammers in order to make eavesdropping devices and remote controls useless.



Visual monitoring

Taking secret photos still remains one of the main sectors in surveillance activities. Even here the digital technology has changed everything.



Night vision

Where IR-night vision devices were used in former times, nowadays we use low-light amplifiers or thermal cameras.



Of course we could show you so many more examples, however, we think that professional monitoring comprises an ever larger range. PKI offers you "all from one source". We are looking forward to a fruitful relationship.

INTERCEPTION AND MONITORING SYSTEMS



PKI ELECTRONIC INTELLIGENCE GmbH GERMANY

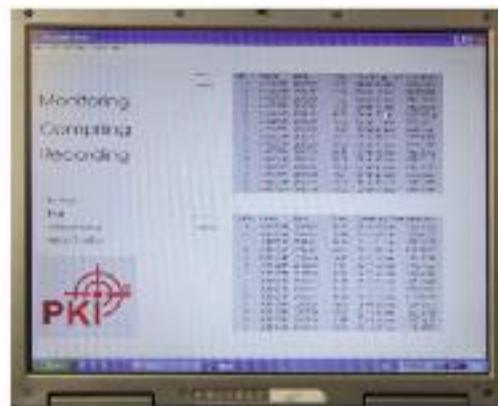
PKI 1100**Monitoring System for E-Mail, Internet, Phone and Fax**

Connection of the **PKI 1100** is effected parallelly to a 4-wire analogue telephone line. The system includes a data base to view the captured information together with date, time and duration of monitoring. The current monitoring state can also be shown here, based on recorded, processed, printed and archived data, among others. The system intercepts telephone, modem, fax and compiles interception databases. This sophisticated recording system with data storage on removable disc archiving looks like a standard Notebook.

Results are displayed by means of the standard internet explorer, as well as Microsoft Outlook Express. Line status – detection of hook, pulse, DTMF, wiretap – depends on the highest possible data rates. **PKI 1100** can interface an analogue line with either a two-wire serial connection by means of an extra tapping device or a two-wire, resp. four-wire parallel configuration.

Specifications:

- Monitoring of 4 telephone lines simultaneously
- Combined voice, fax, e-mail and internet monitoring in one system
- Sophisticated recording system



- Data storage on removable disc
- Low speed modem protocols V.21; Bell 03; V.22bis; Bell 212A; V. 23
- Error correction procedures MNP 2-4; V. 42
- Data compression procedures MNP 5, V. 42 bis
- Synchronization and data transfer PPP; SLIP; CSLIP; LCP ;NCP;
- Van Jacobsen; IPCP; CCP; MS PPC
- Protocols in accordance with OSI model

- are compatible
- Data link layer HDLC, PPP, Slip, Cslip
- Network layer IP
- Transport layer TCP, UDP
- Session layer SMTP, POP3, IMAP, HTTP, FTP, Telnet, Chat
- Operating temperature 0° to 50°C

PKI 1200**GSM Repeater**

This GSM repeater amplifies received signals of all networks which considerably enlarges the action range. Especially in rooms where GSM-reception is restricted or even impossible, this is very important. Often this is the fact in buildings and constructions out of concrete and steel. The **PKI 1200** repeater is designed for specific application and ensures successful data exchange at full signal strength. It comes with power adapter 220 V AC / 12 V DC, instruction manual incl. circuit diagram, installation material and antenna.

**Specifications:****GSM amplifier: 70 dB - 900 MHz**

- Frequency: uplink: 890 - 915 MHz downlink: 935 - 960 MHz
- Power: uplink: 19dBm downlink: 19dBm
- Gain: 70dB
- Bandwidth: 6 MHz – 25 MHz
- Return loss: <-18 dB
- Noise coefficient: <5 dB
- V.W.S.R.< 1.5
- Delay: 1 µsec
- Impedance: 50 Ohm
- Power supply: 220 VAC / 12 VDC (included)
- Connector type: N-female
- Size: 200 x 150 x 40 mm
- Option: ext. step down converter DC/DC 24V/12V

GSM amplifier: 55dB – 1800 MHz

- Frequency: uplink: 1710 - 1785 MHz downlink: 1805 - 1880 MHz
- Power: uplink: -32dBm - -27dBm downlink: -38dBm - -37dBm
- Gain: 55 dB
- Bandwidth: 6 MHz – 25 MHz
- Return loss: <-18 dB
- Noise coefficient: <5 dB
- V.S.W.R. < 1.5
- Delay: 1 µsec
- Impedance: 50 Ohm
- Power supply: 220 VAC / 12 VDC (included)
- Connector type: N-Female
- Size: 300 x 200 x 50 mm
- Option: ext. step down converter DC/DC 24V/12V

G3 – UMTS amplifier: 60dB- 2100 MHz

- Frequency: uplink: 1935 - 1990 MHz downlink: 2125 - 2170 MHz
- Gain: <60dB
- In-band fluctuation: < 2dB
- Output power: < 17 dBm
- Miscellaneous radiation: ≤-30dB,
- Time delay: ≤ 5µsec
- Third order intermodulation (dBm): 9K-1 GHz ≤ -36/1G-12.75 GHz ≤ -30
- Standing wave: ≤ 1.5
- Power supply: 220 VAC / 12 VDC
- Connector type: N-Female
- Noise coefficient: ≤ 5dB
- Impedance: 50 Ohm
- Size: 300 x 200 x 50 mm
- Working temperature: -10°C - +60°C
- Option: ext. step down converter DC/DC 24V/12V

PKI 1500

Cellular Monitoring System

PKI is worldwide one of the leading producers of monitoring devices of cellular phones.

This highly sensitive field of interception is of utmost importance to all government agencies, especially secret-service departments, as state-relevant information is globally frequently exchanged via cellular telephones. To control such tasks it is indispensable to use the **PKI** devices.

PKI 1500 is a multi-channel cellular monitoring system designed for passive interception of GSM radio signals. It intercepts GSM network information data directly without interfering with the GSM network. It is completely passive and it will never be detected by the target person. The system includes eight duplex channels, control and data processing analysis software, UHF antennas and laptop. It has the advantage of compact design, friendly interface and is easy to operate. It can easily be put into a vehicle or anywhere you want for your action. The system provides voice monitoring and very accurate tracking and locating function of target mobile phone.

PKI 1500 is the most advanced and unique GSM locating subsystem, without using any 3rd party GPS device and with the only built-in fabulous full angle antenna. The GSM locating sub-system is built-in and can be separated from the whole system. The system is equipped with a decryption module which is capable of handling A 5.0 and decrypting A 5.2 encryption protocols in real-time.

Basis functions

The system provides eight duplex channels using the following frequency ranges of 900 MHz, 1900 MHz or 900/1800 MHz. According to some feature of the signal, the system can automatically select the best channel to monitor and record. The system supports simultaneously operation on multiple networks and is suitable during mobile operation. While operating in an area where many cellular phones exist **PKI 1500** offers two working modes: in random interception mode it can monitor and record up to 8 full duplex calls and SMS including the relevant duplex phone identities such as TMSI, IMI, IMEI, BCD number, target distance from the base station etc.. In special mode the system can monitor and record incoming and outgoing calls and SMS of special target phones and at the same time the system can extract all relevant phone identities of target phones.

Localisation

PKI 1500 works in real time and with a locating accuracy of approx. 2 meters. It uses vehicle and personal locating subsystems in order to locate the target phone. The position of the inactive target phone will be rapidly (10-15 minutes) located without becoming aware by the phone user. Should the operator know the location area and cell IDs of the target phone in advance the locating time will be even much shorter.



Monitoring

PKI 1500 provides three modes, i.e. target phone monitoring, blind interception and short message monitoring in the unencrypted GSM network. When target phone monitoring is required the system monitors all details concerning the target phone call, i.e. it provides the phone number of both parties, voice, cell parameters, when calling started and ended, distance from the base station etc. In case of blind interception the system collects call information in a local region. By using its 8-duplex-channels **PKI 1500** records conversations, calling and called numbers simultaneously. The provided information can be listened to in real time or as playback later. The third mode is the short message monitoring mode which allows not only blind interception of short messages in local regions but also direction finding and locating of the target phone sending short messages.

Soft Ware

PKI delivers a special developed software with C language. We provide a pre-installed laptop and media installation for backup. All intercepted communications (voice, SMS and the relevant identity datas) are stored on a hard disk which can be easily accessed by the operator. The software has a strong ability to query target records and to relisten.

Installation

The host equipment will be placed in the vehicle whereas the antenna can be camouflaged in any roof box.

Delivery Scope

The total system consists of:

- base station

- Laptop with built-in management software (English interface)
- Antenna direction finding subsystem
- Activating device (mobile phone)
- Data transceiver
- Personal locating subsystem
- Power supply

Specifications:

- Frequency range: 900 MHz, 1900 MHz, 900/1800 MHz
- Supports GSM/CDMA/OCS network
- Direction finding system (distance between personal locating system and target): up to 3000 m
- Direction finding degree of accuracy: +/- 1°
- Recording time: up to 72 hrs
- Antenna unit dimensions:
 - 800 mm Ø
 - 200 mm height
 - 25 kg weight
- Base station dimensions: 19" rack
- Weight: 12 kg without backup battery
- Power supply:
 - 220 AC for fixed location
 - 12 DC backup battery for mobile use, rechargeable
- Durability of battery: 1 month in mobile status
- Dimension of battery: 10x18x12 cm, 6 kg
- Sensitivity of receiver: 1 microvolt
- Distance between vehicle and personal locating subsystem: max. 2000 m
- Locating accuracy (personal locating system):
 - 2 m
 - One target locating every time

Please note that we can also deliver A 5.1 decryption and 16 channels on request

PKI 1800

Digital Telephone Monitoring System

The **PKI 1800** is a comprehensive and state-of-the-art end-to-end solution for monitoring, processing, analysis and dissemination of intercepted telecommunication interactions. Due to rapid structural changes in worldwide telecommunication systems a solution integrating all such tasks is provided by the **PKI 1800**. It offers facilities to monitor ISDN, Digital, PCM30 transmissions as well as all other forms of communication whether they be voice, fax, modem, radio communication or other data transfer. Based on a single, unified platform, **PKI 1800** handles all kinds of telephone and Internet data and thus offering unprecedented features. It provides security agencies with flexibility, reliability and versatility in signal intelligence interception and analysis. The **PKI 1800** combines all these facilities to comfortably managing unlimited amounts of intercepted communications together with instant target information by just using a minimal amount of space and manpower. The major feature of the **PKI 1800** is its flexibility and extraordinary storage capacity, linked to its ability to instantly recall, via the displayed data management target software, intercepted target telephone calls without interrupting the digital tape recording and archiving process. This enables the operator to either carry out interception and playback from one system, or optionally via a separate playback unit. This means that highly classified and priority interception can be configured for transfer by authorised users on a real time basis to a selected location ensuring that the right persons are informed on time.

The **PKI 1800** is available in several versions, depending on the number of channels and end-users monitoring requirements, from minimum 8 channels to 64 or max 128 channels. The major criteria of the **PKI 1800** software is to display all information immediately and to enable instant evaluation, thus dramatically reducing the time needed, compared to time-consuming evaluation of reel or audio tapes. The software is known as the target evaluation and configuration interface (TEC) which is installed onto the delivered workstation. The sophisticated menu provides optimal guidance for selection/viewing and processing of large quantities of data. The TEC software has one control menu and 4 submenus being linked to user's authorisation key code. They are easily accessible and can be seen at a glance on the display monitor. Upon entry to the main control menu selection, the user will see - displayed on the screen - the current channel status which provides activity information as well as remaining tape time, disk end time and selection for the 4 submenus via the preprogrammed password. The configuration menu enables the user to select and change the technical characteristics of each channel depending on the input conditions. This enables the **PKI 1800** to monitor telephone interception from various types of exchanges and radio communication input channels simultaneously.



- Non detectable input impedance
- Simultaneous playback and on-line recording
- Network upgradeable, high MTBF reliability, 1/T1 interception

- Automatic monitoring, interception and recording
- Password protection
- Selectable input characteristics, PABX interfaces
- Analogue/ISDN line, LAN/WAN facility
- Tape / DVD archiving

**PKI 1800** Digital Playback Unit

The optional extras available include the digital playback unit which recalls earlier recordings either directly from the DAT cassette of the **PKI 1800** or from archived versions. It is an essential accessory to the **PKI 1800**. Housed in a standard desk top PC with built-in 4 channel voice card, hard disk and loudspeaker the digital playback unit is used for a number of applications. Usually used as a playback unit for evaluation of recorded data it alternatively can be used as a mass storage facility for archiving or as a supervising position. It incorporates the standard **PKI 1800** software enabling instant recall and evaluation. The intercepted data is loaded onto the digital playback unit from the DAT cassette or linked to the **PKI 1800** for automatic download. The unit can be installed with one or two DAT drives, enabling the evaluated data to be downloaded onto the 2nd drive with the non-essential data being ignored, cancelled or simply kept on the 1st DAT for archiving. The optional extras include a built-in fax and data interception system plus a transcription interface.

Specifications:

- Channels: 8, 64 or 128
- Voice interface cards: 4 voice channels per card, each channel digitised to 64 kbit/s using ADPCM conversion. User selectable data compression to 32 kbit/s or 16 kbit/s
- Frequency response: 300 Hz to 3.400 Hz
- Line inputs: Parallel telephone input impedance - > 30 kOhm (isolated to 3000 V) warning beep (as CCITT 180)
- Transformer isolated: input impedance - 600 Ohm (isolated to 3000 V)
- E1/T2: 2.048 MHz E1 & 1.544 MHz T2 digital data link
- Line outputs
- Transformer isolated: output impedance - 600 Ohm (isolated) output signal - 0 dBm 0=1.23 Vrms
- Monitor output
- Internal speaker
- Headphone jack socket
- Data interface cards: 4 channels per card, synchronous/asynchronous RS232/RS422 serial data data rate up to 64 kbit/s/ rapid access
- Storage: 1 GB hard disk
- Archival storage: digital audio tape (DAT)
- Recording time: 1 GB hard disk - 1 hr for 64 channels at 32 kbit/s. tape - up to 24 hrs for 64 channels at 32 kbit/s/ depending on capacity of the storage device
- Reliability: MTBF - 80.000 hours
- Power supply: single phase AC 240/115 V 50/60 Hz
- Power consumption: < 150 W
- Weight: 8 channels 55 kg 128 channels 165 kg
- Dimensions: 8 channels 56 x 38 x 70 cm 128 channels 60 x 157 x 70 cm
- PC requirement min 286 based PC or better/ EGA or VGA display

PKI 1830

Wireless Network Monitor, Decrypter and Viewer via WLAN or Bluetooth

PKI 1830 is a powerful wireless network monitor and analyzer that enables you to monitor and view any wireless 802.11 a/b/g/n communication around you. The system detects and displays all wireless access points and stations within reception range and provides important information about each of them. Now, after all necessary data is in front of user the target can be selected and capturing of all transmissions can start. **PKI 1830** is a comprehensive and affordable tool for wireless LAN administrators, security professionals, network programmers, or anyone who wants to have a full picture of the WLAN traffic. The application requires Windows 2000/XP/2003/Vista/2008 and a compatible wireless network adapter. **PKI 1830** can also be used for interception via Bluetooth.

PKI 1830 provides the following features:

- scanning for WiFi stations and access points
- capturing 802.11a, 802.11b, 802.11g and 802.11n WLAN traffic
- WEP or WPA keys specification to decrypt encrypted data
- display of detailed per-node and per-channel statistics
- display of detailed IP connections statistics: IP addresses, ports, sessions, etc.
- reconstruction of TCP sessions
- configuration of alarms that can notify you about important events, such as suspicious data, high bandwidth utilization, unknown addresses, rogue access points etc.
- creation of "pie" charts of protocols
- monitoring of bandwidth utilization
- browsing of captured and decoded data in real time
- searching of strings or hex data in contents of captured data
- creation of files containing individual or all data packets
- offline loading and display of captured files



PKI 1850

PC-supported Telephone Monitoring System

The surveillance of any kind of telecommunication, of course, is our main field of business. Whether analogue, digital or cellular, you will find the corresponding monitoring device in our scope of supply and in this catalogue. The **PKI 1850** has been developed for the monitoring of digital and ISDN telephone lines. But the main advantage is that it can be used for stationary and mobile use. Without any problem each necessary data, like telephone number, date, time and other criteria can be stored on a laptop. Each call will be stored as a WAV-file. By means of the supplied software, the WAV-file can easily be administrated and can be opened to hear the content of each call plus indicating the relevant data. Each WAV-file can be stored in compressed or uncompressed version for further action.

Specifications:

- Dimensions of unit without laptop approx. 76 x 55 x 19 mm
- Weight of unit without laptop approx. 50 g
- SO-interface ITU-Standard I.430
- Connection 2 x RJ45 Western Modular
- Tests Polarity, Framing, Power, Protocol
- Channels 2 x (D, B1, B2), E, M, A, Q, S
- USB 1.1 and 2.0 (full speed)
- USB socket USB Type B
- Power < 90 mA
- LEDs 4 x red/green
- Storage: 16 KB per second/call, uncompressed WAV file.
- Sampling frequency 8000 Hz
- WAV format A-Law Stereo, Mono, MP3, GSM
- Operating System required on PC/laptop: Windows 2000, Windows Server 2003, Windows XP, Windows Vista
- Software disk space max. 140 MB
- Processor 500 MHz (min for single device operation)
- Connection to telephone system Point-to-Point or Point-to-Multipoint
- Device package includes **PKI 1850** device, Software-CD, USB and ISDN cables, instruction manual



PKI 1855

Hard Disc Converter

With **PKI 1855** it is easy to copy data from built-in hard discs. Just connect the hard disc to the USB port of your PC by means of the **PKI 1855**. Compatible with all standard 1,8", 2,5" and 3,5" IDE hard discs. By means of this copying converter you can easily obtain all important information. Furthermore this converter is also suitable for testing and connection of all types of hard discs and burner via USB 2.0 port.

Specifications:

- Hard discs: SATA (L-type) and IDE, copying possible
- Sizes: 1,8", 2,5" or 3,5"
- Comes with: converter, adapter, power plug, SATA-cable
- Various: no installation inside PC necessary

**PKI 1860**

Telephone Tapping Device

The **PKI 1860** can easily and quickly be installed on telephone lines, subject to entering the room at least once or for a short time. It allows continuous tapping of a telephone line without leaving outer traces. Just clip the contact clamp onto the telephone cable and listen to the conversation of both sides via the included headphones, or alternatively save it with a recording device.

Specifications:

- The only way to tap telephone lines without having to cut them.
- Impossible to be detected or located via TDR reflectometer.
- Easy and quick installation – just fix the clamp onto the cable and turn it on.
- Equipped with connection sockets for headphones and recording device (D 1300)
- Dimensions: approx. 34 x 20 x 114 mm

**PKI 1865**

Digital Telephone Conversation Recorder

Small but powerful – a technological miracle. With this recorder all telephone conversations can be controlled. It works on both, analogue and digital telephone systems. Very simple installation between receiver and telephone set by means of the included connection assembly. Due to the integrated voice-control all telephone conversations will be recorded automatically and can be monitored either via the integrated speaker or earphones (included). Also included is a connection cable for playback via PC.

**Specifications:**

- | | | |
|--|--|----------------------------------|
| • Power supply: 2 x 1.5 V batteries type AAA | 2) WMA (Windows-Media-Audio) | SP *1 / „WAV“ data type |
| • Operating temperature: 0 - 40°C | • Data stream | MP *1 / „MP3“ data type |
| • Frequency range: 500 Hz-3500 Hz | 1) MPE (8 to 320 kbps) on playback | *1 IP, SP und HP = low, standard |
| • Max. output: 200 mW / 8 ohm | 2) WMA (32 to 192 kbps) | and high performance |
| • Operation time: more than 12 hours | • Recordings: Telephone, integrated and external | • Average recording capacity: |
| • Display: LCD | microphone, line-in | 1 GB Memory – depending on |
| • USB interface: USB 2.0 standard | • Max. number of recorded segments: | recording quality and type: |
| • Weight: approx. 34 g w/o batteries | 2 x 200 segments / files | (HP) *1 10 h |
| • Dimensions: 115 x 33 x 15 mm | • Name of directories and data type: | (SP) *1 70 h |
| • Supported data formats: | (directory/recording quality/data type) | (IP) *1 282 h |
| 1) MP3 (MPEG 1,2 and 2,5 with audio layer 3) | IP *1 / „ACT“ data type | |

PKI 1870

Analogue Conversation Recorder

This analogue conversation recorder stores your telephone conversations automatically onto standard audio cassettes. Due to the integrated voice control the recording does not start until beginning of a conversation and automatically stops at its end. The total recording time is up to 8 hours. With the **PKI 1870** you have the possibility to control all telephone conversations in your house during your absence. A similar device for digital telephone systems is part of our product range as well. Please contact us for detailed information.

Specifications:

- Recording time: 8 h on standard 120 min. audio cassette
- Integrated microphone for notes
- Output for headset
- Included: adapter for telephone receiver, audio cassette, power plug



PKI 2205

Analogue Room Transmitter

Room monitoring requires a small but powerful audio transmitter. Latest technology and consequently low current consumption allows up to 15 hrs continuous surveillance operation. Only by implementation of SMT (surface mount technology) its extremely small dimensions could be achieved. Metal housing manufactured by rotary-grinding from one metal block provides excellent emission characteristics. The placing of a bug has to happen very quickly. The **PKI 2205** room transmitter with its external power supply solves the problem, because only the external battery has to be connected and the unit is ready to operate. The **PKI 2205** Room Transmitter is available in standard frequencies within UHF band. VHF, SHF or special frequencies are available on request.

Specifications:

- Standard Frequency UHF
- A 427.125 MHz
- B 427.475 MHz
- C 427.825 MHz
- others on request
- RF Output Power 100 mW
- Modulation / Deviation NFM @ 5 kHz
- Spurious Suppression better than 50 dB
- Operation time 15 hrs / 9V standard battery
- Microphone internal electret
- Microphone Sensitivity -62 dB
- Dimensions (LxWxH) 30x16x8 mm



PKI 2210

Analogue Telephone Transmitter

If a telephone monitoring operation is on long term basis or access to the target area is restricted then the **PKI 2210** Telephone Transmitter is the perfect solution. It is not necessary to have direct access to the telephone set. Any location along the telephone line can be used for monitoring. This transmitter operates automatically, i.e. the internal off-hook detection circuit automatically switches from standby to activation and transmission. Only transmitting when a telephone conversation takes place, this wireless bug is undetectable. The sensitivity on the telephone line can be adjusted manually. Another advantage is its independence from short-lived power supplies like batteries, so that a continuous monitoring of the target area is guaranteed. The installation on the telephone line should be made in serial mode. Both polarities are allowed. **PKI 2210** is available in standard UHF. Special frequencies on request.



Specifications:

- Quick and easy installation
- Designed for professional use
- Automatic off hook on telephone lines
- Ideal for long term, unattended operation
- Smallest dimensions
- Unlimited operation time
- 5 mW output power
- UHF frequency
- External antenna
- Dimensions: 24x14x8 mm

PKI 2215**Analogue Stethoscope Transmitter**

Listening through solid structures as well as through windows is an important task for special operational teams. The **PKI 2215** Professional Stethoscope Transmitter is the perfect solution for this purpose. The **PKI 2215** has excellent clear audio pick-up and can be adapted to the customer's requirements. On request **PKI 2215** can be delivered with amplification which is adapted to the local environment, such as wall thickness and window characteristics. The sensitivity can be adjusted by a miniature trim potentiometer. This adjustment also influences the frequency characteristic, which means that for walls the higher frequency part will be amplified, on windows vice versa. Additional adjustment is possible by using different thickness of the adhesive paste between sensor and pick-up

surface. The unit is absolutely suitable for professional use. The highly sensitive sensor and the electronic parts are integrated in a solid metal case.

Specifications:

- Monitoring of inaccessible rooms
- Listening through solid structures like walls and windows
- Optimal audio performance
- Metal housing
- Installation with adhesive paste
- UHF frequency around 427 MHz
- 1 mW output power
- Standard Lithium battery
- 24 hours operation time
- Dimensions 64x21x6 mm


[**PKI 2220**](#) [**PKI 2225**](#) [**PKI 2230**](#) [**PKI 2235**](#)
Pocket Receiver, Handheld Receiver, Scanning Receiver, Universal Receiver

Special surveillance operations ask for modern and first-class devices that are able to fulfil all requirements. **PKI** offers various receivers with numerous frequency ranges for all applications. In order to guarantee highest possible transmission and reception ranges all **PKI**-receivers offer outstanding input sensitivities. **PKI 2235** not only includes a built-in digital recorder like **PKI 2230** but also a digital receiver, i.e. this receiver can be used universally for all **PKI** transmitter, whether analogue or digital or VHF, UHF, SHF.

Specifications:**PKI 2220**

- Frequencies: VHF 130-174 MHz or UHF 370-430 MHz
- Channels: 3
- Power supply: 9V battery
- Demodulation: FM narrow band@6 kHz
- Sensitivity: better than 0,5µV@20 dB S/N
- Operation time: 8 hrs
- Squelch range: 0,2µV – 1,5µV
- Antenna: 50 Ohm
- Weight: 250 g
- Dimensions: 140 x 77 x 24 mm

PKI 2225

- Frequencies: VHF 130-174 MHz or UHF 370x450 MHz
- Channels: 10 selectable channels
- Power supply: 7,5V DC/700 mAh rechargeable batteries
- Sensitivity: 0,25µV at 12 dB
- Frequency steps: 20 kHz
- Operation time: 8 hrs
- Weight: 350 g
- Dimensions: 112x54x45 mm
- Audio output: headphone, recorder

**PKI 2230**

- Frequencies: 1.6 MHz – 3,3 GHz
- Channels: _ 1000
- Power supply: 3x batteries type AA
- Sensitivity: 0,4µV – 5,6µV
- Frequency steps: 20 kHz
- Operation time: 6 hrs
- Weight: 320 g
- Dimensions: 60 x 142 x 35 mm
- Audio output: headphone

PKI 2235

- Frequencies: VHF 130-174 MHz
UHF 370-450 MHz
SHF 1000-2450 MHz

- Digital receiver: 400-440 MHz
- Modulation: FSK@100 kHz
- Power supply: rechargeable batteries, Li-ion
- Sensitivity: 0,4µV – 2,8 µV
- Frequency steps: 20 kHz
- Operation time: 20 hrs.
- Weight: 4,2 kg
- Dimensions: 300 x 220 x 60 mm
- Audio output: headphone
- Antenna socket: SMA 50 Ohm,
- Audio: squelch, equalizer
- Extras: programming software for PC
- Frequency stability: +/- 6ppm (+10° to +60°C)
- Various: fits in every briefcase
- Comes with: charger, antenna, earplug and instruction manual in English

PKI 2240

Professional Transmitter / Receiver Set with Digital Recorder

Small and light-weight, but full capacity - that is the **PKI 2240**. An excellent transmitter and receiver set for immediate monitoring. The frequency-stable transmitter is designed for room monitoring and can also be worn on the body. The sensibility of the microphone can be adapted to environmental circumstances (dynamic compressor). The receiver equipped with high 0,4µV input sensitivity guarantees coverage of farest distances between transmitter and receiver. The external recorder automatically captures signals from the receiver and stores them during up to 282 hours, which means that the signals of the pocket receiver can be listened to directly as it works fully automatically and autarkic. Application of the **PKI 2240** is self-explanatory and does not need any instruction. Please read the technical datas carefully – you will be impressed about latest techniques developed by our **PKI** specialists.

Specifications:

Transmitter

- Dimensions: 45x25x10 mm
- Weight: 40 g
- Frequency: UHF 427 MHz, VHF and SHF on request
- RF Output power: 50 mW
- Modulation: NFM@5kHz
- Spurious suppression: better than 50 dB
- Operation time: 15 hrs
- Power supply: Lithion-lion batteries
- Microphone sensitivity: -62dB
- Microphone: internal electret
- Various: charger included in the set

Receiver

- Dimensions: 100x 60 x 20 mm
- Weight: 110g
- Frequency: UHF-range 427 MHz, VHF and SHF on request

- Receiver sensitivity: better than 0,4µV@12dB sinad
- Modulation: NFM@5 kHz
- Spurious suppression: better than 40 dB
- Frequency stability: better than +/- 2 ppm(0-50°C)
- Operation time: 20 hrs
- Power supply: Lithion-lion batteries
- Features included: channel selector, squelch control, volume control, head phone output and recorder, antenna connector
- comes with: charger and antenna, on request recorder can be integrated into receiver, dimensions will enlarge accordingly

Recorder

- Dimensions: 60 x 35 x 20 mm
- Weight: 90 g
- Frequency range: 500 Hz-3500 Hz



- Output power: 200 mW / 8 Ohm
- Interface: USB 2.0
- Play-back: via PC, earplug
- Average recording capacity at 1 GB: (HP) 10 hours
(SP) 70 hours
(IP) 282 hours
- Power supply: by receiver
- Data: MPE 8 to 320 kbps
- Max. recording segments: 2 x 200
- Environmental temperature: 0-40° C
- VOX-control: recorder starts automatically on reception of signal from receiver

PKI 2250

Analogue HF-Repeater

The **PKI 2250** portable crossband repeater is primarily designed for extending the range of low power monitoring devices. Due to its capacity to work from three different types of power supply this system is suitable for work inside buildings, in cars and in the field - independent of supply conditions. The electrical input characteristics of the 3 channel receiver section of **PKI 2250** are adapted to **PKI's** crystal stabilised low power transmitters. With the high output power of the **PKI 2250** a distance of up to 15 km may be bridged under ideal conditions. The totally selectable transmitter/receiver frequency pairs, various power supply adaptations and direct listen-into possibility make this system easy to operate and versatile for any kind of surveillance task. A hand-held 3-channel receiver for the outgoing frequencies of the **PKI 2250** is included in the set as well as every necessary high gain directional antenna plus tripods (transmitting and receiving).

Specifications:

- Frequency range
- Inputs and/or outputs: VHF 130 – 174 MHz channel frequencies to be specified by the customer UHF 370 – 430 MHz channel

frequencies to be specified by the customer
SHF 1.3 – 1.35 GHz channel frequencies
to be specified by the customer

- RF output power selectable 1, 4, 5 or 10 W depending on frequency range
- Receiver sensitivity better than 0.4 _V @ 12 dB sinad
- Modulation / Deviation NFM @ 5 kHz
- Spurious suppression better than 40 dB
- Frequency stability better than +/- 2 ppm (0 - 50°C)
- Number of channels 6
- Power supply internal rechargeable battery
external DC input 12 V (car)
mains 115 V or 230 V AC
- Operation time at battery charge/depending on frequency: min 12 – 15 hours at 1 W continuous operation, or min 10 hours at 4 W continuous operation, or min 6 hours at 5 – 10 W continuous operation
- Charging method 115V or 230V or 12V DC (car)
- Transmission format clear analogue
- Audio monitor 2 W at 8 ohms
- Features included channel selector squelch control volume control headphone output
- Dimensions approx. 450 x 420 x 250 mm
- Weight approx. 25 kg incl. batteries



Scope of supply:

- Repeater in pilot's suitcase
- Directional transmitter antenna
- Directional receiver antenna
- Tripods for antennas
- Mains powered battery charger
- Car power adapter (cigarette lighter)

PKI 2260

Analogue Equaliser

The **PKI 2260** graphic equaliser combines a 28 channel programmable equaliser and a spectrum analyser which provides a constant indication of the input signal to filter out unwanted noises recorded during surveillance operations. The setting can be automatic, which allows operation by semi-technical staff. Multi purpose input jacks are built-in, allowing connection of **PKI's** range of recorders.

Specifications:

- Frequency response: 10 - 100.000 Hz
- Dynamic range: > 110 dB
- THD: < 0.0021% 1KHz, 0 dBm
- XLR input balanced 20 k, max. +22 dBm
- XLR output balanced 50 k, max. +22 dBm
- Jack input unbalanced, 1 M, max +10 dBm
- Jack output unbalanced, 100, max +10 dBm

- Input gain +/- 12 dB
- Output gain +/- 12 dB
- Equaliser filters: 28 band 1/3rd octave filters on ISO centres +/- 12 dB or +/- 6 dB boost/cut in 1 dB or 1/2 dB steps
- Low cut filter switchable 15, 30, 45 Hz
- High cut filter 15 KHz
- Spectrum analyser: 28 band 1/3 octave filters on ISO centres overall level meter
- Presets: 100 non-volatile, editable user names
- Display 140 characters alphanumeric 7500 dots graphic
- Interfaces: 2 x Midi In, 1 x Midi Out, PC interface, remote controls
- Power: voltage selector 110-120/ 220-240 V, 50 - 60 Hz

**PKI 2265**

Room Transmitter (PCB)

Wherever monitoring transmitters have to be used in disguised operations, this micro transmitter is the perfect choice, as it has been especially designed for camouflaged operations. Therefore, and to reduce the size to its minimum, just the printed circuit board (PCB) is supplied. For each and every government department's operation, this tiny little transmitter should be used for discrete observation of rooms. Because of its small size and unobtrusive pattern, it is a perfect tool to monitor rooms from inside a hidden place. A film-size plastic cover protects the components against environmental influences. Powered by battery and equipped with a highly sensitive microphone, this transmitter can be placed into any object of daily use and picks up the sound from up to ten meters. The crystal controlled transmittance

guarantees a totally stable frequency which only can be received by our special receivers like **PKI 2220**. Depending on surrounding conditions, a transmitting range of 800 to 1000 meters may be achieved.

Specifications:

- Easy to disguise
- Looks like installed standard parts
- Smallest dimensions – easily hidden in products of daily use
- UHF frequency around 427 MHz
- Crystal controlled
- 1-10 mW output power
- Battery operated
- Power supply 3-9 V DC

**PKI 2270**

Telephone Transmitter (PCB)

In many cases of observation the telephone conversations have to be monitored. With the **PKI 2270** such tasks can easily be done. Due to its small size and unobtrusive appearance, this transmitter really is the champion in its class. The transmitter is supplied as a printed circuit board (PCB) only and is coated with a special protective lacquer which protects it against environmental conditions. This allows a fast and easy installation into every kind of analogue telephone set in which it looks like a standard component being completely inconspicuous to the user. The installation inside the telephone set should be made in serial mode; both polarities are allowed. **PKI 2270** is only transmitting when a telephone conversation starts and therefore is non-detectable when the telephone is not in use. Another advantage is the independence from

short-lived power supplies like batteries as the unit is continuously powered from the telephone line.

Specifications:

- Easy to disguise
- Looks like installed standard components
- Automatic off-hook detection
- Long term unattended operation
- Quick installation
- UHF frequency around 427 MHz
- Crystal controlled
- 5 mW output power
- Antenna via telephone cable
- Serial mode connection
- Both polarities allowed
- Dimensions 30x14x7 mm



PKI 2275

Mains Transmitter (PCB)

Monitoring of rooms essentially needs to have camouflaged transmitters, but in most cases no new items can be placed into the room in question. Therefore already existing devices have to be used and equipped with an unobtrusive transmitter. For this purpose, the **PKI 2275** is the right solution. Due to the very small size of this printed circuit board (PCB) mains powered transmitter, it does not need much space and very easily can be concealed in sockets, lamps, junction-boxes etc. Additionally the protective cover with a special lacquer shields from occasionally unwanted contacts and short-cuts. Depending on existing power supply, the **PKI 2275** can be supplied either in 110 to 115 VAC/60 Hz or 220 to 240 VAC/50 Hz versions. The integrated microphone of highest sensitivity allows to capture sounds from a distance of up to 10 meters. With its output power of 4 mW a

transmitting range of up to 800-1000 meters may be achieved (depending on surrounding conditions).

Specifications:

- Small size
- Easy to hide within existing objects like mains sockets, power distribution or lamps, radios etc.
- Looks like standard parts when installed into such products of daily use
- Infinite operation time
- UHF frequency at around 427 MHz
- 4 mW output power
- External antenna
- Mains operation by 115 / 230 V AC
- Highly sensitive electret microphone
- Dimensions 28x28x6 mm



PKI 2280

Long Term Transmitter

In every specific case it is difficult to select the most suitable transmitter for monitoring a room. Whether extended operation time, high output power or small dimensions are the main factors - at every time the operator has to make his own decision. But we have the right solution for all of these purposes. Every possible device for large transmitting ranges, high output powers and/or other features may be found in this catalogue. With the **PKI 2280** we offer a battery operated transmitter with the main advantage of extended operation time with one single set of batteries only. The supplied set of different battery adapters enable a variety of operation times from 24 hours to a maximum of approx. 2100 hours. The output power of 1 mW allows transmission in ranges of several hundred meters within the UHF-radio band.

Specifications:

- Continuous operation time of 24 to 2100 hours with one battery set depending on type of battery
- High sensitive microphone
- Various types of batteries supplied
- Set of battery adapters included
- Small size by SMD technology
- Crystal controlled
- UHF frequency at around 427 MHz
- 1 mW output power
- 5 KHz modulation/deviation
- Dimensions 14x22x8 mm



PKI 2285

Long Range Transmitter

Whenever large transmitting distances for monitoring devices have to be achieved, the **PKI 2285** really is the ideal instrument. The advantage of this monitoring transmitter, produced by **PKI Electronic Intelligence GmbH** is to cover distances of up to 1,5 km, just by using a single, standard 9 V battery. The maximum distance, of course, always depends on the surrounding conditions and the use of a suitable receiver. For this we highly recommend our **PKI 2220**, which is directly adjusted to the transmitting frequency by means of the same crystal. **PKI 2285** is small enough for a camouflaged or even body-worn operation. With its solid aluminium housing the **PKI 2285** even can withstand rough handling and harsh environment. Although its output power is very high which allows a large transmission range, its operating time can be up to 10 hrs with just one standard battery.

Specifications:

- High power output for extended distance between monitoring area and receiver station
- High sensitive microphone
- Internal and external microphone also for body worn operation
- Metal housing for excellent transmission
- Battery operation by 9 V battery
- Up to 10 hours operation time
- UHF frequency at around 427 MHz
- SMD technology for smallest dimensions (34x16x8 mm only)



PKI 2290

Voice Activated Transmitter

In many cases the monitoring of a suspicious room has to be effected over a long time period, but the room only can be entered once and the monitoring device has to be installed quickly and easily. Furthermore this monitoring device can only be operated by batteries and should be activated only when persons are in the room. Therefore and in order to save battery capacity, the **PKI 2290** has been developed according to the latest technology standards as it is automatically activated by reception of noises/sounds. Whenever there is no sound, the built in automatic voice control (Acoustomatic) will switch the transmitter into a stand-by position.

This will save the battery capacity and also will make the transmitter being undetectable when not in use.

Specifications:

- Only activated during conversations
- Adjustable Vox-level control
- Adjustable delay period (5-20 sec)
- Economic power consumption
- Long operation time (approx 12 hours with 9 V battery)
- High sensitive microphone
- External microphone as option
- UHF frequency around 427 MHz
- 20 mW output power
- SMD technology for smallest dimensions (34x16x8 mm)

**PKI 2295**

Advanced Remote Controlled Transmitter

Special areas continuously have to be observed but monitoring conditions may vary. For this task we, the **PKI Electronic Intelligence GmbH**, have developed the state-of-the-art **PKI 2295**. For any government agency this device is indispensable. The remotely controlled transmitter offers various functions. Its output power can be adjusted from 10 to 40 mW according to requirement either for shorter or larger transmitting distances. The lower output power will allow an extended battery life time at a reduced transmitting distance, while the higher output power provides a maximum of transmitting distance with a limited operation time. Furthermore a remotely controlled on/off switch is provided in order to save battery capacity and/or reduce the risk of being detected.

Specifications:

- Remote control on multiple functions
- Protection against counter measure
- High sensitive microphone
- Mains and battery supply
- 15 hrs operation by battery (9 V)
- Infinite operation from mains
- UHF frequency around 427 MHz
- Selectable 10 / 40 mW output power
- Crystal controlled
- Dimensions 48x28x8mm transmitter 140x77x24 mm remote control unit


[PKI 2300](#) [PKI 2305](#) [PKI 2310](#) [PKI 2315](#) [PKI 2320](#)

Series of PKI Camouflaged Transmitters

All objects within this series are completely disguised transmitters and ready for use. They are used both in commercial and in private sectors. Providing an extraordinary sensitivity of the microphone all these camouflaged transmitters will capture sounds from approx. 10 m distance like all our other transmitters. Even whispered words will be transmitted wirelessly.

Specifications:

Several surveillance operations are only possible by using camouflaged transmitters hidden in objects of daily use or in body worn items. For this, we, PKI Electronic Intelligence GmbH offer a wide range of standard camouflaged transmitters such as:

[PKI 2300 Table Lamp Transmitter](#)**[PKI 2305 Remote Controlled Socket Transmitter](#)****[PKI 2310 Keyring Pendant Transmitter](#)****[PKI 2315 Cigarette Lighter Transmitter](#)****[PKI 2320 Belt Buckle Transmitter](#)**

Many other applications and implementations into products of daily use can be done according to buyer's request.



Each transmitter placed in such objects is a part of our own production. Full technical details are given upon request.

PKI 2325

Throwing Audio Transmitter

In many situations secret discussions are held in open areas and it always requires a large range of know-how, special technical devices and fantasy to pick up such conversations. This throwing transmitter covers all these criteria and has especially been constructed by **PKI ELECTRONIC INTELLIGENCE GmbH** for government agencies being involved in such special tasks. Thanks to its extremely strong construction, its very short antenna and long operation time the **PKI 2325** is the best choice for such applications. Just put the lithium battery cell into the unit and it is ready for operation. Now throw the **PKI 2325** into the direction of the persons to be observed. The highly sensitive microphone will pick up every sound from a distance of approx. 10 meters, so that even if the transmitter will not match the direct and correct place, the spoken words

clearly transmitted from the receiver can be stored on any recorder.

Specifications:

- Used wherever conversations take place outside. Just throw the **PKI 2325** directly to that place and listen.
- Special aluminium housing for high impacts with smallest dimensions of 20mm diameter x 10 mm only
- UHF frequency at around 427 MHz
- 3 mW output power
- 5 KHz modulation
- High sensitive microphone - 62 dB
- Operated by standard lithium cell
- Long operation time of 24 hours



PKI 2330

Digital Spread Spectrum Audio Kit

This Digital Spread Spectrum Audio Kit is the only answer to tasks where highest levels of security are required for monitoring purposes. The digitally scrambled signal is nearly impossible to decode and furthermore it will be transmitted on special frequencies spreaded over a wide frequency band. An unwanted listening to this transmission therefore is totally impossible.

Specifications:

Receiver

- Frequency: 300 – 400 MHz
- Receiver Sensitivity: -90 dBm +/- 1 dBm
- Antenna: connector SMA (for using Yagi antenna)
- RF Bandwidth: > 40 MHz
- Audio Bandwidth: 6 KHz
- Audio: internal speaker / external

headphone connector

- Power supply: internal 9 VDC standard block battery or external 5-12 VDC mains adapter
- Power: consumption 40 mA
- Dimensions: approx. 90 x 35 x 113 mm

Transmitter

- Frequency: 300 – 400 MHz
- Active Range in City: approx. 250 - 400 meters
- RF Bandwidth: > 40 MHz
- Audio Bandwidth: 6 KHz
- Microphone: built-in
- Power Source: 2,5 – 9 VDC
- Power Consumption: approx. 1mA
- Operating time: approx. 60 days using a 9 V block battery
- Dimensions: approx. 11 x 4 x 36 mm



PKI 2335

Coded Monitoring System

This system consists of a concerted transmitter and receiver. Each sound from up to 10 meters will be captured up by the sensitive microphone of the transmitter and will be transferred wirelessly to the receiver in a coded form and then will be decoded at that place. Therefore this system is the ideal tool whenever monitoring tasks have to be carried out without the risk of unwanted listeners. Although this device is comparatively low priced, its capacity is amazing in regard to secured monitoring transmissions. Additionally the small size and the low weight of the transmitter allows a fast and easy installation wherever it is required. The built-in battery (9V standard) provides a continuous operation of approx. 15 hours.

Specifications:

- Set of transmitter and receiver for a secure, coded audio transmission where no third parties are allowed to listen.
- Built-in dynamic compressor
- Small sized transmitter 48x30x12 mm
- Light weight handheld receiver with dimensions 140x77x24 mm
- Narrow band FM modulation 5KHz
- Analogue dual band split scrambling
- UHF frequency around 427 MHz
- 15 hrs battery (9 V) operation



PKI 2340

Frequency Hopping Transmitter System

Whenever unwanted listeners have to be locked out, the **PKI 2340** is the only solution. The method of frequency hopping transmissions worldwide is known as the most undetectable version of communication and as the one and only procedure to give total security to all kinds of radio communications. This state-of-the-art, digitally encrypted monitoring system is achieved by the use of latest electronic technologies and micro processors with the guarantee of highest reliability. Although the monitoring transmitter is equipped with a large number of electronic components, it still is compact enough to be hidden inside rooms fast and easily.

Specifications:

- Extensive protection against detection by digital encryption
- 2-channel transmission
- 500 hops per second with a hopping frequency range of up to 100 MHz
- 10 MHz of random hopping spread
- Burst length < 100 ms
- Transmitting frequency: 850 – 950 or 750 – 850 MHz in buyer's option
- Burst radio remote control
- Dimensions: receiver 61x145x221 mm

**PKI 2345**

Digital Recording Set

This system solves each problem in terms of long-time observation and is the most secure monitoring device available at this time. A great advantage of this system is that monitoring of telephone lines and observation of a room can be done without having an operator at site all the time. Monitoring and transmission is only made if necessary, i.e. that operation is only effected whenever it is secured that no other person can listen to the transmitting frequency. **PKI 2345** operates totally noiseless. Additional accessories for telephone observation, whether digital or analogue, as well as an external microphone for room monitoring can be connected. The digital recorder stores all telephone and room conversations. By means of the supplied remote control the stored information is transferred to the receiver by just pressing one button. From the integrated receiver all such information can be heard or stored on a separate medium.

Specifications:**Analogue telephone adapter**

- Power supply from telephone line
- Connection in series
- Dimensions 10 x 20 x 6 mm
- Weight 120 g

Digital telephone adapter

- Power supply from telephone line
- Connection via S-Bus of ISDN
- Dimensions 40 x 20 x 10 mm
- Weight 200 g
- Channels A or B with jumper-adjustment

Digital recorder with digital transmitter

- Recording time up to 480 minutes
- Digital transmission 500 : 1
- Power supply 2 x Alkaline batteries type AAA or mains adapter
- Connectors for telephone adapters and/or microphone
- Weight 55 g

Remote control receiver

- Frequency range UHF-range, coded
- Power supply 9V-battery or mains adapter
- Dimensions 100 x 60 x 20 mm
- Weight 220 g

Remote control transmitter

- Frequency range UHF-range, coded
- Power supply 9 V battery
- Dimensions 140 x 75 x 22 mm
- Weight 350 g
- Operating distance approx. 1000 m

Receiving station

- Sensitivity -109 dBm at WFM, -118 dBm at NFM
- Frequency range 400 – 470 MHz
- Power supply 7.2 VDC Lithium battery
- Dimensions 125 x 60 x 38 mm
- Weight 1.2 kg

Digital transmitter

- Frequency range 400 – 440 MHz
- Power supply from digital recorder
- Dimensions 55 x 25 x 15 mm
- Weight 240 g



PKI 2350

ISDN Connection with Miniature Digital Recorder

The complete system consists of a tiny little transmitter and a miniature digital recorder. The transmitter can easily be installed into a telephone set or directly into the ISDN-line for a continuous monitoring and recording of both sides of telephone conversations via ISDN-lines. The full conversation will be recorded by the supplied digital recorder, which will only start when a telephone conversation begins. This saves storage capacity and provides a long-term recording. Each message automatically is date/time stamped by the built-in real-time clock and stored messages can be played back using an earphone or downloaded to a PC as standard sound files. Furthermore the recorder incorporates a high sensitively microphone, which covers a typical range of up to 8-10 meters.

Specifications:

- Professional connection to any ISDN- telephone system with automatic recording of conversations on digital recorder
- up to 140 hours recording time
- Automatic channel selection via jumper at S-bus of ISDN central
- Easy connection by supplied cables between S-Bus and recorder
- Digital recorder included
- VOX (voice control) of recorder is supported



PKI 2355

Telephone Probe Transmitter

The unit is used for a fast and uncomplicated installation on telephone lines whenever time is limited and the room can only be entered once. It stands for continuous monitoring of telephone lines whilst there is no need for a fixed connection directly into the wires. Just clip the clamp over the telephone wires and the conversation of both parties can be heard via the supplied headphones. Additionally the **PKI 2355** provides a radio transmitter within the UHF range. Just by switching this on, the full information and the complete conversations will be transferred wirelessly to a corresponding receiver. Due to the high output power of the integrated transmitter a range of several hundred meters can be achieved (depending on surrounding conditions).

Specifications:

- The only way to monitor telephone lines without opening these
- No detection or location by TDR-reflectometers
- Quick and easy installation by just placing the clip over the telephone line and switch on transmitter.
- UHF frequency around 427 MHz
- 20 mW output power
- Direct connection to headphone or recorder
- Dimensions 85x61x22 mm



PKI 2360

ISDN-S-Bus Telephone Transmitter / Receiver

The complete system, consisting of transmitter and receiver, is to be used especially for ISDN-Bus telephones with a direct connection to S-Bus of NTBA. Each part of the system features small size, robust metal housing and easy handling. The minimised size of the transmitter allows an easy installation into the junction box at NTBA S-Bus. ISDN channel selection provided by a jumper and the high output power of approx. 20 mW is the guarantee for a transmitting distance of at least several hundred meters. Under good surrounding conditions even one kilometer or more is possible. The receiver is equipped with connection for any digital recorder.

Specifications:

- For direct connection to S-Bus of NTBA
- Wireless transmission of all conversations to supplied receiver
- ISDN channel selection by jumper
- Battery operated receiver with dimensions 55x25x112 mm
- Transmitter's power supply by NTBA
- 20 mW output power at around 418 or 433 MHz
- Dimensions 65x35x15 mm



PKI 2385

Voice Recorder Watch

For completely unobtrusive voice recording our watch equipped with an integrated microphone is the perfect equipment.

The fully functional watch captures conversations of up to 5 m distance on its digital recorder and stores them on its 256 MB flash memory. Recording up to 9 hours is possible with one battery. Playback can be done via PC or directly by earplug.

Specifications:

- Power supply: Hi-Li-ion 150 mA / 3,7 battery
- Dimensions: standard watch
- Microphone: elektret
- Flash memory: 256 MB integrated for 16 hours recording, 9 hours per battery
- USB interface: 1.1 (max. 5 Mbps)
- Frequency: 20 Hz – 20 kHz
- Compatible operating systems: Window 98/Me/NT/2000/XP

**PKI 2390**

Hybrid Recorder with Remote Control and Data Transmission

In these times nearly everything is possible in terms of surveillance. A small black case comprises a microphone, digital recorder as well as a remote-controlled transmitter/receiver and can be activated via remote control. The recorded information will be transmitted digitally and wirelessly to the corresponding digital receiver, also with built-in recorder.

Powered by mains, the camouflaged **PKI 2390** can now capture information during years and recordings can be listened to at any time as per the eavesdropper's request. In spite of this incredible performance, the housing of **PKI 2390** only measures 95 x 55 x 18 mm.

Specifications:

- Dimensions/weight:
95 x 55 x 18 mm, recording device 170 g
125 x 60 x 38 mm ,digital recorder
incl. remote-controlled transmitter
220 g
- Frequency: 868 MHz

Recorder

- Recording time: 70 hours
- Frequency: 500 Hz – 3500 Hz
- Miscellaneous: power supply by mini power plug 100 – 240 V AC.
DC-socket for 9-12 V battery included

**PKI 2405 PKI 2410 PKI 2415 PKI 2420**

Digital Transmitter / Receiver Set with Remote Control

- **PKI 2405** Digital Room Transmitter
- **PKI 2410** Digital Phone Transmitter
- **PKI 2415** Digital Stethoscope Transmitter
- **PKI 2420** Digital Receiver with Remote Control

This set offers all possibilities for digital monitoring. Whether the **PKI 2405** for room monitoring with battery and power plug, the **PKI 2410** for phone surveillance, the stethoscope **PKI 2415** or the receiver **PKI 2420** - all digital transmitters are remote-controlled on/off (integrated in receiver) and low-high power. The digital receiver has a sensitivity of -109 dBm on WFM and -118 dBm on NFM. Power of remote-control is 3 W on ASK modulation, burst time will be 6 sec. The integrated loudspeaker transmits audio power up to 300 mW. Li-polymer batteries (rechargeable) 7.2 V DC for power supply are integrated in the set. Furthermore, the receiver is equipped with 100 memory channels as well as search and scan function.

Specifications:

- Frequency: 400 – 440 MHz
- Modulation: FSK@100 KHz
- Audio coding: nonlinear PC M
- Data transmission rate: 100 kb/sec
- Power output:
low power + 10 dBm
High power + 18 dBm
- Power supply:
3.6 V Lithium battery 230 mAh
- Microphone: Electret
- Audio dynamic: 15 dB
- Operating time:
standby up to 10 months,
low power 7 hours, high power
2 hours
- Frequency for remote-control:
315 MHz
- Dimensions:
48 x 23 x 12 mm **PKI 2405**
60 x 40 x 15 mm **PKI 2410**
50 x 30 x 12 mm **PKI 2415**
120 x 54 x 34 mm **PKI 2420**



PKI 2425

Digital Audio Recorder

The **PKI 2425** is an all-in-one high quality Audio Recorder system with MPEG 2 Layer 3 (MP 3) compression for recording and transmission by internal GSM 900/1800 HSCSD modem. The recording time is min. 12 hrs stereo (extendable to 24 hrs) with adjustable bandwidth from 3 to 8 kHz on compact flash ATA memory. Power control is effected by SMS. The PCbased system management software provides full command of the **PKI 2425** audio recorder including download and audio playback.

Specifications:

- Audio Bandwidth: min. 3 to max. 8 kHz
- Audio Compression: MPEG II – Layer 3 (MP 3) with selfadapting data rates
- Microphones: 2 external microphones with cabling up to 5 m including

phantom power and single switching of the mics

- Record modes: tape recorder mode or loop recording mode with Pre-Roll
- Time control: internal realtime clock with dump battery, hardware watchdog
- Memory (Media): compact Flash ATA
- Data transmission: GSM 900 / 1800 (HSCSD) full speed USB 2.0 interface
- Actual Download rate: 9,600 bps – 28,800 bps
- Upload Transfer Data: remote control commands, firmware updates
- Power supply: typ. 12 V DC, 8 to 15 V DC self resetting fuse 500 mA
- Operating Temperature: -10°C to +50°C



PKI 2430

Digital Data Link

The wireless digital data link system consists of a Digital Transmitter with internal remote controlled receiver and a Receiver with internal remote controlled Transmitter. The **PKI 2430** wireless digital data link is based on USB 2.0 full speed interface. The transmitter is connected to the **PKI 2425** audio recorder to read out data and to transmit it error-free and encrypted to the **PKI 2420** Receiver, which is connected to any PC or Notebook. Operation of the system is controlled either by pre-programmed time periods or directly remote controlled by software.

340-370 MHz with 31 FDMA channels (carrier separation 1 MHz)

- encryption: encrypted link
- Keystream: complex, nonlinear sequence with a keystream length of >280
- Key: programmable
- Randomizing: overlay code generator (on multiframe), nonlinear sequence with a length of 220

Transmitter

- RF Power 1 W max.
- Power Control 30 dB
- Supply Voltage 6 -15 V DC
- Dimensions: 140 x 80 x 30 mm

Receiver

- RC Transmitter: 1 W max.
- Supply Voltage: 6 -15 V DC
- Dimensions: 160 x 100 x 28 mm



PKI 2435

Bone-microphone Communication System

This highly sensitive "Bone Vibration Microphone" is the perfect solution for any disguised communication. It is the only system available with a wireless push-to-talk button (PTT). This unique system consists of a bone-microphone, an inductive loop, a wireless push-to-talk button and a wireless ear-piece. The complete set can be connected to any mobile phone, monitoring receiver or commercial transceiver (walkie-talkie). For assembling the system with the correct connector, we only need to know the type of communication system to which the **PKI 2435** should be adapted. For any special application the different connecting plugs are available. For any further technical details please contact us with your special request and we shall immediately give you our personally tailored proposal according to your specific requirement.

Specifications:

- Microphone type: omni-directional electret microphone
- Output impedance: at 1 KHz 4,4 KOhm
- Frequency range: 101 Hz – 10 KHz
- Sensitivity: at 1 KHz (dB re 1V/1PA) -33 +/-3 dB
- Power supply: 1,5 to 10 VDC
- Operating temperature: - 17 to + 63°C
- Length of induction loop 80 cm
- Power supply: for induction loop directly from receiver
- Input signal: max. 2 V effective
- Impedance: 40 Ohms
- Battery: operation time min. 1 year
- Operating distance: of loop approx. 45-90 cm



PKI 2440

Wireless Miniature Earphone

This new set especially has been developed for the professional use in disguised operations. Due to its high quality of voice transmission, and in combination with the inductive receiver it offers the ideal solution for all these purposes. A coil, connected to a suitable receiver, inductively transfers the signals in a range of up to 20 cm to the earphone. The coil has to be fixed on the shoulder, underneath the shirt. Then it is perfectly disguised and no cable connection to the earphone is required. The earphone is powered by an integrated coin cell battery. The set includes the inductive loop, push-to-talk button (PTT) with integrated microphone, distribution box, inductive receiver and suitable plug to customer's communication system.

Specifications:

- Unobtrusive, nearly invisible system
- Wireless information to disguised earphone with smallest size
- Inductive coil hidden inside clothing transfers signal from any receiver to earphone
- Especially useful with PKI's receivers and radio systems
- Battery operated earphone
- Inductive coil powered by receiver
- Variable loudness on earphone

**PKI 2445**

Miniature Receiver

This small device is really a phenomenal achievement in the field of electronic microchip technique. **PKI 2445** is the worldwide smallest in-the-ear receiver. This earphone-receiver should not be missed in any observation where tasks have to be carried out in public areas. A complete VHF Receiver, with integrated power supply, by means of a small-sized coin cell, is placed in an ordinary earphone. It picks up the required signal and performs a perfect sound reception. The specially developed circuit board offers audio functions which normally only can be expected by large and professional radio receivers. **PKI 2445** is equipped with a carrier-frequency-controlled squelch, noise filter, automatic frequency control (AFC) and two adjustable volume levels.

Specifications:

- Max. Distance:
approx. 1.000 meters
- Frequency range: 138 – 240 MHz
special frequencies upon request
- Operation time: up to 15-30 hours
- Automatic Frequency:
Control included
- Squelch and Noise Filter: included
- Accessories:
Cleaning set, batteries, etc. are included

**PKI 2450**

Digital Audio Recorder

The high professional technique of the **PKI 2450** is self-explanatory. A 16 MB flash memory and SD/MMC-card slots plus direct connection to a PC are only some of the features this unit provides for a perfect recording and further-on handling of conversations which may be taken from even 10 m distance. Adjustable microphone sensitivity and automatic gain-control are further features of the **PKI 2450**. Also, the built-in and adjustable sound-level-control (VOS) prevents from unwanted recordings, i.e. these will only be made when there is a noise or conversation inside the monitored room. In case of evidence, the date and time will also be stored. A Super-High-Sound Quality is stored with a sampling rate of 11,5 Kbps. Downloads of recorded data to a PC is possible on a fast rate of 500:1; and vice versa with 1200:1 for uploads from PC to recorder.

Specifications:

- Recording time
160 minutes "HQ" - high quality
220 minutes "SP" - standard play
480 minutes "LP" - long play
- Display large backlight LC-display
- Memory functions: once, daily, weekly
- Indicators
LED – green – for playback
LED – red – for recording
Battery capacity indicator
- Connectors: Sockets for earphone and microphone
- Power supply: 2 x Alkaline batteries, Type AAA
- Weight: approx. 55 g (without batteries)
- Accessories: CD for installation
USB-connecting cable for up-/downloads
Earphone, External microphone, Audio cable connection



PKI 2455

Needle Microphone with Amplifier

In some cases it is only possible to listen into a room through very small openings that can be used for the insertion of room-monitoring microphones in order to capture the spoken words. For this purpose our **PKI 2455** is the right choice to solve such problems. The complete unit comes with a highly sensitive and tiny little rigid microphone plus a pocket-sized amplifier. The electronic unit amplifies the incoming signals and offers a direct listening via headphones (included) or recording on any kind of recorder, whether analogue or digital. VOX-operation i.e. sound-level control of incoming signals is provided for an extensive use of the recorder for a fully automatic operation.

Specifications:

- Microphone:
highly sensitive electret microphone placed in rigid tube of 2,5mm diameter and 300 mm length
- Acoustical distance: up to 10 m
- Operation time: up to 60 hours
- Microphone connection
2,5 mm jack
- Power supply:
9 VDC standard block battery from amplifier also powering the microphone
- Total weight: approx. 200 g
- Dimensions of amplifier:
approx. 95 x 60 x 25 mm
- Accessories Headphones included
- Recommended recorder **PKI 2450**



PKI 2460

Digital Audio/Video Pocket Recorder

No way to have smaller dimensions with the same features like the **PKI 2460** offers. With its size of 80 x 52 x 22 mm it really fits into a cigarette package and can perfectly be used for mobile and disguised observation tasks. In combination with our **PKI 5745** camera, it unites to a complete bodyworn system with most effective camouflaging. The on-screen display allows a very simple handling and each input can be done directly at the unit. For playback, a TFT-monitor is integrated (larger monitors can be connected). Audio and video recordings are stored on a 4 GB SD-card with approx. 65 minutes per 1 GB i.e. up to 260 minutes of recording time is possible. The relating SD-card slot is integrated into the unit. **PKI 2460** will also supply the necessary 12 VDC power for the camera.

Specifications:

- Recording format: AVI
- Resolution: 720 x 480 pixel, colour
- Memory capacity:
up to 4 GB on SD-card, SD-card slot integrated
- Power supply:
Li-Ion accumulator with charger/mains adapter, external power supply is also possible.
- Dimensions:
approx. 80 x 52 x 22 mm
- Weight: approx. 90 g
- Features:
Slow-motion-recording
Single-picture recording
- Connectors: Audio input, PC interface, Mini USB 2.0



PKI 2465

Wireless Mobile Phone Set

For any secret service department the **PKI 2465** is an essential tool for covert communications. With this set, a disguised, unobtrusive and hands-free conversation over the mobile phone network is possible. Whenever you are using the **PKI 2465** with the mobile phone, you can hear and speak unperceived by others. The microphone is integrated into the inductive coil, which also transfers the received signals to the wireless earpiece. This tiny little wireless receiver is to be placed in the ear. The inductive coil just has to be placed around operator's neck and connected to the mobile phone. As standard, a mobile phone type NOKIA 3120 is supplied. Other types are available upon request. Then the mobile phone can easily be hidden in the pocket of a jacket or trousers without hindering operator's mobility.

Specifications:

- Microphone:
highly sensitive electret, integrated into induction coil
- Receiver:
inductive operating ear-piece
- Power supply:
3 coin-cell batteries, type 675
- Weight: approx. 80 g



PKI 2470

Needle Microphone with Amplifier

Sometimes a room is only accessible via tiny holes or cracks, where only a needle microphone is small enough to be introduced and to capture conversations from inside the room. The signals are amplified by the integrated amplifier, so that direct listening via headphones is possible. The **PKI 2470** is equipped with an input socket for our digital recorder **PKI 1865**. Sounds are electronically adjusted, which means that low sounds are more amplified than louder sounds, so that the volume is maintained at a constant level.

Specifications:**Microphone:**

- Highly sensitive electret microphone
- Needle ø: 1.5 mm x 200 mm
- Range: approx. 10m
- Connection: 2.5 mm RCA
- Power supply: supplied by amplifier

Amplifier:

- Dimensions: 34 x 20 x 114 mm
- Power supply: 9 V battery
- Operating time: approx. 60 hours
- Accessory: head phones
- We recommend combination with our recorder D 1300

**PKI 2475**

Larynx Headset

The **PKI 2475** is especially designed for use at places with high ambient noise in order to assure a clear acoustic transmission. The larynx microphone records only vibrations of the larynx and no sidetones. Loud noises especially during open field operations won't disturb clean transmission anymore.

Specifications:

- Larynx microphone: Dual
- Plug-in connector: modular
- Plug: double 2,5/3,5 mm
- PTT-button: with clip

**PKI 2480**

Security Headset

This headset has been designed for discrete radio communication of security staff. The small, separate transmitter button can be fixed with a clip, a flesh-coloured earplug with a transparent and flexible tube and a miniature microphone offer clear transmission of the communication.

Specifications:

- Double plug: 2,5 / 3,5 mm
- Microphone: Electret
- Version: IP 55

**PKI 2485 PKI 2490**

Noise Cancelling Earphone, Noise Cancelling Headphone

In order to eliminate loud environmental sounds, such as street noise, etc. when receiving acoustic signals by a receiver, a directional microphone or a laser eavesdropping device you need this noise cancelling earphone and headphone. The miniature microphone of the earphone/headphone captures and eliminates the background noise so that a clear understanding without any disturbance is possible.

Specifications:

- Sensitivity: 110 dB S.P.L. at 1 KHz
- Impedance: 32 Ohm
- Frequency range: 20 Hz – 20 KHz

Maximum input power:

PKI 2485 – 10 mW

PKI 2490 – 100 mW

Driver unit:

PKI 2485 – 13 mm

PKI 2490 – 40 mm

Active noise reduction level:

40-1500 Hz – 10 dB at 300 Hz

Cable length:

1,5 m

Plug:

3,5 mm gold plated

Power supply:

1,5 V battery type AAA



PKI 2500

Digital Noise Filter System

Secret audio-recordings of wireless transmissions or direct recordings via digital-recorders most often need to have an after-treatment. This especially is necessary in cases where noises from surrounding sources are detrimental. Such unavoidable - but yet disturbing sounds - might be created by air-conditioning, traffic, wind or any other noise-creating engine. We, **PKI**, as a leading manufacturer of surveillance systems hereto can offer a perfect solution to this problem, namely our **PKI 2500** Noise Filter System. With this device every department worldwide - like police, secret service or any other state-owned organisation - is able to restore and enhance such poor quality recordings. **PKI 2500** is based on a special software solution for filtering of noise-corrupted sound recordings.

Specifications:

Consisting of 19 different processing modules:
• Graphical equaliser
• Manually adjustable equaliser sliders
• Adaptive broadband noise filter
• Adaptive frequency compensation filter
• 4 adaptive stereo filters
• Adaptive inverse filter
• Pulse-like interference filter
• Dynamic processing module
• Waveform visualisation module
• Playback speed alteration module
Improves signal-to-noise ratio up to 50dB for tonal noise, up to 20 dB for broadband noise Operates as "Direct X plug-in" in any common sound editor Free adjustment of filtering parameters



- Restoration and enhancement of poor quality recordings
- Improvement of speech intelligibility
- Real-Time Noise Reduction

PKI 2600

Surveillance System Via UMTS Mobile Phone

The **PKI 2600** is the best long-range eavesdropping device in the market providing both audio and video coverage. It has been extensively tested in many countries, where it worked faultlessly and received excellent reviews. It is fully programmable and offers key features like:

- 180° adjustable camera lens
- Highly sensitive microphone for clear listening from up to 10 m
- Operator can make a call from the phone even if it is in surveillance mode.
- The target can be monitored in real time from anywhere in the world without using high power transmitters and receivers.

Specifications:

Within a second by "switching off the phone" (with a special code), the phone changes to surveillance mode with: dead screen, ringer off and keypad disabled. It is now ready to operate as an audio/video transmitter with infinite range. Whenever now the operator wants to see and listen to the target he only has to dial into that phone. **PKI 2600** automatically will answer, without indication to the user. The system only works with 3G phones (WCDMA). Please make sure that there is a 3G coverage and that a valid UMTS card is inserted. If a 3G connection is not available only the audio channel can be used. Once the phone is logged onto network, it may be used normally to make and receive video and audio calls like any other phone.



PKI 2605

PKI 2610

GSM Surveillance Mobile Phone, GSM Surveillance Box

Both systems vary in their different fields of application. **PKI 2605** GSM Surveillance Mobile Phone preferentially is used for unobtrusive and concealed audio transmissions in mobile and flexible tasks, like conferences etc. The **PKI 2605** GSM Surveillance Mobile Phone is a highly sophisticated, modified GSM phone with enhanced Audio Pickup for secret listening into its surrounding area. **PKI 2605** uses a second SIM-card for the monitoring of persons at any time and place - regardless if the original GSM mobile is switched on or off. **PKI 2610** GSM Surveillance Box - on the other hand - has been developed by us for fixed installations, like in buildings, cars etc. Both systems will capture every conversation within a radius of 10 m and transmit this over GSM network worldwide. Both these units can easily be activated by just dialling the phone-number in question, no ringing or other status will be activated. Only by this

technique it is possible to monitor into every room and to every person without any range limits.

Specifications:

PKI 2605

- RF Power GSM class 2
- Power Supply /
- Consumption internal
Lithium-Ion battery,
standby time up-to 16 days,
operating time 3-5 hrs
- Dimensions ordinary Standard Nokia cellular
Phone with 2 SIM - cards and 2 GSM-units

PKI 2610

- RF Power GSM class 2
- Power Supply /Consumption 11 – 15 V DC
External Power Supply standby = 40 mA,
operation 600 mA, operating time 3-5 hrs
- Dimensions 170 x 82,5 x 7,5 mm



- Direct monitoring over GSM Network
- World-wide surveillance access
- Monitoring without range limits
- Multiple fields of application

PKI 2615 **PKI 2620** **PKI 2625** **PKI 2630**

GSM Room Monitoring, GSM Telephone Monitoring, GSM Stethoscope GSM Camouflaged Monitoring Socket or Table Lamp (on request)

These transmitters can be called via mobile phone worldwide. According to their configuration you can now capture conversations in rooms, at remote phones or from outside by stethoscope. Camouflaged GSM transmitters in a monitoring socket, table lamp etc. are invaluable for such purposes as well. Very comfortable is the power plug as this offers unlimited monitoring possibilities. The installation is easily done. You simply have to insert a customary SIM-card (mobile phone card) and you can call the GSM transmitter in question and listen to the conversation in the room where the GSM transmitter is installed. No noise will be audible when calling the GSM transmitter.

Specifications:

- Power supply: 3,7 V DC, 800 mAh, rechargeable battery or power plug according to version
- Battery life: 48 hours standby time, then charging necessary
(only valid for **PKI 2620** and **PKI 2630**)
- GSM-frequency: 900 MHz / 1800 MHz / 1900 MHz
- Microphone: Electret, except GSM stethoscope (sound wave receiver) Basic part for all 4 items
GSM/SMS communication or GPRS TCP/UDP connection Possibility to obtain the target's
latitude and longitude by SMS or GPRS and check position on Google earth auto report
position information of the last location if the target enters into the blind area
- Monitoring and SOS feature
- GOS chipset: SirF III chipset
- Dimensions and weight:
PKI 2615 51 x 46 x 17 mm, 80 g
PKI 2620 51 x 55 x 17 mm, 100 g
PKI 2625 51 x 46 x 27 mm, 120 g
PKI 2630 380 x 60 x 60 mm, 280 g



PKI 2635

GSM/GPS Audio Recording and Real Time Tracking

This complete surveillance device, integrated in a solid case, allows eavesdropping of the interior of a car and localizes its actual position at the same time. The system includes a complete set with all accessories, except the necessary SIM-cards.

Specifications:

General data

- Dimension: 280 x 110 x 70 mm
- Weight: 2,15 kg.
- External power supply: 8-15 VDC
- Built-in battery: 12 V DC, 1300 mAh

Internal GSM

Standard frequency: 900/1800 (1900 on request)
Frequency response: 200 Hz – 3700 Hz
Antenna connector: SMA female
Modem: 9600 AT command standard

Internal GPS

General
 • Frequency L1, 1575.42 MHz
 • C/A code 1.023 MHz chip rate
 • Channels 20
 • Max. update rate 1 Hz
 • Processor speed 6, 12.5, 25 and 49 MHz
 • Data bus 16 bit

Accuracy
 • Position Autonomous: 10 meters
 CEP without SA
 • SBAS: < 5 meter
 • Velocity: 0.1 meters/second, without SA
 • Time: 1 microsecond synchronized to GPS time

Date

- WGS-84

Time to First Position

- GSM < 20 sec., average
- 3 G < 20 sec., average
- CDMA < 16 sec., average
- Hot start < 18 sec., average
- Hot start (open sky) < 1 sec., average
- Cold start < 42 sec., average

Sensitivity

- GSM 15 dBHz

Power Consumption

- Stand-by: 210 mA
- With 2 wire ON and communication
- with headphone plugged and speaker
- ON max. volume: 400 mA
- With 1 GSM ON and communication with headphone plugged and speaker
- ON max volume: 600 mA (average)
- With 2 GSM ON and communication with headphone plugged and speaker
- ON max. volume: 1200 mA (average)
- Storage temperature: -10 – 80°C
- Operating temperature: -20 – 70°C
- Local maximum temperature: -20 – 55°C



- GSM antenna impedance: 50 ohm
- GSM antenna type: Biband passive, SMA male
- GSM transmitting power: class 4 (2W) a EGSM 900 Class 1 (1W) a GSM 1800 e GSM 1900
- GSM frequency band: dual-band EGSM 900/1800 GSM 850/1900
- GSM frequency band: active 3V, male SMA
- GSM frequency band: GPRS multi-slot class 10, class B mobile station
- Chipset and simultaneous satellites: SIRF STAR III 20 channels (200.000 correlations)
- GPS aerial impedance: 50 ohm
- GPS position accuracy: < 10 m CEP SBAS < 5 m
- Date GPS: WGS84
- GPS tracking speed: 500 km/h or lower
- GPS sensitivity: -159 dBm
- Time to first fix: 45 seconds standard
- GPS re-acquisition: 8 seconds

PKI 2640

GPS Vehicle Tracking System

This device combines the GSM/GPRS technology with a GPS receiver. The housing is water-proof and can easily be attached with a magnet to the target's car. The integrated motion sensor activates the device when driving and stops it at still stand with short delay. The antenna is equipped with a cable of 1,5 m length for proper installation. Information about position of the car will be transmitted to a mobile phone via normal cellular network and corresponding software.

Specifications:

- Dimensions: 70 x 25 x 400 m
- Weight: 100 g
- Power supply: external 3.6 V DC
- Communication: GSM GPRS / SMS
- Data capacity: 100 000 GPS points
- Operating temperature: -20° to +60°C
- Antenna: 50 ohm, dual band
- Transmitting power: 1 W
- GSM-frequency: 900/1800
- GPS-antenna: active 3V, 50 ohm
- GPS-sensitivity: -159 dBm typical
- Option: Audio monitoring is possible upon request.



PKI 2645

GPS Mobile Phone Location

With the **PKI 2645** you can locate the position of a mobile phone, respectively a person with an accuracy of +/- 250 m. It works all over Germany and is completely unobtrusive. The location found is sent either via SMS to your mobile phone or via internet, so that you are always informed, where the located person is. Any mobile phone with valid contract or pre-paid card can be used. Registration and installation can be done by us. Also available is a tapping function, by means of which you can listen to the conversations in the environment of the mobile phone. Please contact us for further details.

Specifications:

- Mobile phone networks: O2, D1, e-plus, Vodafone
- Suitable mobile phones: all standard mobile phones
- Operating time: 24 hours
- Information system: internet or SMS to a mobile telephone
- Remark: A registration SMS must be sent to the mobile phone that shall be located
- Comes with: locating software



PKI 2650

GSM Monitoring Transmitter

The future has already begun. This GSM monitoring transmitter can be called with a standard phone from all over the world. It allows monitoring of conversations from wherever you are. As soon as **PKI 2650** captures sounds and conversations it sends a SMS to your phone and you can listen to the conversation. Its sensitivity is adjustable via SMS. All you have to do is to insert a standard SIM-card in this device. **PKI 2650** works completely noiseless! This device allows clear transmission of conversations from all over the world which is absolutely fascinating!

Specifications:

- Network: GSM 900 / 1800 / 1900
- Power consumption:
20 mA standby mode
200 mA monitoring mode
- Audio surveillance: -75dB
- Voice control: environment voice filtering or direct human voice sensor
- Device configuration method:
password protected SMS text message
- Li-battery: 3.7 V DC at 900 mA
- Charging voltage: 5V – 6V DC 500 mA
- Charging input volt: 100-240 V AC
- Dimensions: 53 x 36 x 13 mm incl. battery
- Weight: 40 g



PKI 2660

GSM Monitoring Transmitter and GPS Tracking Device

This miniature monitoring device can be called from all over the world. Not only eavesdropping (inside, in a car or outside) is possible but also the location of the user. The device works with a standard SIM-card, protected by a password. Equipped with external antennas and a 10-36 V DC power supply it allows professional installation and optimal transmitting and receiving signals even under difficult conditions. **PKI 2660** can be connected to every car or truck power circuit. With the built-in Li-ion batteries of 3,7 V and 1500 mAh a standby-time of 48 hours is possible in case of power failure.

Specifications:

- Network: GSM / GPRS / GPS
- Band: 850 / 1800 / 1900 MHz or 900/1800/1900 MHz or 850/900/1800/1900 MHz
- GPS chip: SIRF 3
- GSM/GPRS module: Siemens MC 56
- GPS sensitivity: -159dBm
- GPS accuracy: +/- 5 m
- Start-up time: cold status 45 s, warm status 35 s, hot status 1 s
- Working voltage: 10 V – 36 V DC
- Power supply: 3,7 V 500 mAh Li-ion rechargeable battery
- Standby: 48 hours



- Storage temperature: -40°C to +85°C
- Operating temperature: -20°C to +55°C
- Humidity: 5% - 95% non-condensing
- Dimensions: 85 x 63 x 25 mm
- Weight: 160 g

PKI 2670

GPS Personal Tracking System

The **PKI 2670** is an easy to use, but very efficient GPS tracking system offering the possibility to determine the exact location of a person. Its use is password-protected and it allows comfortable and easy control of a specific person. After switching-on, the **PKI 2670** works fully automatic and does not need any further data input or control. The operation status is indicated by 4 LED's. The position data is given every 60 seconds, either by pressing the "INFO" button or by activation of the integrated movement detector. This informs the operator of the location of the person, incl. name of town and street name. This information can also be shown on digital maps. The full data of the last 120 days can also be recalled. Furthermore, the supplied communicator allows direct calls from the system operator to the user and, by using the

"INFO"-button", the user can call for attention. The status of the "INFO-button" can be transmitted to five different e-mail addresses. If **PKI 2670** is not moved it automatically switches back into stand-by mode and on detection of movements immediately returns into active mode. This automatic energy saving technology makes the built-in Li-Ion battery so efficient and allows continuous operatin of up to 12 h.

**Specifications:**

- Weight: approx. 110 g
- Height: 8,6 cm
- Housing: ABS-plastic
- Operation time: 12 hours continuously
- Status transmission: every 60 seconds
- Power supply: Lithium-Ion battery, rechargeable

PKI 2700

Digital Surveillance System

This device especially is designed for absolutely professional use only. Smallsized, lightweight but sturdy aluminium housings distinguish every part of this system. The risks of interception and detection during critical observation tasks are reduced to a minimum. Depending on the surveillance situation the internal or external microphone can be activated. By this the **PKI 2700** ideally can be used for room as well as body worn operations. The transmission signal is created and scrambled in a digital pseudo-random code so that a highly secured transmission is guaranteed, so that the device provides a most secure and protected listening technique being hardly detectable.

Specifications:**A) Transmitter Frequency**

Between 300 MHz and 1 GHz typically
430-460 MHz or 850-870 MHz
• Output power: + 5dBm @ 850 MHz or
+ 10 dBm @ 433 MHz
• Modulation: FSK @ 76.8 kb/s
• Control: On/Off remote control from

receiver, internal or external
microphone switching power level,
audio gain
• Concealment: digital pseudo-random
code scrambling
• Power supply: 2.5 to 6.5 VDC
• Dimension: 50 x 30 x 6 mm

B) Receiver Frequency

Between 300 MHz and 1 GHz, typically
430-460 MHz or 850-870 MHz
• Sensitivity: -97 dBm @ 850 MHz;
-100 dBm @ 450 MHz
• Antenna: 50 Ohm connection,
short whip antenna supplied
• Output: Headphone capable output,
suitable for recording
• USB: interface
• Physical housing:
Professional aluminium enclosure,
can easily be body-worn or carried
in a pocket
• Power: 1.5 VDC - takes internal AA cell
• Dimension: 102 x 62 x 20 mm



- Highly secured transmission
- Protected against counter measurements
- Designed for agent protection
- Frequency 430 – 460 MHz or 850 – 870 MHz

PKI 2710

Disguised PC Observation System

PKI 2710 is the best possible unit to store any kind of signal from PC's. **PKI 2710** can be used in combination with every common PC, independent from the operating system. Of course, this unit also stores BIOS-Passwords of the monitored PC, enabling the observer to enter into any protected file of the PC-user. Camouflaged as an ordinary adapter between PC and keyboard, the **PKI 2710** stores up to 2 Mio signs, numbers and characters from the keyboard inputs. It is a perfectly disguised and effective way of PC monitoring as it can be installed within seconds. Just disconnect the keyboard from the PC and place the unit in

between. By this "PLUG AND PLAY" method an immediate monitoring of everything what the user is doing on this specific PC is stored and can be downloaded.

Specifications:

- Cable length: approx. 35 cm
- Fast and easy installation between keyboard and PC by means of connecting cable (plug and play)
- Storing capacity up to 2 Mio signs
- Stores BIOS passwords for easy access to any protected file being in use on the PC
- Unobtrusive as it looks like an ordinary adapter



PKI 2715

Computer Interception System

„Tempest“ is the common term for every kind of radiation emitted by computers. Each device and part - such as printed circuit boards, monitors and connecting cables - emit a specific radio signal (compromising radiation) which may contain the fullscreen content of the actual operation of the computer in question. Such signals can be received and reconstructed with our **PKI 2715**. This provides a fast and easy monitoring of a PC in order to see what work actually is done on this. By means of a directional antenna and the special receiver, the incoming data are synchronised and analysed. The received signal then can be seen on the provided display. Depending on type of computer to be monitored the max. distance may vary from approx. 10 to 50 meters. The complete system is supplied by us to government departments

exclusively in order to guarantee full prevention from unauthorised persons committed with industrial espionage, terrorism or any other criminal act.

Specifications:

- Scope of supply:
Directional antenna,
Special receiver,
display
- Others:
Due to security reasons no further
technical data is mentioned here.
Please contact us for full
technical specifications indicating
the position in your government
department.



PKI 2750

Coded Radio Communication System

These handy radio communication systems are equipped with highly sensitive receiver for a superb receiving sensitivity which allows very good receiving distances even with the 1 or 5 Watt output power of the relative transmitters. The more important is the possibility to easily switch over from clear speech to the scrambling mode for secure communications. **PKI 2750**, with its userfriendly operation, is developed according to MIL standards i.e. a maximum of durability and effectiveness. This system can also be combined with our **PKI 2440** Wireless Miniature Earphone for perfect use in disguised operations.

Specifications:

- System according to MIL Standard 810 C,D,E
- User-friendly operation
- Automatic channel selection and individually programmable channels
- VOX funcion
- CTCSS / DCS subcoder for undisturbed communication with other persons using the same channel and subcode.
- Selectable calls for different users
- Pre-programmable emergency call frequencies
- Scrambling mode for secure communication
- 16 channels at 148-174 or 440-470 MHz with 12.5, 20, 25 KHz steps at 1/5 W output power (high/low-selectable)
- 7,5 V DC rechargeable battery, 1300 mA/h for 9 hours operation time
- 0,35µV receiver sensitvity
- Dimensions 130x42x60mm



PKI 2755

Duplex Communication

The use of these duplex communication devices is especially valuable when quick and easy observation is required. The pocket device works on full-duplex-procedure, i.e. transmitter and receiver use different frequencies at the same time which allows a communication like on the phone. Listening and speaking can be done simultaneously without any switching.

Specifications:

- Dimensions: 140 x 54 x 28 mm
- Weight: 120 g
- Frequency: 263 – 393 MHz
- Power: 1,2 W
- Channels: 21
- Max. user: 99
- Operating range: approx. 4 km
- Power supply: Li-ion battery 7,2 V
- Comes with: LCD display with light, micro processor controlled, PLL-system, charger



PKI 2760**VHF or UHF Radio Set with Integrated Scrambler**

This sound and handy radio set with power output of 4 W can be fixed by clip to any belt and is therefore always available when needed. **PKI 2760**

offers various features which allow professional operation. Up to 128 memory channels are selectable. By means of the Vox-function it provides hands-free action which is very important for surveillance. The built-in scrambler makes transmission safe and avoids undesired eavesdropping. In order to offer long operating time the device can be switched manually from Hi to Low.

- Call tone: 1750 Hz
- Repeater tray: available
- Scan and priority channel function: available
- Scrambler: built-in
- Display: LCD with backlight
- Squelch: adjustable in 9 steps
- Keylock: available
- Channels and frequencies: selectable via keypad
- Power supply: battery pack 1200 mAh
- Various: comes with charger for Li-Ion battery, further radio sets available on request

**Specifications:**

- Dimensions: 115 x 63 x 31 mm
- Weight: 195 g
- Frequency: VHF 136 – 174 MHz, UHF 400-470 MHz
- Transmission power: 4 watt
- Channel distance: 25 kHz / 12,5 kHz

PKI 2775**Scrambled GSM Phone**

Most people think that mobile phone calls cannot be eavesdropped or tapped because the system already uses encryption. Unfortunately this is not the case! Actually in most countries the signals are encrypted between the mobile phone and the base station but this data stream can be decrypted with a normal PC. It is even easier to tap GSM phones with a device that simulates a base station which inserts itself between the mobile phone and the provider network. In Germany such easy-doing eavesdropping causes damages of approx. 10 billion Euro per year just in the field of industrial espionage. **PKI 2775** offers the right choice in order to be prevented from this! Each **PKI 2775** works with an individually generated and certified key pair. These are stored on the net card which is inserted into the phone. If another **PKI 2775** (which has its own individual key pair) is called, using the crypto function, the partners are authenticated by means of the two key pairs and the two chip cards. A "one-off" session key (one out of 1038 possible keys) is generated and this is used only for this single communication. This session key encrypts all signals transmitted between the two phones. Whoever intercepts this encrypted data stream will only hear a noise which cannot be decrypted even with the highest performance mainframe computers. **PKI 2775** operates efficiently in all standard 900/1800 MHz GSM networks in all countries.

In addition to the integrated encryption system **PKI 2775** has all the features of a normal, Up-to-date business mobile phone. It still can be used for unencrypted calls to any other phone. For all encrypted and secure communications as well as for all unprotected calls your standard SIM card is used - therefore you do not have to change your phone number in order to use all **PKI 2775** features.

**Specifications:**

- Dual Band GSM 900/1800 MHz
- Full graphic display (106x56 Pixel)
- Rechargeable battery 940 mAh (Li-Ion E)
- Standby time up to 350 hours
- Talk time up to 7 hours
- Hybrid encryption method RSA 1024 / IDEA 128 Bit
- Weight 106 grams
- 100/200 phone book listings on the SIM card
- SMS service

- Secure communication in insecure networks
- Interception-proof
- 2-step encryption method
- Easy handling
- Lightweight and small-sized

PKI 2800

Room Monitoring System Via Mains

The **PKI 2800** is a low frequency transmitter/receiver set using AC power cables for transmission and power supply. Although intended for audio surveillance of rooms, the system can be used as a general purpose security device to prevent from unauthorised entry of rooms in question. The built-in audio compressor reliably captures all sounds inside a room. The transmitter is supplied for installation by the customer into suitable electrical fittings (adherence to instructions given in manual accompanying the equipment is mandatory). Transmitting time is unlimited since power is derived from power cables to which the unit is attached. Additional extras like recording devices of any kind are available upon request.

Specifications:

A) Receiver

- Power Supply: 110 – 240 V AC
- Control functions:
 - squelch, AFC and audio output
- Frequency range: 1,6 – 2,5 MHz
- Dimensions: 180 x 90 x 50 mm
- Weight: 1,2 kg

B) Transmitter

- Frequency range: 1,6 – 2,5 MHz
- Modulation: NB FM
- Deviation: +/- 6 kHz
- Operating voltage: 110 – 260 V AC
- Dimensions: 35 x 45 x 15 mm
- Weight: 140 g



- Room Monitoring via mains line
- Unlimited operation time
- highly sensitive microphone
- compact size

PKI 2850

Electronic Stethoscope

This low-priced economical unit is ideal for long-time observation without entering the room but to listen into it from the outside through solid structures. Where the human ear is inadequate **PKI 2850** makes audible what has previously seemed impossible. The pocket-sized unit can perfectly be body-worn and whenever needed it will be at hand for quick and easy installation. By means of the professional amplifier, and in combination with the highly sensitive contact microphone, conversations and/or noises can be heard through walls, windows or any other solid material. Simply fix the contact microphone by the supplied mastix-material to the best possible surface and listen by means of the electronic amplifier and the supplied headphone directly into the observed room. The amplifier of course is equipped with volume control and output sok-

ket for a recorder.

Specifications:

- Amplifies each kind of sound vibration transferred via solid structures like windows, walls, central heating pipes and doors by means of a contact microphone making these audible from the outside
- Simple installation by fixing the contact microphone with the supplied mastix-paste
- Battery operated for up to 800 hours
- Dimensions: 95x60x25 mm amplifier, 50x35x15 mm contact microphone
- Headset and carrying-bag included



PKI 2860

Wired Monitoring System

Most observation tasks today are done by wireless microphones, the so-called "bugs". Beside these, more sophisticated systems like optical lasers, IRMonitoring Systems, GPS, GSM and computer monitoring systems are used. All of these you may find in this catalogue and are supplied by us. But still there is a demand for a conventional monitoring system using wired microphones. **PKI 2860** is the best choice for such purposes. With its thin cable and subminiature microphone it does not emit any high frequency radiation and perfectly matches the tasks of long-term observations in stationary use and it is hardly detectable. **PKI 2860** provides a perfect audio quality with which even whispered words can be heard and recorded. The standard version of the **PKI 2860** comes with a 50 m cable and can be cascaded by optionally available cables (each 50 m length) up to a total distance of 500 m without any loss of audio quality. The supplied high-capacity and low-noise audio-

amplifier is equipped with an audio input socket, a socket for ear-phone plus an output for any kind of recorder.

Specifications:

- Dimensions of amplifier 22 x 64 x 98 mm
- Weight of amplifier approx. 150 g
- Power supply: 9 V block battery or 110/220 VAC via mains adapter (not included)
- Frequency range: 250 to 3500 Hz
- Amplification adjustable up to 30.000 times
- Operating time up to 50 hours with battery unlimited with mains adapter



PKI 2870**Global Listening Device**

The possibility to monitor specific areas from anywhere in the world is always requested by our governmental customers. This is given by this unit that works via the mobile telephone network. Small-sized, tiny and absolutely noiseless - that is what our high-tech listening device **PKI 2870** characterises. With its small dimensions of approx. 65 x 65 x 28 mm only it can be placed anywhere in a room, a car or any other place which has to be observed. Just put in a standard SIM-card (like used in mobile phones), place the unit in an unobtrusive location and leave the space. That is all what you have to do. From now on you can listen into this area by just dialling the known number of the **PKI 2870** and you can listen into this space. With your mobile phone, and from any place in the world, you will hear the

crystal-clear transmission of each sound and/ or conversation inside this area.

Specifications:

- Transmitting frequency:
GSM 900 MHz / 1800 MHz
- Operating time: standby 14 days
listening 12 hours
- Power supply: Li-Ion accumulator and external power supply via supplied mains adapter/charger
- Microphone: highly sensitive Electret microphone, with amplifier and automatic uniform control for dynamic range
- Dimensions: approx. 65 x 65 x 28 mm
- Weight: less than 200 g

**PKI 2900****Professional Stethoscope Kit**

The **PKI 2900** has been developed for covert surveillance purposes or general security installations. The excellent noise performance combined with high gain capability and automatic compressor makes the unit suitable for a wide range of applications and operating environments. The low power consumption facilitates unattended operation. Each Kit is supplied with a low-noise microphone amplifier, compatible with subminiature microphones, a 5 band graphic equaliser (all in one portable housing) and 2 different stethoscopes (each one for wall and window mounting). Output-sockets for headphones or speakers as well as recorders are provided at the receiving unit.

Specifications:

- Max. gain 100 dB
- Equaliser type: 5 band graphic
- Filter frequency:
300, 600, 1200, 2400, 4800 Hz
- Adjustment range: +/- 10 dB
- Stethoscope type: Piezo crystal
- Stethoscope size:
approx. ø 20 and ø 35 mm
- Output Phone: 4-16 ohm, 100 mW
- Output: Tape 200mV at 50 Kohm
- Power supply: 9 V block battery
- Battery: lifetime approx. 20 hrs
- Dimension: 130 x 50 x 180 mm



- Excellent noise performance
- High gain capability
- Automatic compressor circuit
- Integrated equaliser
- Fully portable
- Battery operated

PKI 2910**Professional Voice Changer**

In many cases of disguised observations it is indispensable to have telephone conversation with the person in question. Under such circumstances the observer should not be identified by his voice. Especially in cases of taking hostages with following black-mails, the **PKI 2910** is the best possible tool for not identifying the caller's voice. In real-time, i.e. without any delay, the voice will be changed from male to female or even children and vice versa. It can be used from any mobile telephone, **PKI 2910** offers a wide spectrum of frequency changes, is highly portable and can be used with any type of telephone or even mobile phones. Transmission is effected by the supplied acoustic-coupler. Just connect this acoustic-coupler to the microphone of your telephone and use the microphone of the **PKI 2910**. The integrated pitch, Mi-balance and formant adjusters are creating the change of voice frequencies.

Specifications:

- Dimensions:
approx. 180 x 120 x 30 mm
- Weight: approx. 280 g
- Power supply:
9 VDC block battery
- Effective adjustment:
3 sliding switches
- A) pitch control – for increase or decrease of audio frequency
- B) formant control – regulates the tone pitch
- C) Mi-Balance – regulates the mixture between original voice and required effect



PKI 2915**PKI 2920**

Parabolic Directional Microphones

These transparent parabolic mirrors, in combination with the built-in low noise and high capacity amplifiers, offer the best audio-unidirectional characteristic being physically possible. The **PKI 2915** and **PKI 2920** just differ in the diameter of the parabolic mirror. With the **PKI 2915** - having a diameter of 60 cm - a distance of approx. 100 m can be achieved, while with the **PKI 2920** - having a diameter of 85 cm – approx. 150 m can be reached.

Specifications:

- These units reach the physical limits of possible sound-pick-up from distant sources
- Two versions available: **PKI 2915** with 60 cm and **PKI 2920** with 85 cm diameter

**PKI 2925**

Directional Microphone

Whenever it is necessary to listen to a conversation at outside areas and from a certain distance, the **PKI 2925** is the best possible choice. This unit is constructed as a directional microphone in the form of a tube. Such types more easily can substitute parabolic mirrors, as their shape is less obtrusive compared to parabolic mirrors. That eases the way of camouflaging during operation. Even from inside a car, with opened windows, or from hidden places in open terrain, the **PKI 2925** can be used. But in order to come as close as possible to the physical advantages of such parabolic mirrors, the **PKI 2925**, in buyer's option, can be supplied in two different lengths of tubes with the same efficiency. For a best possible handling, an ergonomical-shaped handle is supplied, which can be detached if required. The complete set,

incl. headset and accessories comes in a ruggedized, splash-proof hardcover case.

Specifications:

- Pick-up of sounds and conversations from far away
- Selectable filter for high/low frequencies
- Separate amplifier with adjustable amplification and volume control
- Power supply: 9 V
- Socket for external recorder/headphone
- Headphone included
- Weight 525 grams with 350 mm tube

**PKI 2930**

Directional Microphone within a Cigarette Box or Mobile Phone

This exceptionally small-sized directional microphone captures acoustic signals from up to 100 m distance, which are amplified up to max. 10.000 times by its integrated low-noise high-power amplifier. Due to the built-in high- and low-pass filters you can listen to conversations at a distance of 50 m, as they allow especially voice frequencies to pass through and eliminate undesirable noises. It is incredible, that this is possible, particularly in this inconspicuous cigarette box. Even audio transmission is done in an excellent quality. The audio signal will be transmitted wireless via inductor (inside the device) to a miniature earplug. Better camouflage is impossible. Now you can listen undetected to conversations at the table next to you in a restaurant etc..

Specifications:

- Frequency: 20 Hz – 16 KHz (-3dB)
- High-/ low-pass filter: fg= 150 Hz / 5 KHz



PKI 2940**Microphone Case with 8 Channels Digital Recorder**

The **PKI 2940** Microphone Case is equipped with latest technology and designed for permanent room surveillance using wired microphones. Conversations can be monitored in up to eight different rooms and recorded simultaneously in real time with the built-in hard disk recorder which allows play-back, at a later date, of any conversation. All recorded information will be converted into digital data before storage and can be played back immediately. The recording can be split on up to 250 virtual tracks. The interface for CD-R allows the external storage without detour. Locator points and exactly to place markers make it easy to trace precisely certain positions.

Due to its extremely high storage capacity the **PKI 2940** Microphone Case is perfectly suited for a long term surveillance of conference rooms, hotel rooms and prisons.

Specifications:

- Frequency range: 20 Hz to 20 kHz +/- 1 dB
- Voltage distance: > 82 dB
- Distortion: less than 0,01% (at 1 kHz)
- Channel separation: > 80 dB (at 1 Hz)
- input A to C: 6,3 mm, symmetrical
- impedance: -50 dBu to +4 dBu / 4 kOhm
- input D: 6,3 mm, symmetrical
- impedance: -50 dBu to +4 dBu / 4 kOhm (mic/line), 1 MOhm (guitar)
- out-input (stereo): 2 x 6.3 mm, unsymmetrical

- impedance: -10 dBV / 15 Ohm
- total output: 2 x cinch, unsymmetric
- impedance: -10 dBV / 820 Ohm
- digital output / file: coaxial/SPDIF
- output monitor: 2 x cinch, unsymmetrical
- impedance: -10dBV/820 Ohm
- out-output (stereo): 2 x 6.3 mm, unsymmetrical
- impedance: -10dBV / 820 Ohm
- remote control : 6,3 mm
- MIDI in/out: 2 x 5-pole DIN-socket
- SCSI-interface: SCSI-2 50-pole
- Earphone output: 6,3 mm , 2x 60 mW, 30 Ohm
- Power supply: 230 V AC, 50 Hz
- Power consumption: 26 W
- Dimensions: 414 x 95 x 288 mm

- Weight: 3.1 kg (main unit) 1,6 kg (power adapter)
- Microphone input: 4 ch. Stereo or 8 ch. Mono
- Microphone type: sub-min. back electret cadiod
- Cable length: 4x10 m and 4x 25 m
- Frequency response: 30 Hz- 20 kHz
- Recording resolution: 16 bit or 24 bit linear
- Sampling frequency: 44.1 kHz
- Number of tracks: 6 activ, 250 virtual
- Data storage: SCSI-hard disk 10 GB
- Recording time: up to 150 ch./h
- Interface for CD-R: SCSI-2
- Power supply: 115 /230 VAC 30 VA
- Dimensions: 490 x 430 x 165 mm

**PKI 2950****Microphone Cable Reel**

The **PKI 2950** especially was developed for wired room monitoring applications. Due to its cable-based operation this unit is not detectable by any counter measure equipment. The subminiature electret microphone with its small dimensions and the small diameter of the shielded cable is ideally suitable to be hidden behind wallpapers, curtains or in window frames. The small dimensions of the microphone prevent from detection by measuring equipment based on analysing the non-linear junction effect generated in semiconductors. The complete system consists of the highly sensitive electret microphone with shielded connection cable, a cable reel with output socket, headphones and the separate audio amplifier. The supplied audio amplifier provides a low-noise amplification adjusted to the subminiature electret microphone of this system together with a 5 band graphic equaliser and every necessary output for direct listening or recording of conversations. Features like direct listening with headphones, a socket for recording devices and the possibility to extend the total cable length by driving different reels in cascade, fulfill all requirements for effective surveillance.

Specifications:**A) Microphone on reel**

- Microphone Type: of electret
- Microphone sensitivity: - 60 dB / 1 KHz
- Bandwidth: 100 Hz - 7 KHz
- Cable length: 100 m; others on request
- Weight: 600 g
- Dimensions: ø 180 mm x 60 mm

B) Adjustment range: +/- 10 dB

- Output phone: 4 – 16 Ohm, 100 mW
- Output recording: 200 mV at 50 KOhm
- Power supply: 9 V block battery
- Battery lifetime: approx. 20 hours
- Weight: 750 g
- Dimensions: 130 x 50 x 150 mm



PKI 2960

Optical Microphone

The **PKI 2960** ultra-sensitive optical microphone captures a wide range of sounds from normal conversation to soft whispering or even the shuffling of papers with excellent sound accuracy. Being designed for governmental use in SWAT, Special Task Forces and tactical operations it offers surveillance operations and applications requiring RFI/EMI immunity. A beam of light is sent through an optical fiber to a sound sensitive membrane. Sound signals cause the membrane to vibrate and modulate the intensity of the light reflected by the membrane, which is then translated into an electrical signal. **PKI 2960** delivers a high signal to noise ratio, so even very low-level sound inputs can be heard clearly and accurately from many meters away. With an omni-directional polar pattern, the **PKI 2960** can capture sounds from all directions, thus maximising voice representation. The excellent frequency response provides true-to-sound reproduction. The **PKI 2960** cannot be detected by electromagnetic methods since the microphone head neither contains metal parts nor generates electromagnetic fields and is separated from its electronic components by several meters of optical fiber. With its miniature dimensions and versatile configurations it can be installed in a variety of ways to elude discovery both by the naked eye and sophisticated detection equipment such as non-linear junction detectors. Because of its RFI and EMI immunity

the **PKI 2960** can continue to operate even in the harshest environments without any effect to its performance.

Specifications:

- Polar pattern: Omni-directional
- Frequency range: 250 - 4500 Hz
- S/N ratio: 65 dB @ 1 KHz 94 dB SPL
- Sensitivity: 0.3 - 1.8 V/Pa
- THD: < 1% at 84 dB SPL
- Max. static pressure on membrane: 130 dB SPL
- Output impedance: 680 Ohms (standard line input)
- Supply voltage: 9 - 12 V DC
- Current drain: 80 mA

- Operating temperature: -10 °C to +50°C
- Ambient humidity: 93% R.H. @ 40°C, non-condensing
- MTBF: > 100.000 hours
- Std. optical fiber length: 10/20 meters
- Dimensions and weight:
of microphone length 21,5 mm, diameter 4,5 mm, weight 1gr

- Ultra-sensitive microphone
- Excellent sound accuracy
- EMI/RFI immunity
- Undetectable by conventional methods
- Miniature size, lightweight
- Easy to conceal



PKI 2970

Audio Surveillance Kit

In order to be successful in any cases of professional tasks of interception, it is indispensable to have the right equipment at hand. Such basic equipment which is supplied with this set of **PKI 2970** is the absolute minimum which every governmental organisation must have. It has been developed in close co-operation with our customers from worldwide government departments and for completing their request for solutions of every monitoring tasks to be undertaken. **PKI 2970** as a complete assembly results from our more than 40 years experience and our continuous research and development providing the latest state-of-the-art at any time. With this kit you are well prepared, even in cases of unexpected tasks. There is no doubt that the content of this kit can be adapted to our client's requests. Therefore - and this is our long lasting philosophy - we always try to stay in a very close contact to the customers and personally discuss their needs. By this, a final content, beside the standard execution can be determined.

The standard kit contains a comprehensive number of different transmitters for room monitoring powered by mains, telephone lines and battery operated listening devices (even through walls by means of electronic stethoscope with or without transmitter). A professional receiver, a digital recorder and a microphone connected by a cable of 100 m

length (other lengths are available upon request) plus a directional microphone complete the whole set, which is supplied in a solid carrying case for secure storage and outdoor handling.

Specifications:

- This kit contains a comprehensive number of different transmitters, receiver, digital recorder and microphones.

As standard it is supplied with:

- **PKI 2205** Room/Mains Transmitter
- **PKI 2210** Telephone Transmitter
- **PKI 2215** Stethoscope Transmitter
- **PKI 2285** Long Range Transmitter

- **PKI 2510** Handheld Receiver with Digital Recorder
- **PKI 2850** Electronic Stethoscope
- **PKI 2925** Directional Microphone
- **PKI 2950** Microphone Cable Reel
- Other combinations are available on request
- For full technical details of each item please see the relevant item number.



PKI 2975**Investigation Kit for Outdoor Use**

In most cases entrance to a room to be monitored is not possible and observations have to be done from the outside. Although this is the most difficult way of observation, we have the right solution. We only offer devices of latest technology developed on basis of many years of experience in this field. Our product range, as shown in this catalogue, indicates single units for specific purpose, because one universal unit covering all kind of tasks does not exist. As our customers ask for a complete set of equipment, we have assembled the **PKI 2975** Investigation Kit for Outdoor Use. Like our **PKI 2970**, this set also has been assembled in close co-operation with our customers for a best possible selection of necessary items out of our wide range of products. It consists of each and every item being necessary for room monitoring from the outside but, of course, can be adapted at any time in order to meet customer's requirement. Each set is packed in aluminium or sturdy hardcover cases for easy outdoor handling.

Contents:

- PKI 2215** Analogue Stethoscope Transmitter
- PKI 2220** Analogue Pocket Receiver
- PKI 2400** Audio Monitoring Cartridge
- PKI 8025** Silent Drill
- PKI 2455** Needle Microphone with Amplifier

- PKI 2850** Electronic Stethoscope
- PKI 2900** Professional Stethoscope Kit
- PKI 3100** Laser Monitoring System
- PKI 3200** Infrared Observation System
- PKI 2415** Digital Stethoscope Transmitter
- PKI 2420** Digital Receiver

For each single item the complete technical description is listed separately in this catalogue. Depending on customer's requirement, this kit can be adapted to your specific needs. Just contact us to find the best possible solution for all what you need.

**PKI 2980** **PKI 2985****Wireless Stethoscope mono, Wireless Stethoscope stereo**

These stethoscopes find their application where the human ear reaches its limits. The acoustic receptor is very quickly fixed by provided mastic material. It can be attached to the wall (up to 50 cm thick), window, door frame etc. The miniature receiver captures the signal from a distance of up to 100 m. Longer distances are also possible if required, however, this will reduce receiving time from 30 to 15 hours. The stereo version **PKI 2985** is best suitable for operations with loud background noise such as street noise or similar. These sounds can be eliminated by our devices **PKI 2260** or **PKI 2500**. The Piezo acoustic receivers are high sensitive

and capture acoustic oscillation on hard materials, as e.g. on pipes, windows, etc. so that even spoken word are clearly audible. On request we are able to deliver a compatible recorder with 70 hours recording time (**PKI 2980R** refers).

Transmitter

- Dimensions: Ø 32 x 20 mm
- Weight: 15 g
- Power supply: Lithium battery 3V
- Acoustic receiver: Piezo element
- Output power: 5 mW
- Modulation: WMF +/- 25kHz
- Antenna: SHF

Specifications:**Receiver**

- Dimensions: 40 x 120 x 22 mm
- Weight: 85 g
- Power supply: 2 x batteries type AAA, 3V
- Housing: aluminium
- Frequency: SHF 960 – 1300 MHz

PKI 3000

Outdoor Investigation Shooting Stethoscope-Kit

For more than 40 years **PKI** is engaged in AV observation out- and indoor. Consequently our product range offers numerous devices for this application. Please see our below listed devices: **PKI 2215 - PKI 5715**.

Often the rooms which shall be monitored have only access from outside, so that due to security reasons this is the only possible surveillance method. **PKI 3000** therefore offers a very special version as now upper floors can be monitored. On activation the transmitter is shot by a launcher, that is equipped with a CO₂-cartridge, up to a distance of 25 m at full speed. If the transmitter reaches a window or masonry it will stick there and wirelessly transmit the acoustic waves captured from behind the wall up to 50 m. Reception is possible by adequate wide band receivers.

PKI 2215 Stethoscope Transmitter

PKI 2415 Stethoscope Transmitter

PKI 2455 Needle Microphone with Amplifier

PKI 2470 Needle Microphone with Amplifier

PKI 2625 GSM Stethoscope

PKI 2850 Electronic Stethoscope

PKI 2900 Electronic Stethoscope

PKI 2975 Investigation Kit for Outdoor Use

PKI 3100 Laser Monitoring System

PKI 3200 IR-Observation System

PKI 5715 Window Camera

Specifications:

Transmitter

- Dimensions: Ø 10 mm
- Weight: 12 g
- Acoustic receptor: Piezo-element
- HF-power: 1 mW
- Power supply: coin cell
- Monitoring time: max. 24 hours

Receiver

- Dimensions: 160x140x30 mm
- Weight: 180 g
- Frequency: 980 MHz-range
- Input sensitivity: 0,35µV at 12 dB
- Power supply: rechargeable battery
- Outputs: for headphone and recorder

Launcher

- Dimensions: 50x20x10 cm
- Weight: 2,5 kg
- Pressure: CO₂-cartridge
- Range: max. 25 m



PKI 3100

Laser Monitoring System

This **PKI 3100** Laser Monitoring System has been designed for secret surveillance operation if access to the target room is totally impossible. The laser transmitter sends an invisible infra-red beam to the window of the room to be monitored. A certain part of the laser beam is reflected by the windowpane which vibrates slightly due to sound waves caused by the spoken words inside. Due to the law of optics, the beam is reflected in the same angle, i.e. the angle of incidence is equal to the angle of reflection. In order to capture the reflected beam in the middle of the lens the receiver must be positioned very accurately. The captured beam can now be converted into electrical signals, which - after filtering - are amplified and fed into headphones and/or recording devices.

The Laser Monitoring System **PKI 3100** consists of the following parts:

Laser Transmitter

Camera Housing

Wire-trigger

Tele-lens 135 mm

Power supply for transmitter

Cable power supply

2 pcs. tripods

Micrometer platform with adjustable x/y axis

Laser receiver

Camera housing

Wire-trigger

Tele-lens 500 mm

Recording unit & amplifier inside case

Wireless headphones

Cable between receiver and case

Searchtone-handreceiver



Specifications:

Transmitter

- Laser output power: 24 mW max.
- Laser wavelength: 880 nm
- Optical divergence: 0,5 mard
- Optical system: 135 mm, 1:2,8

Receiver

- Optical system: 500 mm
- Laser: class 3 laser

Transmitter/receiver unit (mechanical specs)

- Weight: 1,6 kg
- Power supply: 8x UM-2
- Connectors: socket for wired connection to amplifier

• Adjustment range: +/- 10 dB

• Output phone: 4-16 Ohm, 100 mW

• Output recording: 200 mV at 50 KOhm

• Power supply: 8x UM – 1 or mains

110-240 V AC

• Battery lifetime: up to 50 hours

• Weight: 8,2 kg

• Dimensions: 45 x 38 x 22 cm

Amplifier/Electronic unit

- System: filter amplifier
- Max. gain: 100 dB
- Equaliser type: 5 band graphic
- Filter frequencies: 300, 600, 1200, 2400, 4800 Hz

PKI 3200

Infrared Observation System

Often rooms have to be monitored from the outside due to no direct access and the observation has to be effected by systems hardly to detect. For this purpose the **PKI 3200** Infrared Observation System offers the right choice. Due to its infrared light - which is completely invisible to human eyes and beyond the range of any RF scanner or radio receiver - this device perfectly meets all requirements.

The system consists of an optical receiver with pinpointed telescope, a tripod for mounting the receiver and two different transmitters for room observation. One transmitter is featuring a built-in microphone while the other one comes with a contact microphone which operates like a stethoscope to listen through walls, windows etc. The receiver is equipped with a tele-lens which allows looking into rooms from a distance of approx. 300 meters.

Specifications:**A) Transmitter Frequency** 870nm IR

- Carrier frequency Standard 125 KHz
- Modulation NFM F 3
- Deviation 5 KHz
- Output power approx. 40 m
- Stethoscope-transmitter Dimensions



45 x 35 x 15 mm, battery 6 V

- Room-transmitter Dimensions
85 x 35 x 20 mm, block battery 9 V

B) Receiver Lens connector M 42

- Receiving principle superhet
- Dimension 500 x 120 mm incl. lens and telescope sight
- Power 9 V block battery

- Modulation
- Low rate of detection
- Monitoring of inaccessible rooms through walls and windows
- Portable system
- Easy installation

PKI 4000

Optical Detection Device

The **PKI 4000** is a compact and lightweight device, based on a unique patented technology and is adapted to professional and specific tasks of security activity at its maximum. Worldwide it really does not have any analogues featuring the same technical capabilities. The unit is tested and certified by professionals in the field of counterterrorism and security activities in many countries all over the world. Although being a state-of-the-art unit **PKI 4000** is easy to operate and does not require any special technical knowledge but fully meets all security requirements. **PKI 4000** provides "around the clock" the highest available security level, by minimising the risk of unwanted observation. **PKI 4000** facilitates the detection and exact location of optical and opto-electronic systems, including those covertly deployed - regardless of their type or operational principle (passive, active, laser, night-vision or other systems), level of surrounding light conditions etc. It effectively detects optical systems through double-glazed, tinted windows or windscreens whether these are hidden pinhole cameras, sniper sights, binoculars, lasers or covert video- or photo devices. It is also protected against bright light or flashes and even can identify a vehicle number plate at night.

Specifications:

- Working distance: according to version from 350 m up to 1200 m
- Minimum distance: approx. 0,5 m



- Field of view: 6°

- Operating temperature: - 10 to + 40°C
- Power supply: rechargeable battery 9-36 VDC or AC mains (100-240 VAC) via supplied mains adapter

- Continuous operation: up to 3 hours at fully charged battery

- Power consumption: 4 Watts
- Weight: 1,1 kg
- Dimensions: approx. 175 x 100 x 75 mm

COUNTER SURVEILLANCE



PKI ELECTRONIC INTELLIGENCE GmbH GERMANY

PKI 4100

Rapid Deployment Spectrum Analyser

PKI 4100 is one of the most recent developments of our counter-measures specialists. It is a portable counter-surveillance system for analysis of radio frequency surveillance. As an intermediate field counter measure it can monitor several rooms at the same time. It is easily programmable, with results stored for repeatability and future appraisal, with a full A 4 report printout of text and graphical display in line or bar. It allows a novice user with a modest background in radio scanning to be operational in 30 minutes and to produce a fully documented predetermined scan. **PKI 4100** is not to be confused as near field, one room at a time, equipment. It provides rapid spectrum analysis, with additional spectrum analyser functions. It can readily identify clandestine transmissions including SMART spread spectrum devices, and display video transmissions at "picture in picture". The complete system is fully autarkic with integrated rechargeable battery and mains power supply. Its software on Windows basis is professionally designed especially for electronic counter measures. The video capturing system allows the operator to determine the type of video transmission detected. The captured video image is displayed, picture in picture, on the laptop screen, and can be stored for further analysis and playback.

The **PKI 4100** features mains and line monitoring for cable / telephone line.

**Specifications:**

- Software facilities incl. automatic save of scans, or once every hour for an unattended operation comparing the files routine for additions and omissions, possible threat mode for continuous unattended operation, with alarm manual tune mode spectrum analyser mode
- Frequency range 10 KHz to 3 GHz

- Internal rechargeable battery
- High speed scanning
- Video interpretation and display
- Mains and line / cable monitoring
- Auto save for unattended RF spectrum time profiling
- Possible threat warning
- A4 printout

PKI 4200

Non Linear Junction Detector

Remote controlled transmitters and devices which are switched off, cannot be found by any counter surveillance equipment based on radio scanners. The solution is a debugging device independent from any emission of radio frequencies. Even before using a new room for conferences or after installations, respectively maintenance operations in the room, a basic sweep is absolutely necessary to avoid monitoring by planted devices. **PKI 4200** does not only detect active bug devices but also those which have been switched off. The extremely lightweight unit (only 1.8 kg) is a Third Harmonic Junction Detector and important facility for discriminating between false and real targets. The coloured LED display simply shows left GREEN for false and right RED for target. In addition to the customary Geiger audio indicator, the unit also features AM and FM demodulation modes. Direct listening via headphones is possible.

Specifications:

- Fundamental Frequency: 888 MHz
- Maximum RF Power: 300 mW
- Analysed Harmonics: 2-nd and 3-rd
- Controls: ON/OFF, Volume, Range, Harmonic Selector, Tone-AM FM Selector, Squelch
- Dimensions: 210 x 145 x 45 mm
- Dimensions Antenna: 160 x 40 x 720 mm
- Weight: 1,8 kg
- Detects all types of bugs
- 2-nd and 3-rd harmonic analysis
- Switchable RF power
- Direct listening facility



PKI 4205

HF-Measuring Device

This HF-device measures reliably HF-radiation of mobile phones, DECT-wireless phones, flight security radars, WLAN/Bluetooth and microwaves. It is perfectly designed for measurement of pulsed HF-radiation. The results are measured in $\mu\text{W}/\text{m}^2$. **PKI 4205** offers easiest handling. The logarithmic-periodic antenna has a very good bearing and can perfectly be used for BFM. Measurements are shown on the large 3.5 digit LCD display. An acoustic signal proportional to field strength can be turned on. (sound effect as per our Geiger counter).

Specifications:

- Frequency range: 800 MHz – 2.5 GHz
- Field strength: 1-1999 $\mu\text{W}/\text{m}^2$
- Minimal resolution: -50 dBm
- Precision: +/- 6 dB (+/- 9 digit)
- Power supply: 9V battery
- Operating time: 10-12 h
- Dimension measuring device: 74 x 225 x 32 mm
- Dimensions antenna: 120 x 250 x 30 mm



PKI 4210

RF-Finder incl. Listening Receiver 1 MHz - 3 GHz

With this bug detection device you cannot only locate tapping devices but also determine transmission frequencies and listen to conversations.

The field strength, as well as the frequency, are shown on the LCD display in 100 Hz steps. This device helps you to detect room, phone, GSM or video transmitters etc. quickly and eliminate them. A successful defence system prevents you from trouble.

Specifications:

- Sensitivity: 0,56 μV (12 dB SINAD)
- Power supply: battery
- Loudspeaker: built-in
- Operating temperature: -10°C bis 60°C
- Antenna: 50 Ohm (BNC)
- Weight: 890 g
- Dimensions: 145 x 140 x 40 mm
- Comes with charger



PKI 4215

Bug Detector 1 MHz - 7 GHz

In order to trace a tapping device you need a professional, easy-to-operate locating device which measures the electric field strength of the tapping device. This can be measured because the field strength of the eavesdropping unit is stronger at 10 - 100 cm than local transmitters. The sensitivity is adjustable by potentiometer. The acoustic and visual display changes when approaching the tapping device which allows a quick location of AM or FM, analogue or digital tapping devices. The acoustic alarm can be switched off and be replaced by vibration alert.

This allows totally silent location even of mobile phones or remote controls. The wide band antenna offers the necessary sensitivity for the large frequency range of the **PKI 4215**.

Specifications:

- Frequency: 1 MHz to 7 GHz
- Power supply: 4 x 1,5 V AAA Alkaline battery
- Display: LED bar, for visual indication
- Dimensions: 120 x 60 x 30 mm
- Weight: 180 g
- Antenna socket: SMA-plug



PKI 4220

Detector for Wireless Camera Systems and WLAN Transmitters

Wireless cameras, WLAN networks, Bluetooth devices and audio/video transmitters, all use different frequencies and modulations within the license-free frequency range. The **PKI 4220** has especially been developed by us, in order to locate such devices. The working range of this detector is extremely versatile, from detecting concealed video systems, finding WLAN hot spots, localisation of unauthorized Bluetooth and WLAN devices, to measuring the radiation of video transmitters in the 2.4 GHz range. The **PKI 4220** is able to comply with all these

requirements. It is equipped with a very efficient directional antenna that allows exact bearing within a range of approximately 5 m. Optical and acoustic signs indicate the signal strength. The use of the **PKI 4220** is most easy – just turn it on and start searching spaces.

Specifications:

- Power supply: 9 V battery
- Frequency: up to 2.45 GHz
- Power consumption: 60 mA
- Range: up to 5 m in open



PKI 4230

Radio Eavesdropping Protector

This protector can be used to give real-time protection in meeting rooms, boardrooms etc. against the threat caused from radio eavesdropping devices. After a first sweep of the meeting room for eavesdropping devices, the system can be deployed to ensure that no RF interception device is activated during the meeting. This system is available in 2 versions:

- a fully portable solution including a sensor, a semi-ruggedised laptop (with software) and power supplies housed in a smart briefcase
- a semi-deployable solution comprising a sensor, a semi-ruggedised laptop (with software), power supplies, sensor tripod and system carrying case

Specifications:**Broadband detector (channel A)**

- Frequency: 10 MHz to 2500 MHz
 - Sensitivity: $\geq -60\text{dBm}$
 - Dynamic Range: $\geq 50\text{dB}$
 - Detector algorithms:
- Video (PAL, NTSC), GSM, DECT, 802.11 g(WiFi), Bluetooth, 3G (UMTS)

**Broadband Detector (Channel B)**

- Frequency: 2400 MHz to 2483.5 MHz
- Sensitivity: $\geq -60\text{dBm}$
- Dynamic range: $\geq 50\text{dB}$
- Detector algorithms: Video (PAL, NTSC), GSM, DECT, 802.11g (WiFi), Bluetooth, 3G (UMTS)

Harmonic Receiver (Channel C)

- Frequency band 0:
- 12,8 MHz to 2500 MHz (approx.)
band 1: 2500 MHz to 5000 MHz (approx.)

band 2: 5000 MHz to 7500 MHz (approx.)
band 3: 7500 MHz to 10000 MHz (approx.)

- Resolution: 8 kHz
- Sensitivity: $\geq -50\text{dBm}$ (10dB SNR)
- Dynamic range: $\geq 50\text{dB}$ (noise floor to P1dB)
- Sweep rate: band 0,1 , 2 and 3 approx.
every 250 mS

Sensor Inputs & Outputs

- External power: 2,5 mm centre positive
- Network: RJ45, Ethernet
- Alarm outputs: green, blue, red LEDs, audio signal

Sensor power

- External power: 12V DC @ 4A, reverse polarity, protected against overvoltage

Sensor mechanical

- Sensor size: 280 mm x 200 mm x 110 mm
- Sensor weight. < 2,5 kg

Sensor approvals

- EU EN 300 440-1, EN 301 489-3
- FCC Part 15B, unintentional radiators

PKI 4250

Non Linear Junction Detector

PKI 4250 Non Linear Junction Detector is designed to detect various kinds of electronic devices containing semiconductor elements. Flooding of suspected areas or targets with spectrally pure microwave RF signals locate eavesdropping devices, microphone amplifiers, audio recorders etc. - both in switched-on and switched-off mode. Analysing both 2-nd and 3-rd harmonics returned and varying on the materials with the different metallic junctions and semiconductor junctions return, gives the operator a clear indication of the source of any reflected signal. Due to the use of different formats of modulation for fundamental signals there is a possibility not only to detect radio transmitting devices, but also to define their types by listening to them.

- Manual adjustment of radiation power
- Minimised back and side directional lobes
- Built-in loudspeaker
- possibility to connect headphones
- circularly polarised antenna reduces search time and improves reliability



- Detection of electronic-containing devices
- High sensitivity
- 2 W RF power
- Side directional lobes

- power supply from both rechargeable battery and mains power

Specifications:

- Fundamental Frequency 890 - 895 MHz
- Radiation Mode Continuous
- Automatic tuning step size 0,5 MHz
- Analysed Harmonics 2-nd and 3-rd

- Maximum RF Power 2 W
- Receiver sensitivity Not worse than -130 dBm
- Dynamic Range of receiving section Non less than 75 dB
- Indication Audible and visual (bar indicator)
- Power supply 12 V Li-Ion rechargeable battery or mains power
- Operation Time 2,5 hrs

PKI 4275**RF Transmitter Detector with Global Analysis Software**

For searching of active RF listening devices, speed is essential i.e. minutes or even seconds could potentially be worth tens of thousands of Euro to an eavesdropper. Important meeting areas are exposed to the danger of electronic eavesdropping. The detection and location of illicit RF transmissions requires quick and silent action to identify and locate listening devices on the radio spectrum without alerting potential eavesdroppers. **PKI 4275** makes the detection, identification and location of radio transmitters quicker and easier than ever before. Tuning a radio manually into every station on the FM bandwidth requires a very long time. With the **PKI 4275** you can cover the whole FM bandwidth at a 500 times wider range, all in less than 5 seconds. The spectral Global Analysis Software adds a further dimension to Identifying listening devices. Remote control via telecommunication network and data storage on disk for further analysis are implemented.

**Specifications:**

- Frequency range: in two bands – DC to 10 MHz and 10 MHz to 5 GHz
- Sensitivity: > - 70 dBm at 10 dB SNR for 1 KHz
- Input 2nd order intercept point: - 2 dBm to + 60 dBm
- Input 3rd order intercept point: -13 dBm to + 39 dBm
- Input 1 dB compression point: -20 dBm to + 10 dBm
- IF rejection: 50 to 85 dB
- Spurious free dynamic range: 74 dB
- Dynamic range: 98 dB
- Battery life: approx. 5 hours continuous work
- Dimensions: approx. 312 x 70 x 252 mm
- Weight: approx. 4 kg

PKI 4300**Advanced Telephone Tapping Detector**

The **PKI 4300** is the most advanced network detector available in the world market, based on a highly qualified time domain reflectometer compatible with all types of telephone, data and coaxcables. The full kit includes RF line detection and voltage measurement enabling any changes in the characteristics of the cables to be analysed and fault plus location to be identified. The **PKI 4300** can provide details like size of the object due to the precision of the reflected signal. All traces and parameters are displayed on the builtin high resolution LCD screen. With the ability of the **PKI 4300** to integrate with computer networks not only phone and wire tapping successfully can be controlled but also computer network espionage. A Window based software is available in option for complete data analysis and comparison.

**Specifications:**

- Pulse widths: 1, 2, 5, 10, 20, 50 ns
- Accuracy: 0.01 %
- Minimum distance: 0 m with adapted lead
- Resolution: 0.5 % of displayed range
- Measuring range: 0...100, 200, 500, 1000, 2000 and 5000 m
- Dynamic response: up to 70 dB
- Memories: 12 reflectograms
- Interface: RS 232
- Display: 256 x 128 pixel
- Power supply: NC-battery / 12 VDC
- Dimensions: approx. 379 x 399 x 207 mm
- Weight: approx. 5,6 kg
- Exact location of unauthorized objects
- Full comparison analysis
- 12 digital reflectogram memories
- Very high resolution
- Great accuracy
- PC and printer interface

PKI 4380

Interception Receiver with Spectrum Scope

This monitoring receiver is designed for capturing of signals, for spectro analysis as well as for recording of received signals. It covers a range of 0,005 to 3335 MHz at a frequency stability of +/- 0,05 ppm at 25°C. **PKI 4380** is appropriate for professional use and also allows reception for P25-digital modulation. The multifunctional spectrum scope allows scanning between two constant cut-off frequencies. Due to its numerous features this device is absolutely exceptional, especially e.g. the roofing filter, a digital ZF-filter, a 2-point-notch-filter, a FSK-speech synthesizer, a multi-scan-function etc. **PKI 4380** is equipped with USB-socket for external storage on external USB-devices. Transfer of captured NF-signals and configurated data files from the receiver resp. from a PC is possible. Upgrades are effected by USB-memory.

PKI will be pleased to submit offers for interception receivers up to 12 GHz on request.

Specifications:

- Frequency range: 0,005 to 3335 MHz
- Operating systems: USB, LSB, CW, FSK, AM, FM; WFM, P25
- Number of data storage: 1220
- Antenna sockets: PL (SO-239, 50 Ohm for kW), RCA (500 Ohm for kW), 2xN (50 Ohm)
- Operating temperature: 0°C to +50°C
- Frequency stability: better than +/- 0,05 ppm (at 25°C)
- Power supply: 100/120/230/240 V AC
- Power consumption: less than 100 VA
- Dimensions: 424 x 149 x 340 mm
- Weight: 20 kg
- Accessories: mains cable, grip handle, spare fuses, ACC plug, RCA-plug, DC plug, plug for loudspeaker
- Intermediate frequencies: kW 58,7 MHz (1. ZF), 10,7 MHz (2. ZF), 48,0 kHz (3. ZF), VHF/UHF 278,7 MHz and 778,7 MHz (1. ZF), 58,7 MHz (2. ZF), 10,7 MHz (3. ZF), 48,0 kHz (4. ZF)
- Sensitivity:

	SSB, CW, FSK	AM	FM	FM 50K	WFM
0.100-1.799 MHz	0,5 µV	6,3 µV	-	--	--
1.800-29.999 MHz	0,2 µV	2,5 µV	0,5 µV	0,71 µV	--
30.0 – 2499,999 MHz	0,32 µV	3,5 µV	0,5 µV	0,71 µV	1,4 µV
2500-2999,999 MHz	0,32 µV	3,5 µV	0,5 µV	0,71 µV	1,4 µV
3000-3335,000 MHz	1,0 µV	11 µV	1,6 µV	2,2 µV	4,5 µV
- Dynamic range: 109 dB at 14,1 MHz

**PKI 4400**

Portable Noise Generator

The **PKI 4400** is designed as an easily portable acoustic noise-generating unit, which can be carried in coat-pockets or briefcases, in order to protect sensitive conversations inside rooms. The **PKI 4400** Portable Noise Generator is very versatile, as it can be fixed on many different surfaces inside the room in order to protect sensitive conversations from being monitored. The typical application is found in conference rooms with critical areas like windows and non controllable adjacent rooms. It is suitable for walls, floors, ceilings, water- and/or heating pipes and windows. By means of the supplied 4 resonators, the unit creates a noise which, by its vibrations, disturbs every common microphone by overlapping the sound-waves of spoken words. The optimised voiceband noise masking reduces the effectiveness of eavesdropping devices such as contact microphones, wired microphones inside walls, battery operated audio transmitters or devices using mains power



supplies for operation as well as laser-/microwave- and/or infrared reflections from windows. Any environmental masking easily is possible by using several units of the **PKI 4400** at the same location. The **PKI 4400** can be mounted to any smooth surface by the use of the provided suction cups or just placed in any critical area.

Specifications:

- Audio frequency range 300 Hz - 3 KHz
- Output sound level max. 92 dB at 1 m

- Power supply 2 x 9 V alkaline batteries or AC transformer
- Battery life typically 7 hours at 50% level, 2 hours at full level
- Size approx. 18 x 13 x 5 cm
- Weight approx. 350 g
- Includes carrying case, AC transformer
- Protection of sensitive conversations
- Suitable for walls, floors, ceilings and windows
- Easily portable in coat-pockets or briefcases

PKI 4650**PKI 4655**

Wired Noise Generator, Wireless Noise Generator

The technology of monitoring devices is rapidly increasing and detection and location of such devices is very hard to realize. Transmission frequencies of such items may vary nowadays from VHF- to upper GHzranges. Additionally optical monitoring systems, like Lasers, Infrared Systems and Audio-Stethoscopes are in use. Therefore it is essential that government departments, as well as industrial companies protect themselves against such monitoring devices. For this purpose we have developed our **PKI 4650** and **PKI 4655**. With both systems an electronic generator creates a white and/or pink noise which is emitted via the resonators to the windows, doors or walls. The resonators can be placed and fixed by the supplied special mastics material. By means of these vibrations, such monitoring devices are interfered and an understandable transmission is impossible. **PKI 4650**, as the standard set, comes with the generator and four cable-connected resonators. **PKI 4655** uses the same principle but is independent from cable connections, as the resonators are battery-operated and each unit consists of an integrated generator and resonator. Each unit can be placed within seconds. Depending on room size, the number of devices can vary from one unit only to infinity. This white-noise generator especially is in use where members of conferences should not be aware of such protective actions.



Specifications:

- Power supply:
PKI 4650 110/220 VAC
PKI 4655 9 VDC Block battery
- Power consumption: max. 400 mA
- Dimensions: 95 x 29 x 37 mm
- Weight: approx. 130 g with battery
- Scope of supply:
PKI 4650
1 x 2-channel noise generator

- 4 x Contact-resonators
- 1 x Mains power adapter 12VDC
- Set of adhesive mastics material
- PKI 4655**
generator combined with resonator, adhesive mastic material
- Cable length: 5 m

PKI 4700

Hand Held Detector

This handy and versatile detector can be used not only for the detection of listening devices but also wireless cameras and illicit mobile phones, that are for example used by unauthorised persons like in prisons etc. The transmitted field strength is indicated on a display as well as by a pitching tone. The nearer you approach to the object you wish to locate, not only the indicated field strength but also the tone pitch increases. Sound alarm of course can be switched off in cases where sounds must be avoided, as for example during sweeping of a room where active transmitters might be in operation. The sensitivity of reception is especially high within the frequency range of mobile phones and wireless video transmitters, i.e. between 0,9 and 5,8 GHz.

- Operating time: 5 hrs continuously
- Weight: approx. 350 g
- Dimensions: 7,5 x 14 x 2,2 cm

- Use for detection of spy cameras, mobile phones or bugs
- Frequency range up to 5.8 GHz
- Bar graph indicator for field strength
- Localisation also by tone pitch



Specifications:

- Frequency range:
10 MHz – 5,8 GHz
- Alarm:
LED bar graph internal beeper
External vibrator (optional)
- Localisation: by tone pitch
- Display: LED
- Detection range:
up to 3 m depending on the signal
- Power: 9V standard battery

PKI 4710

Computer RF Detector

By this **PKI 4710**, a direct localisation of hidden monitoring transmitters and other unknown transmitting objects, whether room-, telephone-, GSM or video related devices, is guaranteed. For many years our team of experts has been concentrating on latest developments of detection devices in order to provide our customers with best possible products for each and every task. This highly sensitive but small and handy near-field detector allows transfer via cable of all received information onto a laptop and by another connection directly to a suitable scanner to get the sound. On both, the laptop and/or the optional scanner, the required adjustments and storage can be effected. The more you approach the suspicious object the more the beam-indicator on the **PKI 4710** will increase from left to right plus an audible alarm, additionally presenting the absolute correct frequency on its 10 figures LCD display. By all of these three indicators the localisation of such suspicious transmitting sources is most easy. We strongly recommend this device for any sweeping operation, as for example for the police for the fight against terrorism and criminal acts, or for special forces acting against each kind of espionage as well as for military and industrial security forces.

**Specifications:**

- Frequency range: 1 MHz to 3 GHz
- Resolution: 100 Hz steps
- Input sensibility: <25 mV at 12 dB SINAD
- Power supply: rechargeable battery with mains adapter
- Dimensions: 95 x 68 x 30 mm
- Weight: 220 g

PKI 4720

Camera Detector

You are afraid of being monitored by hidden miniature cameras? In this case you should always have this handy camera detector measuring only 50 x 65 x 15 mm with you, in order to control if you are not monitored by any camouflaged cameras in your hotel, home, office etc. The **PKI 4720** traces hidden cameras within some minutes. Just turn it on and scan the wall surfaces through the round hole. The detector emits a pulsating red LED-light. The pulsating frequency is adjustable from 1 to 5. If there is a camera hidden somewhere, the pulsating red light will be reflected by its lens, even if its dimension is not more than 1 mm, no matter if the camera is active or not. Protect your privacy by using the **PKI 4720** for quick and easy control.

Specifications:

- Dimensions: 50 x 65 x 15 mm
- Weight: 40 g
- Power supply: rechargeable battery
- Charger: included
- Operating time: 5 hours per battery charge
- 6 x LED: pulsating, red, pulsating frequency adjustable from 1 – 5
- Battery charge indicator included



PKI 4725

Detector for Cameras and Bugging Devices

This device should always be included in your luggage. Either surveillance cameras, bugs or infrared diodes, the **PKI 4725** detects all wired and wireless units and thus protects you from being monitored anywhere. You can choose between optical alarm via LED-diodes, acoustic alarm via loudspeaker or silent alarm via vibration. This camera and bug detector is the indispensable partner for protection of your privacy.

- detection range, „low“ decreases detection range“
- Power supply: 2 x 1.5 V batteries type AAA
- IR-detection range: 920nm
- HF-detection range: 1 MHz – 6.5 GHz
- Optical lens: IR
- Dimensions: 108 x 48 x 18 mm
- Weight: 50 g



Specifications:

- Range for laser detection: 10 cm - 10 m
- Range for high frequency detection: 5 cm - 10 m (depending on signal intensity)
- Sensitivity: adjustable, „high“ increases

PKI 4730

Transition Control Device

Nowadays you can never be sure anywhere, as there are unlimited varieties of eavesdropping devices on the market. There has been an enormous development in interception technology (please see our catalogue). The new devices do not only use higher frequencies, but also totally different technologies, like GSM and GPS. Furthermore digital tapping devices are rating high meanwhile and everybody knows that it is difficult to locate them. Our **PKI 4730** allows reliable localisation of these devices. Integrated in a frame with interior dimensions of 1 x 2 m the device can be arranged before or under every front door. Now you can be sure that your interlocutor will not activate HF-eavesdropping devices without causing an alarm.

Specifications:

- Dimensions: 100x 200 x 25 cm
- Weight: 12 kg
- Locating frequency: 10 MHz – 6 GHz
- Power supply: 100 – 240 V AC, 50 Hz
- Alarm: optical or acoustical
- Detection range: up to 6 m, according to power of eavesdropping device
- Sensitivity: < 25 mV at 12 dB SINAD



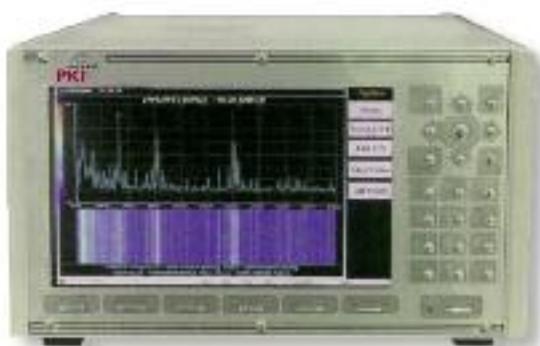
PKI 4735

Active Eavesdropping Resistance

Often actions of foreign intelligence services have been planned long beforehand and are executed very professionally. Modern communication technology like GSM (see **PKI** catalogue), laptops and blackberrys facilitate spying attacks.

In order to meet such attack, a reliable security structure for protection against eavesdropping is of highest importance. This means active and passive eavesdropping resistance.

PKI works with experienced eavesdropping specialists using modern devices (see **PKI** catalogue) in order to detect different types of tapping devices.



Specifications:

- **PKI 4735** comprises:
 - inspection of telephone devices
 - inspection of local net work (current, computer)
 - examination of rooms by measuring devices
 - and visual devices qualified training courses
 - information about risks of radio communication

PKI 4740**Passive Eavesdropping Resistance**

PKI develops, supplies and installs bugproof rooms worldwide. This reliable and durable protection against eavesdropping attacks is nowadays necessary for every conference room. Interference attacks are no longer limited to 100 m. Eavesdropping technology has been revolutionized by GSM technology (see **PKI** catalogue). The room screening system comprises HF-

screening and acoustic insulation including air conditioning, electrical installation and furniture. Screening is totally invisible for the user. Furthermore, we are prepared to supply bug-proof booths ready to use.

acoustic insulation
power supply bug-proof
air condition bug-proof
furniture
fire-alarm and fire extinguishing systems

Specifications:

- **PKI 4740** comprises electro magnetic screening

PKI 4750**Architectural Room Screening**

With the **PKI 4750** series of room screening devices we offer a large range of products, architectural engineering, planning and know-how for worldwide government agencies and special task forces in order to prevent their own facilities from being monitored and to make sure that internal electronic works will be kept inside their rooms. The **PKI 4750** Architectural Room Screening integrates the RF-screening into the architecture of a new or already existing room being invisible to the users and others. Each single component, by its own, cannot guarantee a complete protection. Only the integration of compatible devices can realise this. Planning, construction, production and aftersales-service are combined in one hand by **PKI ELECTRONIC INTELLIGENCE**. Only with this complete service package attenuations of 40 or 60 dB at 10 MHz to 3 GHz can be achieved and guaranteed. For even higher requirements we use copper- or steel-sheets providing a damping of 80 dB up to 10 GHz. But as each single project needs to be evaluated



case by case it is essential to stay in close discussion with our customers and to find out which kind of electromagnetic screening is most suitable.

Ask us for:

- 1 Architectural Room Screening
- 2 Modular Room Screening Panels
- 3 Electromagnetic Screened Cages

- 4 Screened Tents for RF and EMV Measurements

- Communication and Security
- RF-screening up to 3 GHz
- Integrated screening in existing or new buildings
- Invisible to users and others

VIDEO AND NIGHT VISION SYSTEMS



PKI ELECTRONIC INTELLIGENCE GmbH GERMANY

PKI 5100

Multi-Purpose Thermal Imager

The **PKI 5100** is an innovative thermal imager, which offers outstanding imaging and temperature measurement performance together with extreme flexibility, ease of use and minimal operating cost. With the **PKI 5100** we can offer an imager that is ideal for thermography and maintenance engineer alike; high quality images may be captured and manipulated offline or problems can be resolved on the spot. The camera comes with an industry leading 3.5" colour LCD display with LED backlight. The ergonomically designed imager houses the complete uncooled microbolometer-based camera core together with a long life Li-Ion battery pack. Images can be stored on MMC or SD cards for recall and further analysis if required and also can be downloaded to a PC for further report generation and printing.

Operation

Designed for self-contained use, the **PKI 5100** contains everything required by the operator. The high power, field replaceable, rechargeable Li-Ion battery allows continuous operation over a full working shift. The **PKI 5100** is fully radiometric. Temperature measurements can be made over the entire image, and hot spots can be identified by the use of a trigger activated laser pointer.

Specifications:

- Field of view: 20° x 15°
- Focus: manual
- Minimum Focus approx. 30 cm
- Spectral response: 8µm to 14 µm
- Thermal sensitivity:
150 mK (0.15°C) @ 25°C
scene temperature
- Detector:
160 x120 pixels uncooled microbolometer
- Image storage: up to 1000 images
on supplied SD card
- Display:



3.5" colour LCD with LED backlight
4 colour palettes

- Laser pointer: a built-in class 2 laser is supplied to highlight the central measurement area
- Measurement temperature: range -10°C to +250°C
- Radiometry: two movable temperature measurement cursors
- Temperature difference measurement
- Emissivity Correction: user selectable 0.2 to 1.0 in steps of 0.01 with reflected ambient temperature compensation
- Accuracy the greater of plus/minus: 2°C or 2%
- Power supply: Li-Ion rechargeable

battery, AC adaptor supplied

- Operation time:
4 hours continuous operation
- Operating temperature:
-15°C to + 45°C
- Storage temperature:
-20°C to + 70°C
- Dimensions: 230 x 120 x 110 mm
- Weight: 0.75 kg incl. battery
- Predictive and preventative maintenance
- Process monitoring
- HVAC & R troubleshooting
- General industrial/domestic inspection
- Security

PKI 5105

Thermal Imaging Camera

Compared with night vision devices, the advantage of thermal imaging cameras is that they are able to capture images even through fog, smoke or rain. Animals, objects or persons become visible even hidden behind shrubs or bushes. Of course it shows a thermal image, not a natural image. The **PKI 5105** can be used for surveillance operations of any kind, as well as for thermographic controls at insulation works in buildings or at leakages.

Specifications:

- Spectral range: 7-14 µm
- Type of detector: uncooled silicone micobolometer
- Focusing: 1 m to infinite
- Power supply: standard batteries
- Operation temperature: -20° to +50°
- Weight: approx. 600 g
- Housing: waterproof
- Camera: 2.3 mega pixel
- IR-resolution: 140 x 140 picture elements
- Display of the camera: 3.5"



PKI 5110

Laser Range Finder

Measuring the distance to a possible target always is essential in cases where an unobtrusive alignment to this is necessary in order to choose one of the specific listening devices like our Laser Monitoring Device **PKI 3100** or our Infrared Observation System **PKI 3200**. Any special task forces, may it be from police or military departments, should have the **PKI 5110** as an essential tool for their purposes. This hand held and low-weight unit perfectly matches to these requirements and is as easy to handle like an ordinary binocular. By looking through the device you can obtain the right direction (in case of the use of one of a.m. devices or directional antennas for wireless monitoring and/or any other listening devices) and by pushing a button, automatically and within a second the right distance to the object will be digitally displayed. The binocular is equipped

with transmitter- receiver and allows measurements up to 10 km distance. The unit exactly measures the distance and angle and the results are shown on the integrated LCD indicator. The reported measurements will help to choose the right objective for optical observation systems and the right angle for directional microphones or antennas.

Specifications:

- Field of view:
8° = 140 m width at 1.000 m distance
- Eye relief: 13.5 mm
- Exit pupil: 3.6 mm
- Weight: approx. 425 g
- Dimensions: 6 x 14,5 x 14,2 cm



PKI 5115

IR and Laser Detection Device

There is a counter-device for every unit. This pocket device offers very good services. Night observation by camera or night vision instruments with IR light can be easily detected. Furthermore, even laser interception devices with strong beam within the invisible 880 nm range can quickly be located. You simply have to put the unit with its sensor into the direction where you suspect an observation device. If the IR-beam meets the sensor a visual and/or acoustic alarm will be heard. Its distance can be evaluated according to the alarm, which is strong at short distances and weaker at longer distances.

Specifications:

- Wave length: 780 – 880 nm range
- Dimensions: 110 x 58 x 24 mm
- Weight: 120 g
- Power supply: Li-ion battery
Comes with recharger



PKI 5120

Zoom Rifle Scope 3-12 x 50

We are prepared to offer rifle scopes in multiple versions. Please ask for a quotation.

PKI 5120 is bullet-proof also against large calibres and features unparalleled light transmission with fully tempered optics. It is filled with nitrogen against internal moisture. **PKI 5120** is equipped with a Duplex reticle providing a cross hair with thin and thick crossing lines for precision aiming. Thick bars on the perimeter and thin ones in the middle allow the eye to quickly locate the center of the reticle and the thin lines in the center allow for precise aiming. Our valuable Duplex reticle offers a high hit ratio even at long distances.

Specifications:

- Magnification: 2-12 x
- Objective lens diameter: 50 mm
- Tube diameter: 25,4 mm
- Reticle: Duplex 30/30
- Eye relief: 75 and 95 mm
- Dimensions: 314 x 58 x 58 mm
- Weight: 390 g
- Installation: suitable for diameter 25,4 mm, included in package



PKI 5130**Waterproof CCD Colour Camera**

The **PKI 5130** offers clearer images and greater distances of video observation to every government department or industries. The built-in 1/3" SHARP image sensor provides pinsharp pictures at a very high resolution. Even under no light conditions this camera works perfectly because of the integrated IRillumination. Both, the camera and the IRillumination, are placed in a waterproof housing for outdoor use under every weather-condition. The invisible IR-light illuminates the surrounding up to 50 m distance. Depending on buyer's option the **PKI 5130** is available either in PAL or NTSC version.

Specifications:

- Image sensor: 1/3" SHARP sensor
- TV system: PAL / NTSC
- Horizontal resolution: 480 TV-lines

- Pixels: PAL – 752(H)x582(V)
NTSC – 768 (H) x 494 (V)
- IR LED: 5 x 36 pcs
- IR Series Distance: 20 to 50 m
- Synchronisation System:
Internal synchronisation
- Minimum Illumination:
0.000 lux / F1.2 (LED on)
- S/N ratio: > 48 dB (AGC off)
- Gamma characteristic: 0.45
- Video output: 1 Vpp at 75 Ohms
- Scanning system:
PAL – 625 lines/50Hz
NTSC – 525 lines/60Hz
- Electronic shutter time:
automatic,



- PAL 1/50-1/100.000 sec,
NTSC 1/60 – 1/100.000 sec
- White Balance: automatic
- Operating temperature:
-10 to + 50°C, at 95% relative humidity
- Storage temperature:
-20 to + 60°C, at 95 % relative humidity
- Power supply: 12 VDC, 500 mA

PKI 5200**Nightvision and Thermal Imaging System**

The **PKI 5200** is an easy to use, handheld device for direct observations by means of an uncooled thermal imaging system. It provides "round-the-clock" observation, monitoring and security for any military, paramilitary, police or civilian application. Not only problematic areas like border fences, buildings and industrial sites can be surveyed but also hidden objects in cars, cases etc. It also detects human traces like foot- and fingerprints as well as overheating and fires, before flames and smoke become visible. This makes it the ideal, costeffective, warning device for any monitoring task.

PKI 5200 is an integrated electro-optical system incorporating a microbolometric IR camera for night-vision and a CCD camera for daylight use into a highly affordable unit for monitoring any sensitive location or observing potential trouble spots. **PKI 5200** can be fixed to a solid base at a particular observation point and being connected via optical fiber or wireless link for remote display and centralized control by the operator situated at a safe distance. Vehicle mounting for mobile reconnaissance also is possible.

**Specifications:****A) Thermal Imaging part**

- Detector type FPA (Focal Plane Array)
uncooled microbolometer
(amorphous silicon or
vanadium oxide)
- Spectral range 8 – 12 µm
- Resolution 320 x 240 pixels
- Focal length 100 mm
- F# 1
- Field of view 8.45°H x 6.33° V
- Video output CCIR or RS 170
- Remote control RS 422 or RS 232

- Control operation AGC, focus (manual)
contrast, on/off, video
polarity, NUC
- Operating voltage 12 V nominal
- NETD < 100° mK
- Detection range
(human being) better than 800 m
- Recognition range
(human being) better than 300 m
- Transmission
(hard carbon exterior coating)
81 % (8-12 µm average)

B) Video camera part

- Sensor CCD
- Pixels 768 x 494
- Optics F 1.4 / 50 mm
- Field of view 5.6° H x 4.2° V
- Detection range better than 2.500 m
- Recognition range better than 1.000 m
- Modular options optimised to applications
- Remotely controlled
- Easy installation
- Built-in "Go/No Go" Tester

PKI 5205

Binocular Telescope Camera

This high-class pocket camera is a development from the latest generation of camera. It offers a 10x magnification with the dimensions of only 140x100x40mm and a weight of 396g, integrated digital camera with 1,3 megapixels and 16MB memory capacity. This allows you to observe objects or persons at a distance of up to 1000m and save as much pictures as you want on the provided smart card. The fitting for a tripod is also included. The pictures can be transferred to a PC by means of the USB output. Because of its small size we recommend to take the **PKI 5205** always with you in case of surveillance or observation services.

Specifications:

A.) Digital Camera

- Image Sensor: 1,3 mega pixels CMOS sensor
- Resolution: 1280 x 1024 CSXGA,

- 640x480 (VGA)
- Quantity of pictures: SXGA / 50 pictures
- VGA / 90 pictures
- Memory Capacity: 16 MB
- Lens: F 4.5
- Angle of view: 5,8°
- Focusing range: > 7 m
- Exposure white balance: Automatic
- Port: USB
- Self-timer delay: 10 seconds
- Power of keeping: 25 seconds
- Battery: AAA (2 pcs.)

B.) Binocular

- Magnification: 10 x 25
- Object Lens Diameter: 225 mm
- Angle of view: 5.8°
- Exit pupil diameter: 2,5 mm
- Exit pupil distance: 10 mm



PKI 5210

PKI 5220

Nightvision Monocular, Nightvision Binocular

Whenever visual observations under low-light or even no-light conditions have to be effected, the use of a professional night vision device is indispensable. With these two units, whether monocular or binocular, such tasks can easily be fulfilled. These extremely lightweight but robust night vision devices have been designed for operation under all weather conditions and at any light level. Even in complete darkness these units will work due to the built-in IR-illuminator being invisible to the human eyes. Each type, whether the **PKI 5210** or the **PKI 5220** provide a sharp and clear picture of the area to be surveyed and is therefore especially useful for police, customs, security guards and border controls. Each type is waterproof and another main advantage is the low power consumption which allows an outstanding operating time of approx. 50 hours continuously with one set of standard batteries. Different adapters optionally can be supplied to connect the **PKI 5210** / **PKI 5220** to cameras or camcorders



Specifications:

- Controls Multi-latching push-button:
 - On/Off
 - Intensifier only
 - Intensifier plus IR-Illuminator
- Eyepiece: Adjustable diopter
- Magnification: 1 x with 25mm lens or adaptor for 75 mm Lens
- Power supply: Standard Alkaline batteries, type AAA
- Waterproof: according to IP 67
- Ambient temperature: - 50°C to +60°C
- MTBF: 10.000 operating hours
- Size:
 - PKI 5210** – approx. 190 x 60 mm
 - PKI 5220** – approx. 140 x 125 mm
- Weight:
 - PKI 5210** – approx. 350 g
 - PKI 5220** – approx. 900 g
- Available with 2nd, 2nd+ and 3rd Gen. tubes
- Waterproof according to IP 67
- Provides all weather operation
- Accepts standard C-mount lenses
- Operates from standard batteries
- More than 50 hours battery lifetime
- Built-in near IR-illuminator
- Available with 2nd, 2nd+ and 3rd Gen. tubes
- Waterproof according to IP 67
- Provides all weather operation
- Accepts standard C-mount lenses
- Operates from standard batteries
- More than 50 hours battery lifetime
- Built-in near IR-illuminator

PKI 5225

IR-Observation System

The **PKI 5225** is based on an uncooled infrared detector, a 360° optic and a picture and data processing device. By this, the system is used for observations of rooms and open terrain, nearly independent from surrounding sight conditions. Each picture picked up will be scanned at 25 cycles and shown at operator's monitor in a rectified form. The picture processing therefore only needs a minimal PC-capacity and enables an automatic generating of alarm-signals with a correlation to customer's needs. The very low power consumption (max. 7 W), the flexibility in regard to interfaces and the minimal weight of approx. 800 g easily allow integrating the **PKI 5225** into existing monitoring networks. With the **PKI 5225** the user will have a 360°-panoramic observation system without moving parts and

cost-effective components in the need of maintenance. Depending on the types of used IR-detectors, areas of several hundred meters can be observed with the **PKI 5225** vastly independent from surrounding weather and light conditions.

Specifications:

- Detector type IR uncooled
- Detection area 360°
- Detection range up to several hundred meters
- Scanning frequency 25 Hz
- Power consumption ma. 7 W
- Weight approx. 800 g

**PKI 5230**

Long Range Thermal Imaging System

The **PKI 5230** is intended for the use in harsh applications including perimeter surveillance and coastal security. Therefore it perfectly matches the tasks of police-, military-, customs and border-control departments. It is a high performance thermal imager based on a indium Antimonide (InSb) 320x256, 30µm pitch focal plane array (FPA) and operates in the 3-5 µm spectral range. Its sealed housing (backfilled dry nitrogen) and marine hard carbon coated lens with front element defroster makes it perfect in all conditions incl. snow and sea. The triple-FOV lens 250-1000 mm / F 4.0 allows a man detection up to 17 km. Also the camera features RS232 /RS422 link for fast integration in any surveillance equipment.

Specifications:

- Thermal imaging system with:
InSb FPA array - 320 x 256 or
640 x 512 pixels
- Weatherproof: N2-pressurised housing
- Highest temperature sensitivity:
NETD 35 mK in spectral range of 3 to 5 µm
- Serial remote control: RS232/422
of all camera and lens functions
- Analogue: PAL video output
- IR lenses available with:
17/60/200 mm / F4.0 or 50/250 mm
/ F4.0 or 250/500/1.000 mm / F4.0
- Range to detect a person: – up to 17 km
- Seawater resistant: (IP 67 / MIL-Std 810e)

**PKI 5235**

Pan & Tilt Infrared Video Camera

Meeting the challenge that darkness presents for marine applications is the **PKI 5235**. This rugged camera is especially designed to withstand the typical shock and vibration associated with marine applications. It is intended for law enforcement and public safety applications with the use on vehicles or boats. It is the next and low-cost generation of thermal imaging with a pan & tilt platform for mobile and landbased or sea-based outdoor environment. The camera can be mounted on a ship or other coastal structure and with the pan-and-tilt positioning platform, operated by a joystick controller, the user can observe or search for boats or stray objects in the water by manoeuvring and pointing the camera into the necessary direction. **PKI 5235** utilises image processing to create thermal images with improved contrast, resulting in better feature definition, sharper and clearer pictures.

Specifications:

- BST sensor with 320 x 240 pixels
in spectral range of 8 to 14 µm
- Daylight camera optionally available
- IR camera and platform control via joystick
- Automatic gain and brightness control
- Range to detect a person: up to
450 m in total darkness



PKI 5240

Night Vision Binocular

PKI ELECTRONIC INTELLIGENCE GmbH is one of the leading distributors worldwide for night vision devices. Although the optics play a critical role of the night vision device, the heart of a night vision device and the most important component is the Image Intensifier Tube (IIT). As a leading consumer for ITTs we source and acquire the best and the latest available image intensification technologies from top US and European producers. From hand selected premium grade 1st Generation to filmless/autogated 4th Generation that would satisfy the most performance obsessed clientele, we offer the best for your specific application. When you see night vision units with built-in infrared illuminators for total darkness, remember that we were one of the first to offer this feature that now has become an industry standard. All of our night vision units are outfitted with an IR-illuminator. Furthermore some of such devices offer interchangeable lenses, optical doublers and remote controls. Our R&D engineers are making sure that we are always on the cutting edge providing you with the latest in features and technology. The **PKI 5240** as an infrared, low light level device for the use in public security, armed police forces, custom houses, frontier - and safe guards for night patrols as well as investigations. In one word, the operator cannot miss using the **PKI 5240** in any kind of night observations. Being fully portable, self-powered and lightweight, this system offers a reliable tool at a cost-effective price.



Specifications:

- Effective visual distance 600 m
- Magnification 6 times
- Field of view 6°50'
- Objective focusing range 15 m to infinity

- Eyepiece diopter range -5 to +2 diopter
- Exit pupil diameter 7 mm
- Resolution < 0.46 mrad
- Operating voltage 3 VDC
- Weight 2.5 kg

PKI 5245

Low Light Level Nightvision Goggle

If what you need is hands free night vision, **PKI ELECTRONIC INTELLIGENCE** has the unit for you to drive or walk through the darkness with the confidence of a cat with our **PKI 5245** dual eye goggle system. It is a low light level, head mounted, light weight dual eye / tube goggle being comfortable to wear and most easy to use. Surprisingly, even though we gave the unit a heavy coated glass lens, we were still able to keep its weight down to only less than 1 kg. Powered by two high quality light intensifier tubes and using fast precision optics this device has one of the clearest and brightest images in a goggle. Combine all the above with a built-in infrared illuminator that lets you see in total darkness and you will be on your way to exploring even the darkest of places. This is of most importance for the use of the **PKI 5245** by public security, armed police forces protecting the streets, custom houses, nuclear power plant security, frontier and safe guards for night patrols as well as every member of military or industrial security staffs working in dark conditions. Wherever hands-free operation is required, the **PKI 5245** offers the right solution. For the observation of suspicious objects in the dark or driving a car under no-light conditions, the **PKI 5245** provides a comfortable and



cost-effective solution. In a word, you can do nothing at night and in dark rooms without the use of the **PKI 5245**.

Specifications:

- Effective visual distance 150 m
- Magnification 1 time

- Field of view 45°
- Objective focusing range 360 mm to infinity
- Eyepiece diopter range +/- 5 diopters
- Resolution < 2.8 mrad
- Operating voltage 1.5 VDC
- Weight 0.9 kg

PKI 5250

Long Range Video System

The **PKI 5250** - Long Range Video System combines state-of-the-art video with high definition nightvision technology. It is designed for 24 hours operation by combining three camera modules in just one housing - forming a unique system of:

- a colour CCD-camera for daylight
- a black & white camera for twilight
- an intensified camera for night time

The system is either available in 1" or 1/2" image format - in buyer's option. The lifetime of the image intensifier is optimised and the method of night vision technology only must be used in cases of absolute darkness or where it is necessary (closed dark rooms, underneath bridges etc). This **PKI 5250** optionally also is prepared for operation with infrared illuminators for spot elimination and non-visible target illumination as well as range gating applications. Optionally additional filters like infrared or band pass filter are available.

Specifications:**A) General**

- Dimensions (without lens) 135 x 172 x 224 mm



- Weight (without lens) approx. 6 kg
- Power consumption 1200 mA (TBD)
- Operating voltage 12 VDC
- Operation temperature -10 to +50 °C (recommended 0-40°C)
- Lens format C-mount
- Lens control zoom, focus, iris
- Comm. connection RS232, RS485
- Video standard PAL/CCIR/NTSC/EIA
- Video signal FBAS

B) Black/White Camera

- Horizontal resolution 570 TVL
- Sensitivity 0,0006,lx (F1.2, 50% video, AGC 20 dB, normal shutter 1/50 s)
- Signal-to-noise 52 dB

C) Colour Camera

- Horizontal Resolution 480 TVL
- Sensitivity 0.1 lx (F1.2, 50% video,

- AGC 20 dB, normal shutter 1/50 s)

D) Intensified Camera

- Image intensifier XD 4 technology 1/2"
- CCD Sensor 1/2" interline Transfer, 752 x 582 pixel
- Horizontal resolution up to 530 TVL
- Sensitivity 0.000001 lx
- Signal-to-noise 42 dB
- Control Auto gain, auto gating - down to 1μsec (optional 50 nsec) external range gating option

- Multisensor camera system
- Image intensified, B&W and Colour
- Combined system in one housing
- 24 hours a day full operation
- Automatic back focus correction
- Selectable objectives

PKI 5255

Low Light Level Viewer

A new extremely fast lens system combined with a high resolution Gen 1+ light intensifier tube gives the user an unparalleled bright image in a 1st gen. night vision device by just easy push button controls. Therefore the **PKI 5255** is recommended for most comfortable and hand held use at any observation tasks in the dark. It is a must to use this unit by police forces, secret services and other government departments where such investigations have to be effected under lowlight conditions or even in total darkness. With its effective range of approx. 150 to 200 m the **PKI 5255** provides perfectly illuminated pictures, which allows excellent observation results. The built-in IR-Illuminator

provides additional light, being invisible to the human eye, allowing the user to observe his target even if there is no surrounding light. The adjustable hand-buckling belt makes its handling very comfortable.

Specifications:

- Magnification: 1.38 times
- Field of view: 20°
- Resolution: < 1.5 mrad
- Dioptric adjustment range: +/- 5 diopter
- Focussing range: 0.25 m to infinity
- Operating voltage: 3 VDC battery
- Enhanced infrared lamp: built-in
- Effective visual distance: 150 to 200 m
- Weight: approx. 700 g

**PKI 5260**

Long Range Binocular

This legendary **PKI 5260** model with its large objective diameter of 150 mm, is an magnificent tool in many sectors, covering a large range of applications, such as surveillance operations of suspect objects or persons, border control, fire prevention and other scientific researches, where a crisp, bright, sharp and high-resolution image is indispensable. Many other applications like wild animal observation, sightseeing from the top of high buildings or home balcony, hunting, shipping, fishery, forest observation etc. are also possible. This binocular, with its large aperture and high magnification of 31x to 50x allows a long range, fatigue-proof operation under every condition. The unit is equipped with a fast dual

focusing which is ultra smooth. The telescope tube is covered with a protective rubberised paint finish to help protecting it from the elements.

Specifications:

- Magnification: 31 - 50 times
- Field of view: 2°
- Objective diameter: 150 mm
- Diopter adjustment: - 5 to +5
- Exit pupil diameter: 4.48 mm
- Exit pupil distance: 16.66 mm
- Resolution: < 1.6"
- Interpupillary distance: 58 - 74 mm
- Weight: approx. 12 kg
- Dimensions: approx. 60 x 25 x 15 cm



PKI 5265

Colour Video Zoom, Camera with Monitor

In many cases of video observations sharp and clear pictures have to be achieved. Our **PKI 5265** is the right solution for this purpose. Whether in distances of only 10 meters or even up to 100 meters, this zoom-camera provides perfect resolutions with a brilliant sharpness and excellent light sensitivity. It is just the matter of a correct menu technique via the supplied cable connection. This high resolution colour camera with 480 TV-lines and the 16x zoom objective, combined with the digital, electronic camera zoom, allows the recognition of a car number plate even from a distance of 100 m. On the

supplied 19" flat screen monitor every picture is displayed and can be transferred to any storage medium.



Specifications:

- Resolution: 480 TV lines, colour
- Min. illumination: 1.0 Lux
- Counterlight compensation: automatic
- Objective: F = 1.4 – 2.8, f = 4.0 – 64 mm
- Monitor: 19" colour flat screen
- Power supply: 12 VDC with mains adapter
- Dimensions: approx. 70 x 65 x 95 mm

PKI 5270

Day & Night IR LED Camera

For a permanent video observation a clear colour picture in day time and an automatical change to B/W picture at night time, the **PKI 5270** is what you need. As our duty is to deliver the best quality we have developed this complete camera which is a highly sophisticated day & night camera for use in every outdoor surrounding where video observations are necessary. By this, industrial areas, military camps, police stations or any other territories are protected by video monitoring for 24 hours a day. A clear colour picture is given in the daytime which automatically is changed to b/w picture at night time. 180 integrated infrared diodes illuminate the area of observation at night time or low-light conditions. The complete system comes in a weather-proof housing, including a cooling-fan for the control of heat from the IR-LED's and a CDS sensor for the change from colour to b/w operation - depending on light conditions. The complete system optionally is available in PAL or NTSC version using a SONY Super HAD CCD camera with 410K pixels.



Specifications:

- Image Device: Super HAD SONY CCD
- Scanning System: NTSC - 525 lines /60 fields per second
PAL - 625 lines / 50 fields per second
- Synchronisation System:
Internal Synchronisation
- Number of Pixels: NTSC - 768 x 494 (HxV)
PAL - 752 x 586 (HxV)
- Horizontal resolution: 480 TV lines
- Video output: 1Vpp 75 Ohm, composite
- Signal to noise ratio: > 45 dB (AGC off)
- Gamma characteristics: 0.45
- White balance: automatic white balance
- Back light compensation: automatic BLC

- Minimum illumination: 0.3 lux at day-time
0.0 lux at night time
- Electronic shutter: NTSC - 1/60 to 1/10.000 sec
PAL - 1/50 to 1/10.000 sec
- Lens mount: 260 x Zoom
(Optical : 26 x, Digital : 10x)
- Number of LED: 180 pieces infrared LED
- Wave length: 850 nm
- Angle of IR-LED: 10° and 30° in combination
- Illuminated distance / outdoor: max 75 m
- Power supply: 12 VDC, 3 A
- Power consumption: 2200 mA
- Operating temperature: - 10°C to + 45 °C
- Weight: approx. 3.5 kg

PKI 5275

Dual CCD Night Vision Camera

The **PKI 5275** is designed for day and night observations with just one complete unit. It consists of two cameras in one weatherproof housing - colour and b/w. The colour camera is for use at daylight and the b/w-camera, with integrated IR-lightning diodes, covers all tasks at nighttime. Depending on the field of application various objectives for both cameras are available. Just let us have your request and we shall provide the best possible configuration. The following technical data show every possible combination.

Specifications:

- Signal format: NTSC or PAL for colour camera, EIA or CCIR for b/w camera
- Total pixels: 811x508 for NTSC, 795x596 for PAL 537x505 for EIA, 537x597 for CCIR
- Effective pixels: 768x494 for NTSC, 752x582 for PAL 510x492 for EIA, 500x582 for CCIR
- Horizontal resolution: 550 lines for colour camera, 420 lines for b/w camera
- S/N ratio: > 45 dB for colour and > 50 dB for b/w
- Sensitivity: 1 lux /F2.0 for colour, 0.05 lux/F2.0 for b/w camera
- Image sensor: 1/3" SONY Super HAD CCD
- Power supply: 12 VDC
- Gamma correction: 0.45
- Electronic shutter:
NTSC/EIA - 1/60 - 1/100.000 sec automatic
PAL/CCIR - 1/50 - 1/100.000 sec automatic
- Current consumption:
LED on = 520 mA or less
LED off = 280 mA or less
- Infrared LED's:



30 pcs, 850 nm, for 50 m distance max.

- Lenses available:
3.6 mm, 6 mm, 8 mm in buyer's option
- Operating temperature: -10 to + 50 °C

PKI 5280

Long Range Video Camera

This high resolution colour camera, with its 220x Zoom-objective and integrated pan/tilt head, provides pictures of perfect brilliance and sharpness. Even a car number plate can be recognised from a distance of up to 500m and larger objects like persons or cars and boats can be observed even from more than that range. Up to 32 fixed positions of the zoom and the pan/tilt head can be programmed and recalled automatically. **PKI 5280** is supplied with a wired remote control for every function of the device. On request, it can be equipped with a wireless remote control. The complete set comes with a cable connected 19" flatscreen monitor combined with an optional high power video transmitter the **PKI 5280** is ideal for border controls and other wide range observations in outdoor conditions. Such transmitters should be selected from our wide range shown in this

catalogue. Only then we can guarantee that camera, transmitter, receiver and monitor match perfectly.

**Specifications:**

- Resolution: 480 TV-lines, colour
- Min. illumination: 1 Lux
- Backlight compensation: automatic
- Objective: f: 12-128 mm, F: 1.4 – 3.6
- Monitor: 19" flat screen
- Dimensions: approx. 420 x 350 x 220 mm
- Weight: approx. 9,8 kg
- Power supply: 12 VDC with separate mains adapter

PKI 5285

Digital PCI Video Observation System

This PC-Video Card is used as a central unit for any kind of video observation. Live observation via display, recording, monitor-splitting, camera remote control and many other features are possible with this unique **PKI 5285**. All signals can be transferred either via telephone lines, internet or networks. Any alarm message can also be sent via e-mail to another PC or by SMS to any mobile phone. An acoustic and optical alarm sensor is also included for detection of any movement/ change in camera pictures. Up to 4 cameras can be connected with best possible recording quality (MPEG4 or Wavelet). Optionally this unit can be supplied with 8 or 16 video inputs.

Specifications:

- Video inputs: 4
- Resolution: 768 x 576 Pixel
- Recording method: MPEG4 or Wavelet
- Recording time: up to 800 hours with 200 GB-hard disc for 4 cameras and 6 pictures per second
- Required PC system: WIN 2000 or XP
- Digital motion: detector integrated
- Other features: weekly timer, digitally evidencing water mark, automatic alarm transfer, comfortable play-back and interpretation functions, databank, crash recovery, info-overlay etc.
- Scope of supply:
PCI card, Software and manual

**PKI 5290 PKI 5295**

Large IR-beam Device, Small IR-beam Device

Both systems are mainly designed for the illumination of dark rooms or surroundings with no remaining light. Wherever no electrical lights or moon/starlight are available, these devices are the perfect accessory for night-vision devices and observation cameras. This light is invisible for the human eye i.e. nobody can recognise that he is observed during night-time or in non-illuminated rooms. **PKI 5290** covers a range of approx. 20 meters while **PKI 5295** stands for approx. 10 meters. For larger distances our IR-Laser beam device is applicable (see our **PKI 5300**).

- Power supply: 12 VDC
- Operating temperature: - 10 to + 50°C
- Opening angle: 30°
- Power consumption:
700 mA for **PKI 5290**
400 mA for **PKI 5295**
- Max. illumination distance:
up to 20 m for **PKI 5290**
up to 10 m for **PKI 5295**
- Dimensions:
approx. 82 x 65 x 60 mm
for **PKI 5290**
approx. 60 x 40 x 20 mm
for **PKI 5295**
- Weights:
approx. 300 g for **PKI 5290**
approx. 150 g for **PKI 5295**

**Specifications:**

- Housing: Aluminium
- Lifetime: up to 10.000 hours
- Protection Class: German standard IP 65
- Wave length: approx. 850 nm +/- 30 nm

PKI 5300

Laser-Zoom Illuminator

Whenever video observations have to be made in completely dark rooms, under bridges, in tunnels or other conditions without light, this Laser-Illuminator is the only one which can cover even large areas and distances. In combination with our CCD-cameras and intensified CCD-cameras you can use this device for night-time surveillance up to a distance of 4 km. The **PKI 5300** Laser Zoom Illuminator is provided with a temperature-stabilised laser diode with a frequency range of 810nm. By means of the built-in lens system and the external control system you can adjust the zoom according to the desired illumination and distance.

Specifications:

- Output power: 1000 mW
- Laser class: 4

- Laser type: IR-laser diode
- Laser frequency: 810 nm
- Divergence: 1° to 12° continuously adjustable
- Power supply: 12 V DC
- Power consumption: 1,6 A
- Lifetime: 50.000 hrs
- Operating temperature: -10°C up to +50°C
- Dimensions: 70 mm diameter x 340 mm
- Weight: 2,8 kg



PKI 5305

Long Range Binocular

It always has to be determined whether friendly or unfriendly objects, like cars, trucks, boats or persons are approaching a certain place and it, at any time, it has to be under complete control and supervision of the related security forces. Therefore a long range optical device is required, with which the terrain in question can be supervised. Fixed on top of high buildings, at sight-seeing spots or at borders (land- or seaside) the **PKI 5305** always is the right choice to view the scenario for any police force, border control squad or military task force. It is an absolutely necessary and important tool for observations over large distances. With an optionally available electronic eyepiece, like one of our video cameras shown in this catalogue, it can be connected with a monitor or computer, so that analysis, measurement and statistics can be

effected at save places and with the capabilities to store the pictures. With its large magnification of 25 times and the 100 mm objective diameter the **PKI 5305** enables every supervising department to effectively fulfil their tasks even under low light conditions.

Specifications:

- Magnification: 25 x
- Field of view: 2°30'
- Star finder: (f.o.v) 7 x 50 (5")
- Objective diameter: 100 mm
- Eyepiece diopter range: +/- 5 diopters
- Exit pupil diameter: 4
- Exit pupil distance: 14
- Resolution: 3"
- Interpupillary distance: 56 - 74
- Weight: 13 kg



PKI 5310

Pocket Night Vision Scope

With its very small dimensions, minimal weight and comfortable one-hand operation, the **PKI 5310** can easily be placed in any pocket and at any time it is ready for disguised observations in the dark. Especially developed for secret service agencies, police tasks forces and other government departments, this handy unit offers a perfect solution to every need of night surveillance. Through the image intensifier tube, it transfers the faint target image into a bright image, but still providing an automatic bright light control for accidentally incoming light. In addition, the device contains a concealed IR-light source for the illumination of the area to be observed. This IR-light is nearly invisible to the human eyes.

Specifications:

- Max. observation distance: approx. 80 to 120 m at 10-2 Lux
- Magnification: 2x
- Bright-light protection: automatic bright-light proof
- Field of view: > 15°
- Objective focal length: 57 mm
- Objective aperture: 34 mm
- Focusing range: 0.5 m to infinity
- Diopter adjustment: -4 to + 4 diopter
- Power supply: 3 VDC, battery operated
- Battery type: two batteries, type AAA
- IR lamp: concealed inside with 10 to 15 m operating range
- Dimensions: approx. 175 x 80 x 50 mm
- Weight: approx. 0,35 kg



PKI 5315

Long Range Night Vision Scope

Beside hand-held and disguised units for observations at nighttime it is very often necessary to have a complete unit for longer ranges. The **PKI 5315** fulfills all requirements. With its large aperture and low-light objective, combined with the image intensifier of 2nd generation, it provides a stable and reliable night-vision system for border controls, permanent observation of industrial areas and other important points. It has a large eyepiece, enabling the user to comfortably view targets with both eyes. By using the supplied tripod, the unit can be rotated by 360° and elevated by 90° during operation. **PKI 5315** can be equipped with

a lowlight watching system, which will transfer and display the image on TVsystems.

Specifications:

- Objective aperture: 200 mm
- Magnification: 4.8x
- Field of view: 5,6°
- Focusing range: 50 m to infinity
- Fixed diopter: -2 diopter
- Operating range:
700 to 1000 m to discover or
recognise a person
- Weight: approx. 13 kg

**PKI 5320**

Binocular Night Vision Goggle

PKI 5320 is a helmet-mounted night vision device for hands-free operations. It improves the remaining light by its light intensifying tube of 2nd generation and should be used for patrols, (walking or driving), medical care, reading of maps or any other observation task under poor light conditions. Due to its universally adjustable head-mounting it can be used for every observation purpose where hands-free operation is essential. The integrated IR-light helps the operator to illuminate the area to be observed with a nearly invisible IR-light.

Specifications:

- Magnification: 1 x
- Field of view: 38 °
- Focusing range: 250 mm to infinity
- Resolving power: 1.59 mrad
- Diopter adjustment:
+ 2 to +5 diopter
- Exit Pupil diameter: 7 mm
- Exit pupil distance: 15 mm
- Adjustment of pupil distance:
52 to 71 mm
- Image intensifier: 2nd Generation
low-light level image intensifier
- Built-in IR lamp operating range:
15 to 25 m
- Power supply:
2 x 1,5 VDC batteries, type AA
- Operational time:
approx. 25 hours without
IR-light source on
approx. 15 hours with
IR-light source on

**PKI 5325**

Night Vision System

The **PKI 5325** has been developed as a platform for underwater applications. Combined with a submersible mini monocular night vision viewer of 2nd or 3rd generation and a tactical illuminator, this device offers the best choice for any underwater purpose. It also allows fixation of an ACD (Advanced Combat Display), giving the user a remote viewing display that works underwater. The ACD can be used with a large variety of systems, such as thermal sights, night vision devices or remote cameras.

The kit consists of:

- Modified U.S. diver's mask Monocular Night Vision Device with:
- Multiuse monocular assembly
- Head mount assembly for land use
- Swing arm interface
- Soft carry case
- Battery adapter
- Batteries (2 pcs)
- Neck cord
- Shoulder strap
- Objective lens cap

**Specifications:**

- Sacrificial filter
- Lens tissue
- Demist shield
- Eyecup assembly

Illuminator with:

- High intensity underwater light Underwater personnel ID illuminators (3 each – red, green and yellow)
- Laser sticks (2 each)
- VIP-amber illuminator
- IR/Red bikini filter (2)

Specifications:

- Field of view 40°
- Submersible to approx. 20 m
- Dual mission - sea and land
- Adjustable eyepiece
- Standard rail interface
- AA-type or 3 VDC battery
- Covert application ready
- Head mounting included
- Variety of illuminators
- Kit complete in waterproof case

PKI 5330

Thermal Night Vision Goggle

The **PKI 5330** provides a bright clear picture of surroundings, unaffected by lights or shadows that will render image intensified night vision useless. The only way to keep your edge, whether in the battlefield or in the streets, is to have the best equipment – and the **PKI 5330** really is the best. Even camouflage will not be an asset against the detection capability of this unit. Made by latest DSP technology and ultra lightweight materials, these goggles are small and comfortable. This system is a self contained thermal unit that only requires 2 AA-type batteries to function and features:

- Digital thermal viewing
- Light weight
- Ruggedized housing
- Hands-free operation
- Helmet mountable
- Binocular viewer

- Video output
- Low MTBF
- Simple user operation

Specifications:

- Sensor: Microbolometer
- Detector uncooled: 160 x 120
- Image size: 320 x 240 2D interpolated
- Thermal sensitivity: < 100 mK
- Spectral response: 7 – 14 μ m
- Objective: 25 mm germanium
- Field of view: 17 x 12 degrees
- Battery type: 2 each AA type
- Operation time: approx. 2 hours continuously
- Display: FLCD - 320x240 format
- Diopter adjustment: +6 to -0
- Eye relief: 15 mm
- Dimensions: approx. 15 x 16 x 10 cm
- Weight: approx. 680 g with head gear



PKI 5335

Handheld Thermal Eye Camera

This handy thermal eye camera is perfect for remote monitoring, safety engineering, hunting and nature. Its easy and comfortable operation with automatic mode and tuning for focus, gain, brightness and polarity are only some of its advantages. A search monitor is integrated. People can be detected up to a distance of 1500 m.

Specifications:

- Spectral range: 8-14 μ m
- Sensor: BST 320 x 240 pixels
- IR-objective: 150 mm / F1.0
(25, 50, 75, 100, 150 mm optional)
- Comes with video output
- Comes with tripod thread
- Dimensions: 210 x 180 x 80 mm
- Weight: 1,4 kg



PKI 5340

Laser Night Vision Unit for Long Distances

This strong and high-quality night vision unit allows observations at night up to 10 km distance even at total darkness. To cover this exceptional distance is only possible due to the integrated 200 m telescope objective with 240 mm focal length and a 60 - 240x magnification. Nothing will be left to chance with the built-in 15 W laser at 860 nm range (invisible for human eye) as well as the lowlight image amplifier of 3rd generation. An indispensable device at border controls, by sea or ashore. The video control terminal with display records all events.

Specifications:

- Dimensions: 55 x 52 x 37 cm
- Weight: 55 kg
- Power supply: 100 – 240 V AC
- Power consumption: 350 W
- Optic: 240 mm focal length at F 1:5 to 1:20
angle: min. 0.15° x 0,11°, max. 0,61° x 0,46°
- Laser: 15" with air cooling
- Low light picture tube: III. Generation Ø 18 mm
- Video resolution: 640 x 480 pixel
- Video IN, Video OUT: NTSC or PAL
- Communication: Ethernet (TCP/IP)



PKI 5345

Digital Night Vision Binoculars

The quality of digital techniques is nearly equivalent to the 2nd generation of tube night vision devices. The **PKI 5345** is equipped with two IR-lights, of which one permanently illuminates the area and is for use in semi-light conditions. The 2nd IR-light can additionally be switched on and allows excellent vision at low-light conditions or absolute darkness. The integrated video output socket allows play-back via an external display or recording with an external recorder.

Specifications:

- Dimensions: approx. 116 x 76 x 170 mm
- Weight: approx. 800 g
- Power supply: 6 batteries type AA
or power plug 7.2 - 9 VDC (not included)
- Magnification: 5 times
- Visual range: up to 150 m
- Video output: PAL/NTSC
- Lens diameter: 42 mm



PKI 5350

Night Vision Binoculars

For lengthy night vision surveillances it is advisable to use night vision binoculars, because at longer surveillance operations the use of a monocular would be exhausting for your eye. The **PKI 5350** is one of the best night vision binoculars with an image intensifier tube of the 1st generation. It is rare to find something comparable, where design and easy handling have been combined so perfectly. The **PKI 5350** features an integrated infrared light which can be switched on additionally at low light conditions. It is especially useful for security agencies,

hunters, nature lovers or private ship-owners. The **PKI 5350** is equipped with automatic ON/OFF function and can be controlled via three buttons.

Specifications:

- Power supply: 2 x 3 V batteries
- Magnification: 5 times
- Lens: 90 mm / F 1.7
- Angle of view: 20°
- Diopter adjustment: -5 to +5
- Dimensions: 225 x 150 x 62 mm
- Weight: 1.400 g

**PKI 5355**

Under Water Night Vision Unit

This handy under water night vision unit provides completely new working condition for divers. There is no danger of being detected at secret actions. A built-in low light amplifier with max. 100.000x light amplification allows impeccable view up to 150 m. **PKI 5355** is easy to handle under water. Two additional plummets inside the housing avoid unintended lifting up of the unit. An outer contact switch allows quick switch on/off. The lens is fixed and allows observation from 50 cm to unlimited. Operating time for battery set is 50 hours, max. diving depth 80 m.

Specifications:

- Dimensions: Ø 160 mm x 350 mm
- Weight: 8,5 kg
- Power supply: 6,75 V Mallory battery
- Housing: plastic, black or olive-green
- Lens: 50 mm
- Opening: 1:1.4
- View angle: 20°
- Brightness adjustment: built-in Display for observation with both eyes

**PKI 5360**

Underwater Night Vision Glasses

PKI 5360 should not be missing at underwater operation. The night vision device is fixed to the goggles in order to enable the diver to have both hands free for swimming. An IR-diode is integrated for additional illumination of nearest surroundings. For longer distances an underwater IR flashlight can be fixed Due to the IR-light's invisibility for human eyes no actions will be detectable from the water surface. The goggles can be used up to 10 m depth and are equipped with standard batteries.

Specifications:

- View area: 31° +/- 1° (under water)
- Resolution limit: 1,23 mrad/lp (under water)

- Enforcement: 0,98x Lens with plano-parallel window
- Focus: 24,0 mm F/1,3 Focus stepless adjustable 0,25 m to unlimited
- Ocular binocular: focus 25,5 mm
- Dioptric adjustment: stepless -5 dpt to +4,5 dpt
- Diameter of outlet pupil: 7 mm
- Eye protection from screen: 12,7 mm
- Eye basis, stepless adjustable 56 mm – 72 mm
- IR spotlight: provides resolution of 1,41 mrad/lp in water, effective range: approx. 2 m
- Battery: 1 x Lithium type AA 2,7 V or 2x alkaline batteries type AA 1,3 V
- Weight without goggles: 570 g

**PKI 5365**

Infrared Spotlight

This IR spotlight has been developed for use in surveillance systems with infrared compatible CCD-cameras. With infrared light, which is invisible to the human eye, you can illuminate buildings, entrance areas, garden areas etc. This allows camera surveillance in absolute darkness as well. The extra flat and weatherproof housing includes a small cut-out for unobtrusive installation of a camera behind the spotlight. 14 long-life LED lights serve as light source.

Specifications:

- Power supply: 12 VDC / 400 mA
- IR-wave range: 940 nm
- Economic life-time: approx. 10.000 hours
- Angle of beam: 160°
- Range: approx. 3.5 m
- Protection against dust/moisture: IP 65
- Operation temperature: -30°C to +40°C
- Dimensions: 106 x 72 x 6 mm
- Weight: 100 g



PKI 5370**PKI 5375**

Infrared Beam, big / small

Do you want to be able see with your camera at night as well? Or perhaps you are not satisfied with your camera that is already equipped with IR-LED lights? These infrared lights mainly serve as auxiliary light for residual light intensifying systems and some video cameras, if for example no residual light, such as stars or moon-light, is available. With these additional light sources even extremely dark rooms can be illuminated or animals hidden in bushes can be detected. With a capacity of up to 18 W at an angle of beam of 20° the **PKI 5370** and **PKI 5375** cover a distance of 20 - 40 m. Invisible to the human eye, the person observed cannot perceive the light.

Specifications:

- Housing: aluminium
- Economic life-time: approx. 10.000 hours

- Protection against dust/moisture: IP 65
- Operation temperature: -10°C to +50°C
- Wave length: 850 - 880 nm
- Angle of beam: 20°
- Power supply: 12 V batteries or power plug
- Dimensions:
PKI 5370: 82 x 65 x 60 mm
PKI 5375: 60 x 40 x 20 mm
- Weight:
PKI 5370: 300 g
PKI 5375: 150 g
- Power consumption:
PKI 5370: 700 mA
PKI 5375: 400 mA
- Range:
PKI 5370: 40 m
PKI 5375: 25 m

**PKI 5405**

UV-LED Torch Lamp

UV-light most often is used for recognition of falsifications and markings which are invisible to the naked human eye. The **PKI 5405** is a handheld UV-LED torch lamp which has been developed for non-destructive material testing and detection of frauds on bank notes, credit cards or other UV intensive materials. It provides a fluorescent penetrating testing, fluorescent magnetic particle testing plus being a device for all the tasks of criminal evaluations which have to be done by police forces and other government agencies. Marks, fingerprints or any other evidence, made by invisible UV-ink on bank notes or other documents, can be made visible by the **PKI 5405**. It is a lightweight, portable and easy to handle unit which is useful anywhere. It does not need any warming-up time and emits 98,9 % of the UV-A spectral range.

Specifications:

- Spectral range: 315 - 400 nm
- Voltage: 4,8 VDC (4 accus, 1,2 V each)
- Current: approx. 380 mA
- UV-source: 10 x UV-LED's
- Lifetime of LED's: approx. 10.000 hours
- Wavelength of LED's: 380 nm
- Half-width of emission: 10 nm
- UV-light intensity: approx. 1.000 µW/cm at 200mm distance approx. 2.400 µW/cm at 70 mm distance
- Weight: approx. 250 g
- Dimensions: approx. 170 x 45 mm
- Comes with: UV torch lamp, 4 x rechargeable batteries, Mains power supply charger 110/220 VAC

**PKI 5410**

IR Torch Lamp

The **PKI 5410** emits a powerful and directional beam of IR-light being invisible to the human eye. IR-light sources can only be used in combination with night vision devices (see our products in this catalogue) and therefore this unit, with its integrated brightness control, is the ideal solution for observation tasks under bad light conditions, in the total darkness with fully clouded sky or at problematic locations. This torch lamp has been developed according to the latest technical standard. It is lightweight and easy to handle. A 5 mW IR-Laser-Diode inside the **PKI 5410** provides the necessary power for ranges of up to 100 m. With the adjustable optic the beam can easily be focussed. The unit is powered by a rechargeable NC-battery and a lid protects it from switching on by mistake. **PKI 5410** is supplied as a complete unit with mains charger and transportation case.

Specifications:

- Wave length: 780 nm
- Output power: CW 5 mW
- Power supply:
built-in NC-rechargeable battery
- Charging time: max. 12 hours
- Switches: ON/OFF
- Connectors:
Socket for mains charging adapter
- Indicators:
Operation control lamp
Charging control lamp
- Accessories:
Mains charging adapter
110/220 VAC



PKI 5415

IR-Hybrid Illuminator

Many cameras are night-blind, this means you can't see anything at night. With a standard IR-light only 20 m will be possible. This, however, often is not sufficient. Therefore **PKI Electronic Intelligence** has developed a hybrid illuminator with a range of 200 m. This LED illuminator consists of 560 LED's on one chip, bundled by 2 convex lenses which allows you to reach this enormous distance. It can only be topped by very expensive laser within IR-range, however, these lasers can cause serious eye injuries. **PKI Electronic Intelligence** recommends to up-grade your cameras!

**Specifications:**

- Range: 200 m at 0 lux darkness
- Power consumption: 60 W
- Angle of radiation: 20°
- Operating time: more than 10 years
- Weight: 3,7 kg
- Dimensions: 200 x Ø 60 mm
- Power supply: 12 V DC

PKI 5420

Wide Range Spotlight

PKI 5420 spotlight provides white halogen light over a wide range. Its shockproof housing made of synthetic material is tough and easy to handle. Due to the special parabolic metallic reflector the precise concentration of the light makes it an efficient portable device. The "economy" key enables to reduce the light intensity to a preset value which considerably increases the operating time. The energy pack can be detached from the light head and be replaced by a spare pack, which allows doubling of the operating time.

**Specifications:**

- White halogen light, concentrated
- 35 minutes of max. light intensity
- 3,5 hours max. non stop operation at "economy" mode
- Rechargeable NiCd battery 7,2 V / 7 Ah
- Charging time: 14 h
- Halogen lamp: (type H3) 6V / 55 W
- Dimensions: 340 x 85 x 110 mm
- Weight: 2,3 kg

PKI 5425

Long Range Scope with Audio / Video Recording

This device offers a magnification of up to 100 times, with step less adjustment starting from 25 times. In order to help focusing the correct direction it is equipped with a direction finder, featuring a magnification of 6 to 25 times. By simply turning the button, the magnification range switches to 25 - 100 times. The ocular is mounted at an angle of 45° and is freely rotatable, which allows comfortable handling in all surveillance situations. The digital audio / video recording system realizes excellent recordings at a distance of more than 1000 m. With the **PKI 5425** long distances will never be an obstacle any more.

**Specifications:**

- Main magnification: 25-100 x
- Magnification direction finder: 6-25 x
- Main lens diameter: 100 mm
- Lens diameter direction finder: 25 mm
- Interpupillary distance: 12-16 mm
- Ocular: mounted at an angle of 45°
- Vision range at 1000 m: 11 x (100 x) 39 m (25 x)
- Dimensions: 425 x 119 x 165 mm
- Weight: 1.5 kg
- Video kit: tripod, recorder, automatic volume control, TFT display 2.5"

PKI 5430

Spy Glasses

Seeing is knowing! Some events require special handling, especially body guards for VIPs need extra equipment. Not only they have to be patient, but must be on alert in any situation. Our **PKI 5430** spy glasses are indispensable in order to support them doing their job as with these special glasses they can look backwards, and see at any time what is going on behind your back. The sun glasses are designed in a way, that a sideward reflection gives a clear picture, similar to a real-view mirror.

**Specifications:**

- Dimensions: normal sun glasses with metal bridge /bracket
- Looks like common sun glasses

PKI 5435

Mirror Film for Observation

Trust, but verify! Unfortunately this statement has become true quite often. Using our mirror film you can look from one room into the other without the person becoming aware of it. All you need is a wall with a glass pane. Just stick the PKI 5435 film onto the pane and it will only be possible to look through it from one side, i.e. the observed person cannot see the observer. Formerly so-called "look through mirrors" were used but with our film you can decide individually which pane you want to transform.



Specifications:

- Delivery: rolled mirror film 1 m wide and 5 m long, self-adhesive

PKI 5440

Night Observation Camera without Flashlight

With this camera you can take photos at night at a range of up to 150 m without any flashlight. Often this is necessary during monitoring operations. Images taken by night with low-light amplifiers often are not clear enough and the price for these cameras are considerably high. Our hybrid illuminator offers this long range at 0 Lux darkness. The infrared radiation is invisible for human eyes. This digital camera is also designed for IR-range and makes it easy to take high-quality pictures at night.

- Power: 60 W
- Focal distance: 50 mm
- Power supply: batteries
- Comes with charger



Specifications:

- IR-range: 150 m
- Radiation angle: 20°

PKI 5450

Camouflaged Audio / Video Multifunctional Camera for Police Operation

This multifunctional camera is the latest high-light in the camera sector and fulfills all needs for police operation in order to provide security to population. It is perfectly designed in an anthracite grey aluminium cylinder with dimensions of 80 x cm 16 cm diameter.

The pan/tilt camera with zoom function offers pinpoint audio video monitoring of outdoor areas at day and night. The system can be switched from permanent to sensor operation, i.e. the built-in motion sensor will be activated by captured actions or movements, which automatically starts the whole system.

The cylinder unit, equipped with a quick release fastener, can easily be mounted on any lighting mast within a few minutes. The solid device is sufficiently protected against vandalism. As **PKI 5450** works totally autarkic no cables for operations up to max. 100 hours are necessary. For permanent use the device offers various sockets for different voltage.

Cascading is also possible, provided for example every 100 m one of our multifunctional camera is installed. In case of a convoy with VIPs driving down a certain road, all actions will be automatically monitored and recorded. Transmission of audio video signal is effected with high resolution and frame rate. Diversity-antenna-principle is used for reception, which means that the antennas are slightly displaced allowing multiple reception of the antenna signals.

This high-tech device consists of a pan/tilt camera for day and night with recorder, digital transmitter for audio video with encryption system, telemetric transmitter and receiver, sensor technology unit and power supply module as well as a portable control unit within a case for controlling, monitoring and programming.

The various antenna signals will be evaluated and only the best parts will be combined to a high-quality, error-free signal. This offers a considerable advantage compared to standard receivers in respect of range and transmission



quality. According to the selected power the range of the audio video digital transmitter reaches up to 3 km.

The portable control unit can evaluate up to 8 systems sequentially. All actions will be recorded and can be transferred at any time by USB cable in order to view them on PC. For further security, the transmission of video signals is done via encrypted signals.

There is a bi-directional telemetric radio connection for all functions between multifunctional camera and control unit. All details are shown on the built-in LCD-display. If required, we offer 2 days training for correct operation of our professional audio video monitoring system.



PKI 5450

Camouflaged Audio / Video Multifunctional Camera for Police Operation

Specifications:

- Dimensions of housing: 80 cm x 60 cm diameter
- Protection class: IP 64
- Weight: 48 kg
- Material: aluminium plastics, anthracite, other colours available on request
- Fixing: 4 metal quick release fastener
- Antennas: integrated in plastic part
- Power supply: integrated L-ion/polymer 160 Ah, 14V, external sockets, 12 V DC / 230 V AC
- Power consumption: approx. 30 W
- Operating temperature: -10° - +50°C

Camera

- Resolution: 520 TV lines
- Sensitivity: 1 lux colour - 0,05 lux black/white 0 lux IR
- Frame acquisition: 1/4" ex view HAD CCD
- Signal format: PAL
- Effective pixels: 795 H x 596 V
- S/N ratio: 50 dB
- Lens: 4=3,25 - 88m
- Zoom: 27x optical / 12 x digital
- Pan/tilt range: H = 350° (max. 120°/sec) V = 90° (max. 120°/sec)
- White balance: auto/indoor Manual/outdoor
- Shutter speed: 1/50 - 1/50.000
- Synchronisation: internal
- Video output signal: 1 V@75 ohm composite
- Iris control: auto/manual
- Sensor: motion detector
- Preset function: 128 positions
- Private zone: 8 zones
- Interface: RS 485
- Alarm input: 4
- Power supply: 12 V DC
- Power consumption: 1 A
- Weight: 2,5 kg

Digital Recorder

- Resolution: 720 x 576 @ 25 fps
- Recording time: 50 hours
- Compression: MJPEG
- HD: 120 Gbyte SATA
- Power supply: 12 V DC
- Power consumption: 7W
- Weight: 650 g

Encryption

- Mode: AES with 256 Bit
- Encryption possibilities: more than 34 x 1038
- Power supply: 12 V DC, 70 mA
- Video band width: 4,8 MHz

AV digital transmitter/receiver

- COFDM: Coded orthogonal Frequency Division Multiplying
- Frequency: GHz-range
- Channels: 8
- Power: 100 mW / 1 W switchable, higher power available on request
- Power consumption: 100 mW / 15 W, 1 W / 55 W
- Weight: 1,5 kg
- Power supply: 12 V DC
- Receiver antennas: 1-4 SMA
- Receiver outlet: audio/video

Telemetric transmitter/receiver

- Frequency: 868 – 868.60 MHz
- Channels: 8
- Power: 25 mW – 4W
- Data transmission: bi-directional
- Interface: RS 485
- Power supply: 12 V
- Power consumption: 1,8W – 24W

Control unit

- Housing: pelicase, plastic
- Display: 12" TFT
- Remote control: bi-directional telemetric transmitter for pan/tilt camera, a/v signal, day/night, a/v recorder, battery display
- Digital receiver: 8 channels
- Antennas: diversity-principle
- Dimensions: 485 x 390 x 190 mm
- Power supply: 12 V DC L-ion/polymer battery
- Power consumption: 25W
- Weight: 8,5 kg

PKI 5490

AV Miniature Transmission/ Reception Set

Unbelievable - a complete miniature transmission/reception system smaller than a matchbox! This set, licensed for the 2.4 GHz range, is inconspicuous and easy to carry on you. The microphone captures conversations at a distance of up to 10 m. An external camera can be connected. The **PKI 5490** allows quick and uncomplicated room monitoring. The small earphone, that is included in this set, is perfect for play-back of the audio signals.

Specifications:

- Frequency: 2.4 GHz, 4 channels
- Range: 300 m in open spaces
- Dimensions: 43 x 28.5 x 16 mm
- Weight: 25 g
- Power supply: 6 V DC



PKI 5500

Digital Audio/Video Transmission System

The **PKI 5500** Digital Video/Audio Transmission System is part of a complete end-to-end digital wireless system consisting of Digital Audio/Video Transmitter with RF output from 100 mW to 2 W and Digital Video/Audio diversity Receiver. Encryption optionally is available. Low power consumption and compact dimensions make the system perfectly suitable for mobile use.

Specifications:

- Transmission Power: 100 mW 2 W
- Transmission frequency:
2.3 – 2.5 GHz 2.3 – 2.5 GHz
- Signal bandwidth: 6 MHz, 7 MHz, 8 MHz
- Transmission rate: 4 - 31 MBit/sec
(effective: 3.3 - 27 MBit/sec)
- Delay time: 300 ms
- Video Input: FBAS, S-Video, SDI (optional)
- Video standard: PAL/NTSC/SECAM
- Compression: MPEG-2 (ML@MP)
- Modulation: COFDM (QPSK, 16 QAM, 64 QAM)
- Encryption: optional 168 Bit / 3DES
- Power consumption: 18 W 60 W
- Power supply: 9 - 30 V DC 24 V DC
- Video IN: Mini DIN plug, BNC
- Video OUT: BNC
- Audio IN: Cinch/RCA
- Audio OUT: Cinch/RCA
- Control IN: 9-pole Sub-D-plug
- Antenna: SMA
- Weight: 950 g 3500 g
- Operating Temperature: +5°C - +50°C
- Compact Dimensions
- Low Power consumption
- Operator controlled digital scrambling
- Rugged, ergonomic and portable



PKI 5505

Wireless Digital Camera System with Eavesdropping Protection

Intelligent frequency hopping technology stands for bugproof digital connections. Due to digital technologies all transmissions will be absolutely interference-free and the picture at the receiver will be enlarged. An integrated microphone offers first class audio quality. The **PKI 5505** features automatic activation of the IR-light for operations at night. The weatherproof metal housing allows operation in- and outdoor.

Specifications:

- Dimensions: camera 68 x 60 x 160 mm
receiver 80 x 45 x 85 mm
- Camera: objective F=3,6 mm / 2.0 lux
1/4" CMOS-Color, 360 TV lines
- Microphone: built-in
- Range at night: 20 m
- Metal housing weatherproof: IP 44
- Transmission: 2,4 GHz range
- Receiver: 4 channels with A/V output,
Digital image with zoom
- Comes with: antenna, camera mounting,
A/V cable, 2x power adapter and
installation material.



PKI 5510

Wireless Digital Video System

The **PKI 5510** is a digital wireless transmitter that provides exceptional video quality in high multipath environments. Ideal for use in urban environments or for transmission from mobile platforms, where equivalent analogue equipment would suffer tearing and break-up. The narrow bandwidth modulation offers unprecedented spectral efficiency, while also increasing the sensitivity of the system and therefore range. It provides a rugged non-line-of-sight link over a range of up to 500 m. This transmitter is equipped with video- as well as two voice- and data-channels. The 100 mW output power makes it ideal for covert, body-worn, UAV and short range applications. Optionally a 256 bit encryption is available for a secure transmission.

Specifications:

- Video-Format:
PAL/NTSC at narrow band bitrate of 1.2Mb/s to 4.8 Mb/s
- Horizontal resolution:
720, 528 or 480 lines
- Audio bit rate per channel:
64 kb/s to 364 kb/s
- Data: RS-232 control port and TTL asynchronous input with up to 115200 bps
- RF tuning range band:
L-band - 1.15 to 1.4 GHz
Low S-band - 2.28 to 2.45 GHz
- Bandwidth: narrow band 2.5 MHz
- Modulation:
QPSK 1/3 (1.2 Mb/s)
QPSK 2/3 (2.4 Mb/s)
16QAM 2/3 (4.8 Mb/s)
- Output power: 100 mW at 20 dBm



- Power Control: 30 db in 1 db steps
- Power supply: 9 to 16 VDC
- Power consumption:
6.3 to 7.5 W (configuration dependant) 0.1 W at sleeping mode
- Dimensions: 129 x 70 x 28 mm
- Weight: 400 g
- Environmental temperature: -10 to +50° C
- Highly efficient 2.5 MHz narrow band COFDM modulation
- Excellent image quality in high multipath environments
- 500 m typical transmission range at 100 mW output power
- Optional DVB-T compliant 2000 carrier modulation
- Optional 256 bit encryption
- Small package size suitable for covert and body-worn applications
- L-Band and S-Band available in buyer's option
- Two high quality audio-, and one data channel provided
- DC operated at 9-16 VDC
- Battery input with recharger

PKI 5515

Digital Video Transmission / Reception Set

As an outstanding video set, **PKI Electronic Intelligence** offers this highly sophisticated audio/video transmitter and receiver. Integrated error correction is one of the main advantages nowadays. This provides constant image quality and prevents from interferences like identikit pictures and dropouts. Useful functions like freeze-frame, display of signal strength and switchable transmission power are part of our standard features. Furthermore the system is equipped with a digital 168 Bit encryption in triple DES-mode 3DES.

Specifications:

- Transmission power:
100 mW, 1 W, 2 W, 4 W, 10 W
- Frequency range:
2,2 - 2,25 GHz or 5.725 - 5.875 GHz
- Signal band: 6 MHz, 7 MHz, 8 MHz
- Transmission rate: 4 MBit/sec - 31 MBit/sec
- Delay-time: 150 ms / 300 ms
- Video input: analogue composite, S-video
- Video standard: PAL / NTSC / SECAM
- Compression: MPEG-2 (ML@MP, 4:2:0)



- Modulation: COFDM (QPSK, 16QAM, 64 QAM)
 - Power supply: 9-28 V DC, 22-30 V DC, 12-26 V DC, 24-30 V DC depending on version
 - Power consumption: 12 W, 96W, 250 W
 - Dimensions:
170 x 65 x 20 mm, 135 x 145 x 43 mm
135 x 235 x 43 mm, 215 x 297 x 83 mm
215 x 297 x 133 mm depending on version
 - Weight: 250 g, 740 g, 1200 g, 3500 g, 6500 g
 - Operating temperature: -5°C to +50°C
 - Frequency range:
2,2 - 25 GHz and 5.725 - 5.875 GHz
 - Power supply: 9-30 V DC
 - Power consumption: 12 W
 - Dimensions: 220 x 215 x 60 mm
 - Weight: 1400 g
 - Operating temperature: 0°C to +50°C
 - Video out: BNC
 - Audio A out: Cinch/RCA
 - Audio B out: Cinch/RCA
 - Antenna: SMA
 - DC 9 - 30V: 2,5 x 5,5 mm jack
- The receiver goes well with our 5 different digital powerful transmitters and is equipped with a diversity antenna.

PKI 5520

Digital Video Encryption System

This high professional encryption system ensures that no video pictures will be captured or decrypted during transmission. Using a great variety of encrypting keys it guarantees highest possible security for all police and military transmissions. Decoder and encoder use the same private key for decoding the signal. The system provides key sets programmed by the producer which can be individually combined in order to get single decoder/encoder pairs or, if necessary, decoder/encoder units.

Specifications:

- Encryption possibilities: more than 3.4×1038
- Power supply: 12 V DC
- Power consumption: 70 mA
- Input: 1Vss@750hm (BNC)
- Output: 1 Vss@75 Ohm (BNC)
- Line cut: high-secure, with additional torsion of video signal
- Video signal interference: decryption stays active
- Video band width: 4.8 MHz
- Dimension: 100 x 67 x 28 mm
- Weight: 220 g
- Operating temperature: -10°C to +70°C



PKI 5525

Digital A/V Repeater System

PKI only produces repeaters upon receipt of an order as the individual requirements are very different. It is not possible to meet all specifications with one device. When does it make sense to use a repeater? Quite often the transmission power of A/V monitoring units is too low to guarantee large transmission range. This increases the risk of discovery of receivers nearby. The repeater (portfolio size and well camouflaged) receives the A/V signal and transmits it over a distance of several kilometres. It not only enlarges the distance considerably but also helps to overcome constructional and geographic barriers. Suitable for mobile as well as for stationary use.

Specifications:

- Frequency: RX, TX
- Power: TX
- Antenna: omni-directional antenna or directional antenna
- Power supply: 12 V DC, battery, 120 – 240 V AC
- Version: A/V IN and Out GPS, GSM, Internet, Display, channels, remote, coding possible



PKI 5530

Audio / Video Transmitter Lapel Camera with Digital Receiver

This miniature camera is perfect for unobtrusive wearing on the body. It is nearly invisible and easy to fix in the buttonhole whereas the transmitter is placed in your pocket. Now you can listen to conversations at a distance of up to 400 m via the 12-channel receiver. Alternatively you can use a digital recorder instead of the transmitter/receiver of which you will find a wide range in our catalogue.

Specifications:

- Dimensions: 25 x 25 mm
- Sensor: CCD Chip, colour
- Frequency: 1,2 GHz or 2,4 GHz range
- Microphone: Electret
- Transmitting power: 400 mW
- Channels: 12
- Power supply: 9-12V DC



Repeater

When does it make sense to use a repeater?

Quite often the transmission rate of audio video monitoring systems is too low to guarantee large transmission ranges. The danger of discovery of receivers nearby is quite high. The repeater (pocket-size and well camouflaged) receives the A/V signal and transmits it over a distance of several kilometres. The repeater not only enlarges the distance considerably but also helps to overcome constructional and geographic barriers.

Suitable for mobile as well as for stationary use.

Frequency Ranges for Audio / Video Transmission

Frequency range 2.4145 – 2.4705 GHz

This frequency range is approved all over Europe. It is used for industrial and commercial operations. Transmitting power of 10 mW can be divided into 5 channels. 3 channels can be used for parallel operations. Standard video signals will be transmitted in PAL, NTSC or SECAM data format. When using a sensitive receiver within sight a range of approx. 300 m can be obtained and even 600 m with an external 8 dB antenna.

Frequency range 2.3670 – 2.3740 GHz

This frequency range is developed for industrial, commercial and scientific applications in mobile agricultural broadcast and for police for example. Transmission power of 10 W (HF) and 25 W (EIRP) is possible, divided into 16 channels. Standard video signals of PAL, NTSC or SECAM data format can be transmitted approx. 9 km within sight and even 21 km with external 8 DB antenna.

Frequency range 5.732 – 5.867 GHz

This audio / video transmission range is especially suitable for industrial and commercial operations and for special tasks. The transmission power of 25 mW can be divided into 16 channels of which 6 channels can be used for parallel operation. Video signals of PAL, NTSC or SECAM data format can be transmitted. These frequencies are approved all over Europe. Range will be approx. 150 m at sight, and approx. 300 m when using an external 8 dB antenna.

Frequency range 0.868033 GHz – 0.868560 GHz

These frequencies are designed for analogue and digital switching signals with a transmitting power of 25 mW. 8 channels are available of which channel 1 and channel 8 can operate parallelly. The frequencies comply with European regulations. Range is approx. 3 km at sight. We can deliver special systems in the 0.869 GHz range with up to 10 W and 32 channels.

Frequency range 0.4332 – 0.4346 GHz

This range can be used for unidirectional transmission of analogue switching and audio signals. The transmission power of 10 mW can be divided into 8 channels. Channel 1 and 8 can operate parallelly. The frequencies are approved all over Europe. The range is approx. 4 km at sight.

Frequency range 24.040 – 24.230 GHz

These frequencies are for point-to-point transmission. Data format PAL, NTSC or SECAM will transmit standard video signals. Transmission power is up to 100 W and can be divided into 16 channels. The used antennas are directional antennas with high gain. Its range is 5 km at sight using 36 dB antenna.

Antenna techniques

Omnidirectional and directional antennas have on their horizontal plane an almost circular directional diagram. Therefore radiation is crosswise to axle. In general this means that a higher antenna gain induces a plainer emission angle and consequently a larger emission range. On the other hand, directional antennas show on horizontal and also on vertical plane a strong directed emission. Due to this fact they are less susceptible to interferences from other directions. Generally you can say that the higher the gain, the planer is the emission angle and the longer the range.

The diversity function

If possible the user wants to obtain a high-quality, failure-free signal especially if he has challenging applications in urban or mountainous areas. In order to achieve this aim PKI provides on request video receivers with several slightly staggered antennas which allows multiple reception of the signals. The system evaluates the various signals and the best parts will be combined to one single high-quality and failure-free signal. This method represents a great advantage compared to normal receivers concerning range and transmission quality. A progression of this antenna function is the SMRC-diversity unit. The digital system combines ideally the benefits of a maximum ratio combining and a selection combining technology. It mainly consists of a diversity receiver and an antenna system with 8 independent antennas. The obtained results will exceed all expectations and provide an outstanding level of transmission quality, coverage and range which common video transmission systems never achieve.

Audio Video Digital Transmission

COFDM stands for Coded Orthogonal Frequency Division Multiplexing! It is a supplement to OFDM digital modulation scheme providing integrated digital false correction, selectable guard interval, resistance against multipath fading and burst failures. COFDM is perfectly suitable for mobile reception of digital signals.

The modulation plays an important role for the transmission. "QPSK" is designed for sound, faultless transmission, "16 QAM" is sufficient for normal picture quality, whereas "64 QAM" can be selected for highest picture quality as it works with highest data transmission rate.

Digital Way of Compression GOP (Group of Picture)

This way of compression (MPEG-compression) reduces video pictures of a video stream differently. The so-called I-frame (Intra-frame) will be compressed independently from the other pictures and is in general the largest data file of the video sequence. The I-frame serves as basic information for the following pictures (B-frames = bidirectional frames) and defines their reference within the video stream. They are considerably smaller because only their discrepancies to other pictures are stored, as they cyclically appear as GOP (Group of Pictures). They are followed by the P-frame (predicted frame) that contains reference information for the I-frame, which is the basic data for this kind of compression. One GOP expands from one I-frame to the next. GOP's often have a length of half a second. The following types of pictures can be included: I-Picture resp. I-frame, reference pictures (equivalent to freeze image and independent of others). Every GOP starts with this type of frame.

Digital Data Transmission

What is meant by Guard Interval?

The time period which is available for a reflection is indicated as the guard interval. A guard interval of $\frac{1}{32}$ allows longer reflections but also means a lower rate of data transmission. When using a guard interval of $\frac{1}{32}$ only shorter reflections will be compensated resulting in a higher rate of data transmission.

What is meant by code rate?

The code rate indicates how many of signal parts will be used for error correction. Code rate $\frac{1}{2}$ means that half of the signals will be used for error correction whereas code rate $\frac{7}{8}$ only needs $\frac{1}{8}$ of the signals. Consequently, the effective data rate is higher in code rate $\frac{7}{8}$ as much more signals will be used for transmission.

What is meant by band width?

The band width indicates the quantity of signal transmitted. This means, the higher the band width the more data can be transmitted. When using more systems parallelly a lower band width has to be selected in order to avoid interferences and to increase stability and quality of the transmission.

PKI 5535

Audio / Video Transmitter

The **PKI 5535** is available in various power grades. Furthermore, you can choose between 1,2 or 2,4 GHz frequency. Both include antenna and power plug. All cameras of our catalogue are compatible with our transmitters/receivers. These sets are designed for simple wireless transmission of audio and video signals and cannot be compared with our coded digital transmitters and receivers - neither concerning their capacity nor their price.



Specifications:

- Frequency: 1,2 or 2,4 GHz range
- Channels: 8
- Power: 200 mW, 500 mW, 1000 mW, 2000 mW, 5000 mW
- Range: 100 m – 2 km depending on power
- Antenna socket: SMA
- Power supply: 12 V DC, power adapter included
- Housing: aluminium
- Dimensions: 82 x 52 x 18 mm
- Weight: 50 – 500 g according to power
- A/V: IN socket
- Various: channel switch, LED control lamp, ON/OFF switch

PKI 5540

Video Receiver with Built-in Directional Antenna

This compact device consists of a directional antenna and an audio / video receiver - both integrated in one unit. It is not necessary to connect an external antenna. By means of the directional antenna an aerial gain of 8dB can be obtained. Due to its small dimensions of 58 x 56 x 13 mm this device can be used everywhere.



Specifications:

- Frequency range: 4 channels 2.4 – 2.4835 GHz, 1.4 GHz upon request
- Aerial gain: up to 8 dB
- Opening angle: 35°
- Dimensions: 58 x 56 x 13 mm
- Protection class: IP 65 (suitable for outdoor use)
- Operation temperature: -20°C to +60°C
- Weight: 300 g
- Video output: 1 Vp-p/75 Ohm
- Audio bandwidth: 50-17000 Hz
- Power supply: 7.5V DC
- Power consumption: 200 mA

PKI 5545 PKI 5550

Wireless Camera and Transmitter in a Cigarette Packet

Wireless Camera and Transmitter in a Mobile Phone

Some operations require extremely sensitive observation methods. Without camouflage a quick reaction is nearly impossible. These devices transmit audio and video signals wireless over a distance of 150 m in 1.2 or 2.4 GHz range at a power of 100 mW. In our catalogue we offer various compatible receivers, also with built-in A/V recorder.

Specifications:

- Dimensions: standard cigarette packet, standard mobile phone
 - Transmission time: 90 minutes
 - Transmission power: 100 mW
 - Weight: **PKI 5545** 60 g
PKI 5550 110 g
 - Power supply: rechargeable battery, built-in
 - Frequency: 1.2 or 2.4 GHz
- Comes with power plug


PKI 5555

Camouflaged Cameras

Electric box, Belt, Helmet, Tie, Button, Glasses, Rear view mirror, Sport cap

Often mobile and camouflaged camera systems are the only effective possibility for specific observations. **PKI's** camouflaged cameras inconspicuously fit into the environment, selected according to their application and their stylish integration. Of course, **PKI Electronic Intelligence GmbH** will comply with your specific requirements. Our cameras, which all are quite similar have the following specifications:

Specifications:

- Camera: 1/4" CCD Chip, colour
- TV lines: 470
- Min. illumination: 1 Lux
- Power supply: 9-12 V DC
- Video output: Vpp / 75 Ohm
- Operating temperature: -10°C to +50°C

- Various: In our catalogue we offer various kinds of pocket transmission / reception recorders, that we can strongly recommend for use with our cameras.


PKI 5565

Intelligent 360° Day and Night Observer

Fixation of this 360° camera is very simple and quick, as it is equipped by a ground spike. The unit consists of 3 cameras, which allows an all-around observation. Activated by a sensor or remote-control it stores all captured data on a digital recorder. At darkness the high-power LED's are automatically switched on, so that night visions can be effected up to a distance of 100 m. The built-in GH-transmitter transfers the audio and video signals up to 500 m to a LCD-receiver. The observer is controlled by remote pocket transmitter.

Specifications:

- Image sensor: 3x 470 TVL
- Shutter: automatic
- Frame rate: live video, 24 fps
- Microphone: records conversation up to 10 m distance
- TFT-display: 6,4"
- Remote control: camera, zoom, ON/OFF
- A/V transmitter: GHZ-range
- Dimensions: Ø 380 mm x 150 mm
- Weight: 4 kg
- Power supply: dry fit battery 12 V / 80 Ah, set into soil



PKI 5570

Security Camera IR + Night Vision

This combination of IR + Night Vision allows observation in any light conditions, in moments of daylight and total darkness, moonlight or starlight. **PKI** security camera is often used by police and military departments, but also by security companies. Day and night observation with video recording is as easy and comfortable as might be with this lightweight camera.

Specifications:

- Dimensions: 206 x 150 x 80 mm
- Weight: 1 kg
- Operating temperature: -10° to 50° C
- Power supply: DC 12 V, 4W
- Environment: IP 65
- CCD: Zoom 13,3 fold
(6,7 x optical, 2,0 x digital)
- Minimum illumination: 0,0001 Lux starlight
- Lens: varifocal IR, auto iris
- Optics: F /1.3, f=7,5 – 50 mm
- FOV: 5,64° - 36,6°
- Target detection: >2 km for man size object



PKI 5575

Hybrid IR-Camera

This camera is indispensable for professional use, not only because of its high resolution 1/4" color chip but also due to its 3,9 mm to 85,8 mm zoom optic with 22x optical magnification. Additionally it offers a controllable IR-light for night vision up to a distance of 80 m.

Specifications:

- Dimensions: 270 x 250 x 100 mm
- Weight: 1.3 kg
- Objective: 3.9 - 85,8 mm
- Zoom: 22x optical magnification
- IR-range: 80 m
- Resolution: 550 TVL
- Power consumption: 14W
- Operating temperature: -20°C - 60°C
- Hybrid IR chip: LED IR 36
- Method of transmission: through a pair of optical lenses
- Life span: over 10 years
- Radiant intensity: 150 mW/Sr (12.70)



PKI 5580

24 Hours Surveillance Camera

This camera not only provides an excellent design but is designed for 24 hours outdoor use, without interruption. This allows observations by night at 0 lux up to 100 m distance with 8 high power and 12 IR LED's. Its technical features are outstanding! This is an unique and solid camera for every day use!

Specifications:

- Dimensions: 60 x 70 x 110 mm
- Weight: 800 g
- Power supply: 220V AC
- Objective: 6-60 mm standard version, others upon request
- Zoom: 22 x
- Housing: aluminium with cover against rain and sun
- Chip: 1/4" Super HAD CCD and DSP digital processing
- Resolution: 420 TVL
- IR-LED's: 8x High power and 12 x IR LED's
- Range: 100 m



PKI 5585

Audio / Video Surveillance Case

This A/V surveillance case, designed for mobile operations, records signals sent by wired and wireless cameras. Video signals will be shown on TFT display in pin sharp quality. Even frequencies for control of external devices can be captured. All connecting cables and adapter are included in practical compartments inside the case.

Specifications:

- Dimensions: 390 x 330 x 110 mm
- Weight: 4 kg
- Display: TFT, 5,6"
- Loudspeaker: built-in (for audio transmission)

**PKI 5590**

Audio / Video Special Surveillance Case

Integrated in a hardcover protective case you will find an interesting surveillance unit. Besides receipt of signals from wired and wireless cameras the built-in telemetric module of the unit can alter camera settings, such as angle, adjust zoom, focus, day/night setting.

Specifications:

- Dimensions: 550 x 370 x 230 mm
- Weight: 18 kg
- AV receiver: available frequencies: 1,4 GHz, 2,3 GHz, 2,4 GHz, 5,8 GHz further frequencies upon request, channel switch with analogue display
- Switching channel output: - 500 mW, frequency

- Power supply: built-in rechargeable battery for 2,5 hours, built-in power adapter / charger 220V, cable for car use
- Receiver: Audio and video, channel switch with analog display, channel switch output
- Frequencies: 1,4 GHz, 2,3 GHZ, 2,4 GHZ and 5,8 GHz further frequencies upon request
- Antenna: to be clipped on car window
- Miscellaneous: port for external video recorder available (please see PKI digital recorder)

**PKI 5595**

Audio / Video Transmitter / Receiver Surveillance Case

This professional set of surveillance cases consists of a transmitter case with pivot point camera, a receiver case with telemetric control and a built-in A/V digital recorder. The transmitter case transmits pictures either taken by the built-in mini camera or by the included pivot point camera. Further "highlights" of the PKI Audio/Video Transmitter/Receiver Surveillance Case are adjustable transmission power and connectable encryption. The received pictures are shown on the high-definition TFT-display of the receiver case and can immediately be recorded by the built-in A/V digital recorder. At the same time signals can be received from various sources and analysed on different displays. The built-in telemetric control of the receiver case allows control of 2 different cameras.

Specifications:**Transmitter case:**

- Dimensions: 550 x 370 x 230 mm
- Weight: 18 kg
- Frequency: 1,4 GHz, 2,3 GHz, 2,4 GHz, 5,8 GHz, further frequencies upon request
- Channel switch with analogue display, video image inverting



- Transmitting power: adjustable

Receiver case:

- Dimensions: 550 x 370 x 230 mm
- Weight: 21 kg
- TFT-Displays: 1 x 12" and 2 x 5,6" TFT incl. loudspeaker
- Frequency: 1,4 GHz, 2,3 GHz, 2,4 GHz, 5,8GHz, further frequencies upon request
- Channel switch with analogue display, video

level control, video image inverting, switching channel output

- Telemetric Transmitter: Joystick / 200m / focus (auto /manual) day/night switch (auto/manual), frequency: 868 MHz, transmission power 25-500 mW
- Miscellaneous: 2 separate A/V receiver
- Power supply: built-in rechargeable battery with charger control, mains connection 220V or car mains 12 V

PKI 5600

24 GHz Audio Video Directional Transmission System 1

This newly developed directional transmission system allows transmission of audio, video and switch signals via the 24 GHz-ISM frequency range, which is register and cost-free. The use of directional antennas reduces its interference response coming from other systems and increases safety from interception. The **PKI 5600** covers a range of up to 5 km at a transmission power of 100 mW. Also available are similar devices only for export purposes with 1 W, 10 W and 50 W and up to 50 km transmission range. All cameras out of the PKI product range can be connected to the transmission system and the receiving system is compatible with all our TFT colour displays and video recorders.

Specifications:

Transmission system

- Video input: 1 Vss / 75 Ohm
- Video frequency range: 30 Hz - 5 MHz
- Audio input: 100 mVss - 10 Vss
- Audio frequency range: 30 Hz-15 kHz
- Modulation: F3F
- Power supply: 9 - 30 V
- Power consumption: max. 500 mA/12 V
- Antenna: 36 dB parabolic antenna
- Dimensions incl. antenna: 500 x 500 x 400 mm

- Protection against dust/moisture: IP 65
- Operation temperature: -25° to +55°C
- Transmission power: 100 mW

Receiving system

- Frequency range: ISM 24.020-24.230 GHz
- Channels: 16 channels
- Video output: 1 Vss / 75W
- Video frequency range: 30 Hz - 5 MHz
- Audio output: 500 mVeff to > 1 kW

- Audio frequency range: 30 Hz - 15 kHz
- Receiver response: -85 dBm
- Modulation: F3F
- Switching channel output: 15 V / 100 mA
- Power supply: 9-30 V
- Power consumption: max. 250 mA at 12V
- Operation temperature: -25°C to +55°C
- Dimensions incl. parabolic antenna: 500 x 500 x 400 mm



PKI 5605

Microwave Radio Transmission

This system comprises one transmitting and one receiving unit at a frequency range of 10,5 GHz including parabolic antennas. It allows transmissions of audio, video and switch signals. At 10W output power a range of max. 50 km can be achieved. Should this be insufficient cascading is possible, i.e. to overcome larger obstacles (mountains, buildings etc.) or to get longer distances several radio systems can be switched in series.

Specifications:

- Frequency: 10.5 GHz
- Output power: 0,1 / 0,5 / 1 / 2 / 5 / 10 W
- Topology: PTP & PTMP
- Digital line Interface: E1 / Ethernet
- Encryption: AES (WPA2 – PSK)
- Dish & Grid & Panel directional: high gain
- Dimension: 39,2 x 31 x 15,6 cms
- Antenna Ø 35,5 cm
- Weight: 6,8 kg
- Temperature: -30° to +60°C
- Housing: IP 68
- Power supply: 110 / 220 V AC



PKI 5610

Digital AV Encryption System

In professional use you shouldn't miss audio/video encryption when using wireless directional transmitters. With our encryption system you can focus 2 audio channels with 1 video channel. This is especially important if you need to secure surveillance links. The system embeds digital audio data within the video's vertical blanking period. The data is encrypted under control of the **PKI** encryption algorithms resulting in a highly secure transmission.

Specifications:

- Scrambling method: encrypted digital audio sent as VBI data
- Audio input level: 10 mV to 4 Vpp, 100 kOhm

- Audio bandwidth:
100 Hz to > 5 kHz dual channel
100 Hz to > 10 kHz single channel
- Video input level: 1 Vpp 75 Ohm
- Digital sampling rate:
8 bits at 22,5 MHz
- Video bandwidth: to 5.5 MHz
- Lock-in-time: < 0.5 sec. max.
- Video standards: PAL, NTSC
- Dimensions: 130 x 60 x 23 mm
- Operating temperature range:
-10°C to +70°C
- Weight: 220 g
- Connectors: BNC
- DC power: 6 to 32 V DC, 800 mW



PKI 5615

Camera with Motion Sensor

This camera is the response to the highest expectations in security needs. Everyone, who enters your premises, is captured by the motion sensor of this camera, which automatically activates a halogen spotlight and starts recording, whereas the recorded data is stored on the inserted memory card. Furthermore, the camera will pursue the person by panning in an angle of up to 180°, depending on the direction of the person observed. Recorded data will be stored on the memory card, which is included in the set, and can be played back with any standard PC.

Specifications:

- Camera: CMOS sensor
- Recording: motion controlled
- Memory: 1 GB memory card
- Recording time: 560 x 20 sec. video films
- Power supply: DC 12 V power plug
- Spot light: 300W halogen, 220 V
- Dimensions: 280 x 150 x 100 mm
- Weight: 320 g
- 3 different announcements possible, that will be played back automatically via the integrated loudspeaker

**PKI 5620**

Video Surveillance Helicopter

The **PKI** video surveillance helicopter is designed for all circumstances where no other methods of video surveillance are possible. For this reason, our **PKI** video surveillance helicopter is called "your eye in the sky". Equipped with a special camera and video transmitter it delivers the requested pictures. It is ideal for various application fields, for example in a soccer stadium (for observation of hooligans) at street riots (where political groups fight against each other) or at special police operations.

An assortment of components can be chosen individually according to requirements. Please find hereafter a choice of components.

**Specifications:****Microdrone set 4-200 ready-to-fly**

- Flight duration: approx. 20 min.
- Payload: 200 g
- Size: < 1 m Ø
- Power supply: 5V/1A
- Servo: 2 x standard
- Switch channel: 2 x 5V/16V
- Including: 1 FM-synthesizer transmitter 13-channel 35/40/41 MHz
- 3 x carbon blade, 370 mm (front and rear motor)
- 3 x carbon blade, 370 mm (left and right motor)
- 2 x LIPO batteries 4x, 14.8V, 2300 mAh
- 1 x peli case, dimensions 800 x 581 x 479 mm

Base station set

- 1 x 1.4 megapixel video eyeglasses
- 1 x 2.4 GHz 4-fold diversity receiver, high gain antenna
- 1 x internal power supply, inputs: 230/115VAC, 12/14.8VDC
- 1 x charger and true single cell balancer
- 1 x USB video frame grabber, video splitter 3x out
- 1 downlink decoder for receiving the complete machine state
- 2 x LIPO batteries 4s, 14.8V, 2300mAh

1 x peli case, dimensions 486 x 392 x 192 mm (notebook not included)

Mobile Video Receiver

- 2.4 Ghz 4-fold diversity receiver
- 1 x 1.4 megapixel video eyeglasses
- 1 x LIPO batteries 4s, 14.8V, 2300 mAh

Video transmitter

- 2.4 GHz analogue, 200 mW
- With this option the drone transmits the video and telemetry data to the base station/mobile video receiver

Different cameras are available such as:

- Daylight Color video camera
- Low-light b/w video camera
- Still photography
- Videography

GPS position hold

- GPS-receiver and antenna
- 3D-magnetometer
- Firmware extension

**GPS waypoint navigation**

- This option allows the drone to follow a flight path, that can be planned or uploaded into its memory.

- LIPO batteries 4s, 14.8V, 2300 mAh

LIPO Loader

- With true single cell balancer
- Supply: 12VDC
- Max. load current: 3.1A

PKI 5625

Automatic Tracking Day/Night Camera with Microphone and Recorder

This newly developed security camera detects all moving persons and follows them full automatically. This is the important advantage compared with common cameras. Generally a camera only records a person passing by but this camera pans according to the movements of the persons. Due to the enlarged recording range more of their actions will be monitored. In addition to that, the integrated high sensitive microphone captures conversations from up to 10 m distance. Powerful IR-diodes allow night observation, whilst remaining completely invisible for human eyes.

Specifications:

- Power supply: 7,5 V DC by power adapter
- Output: Audio 1 x Cinch 1 Vss (600 ohm)
- Video 1x BNC 1Vss (75 ohm)
- Detection angle: 12°
- Camera range: 12 m
- Rotation speed: up to 3 m/sec.
- Relay output: NC, 50 mA/6V
- Power consumption: 300 mA
- Operating temperature: -10°C up to +50°C
- Dimensions: 82 x 139 x 57 mm
- Comes with: AV- cable, installation material, operating manual



PKI 5635

Number Plate Recognition Camera

This high speed camera captures every number plate of cars passing by at a speed of 60 fps (frames per second) completely independently from the illumination conditions. This is absolutely unnoticeable for drivers, as the IR illuminator works at an invisible 850 nm IR bandwidth with 2000 W light power. Effective range of number plate capturing is up to 15 meters. The **PKI 5635** is ideal for various applications, such as traffic surveys, vehicle access control, private car parkings, airports, harbours, law enforcement automation, transit traffic monitoring, vehicle entrance admission, speed enforcement, etc. The compatible software for data storage resp. filing can be offered upon request.

Specifications:

- Dimensions: 155 x 155 x 124 mm
- Weight: 3.2 kg
- Operation temperature: -20° to +50°C
- Power consumption: 24V AC / 20W

Digital IR-Camera

- Resolution: 752 x 480 pixels

- Image processing speed: 60 frames/sec at full image size
- Format: RAW, JPEG
- Shutter time: 1/100 to 1/30000 sec. adjustable gain
- Communication interface: Ethernet UDP/IP or USB
- Image sensor: High speed and ultra sensible, CMOS monochrome WideVGA
- Pixel size: 6 µm x 6 µm
- Dynamic range: up to 100 dB
- Miscellaneous:
 - built-in motion detection
 - Integrated flush memory
 - Real time clock
 - IP class 67



PKI 5640

Mini Pan/Tilt Mounting

This outstanding miniature pan/tilt system could fit in a cigarette box but professionally can compete with larger systems. Due to its small size PKI 5640 is ideal for perfect camouflage. All functions can be controlled by the wireless remote control. This system is designed for small and light zoom cameras.

Specifications:

- Dimensions: 85 x 55 x 25 mm
- Weight: 240 g
- Interface: RS 485
- Various: Mounting with mini zoom camera can be delivered upon request.



PKI 5645 **PKI 5650**

AV Micro Recorder Camera, AV Micro Recorder Window Camera

PKI 5645 is easy to camouflage at top-secret actions. Due to the integrated voice control the recording does not start until beginning of a conversation and automatically stops at its end. Therefore a standby time of 260 hours is possible. Should this be insufficient you can use this technological miracle with an adapter and a remote control can be delivered on request.

PKI 5650 is a real highlight by PKI Electronic Intelligence. Smaller and more inconspicuous is impossible! Just fix the **PKI 5650** with the special mastic material on the window. 1 Lux illumination is sufficient in order to obtain impeccable video recordings. Its outstanding resolution of 2 million pixels provides images of excellent quality. The camera records audio/video signals by means of built-in batteries up to 90 min. By using external power supply and an 8 GB micro SD card, the recording time can be extended to 320 min. The SD card can be exchanged from outside without removing **PKI 5650** from the window. This miniature miracle is predestined for top secret videos

Specifications:

- Pixel: 2 million color CMOS
- View angle: 62°
- Battery capacity: 260 mAh
- Consumption current: 120 mA / 3,7 V (max.)
- Storage temperature: -20°C to +80°C
- Operating temperature: -10°C to +50°C
- Relative humidity: 15-85% RH
- Memory storage capacity: micro SD card (TF card)
- SD capability: max. 8 GB micro SD card
- Video function and format: JPEG, VGA 640x480@30 fps
- USB jack: USB 1.1 / 2.0
- Weight: 50 g approx.
- Dimension: 55 x 28 x 20 mm approx.
- Operation system: 2000 / XP / Vista 32
- Storage consumption: 1 GB per 40 min.
- Charging time: 2 h
- Standby time: 260 h
- Various: Suitable as web camera for online video chat. Comes with adapter, mounting, PC connecting cable, Micro SD 2 GB


PKI 5655

Long Distance Day/ Night Camera with 360° Continuous Pan

This camera is especially designed for long distance observation. Equipped with a weather-proof and solid housing it is often used at airports, highways, harbours and seashores. Due to an integrated water tank and its windscreen wiper it always provides excellent visibility, independently from environmental conditions.

Specifications:
Camera Specifications

- Sync System: Internal
- Image Sensor: 1/4" Exview HAD CCD
- Scan System: 2:1 Interlace
- Resolution: 470 TVL(C)/570TVL(M)
- Sensitivity: 0,01 Lux (1/4 sec. NTSC), 1/3 sec. PAL
- Lens aperture: auto/manual
- Focus: auto / manual
- Zoom Ratio: 432X (optical 36x, digital 12x)
- Focal Length: 3,4 mm - 122,4 mm
- View Angle: Wide 57,80° / Tele 1,70°
- BLC: close/auto
- White Balance: auto
- Gain control: auto
- Privacy Mask: 24
- Signal Format: PAL/NTSC
- S/N: ≥ 50 dB
- Video output: 1.0 +/- 0.2 Vp-p
- Video output port: female BNC

Connection type

- Interface: RS485/RS422, Bi-phase

Electrical specifications
Functions

- OSD menu
- Scheduled various functions
- 220 presets with title
- 4 panning, 4 sequences, 4 patterns
- 8 zones with title
- 8 privacy masks
- Auto running function
- Temperature display
- 18x/22x/23x/30x/35x/36x optical zoom camera optional
- 9 language OSD menu (Chinese, English, French, Portuguese, Spanish, Italian, German, Russian, Polish)

Weather-proof equipment

- Protection against dust/moisture: IP66
- Sun shield, auto running defroster/heater/fan/wiper
- Operating temperature: -40°C – 60°C
- Operating humidity: 0-90%
- Operating wind speed: 90 km/hour
- Wind speed resistance: 130 km/hour
- Resistance against rain: 4mm/min.
- With relay out for water jet control

IR Specification

- Power supply: 100-240 VAC (outer)
- Power consumption: 10W



- IR output power: 20W
- IR emission angle: 15°
- IP optical wavelength: 850 nm
- Operating temperature: -40°C to +60°C
- Size: Ø 58 mm x 135 mm
- Weight: 300 g

PKI 5660

Mini Pan/Tilt Camera

This first class camera provides 18x optical and 12x digital zoom in day/night setting. This **PKI** Mini Pan/Tilt Camera, equipped with a resolution of 470 TV-lines and a sensitivity of 1 lux, is designed for use on tables or on ceilings. On special request this camera can be delivered in a weatherproof covering. Besides various different functions it is possible to preset 6 positions which later can be recalled automatically at the touch of a button. All functions can be triggered wirelessly through our telemetric control (see **PKI** surveillance case).



Specifications:

- Dimensions: Ø 15,5 x 19,5 cm
- Weight: 2,4 kg
- Power supply: 12V power adapter
- Resolution: 470 TV-lines
- Min. illumination: 1 Lux

PKI 5665

Microwave Surveillance Solution

Audio and Video surveillance is necessary and required everywhere. In the **PKI** product range you will find complete net work systems including antenna and transmitter/receiver. The systems are designed to be cascading, so that they can achieve a range of more than 1000 km according to installed number of systems.

Specifications:

- Frequency: 140 MHz - 10,5 GHz
- Output Power: 0,1 - 100 W
- Digital line interface: E1 / Ethernet
- Encryption: AES (WPA2-PSK)
- Antenna: high gain
- Dimension: 355 x 445 x 238 mm
- Weight: 4-7 kg
- Operation temperature: -30° - +60°C
- Protection against dust/moisture: IP 68
- Power supply: 110/220 V AC
- Solar: optional for low power
- Format: PAL / NTSC
- Bit rate: 32 kb/s - 4Mb/s
- Resolution: D1 size (720x480)
- Compression: Video MPEG 4
Audio ADPCM



PKI 5710

Indoor/Outdoor Video Camera with Automatic Recording for Day and Night

Digital video observation is what you need. With this **PKI 5710** "blackbox" you will just have what you are expecting, perfect pictures and reliable performance around the clock. It is a must for every government department and an indispensable tool for recognition of criminal acts and manipulations. It is the only camera which combines a standard white-light flash, an IR-flash for night-vision function and a motion detector in one small housing. The built-in 2.1 Mio pixels camera provides pictures of extraordinary quality and most reliable capacity around the clock. **PKI 5710** fully automatically stores relevant pictures by day and night together with date and time indication (being of most importance for evidence collecting). Single pictures as well as video recordings of 15

seconds are possible and will be stored on the 32 MB SD-card (included in the set). This card, if necessary, can be exchanged against other types of higher capacity.

Specifications:

- Dimensions: 180 x 100 x 40 mm
- Weight: 320 g
- Power Supply:
4 x 1,5 V Battery, type AA
- Distance of IR-flashlight:
approx. 10 m
- Detection range of motion:
Detector approx. 30 m
- Adjustments:
3 picture delay, incident-counter



PKI 5715

Window Camera

The **PKI 5715** has been designed as a miniature, colour camera with a wireless transmitter and optional receiver. It is really the best choice for visual room observation from outside, if a permanent presence of the observer is not possible but still he must be informed of what happens in a closed room. Due to its very small dimensions and low weight, the **PKI 5715** is hardly perceptible. When fixed at the edge of the window pane (with our supplied special adhesive material), this wireless miniature colour camera provides a direct view into a room even under low light conditions (min. 1 Lux) for the observation of all activities inside the room. Because of the built-in video transmitter such surveillance can be effected from a distance of several hundred meters (depending on

surrounding conditions). As a receiving station we recommend our **PKI 5755** receiver with display, play-back and recording function.

Specifications:

- Camera: 1/3" CMOS Chip
- Resolution: 380 TV-lines, colour, 628 x 582 pixel
- Min. illumination: 1 Lux
- Objective: 3.6 mm wide-angle
- Power supply: Lithium rechargeable battery with mains adapter/charger
- Transmitting distance: up to 50 m
- Dimensions: approx. 22 x 22 x 24 mm - incl. transmitter
- Weight: approx. 30 g
- Recommended receiver: **PKI 5755**

**PKI 5720 PKI 5725 PKI 5730**

Cameras, Receiver and Recorder

Our micro cameras with extraordinary high resolution can be connected to our pocket transmitters or directly to one of our digital recorders. Even the weakest video signal created by a small video transmitter will be captured by the corresponding receiver. Indispensable for any kind of disguised video surveillance.

Specifications:

For all application fields - even in disguised operation - we offer the right choice of PCB cameras in b/w or colour with the following features:

- smallest dimensions from 24x24x27 mm for **PKI 5720** - 1/3" CMOS b/w camera, with 1:2,0 / 3.6mm objective via 26x22x24 mm for **PKI 5730** - 1/3" CCD colour

camera with 3,6mm pinholeobjective
disguised as normal
button up to 31x31x28 mm for
PKI 5725 - 1/3" CMOS colour
camera with 1:2,0 / 7,8 mm
objective.

- Other types and objectiveconfigurations are available on request
- CMOS or CCD-chips of latest technology made by world-wide known manufacturers
- Fully battery operated at 12 VDC with approx. 30-40 mA power consumption

**PKI 5735**

Miniature Day/Night Camera

For disguised observations under low light conditions, whether in dark rooms or outside at low daylight or even at night, the **PKI 5735** is the right choice for every government related agency. With its minimum illumination sensitivity of only 0,0003 Lux, and the extremely high resolution of 600 horizontal TV-lines, this camera provides incredible clear b/w pictures which helps to identify a person, a car number plate or even a small suspicious parcel, which may be a postal bomb laid down in front of a sensitive area. For all such purposes a camera has to be suitable in size and weight. With its very small size of approx. 20 x 20 x 18 mm and the minimal objective opening of only 1,4 mm the **PKI 5735** is ideal for disguised mounting at any place. It either can be powered by 12 VDC

rechargeable batteries or via the supplied mains adapter. Other miniature cameras with microphone and/or colour recording are available on request

Specifications:

- Power supply: 12 VDC with external mains adapter
- Resolution: 600 horizontal TV-lines
- Min. illumination: 0,0003 Lux
- Backlight adjustment: automatic
- Objective: Pinhole 4,3 mm (78°)
- Dimensions: approx. 20 x 20 x 18 mm
- Weight: approx. 35 g



PKI 5740

GSM Audio / Video Transmission Set

This set consists of a central unit, a pocket PC, a laptop with receiver and an audio/video camera. The central unit is equipped with a SIM-card as well as the necessary sockets for power supply and audio/video connection. The integrated GSM-transmitter, by call, transfers the audio and video signals worldwide to the observer. Thus, observations can be effected without being at site, i.e. just the audio/video camera has to be placed in the room and the monitoring can be done from any location around the world. Additionally, and as an option, the camera can be equipped with infrared diodes for observations at night. Upon request, the **PKI 5740** can be modified for operations on landline telephone systems. Please contact us for further information



Specifications:

- Resolution:
704 x 288 pixel (half-size picture)
352 x 288 pixel CIF
176 x 144 pixel QCIF
128 x 96 pixel SQCIF
- Picture transmission:
1-3 pictures per second via GSM at 9,6 kbps
- Power supply: 12 VDC mains adapter, 10 W
- Software:
Windows compatible software with storage, 24 hours, approx. 120 MB, video player software
- Dimensions: approx. 120 x 140 x 35 mm
- Weight: approx. 320 g

PKI 5745

Wireless Audio / Video Camera

This complete set is a special assembly of several first-class components for disguised operations with body worn audio and video observation devices. The **PKI 5745** consists of a miniature colour camera, a pocketsized transmitter and a corresponding receiver with built-in TFT-display and digital recorder. The camera objective is camouflaged with an ordinary button suitable for every kind of clothing. Special types of buttons are available upon request. Optionally, this set can be supplied with a body-worn digital A/V recorder instead of the wireless link.

Specifications:

A) Colour Video Camera

- Horizontal resolution: 420 TV-lines, colour
- Min. illumination: 0,5 Lux
- Backlight adjustment: automatic

- White balance: automatic
- Power supply:
12 VDC either from transmitter or recorder
- Dimensions: approx. 25 x 25 x 20 mm
- Weight: approx. 32 g
- B) A/V Transmitter**
- Frequency: 1.2 GHz
- Output power: 1 Watt
- Operating distance:
approx. 200 to 700 m, depending on surrounding conditions
- Power supply:
Li-Ion rechargeable battery charger/mains adapter
- Operating time:
approx. 2 hours with fully charged batteries
- Extended operating time possible by means of external batteries.



- Dimensions: approx. 50 x 28 x 8 cm
- Weight approx. 200 g
- C) A/V Receiver see **PKI 5755**
- D) A/V Digital Pocket Recorder see **PKI 2460** - as option

PKI 5750

Wireless Audio / Video System Disguised in Smoke Detector

The **PKI 5750** - wireless audio/video system disguised in a smoke detector offers the best choice for camouflaged observation in office environments and other rooms where unobtrusive surveillance is required. With the self-adhesive tape the smoke detector camera can be fixed within seconds and at any place without any installation tools. The built-in camera can be positioned to any required direction and the integrated transmitter covers a range of approx. 200 m for a clear sound and picture reception. Depending on customer's requirements various combinations are available:
a) either b/w or colour cameras
b) transmitters in different frequency ranges 1.3, 2.3 or 5.8 GHz
c) transmitters with different output power - 10 mW to 200 mW (Every other type is available on request)

Specifications:

A) B/W Camera

- TV-Lines: min. 420
- Min. Illumination: 0.05 Lux
- Built-in Lens: F = 3.6 mm

B) Colour Camera

- TV-Lines: min. 380
- Min. Illumination: 0.25 Lux
- Built-in Lens: F = 4.3 mm

C) A/V Transmitter

- Frequency Ranges: 1.3, 2.3 and 5.8 GHz
- Output Power: 200, 25, 10 mW

D) Housing

- Height: approx. 60 mm
- Diameter: approx. 125 mm
- Weight: approx. 120 gr.

E) LCD Pocket Receiver

- Screen Size: 50 mm
- Dimensions: 60 x 120 x 35 mm
- Power supply: standard batteries



- Black/white or colour transmission
- Up to 4 hours operation time
- Selectable transmission channels
- Integrated microphone
- Portable pocket receiver

PKI 5755

Audio Video Receiver & Recorder

Wireless video cameras quickly and easily can be installed anywhere.

The combination with our **PKI 5755** A/V Receiver and Recorder provides a complete surveillance system with utmost flexibility. For mobile operations, this pocket-sized device offers direct play-back on the built-in TFT-display plus digital recording in real-time. A larger display can be connected via the A/V outlet sockets. The integrated 30 GB hard disc records the signals with approx. 65 minutes per 1 GB, i.e. the total recording time is up to 30 hours. An additional SDcard slot is integrated for cards up to 4 GB. Furthermore the device is equipped with an integrated motion detector which will only start recording when there is a movement in the observed area. All necessary A/V RCA and USB-cables, headphones and carrying bag are included.

Specifications:

- Receiving frequency: 1,2 or 2,4 GHz range
- Receiving channels: 4
- Antenna: omnidirectional
- Resolution: 720 x 480 pixel
- Recording: audio and video digitally on 30 GB hard disc in real-time.
- Connectors: A/V-in, A/V-out, external power supply
- Power supply: Li-Ion rechargeable battery, 7,4 VDC, 1800 mAh with external charger/mains adapter.
- Dimensions: approx. 130 x 80 x 25 mm
- Weight: approx. 250 g
- Remarks: motion operated recording (slow-motion-detection)

**PKI 5760**

Pinhole and Fibrescope Objectives

Wherever video observations through very small openings are required, the **PKI 5760** provides the perfect solution. Camouflaged in products of daily use, looking through key-holes or small holes drilled through a wall - our range of special pinhole objectives offer the most suitable possibilities. You have your camcorder and we have the perfect solution for all your purposes. On the other side, camcorders of latest generation are also included in our product range. With this latest generation and state-of-the-art products, sharp and clear pictures of high resolution are guaranteed. Each lens/fibrescope can be connected with nearly every camcorder and/or CCDcamera with 12 mm thread or C/CS mount by means of the supplied adapters. Direct

observation without camera or camcorder is also possible.

Specifications:**A) Fibrescope**

- Length: 100 cm
- Diameter of fibre: 2,0 mm
- Diameter of objective: 3,5 mm
- Number of glass-fibres: 10.000
- Adapters different types included to fit to nearly every commercial camcorder

**B) Pinhole Objectives**

- Focal range:
available in 6, 10, 15 and 30 mm
- Mount: 12 mm or C/CS-mount

PKI 5770

Full Band Video Scanner

Nowadays night and day observation cameras are installed everywhere, sometimes they are even equipped with microphones. They transmit signals of multiple frequency ranges from 1,2 GHz up to 5,8 GHz. In order to detect and display these hidden wireless cameras we have developed our **PKI 5770** Full Band Video Scanner which scans 1,2 GHz, 2,4 GHz and 5,8 GHz frequency bands synchronously within 30 seconds up to a distance of 100 m. It is equipped with NTSC or PAL/SECAM for identification of detected video signals. By means of the STOP/SCAN button the image can be latched or released. The speaker will display the voice if there is an audio signal with the wireless camera signal. **PKI 5770** offers 3 STOP/SCAN buttons for each frequency band and video system indicator. Furthermore it provides 3 Audio/Video outputs for recording of signals from 3 frequency bands at the same time.

Specifications:

- Detecting frequency: 1.2 GHz, 2.4 GHz, 5.8 GHz
- Display: 3.5" high resolution LCD, color and b/w camera compatible
- Scan indication 1: NTSC or PAL/SECAM video format
- Scan indication 2: scanning LED indication x 3 for 3 frequency bands
- Warning mode: acoustic and silent detection through earphone
- Scanning band: 1.2 GHz, 2.4 GHz, 5.8 GHz
- Monitor display: auto band switching
- Band selection switch for manual band change
- Audio/video output: 3 AV outputs for 3 bands synchronous recording
- With 3.5 mm Video/Audio output jack x 3 (for recording)
- Detecting distance: up to 100 m (depending on output power of source transmitter)
- Power: switching power adaptor, built-in rechargeable battery



- Battery life: about 40 min. after full charge
- Dimension: 19 x 14 x 4 cm (antenna length not included)
- Weight: 860 g incl. rechargeable battery

PKI 5775

Universal - Receiver - Display - Recorder

This universal pocket device beats all records with its measures of only 70 x 120 x 20 mm and its light weight of only 180 g. The **PKI 5775** is the control center of most surveillance operations. Transmissions of both systems, wireless or cabled cameras, can be received. Play-back via the integrated 2.5" TFT display. But there is even more to it than that. All audio and video signals can be stored onto the internal memory card and displayed either on the internal LCD-display or on external devices, such as PC or TV set. Recording time depends on the memory card used and varies up to 4.5 hours. As it is equipped with a foldable foot, it can be used as tabletop unit as well.

Specifications:

Wireless receiver:

- 4 receiving channels:
CH1: 2414 MHz; CH2: 2432 MHz,
CH3: 2450 MHz; CH4: 2468 MHz
- D6 level: - 90dB

Video:

- Frequency range: PM 2.4 MHz
- Display: 2.5 TFT LCD 882x228 transactive LCD
- Video system: MTSC/PAL
- Resolution: 640x480 / 320x240
- Video format: MPEG-AVI max. 30 fps
- Data format for play-back: MPEG-1/MPEG 4/AVI/ASP/ADPCM

Audio:

- Frequency range: 20Hz-20 KHz
- Play-back: stereo
- Audio format: MP3 / MP 2.5
- Loudspeaker: 1 W

Pictures:

- Data format: JPG/JPEG
- Memory: flash memory 64 mB
- Memory card: SD / MMC / SX / U-disc / HDD
- Supported systems: IBM-PC: Windows 98SE, ME, 2000, XP
- Interface: USB 2.0, USB OTG 1.1
- Disc format: FAT 32
- Language: English



Power supply:

- Power plug: DC 5V / 2 A or Li-ion rechargeable battery 2500 mAh
- Operation time: > 4.5 h in stand-by mode / > 7 h in active mode

PKI 5780

Audio Video Recorder with Integrated Camera and Display in a Cigarette Packet

Another "HIGHLIGHT" in our product range. Disguised in a common cigarette packet, the **PKI 5780** is a complete audio/video recorder with integrated camera and display. If the integrated motion detector is turned on, the recording only starts when the picture is moving, allowing long term monitoring. Even in total darkness you can effect recordings at a 5 m distance due to the integrated IR-diodes. The **PKI 5780** is equipped with all necessary in- and output jacks, giving the possibility to connect an external camera or to copy the recorded files to a PC or TV set. All recordings are saved on a standard SD-memory card that can easily be changed. Of special advantage is the remote control, which is included in the set.

Specifications:

- Video: NTSC/PAL system
- Codec: MPEG4-SP ASF data format
- Recording: 1,2,9 max. fps
selectable max. 30 fpsa 320x240 /
12 fpsa 640x480
- Recording quality: low /medium /high
- Recording time/date: overlay in
video recordings as ASF-file
- Input: 1 channel video signal
- Output: 1 channel video signal
- Audio: frequency 44.1 KHz
codec G726/32 kbps
- Input: 1 channel audio signal
- Output: 1 channel audio signal
- Audio-unit: microphone,
loudspeaker, earphones
- Memory: SD card (FAT 16/32)
max. no. of files: 16384
- Connection: USB 1.1 (read only)
- Recording: manual / programmable
- Play-back functions: Play-back/



- fast forward /fast rewind,
pause, 1 forward, 1 rewind
- Play back speed: x1/x2/x4/x8/x16/x32
- Power consumption: DC 5V /1 A,
Li-Ion rechargeable batteries
- Battery life: Li-Ion rechargeable
batterie 100 min.
- Weight: 150 g (w/o battery)
175 g (incl. battery)
- Dimensions: 86 mm x 55 mm x 22,5 mm
- Operating conditions: 30 – 80 % rh,
5° - 45° C (41° F - 113° F)

- Storage conditions: 30 – 90 % rh, 0° - 50° C
(32° - 122° F)
- Additional functions:
CMOS sensor 1/6" CMOS sensor
Image VGA (H/V 40 x 480)
S/N ratio 46 dB
- Lens: conical lens f3.62 mm/F2.8
- Infrared luminosity: 6x IR LED
- Infrared wave length: 850 nm
- Infrared range: 5 m LCD 2.5" colour TFT-LCD
- Remote control: 2.4 GHz

PKI 5785

Wireless Audio/Video Transmitter Ball

There are of course different possibilities to gain access to the object to be observed. However, in some cases there might be a high wall or security personnel or even other circumstances which prevent you from entering certain premises in order to install corresponding surveillance devices. In this case we recommend the **PKI 5785**, because this Hi-tech ball is a relatively simple equipment. The lower half of the transmitter ball is 4 times heavier than the upper half. Because of the gravity the heavy lower half always remains on the ground. The upper half is provided with 3 video cameras with pinhole lenses at an angle of 110°. This guarantees that always a picture is transmitted from the desired direction. This of course also applies for the built-in directional microphones. The built-in audio/video transmitter with 4 channels transfer the signals to the LCD monitor delivered with the

PKI 5785 within a frequency range of approx. 5,8 Ghz. up to a distance of approx. 200m and continuously up to 3 hours. Optionally we can also offer an additional remote control in order to activate the transmitter ball only if required and such enabling observations for several weeks.

Specifications:**Camera:**

- TV-lines Min. 420
- Illumination Min. 1 Lux
- Built-in lens 3,6 mm
- Focal aperture F = 2,0 mm 110°

A/V Transmitter:

- Frequency range 5,650 – 5,950 GHz
- Channels 4
- Output Power 25 mW
- Power supply Rechargeable battery

**PKI 5790**

Miniature Video Repeater

Small-sized video cameras with integrated transmitters only have a limited transmission range. Wherever larger distances to receiving points have to be covered, it is necessary to use a repeater-station. Our **PKI 5790** is the right solution for such applications. It receives the standard video signal within the 1.2 GHz range and transfers this into the 2.4 GHz range. With its max. output power of 4 Watts and the 18 dbi directional Yagi-antenna, a max. distance of up to 20 km (depending on surrounding conditions) is possible. **PKI 5790** especially has been developed for disguised purposes, and its smallest dimensions are perfect for any mobile operation. Power supply of the **PKI 5790** is provided by a separate 12 V rechargeable battery and/or mains adapter/charger. For the reception of the signals we recommend our **PKI 5755** A/V Receiver/Recorder.

Specifications:

- incoming: - 1.2 GHz-range
- outgoing: - 2.4 GHz-range
(other frequencies - like 1.3 GHz to 2.6 GHz - are available upon request)
- Max. transmission range: up to 20 km (depending on surrounding conditions)
- Max. output power: up to 4 Watts
- Antenna Directional: Yagi-Antenna, 18 dbi gain
- Power supply: 12 VDC rechargeable battery and/or mains adapter/charger
- Dimensions:
approx. 135 x 60 x 40 mm
- Weight: approx. 400 g

**PKI 5795**

Audio / Video Scanner

With the **PKI 5795** every audio and video signal within the frequency range of 900 to 2520 MHz can be received. Automatic scan mode allows easy localisation, but manual scan is also possible. In both modes, disguised wireless cameras can be found and the received signals will be transmitted to the integrated LCD-monitor and speaker. Of course the **PKI 5795** can not only be used for detection purposes, but is also a versatile tool for a mobile observation system by just combining one of our small wireless cameras with this scanner.. Optionally an external directional antenna can be connected for achieving larger ranges.

Specifications:

- Dimensions: approx. 120 x 70 x 35 mm
- Weight: approx. 320 g
Power supply: 4 x 1,5 V battery, Type AA, or mains adapter
- Display: integrated LCD display, 2,5"
- Accessories:
1 x RCA connecting cable,
mains adapter 5 VDC,
external directional antenna SMA (optional)
- Frequency range: 900 - 2520 MHz
- Video signals: PAL / NTSC
- Connections: Video-out socket
Power-in socket
Antenna socket



PKI 5800

AV Night Vision Set

This high-tech A/V system developed by **PKI** exceeds everything that might be available on the market so far. The reasons for this are very simple:

- 1) no low light amplifier (poor video resolution and expensive)
- 2) no laser (dangerous for the eyes)
- 3) weight (portable device too heavy)

PKI 5800 is equipped with a high-resolution camera connected to an IR-hybrid illuminator for night vision. This handheld device with integrated directional microphone allows observation at day and night up to 200 m distance at the highest possible resolution. Several ways of processing of the audio/video signals are possible, such as immediate recording, wired transmission to our A/V goggles or wireless transmission to further external devices. All kind of monitors are connectable. This outstanding combination enables every policeman to survey and control the relevant situation. Due to security reasons **PKI 5800** should be available at every surveillance operation of customs, police or border patrols.

Specifications:

- Dimensions: 170 x 200 x 55 mm
- Weight: 2.8 kg
- Power supply: 12 V DC Li-ion battery

Camera

- Resolution: 550 TV lines
- Sensitivity: 1 Lux (0 Lux IR)
- Lens: 50 mm (F2.0)
- Opening angle: 5°



Directional microphone

- Amplifier: 10.000 x
- Frequency: 20 Hz – 16 kHz (-3dB)
- High-low pass filter: fg= 150 Hz / 5kHz

IR-hybrid illuminator

- Range: 200 m, at 0 Lux darkness
- Power consumption: 60W
- IR radiation angle: 20°
- Shelf-life: more than 10 years

A/V goggle

- Dimensions: 180 x 190 x 35 mm
- Weight: 90 g
- Power supply: 1000 mA Li-ion battery
- Power consumption: less than 1,1 W
- Battery life: 3-4 hours
- Video signal: NTSC/PAL/SECAM automatic selection

- Display: 2 TFT LCD Displays
- Color depth: 24 Bit Input
- Image input: composite AV
- Image size: 80" screen (1 m far)
- Resolution: 640 x 480 (920 k Pixels)
- Audio: double-channel stereo
- Viewing angle: 35° (diagonal)

Wireless transmitter/receiver

- Range: 300 m in open spaces
- Dimensions: 43 x 28 x 16 mm
- Frequency: GHz-range, 4 channels
- Weight: 25 g
- Power supply: Li-ion rechargeable battery 6V
- Various: Reception by various persons (according to number of AV-goggles) is possible by using the wireless version.

PKI 5805

PKI 5810

Video Pen, Video Glasses, Series of Disguised Video Cameras

This series of different video systems especially is designed for undercover observations. Without arising any suspicion security guards, agents or safety personnel can walk through crowds, join important meetings/ events and observe or record participants in every situation. Products of daily use are combined with a micro CCD-camera available either in b/w or colour. Each type can be connected to an existing portable video recorder which can be fixed to the belt or in the pocket. Optionally **PKI ELECTRONIC INTELLIGENCE** can provide a video transmitter / receiver set and digital recorder for wireless transmissions and recording. The disguised cameras are available as: **PKI 5805** - Video Pen b/w or colour, **PKI 5810** - Video Glasses b/w or colour



Specifications:

- Image sensor: Inter-Line type CCD
- Scanning system: 2:1 Interlace
- Horizontal Resolution:

 - **PKI 5810** better than 350 TV lines,
 - **PKI 5805/PKI 5815** better than 330 TV lines

- Pixels:

 - **PKI 5810** - 500 x 582
 - **PKI 5805** - 512 x 492

- Synchronisation: Internal
- Gain control: AGC ON 24dB, OFF 18 dB
- Electronic iris: Selectable 1/50 to 1/30.000 sec
- Lens: 3.6 mm
- Min. illumination:

 - B/W: 0.6 lux (f 1.4, AGC ON 50%)
 - Colour: 1.4 lux (f 1.4, AGC ON 50%)

- Power consumption: 30 - 150 mA at 5 VDC
- Concealed video observation
- High quality and performance
- B/W or Colour systems available
- Gain control AGC high / 24 dB
- Lightweight and robust
- Optional digital recorder and video transmitter/receiver

PKI 5815

Miniature Repeater

A Repeater is recommended if you need to extend the transmission range of a wireless camera. The **PKI 5815** captures the camera signals at a distance of 10 to 100 m, amplifies them and afterwards transmits them to the final receiving device. Very useful at longer distances, as it doubles the transmission range.

Specifications:

- Frequency: 2.4 GHz range
- Channels: 4 selectable channels
- Power supply: external power plug
- Weight: 200 g
- Dimensions: 150 x 40 x 20 mm
- Complies with FCC/CE regulations

**PKI 5820**

Video System in Mobile Phone Housing

During meetings, conversations and in special occasions it is necessary to have a proof of the participants. For this a video observation is the best possible way, but in many cases it is impossible or not workable to install a fixed camera system. Therefore a mobile and camouflaged system is a good alternative. **PKI 5820** is a completely disguised video system for unobtrusive operations built in a standard mobile phone housing. Consisting of a CCD-miniature camera, a video transmitter and power supply it should be used wherever installation of standard cameras is impossible. Just switch it on, put it at a suitable place and you will have perfect reception at highest quality. Installation of a complete video surveillance cannot be more simple, faster and easier than with the **PKI 5820**.

Specifications:

- Extremely small 1.25 GHz video transmitter with 1/4" b/w or colour CCD miniature video camera in a GSM-phone housing
- B/W-camera with 350 TV lines and 3.8mm lens F=2.0
- 100 mW transmitter output power
- FM modulation / 30 MHz bandwidth
- 70 mA transmitter power consumption
- 6-9V DC internal battery operation
- Dimensions: Standard mobile phone

**PKI 5825** **PKI 5830** **PKI 5835** **PKI 5840**

Series of Camouflaged Video Cameras

Camouflaged cameras are very often required for disguised observation tasks. This set should be the minimum to be with every government department. Local environments and the surroundings determine the type of camera system to be used. For every purpose this set offers the right solution, i.e. if an indoor observation has to be effected at residential premises, the wall clock camera or camera in a loudspeaker should be used. For outdoor observations the camera in a motion detector or in a steel housing are applicable. Other types of camouflaging our camera systems are available upon request. Whatever you need, we can do it. Wireless versions with built-in transmitter and the according receiver are, of course, also available for each kind of the camouflaged cameras.

Specifications:

Various items of daily use equipped with 1/3" CCD-chip cameras, 380 TV-lines, 3 lux minimum



illumination and built-in microphone. Each with 9-12 V DC battery operation and full operation of the original item as it is

- **PKI 5825** Camera in motiondetector
- **PKI 5830** Camera in wall clock

- **PKI 5835** Outdoor camera in steel housing
- **PKI 5840** Camera in loudspeaker
- Please contact us for full information of each item

PKI 5845

Digital Network Camera

Whether via local network, Internet or mobile phone, with the **PKI 5845** Digital Network Camera you are always informed about things happening in areas to be observed. Just switch it on and you will receive a brilliant sharp picture with a high resolution of 640 x 480 pixels. Due to the RTSP protocol, it is possible to receive the recorded data either on your mobile phone or on a PC. The set includes a complete software package for real-time recording of up to 16 **PKI 5845** Digital Network Cameras or security video servers, as well as software for play-back and further analysis. Optionally the camera can be supplied with Ethernet-connection or fitted for a wireless LAN network

Specifications:

- Camera: 1/4" high quality CMOS sensor
- Min. illumination: 1,5 Lux
- Objective: 4 mm, wide-angle, F=2,0
- Backlight: automatic compensation
- Resolution: 640 x 480 pixel
- Features electronic: shutter (ELC) automatic white balance (AWB) automatic amplification regulation (AGC) browser for Internet explorer integrated microphone protocols: TCP/IP, HTTP, FTP, SMTP, NTP, DHCP, DDNS, RTSP.
- automatic indication of date and time
- LAN-network as option
- Dimensions: approx. 115 x 75 x 35 mm
- Weight: approx. 220 g



PKI 5850

Digital Miniature Flash Memory Video Recorder

The **PKI 5850** is a Video and Audio recorder for videos with full TV frame rate and resolution and integrated microphone pre-amplifiers for 2 microphones. Its small size plus exchangeable and rechargeable battery especially are suitable for tasks where covert recordings are necessary. The recorder is based on MPEG-2 data compression on 1 GB standard compact flash card with a recording time of up to 110 minutes.

Specifications:

- Video: PAL/NTSC with full TV resolution and 25/30 frames
- Audio microphone input: (stereo)
- Encoding: MPEG-2 MP@ML for Video and MPEG-1 Layer 2 for Audio, additional scrambling
- Storage media: Compact Flash Card Type I or II
- Power supply: Li-Ion battery with 700 mAh for 75 min or 1400 mAh for 150 min or unlimited via mains adapter
- Interfaces: USB 1.1 interface (device) up to 12 MBit/s, audio/video input, remote
- Camera power supply: 5 V, ≤ 200 mA
- Status indication: LED for operating mode, system error, battery status, memory status
- Dimensions: 130 x 80 x 22 mm
- Small size for covert applications
- Video recording in PAL/NTSC format
- MPEG-2 data compression
- on standard compact flash card
- Recording time up to 110 Minutes



PKI 5855 PKI 5860 PKI 5865

Audio / Video Cellular Monitoring

PKI 5855 assembly module

PKI 5860 built-in motion detector

PKI 5865 recording camera

This is the latest technology at the moment. Easy to install, it does not need any special configuration. Control has never been so easy as nowadays and is possible within seconds worldwide. A common UMTS/3G mobile phone is sufficient for activation and receipt. **PKI 5855** is as small as a cigarette box and can unobtrusively be installed everywhere. **PKI 5860** is a common, full functional motion detector and offers perfect camouflage. **PKI 5865** is designed for day and night observation and all activities recorded during your absence are stored on its integrated memory. Later they can be recalled at any time from every place you are worldwide. For operation of this unit an activated SIM-card is necessary.



Audio / Video Cellular Monitoring

Specifications:

PKI 5855

- Power supply: power adapter
6V DC / 100-240 V AC
- Frequency: UMTS 2100 MHz
- Camera: 300.000 pixels
- Dimensions: 70 x 44 x 18 mm
- Weight: 55 g

PKI 5860

- Power supply: power adapter
5V DC / 100-240 V AC
- Input resolution: 480 x 320
- Data format: JPEG
- Output resolution: 420 TV-lines
- IR-range: 10 m
- View angle: 120°
- Operating temperature: -10°C to +50°C
- Humidity: max. 85%
- Dimensions: 60 x 115 x 50 mm

PKI 5865

- Power supply: power adapter
6V DC / 100-240 V AC
- Detection sensor: dual element pyro-electric sensor
- Animal alley: 12 m long, 100° sector
- Terminal block: key switch input and indication lamp output
- Band system: WCDMA
- Operating frequency:
UMTS 2100 MHz
- Camera module:
2,0 mega pixels
- Imaging and video:
QVGA (320x240 pixels)
- Frame rate: 15 fps max.
- Memory card: supports Micro SD 4 GB max.
- Back up battery: DC 4,8V, 300 mAH rechargeable
- Dimensions: 120 x 70x 50 mm



PKI 5870 PKI 5875

Floodlight Monitoring Camera, IR Monitoring Camera

This system is equipped with a high resolution camera controlled by a motion detector. Videos and pictures are stored on a SD-card stating time and date. At darkness the system starts a 500 watt spotlight (**PKI 5870**) or an IR spotlight (**PKI 5875**). Recorded data can be transferred via USB port to a PC or a separate card reader. This system is perfect for uncomplicated but successful monitoring.

Specifications:

- Recording: unlimited on SD-card
- Camera: CMOS sensor, 1600 x 1200
- Halogen spotlight: sensational 500 W
- IR-spotlight: 20 m range
- Motion detector: 9 m range
- SD/MC card: up to 2 GB for 5000 pictures
- Power supply: 230 V AC / 50 Hz
- Options: easy and individual activation via display.
Brackets for wall mounting included.



PKI 5880

Audio / Video Belt Recorder

Some years ago it would have been incredible to hide a camera with audio / video recorder fully camouflaged in a belt buckle. Unlike wireless devices this system cannot be located by HF detectors. The colour camera with built-in microphone captures every movement. Micro SD-card, recorder switch, power on/off and USB port are integrated in the bottom of the buckle.

Specifications:

- Dimensions: 6,45 x 3,73 x 1,52 cm
- Recording: real time in 3 GP
- Memory: SD micro card
128 MB – 8 GB (up to 8 hours recording time)
- Recording time: up to 2 hours per battery
- Video format: AVI 640x480
- Adapter: USB and cable for charger
- Power supply: lithium-ion batteries



PKI 5885

Outdoor Video Investigation Set

The **PKI 5885** especially has been developed by us for the use by police officers and other security guard patrols of any kind of governmental departments. It especially should be used by those who need to keep a clean record of their sincere investigation. **PKI 5885** is another crime fighting and easy to use unit which enables you to record the actions of the suspected persons. Such video recordings can or will be used as evidence to prosecute those individuals who violate the law. With its specific small dimensions, lightweight and perfect size it can be clipped to a belt and provides a clear and evidence-proved coloured picture recording at daylight or at sufficient surrounding artificial light conditions. It furthermore can work during

low light conditions, due to the built-in IR-illuminators, and then provides a sharp and clear black-and white picture which is stored on the exchangeable standard SD-card.



Specifications:

- High resolution video quality in AVI video format
- Lightweight enough to carry on you with clip to hook on the belt
- Built-in IR illuminator for night vision recording (b/w when used in night-vision application)
- Repeated and continuous recording
- Use SD card from 128 MB to 2 GB
- Dimensions: approx. 100 x 80 x 60 mm
- Weight: approx. 80 g

PKI 5900

Submarine Video Camera

The **PKI 5900** conducts searches with actual underwater views without sending a diver into a potential dangerous situation. Up to a maximum depth of approx. 20 meters this selfcontained video system can be used for location and study of suspicious objects and areas. The built-in 1/4 inch colour camera together with 2 integrated ballasts guarantee for a stable and clear picture of the area to be examined. The video signal as well as power supply for the camera are transferred by only one cable between camera and receiving unit. At receiving site a 7" TFT LCD display provides the picture of the inspected area. A socket for recording devices is implemented. The complete set consists of:

- Colour camera with sealed housing and ballasts
- 7" TFT colour display

- Sunshade for the display
- Battery and A/C-Adapter
- Protective aluminium storage case with inlays
- 20 m cable for video signal and power supply for the camera

Specifications:

- Camera: 1/4" high resolution CCD colour camera, 420 TV lines
- Cable length: approx. 20 m
- Display: 7" TFT LCD colour
- Power supply: 12 VDC operation with rechargeable battery with charge cord and AC/DC adaptor for the display
- Weight: 8,9 kg
- Dimensions: storage case -60 x 40 x 20 cm



- Hermetically sealed
- Diving depth up to 20 m
- Colour CCD image sensor
- 7" TFT LCD monitor

PKI 5910

Personal Underwater Propeller

Years of engineering and design have resulted in the **PKI 5910** Personal Underwater Propeller that provides power of 3 km/h for up to 40 minutes of use with a standard battery. At the same time it is compact and light-weight. The ergonomic handle with integrated trigger and master switch facilitate the operation and manoeuvrability. A rigid grille protects the propeller against obstructions. The complete unit is maintenance-free and has only to be rinsed with fresh water after use.



Specifications:

- Size: 670 x 430 x 430 mm
- Battery: lead-acid battery, 3 sections, with charger
- Battery capacity:
12 VDC - 12 A/h or 7 A/h (optional)
- Charging adapter included
- Charging time: approx. 10 hours
- Motor high performance electric motor, 12 VDC, 65 Watts
- Weight: 5.3 kg with 7 A/h battery

6.8 kg with 12 A/h battery

- Speed pulling divers at max. 3 km/h
- Operating time: up to 1 hour (standard battery), up to 1.5 hours (external battery)
- Depth rating: 65 feet / 20 m
- Thrust: 11 pounds / 5 kg
- Material / Housing: PP

Gears & Levers: Nylon

- Seals: PTFE impregnated NBR
- On/off: Master switch used to disable the normal on/off trigger. When the master switch is in OFF position the unit can be handled without fear of accidentally putting the main trigger into ON position

PKI 5915**Underwater Robot**

The requirements of an underwater robot have to meet various differences compared with a land robot. The propeller drive allows movements in 3 dimensions and can turn around its own axles. Of special importance is to keep the device stable in currents and turbulences, as tools such as x-ray devices have to stay fixed. Such an underwater system must be capable of scanning via camera and sonar and use its tools. The **PKI 5915** is a compact and approved robot system for underwater operation. It is controlled by cable

and camera from the ship's deck and is easy to transport with its handy control device, power supply and accessories. Due to its weight of approx. 50 kg and more it is easy to handle for 2 persons. Controller and cable are integrated in a separate hard cover protective case.

Specifications:**Robot**

- Length: 1.000 mm
- Height (without additional modules): 500 mm

- Width: 600 mm
- Weight: 50-62 kg (as per configuration depending on equipment)
- Speed: more than 5,556 km/h
- Cargo load: 4-16 kg (as per configuration depending on equipment)
- Operation depth: 300 m

Controlling

- Cable length: 450 m
- Cable length fibre-glass: 1.100m (optional)
- Power supply: 100-270 V (2,8 kW)

PKI 5925**Submarine Observation Vehicle and Manipulator**

The **PKI 5925** is really a breakthrough in technical development of smallest but extremely manoeuvrable submarine devices for observation and manipulation tasks. By long lasting experience. **PKI ELECTRONIC INTELLIGENCE GmbH**, can proudly state that this is the only unit which has been developed by professional engineers and in close co-operation with divers and users of submarine- and deep-sea manipulators. Due to the 18 kg this system can be transported by a single person in every sea- or fresh-water terrain as well as in tubes and pipes. It only takes about 3 minutes to get the unit ready for operation and manipulation can be effected by just one hand.

Specifications:

- Dimensions of observation: vehicle 203 x 152 x 146 mm
- Weight of observation: vehicle 3 kg
- Max. diving depth: 75 m
- Camera: installed CCD-colour, 520 lines, 0.1 Lux, fixed focus 100 to infinity
- Jet-Pipes: 6 thrusters (4 x horizontal, 2 x vertical)
- Lamps: 4x LED systems with adjustable intensity
- Steering: 5-axes Spacemouse, 8 functions
- Display: 5.6" TFT-colour display
- Carrying capacity: 300 g



- Power supply inputs: 90-260 VAC or 124 to 370 VDC
- Outputs Video: 1 + 2, Diagnosis
- Hard cover carrying case 15-18 kg, 490x380x190 mm
- Optional equipment: reverse camera and lightning depth sensor, 2-way manipulator, etc.

PKI 5950

Video Surveillance Set

This set offers a full range of video equipment for every type of observation. Whether a direct connection via cable or a wireless transmission is applicable – this set contains each component for a successful and professional operation. The complete set of video observation devices includes body-worn systems such as the camera in a cigarette package with directly connected digital video recorder, the day-and-night-system, the video transmitters with up to 4 Watt output power for larger distances and the corresponding receivers at 1.2-1.5 GHz. All these devices offer tremendous possibilities to the operator for unexpected video observations.

Specifications:

The **PKI 5950** is a complete set of video surveillance devices consisting of:

- **PKI 5000** Professional Audio/Video Set
- **PKI 5600** Analogue Video Transmitting and Receiving System
- **PKI 5700** Disguised, Wireless Audio/Video Transmitter

- **PKI 5725** Wireless Camera, Transmitter/Receiver System
- **PKI 5750** Wireless Audio/Video System disguised in a smoke detector
- **PKI 5830** Camera in a wall-clock
- **PKI 5850** Digital miniature with flash memory video recorder
- All technical details can be taken from descriptions mentioned in this catalogue
- For further information please feel free to contact us



PKI 5955

Camera Spy Set

This camera set includes different objectives with focal distances of 8, 12, 25 and 50 mm. A screw head objective is included as well, which is an excellent camouflage. The set also includes a pinhole colour camera with exchangeable thread for the various objectives. With this large variety of camera types, the **PKI 5955** set covers all needs that might occur during unobtrusive video surveillance.

Specifications:

- Image scanner: CMOS
- Video output: PAL

- Synchronisation: horizontal 15625 Hz, vertical 50 Hz
- Resolution: 628 x 582 pixel
- Minimum illumination: 4 Lux
- S/N ratio: > 40 dB
- Video output: 1Vss / 75 Ohm
- Operation Temperature: 0-40°C
- Power supply: 5-7,5 V = 40 mA
- Dimensions: 20 x 20 x 28 mm
- Weight: 10 g / 6 g
- Carrying case and camera connection cable included



PKI 5960

Outdoor Video Investigation Set

In many occasions when you need to observe rooms from the outside, a precise preparation is necessary as well as the use of our special equipment. Our complete program, as shown in this catalogue, offers the complete range of devices for such tasks, but there is no omnipotent single unit to do everything. But as each government department should have at least a minimum range of equipment for video observation we have assembled this basic set **PKI 5960** in order to satisfy each and every demand in daily and practical use. Other combinations of our products can be assembled in close contact with our customers. Please contact us for further combination possibilities. Technical data of each item included in this set can be taken from this catalogue.

Specifications:

- The complete set consists of:
- **PKI 5715** window camera with
- **PKI 5755** receiver
- **PKI 8025** silent drill
- **PKI 8015** rigid search endoscope
- **PKI 5745** miniature camera with transmitter and receiver
- **PKI 8100** video inspection camera with display



JAMMING SYSTEMS



PKI ELECTRONIC INTELLIGENCE GmbH GERMANY

PKI MOBILE JAMMING SYSTEMS VEHICLE MOUNTED

Modular Design

The **PKI** modular jamming system can be scaled and adapted to any necessary application. Depending on available space and power, country of destination and customer specification **PKI** adapts the electronics and antennas to match given specifications.

Full Range Jamming

Frequencies can be covered from 20MHz up to 6000MHz using high sophisticated sweep generators which are capable of interfering analogue and digital transmissions. Depending on the requested power the number of incorporated units may vary.

Intensified Bands

Based on our experience on available remote controls of cell phones and other devices we incorporate additional units to improve the covered distance for well known frequency ranges.

Sweeping Technology

PKI „High Speed Sweeper“ show how precise the power amplifier are modulated. This avoids unnecessary technical side effects which could endanger the mission.

Power Supply

The high power modules of the HF-modules can be either powered by:

- Vehicle engine alternator
- Independent Generator
- Mains operation

For high power systems vehicle engine alternator, also improved versions (< 2 KW), might not be sufficient to source a system. Therefore we offer a build-in high power generator solution.

Cooling

Depending on the given environment of the country of operation, we offer separate cooling solutions for the electronics and driver compartment.

Antennas

All antennas are specially designed to the specific frequencies to broadcast.

We offer two options for the antennas:

- directional antennas, because they are much more effective to produce a „clean“ corridor along the convoy
- omni-directional antennas

Shielding

All high power jamming systems are equipped with special protection mechanism to avoid health damages to the driver and the operators. Even though the output power is in the official limits, we protect the car with special window foil to block any high frequency power from the antenna going inside the car. The complete car will be shielded like a Faraday cage.

Control and Monitoring

All controls will be placed in the driver´s compartment. The system is to operate, just by one button. For trained personnel it is possible to monitor all system parameters, function, temperatures and video surveillance from the operator seat.

The operator of the Jamming System gets an immediate warning if one of the components fails. He can easily see the location of the problem.

Vehicles

The optimum vehicles for mobile jamming systems vary due to power requirements. We are capable to adapt the electronics to most cars offering enough space. Ideally it is installed in long version vans or pick-up trucks. As option armoured cars or 4x4 vehicles can be equipped.

Vehicle Selection Criteria

- Top Speed
- Armoured
- Available Service in Country
- Size and appearance
- Emergency functions

Communication

For higher security we do not recommend communication between the vehicles. Every communication gap can be used to compromise the system. Usually, clients use acoustic or optical methods to communicate with running jammer systems. All cars can be equipped with PA systems, sirens, special horns and emergency lights. If requested, the end user can specify frequencies for communication.

Video Surveillance

The vehicles can be equipped with every kind of video surveillance for front, back or all-round view with regular cameras, day-night or thermal imaging systems.

Different models of recording devices can be selected for long recording periods.

Complete Solution

PKI offers

- Customized development
- Small quantity production
- Delivery in time
- Service worldwide
- Training as requested
- Repair and Maintenance
- Documentation
- Test and Measurement Equipment

For system testing we will provide:

- Modern measurement equipment for all system specifications
- Field test equipment
- Training for the system and all measurement tools.

All devices are built from subassembly units, which can be interchanged or replaced in case of malfunction. Diagnostic tools for error analysis to assist the operating staff are included.

PKI 6010

Portable Cellular Phone Jammer

This compact device, the **PKI 6010** Portable Cellular Phone Jammer is designed for mobile use. Due to its small pocket size it can easily be hidden in clothing, handbags or any other personal belongings. It is powered by a rechargeable Ni-H battery for continuous operation of up to 90 minutes.

Specifications:

- Tx frequency for type A:
845 to 975 MHz
- Tx frequency for type B:
1785 to 2000 MHz
- Tx frequency for type C:
2100 to 2180 MHz
- Output power:
+25 dBm / 300 mW
- Power supply:
Ni-H battery
12 VDC / 1600 mA/h
- Weight:
approx. 300 g
- Dimensions:
approx. 110 x 62 x 30 mm
(without antenna)
- Jamming Range: radius 5 - 8 meters
- Various frequency ranges available
- Keeps your conferences quiet and confidential
- Avoids cellular interruption
- 300 mW output power



PKI 6020

Portable Bluetooth, WiFi, Video Jammer

This pocket-sized device is the one and only solution for protecting conference rooms, schools, hospitals, court rooms, jails, military establishments, petrol stations, theatres, churches, mosques etc. Due to its minimized size it can easily be body-worn and disguised in clothing, handbags or any other personal belongings.

Specifications:

- Tx frequency for type A:
895/900 to 1000 MHz
- Tx frequency for type B:
1195/1200 to 1300 MHz
- Tx frequency for type C:
2395/2400 to 2500 MHz
- Output power:
+25 dBm / 300 mW
- Power supply:
Ni-H battery
12 VDC / 1600 mA/h
- Weight:
approx. 300 g
- Dimensions:
approx. 110 x 62 x 30 mm (without antenna)
- Jamming Range - radius 5 - 8 meters
- Protects from unwanted remote controlled monitoring
- Covers every kind of Bluetooth, WiFi and video transmission
- Various frequency ranges available
- 300 mW output power



PKI 6030

Video and WiFi Jammer

This jammer is camouflaged in a panel antenna and easy to install. Its 40W power per channel allow interference of devices within a range of up to 150 m. The housing is waterproof according to IP 68. **PKI 6030** features an increased frequency range from 2,4 GHz to 5,8 GHz. Further frequencies are available on request.

Specifications:

- Dimensions: 270x260x95 mm
- Weight: 3,0 kg
- Interference frequency: 2,4GHz – 5,8 GHz range
- Power output: EIRP 40W per band
- Covered range: up to 150 meters (at -80db)
- Outdoor housing design: IP 68 waterproof
- Antenna: integrated Patch High Gain
- Power supply: 220V/50Hz
- protects from unwanted WiFi and video transmission
- various frequency ranges available
- 40W per band output power



PKI 6050**Dualband Phone Jammer**

The **PKI 6050** Dualband Phone Jammer is designed for the protection of sensitive areas and rooms like offices, prisons, police stations, military camps etc. Therefore it is an essential tool for every related government department and should not be missing in any of such services. The jammer transmits radio signals at specific frequencies to prevent the operation of cellular and portable phones in a non-destructive way, working in the GSM, DECT, DCS and wireless bands. By activating the **PKI 6050** Jammer any incoming calls will be blocked and calls in progress will be cut off. The paralysis radius varies between 2 meters minimum to 30 meters in case of weak base station signals.

Specifications:

- Frequency Range: Dual-band output 920 MHz
GSM 1800 - 1900 MHz DCS/PHS
- Power Supply: 11 - 24 V DC, 250 mA
- Total Output Power: 1 W
- Jamming Range: 2 - 30 m
(the signal must < -80 dB in the location)
- Size: 140 x 80 x 25 mm
- Operating temperature: 0°C - +60°C
- Relative Humidity: 5% - 80%



- Dual-Band Output 900, 1800 MHz
- Paralyses all kind of cellular and portable phones
- 1 W Output Power

PKI 6060**Wireless Camera Blocker**

This wireless camera blocker disrupts Audio/Video signals without being detected. **PKI 6060** transmits interruption-code frequencies to interrupt and block the signal of wireless cameras in the range from 900MHz to 2499 MHz. A Lion-hydrogen battery allows interference activity of up to 90 minutes. Due to its small size and its built-in power supply this device is perfect for camouflaged operation.

- Power output: 800 mW
- Interference range: 10-20 m radius
- Power supply: AC-DC Adapter
- Battery: rechargeable Lion-hydrogen 900 mAh
- Operating temperature: 0-50°C
- Operating humidity: 80%-90%
- Dimensions: only 70x 5x30 mm
- Weight: 170 g

**Specifications:**

- Frequency:
band 1: 0,9 – 1,10 GHz
band 2: 1,2 – 1,45 GHz
band 3: 2,4 – 2,499 GHz
- Interference mode: interruption of wireless frequency transmission
- Triband Jammer
- Small Size
- Protects your privacy
- 10-20 m range interference range

PKI 6070**PKI 6080****GPS Jammer**

This extremely small-sized pocket device **PKI 6070** is equipped with 10 mW outlet power and designed for interference of GPS trackers which might be installed in a car. The built-in rechargeable batteries allow 6 hours operation. Mobility and independent power supply are the main advantages of this device. The car tracking jammer **PKI 6080** works in the exact same manner, however, it is integrated in the cigarette lighter using 12 V on board power supply.

- Dimensions:
PKI 6070 64 x 37 x 16 mm
PKI 6080 100 x 20 x 23 mm
- Working band: 1575 MHz
Cover all GPS signals worldwide available
- Antenna:
PKI 6070 built-in
PKI 6080 external
- Output power: 10 mW
- Various: GPS jammers with higher power available on request

- small size
- safety and security
- prevents from car tracking
- easy installation

**Specifications:**

- Power supply:
PKI 6070 Li-Ion battery 400 mAh
PKI 6080 12V DC on board power
- Block distance radius: 5-10 m

PKI 6100

Cellular Phone Jammer

The **PKI 6100** Cellular Phone Jammer is designed for prevention of acts of terrorism such as remotely triggered explosives, impediment of undetected or unauthorised information exchanges, protection of sensitive areas and facilities, such as government buildings, national assets, embassies, public transport etc. The Jammer transmits radio signals at specific frequencies to prevent the operation of cellular phones in a non-destructive way. Exact coverage control furthermore is enhanced through the unique feature of the jammer, providing a continuously variable RF output power adjustment with digital readout in order to customise its deployment and suit specific requirements. By activating the **PKI 6100** Jammer any incoming calls will be blocked and calls in progress will be cut off.

Specifications:

- Frequency Range, Quad-band output:

- 860 – 885 MHz CDMA
- 925 – 965 MHz GSM
- 1800 – 1950 MHz DCS/PHS
- 2100 – 2200 MHz 3 G
- Power Supply: 110 – 240 V, 50/60 Hz transmitting to 12 V DC
- Operating Time:
3 hrs with 12 V DC, 4 Ah battery or 100 – 240 V AC, 50/60 Hz permanent operation
- Total Output Power: 4 W
800 MHz: 1 W
900 MHz: 1 W
1800 – 1950 MHz: 1 W
2100 - 2200 MHz: 1 W
- Jamming Range: 20 - 25 m (the signal must < -80 dB in the location)
- Size: 240 x 180 x 50 mm
- Weight: 1,5 kg
- Operating temperature: -10°C - +60°C
- Relative humidity: 5% - 80%



- Quad-Band Output:
800, 900, 1800-1950, 2100-2200 MHz
- Paralyses all types of cellular phones
- For mobile and covert use

PKI 6120

Cellular Phone Jammer for Police and Military Services

Our **PKI 6120** Cellular Phone Jammer represents an excellent and powerful jamming solution for larger locations, such as prison buildings, law-courts and banks or government and military areas where usually a high level of cellular base station signals is emitted. Due to the high total output power, this device can cover all such areas with a RF-output control of 10, 20, 30, 40 W with digital display. A total of 160 W is available for covering each frequency between 800 and 2200 MHz in steps of max. 40 W for each single frequency band. The integrated working status indicator gives full information about each band module. Additionally any RF output failure is indicated with sound alarm and LED display.

Specifications:

- Tx frequency: 851/869 to 894 MHz, 925/936 to 965 MHz, 1800 to 1990 MHz, 2110 to 2170 MHz
- Total output power: 160 W, at each a.m. frequency band with 40 Watts max.
- Signal source: PLL synthesized
- Band capacity: Max. 6 different bands (with 2 additional bands in option)
- Modular protection: VSWR over protection
- Connections: RS-485 for wired remote control RG-214 for RF cable
- Power supply: AC 110-240 V / 50-60 Hz or DC 20 - 28 V / 35-40 AH
- Dimensions: approx. 492 x 352 x 120 mm
- Weight: approx. 35 kg
- Operating temperature: approx. -20°C to +60°C
- Ambient humidity: approx. 5% to 90%



PKI 6140

Cellular Phone Breaker

The **PKI 6140** is a small and compact Cellular Phone Breaker for most kinds of cellular communications. Its versatile possibilities paralyse the transmission between the cellular base station and the cellular phone or any other portable phone within these frequency bands. Therefore the **PKI 6140** is an indispensable tool to protect government buildings, military camps, prisons, religious establishments like churches and mosques, petrol stations, cinemas, theatres, casinos, recording studios, and much more.

Mode of 0,5 Watt.

- Power supply:
automatic power switching from 100 to 240 VAC 50/60 Hz, transmitting to 12 VDC by AC adapter
- Jamming Range - radius up to 20 meters at < -80db in the location
- Dimensions: approx. 200 x 190 x 55 mm
- Weight: approx. 2.5 kg



- Keeps your conversation quiet and safe
- 4 different frequency ranges
- Small size
- Covers CDMA, GSM, DCS, PHS and 3G

Specifications:

- Tx frequencies: 800, 900, 1800-1950, 2100-2200 MHz
- Tx output power: 1 Watt each for the selected frequencies of 800, 900, 1850-1950
Can be adjusted by a dip-switch to low power

PKI 6150**Cellular Phone Breaker**

The **PKI 6150** is the big brother of the **PKI 6140** with the same features but with considerably increased output power. This allows a much wider jamming range inside government buildings, military camps, petrol stations, churches and mosques as well as lecture halls, meeting rooms, theatres and any other public places. At every frequency band the user can select the required output power between 3 and 1,5 Watt.

Specifications:

- Tx frequencies:
860 to 885 MHz on CDMA band
925 to 965 MHz on GSM band
1800 to 1950 MHz on DCS/PHS
bands 2100 to 2200 MHz on 3G band
- Output power: selectable on each band between 3 and 1.5 Watts

- Jamming Range: radius of approx. 35 m.
The signal must be < - 80 db in the location
- Dimensions: approx. 240 x 190 x 55 mm
- Weight: approx. 4,5 kg

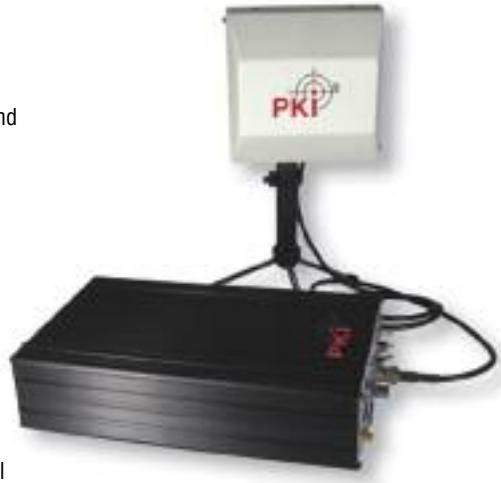
**PKI 6160****Cellular Phone Breaker**

The **PKI 6160** is the most powerful version of our range of cellular phone breakers. With its highest output power of 8 watt, reasonably small-sized, this device is the perfect solution for large areas like big government buildings, military camps and public places, such as shopping centres, supermarkets and much more. Similar to our other devices out of our range of cellular phone jammers, the **PKI 6160** covers the whole range of standard frequencies like CDMA, GSM, DCS, PHS and 3G, but with the highest possible output power related to the small dimensions. All the Tx frequencies are covered by down link only.

Specifications:

- Tx frequency (CDMA): 860 to 885 MHz
- Tx frequency (GSM): 925 to 965 MHz

- Tx frequency DCS, PHS): 1800 to 1950 MHz
- Tx frequency (3G): 2100 to 2200 MHz
- Output power: 8 Watts on each frequency band
- Power supply: 100-240 VAC, 50/60 Hz transmitting to 24 VDC
- Dimensions: approx. 310 x 180 xx 55 mm
- Weight: approx. 12 kg
- Jamming range: radius up to 50 m at signal < -80db in the location



- For safety and security
- Covers all communication bands
- keeps your conferences quite and confidential
- High output power

PKI 6200**Cellular Phone Signal Detector**

The **PKI 6200** protects private information and supports cell phone restrictions, whether in hospitals, power plants, airports, computer rooms or any other government and military office. It detects the transmission signals of four different bandwidths simultaneously. **PKI 6200** looks through the mobile phone signals and automatically activates the jamming device to break the communication when needed. Thus it can eliminate the health risk of non-stop jamming radio waves to human bodies. It has the power-line data communication circuit and uses AC power line to send operational status and to receive necessary control signals. Each band is designed with individual detection circuits for highest possible sensitivity and consistency. The **PKI 6200** features achieve active stripping filters, designed for high selectivity and low false alarm are implemented.

Specifications:

- Working bandwidths:
CDMA : 824 to 849 MHz
GSM : 890 to 915 MHz
DCS : 1710 to 1785 MHz
3 G : 1920 to 1980 MHz
- Sensitivity: > -55 to - 30 dBm
- Detection range: 15 to 30 meters
- Jamming control (Detection first):
Power on/off
- AC output: 110 to 240 VAC / 5 Amp
- Power consumption: < 500 mA
- Working temperature: -10 up to +70°C
- Ambient humidity: 5 to 80%
- Dimensions: approx. 255 x 165 x 45 mm
- Weight: approx. 1,8 kg



- Large detection range
- Protects private information
- Supports cell phone restrictions
- Covers all working bandwidths

PKI 6210

Cellular Phone Detector with Jammer

The **PKI 6210** is a combination of our **PKI 6140** and **PKI 6200** together with already existing security observation systems with wired or wireless audio / video links, servers and LAN networks. Whether in hospitals, jails, prison camps or any other governmental areas like ministries, embassies or military establishments, this combined system is the right choice to protect such locations. Depending on the already available security systems, we - in close cooperation with our customers - work out a complete and fully automatic system for their specific demands.

For technical specification of each of the devices

the **PKI 6140** and **PKI 6200**, please see the details in this catalogue. For any further cooperation you are kindly invited to let us know your demand, so that we can work out the best possible solution for your special requirements.



Specifications:

- Detector for complete security systems
- New solution for prison management and other sensitive areas
- Complements products out of our range to one automatic system
- compatible with every PC supported security system

PKI 6400

EOD Convoy Jammer

The **PKI 6400** EOD Convoy Jammer is a broadband barrage type jamming system designed for VIP, Government and military convoys. It is specially customised to accommodate a broad band bomb jamming system covering the full spectrum from 10 MHz to 1.2 GHz (3dB bandwidth). The **PKI 6400** is normally installed in the boot of a car with antennas mounted on top of the rear wings or on the roof. Its total output power is 400 W rms. The unit is controlled via a wired remote control box which contains the master on/off switch, band selection and low battery warning LED. Reverse polarity protection is fitted as standard. The unit requires a 24 V power supply. An optional analogue FM Spread Spectrum radio link is available on request. This system is able to operate in a jamming signal to communication link signal environment of 25 dBs, so that the jamming signal is more than 200 times stronger than the communication link signal. The use of Spread Spectrum technology eliminates the need

for vulnerable "Windows" within the frequency coverage of the jammer.



Specifications:

- Frequency Range: 10 MHz – 1.2 GHz:
 - Band 1: 10 MHz – 200 MHz
 - Band 2: 200 MHz – 550 MHz
 - Band 3: 550 MHz – 1.2 GHz
- Power Supply: 24 V DC
- Antennas: High efficiency matching units and omnidirectional antenna for each of the three bands
- Total Output Power 400 W rms
- Cooling: low-noise fans
- Size: 320 x 680 x 320 mm

- Broadband jamming system 10 MHz to 1.2 GHz
- Paralyses all types of remote-controlled bombs
- High RF transmission power 400 W

PKI 6600

Jammer for Mains Circuits

Most of the time a room monitoring attack is carried out by more or less smart RF bugs, in some cases even equipped with remote control to prevent quick and easy detection by counter surveillance scanners. But less sophisticated and low cost solutions like Intercom systems for the communication through the main lines most often are not taken into consideration. Such systems simply can be bought in normal stores, and by removing the housings, the basic components are small enough to be hidden in places of mains power distribution sockets or junctions. Therefore the risk of this kind of attack is enormous. The **PKI 6600** as a jammer system for mains protects sensitive areas against room eavesdropping through the mains line. **PKI 6600** simply has to be plugged into the mains socket and is running fully automatic and disturbs the signal with an AM/FM-modulated noise. Direct listening to the target transmission is possible via headphone.



Specifications:

- Frequency range: 50 to 500 KHz
- Modulation: AM / FM simultaneously
- Direct listening: Via headphone
- Power Supply: 120 or 230 VAC
- RF output power: approx. 1 W
- Size: 170 x 100 x 40 mm
- Prevents against Intercom attacks
- Suitable for 115 & 230 VAC
- Against mains listening
- Easy installation

PKI 6610

Modular Car Jammer System with Digital Programming

Jammers are absolutely indispensable in a lot of application areas, i.e. securing of convoys, VIP or borders. We especially want to point out that the jammer technology is also very useful to fend off remote-controlled bombs, i.e. RCIEDs (Remote Controlled Improvised Explosive Devices) **PKI**. Jammers are manufactured according to customer's requirements. Thanks to the new digital **PKI** programming it is possible to adapt not only output power and frequencies to be disturbed, but also the required exemptions necessary for your own communication. The modular system allows you to choose any required frequency within the range of 25MHz up to 1.000 MHz / 1GHz up to 2GHz / 2 GHz up to 3GHz and 3GHz up to 4GHz.

Specifications:

- Total frequency range 25MHz - 4.000MHz
- Band 1 25MHz - 90MHz
- Band 2 90MHz - 500MHz
- Band 3 500MHz - 1000MHz
- Band 4 1GHz - 2GHz
- Band 5 2GHz - 3GHz
- Band 6 3GHz - 4 GHz

**Power amplifiers**

- Band 1 and 2 60 W CW each, Class A/B
- Band 3 40 W CW, Class A/B
- Band 4, 5, 6 26W + 44,2dBm
- Flatness: +1 to -1,5 dB
- Power consumption: DC 12V / 35A each
- Cooling system: integrated heatsink 12V fans
- Direction couplers: insertion loss 0,5dB measuring ports - 20dB

- Type of Antennas: Log.-periodic directional

- Dimensions: 19" rack, height 3RU, each 135x450x350mm

- Weight: approx. 22 kg each modul

- Scope of Delivery: incl. Antennas, remotebox and cables

If you require any further information, please let us know.

PKI 6620**PKI 6625**

Portable Jammer System

This portable jammer has been designed for flexible and versatile use. Integrated in a water-tight carrying case it can be used everywhere. A strong disturbing signal of 80W over a wave band of 20 up to 1000MHz guarantees the protection against eavesdropping devices. The RF power emission of this jammer disturbs all receivers immediately. The function of the jammer's signal is defined as SCMS (Complete Sweep Modulation Signal). A broadband antenna for the total frequency range is also included in delivery. When the system is put into operation the antenna will be set up and connected to the antenna socket of the **PKI 6620** by means of a cable. A built-in rechargeable battery guarantees the necessary power supply. It is also possible to connect the system directly to 115/230VAC.

Specifications:**PKI 6620**

- Total frequency range: 20 - 550 MHz, 500 - 1000 MHz, 1800 - 1990 MHz, 2110 - 2170 MHz
- Output power amplifiers: 2 outputs, total 80W at 50 Ohm
- Flatness: +1 to - 1,5 dB
- Operation of amplifiers: class A/B
- Channel power out: Low band 50W / High band 30W
- Cooling system: Integrated heatsink 12V fans
- Cables: N-connector 2 omnidirectional antennas
- Power supply: 12V DC / 35A, 115 – 230V AC
- Operating temperature: -10°C up to +60°C
- Humidity: 0 - 90% relative humidity



- Dimensions: approx. 620 x 490 x 300 mm (weatherproof)

- Weight: approx. 24 kg

- Scope of delivery: incl. antenna and connecting cable

If you need any further details, please let us know

PKI 6625

Jamming systems can be manufactured according to client's requirements. They are available from 20 MHz to 3 GHz, power 40 W - 80 W.

PKI 6630

Man Pack Jammer

PKI 6630 is developed on explicit request of different military and governmental institutions. This powerful jammer offers an effective blocking range. This Man Pack Jammer can be carried by a person in areas where remote controlled improvised explosive devices are suspected and is designed for protection of soldiers and law enforcement foot patrols against RF radio controlled bombs, or against terrorists indicating their exact location via radio transmission.

Specifications:

- Frequency:
 - band I: 820 - 895 MHz
 - band II 920 - 965 MHz
 - band III 1800 - 1990 MHz
 - band IV 2110 - 2170 MHz
 - further frequencies on request
- Output power:
 - +40 dBm per band,
 - total 125 WEIRP
- Antenna:
 - external high gain omni GP
- Power ON:
 - by remote control
- Power supply:
 - Lithium battery for 2 hours
 - operating Battery charge input
 - AC 100-250V, 50-60 Hz
- Housing:
 - rain-proof
- Antenna:
 - 650 m length
- Operating temperature:
 - 10°C to +60°C
- Applications:
 - Anti terror units, bomb squads, VIP protection, protection of convoys, Military forces, SWAT teams, police forces, anti drug units, riot control units
- Dimensions:
 - 390 x 340 x 130 mm
- Weight:
 - 12 kg incl. battery
- 125 W Output Power
- 60 m average interference range
- 2 hours operating time



PKI 6650

Mobile Jamming Systems

The **PKI 6650** uses the technology of the more advanced digital frequency generation, compared to the traditional PLL technique, in order to allow different modes of signal generation.

A) Spot-jamming of a particular frequency or channel

B) Hopping - Jamming of jumping frequencies in combination with an optional connected surveillance receiver, a single bus-band may be selected or the whole spectrum of 20-3000 MHz. On special request we are able to deliver also frequencies up to 6 GHz.

C) Sweep - Jamming of a frequency band at an ultra-fast speed and in a continuous mode, various programmable frequency windows allow to define the beginning and end of the frequency bands to cover.

D) Barriage - Instantaneous and continuous p.n. noise (pseudo noise) jamming over a wide band. It is possible to activate all sub-bands at the same time and to get a total complete RMS power of 1100 W output to the antenna.

Specifications:

- Frequency Coverage:
 - 20 MHz to 3000 MHz
 - (including 800,900,1800,1900 and 2100 mobile phone bands to cover AMPK, CDMA, TDMA, GSM, IDEN and UMTS bands)
- Power output: 1100W total
 - Number of channels 12
 - Channel 1 20 - 80 MHz 200W
 - Channel 2 80 - 200 MHz 200W
 - Channel 3 200 - 500 MHz 200W



Channel 4	500 - 1000 MHz 100W
Channel 5	1 - 2 GHz 100W
Channel 6	2 - 3 GHz 100W
Channel 7	800 MHz 50W
Channel 8	900 MHz 30W
Channel 9	1800 MHz 30W
Channel 10	1900 MHz 30W
Channel 11	2100 MHz 30W
Channel 12	2400 MHz 30W

- Power consumption:
 - approx. 260A at 12V (3120 Watts)
 - Effective operating range: approx. 80 - 200 meter (depending on location)
- Jamming Signal:
 - CDSS (Complex Digital Sweep Signal)
- Amplifiers:
 - Class A Linear, Gain flatness +/- 1.5dB

• VSWR Protection: Protected against antenna miss match including open and short circuit

• Temperature range: -10°C to +70°C

• Humidity: 0 - 90% Relative Humidity

• Power sources: 12 V DC from car system and additional generator

• Cooling system: Forced air (by built-in blower)

• Dimensions:

- approx. 500 x 500 x 1150 mm (h x d x w)

• Weight: approx. 130 - 150 kg

The data may vary depending on the vehicle.

The system includes a complete set of roof mounted antennas, remote control and monitoring system.

Technical data is subject to change without notice

PKI 6660

Car Lock Jammer

This jammer is designed for the use in situations where it is necessary to inspect a parked car. Whenever a car is parked and the driver uses the car key in order to lock the doors by remote control, normally he does not check afterwards if the doors are really locked or not. For such a case you can use the **PKI 6660**. It can be placed in car-parks, both outdoors and in car-park buildings. The briefcase-sized jammer can be placed anywhere nearby the suspicious car and jams the radio signal from key to car lock. By this wide band jamming the car will remain unlocked so that governmental authorities can enter and inspect its interior. The complete system is integrated in a standard briefcase. Optionally it can be supplied with a socket for an external antenna, so that **PKI 6660** can even be placed inside a car, parked in the same area, with the antenna placed on top of the car. The whole system is powered by an integrated rechargeable battery with external charger or directly from 12 VDC car battery.

Specifications:

- Dimensions: standard briefcase - approx. 50 x 40 x 20 cm
- Weight: approx. 5 kg

- Jamming of a particular frequency or channel
- Modular system based on 19" racks
- Hopping of jumping frequencies
- Sweeping of a frequency band at ultra-high speed



- Output frequency: to cover all radio frequencies for remote-controlled car locks
- Output antenna: integrated inside the briefcase, optionally external antenna if jammer is positioned inside a car

PKI 6670

Remote Control Duplicator

Often the door of an observed car has to be opened without leaving any damages or traces. This is quite difficult sometimes! Our remote control duplicator enables you to open any car door easily. When a driver opens his car with a remote control, an encrypted signal will be sent to the car which opens the door. This signal will be captured by our duplicator and decrypted. With the obtained data a new remote control will be programmed with which it's very easy to open the door of the relevant car without leaving any trace.

Specifications:

- Dimensions: 140 x 190 x 30 mm
- Weight: 240 g
- Power supply: 12 V battery
- Display: LED frequency counter
Comes with connecting cable and charger.

**PKI 6680**

GPS Pocket Jammer

There is a counter device for nearly every tapping unit. One of these is our **PKI 6680**. Small, light-weight, but very effective it jams GPS-signals. This pocket jammer is used if you suspect your vehicle being equipped with a GPS tracking system. The pocket jammer sends a spurious signal on the L1/L2 frequency and eliminates the GPS tracking signal. Now you can be certain that a location of your car is impossible. Other frequencies, i.e. for mobile phone, radio etc. will not be disturbed.

Specifications:

- Frequency: L1/L2
- Battery capacity: 400 mAh Lion battery
- Operation time: 6 hours
- Charging time: 1,5 hours
- Block distance: radius 5-10 m
- Working currency: 65 mA
- Transmission: built-in antenna
- Size: 64 x 37 x 16 mm
- Net weight: 34 g
- Gross weight: 130 g



POLICE, CUSTOMS AND MILITARY EQUIPMENT



PKI ELECTRONIC INTELLIGENCE GmbH GERMANY

PKI 7100

X-Ray Inspector

The **PKI 7100** is a portable fully digital X-ray system consisting of an exceptionally constant potential X-ray source and Hi-Tech image capture unit for examination of suspect packages or other inaccessible areas where bombs, listening devices or contrabands may be hidden. The system especially is designed for EOD technicians, customs, police and army. **PKI 7100** sets a new standard for image quality, as well as for quick and safe inspection. It offers the possibility to take four images at different energy levels in 12 seconds for progressive penetration depth studies. All images are transferred to a notebook at very fast rate.

Specifications:**Image capture unit:**

- CCD camera: 768 x 576 pixel, 8 bit resolution
- Operating time: 2,5 hrs
- Dimensions: 250 x 450 x 170 mm
- Weight: 9,7 kg

X-Ray Generator:

- Wave-form: constant potential
- X-Ray dose: 1 ft 1000 μ Sv/sec.
- Max. battery capacity: 5-6 min.



continuous X-Ray generation

(up to 120 images with 3 sec. exposures)

- Max. kV 120 kV (adjustable 40 to 120 kV)
- Max. mA 1.5 mA between 40 and 80 kV; 1 mA between 80 and 120 kV
(adjustable from 0.1 to 1.5 mA)
- Steel penetration: 12 mm at 15 cm distance
- Exposure time: 1 sec to 99 sec
- Focal spot size: 0,25 x 0,5 mm
- Power supply:
2 batteries (1 spare) 36 V, 600 mAh Ni-Cd
- Weight: 6,5 kg
- Beam angle: 60° x 52°

Software:

- Reverse Black & White:
Sort and file management (on CD or HD)
- Pseudo Colour Pseudo 3D
- Contrast stretch Zoom (window selection)
- Portable, digital X-Ray system
- Battery operated, small and light weight
- Ultra light constant potential X-Ray set
- Mini focal spot, wide angle beam
- kV and mA outputs selectable from PC
- communication cable, 50 m coiled

PKI 7110

X-Ray Color Mailscanner

This X-ray scanner is designed for security control of incoming mail, such as parcels and letters. The **PKI 7110** is used at embassies, courts, jails, ministries, military departments and factory security offices. It works with a special short-time exposure and records the taken x-ray picture for further analysis. X-Ray scanning is only done behind closed protective door. If the door happens to be opened prematurely the x-ray scanning will stop immediately. **PKI 7110** complies with CE and X-ray regulations.

Specifications:

- Dimensions: 430 x 610 x 1610 mm
- Inspection scanner: 420 x 560 x 530 mm
- Doorway: 340 x 530 mm
- X-ray source: 90 kW, 7mA, oil cooled
- Picture analysis: 2 brightness grades, inverted display with zoom and pseudo-color
- Display: 17", low-radiation
- Weight: 150 kg
- Power supply: 230 VAC, 50 Hz, 5A

**PKI 7115**

Microscope Camera for Inspection

This device is highly recommended for forensic investigation. An electronic, digital microscope captures smallest parts such as hairs, dandruffs, blood spots, etc. By means of its digital zoom function a magnification of 200x is possible. The recorded pictures can be stored onto a PC for further inspection. Automatic focusing is done directly at the microscope lens.

Specifications:

- Dimensions: Ø 33 x 110 mm
- Weight: 49 g
- Resolution: 1280 x 1024



PKI 7120

Letter Bomb Detector

PKI 7120 is designed for inspection of letters up to 6 cm thick. All known letter bomb explosives will be detected. The device actuates an alarm as soon as a letter is passing that contains dangerous material. Normal clips, needles etc. will not be indicated. Therefore its sensitivity cannot be adjusted by the user. This letter bomb detector doesn't need more space than a normal PC printer.



Specifications:

- Power supply: 110/220 V, switchable, 50/60 Hz
- Emergency power: 12V / 4 Ah, integrated
- Dimensions: 400 x 450 x 220 mm
- Weight: 8 kg
- Operating temperature: 0°C - 40°C

PKI 7130

Letter Bomb Detector

With the **PKI** letter bomb detector you can check all suspicious mail like letters and small parcels. It is easy to handle and detects all kind of metal and alloys and even very small components of improvised bombs or incendiary devices. Alarm is given as audio and optic signal. The audio alarm can be switched off. Two different modes are available: static or dynamic. In static mode, the alarm depends on an adjustable trigger threshold and has to be reset manually. In dynamic mode, the alarm signal depends completely on the target's characteristics. This allows the cross-checking and determination of the target's size and position, when a letter was separated due to an alarm.

The sensitivity of the **PKI** letter bomb detector is very high. It can be adjusted according to the required value and it is possible to suppress the indication of staples, clips or unwanted metal objects.



Specifications:

- Alarm: optical alarm and switchable audio alarm
- Dynamic mode: intermittent alarm with automatic reset
- Static mode: continuous alarm with manual reset by button press

- Power supply: built-in NiCd battery
- Operating time: approx. 18 h with NiCd battery
- Battery control: flashing led
- Dimensions:
380 x 280 x 65 mm folded
380 x 280 x 215 mm unfolded

PKI 7190

Handscanner for Liquids

This hand-held liquids detector is a unique innovation for contactless detection of flammable and explosive liquids inside sealed containers. It quickly and accurately checks the contents, such as plastic and glass bottles and other non-metallic containers up to 9 mm thick, without having to open any seals or tapes.

This handscanner exploits a technique which estimates the spatial distribution of electrical properties of a medium and can determine the characteristics of a liquid irrespective of the size of the container. The electrical properties of a liquid determines whether the liquid is either flammable or explosive.



Specifications:

- Size: 135 x 70x 24 mm
- Weight: 110 g
- Power supply: 2 x AA batteries

PKI 7200**X-Ray Scanner**

The **PKI 7200** X-Ray Scanner is based on the principle of registration of the back-scattered X-radiation from the enclosures located behind various kinds of obstacles (steel, aluminium, wood etc.) and designed for detection of the enclosures located in the optically opaque and covered-up spaces, such as motor vehicle doors, seats, fuel tanks, wheels, truck body walls, racks etc. **PKI 7200** is a handy, dust- and splash-proof device which can be operated either as a stationary version (with power from the mains of 100-240V) or as a portable version (with power from the supplied battery pack of 12 VDC). **PKI 7200** surely detects the enclosures measuring down to 2x2x2 cm with the density ranging from 0.5 to 2 g/cm³ (plastics, organic and inorganic substances) which are located behind the obstacles with a maximum thickness of 40 mm for wood, 10 mm for aluminium and 1.0 mm for steel.

Specifications:

- Warm-up time: max. 10 sec
- Output power: from X-Ray source 50 kV
- Annual effective dose of radiation: less than



- 5 mSv at 1700 operating hours per year
- Operating temperature: - 20°C to + 50°C
- Operation time: stationary: 24 h, continuously portable: approx. 7 hours
- Dimensions: approx. 325 x 70 x 175 mm for scanning device and 200x50x105 mm for battery pack
- Weight: approx. 2.4 kg for scanner plus approx. 1.8 kg for battery pack with carrying belt

- Power consumption:
27 W A/C-operated
18 W battery-operated
- Search of arms, drugs, contraband goods
- Inspection of cavities with one side access
- High speed inspection
- Safe radiation

PKI 7250**Letter X-Ray System**

The **PKI 7250** is a compact, entry-level letter and small package X-Ray Security Screening System for desktop operation in mailrooms, corporate offices, embassies, prisons, executive residences, courtrooms, etc. (Where such suspect material must be screened.) It is perfect for the rapid detection of contraband materials in mails, briefcases, backpacks, clothing, electronic devices as well as personal belongings like purses, cameras, shoes, bins, mailbags etc.

Specifications:

- X-Ray generator:
rated 90 kV constant potential peak current - 1 mA max. cooling - sealed oil bath, air penetration - up to 11 mm of steel equivalent
- Viewing method: direct view
- Fluoroscopic inspection screen size:
17" x 17" The full screen area is displayed.
(thick parcels may need to be viewed twice)
- Power supply:
110-130 VAC or 210-250 VAC at 50/60 Hz
- Dimensions: approx. 77 x 58 x 60 cm
- Weight: approx. 160 kg
- Radiation safety:
dual safety interlocks
panel operating switch
double shielded glass
lockable power switch
meets or exceeds all applicable
radiation and CE marking standards



- High penetration, more efficient and reliable by 90 kV X-Ray source
- Extra fine grain resolution, with greater brightness, for a very sharp image
- Higher throughput of larger parcels than other similar models - at less costs
- Examines more than 400 batches per hour, 200-500 standard envelopes per batch
- Very easy to install, operate and maintain. No moving parts to maintain

PKI 7260

X-Ray Luggage Inspection System

The **PKI 7260** is a heavy duty, conveyorised X-Ray Security Screening System designed for screening cargo and large luggage, detecting concealed weapons, explosives, narcotics, foreign currencies, contraband goods or manifest frauds. Featuring an opening of max. 100 x 80 cm and an endless conveyor belt, this device perfectly matches the requirements of professional users. **PKI 7260** should be used at any airport, rail or bus station, government facility, loading dock, customs office, nuclear power station, hospital or wherever suspicious luggage or parcels may occur.

Specifications:

- Dimensions: approx. 317 x 129 x 173 cm
- Weight: approx. 600 kg
- Construction: unibody heavy duty gauge epoxypainted steel construction with stainless steel trim and accessories, non-marring casters, levelling jackcrews and reinforced forklift pockets. Corrosion resistant command centre keypad mounted on side, or available on table
- Tunnel size: approx. 100 x 80 cm with endless conveyor belt
- Material penetration: 28-29 mm steel
- Contrast sensitivity: > 2 Mio colour tones
- Conveyor height: - 27 cm off floor speed - 24 cm per second, reversible pulling weight - 150 kg as standard, 400 kg as option



- X-Ray generator: self-contained, shielded tank with 160 KV high voltage rating (140 KV operating voltage), with 100% sealed oil bath cooling for duty cycle. Dose rate - 0,1 mRad diagonal beam orientation (80° beam divergence)
- X-Ray Detectors: Surface-mounted, fully integrated, high frequency, solid state detectors using high speed processors and advanced

- Pentium 4 processing with multi-energy.
- Video: the standard system comes with a high resolution, flicker-free and low radiation 17" SVGA display with 1280 x 1024 pixels.
- Environmental conditions temperature range 0 – 40°C at 95% non-condensing relative humidity
- Power supply 100 to 250 VAC at 50 - 60 Hz

PKI 7270

Detection Dog

Detection dogs are very often used at customs for tracing drugs, explosives etc. Specially educated dogs also locate banknotes or ivory which is quite unbelievable considering modern electronic detection systems. However, dogs have proved to be very reliable. Also in cases of earthquakes or avalanches they show high efficiency and are indispensable at any rescue service.

We offer a systematic and efficient training and handling courses with teacher to acclimate dogs, lasting 6 weeks.

Specifications:

- German Shepherd
- Labrador Retriever
- Giant Schnauzers
- Malinois



PKI 7290**Quick Test for Proof of Explosives**

This quick test has a low rate of false alarm at highest sensitivity giving a result within only a few seconds. Its easy manipulation, which needs only little training time, makes the **PKI 7290** indispensable for police operations, flight attendants, customs, etc. Long shelf-life (18 months) at a wide temperature range and its handy size that allows to inconspicuously wear it on you are only two of its advantages.

Specifications:

- Detection: aromatic, aliphatic and anorganic explosives
- Proof: smallest quantities are sufficient (nanogram range)
- Sorts of explosives: ANFO, DNT, RDX, TETRYL, TNT
- Various: very cheap possibility of detection of explosives

**PKI 7295****Quick Test for Proof of TATP and HMTD**

PKI 7295 is well suited to complete further analysis devise, as it allows a first check due to its uncomplicated and easy handing. In addition to that, its small size allows inconspicuous bearing on the body and offers good service for example in case of access controls, covered investigation, patrol service etc. Should a detection dog for explosives give alarm when controlling buildings and rooms the dog handler can start a first quick test within a few seconds.

Specifications:

- Detection: TATR and HMTD peroxide-based explosives
- Proof: smallest quantities will be proved (nanogram range)
- Various: extended shelf-life (18 months) at wide temperature range possible, Cheap solution for detection of explosives

**PKI 7300****Handheld Explosive Detector**

The **PKI 7300** is a handheld device for rapid and effective screening of all explosives including ICAO taggants, military plastics and TATP, using Luminol Chemiluminescence (Chemilumina). It detects bombs and explosives with a fast response time (typically 15 seconds). The detector does not use any external carrier gas or radioactive source. **PKI 7300** offers extremely fast and reliable detection with very high selectivity for explosives.

Specifications:

- Detection Principle Luminol Chemluminescence - Disposable cartridge
- No Radioactivity No radioactive source, and no licensing or radioactive calibration applicable
- Detectable Compounds Most military (including plastic) and commercially available explosives, C4, TNT, Nitroglycerin, Dynamite, PETM, Semtex, RDX, ANFO, ICAO, Taggants, (DMNB, EGDN, o-MNT, p-MNT), Urea nitrate, and TATP
- Sampling Capabilities Vapors and particulates - Dual Mode
- Typical Sample/Analysis Time Sample: 5-30 seconds (user selectable based on application)
Analysis: within 15 seconds
- Initial Warm-Up Time 30 seconds
- Carrier Gas None required (ambient air)

- Controls:
Power switch Keypad
Automatic Vapor/Particulate selector
Volume control (with optional earphone)
- Operational Status Indicators:
LED indicator lights
4 x 20 Liquid Crystal Display (LCD)
- Data Storage + Communications:
Storage of 1000 data records, RS-232 serial output port for remote control and external display
- Power Supply: 12 volt DC rechargeable battery pack
External battery pack 12 volt AC adapter
- Operating + Storage Temperatures:
Operating: 0°C to +55°C (+32°F to +131°F)
Storage: 0°C to +65°C (+32°F to +149°F)
- Weight + Dimensions:
Unit weight: 3 kg in ABS engineered plastic shielded case
Unit dimensions (LxWxH): 51x14x11 cm
Shipping weight: 12 kg in steel-reinforced, foam-padded, protective carrying case



- Simple operation for non-specialist personnel
- Dual sensitivity for normal and high-risk situations
- Optical and acoustic alarm
- Ion drift principle with humidity protection
- Rugged construction

PKI 7305

Detector of Plastic Explosives

Plastic explosives are more and more frequently used by terrorists. In order to detect them the **PKI 7305** has been developed. It uses the Doppler effect with selected frequencies and simultaneously compares metallic and non-metallic compounds. The discrepancy between these two measured results is analyzed.

Specifications:

- Dimensions: 175 x 66 x 129 mm control device
146 cm length, searching probe



PKI 7310

Handheld Detector of Explosives

This portable explosives detector is capable of detecting the presence of all explosives, including ICAO taggants, military plastics and TATP. It is self-contained, lightweight and comes in a fully equipped, rugged carrying case and offers fast, stable detection with very high selectivity for explosives. Ready to operate within one minute of powering-up, a simple push of the button automatically activates the sampling and analysis modes. Results are displayed in just some seconds on an easy-to-read LCD. Therefore this detector is ideal for all non-technical personnel as only minimal operator training is necessary and no carrier gas or radioactive source is used.

Specifications:

- Detectable compounds: C4, TNT, Nitroglycerin, Dynamite, PETN, Semtex, RDX, ANFO, ICAO, Taggants, (DMNB, EGDN, o-MNT, p-MNT), urea nitrate and TAPT



- sampling capabilities: vapours and particulates - dual mode
- typical sample/analysis time: sample: 5-30 seconds (user selectable based on application) analysis: within 20 seconds
- controls: power switch, keypad, automatic vapour/particular selector, volume control, sample switch
- operational status indicators: LED indicator light, liquid crystal display with graphic display
- data storage + communications: 1000 data records stored for further analysis serial output port for remote control and monitoring
- power supply: 12 V DC rechargeable battery pack external battery pack 12 V AC adapter
- Operating temperature: 0°C to +55°C
- Storage temperature: 0°C to +65°C
- Size: 510 x 140 x 110 mm
- Weight 3 kg

PKI 7330

Vapour Tracer & Analyser

This vapour tracer and analyser is the only portable, real-time, ultra-fast analyser available on the market, that detects and identifies all types of vapours and traces of organic, biological and chemical compounds accurately and in extremely short time. Therefore this new equipment is used by law enforcement and military organisations for detection of explosive devices and all types of narcotics. The vapour analysis technology is based on surface acoustic wave sensors and flash chromatography, which allows the fragrance or odour that is associated with specific chemical processes or products to be chemically analysed and quantified, in parts per billion accuracy, and this within only few seconds.

Specifications:

- Sensitivity: analyzes vapours within 10 seconds in parts per billion for most compounds detects hydrocarbons in the range of C4-C25, sensitivity will vary by compounds sampling time, matrix, interferences and detector temperature settings



- Detector: surface acoustic wave - quartz microbalance
- Sensitivity Temperature: 0°C - 125°C programmable
- Sampling: internal sample pump Sample introduction - 5 ml/sec Time programmable from 1-300 seconds Sample absorbed into internal tenax pre-concentrator
- Column heater range: isothermal operation: 40°C to 180°C or 5°C above ambient

- Column ramping: isothermal or ramped for 1-18°C/second
- Carrier gas: helium, typical usage is 300 tests per day with one helium charge
- Analysis time: 10-60 seconds
- External input/output: remote start input Digital output information
- Dimensions: 30 x 25 x 15 cm
- Weight: 9.1 kg
- Power: 100-260 VAC at 250 Watt max.

PKI 7350

Explosives and Narcotics Trace Detector

The **PKI 7350** is the first and most recognised portable explosives and narcotics trace detector that uses Luminol Chemiluminescence (Chemilumina) plus the unique GC/IMS (gas chromatography/Ion mobility spectrometry). It is the only portable device capable of detecting the presence of all the explosives incl. ICAO taggants, military plastics and TATP combined with a detection of cocaine, opiates, cannabis and amphetamine-type stimulants. It does not use any external carrier gas or radioactive source and offers extremely fast and reliable detection with very high selectivity for explosives.

PKI 7350 should be used at any Police and Bomb Squad, Embassy, Sea- or Airport, Border Crossing, Government Building, Nuclear Power Plant or any other place where high risks of attacks with explosives may occur or where the use of narcotics has to be identified.

- **PKI 7350**'s dual technology platform detects and identifies traces of specific explosives and narcotics within a multi-compound sample more accurately than single technology systems can do.

- **PKI 7350**'s superior design and intelligent analytical software allow exceptional trace detection performance and by this offers a maximum of sensitivity.

- **PKI 7350**'s GC/IMS dual technology ensures the lowest false alarm levels.



- **PKI 7350** is easy to operate. Use the sampling tab to survey the target surface for traces of explosives and the unit processes and analyses the samples immediately and displays the results on its touch screen, making detection an easy process that only takes seconds. Just a simple one-step process is to be made and with minimal training this device is a perfect tool for areas with high turnover.

- **PKI 7350** has a built-in networking and communication capability. The device can easily be interfaced with other screening systems, creating a comprehensive security solution.

- **PKI 7350** offers continuous action and complete analysis within seconds i.e. a high throughput - ideal for high volume environments like airports and border crossings.

Specifications:

- Detection capabilities Explosives:
 - PETN, RDX, TNT, NG, Dynamite, Semtex, C4, Narcotics - Cocaine, Opiates (Heroin and Morphine), Cannabis (Marijuana and Hashish), Amphetamine-type stimulants (amphetamine, ecstasy & methamphetamine)
- Technology Gas chromatography / Ion mobility spectrometer
- Sensitivity: Nanograms to picograms
- Analysis time: 6 - 20 seconds, variable
- Power supply: 90 to 265 VAC, 50/60 Hz
- Power consumption: < 500 W
- Warm-up time: 20 minutes from a cold start
- Weight: < 25 kg

PKI 7355

Explosives Trace Detection System

The **PKI 7355** is a mobile unit for baggage inspection without the use of any radioactive source for ionisation. Unlike conventional explosive trace detection devices no special gases or liquids are required. It is easy to use for high speed explosives detection by just the graphical user interface on the touch-screen. The highly visible and large LCD-monitor clearly shows each information on the display. The complete unit is certified by many countries - for example the United States DHS/TSA (Department of Homeland Security/Transportation Security Administration).

Specifications:

- Analysis Unit: Quadrupole Mass Spectrometer with air pressure chemical ionisation
- Analysis time: 10 sec
- Warm-up time: approx. 30 min
- Display Colour: LCD (Touchscreen)
- Operating conditions temperature: +5 to + 35°C relative humidity: 20 to 80 % (non condensing)
- Power consumption: 1.500 Watts
- Weight: approx. 190 kg
- Dimensions: 650 x 1150 x 807 mm
- Storage conditions: 0 to 40°C and 10 to 90 % relative humidity



PKI 7360

System for Detection of Hidden Persons in Vehicles

PKI 7360 is essential for control of vehicles in prisons, for detection of illegal immigrants or terrorist risks. The so-called detection of heartbeats is the only known technology so far which allows reliable detection of hidden persons in vehicles. Not only the heartbeat will be detected but also inner movements of other body organs which cannot be influenced by human beings. The whole control of vehicles lasts only 2 minutes. As **PKI 7360** uses high sensitive sensors out of the earthquake research results are displayed within 10 to 25 seconds. **PKI 7360** is recommended by European Federal Police and is used by police and justice departments in many European and neighbouring countries.

Specifications:

- System components:
 - 1 stationary PC
 - 1 colour monitor 15" touch screen
 - 1 PKI software
 - 4 magnetic sensors for trucks
 - 1 floor sensor
 - 1 low frequency measuring microphone
 - 1 spare sensor



Remark:

The detection of hidden persons is an extreme complex task due to nearly unlimited versions of different truck constructions. **PKI 7360** is a measuring device. The operation of this device and high security requirements claim trained personnel.

PKI 7375

X-Ray Inspection Trailer

The **PKI 7375** is the worldwide leading, mobile system for fast, reliable and sophisticated X-Ray, Metal- and Trace-detection screening. It is a self-contained and trailer-mounted device providing a mobile security system to be used by any government department, in sea- and airports, at border crossings, warehouses and correctional facilities to meet every requirement to screen cargo, packages and luggage. Many government departments of transportation have already approved this tandem axle trailer as being the best solution for all these purposes. Free from noise and distraction, the operators can concentrate on such inspections, as the **PKI 7375** is equipped with a double-walled insulation of 50 mm and a super-silent roof-mounted air-condition system. Precise X-Ray images of renowned clarity are generated by the integrated X-Ray detector system and superbly displayed on flat screen monitors. The well-appointed station console is ergonomically adjustable and provides a complete array of image identification and processing feature. For each and every operation, equipment quality and placement are determined for longevity and reliability. Several software programmes are already installed on the Pentium 4 computer.

Specifications:

- Overall dimensions of trailer: 4,24 x 2.58 m
- Inspection capabilities:
 - tunnel size - 100 x 80 cm
 - material penetration - 28-29 mm steel
 - contrast sensitivity - > 2 million colour tones
 - resolution - 40 AWG wire



conveyor speed - 24 cm per second, reversible
pulling weight - 150 kg
film safety - up to ISO 1600 (33 DIN)

X-Ray generator:

x-ray tube head - self-contained,
shielded tank High voltage rating - 160 KV,
140KV operating voltage duty cycle - 100 %
with sealed oil bath cooling beam orientation -
diagonal (80° beam divergence) dose rate per
exam. - 0.1 mR typical

• X-Ray detectors: surface-mounted, multilayer,
fully integrated, high frequency, solid state

detectors using high speed processors and
advanced Pentium 4 signal processing with
multi-energy.

- Video: standard with colour 17" SVGA monitor,
high resolution, flicker-free, .21 dot pitch,
1280x1024 pixel
- Environmental conditions: 0 to + 40°C at 95%
non-condensing relative humidity
- Electrical power requirements:
power provided by on-board motor generator
set, 7 KW continuous duty with 50 Amps
service panel

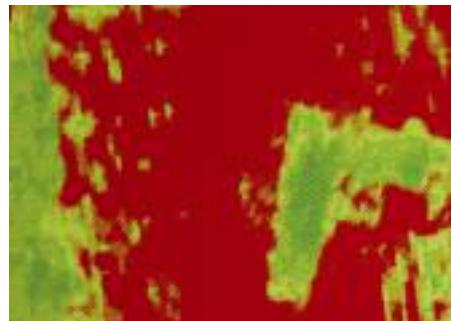
PKI 7400

Terahertz Imaging System

The **PKI 7400** Terahertz Imaging System is based on passive terahertz imaging technology, without illuminating or irradiating subjects in any way. No XRays are used. Suspective objects are imaged by passively detecting terahertz waves naturally emitted by all objects and people. Terahertz waves pass through opaque materials such as clothing, packaging and certain building materials and can form images of objects, such as weapons, explosives, narcotics or contraband goods. The **PKI 7400** Terahertz Imaging system consists of a camera unit and digital CCTV, for mounting on user's external pan / tilt device. Ethernet control of camera unit from remote computer and RS 232 link between camera and external pan/tilt unit are possible.

Specifications:

- Imaging distance: 3 – 9 m
- Imaging rate: 1, 2, 3 fps
- Field of view: 1 x 1 m at 5 m distance
- Power Supply: 100 – 240 V AC, 50/60 Hz
- Dimensions Camera Unit: 60 x 50 x 30 cm
- Weight: 18 kg
- Passive Imaging of non-metal and metal objects
- Passive tracking of moving people at 0.5 m distance
- Compact portable imaging unit

**PKI 7405**

Through-the-Wall Detector

This device is a small handheld system for the detection and localisation of human beings or animals being suspected in inaccessible rooms. The typical application is during anti-terrorist interventions and disasters like earthquakes, demolitions, etc. Its high sensitivity even assures reliable detection of objects hidden behind solid structures like walls, wreckage, etc. According to the micro-movements performed by their life functions the system detects and localises them. In common use, the **PKI 7405** can be deployed vertically for forward observing or horizontally for up- and down scanning. The easiest way of operation is just to place the device on the wall or any other solid object. Another possibility is to mount the system on a tripod and to observe the obstacle from a distance of up to 10 m. An optional LAN remote control allows the operator to survey the scene from a safe distance, which is especially useful during long term operation. **PKI 7405** has two basic modes, one for fast moving and one for non- or slow moving objects. The fast moving mode has a better tracking accuracy whilst the slow moving mode is more suitable to detect objects which are not moving.

Specifications:

- Scalable range: up to 20 m
- Weight: approx 5 kg
- Breath detection
- Fast and long term investigation
- Data recording
- Tripod mount
- Optional remote control via LAN



PKI 7410

Microwave Barrier

As long as you are looking for a mobile perimeter control the **PKI 7410** is the only choice. It is a mobile perimeter microwave detector and is intended to provide temporary protective boundaries at airfields, military camps, provisional prison camps or other places where areas have to be protected against intruders before they can commit a crime.

Therefore this device should not be missing in any government department, as it is the one and only mobile version for totally secure area protection. It protects areas of up to 1.000 m and transmits full information to the security guards via radio channel at a max. distance of up to 6 km. By this the guards can easily determine what

is happening in the secure area enabling them to decide the next steps. The complete system is easily deployable and can be carried by one man in the supplied transportation bag.



PKI 7415

IR Light-Barrier with Radio Transmission

This solar-powered unit is totally independent from any external power supply or batteries. The **PKI 7415** consists in a combination of a transmitter in the IR-range and a receiver in the HF range. The IR beam has to be placed in face of IR receiver within a max. range of 300 m. In case the invisible IR-beam is disconnected e.g. by a person, an alarm will be given which will be transmitted wireless to the HF receiver up to 1 km range. The complete system is solar-powered and even without sunlight works up to 4 weeks due to built-in rechargeable batteries.

- Specifications:**
- Power supply: solar cell, rechargeable battery
 - Power consumption: 0,2 mA
 - Alignment angle:
vertical 10° (+/- 5°)
horizontal 180° (+/- 90°)
 - Operating temperature:
-25°C to +55°C
 - Dimensions: 73 x 85 x 180 mm



PKI 7420

Stowcheck Human Detector

The **PKI 7420** has been developed for border controls, police and law enforcement agencies to detect people hiding in confined spaces in trucks, lofts, rooms, vehicles etc. It works by detecting and analysing the presence of microscopic quantities of carbon dioxide gas which are emitted in human breath.

The system contains sophisticated software which interprets the results from the sensors. Results and current status of the **PKI 7420** are shown in the LED display.

An optional 50 mtr. CO₂ pear drop rescue probe has been specifically designed for specialist rescue units following major disasters where people may be trapped in confined spaces.

Specifications:

- Measuring principle: non dispersive dual wavelength infra-red
- Gas detected: CO₂
- Display: backlit LCD
- Response time: typically 20 seconds
- Operating time: up to 8 hours manual operation
- Ambient temperature: -10° - 40°C
- Humidity: 0-90% RH, non-condensing
- Audible alarm: adjustable threshold across range
- Power supply: rechargeable batteries



PKI 7425**Net Catcher**

With this net catcher escaping persons can be arrested without any problems and danger. No need for a gun! **PKI 7425** looks like a common torch. A nylon net is placed in the head which can be ejected under high pressure up to a distance of 8 meters within one second. The person trapped by the net is forced to stop or falls down and can be arrested easily now.

**Specifications:**

- Power: high pressure
- Net diameter: 3 meter Ø, 16 m projector
- Net ejection speed: 3-8 meters in one second
- Net material: high strength nylon fibre
- Dimension: 60 cm
- Weight: 1.2 kg
- Various: easy to use & carry, suitable for users of all ages
user permission not required, safe and low cost, environment-friendly, high shooting speed over 3-8 meters in one second, large catching diameter of 16 m

PKI 7430**Acoustic Warning Device**

This device immobilizes everyone approaching you nearer than 200 m. A directed audio signal with 80 dB attains absolute threshold of pain. The sound beam can be used to assist law enforcement and security officers in riot control, maritime/perimeter security and counterterrorist hostage situations by allowing the operator to communicate with, and in some instances determine the intention of, a target individual over previously unattainable distances. At close range the device can be used to send an extremely uncomfortable ear-piercing noise to deter potential intruders or rioters. In anti-terror or hostage situations the **PKI 7430** can be used to distract attention away from other activity or to project a clear voice signal over many hundreds of metres.

**Specifications:**

- Maximum continuous output: 148 dB SPL at 1 meter
- Beam width: +/- 15° @ 1kHz/-3dB
- Frequency range: 200 Hz - 20 KHz
- Communication range: highly intelligible speech transmission over 2000 meters
max. range of 650 meters over 88 dB of background noise
- Emitter Array Dimension: 635 x 635 x 304 mm
- Emitter Array Weight: 20 kg
- Power consumption: normal power consumption 250 watts
peak power consumption 350 watts
- Power input: 12 - 28 VDC
- Safety: MIL-STD-1474D
- Electromagnetic compatibility:
FCC part 15 class B radiated emissions
MIL-STD-461E
CE

PKI 7460**Laser Range Finder**

The **PKI 7460** is a hand-held, lightweight and compact device for every kind of distance measurements. Having this unit available at any time, is a must to every government department being involved in urban structure development as well as police or military forces where a correct knowledge about the distance to an aimed target is essential. By means of a totally eye-safe and invisible laser beam, emitted by a special laser diode, the running time to the aimed target is determined for a correct distance measurement.

The **PKI 7460** operates either in passive mode (without reflector) or in active mode (with reflectors or reflecting foils). The integrated declination sensor elicits the exact distance to the aimed target. The result is digitally shown on eyepiece screen and furthermore can be transferred to PC or Datalogger via built-in interface.

Specifications:

- Distance of measurements:
approx. 1.000 m in passive mode
approx. 2.000 m in active mode
(depending on reflexing capacity of target and meteorological conditions)
- Accuracy of measurement:
30 cm up to approx. 800 m distance
1 m for larger distances
- Measurement of declination:
+/- 90°
- Accuracy of decline measure:
+/- 0.25°
- Power supply:
2 batteries type AA
- Laser protective class: class 1
- Interface: RS 232
- Optical enlargement: 7 times
- Weight: 220 g



PKI 7480

Laser Shot Simulator

This laser shot simulator is designed for virtual training of appropriate reactions in rapidly evolving situations which may occur in hostile environments. Applicable tactics are practiced by approaching or confronting persons in lifelike scenarios e.g. identifying the target, making an instantaneous judgement as to the use of deadly force and place the shot. Various types of weapons can be chosen for training. Furthermore **PKI 7480** teaches handling with prescribed courses of fire.

PKI 7480 comes in a rolling, weather-proof Pelican case.

Specifications:

- Comes with:
 - Detection camera
 - Laptop
 - Video projector
 - Handgun
 - Laser inserts
 - Projection screen
 - Courseware
- Courseware
 - Branching Video Player
 - Skill Drills Vol.1
 - Course of Fire Vol. 2
 - 3D Firearm Cyclic Actions



PKI 7495

Mobile Electronic Shooting Area Kit

The **PKI 7495** updates the traditional target reporting and statistic ways into a self-intellectual, automatic and data processing way. A wireless data transfer system is applied in this. The main control computer adopts DUAL-CPU design style, incl. keyboard operation, computer printing, electricity volume and data presenting functions. Each display transfers all the detailed shooting process to the shooter, which not only helps him to know the scores and experiences, but also improves the training quality and efficiency.

The signals of bullet impacts are collected by high-velocity collecting chips with high sensitivity and being transferred wirelessly to the main computer. The target-plate is adhered to the sensor layer by a new compound material which allows a bullet hole recovery rate of more than 90%. The full range of the system consists of:

Specifications:

- Target-plate
- Target-bracket
- Anti-bullet Board
- Target Controller
- Data Adapter
- Cable Connection from target bracket to



- data adapter and target controller
- Wireless Receiver
- Main Computer
- LCD Display

PKI 7505**Semi-dry Diving Suit**

This one-piece semi-dry diving suit is available in sizes XS - XXL. **PKI 7505** is extremely resistant against pressure. Knee and side pads are manufactured from solid, long-lasting fabrics. A separate hood is included. Zipper at arms and legs allow comfortable dressing. The diagonal main zipper is completely underlaid and has no contact to the body.

Specifications:

- Fabrics: titanium / plush
- Thickness: 5 mm at body
6 mm at arms and legs
- Colours: black / grey

**PKI 7510****Dry Diving Suit**

Some delicate operations in harbours for example require examination of underwater ship's body in order to find possible drug parcels which might be attached to the ship's body by magnet clamps. The **PKI 7510** dry diving suit is ideal for such actions. Knee and side pads are vulcanized on neoprene which predistines this suit for very tough applications. The zip is placed diagonally on the back. Weight pads on the belt and shoulders are also fixed by vulcanisation.

Specifications:

- Available sizes: XS - XXL
- Colours: black, orange
- Hood: separately
- Fabrics: 5 mm, semi compressed neoprene
- Boots: hard sole
- Inlet valve: frost-proof
- Outlet valve: automatic
- Comes with bag and grease stick

**PKI 7515****Thermo Underwear**

In order to feel comfortable in a dry diving suit, an effective protection against cold and humidity is essential. Longer dive times require sufficient insulation. The **PKI 7515** thermo underwear is made out of Merino wool. Due to the outstanding characteristics of this delicate material protection against coldness is guaranteed. Further accessories like gloves, footlets, snorkel, LED torches, flippers, valves, compressor, depth meter, diving watch, diving regulator, scuba tank etc. will be offered on request.

Specifications:

- Recommended temperature: up to 10°C, in case of even lower temperatures simply dress a second thermo underwear
- Colours: black
- Sizes: SX - XXL
- Weight: 220 g/m²

**PKI 7520****Full Face Mask**

PKI 7520 is proved in cold water and offers an extraordinary anti-fog system which allows clear view even at temperatures near the freezing point. This mask can be changed via easy reachable switch to over pressure breathing which is even possible with gloves. The mask can be used without deflating at any time. **PKI 7520** is tested and approved according to EU regulations.



PKI 7525

Inflatables

Inflatables are extremely practical and flexible, easy to transport and quickly to launch everywhere. Suitable for coast guard, police, marine research, diving etc. We supply inflatables with wood deck for 5-12 persons.

Standard Equipment:

- Inflatable keel
- Heavy duty rubbing strake
- Top buoyancy anti-chafe strips
- Stowage pocket
- Bow handle / towing point
- Lifelines - internal & external
- Davit lifting points
- Fuel tank retainers
- Carrying handles
- Towing bridle patches
- Drain plug
- Drain port
- Marine plywood non slip deck
- Aluminium deck
- Paddles with retainers
- Combines hand/foot bellows
- Maintenance kit
- Instruction manual
- Boat and deck valises



Specifications:

- Dimensions: 3,41 m - 5,25 m
- Weight: 59 kg - 163 kg
- Assembly time: max 20 minutes
- Max. performance allowed: 25 - 32 mph

PKI 7540

Inspection Mini Robot

You shouldn't miss this small and powerful mini robot in your equipment. It is completely remote controlled up to 130 m and has a weight of only 5,6 kg. All 4 wheels are driven by electric engines and cameras with microphones are integrated at the front and at the back. The **PKI 7540** can be used at day and night due to white and IR LEDs. A disruptor is mounted to the mini robot and can be activated by remote control. Further devices can be mounted on request. An additional cargo of 5 kg is possible.



Specifications:

- Dimensions: 364 x 392 x 170 mm
- Weight: 5,6 kg
- Drive: 4 wheels
- Power supply: 12 V /Ni/Mh
- Operation time: 60 – 90 minutes
- Max. speed: 7,5 km/h
- Front camera: with zoom 3x
- Rear camera: 68°horizontal, 54° vertical
- Control station: remote control for all functions
A/V receiver with 5,6" LCD display

PKI 7545**Breaching System**

Drilling access holes through concrete, wood and sheet metal, with the **PKI 7545** breaching system makes searching sealed voids becomes quick and easy. The Breaching System is the fastest method available to positively locate victims of structural collapse. Its operation is facilitated by compact, comfortable support handles and a convenient throttle control and thumb operated safety switch. Four heavy duty various bits are provided with each system. The high speed diamond bits are water cooled by attaching the pressurized water container to the provided coupling. Coring in standard construction concrete averages 8 cm per minute. The **PKI** Breaching System doesn't need an electrical generator or air compressors. The system is fully portable and saves precious time when life is in danger.

Specifications:

- Power train:
two cycle
40 CC
2.75 Horsepower
Centrifugal Clutch
- Power head weight: 11,4 kg
- Speed: 950 rpm
- Boring speed:
7,6 cm per minute
Standard construction grade concrete



Results may deviate depending upon the material to be drilled

- Bits:
5,1 cm x 43,2 cm diamond faced
thin kerf - close segment
5,1 cm x 43,2 cm carbide faced
- Max. bit size: 10 cm
- Spindle: 1-1/4" x 7 threads per 2,53 cms
- Cooling:
pressurized water container
7,57 litre capacity
Hose 3,7 m with quick-connect fittings
- Field service kit:

- codura storage pouch
- spare fuel tank cap
- spare pre-wound starter recoil assembly
- 2 pcs key set for starter assembly
- spare spark plug
- spare plug wrench
- copper washer
- garden hose to water collar adapter
- Spindel extensions: 30,5 cm optional up to three may be used
- Dimensions: 81 x 53 x 31 cms
- Weight: 34 kg

PKI 7550**Modular EOD / IEDD Robot**

PKI 7550 is the optimum tool for every explosive ordnance disposal (EOD) technician. Due to its flexible track drive, the robot can be utilised on almost any surface. In order to get to the mission site, the robot is able to climb stairs and overcome obstacles without any problem. Thus **PKI 7550** can perform EOD tasks anywhere - in buildings, public means of transport or in outdoor terrain. Due to its small size, it can operate even in cramped conditions, e.g. in buses, trains or planes.

PKI 7550 is provided with a manipulator arm and a parallel gripper. The manipulator arm is controlled through a new type of remote control technology. The manipulator arm can be moved synchronously with the operator's hand or head movement. A stereo camera is attached at the arm's tip, which transmits its data to a head-up display and the control unit. Additional cameras on the basic platform and on the survey module facilitate the operator's orientation with the **PKI 7550**. A further advantage of the **PKI 7550** is its modularity. With only a few manual interventions, the **PKI 7550** can be transformed into a reconnaissance robot. Replacement of the payload modules with reconnaissance or manipulator arm is done within seconds. Thus, the operator can flexibly react to the requirements of his mission. This modular concept for a small robot is unique worldwide

Specifications:

- Dimensions: approx. 60 x 40 x 40 cm without arm
- Platform weight: 45 kg (incl. battery)
- Robot total weight: 90 kg (incl. battery)
- Drive system: Electric motors
- Power supply: 24 V / 27 Ah rechargeable batteries
- Operating time: up to 4 hours in mixed mode operation
- Speed: max. 10 km/h, precise slow movement
- Operating range: up to 1 km (line of sight) by radio remote control
- System mobility: operates on firm as well as relatively soft surfaces, climbs stairs, ramps up to 45°, surmounts obstacles of 15 to 20 cm height
- Communication video and data telemetry at 2.3/2.4 GHz; high-security data radio at 433 MHz
- Navigation camera images front- and rear-motion colour camera, stereo camera on the pululator arm, "picture-in-picture" (PIP) technology for simultaneous display of two camera images on the control unit
- Illumination white, high-power LEDs, ring-type around each camera
- Payload of manipulator arm up to 5 kg
- Working height of arm approx. 1,6 m, with optional extension up to 2,2 m



PKI 7560

Obstacle-Clearing Tank

Nowadays each country can be threatened by terrorism. Therefore it is essential to have all necessary basic equipment available such as our **PKI 7560** obstacle-clearing tank. German experts for explosives are the no. 1 worldwide due to their long lasting experience of bomb disposal. As specialists often don't like to work via monitor, this unit has been developed. The driver sits in a shell of 6 mm Naxtra steel, which resists explosives of 5 kg Nitropenta. The front side is especially reinforced with a 33 mm thick Lexar disc. You get inside the obstacle-clearing tank through a hatch which can be opened from in- and outside. An optional installation of 2 oxygen bottles guarantees survival in case of

accidental burying. Its small width of only 75 cm allows operation in confined areas.

Specifications:

- Dimensions outside: length 1,63 m, width 0,75 m, height 1,32 m
- Dimensions inside: length 1,10 m, width 0,62 m, height 0,96 m
- Engine: air cooled one-cylinder diesel engine with 1,3 l tank for 45 min. operating time
- Vertical motion of arm: 120°, horizontal: 30°
- Picker arm: 120°
- Window: 170 mm x 320 m made of bullet proof glass 2 side openings of 110 mm Ø
- Net weight: 635 kg



PKI 7600

High Power Microwave System

The **PKI 7600** offers new and additional possibilities for both military and civil forces by disrupting or destroying electronically controlled equipment and installations of any kind. The system generates a wide-band frequency spectrum. **PKI 7600**'s special feature is its effectiveness against unknown targets as well as target structures. It disrupts or destroys electronic modules in the target, generates resets in processor systems or induces power latch-ups. By this the targets can be neutralised effectively. The **PKI 7600** is a compact, autonomous and portable system which can also be integrated in various platforms. The basic version works as an omnidirectional disruptor. All components, including the battery, are integrated in a handy suitcase. In a modified

version the system is equipped with a reflector, permitting a directional radiation pattern.

Specifications:

- Standard Suitcase Version:
- Dimensions 500 x 410 x 200 mm
- Weight 28 kg
- Peak output power 250 mW
- Power supply 24 VDC battery, 4 Ah
- Antenna voltage 400 kV
- Radiation pattern omnidirectional (360°)
- Operating time 30 min continuous with internal battery, 3 hours burst with internal battery, 24 hours with external power supply

Please contact us for specifications of modified versions.



PKI 7650

Bionic Sensor

The **PKI 7650** is a portable and self-contained mini laboratory being developed in co-operation with renowned German institutes for silicon-technology and eBiochip systems. On the spot it provides a fully automatic recognition of selected biological agents within less than 30 minutes. The flexible technology of the **PKI 7650** is based on silicon-chips, on which antibody substances respectively DNA-structures are placed. This allows the identification of all kinds of important biological agents in next procedures. As all these biological agents are hard to identify, and their influence to human bodies only takes place after a certain period, it is most essential to have a fast and reliable identification of such substances for an effective and reliable prevention. Just with this single and innovative concept of sensors, the whole range of dangerous biological agents can be determined. By means of different chipsticks, even in accordance with customer's requirements, the range of detectable materials can be enlarged. For such amendments, alterations at the base-unit are not necessary. For



each integration of further enlargements, like automatic feeding of up to ten chipsticks and/or upcoming PCR (Polymerase Chain Reaction), various adaptable modules are available. The **PKI 7650** is in use with many NBC and fire-fighting departments worldwide and with its dual measuring positions for negative and positive results, it offers a fast and reliable method to determine selected biological agents. Using the **PKI 7650** in urban traffic systems, like

underground-, bus- and railroad stations it will give an immediate indication about pollution with dangerous biological agents. This enables the special forces to act before the first unspecified symptoms at human beings are recognised (most often only after 24 to 48 hours). Furthermore the **PKI 7650** can also be attached to our **PKI 7550** Modular EOD/IEDD Robot for extended security to the first responding team in cases of emergency.

PKI 7700

Screening Smoke System

In order to assure protection of critical infrastructures this special Screening Smoke Emitting Unit has been developed. The **PKI 7700** can easily be installed at the right place of premises to be protected and within seconds emits a visually impenetrable cloud of smoke. The used smoke emitting material is harmless to human health and environment. The **PKI 7700** can be adapted according to customer's requirements. We produce our **PKI 7700** on an individual basis and case by case in a very close cooperation with our clients. Like all the other products of our programme, we keep the price at a reasonable level, and agree with you how we can meet your needs. When contacting us on this device, please have the following information

ready at hand:

- Duration of smoke required
- Volume required (cubic meters)
- Ignition method required (fuse or electric)
- Physical size restrictions
- Intended use for the device

We will consider all this information in order to develop a product designed specifically for your application.

**PKI 7800**

Helicopter

The **PKI 7800** is a 3-seater, lightweight helicopter to be used for every purpose in police, border patrol, secret services and other governmental operations. Other uses in corporate and/or private flights, news services for TV and radio media, pipeline- and power line control etc. can be effected as well. It is designed according to the latest state of technical standards and meets CS- 27 (EASA) and FAR 27 safety and environmental standards including "crashworthy" seats and fuelling system. Due to a revolutionary new technique, this helicopter has the advantage of a reduced fuel-consumption (up to 35%), a low noise level and low CO₂ emission.

Specifications:

The technical specifications are self-evident and show the large capabilities of the **PKI 7800**: For further detailed information please contact us.

• Approved standards EASA (CS-27) & FAR 27



- Engine 230 HP jet fuel piston engine, single stage bevel gearbox, electronic engine management, direct injection
- Empty weight approx 700 kg (1.540 lbs)
- Max. take-off weight approx 1.182 kg (2.600 lbs)
- VNE 240 km/h (130 kts)

- Cruise speed MCP power
- ISA sea level 220 km/h (120 kts)
- Hover in ground effect ISA 3.685 m (12.000 ft)
- Hover out of ground effect ISA 2.124 m (7.000 ft)
- Service ceiling 4.572 m (15.000 ft)
- Max. range at 110 kts 887 km (425 miles)

PKI 8010 PKI 8015 PKI 8020 PKI 8030

Pin Fiberscope, Rigid Search Fiberscope, Flexible Fiberscope, Ultra-slim Fiberscope

Often observations and inspections have to be done through very small openings. To look through key holes, to monitor rooms through smallest holes in the wall, or simply to control areas behind a door, this all is possible with our fiberscopes. We offer a large variety of fiberscopes for day-to-day inspections. Whether you need it long, short, rigid, flexible, with or without light, with connection to video recorder or for direct observation. Please let us have your individual requirements and we will be pleased to issue a personally designed offer.

Specifications:

	Angle of view	Field of view	Dimensions	light	camera adapter
PKI 8010	0° forward	50°	170 x Ø 2 mm	12V/50W Halogen	included
PKI 8015	0° forward	30°	300 x Ø12 mm	12V/50W Halogen	included
PKI 8020	0° forward	60°	700-3000 x Ø 4-12 mm	12V/50W Halogen	included
PKI 8030	0° forward	50°	1000 x Ø 2mm	without	included



PKI 8040

Silent Drill

In most observation operations it is indispensable to have the possibility of direct viewing into the room in question. This can easily be done with our various endoscopes. However, first of all a small hole has to be drilled through the wall. As this has to be effected without noise, **PKI ELECTRONIC INTELLIGENCE** is pleased to introduce the **PKI 8040** as the one and only device for technical surveillance, special forces and law enforcement units. This drilling device is a special construction which is not available in common stores. It provides an automatic propulsion at low rotation speed, thus reducing drilling noises to a minimized level. Holes in walls of up to 60 cm thickness can be drilled with diameters of 1 mm upwards. It may be hand held or attached to the wall by a mounting bracket. After being attached to the wall, it does not have to be removed in order to exchange the drill bits, as all drill bits can be exchanged from the rear of the drill. A lever on

top of the drill assists the operator with keeping in level and a monopod, attached to the drill, maintains stability.

Specifications:

- Chuck standard 133 mm for drills from 1mm diam. upwards
- Power supply 85 - 270 VAC (50-60Hz) from mains or 12 VDC (20Amps) rechargeable battery with mains adapter/charger.
- Drilling speed low - 100 rpm at 6 VDC and high - at 140 rpm at 12 VDC
- Drives forward or reverse with switch on the side of the drill
- Motor protection special clutch system to disengage the motor at 10 Amps draw to protect the system
- Dimensions approx. 25 x 18 x 11,5 cm
- Weight approx. 8,5 kg
- Others The system is contained in two large, watertight cases



PKI 8050

Ultracam Videoscope

Often it is necessary to visually control a room before entering. There are many reasons, e.g. to check whether there are one or more persons in the room, which objects are in the room, etc. The **PKI Ultracam Videoscope** system is equipped with IR power diodes and can also be used at night when the room is totally dark without being recognized by present people. Just slide the very flat strip light of only 4 mm with integrated camera under the door and you can monitor the room due to its IR-light.

Specifications:

- Dimensions of strip light: 4.0 mm flat x 50 x 27 mm with integrated camera
- Camera: CCD, 420 TV lines
- Monitor recorder: 2,5" TFT LCD display with integrated video recorder for 4,5 hours recording time
- Power supply: Li-ion batteries, rechargeable, charger included



PKI 8055

Control Mirrors

A large variety of special control mirrors are always available in our stock. Inspection by mirror is the easiest and less expensive way. However, electronic surveillance with high resolution cameras is much more effective, especially as you can record time and date of traced objects. Therefore the use of mirrors can only be a first rough control.



PKI 8060 Telescopic Arm & Interchangeable Mirrors

PKI 8065 Short Arm Mirror with Torch

PKI 8070 Pocket Search Mirror

PKI 8075 Miniature Inspection Mirror

PKI 8080 Under Vehicle Search Mirror

PKI 8060

Computer Inspection Eye

With this unit outstanding possibilities of monitoring are possible. Without any effort you can have a look at places that are hard-to-reach. A high resolution mini camera with integrated LEDs, connected to a laptop by a flexible 88 cm long gooseneck provides access. The LEDs can be dimmed and guarantee optimal illumination. The camera is connected to the laptop by means of a USB 1.1 cable of 2 m length. The supplied software provides easy handling of camera and laptop and allows storage of photos or videos on the harddisk or to watch them immediately. The camera head is water- proof and measures 17 mm Ø.

You need a laptop equipped with at least Pentium III 200 MHz with 32 MB RAM and 40 MB free harddisk space incl. CD or DVD-ROM drive. Windows 98/ Windows ME/ Windows 2000/ Windows XP or Windows Vista must be installed. On request we can supply a suitable laptop with installed software.

**Specifications:**

- Camera resolution: 640 x 480 pixel
- Frame rate: 30 fps
- Lens: F=2,8, view angle 54°
- Focus: 6 m to infinite
- Power supply: via USB

- Weight: 850 g
- Dimensions: hard case 35 x 20 x 4,5 cm
- Comes with: software and driver CD, operating manual, hard case
- Various: frames (snapshot function) or video recording possible

PKI 8095

Periscope

For unobtrusive optical observation a periscope is absolutely essential. Thus all actions can be supervised even if the controlled person hides behind a wall, container, hedge etc. **PKI 8095** is a simple device with metal housing and 4x magnification. The solid strap ensures controlled manipulation, which ensures easy and comfortable handling.

**Specifications:**

- Dimensions: 53 cm, unfolded 70 cm
- Ocular: Ø 18 mm
- Strap: 10,5 cm
- Optic: glass (Bk7)
- Magnification: 4x
- Weight: 420 g

PKI 8110

Telescopic Inspection Camera for Day and Night Observation and Recording

Trust, but verify! This saw often becomes true. We keep many different surveillance devices in stock, but **PKI 8110** is an exceptional one. The camera with enlarged optic and IR diodes for night observation is the head section. Due to its small dimensions monitoring even behind closed doors is possible. The camera is mounted slightly angled to the telescopic rod with strap. **PKI 8110** works totally autarkic, the power supply is built-in the tube as well as the A/V transmitter. Completely wireless functioning and supervision via monitor is possible. Now you can watch the pictures of the camera by means of wireless spy glasses or a receiver with built-in recorder and display which is fixed on your arm with a Velcro strap. Now you or a second person can take action if required.

**Specifications:**

- Dimension: rod telescoped 48 cm, not telescoped 150 cm

- Weight: 350 g
- Power supply: 12 V battery
- IR-diode: 5 mW, 4 pieces, 850 nm
- Head of camera: 3 x 30 x 60 mm
- Camera: 1/4" color CCD
- Illumination: 0,1 Lux
- Resolution: 420 TV lines
- Focal distance: 3.7 mm, other

- distances on request
- Transmitter: GHz-range
- Power: 10 mW
- Receiver: 4 channels, GHz-range
- Recorder: 4,5 hours recording time
- Memory: SD card
- Display: 2,5" TFT, larger sizes on request
- Spy glasses: incl. GHz-receiver

PKI 8120

Super Probe

This multi-stage telescopic super probe has been carefully designed to provide the extra-extended length up to 6,5 m, yet retract to a manageable length of less than 2 metres. This allows the operators to retain good mobility on and in destructed areas or buildings.

The expanded length of **PKI** super probe is invaluable in large collapse areas and enables floor-by-floor searches of multistory structures. The fully extended probe functions well in either horizontal or vertical applications. **PKI** super probe is designed for extended building collapse search operations, and is an effective tool for confined space rescue operations. The extra length allows the probe to be inserted into tanks, vaults and underground spaces to visualize and communicate with the victim without having to enter the space. The super probe can give the rescue team advanced knowledge of what they are up against with minimal risk and in many cases may facilitate the decision of how to operate in a rescue or recovery mode.

Specifications:

- Dimensions:
telescopes from 1,75 m to 6,5 m
Camera 43 mm diam.
- Weight:
3,2 kg probe
2,3 kg control console
- Articulation travel: 180° total, right to left
- Total area viewed: 260°
- Control console:
hand held pistol grip
finger operated rocker switch controls
for articulation
illumination, audio gain, and push to talk
quick connect display



Video

- Camera: Color, 1/4" CCD, 5 Lux,
380 lines, auto iris
- Illumination: xenon high intensity lamp,
20 hour minimum life
- Display monitor:
5" diagonal, flat screen LCD active matrix
system status graphics - illumination intensity,
audio gain, push to talk, battery reserve,
camera head position in 15° increments
- Auxiliary output: 7 pin, accessory multi-port
- Video standard: NTSC or PAL
- Viewing distance: 6 m in total darkness
- Audio: two-way audio integrated speaker,
microphone, headphones

Battery

- type: sealed lead-acid
- Endurance: 3 hours continuous operation
- Recharge: 2 hours to 90%
- Weight: 2,7 kg
- Charger:
automatic, dual rate
AC Dual voltage switchable 120/200 VAC

Environmental

- Operating temperature: -10° to 60°C
- Storage: -25° to 60°C
- Water resistance: water resistant,
not designed for submersion

PKI 8130

Audio Video Observation Set

This set comprises a high resolution camera and a handheld receiver with monitor. This system has been developed especially for dangerous operations where it is preferable to stay at a protective distance. The camera works fully autarkic and can be mounted and connected wherever needed. The observer remains protected and controls all actions with both arms free for use in case of emergency, as the receiver/recorder with integrated display is fixed to the wrist by Velcro strap.

Specifications:

- Camera: 1/3" CMOS-Chip
- Frequency: GHz- range
- Resolution: 380 TV lines
- Colours: 628 x 582 pixels
- Min. illumination: 1 Lux
- Lens: 3,6 mm wide angle
- Power supply: Li-batteries rechargeable
- Transmitting power: 10 mW
- Microphone: built-in

- Operating time: 5 hours per rechargeable battery
- Dimensions: 66 x 24 x 24 mm
- Weight: 32 g
- Comes with charging unit
- Receiver: wireless, 4 channels at GHz range
- Recorder: MPEG-AVI max. 30 fps
- Storage: SD-card
- Recording time: max. 4,5 hours
- Power supply: Li-ion battery 2500 mAh



PKI 8140 **PKI 8145**

Audio / Video Sunglasses, Wireless Audio / Video Sunglasses

These video glasses are designed for hands-free audio / video observation. Instead of using an A/V LCD-display receiver you simply put on these glasses, enabling you to hear and watch like on TV. As looking over the spectacle frame very easy, you can either watch the video pictures or walk and observe your environment at the same time. Having your hands free for other activities is a great advantage. **PKI 8140** can be connected to any A/V output. **PKI 8145** additionally includes a miniature A/V receiver in the GHz-range enabling you to receive wireless signals with full liberty of action, which is perfect for A/V observation.

Specifications:

- Video signal: NTSC/PAL/SECAM automatic selection
- Display: 2 TFT LCD displays
- Color depth: 24 Bit
- Image input: composite AV input
- Image size: 80" screen (1 m far)
- Resolution: 640 x 480 (920 k Pixels)
- Audio: double-channel stereo
- Viewing angle: 35° (diagonal)
- Battery: 1000 mAh Lithium-ion battery
- Charging voltage: DC 5 V
- Weight: 89 g
- Dimensions: 180x 190 x 35 mm
- Power consumption: < 1,1 W
- Battery life: 3-4 hours
- PKI 8145:**
- frequency 2.4 GHz, 4 channels
- Range: 300 m in open space
- Dimensions: 43 x 28,5 x 16 mm
- Weight: 25 g
- Power supply: 6V DC


PKI 8210 **PKI 8215** **PKI 8220** **PKI 8225**

Handheld Metal Detectors

These metal detectors for handheld use are the perfect equipment for professionals, giving reliable results at metal detection on persons. Invaluable because of their high sensitivity, easy manipulation and unique hardness. All devices are different from each other, for special details please see their specification listed below.

Specifications:

PKI 8210

- Alarm: acoustic
- Power supply: 9 V battery
- Dimensions: 400 mm total length, foldable
- Special feature: circular searchcoil

PKI 8215

- Alarm: acoustic
- Power supply: 9 V battery
- Dimensions: 400 mm total length, foldable
- Special feature: baton design, foldable

PKI 8220

- Alarm: acoustic, optical, vibration
- Power supply: 9 V battery
- Dimensions: 240 mm total length, pocket-size


PKI 8225

- Alarm: acoustic, optical, vibration
- Power supply: 9 V battery
- Dimensions: 462 mm, total length

PKI 8230

Top Quality Metal Detector

The **PKI 8230** has been developed for professional use and leaves nothing to be desired. A large display shows all necessary details. Detections are indicated by acoustic signals via the integrated loudspeaker. Of course the **PKI 8230** is equipped with socket for headphones for silent search. Its sensitivity allows detection of an object of the size of a 1 Euro coin in a depth of 25 cm. Extremely easy to use due to its digital measurement processing.

- Metal detection: 3 different sounds for different metals
- Control button: switchable for volume and ground quality
- Switchover: mode, adjustment (+/-), ground inspection, entries



Specifications:

- Power supply: 2 x 9 V batteries
- Dimensions: 720 x 230 x 150 mm
- Weight: 2.8 kg
- LCD display: directional arrow, depth sensor, ground balance, battery life
- Audio output: 2.5" loudspeaker or headphones

PKI 8235

Geiger Counter

This Geiger counter measures alpha, beta and gamma rays. Continuous measurement of radioactivity with data storage is possible and ranges from low environmental radiation levels of 0.01 Sv/h up to high radiation levels of 1000 Sv/h (legal limit value 20 Sv/h per year). The keypad with 10 keys offers a variety of information possibilities. Comes with a CD-ROM containing a menu-driven Windows software for analysis. The **PKI 8235** provides dosimeter function and display of the cumulated radiation level and also measures minimal changes of the radiation levels in your environment. Countable pulse resolution is possible of 1 count per min., per 10 min, 1 h, 1 day or 7 days.

Specifications:

- Power supply: Lithium battery
- Gamma radiation: as of 0.02 MeV
- Gamma sensitivity: 95 pulses/min. at 1 Sv/h
- Operating time: 117.000 h at 20 pulses/min.
- Dimensions: 70 x 161 x 30 mm
- Weight: 153 g
- Alpha sensitivity: from 4 MeV
- Beta sensitivity: from 0.2 MeV
- Gamma sensitivity: from 0.02 MeV
- Serial interface



PKI 8240

Hand-Held Radioisotope Detector

The **PKI 8240** is a complete, portable, digital gamma spectrometer and dose rate measurement device for all members of:

- Custom and border security
- Civil defence
- Police and military
- Metal industries
- Nuclear medicine etc.

It features a digital multi-channel analyser, amplifier, high voltage power supply and memory embedded in a lightweight, easy to use device. In standard configuration the **PKI 8240** comes with an integrated ^{137}Cs source of about 500 Bq (15nCi) for calibration and stabilisation. Optionally a 3He neutron detector can be installed. Its main benefits are detection, location, measurement and identification of radionuclides, automatic calibration and continuous stabilisation, digital signal processing plus isotope ID based on template matching. All these functions are easy to operate by just two modes and a 3 button operation:

a) EASY MODE (automatic mode): dose rate, fin-der and isotope identification parameters are password protected.

b) EXPERT MODE: full functionality of all features incl. access for changing parameters/ settings.

Specifications:

- Detector type: NaI(Tl)
- Shaping: Digital Filter
- Resolution: 7% to 7.5% at 662 keV (typical)
- Throughput rate: > 100.000 cps
- Energy range: 15 kV to 3 MV
- Operating time: 10 hours with 2500 mAH NiMH rechargeable battery in dose rate mode
- Dimensions: 255 x 93 x 81 mm
- Weight: approx. 1250 g incl. batteries and NaI(Tl) detector
- Operating temperature: -15°C to + 55°C
- Accessories AC adaptor for stationary use and recharging power pack plus, RS232 and USB cables and connector box, holster, carrying case, optionally: earphones



PKI 8245

Radiation Detection System

The **PKI 8245** is an automatic system for radiation detection for all kinds of metallic scraps where unwanted radiating material might occur. **PKI 8245** is the only solution in steel industries, recycling factories and scrap trans-shipment centres for monitoring with wireless data transfer. The robust and resistant housing has to be mounted directly into the grab of a crane, thus giving best sensitivities due to the short distance between scrap and detector.

The **PKI 8245** consists of 4 components:

- the user-friendly interface to be placed in the crane's cabin
- the wireless, radio controlled and shock-resistant NaI detector in a robust housing
- the ruggedised, but easy accessible battery case
- the battery charger including a second battery to be charged in the cabin

Specifications:

- Detector 3" dia. x 2" NaI(Tl) with a shielded 137Cs source with 30nSv/h dose rate in 1 m distance (equivalent to an unshielded 35 kBq source) 60 keV to 3 MeV with sensitivity > 2300 lps/ μ Sv/h at a response time of 2 sec
- Detector housing: steel, powder painted
- Shock resistance: > 30 g



- Battery: dry lead battery, 6 V/10Ah
- Control unit display: TFT-LCD with 240x320 pixel
- Operating system: LINUX
- Communication: wireless data transfer between detector and control unit

- Dimensions: 205 x 100 x 62 mm
- Weight: 1000 g
- Power supply: 24 VDC
- Alarm levels: 3 levels, software controlled
- Alarm output: optical - screen, red light, acoustic - sounder

PKI 8250

Radiation Detection System for Hand Luggage

The **PKI 8250** is an automatic detection system for radioactive material to avoid illicit trafficking and to protect security areas like airports, public buildings, customs offices etc. The very easy to handle **PKI 8250** can be mounted directly on-top of the conveyer belt of x ray scanners for hand luggage or at any other place where personal belongings are being checked. The system works fully automatically and in case radioactive material is passing, a sound alarm plus a red display indicates the hidden material in the corresponding bag.

Specifications:

- A)** Functions automatic monitoring against hidden radioactive sources
- Integrated electronics: Multi-Channel-Analyser
- Integrated detectors: 2" x 2" dia. NaI(Tl) detector
- B)** Physical dimensions: 95 x 124 x90 mm with 30 kg weight
- Protection class: IP 57
- Operating temperature: -20°C to + 50°C
- C)** System specifications
- Energy range: 60 keV - 3 MeV
- Sensitivity: > 1200 cps/ μ Sv/h
- Response time: 2 sec
- Detection sensitivity: a shielded 137CS source with 30nSv/h dose rate in 1 m distance will be detected (this is equivalent to an unshielded 35kBq source)
- Detector housing: steel case, powder painted



- D)** Control unit Pocket PC with touch screen
- Display LINUX operating system
- 3 alarm levels, software controlled
- Keys for power On/Off and alarm:

- Reset, alarm output by LED and acoustic sound
- Dimensions: 100x210x60 mm
- Weight: 1 kg
- Power supply: 240 VAC

PKI 8255

Gas Warning Instruments

The **PKI 8255** family comes in three versions for the detection of either CO, H₂S and O₂. All instruments are equipped with a well arranged display providing the most important information. During the development the main focus was laid on a long operating time without need to exchange sensors or battery. Just two buttons allow handling of the unit. Each instrument can be configured via an infrared interface. **PKI 8255** allows adjustment of several display modes, different alarm limits, measuring units (mg/m³) or a life signal. As a special accessory a helmet holder is available allowing fixation of the device not only at the chest pocket or belt, but also at the helmet. The sensors, installed in the instruments, guarantee a lowest drift, cross-sensitivity and longest service life for operation during a two-years period without calibration. After a 2-year operating period (1 year in case of O₂ detection) the user may need to renew the instrument or to receive a reconditioned unit upon return of the used one.



This low cost method then allows an operating period of another 2 years.

Specifications:

- Three versions for CO, H₂S and O₂
- CO measuring range 400 ppm
- H₂S measuring range 100 ppm
- O₂ measuring range 25 % by vol.
- Operating conditions:
 - 20 to 50°C for short periods
 - 40 to 60° C (limited display function)

700 to 1300 hPa 10 to 95% relative humidity for short periods 5 to 99% relative humidity

- Storage conditions:
 - 0 to 30°C – 30 to 80% relative humidity
- Protection class IP 54
- Operating period:
 - 2 years for CO and H₂S - 1 year for O₂
- Dimensions: 54 x 84 x 32 mm
- Weight: 105 g
- Loudness of alarm signal:
 - > 90 dB A (typical at 30 cm distance)

PKI 8260

Drug Test Kit

It is our ambition to provide you with high-quality products and top service. Germany is well known for its accuracy. We stick to this cultural background and assure to deliver only products of highest quality and absolute pureness, which meet with all requirements as to analysis results and substance identification. The **PKI 8260** delivers detailed, exact and absolutely reliable results of consumed drugs. This price worthy set is an immunological test for identification of consumed drugs in the urine, as well as in other suspicious compact material and is very easy to apply. The **PKI 8260** offers full mobility and security for the user, as no further items or dangerous chemical substances are necessary. A result with up to 99 % reliability can be obtained with this high-tech device within 1-5 minutes. Also available is an additional drug test panel, produced individually according to our customer's requirements. Every urinary test is based on the chemical reaction between the substance and the relevant test strips, which have a shelf life of up to 18 months before use.

Test properties of the stripes do not alter under normal storage conditions at moderate temperatures and comply with international standards with test results that are comparable to GC/MS. Minimum concentrations are between 10 ng/ml for Buprenorphin and 1000 ng/ml for Amphetamine, Tricyclic Antidepressants and Methamphetamines.

Specifications:

Identified substances:

- Amphetamines (AMP)
- Barbiturates (BAR)
- Benzodiazepines (BZO)
- Buprenorphines (BUP)
- Cocaine (COC)
- Methadone (MTD)
- Methamphetamine (mAMP/MET)
- Methylenedioxymethamphetamine (MDMA)
- Morphines/Opiates (MOP/OPI)
- Phencyclidine (PCP)
- Tetrahydrocannabinol (THC)
- Tricyclic Antidepressants (TCA)



PKI 8265

Drug Detector

This easy to use and absolutely reliable drug detector allows identification of 9 different drugs within 3-5 minutes. Simply fill a few urine drops into a standard pipette and the **PKI 8265** will show you the result within a few minutes without further training or preparation. The result remains visible up to 6 hours. You will find this device in every police station in Germany.

- Cocaine
- Barbiturates
- Benzodiazepines
- Methamphetamine
- Morphine
- Phencyclidine
- THC (marijuana)
- Tricyclic Antidepressants

- Shelf life: 2 years, 8 hours after having removed protective foil



Specifications:

The following drugs can be detected:

- Amphetamines

PKI 8270**IED/RCIED Detector**

This very sensitive detector traces hidden analogue and digital signals which are frequently used for ignition of IED/RCIED bombs. Up to a distance of 120 cm the operator is able to handle the **PKI 8270** which offers an increased level of safety. The **PKI 8270** has been designed to detect waves of mechanical count-down timers and cell phones etc. in improvised explosive devices such as mechanical timing devices, wrist watches etc. It is equipped with a crystal detection sensor for detecting conducted circuits commonly found in IEDs and radio transmitted wireless devices. This is possible even through solid materials such as walls, bricks, glass, plastic, concrete, wood and similar. An integrated display at the detection head shows the results found during the operation. **PKI 8270** is an essential device for police, military and special EOD/IEDD forces for application at airports, check points, government buildings, police and military zones, oil and chemical zones, religious centres.

Specifications:

- Process control unit
- Size: 15 x 5 x 20 cm
- Material: anodized aluminium
- Operating temperature: -5°C to +70°C
- Humidity: RH 10 – 90%
- Working capacity: 24 hours (12 VDC)
- Sensor: resistant against ambient noise, able to measure analogue and digital signal

- Detection head: telescopic, high-sensitive, waterproof, with crystal sensor integrated display containing two display levels.
- Stereo headphone: high-sensitive
- Frequency range: 5-30.000 Hz
- Sensitivity: 107 dB

**PKI 8275****Handheld Detector for Explosives, Chemical Warfare Agents, Toxic Chemicals, Drugs**

This device is designed for daily use. In case of unknown odours, suspicious parcels, drugs etc., **PKI 8275** is the lightest and most universal detector on the market and can easily be handled by security staff. Reliable detection is its key task. **PKI 8275** can analyze suspicious particles as well as traces of gas and enables the user to take action accordingly.

Specifications:

- Weight: 3,2 kg
- Start-up time: 10 minutes
- Detection time: approx. 20 seconds
- Technology: Ion Mobility Spectrometry IMS
- Explosives detected: RDX, PETN, TNT; Semtex, TATP, NG, Ammoniumnitrate and others
- Narcotics detected: Cocaine, Heroin, THC, Methamphetamine and others
- Chemical warfare agents: Tabun, Sarin, Soman, Cyclosarin, Agent VX, nitrogeney perite 3 and others
- Toxic chemicals: Hydrogenzyamide (HDN), Phosgene, SO₂, NH₃ and others
- Display: 3,5" TFT-colour display
- Dimensions: 36 x 11 x 13 cm
- Power supply: battery for 4 hours
- Operating temperature: 0°C – 45°C
- Relative humidity: less than 95%

**PKI 8280****Handheld Detector for Blood, Blister, Choking and Nerve Agent**

This very reliable handheld device enables you to detect nerve and blister warfare agents as well as liquid agent contamination. It is used by civil security personnel and emergency forces. The **PKI 8280** detects contamination of personnel, vehicles, munitions and stores, in order to avoid cross-contamination and to stop unnecessary decontamination. Furthermore **PKI 8280** confirms that danger is over, i.e. decontamination was effective and area is clean.

Specifications:

- Dimension: 35 x 8 x 14,5 cm
- Weight: 1,9 kg
- Power supply: rechargeable battery
- Detects: blood, blister, choking and nerve agents as well as selected toxic industrial chemicals



PKI 8285

Handheld Detector for Chemical Warfare Agents, Mace, Pepper Spray

In case of threats due to chemical or pepper spray attacks, the **PKI 8285** offers profound possibilities of detection and supervising in any case. According to the selected configuration, the device works as a detector which shows up detection by an alarm and resets automatically, or as a continuously verifying surveillance system. The **PKI 8285** is the first device of this kind for detection of chemical warfare agents, pepper spray and mace that is designed for military and civil emergency cases.

Specifications:

- Dimensions: 10 x 9 x 28 cm
- Weight: 3 kg
- Detects: Tabun (GA), Sarin (GB), Soman (SD), VX, S-Lost (HD), Lewisite (L), pepper spray, Mace
- Power supply: 6 rechargeable batteries type C
- Operating temperature: -30° to +52°C
- Storage temperature: -62°C to +71°C
- Operator Service: 5 minutes per 24 hours of operation
- Alarm: visual and acoustic



PKI 8290

Multi-Sensor Handheld Detector for Gamma Radiation, Chemical Warfare Agents, Toxic Chemicals

The **PKI 8290** is the only portable device that offers quick detection, identification and quantification of toxic chemicals and chemical warfare agents. This device is used by military, first responder teams, police and personnel of forwarding companies at harbours and borders and in areas of critical infrastructure worldwide. **PKI 8290** is equipped with modern software combined with multi-sensor-technology in order to minimize false alarm, to improve accuracy and to guarantee reliable results.

Specifications:

- Technology:
 - Ion-Mobility-Spectrometry (IMS)
 - Photo-ionisation detection (PID)
 - Taguchi Gas sensors (TGS)
- Detection and identification of the following chemical warfare agents:
 - nerve - and blister warfare agents,
 - blood and choking warfare agents
- Detection and identification of toxic industrial chemicals:

- dangerous substances classified as high and medium from list ITF-25
- Radiation detection: Gamma
- Alarms: acoustic, visual, and vibration
- Weight: 3,4 kg
- Dimensions: 43,2 x 14 x 12,7 cm
- Power supply: 18 V DC set of alkaline batteries
- Interface: USB

- GPS: integrated GPS for rapid localisation of incident
- Operating temperature: -10°C to 50°C
- Display: clearly visible LCD-display with built-in light sensor for automatic adjustment of backlight according to lighting conditions
- Radio communication: RF-modem



PKI 8295

Portable Analysis System for Unknown Chemicals

This rugged and portable **PKI 8295** analysis system is based on FT-IR (Fourier Transform-Infrared) Spectroscopy. Very easy to handle, it delivers quick and precise results. This unit is a very specific instrument which measures the interaction of chemical samples under infrared light. Every chemical substance has an unique finger print which will be compared with an integrated data base in order to allow identification in less than 20 seconds.

Specifications:

- Technology:
 - Fourier-Transform-IR-Spectroscopy
- Weight: 10,43 kg

- Dimension: 18 x 39 x 36 cm
- Data base: MVW nerve and blister warfare agents, Toxic chemicals, White powder, Drugs and pre-stage of illegal drugs, Explosives and propellant
- Operating temperature: -7° to 50°C
- Relative Humidity: 0-80%
- User surface: Software is suitable for quick sampling analysis.
- Power supply: 100-240 V AC, max. 2A, 50-60Hz
- Integrated video microscopy system: 100x magnification



PKI 8300

Document Scanner

The **PKI 8300** is designed for detection and identification of more than 40 different explosives or traces of narcotic substances in a quick 8 second analysis. Samples can be taken by simply swiping passports and other travelling documents over the sample disc. In case of detection the substances are identified and indicated on the display. If explosives are detected it means that there are smallest quantities of a particular explosive substance on the sampled document. This shows possible presence of explosives or indicates that the person might have been in contact with a bomb perhaps when preparing it.

Specifications:

- Technology: Ion Mobility Spectrometry (IMS)
- Detected explosives: RDX, PETN, TNT, Semtex,



NG, Nitrate, HMX, TATP
and others

- Detected narcotics: Cocaine, Heroin THC (Cannabis), Methamphetamine, PCP, LSP, Ecstasy and others
- Time of analysis: 6 to 8 seconds
- Start-up time: less than 20 minutes
- Dimension: 40 x 34 x 32 cm
- Weight: 24 kg
- Operating temperature: 0°C to 40°C
- Relative humidity: less than 95%

PKI 8305

Handheld Detector for Chemical Warfare Agents and Toxic Chemicals

The **PKI 8305** is lightweight, reliable and small enough to be carried on you very discretely as personal detector. Fastened to the belt the user can concentrate on his main business. This device takes advantage of the modern technique of the Ion Mobility Spectrometry for detection and identification of low concentrations of chemical warfare agents or toxic chemicals.

PKI 8305 is quick and easy to handle due to its top-quality menu driven display and a functional keypad. Due to a separate testing mode the rate of false alarm could be reduced. Please note the outstanding battery life of up to 100 hours.

Specifications:

- Dimensions: 10,6 x 18 x 4,8 cm
- Weight: 650 g
- Power supply: 4 x batteries type AA
- Operating temperature: -32°C to +50°C
- Relative humidity: 8-100%
- Data interface: RS 232
- Various: small, light weight unit for continuous and real-time detection of chemical warfare agents and toxic chemicals.

**PKI 8310**

Non-Contact, Walk-Through Portal for Detection of Explosives or Narcotics

Trace amounts of more than 40 different explosives and drugs can be detected and identified within only some seconds. By means of gentle puffs of air particles trapped on hair, body, clothes and shoes are dislodged. Aided by gravity and a downward airflow these particles are then directed into the **PKI 8310** for analysis. Operation is done by an easy-to-handle color touch screen display. In case of an alarm the color printer will automatically print the digital photos taken during the screening process. Control of people is done full automatically head-to-toe. Up to 6 people can be controlled per minute. With this high throughput, **PKI 8310** is ideal for applications where large numbers of people need to be screened for threats quickly, such as at airports, customs, military bases, correctional facilities and high profile facilities.

Specifications:

- Technology: Ion Mobility Spectrometry (IMS)
- Explosives detected: RDX, PETN, TNT, Semtex, NG and others
- Narcotics detected: Cocaine, Heroin, PCP, THC, Methamphetamine, Ecstasy and others
- Dimension: 188 x 140 x 229 cm
- Weight: 860 kg
- Power supply: 220 V AC 50-60 Hz
- Comes with digital camera and printer



PKI 8500 to PKI 8995

Various Pyrotechnical Products

For more than 40 years, we **PKI ELECTRONIC INTELLIGENCE GmbH** have been working with prominent government authorities all over the world. Due to many important enquiries we have decided to complete our already extensive range of products by including pyrotechnics. To back this up, we are proud of our very special relationship with the world's leading pyrotechnic manufacturers. Please do not hesitate to contact us. We will answer promptly. We are sure that our new programme will satisfy your requirements.

The complete range of available pyrotechnics cannot be shown on just this one page, but we would like to give you a short summary. Our range of pyrotechnic products includes:

- Signal flares of various colours (red, green, yellow and white), different calibres and with or without parachute.
- Coloured smokes and screening cartridges
- Alarm and training devices like thunderflashes, alarm flares and gun fire simulation units
- Personal protective devices like dazzle and shock grenades, CN/CS or pepper spray canisters



- Distress items like hand flare or hand smoke devices in different colours and with various burning times.

we shall send you full technical information on each and every item. Please ask for our special catalogue.

Whatever you are requiring in the field of pyrotechnics, please let us have your enquiry and

PKI 9000

Portable Walk-Through Metal Detector

The **PKI 9000** Portable Walk-Through Metal Detector is the enhanced version of the former foldable detector. It is designed to detect dangerous weapons such as knives and pistols, even if these are concealed inside shoes or any other part of clothing. The unit is completely manufactured out of weather-resistant aluminium with highly reliable, battery-operated electronic circuitry. This provides a professional operation of 15-20 hours per battery load in each kind of in- or outdoor use independent of mains power. From this the field of application is rather unlimited. **PKI 9000** can easily be installed in front of any entry like prisons, border check-points, customs checks at sea- and airports, sport-arenas, fair-grounds and other places of events where persons have to be examined for dangerous goods.

Specifications:

- Width: 850 mm
 - Height: 2000 mm
 - Depth: 550 mm
 - Weight: 3.5 kg
 - Battery Life: 15 - 20 hrs
- Weather-resistant construction
 - Rechargeable battery
 - Lightweight and portable
 - Highly sensitive



PKI 9005

Sprayer for Decontamination

This turbo sprayer is designed for interior decontamination / disinfection of tents, containers or buildings. Wherever a prompt and quick treatment against bacteria, fungi or insects is necessary, the use of our **PKI 9005** is indispensable. Its aerosol generator with high efficient turbo system atomizes up to 38 l disinfection liquid per hour.

Specifications:

- Dimension: 870 x 180 x 270 mm
- Weight: 6.9 kg
- Content of tank: 6 l



- Aerosol size: 20-400 µm
- Spray distance: max. 20 m
- Power supply: 230 V / 50 Hz / 1.0 kW
- Transport case: 600 x 240 x 400 m, impact-proof grey plastic

PKI 9010

Hot Vapor Producer

This high-performance thermal vapor device is designed for interior removal of decontamination agents (BDS 2000, Wofasteril SC250). Besides its plastic diaphragms no mechanical moving parts are built in, which allows long operation time without need for spares. All you need are standard batteries to start up the device.

Specifications:

- Dimensions: 133 x 29 x 33 cm
- Weight: 9,3 kg empty, 17 kg full
- Power of combustion chamber: 18,7 kW
- Patrol consumption: 2 l/h



- Patrol tank: 1,4 l
- Overpressure in patrol tank: 0,12 bar
- Content of agent tank: 6,5 l
- Discharge pressure: 0,4 bar

PKI 9015

Decontamination Container

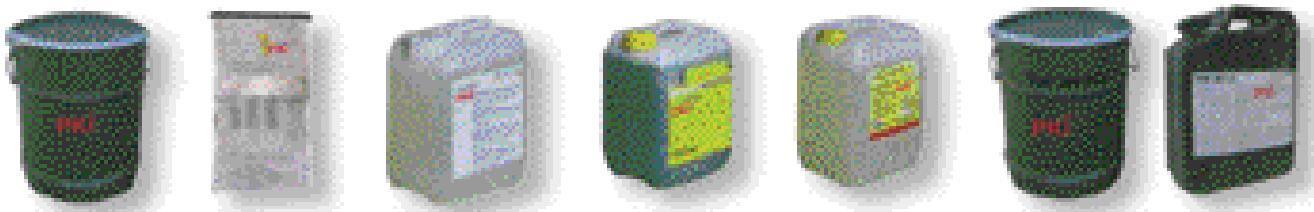
This universal environmental protection system has been designed for fire fighting brigades wearing heavy C-protection suits at the place of an accident. It allows to take all necessary actions to pass from high contaminated area to safe area. Contaminated dirty water and other materials can be collected for further treatment or disposal. This autarkic system provides immediate decontamination of highly toxic hazardous substances.

Specifications:

- Dimensions of container: 5,50 x 2,45 x 2,30 m
- Weight: 8 tons
- Decontamination of persons: 20 per hour
- Decontamination of chemical protective clothing: 8 per hour
- Decontamination of vehicles: 8 per hour
- Operation pressure: 30-140 bar
- Volume output: 300 - 900 l / hour
- Operating temperature: 30-150°C
- Heating power: 70 kW
- Power consumption: 16 kW, 230/400 V / 50 Hz

**PKI 9020**

Decontamination Agents



The following decontamination agents have been designed according to specific requirements of fire brigades, civil defence, relief organisations and military bases.

Decontamination agent **RDS 2000** is used against nuclear pollution.

BDS 2000 is effective in biological contaminated indoor areas.

GDS 2000 is employed against chemical warfare agents.

DI 60 is used for biological and chemical decontamination of stretch of roads.

RM 35 and **RM 735** are neutral disinfection

agents against bacteria, fungi and viruses.

RM 21 is developed for NBC-decontaminated people.

RM 54 ASF is used for decontamination of A-contaminated radioactive fallout.

Further decontamination agents will be offered on request.

PKI 9025

Shower Tent for Decontamination of Persons

This mobile inflatable shower tent is designed for decontamination of persons directly on-site. The double walled tent construction offers privacy and protection from cold temperatures outside. 2 Persons can take a shower at the same time. Outer tent and shower cubicle have a separate entry and exit. The tube frame is protected against over pressure by a safety valve. Installation is possible within 30 seconds.

Specifications:

- Weight: 45 kg
- Dimensions: 2 x 2 x 2,5 m
- Packed: 0,6 x 0,55 x 0,45 m
- Water consumption: 8 l/min.
- Decontamination capacity: 50 persons per hour
- Various: If higher capacities are required we can deliver shower tents for up to 240 people/hour.



PKI 9030

Hazardous Substance Combat Vehicle

Hazardous substances such as acids or chemicals which are set free at explosions or accidents have to be disposed of by trained personnel and suitable tools. The **PKI 9030** includes e.g. special diaphragm pumps of stainless steel, measuring devices, plastic containers, gas and acid protective clothing, light tower etc. These special devices are included in a fire truck and are part of standard equipment. Kindly let us have your specific enquiry, we will quote according to your requirements.

Specifications:

- On request



PKI 9035

Oil barrier

Unfortunately sometimes it happens that oil runs into a river, lake or ocean due to accidents or attacks. Our oil barriers have been designed to dam these oil spills. The barriers are floatable, seawater resistant and are made of aluminium and fibreglass. They follow the motion of the waves and can be enlarged individually by quick coupling. This prevents the oil spill from expanding and the oil can easily be pumped off.

Specifications:

- Length: 2,46 m per unit
- Weight: 4 kg/m
- Colour: red and orange
- Diameter: 20 cm
- Various: Correct positioning can easily be achieved by belts and loops.



PKI 9040

Lifting Bag

These lifting bags are available in different sizes from 11 to 67 ton lifting weight. The **PKI 9040** is designed for lifting extremely heavy devices, for rescue of buried people or enlargement of wall holes where other presses fail due to lack of space. A steel reinforced plastic bag is filled with 8 bar air pressure, which extends the bag and lifts up the device. Of course, more than 1 lifting bag can be used simultaneously.

Specifications:

- Lifting weight: 11 to 67 tons
- Pressure: up to 8 bar
- Weight: 4,3 - 33,3 kg according to size

**PKI 9045**

Life Raft

When **PKI 9045** is launched into the water the hose cells are automatically filled with air within only 60 seconds. Once inflated, the life raft can accommodate up to 10 people. Life jackets, distress signs, first aid kits, food - all these things are stored inside the life raft. The upper tent can be closed and is waterproof, so that no water can come inside. This life raft is the perfect equipment to save lives!

Specifications:

- Weight: approx. 52 kg
- Dimensions (folded): 181 x 158 x 87 cm

**PKI 9055**

Drinking Water Container

There are not only terror attacks, but also earthquakes, wars, droughts etc. where drinking water is needed. In all these cases the most important thing is to provide the people with water. The **PKI 9055** drinking water container is the perfect solution. The container with built-in water tank can be used anywhere and can easily be transported by plane, ship, truck or train. Furthermore it is comfortably stackable and is approved for civil and military operation.

Specifications:

- Dimensions: 20" container or according to customer's request

- Approval: BAM, US DOT, DOT (UK) TC, SELO
- Power pack: chlorination, UV, double-pressure pump and heating/cooling systems

- Material: stainless steel
- Capacity: 1000 - 18.000 litre, according to size
- Operating temperature: -45° to +80°C

**PKI 9060**

Foldable Drinking Water Tank

With the **PKI 9060** drinking water tank the supply with drinking water is not a problem any more, even far away from sources. It is indispensable, especially in cases of emergency. When empty this foldable drinking water tank can easily be transported.

Specifications:

- Dimension folded: 0,6 x 0,6 x 0,8 m
- Weight: 11 kg

- Dimension unfolded: 2,9 x 2,43 x 0,8 m
- Capacity: 3000 litre

- Material: top-quality
- Outlet: 3 way manifold



PKI 9065

Anti-Riot Water Cannon Vehicle

Deployment of water cannon vehicles to break up non-permitted demonstrations or against radicals is still essential for the police. At least this measure avoids that people are injured or even killed during those conflicts. The windows as well as front and back lights of the **PKI** water cannon vehicle are protected with steel bars against stone's throw. Door grips are designed in a way that there is no possibility to cling to them. By means of a covered loudspeaker of 75W power clear announcement can be made. The driver's cabin offers space for 6 persons. Windows are made of bullet-proof glass. The tank has a capacity of 9.000 litres and the water gun shoots over a distance of max. 65 m 15 bar pressure.



Specifications:

- Chassis: Mercedes Benz or other manufacturer
- Total weight: approx.20 tons
- Colour: green or others
- Pump capacity: 2.200 litres per minute
- Water gun: 2 units, 360° horizontal pan, 90° vertical pan
- Various: we can offer different sizes
All control devices for pressure, temperature, power are installed.

PKI 9070

Rescue Bridge

This portable rescue bridge can be erected over ditches or small waters within short time. The polyester construction in combination with wooden reinforcement provides a weight-bearing capacity of 200 kg/m². The **PKI 9070** rescue bridge is the perfect equipment to save people in dangerous situations. Only 4 people are necessary to transport this inflatable bridge to the next emergency case.

Specifications:

- Material: PVC, UV-resistant
- Operating temperature: -30°C to +80°C
- Pressure: 1,2 ar
- Compression: 9 l capacity
- End pieces: out of butyl rubber
- Weight-bearing capacity: 200 kg/m²



PKI 9075

Non Magnetic Tool Kit 36 Pieces

- 1 Tweezers
- 1 Double end scriber
- 2 Knives
- 1 Scissors
- 1 Hacksaw
- 1 Blade for hacksaw
- 1 Wire brush
- 5 Screwdrivers flat
- 3 Screwdrivers offset
- 4 Screwdrivers crosspoint
- 7 Pliers (cutting, flat nose, round nose)
- 2 Adjustable wrench
- 1 Adjustable pipe wrench
- 1 Hammer ball point
- 1 Hammer sledge German type
- 2 Chisel flat
- 2 Bars lever
- 1 Transportation case



PKI 9080**Non-Magnetic Tool Kit 84 pieces**

A comprehensive non-magnetic tool kit especially for use at EOD operations. All tools are manufactured in beryllium copper alloy and are hardened for durability. The kit comes in two foam lined protective carrying bags, also fully certified as non-magnetic. Replacement tools can be supplied separately.

**Specifications:**

Non-magnetic tool kit 84 pieces comprises:

Tweezers, 200 mm O/A

Knife, 80 mm blade, 210 mm O/A

Hacksaw, blade length 300 mm

Scraper, 25 mm blade width, stiff, 250 mm O/A

Screwdriver, flat, 2mm blade width, 150 mm O/A

Screwdriver, flat, 6mm blade width, 240 mm O/A

Screwdriver, flat, 9 mm blade width, 380 mm O/A

Screwdriver flat offset, 7mm blade width, 120 mm O/A

Screwdriver, crosspoint, Philips No. 1, 150 mm O/A

Screwdriver, crosspoint, Philips No. 3, 260 mm O/A

Pliers, cutters/grips combination, 205 mm O/A

Pliers, cutters/grips, long point nose, 165 mm O/A

Cutters, side, 120 mm O/A

Pliers, flat jaw, point nose, 130 mm O/A

Scanner, adjustable, 28 mm max. 255 mm O/A

Spanners, hexagonal, 10 pc imperial set, size

across flats: 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4,

5/16, 3/8, 1/2 inch

Hammer, ball pein, 680 g, 355 mm O/A

Chisel, flat, 15 mm cutting edge, 165 mm O/A

Bar, lever, spike & cranked chisel ends, 445 mm O/A bar, lever, cranked fork & wedge ends, 260 mm O/A

1/2 inch square drive socket set, 29 pcs consisting of: ratchet, sliding T bar, 100 mm extension, 200mm extension, ball join, AF sockets, sizes:

10, 11, 12, 13, 14, 15, 17, 19, 22, 24, 27, 30 1 mm imperial sockets sizes: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1,1-1/16, 1-1/8

probe, straight and right angle, 150 mm O/A

scissors, 150 mm O/A

blade, 300 mm to fit hacksaw

wire brush, 305 mm O/A

screwdriver, flat, 4 mm blade width, 170 mm O/A

screwdriver, flat, 8 mm blade width, 295 mm O/A

screwdriver, flat, offset, 6 mm blade width, 75 mm O/A

screwdriver, flat, offset, 10 mm blade width 195 mm O/A

screwdriver, crosspoint, Philips No. 2, 225 mm O/A

screwdriver, crosspoint, Philips No. 3, 260 mm O/A

pliers, flat jaw, flat nose, 135 mm O/A

cutters, side, 150 mm O/A

Pliers, flat jaw, flat nose., 135 mm , O/A

spanner, adjustable, 19 mm max. 160 mm O/A

spanners, hexagonal, 10 pc metric set, size across flats:

1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 10 mm

wrench, pipe, adjustable, 38 mm max. 355mm O/A

hammer, club, 910 g, 255 mm O/A

chisel, flat, 22 mm cutting edge, 230 mm O/A

PKI 9095**Water Jet Disrupter**

This newly designed disrupter works with water jet instead of power cartridges. It is a light recoilless equipment used for disruption of Improvised Explosive Devices with a high probability of avoiding detonation or explosion. The device is especially designed for EOD and IED persons. It also can be utilized to perform different EOD work to break items with different kind of projectiles. The disrupter comprises a specially designed liquid container. A high pressure nozzle is available to generate a very high velocity jet of cool liquid in case of handling with high duty IED. Various changes can be made according to the requirements of the user. The provided laser light allows to accurate aiming. The tripod with ratchet wheel stop mechanism guarantees that the disrupter will not move backwards or tumble when shooting. The specially designed legs can be adjusted to correct working position and angle. Five different bullets are available: water, spading, organic glass, punching and distance bullet.

**Specifications:**

Bullet type:	water	spading	organic glass	punching	distance
With water in					
Barrel or not	yes	yes	yes	no	no
Effectual shooting					
Distance/meter	0-1,5	0-1	0-2,5	0-1	0-10

PKI 9100

Disguised Metal Detector

Either for participants at specific meetings or during general check-up tasks at entrances, where people have to be examined, without their knowledge, the **PKI 9100** Disguised Metal Detector is an especially designed equipment for detection of both metallic and non-metallic objects. Because of its hand-free application the operator - at one and the same time - can examine a person physically and investigate, automatically and electronically, for the presence of metallic objects. Its silent vibrating alarm allows fully covert operation and is able to discriminate between large and small metal objects. The **PKI 9100** comes in one universal size, which fits both the left and right forearm, fixed by a velcrostrip, and can be hidden under every normal clothing like shirt or jacket. It is

simple to use as the user just approaches his arm inconspicuously towards the suspect person. If this person carries a weapon or any other metallic object, the vibrator will give its silent alarm.

Specifications:

- Weight approx. 200 g
- Operating time approx. 80 hours with standard 9 V battery
- Ideal for body searches
- Combines physical and electronic investigations
- Silent vibrating alarm
- Standard 9 V battery
- Fully automatic
- 100 % finger dexterity



PKI 9105

Hydraulic Jamb Spreader

In several cases, doors have to be opened by force in a silent and quick manner because criminal acts like drug dealing, hostages or terrorism have to be intercepted and rooms have to be entered to arrest the expected perpetrators. The **PKI 9105** is designed for Police and Military Special Assault Teams and other government departments especially trained for such tasks. This device is using a quiet hydraulic pressure technique to spread door jambs and release latch bolts. The non-slip clutch allows the telescopic bar to hand-fit into the door opening. The operator then uses the hand pump, which quickly extends the piston and exerts 3 tons of force - enough power to open or break most types of single doors. The system virtually works noiseless, is fast and instantly adjustable.

Specifications:

- Max. Power: 3 tons
- Weight: approx. 7.7 kg
- Carrying bag black: CORDURA with dual handles plus shoulder strap
- Size of carrying bag: approx. 66 x 116 cm
- Colour: tactical black finish



PKI 9110

Series of Door Rams

In combination with our **PKI 9105** Hydraulic Jamb Spreader, the **PKI 9110** as a series of door rams with different sizes and weights offers a perfect combination with our full range of tools to open doors by force. Every police-, military-, anti-drug and special operational task force team should be equipped with this product as it is the one and only device that is capable to give immediate entrance into rooms where scenes of crime are suspected. It really could not be easier to use and no setting up time is required. Originally the **PKI 9110** have been developed for US Police Swat teams, but now are more and more used by police and Military Special Forces worldwide. Simply get in position in front of the door, swing the ram back to gain momentum and swing it forward to smash the toughest door. Three different versions are available - each one being electrically non-conductive, shock-absorbent, compact and this at a very reasonable price.



Specifications:

Different versions are available but each department should have the full range of rams in order to be prepared for every different application. Therefore we offer the complete range as a set consisting of:

PKI 9110/A - This ram is designed for one-man operation with a length of 76 cm and a weight of 16 kg. It only requires 50 to 60 cm of backswing, making it ideal for use in close quarters.

PKI 9110/B - This ram is a heavier version, 25 cm longer and 7 kg heavier than the above ram and

can be used by either one or two persons simultaneously.

PKI 9110/C - This ram is the smallest and most cost-effective door-ram yet designed. It is ideal for very confined spaces. It is made of specially modified steel shot and is only 41 cm in length, but has the same weight (16 kg) as the **PKI 9110/A**, and provides the same kinetic energy.

We recommend the complete set of **PKI 9110/A-C**, however, each ram of course can be ordered separately as well.

PKI 9115**Underwater Metal Detector**

The **PKI 9115** is a versatile under water detection system being consequently the further development of our former land & underwater metal detectors. Improved detection performance and a wide auto-adaptation to interfering metal components characterise the new **PKI 9115**. The full unit, and especially the electronic design, is based on our thousandfold proven technology being in service with many government departments worldwide. **PKI 9115** is tested for water pressure up to 10 bars and is very comfortable to handle for the diver. It is operated by only one adjuster. **PKI 9115** can detect minimum amount of mine shallows being buried - such as A/P 72 A - at operational depth. Larger undefined objects can be located up to a depth of 1.5 m. For even larger depths, a further sensor is available.

PKI 9115 applies a dynamic mode pulse induction concept. Short bipolar magnetic pulses generate detection signals from ferrous or non-ferrous metals and alloys. Target acquisition is indicated as visual or audible alarm. A silent mode (visual LED only) improves operator's safety on "smart" munitions with acoustic sensors. When used with a larger search head of 80 x 80 cm (optionally available), the detection range is significantly extended and larger objects - such as 105 mm shells, bombs, torpedoes etc. - may be detected at 2 m depth or more. The detector operates on a dynamic search mode, which compensates interference from metal diving equipment. If required, the detector can be operated in a "silent mode" without headset. In such case the red LED will indicate target



acquisition. To operate the **PKI 9115** switch the rotary sensitivity calibrator into position I (low), II or III (high). Sensitivity can be changed stepless within ranges I-III by an internal adjuster inside the electronics cylinder.

Optional accessories - available on request:

- probe 32 x 370 mm
- oval search head 300 x 170 mm
- foldable large loop 800 x 800 mm
- extension rod 36 x 600 mm

Specifications:

- Battery: 1 x dry battery 9 V U9VL or U 9 VL (Lithium)

- Operation time: approx. 3 hours with dry battery, approx. 10 hours with Lithium cell

- Temperature range: approx. -20 to +60°C

- Pressure test: 10 bar (approx. 90 m)

- Dimensions, approx.

- oval search head - 300 x 170 mm

- square search head - 260 x 260 mm

- electronics cylinder - 40 x 535 mm

- large loop - 800 x 800 mm

- extension rod (PVC) - 36 x 600 mm

- extension rod (GRP) - 25 x 600 mm

- short version - 800 mm

- long version - 1400 mm

- max. length - 2000 mm

PKI 9120**Mine Detector**

The **PKI 9120** mine detector is designed for use on all grounds even on compact soils such as volcanic soil or laterit, which makes it suitable for use everywhere in the world. In many regions mine detectors can be influenced by a mixture of soils such as laterit, magnetic rock and by soil conductivity due to monsoon rain. The wide band compensation of this **PKI** mine detector meets such environmental working conditions and also rejects interference from saltwater due to its pulse induction operating principle. Components subject to wear and tear can easily be exchanged without further calibration work. This eases fault definition and significantly improves equipment availability in the field.

Rugged design and constructional features, coupled with various accessories make the **PKI** mine detector a very versatile equipment, which allows use in lying, kneeling or upright position.

Specifications:

- Power supply: 8 alkaline batteries 1,5 V type LR 14 (operating time 40 h) or 8 rech. batteries NiMH 1,2 V - 3,5 Ah (operating time 10 h) or battery pack 9,6 V - 3,8 Ah (operating time 10 h)

**Temperature range:**

- from -21°C to + 55°C approx.

Dimensions:

- circular search head 230 mm diam.

- optional search head 450 mm diam.

- Electronic cylinder: 35 x 460 mm

- Extension rod: 25 x 600 mm

- Battery container: 30 x 360 mm

- Lengths and weights:

- Short version: approx. 1000 mm and 2,1 kg

- Long version: approx. 1700 mm and 2,4 kg

- Complete in satchel: approx. 3,8 kg

- Complete in carrying case: approx. 8,5 kg

PKI 9125

Non Magnetic Probe

This non-magnetic device is designed for manual location of mines, buried at depths of up to 250 mm. The mine probe is lightweight, robust and easy to assemble.

It consists of three main components (handle, extension tube, probe) and can be assembled in two versions for kneeling and upright position.



PKI 9130

Multi-Plier Gerber

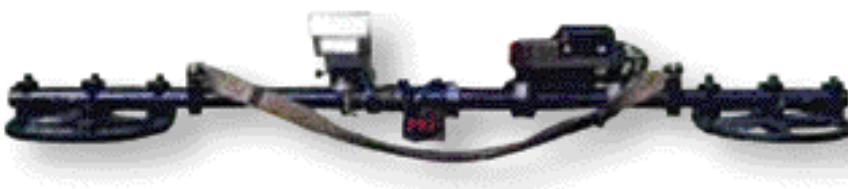
Made from 410 grade stainless steel with non-reflective black oxide coating, the **PKI** multi-plier gerber tool incorporates the following tools: explosive punch, blasting cap crimper, wire cutter, needle nose pliers, 3" drop point blade, 3" serrated sheepfoot blade, saw blade, cross point screwdriver, large, medium and small flat blade screwdrivers, file, bottle opener and lanyard. Comes in a solid nylon sheath.



PKI 9135

Active Metal Detection System

This newly developed active metal detection system is primarily used for the detection of large metal objects such as underground deposits, barrels and bombs. The special features of the **PKI 9135** Active Metal Detection System consists in its selectivity regarding small metal objects buried close to the surface and - in comparison to active metal detectors - its excellent detection range on large objects (transmitter effect). For conventional operations, there is a galvanometer and an audio alarm integrated into the electronic box. Furthermore the system has an analogue data output and can therefore also be linked to an external data logger to allow data recording.



Specifications:

- Power supply: rechargeable NiMH battery 12V, 2 Ah
- Operating time: 4 hours approx.
- Sensitivity levels: 5
- Temperature range: -10° +40°C
- Dimensions: total 1500 x 420 x 210 mm
coils 420 x 280 mm
sensor spacing: 120 cm
- Weight: 3,1 kg approx.

PKI 9140

Large Loop

This technology enables low skilled personnel to locate air delivered ordnance buried at depth. The **PKI 9140** Large Loop applies the eddy current pulse induction principle. It detects all ferrous and non ferrous metals. The equipment consists in an electronics box, a battery container and a large loop diameter 2600 mm with search frame. A ring coil diameter 260 mm is available as an option. The modular frame can be assembled in several ways, which allows to obtain frames from different sizes (1x1 m, 1x2 m, 1,5x2,5m) according to the searched objects and depth. The ring coil (option), working with the same electronic system is used for pin-point location, after detection with the large loop. Detection signals are easy to interpret and no advanced training is required for operation. The unit is splash-proof and of sturdy design. The target



acquisition is indicated by audio alarm and on a galvanometer. The delay setting suppresses the indication of small metal fragments located at the surface in order to assure the detection of bigger objects in deeper grounds, such as bombs or big shells buried very deeply and to ignore surface clutters.

Specifications:

- Power supply: 8 dry batteries 1,5 V type LR14 or rechargeable batteries
- Operating time: 55 h in pos. low /25 h in pos. high (LR14)
- Dimensions:
Electronics box: 270 x 90 x 70 mm
Battery pack: 290 x 105 x 50 mm
Search loop: 2550 mm diameter
- Weights: frame 2,5 kg
electronics box 0,9 kg
battery pack 1,1 kg
- Detection range (in air):
mine T57 at approx. 1,6 m
bomb 250 kg at approx. 3,5 m

PKI 9145

Arm- and Leg Protectors

The **PKI 9145** arm- and leg protectors consists in body-shaped protective parts made of polypropylene and flame-resistant fabrics. The protectors can easily be adjusted individually, so that they are extremely comfortable and very quick to put on and to remove. An individual adjustment of ergonomically formed protector parts can be achieved by elastic cords with Velcro strips and fleece shutters.

Specifications:

- Arm protection: protectability 35 Nm, consisting of elbow and lower arm protector
- Material: aluminium alloy edged by breathable fabrics
- Leg protection: protectability 35 Nm, body-shaped knee protector fixed with special seam between tights and upper shin bone protector
- Material: special aluminium alloy, inlets with special stitching for optimal air ventilation

**PKI 9150**

Protective Shield

The **PKI 9150** Protective Shield is a must for any police and security task force.

PKI 9150 Protective Shield already has proved its efficiency in many actions against terroristic acts, riots and demonstrations. Due to the clear visibility of the polycarbonate material the wearer is protected against most common attacks in riot situations but still has a full survey about critical situations. A specially constructed supporting holder with leather-coated handgrip and swiveling armrest provides comfortable wearing either on the right or left arm. The curved shape of the highly resistant shield deflects any thrown objects and affords perfect and fullbody protection to the wearer. Each shield can be supplied with a specific and tailor-made label or Insignia as per customer's requirement.

Specifications:

- Material polycarbonate
- Dimensions approx. 90 x 60 cm
- Weight approx. 2.3 kg
- Armrest and handle leather-coated, swiveling for right-/left arm operation
- Label standard - „POLICE“ - others on request
- Options additional holders/supports for batons, torch-lamps, hand-cuffs etc. available on request
- Lightweight
- Transparent material
- Easy to handle
- Protection against thrown objects
- Labelling according to customer's needs

**PKI 9155**

Multifunctional Belt for Police

Security staff must have a possibility to wear tools for daily use like radio transmitter, pistol, handcuffs, baton, knife, mace and torch easily on the body. This multifunctional and solid belt meets all these requirements as it is equipped with loops and hooks of different sizes for all kinds of tools and equipment. On request we can deliver belts adapted to your personal specification.

**PKI 9160**

Entry Force Tool

This universal tool is a must for any task force. It is indispensable when quick and violent opening of doors and locks is required. Whether used as a hammer, axe, drift or crowbar this tool is a real universal miracle.

Specifications:

- Material: steel, reinforced
- Length: 90 cm
- Various: on request it can be delivered in 2 parts of 45 cm each screwable



PKI 9165

Emergency Set

Our protective outfit offers breathing and body protection against powdery, liquid or gaseous toxic agents, when put on properly and in time. In order to avoid handling errors, please carefully read the instruction manual. It complies with European regulation and is CE approved. For many years it has been used in chemical industry, fire brigades and others.

- 1 protective suit
- 1 protective mask
- 2 protective mask filters
- 1 pair protective gloves
- 1 pair overboots
- 1 bag
- 1 instruction manual



Specifications:

- Weight: 84,6 g/m²
- Resistance: 128,3 kPa
- Abrasion: 1500-2000 cycles
- Resistance against stabs: 16.7N
- Shelf life: min. 10 years
- Comes with:

PKI 9170

Gas Mask

The **PKI** Gas Mask and its straps are produced in black and yellow silicone. The screen provides a large vision angle and can be adjusted with anti-solvent or anti-scratch treatment on request. The system is shock- and solvent-resistant and equipped with two breathe out valves. One breathe-in valve and one phonic membrane allow easy communication. The specifically designed air circulation avoids steaming up of the screen. The **PKI 9170** Gas Mask is equipped with straps for rapid fastening. It can be used with assisted ventilation or with compressed air adduction. It must not be used in atmospheres where the concentration exceeds 0,5% or where the oxygen rate is less than 17%.

Different cartridges are available upon request for example for dust, different types of gas or

combined gas/dust. The cartridges are equipped with caps in order to increase their lifetime, as they keep them sealed when not used. A case designed in a specific thermoplastic material increases the mask's lifetime, as it protects against dust, light, vapours of chemical agents and heat sources. This case can contain one mask and one cartridge of any type, not screwed.



PKI 9175

Hydraulics Door Opener

Special forces are perfectly trained in opening closed doors no matter whether they are barred, of metal or wood, thin or thick. Very fast entering of rooms can be crucial. A surprise attack must be effected within 20 seconds, otherwise the offenders are warned and could escape or make use of their weapons. The attack has to be effected without any noise. **PKI 9175** comprises various components i.e. hydraulics unit with 4 different hydraulics stamps. All items are properly packed in 2 portable cases. In order to use these tools professionally, a training time of 1 week is necessary, which is offered by **PKI** as well. Please refer to our training program.



Specifications:

- Dimensions: hydraulics unit 835x520x285 mm
- Weight: 33 kg
- Dimension: hydraulics stamp and accessories 1360x460x150 mm
- Weight: 43 kg

PKI 9180**Air Launcher**

This air launcher can be fired from the shoulder or from a solid point on the ground. The titanium grapnel and its 3 mm diameter pilot line have a breaking strain of 180 kg. Horizontal distance is approx. 75 m, vertical range approx. 35 m. Repeated firings can be made from the rechargeable cylinder without ejecting any smoke, heat or flash. A 25 foot heavy-duty, flexible and wire-sided ladder can be supplied.

Specifications:

- Weight of launcher: 1 kg
- Overall length incl. grapnel: 70 cm

**PKI 9185****Response Backpack**

This extremely lightweight EOD response pack is a new backpack-mounted kit made to provide a two man search team with significant „real time“ capability at minimum weight and bulk.

All the search tools contained in the response backpack have undergone rigorous testing in hostile and demanding operations. The kit includes a new and innovative lightweight hook and line kit, an advanced metal detector and other search equipment, as well an ultra-light Vulcan disruptor and a new fuse removal key.

**PKI 9190****Swat Hood**

The lightweight black-coloured swat hood is designed to protect police operators from heat and flash. It is made of breathable, moisture-resistant material and is fully washable. One size fits all.

**PKI 9195****Kevlar Sleeves**

These Kevlar Sleeves are designed to efficiently protect forearms of special operators from heat, flashes and cuts. **PKI** Kevlar Sleeves allow fully flexible arm movements and are manufactured out of double-knit black Kevlar.



PKI 9200

Protective Police Helmet

The **PKI 9200** Protective Police Helmet is specially designed, according to DIN ISO 9001-norm, for any police and anti-riot squads. By using high impact strength compound, colour white, with ventilation holes for the helmet-shell and crystal-clear polycarbonate of 4mm thickness for the visor, this helmet provides a maximum of protection, but still is lightweight and most comfortable for wearing even under tropical conditions. Each helmet comes with a 3-section leather neckprotection. The detachable innerlining, individually adjustable to headsizes, offers highest shock-damping and together with the 3-point chinstrap perfectly matches for optimised fit. Additionally **PKI 9200** can be supplied with specific governmental insignias of non-detachable, self-adhesive and multi-coloured labels according to buyer's requirements. Please contact us for further information.

Specifications:

- Material of shell high impact strength PA 6 compound
- Material of visor crystal clear polycarbonate, 4mm thick
- Inner lining special wearing-net with leather sweatband easily detachable without tools for size alignment.
- Available headsize: small = size 53 - 58, large = size 57 - 62, - others on request -
- Total weight: approx. 1.85 kg
- Standard colour of shell: white - other colours on request -
- Lightweight
- Crystal clear visor
- Neck Protection
- Ventilation holes



PKI 9205

Road Blocking Barrier

The **PKI 9205** is a very rugged, portable barrier specifically developed for police and military personnel in order to stop vehicles instantly. Designed for the use by just one person it is an inexpensive tool which can be deployed in seconds at a road block. Alternatively it can be used semi-permanently to protect a target building. Any vehicle passing over the **PKI 9205**, no matter its speed, will have its tyres instantly deflated by the 50 mm spikes quickly, safely and effectively. The unit comes as a complete kit and consists of two separate sections, each of which can be extended up to 3 m and contains 45 spikes. **PKI 9205** is made of a mix of Nylon 66 and glass fibre making it flexible but yet firm. The stainless steel spikes with a length of 50 mm long and a diameter of 4 mm diameter will

penetrate through all types of tyres. When the spikes penetrate a tyre they break off from the base and therefore a sparekit comprising spare spikes, pliers and screwdriver is provided with each **PKI 9205**.

Specifications:

- Extended size max. 3 m
- Folded size 52 x 28 x 8 cm
- Weight 5 kg
- Number of spikes 45



PKI 9210

Barbed Tape Wire

Very often cheap and effective solutions are needed for protection of different institutions. The perfect solution for this is our special **PKI** Barbed Tape Wire. There are more than 100 different varieties of applications depending on requirements. Do you want to secure a wall, fence or scaffolding? Kindly let us know your problem, we will be pleased to present you our solution.

Specifications:

- Dimensions:
thickness 5 cm
diam. 450 - 980 mm
length: 7-16 m per coil
- Material: hot galvanized steel sheet AISI430 and AISI304
- Packing: water proof paper inside and plastic weaving bag outside
- Device for detachment: upon request



PKI 9215

EOD Tripod

The essential function of this robust and portable tripod is to lift heavy objects of up to 2.260 kg during EOD operations (including IEDD). The two-section telescopic legs can be locked at a range of heights enabling it to be used in areas of restricted height or on sloping ground. The head is fitted with leg stops in order to prevent the tripod from collapsing under load, as well as eyes and a karabiner for attaching lifting tackle and for tying objects down. The self-adjusting feet may be pegged to the ground for extra stability. The tripod is a high strength aluminium construction and is supplied with a set of anchor pegs in a durable nylon transport case.

Specifications:

- Weight: 22 kg
- Load capacity with feet anchored: up to 2.260 kg
- Overall length: (folded) 1.620 mm
- Max. working height: 2.740 mm (under the suspension eye)

**PKI 9220**

Contraband Detector

This item can positively detect drugs, explosives, weapons, currency and much more. Its typical application field is the inspection of tires, car doors, fuel tanks, wall and lined containers, aircraft, trucks, caravans, bus, trains etc. Identical packages, flower shipments, boats and ships, freight container.

Principle of Operation:

PKI Contraband Detector measures the mass density of the inspected objects and indicates the difference in density between illegally hidden goods (drugs, explosives, weapons, currency, etc.) and the object in which the contraband is hidden. For example, an "empty" tire filled with air and a tire filled with drugs give different results or an "empty" cross member in a freight container stuffed with contraband indicates a



different density than a full one. It also detects radioactive materials. The **PKI** Contraband Detector directs a beam of energy into the inspected object. A filled space reflects back more energy than an empty space. As **PKI**

Contraband Detector is moved across the surface of the object, the measurement is displayed on a digital LCD and an alarm is given if the density changes or radioactive material is encountered.

PKI 9225

Vehicle Protection against AP Mines

This lightweight system has been developed for protection of vehicles against anti-personnel mines during humanitarian missions. In this new system following criteria have been given highest priority:

- High degree of protection - V 50 > 600 m/s for 1,1 g
- Low weight
- Quick and easy mounting
- No modification of the vehicle

Before mounting the system it is necessary to remove the seats, door panels and bottom mats from the car. Afterwards the ballistic mats are being glued to the bottom of the vehicle. The individual mats must overlap each other in order to secure maximum protection. After proper mounting of the ballistic mats, the original components of the car can be reinstalled. The **PKI** Vehicle Protection system can be supplied as a kit ready for mounting.

**Specifications:**

- Protection level: V50 > 600 m/s for 1.1 gram FSP
- Material: aramid fibres woven and stitched together to flexible mats

- Surface: PFC foil
- Weight: 8,2 kg/sqm
- Total weight: approx. 60 kg, depending on the model
- Interior: no modifications

PKI 9230

Rapid Armor Shelter System

This lightweight fortification wall system is ideal for fast moving troops. Fortification walls can be built and dismantled in a few minutes allowing troops to be protected even during short stops or operations. Panels protect men or property mainly from fragments, protection level of V 50 >600 m/s. For bullet protection a double panel system can be used.

All components are capable of withstanding UV-radiation, fuel and oil spatters as well as temperatures between -40°C and +60°C. The panels are fully moisture resistant. This innovative ballistic multipurpose protection system is easy to adapt for various military, police and peace keeping applications. It can also be used for civilian protection, e.g. protection of window and door openings.



Specifications:

- Material: Fibreglass and phenolic resin
- Protection area:
square 0,90 m², triangle 0,39 m²
- Thickness: about 9,5 mm
- Areal Weight: under 19 kg/m²
- Splinter protection:
V50-value (1,1 g ESP) >600 m/s
- Explosion test: endures 0,5 bar overpressure, pressure influencing time 0,01 sec.

PKI 9235

Armour Protected Vehicles

We offer various armour protected vehicles for military, paramilitary, police and bomb disposal. Please let us have your enquiry, we will offer you the appropriate vehicle specifically designed according to your requirements.

General Design:

The hull is a fully welded body unit complete with seats for up to fourteen persons including the driver. It is fabricated from lightweight high hardness steel armour and is bolted to the chassis. Windscreen and front windows are of laminated armoured glass with anti-splinter screens out of polycarbonate. The vehicle gives protection to the engine compartment and incorporates gun ports complete with vision blocks on each side, as well as at the rear. The doors of the driver, co-driver and rear crew are provided with internally operated shoot bolts. Special attention has been given to the design of door/door apertures to ensure full protection. The armour door overlap incorporates a double seal unit and a spall return strip to protect against petrol ingress and spall fragments.



Specifications:

- Armour: The steel armour provides ballistic immunity at 25 metres and an attack angle of 90° from ball 7,62 ammunition fired from high velocity rifles and machine guns as well as all threats lesser than that. The armoured glass/polycarbonate construction used for the windscreens and front windows is of a corresponding ballistic resistance. Additional protection for the windscreens and front windows

is provided by armoured visors with incorporated vision slits which are actuated from inside the vehicle. The floor armour protects against mine fragments and grenades and, being an integral part of the monocoque hull, possesses good blast deflection characteristics. The doors are constructed of the same material as the hull and all transparent armour is glazed into armoured steel frames.

PKI 9240

Bulletproof Vest for Army

This bulletproof vest is designed for army operation. It not only protects the soldier's breast but also neck and shoulders. Additionally ceramic plates are inserted due to which this vest reaches protection class IV. Despite this high classification **PKI 9240** weights not more than 3,5 kg in IIIA, which allows high bearing comfort during longer operations.

Specifications:

- Threat level and weight:
NIJ IIA = 2,5 kg, II = 3,0 kg, IIIA = 3,5 kg
- Colors: black, woodland and desert camouflage
- Special: waterproof and anti-fire carrier
- Size: S, M, L, XL



PKI 9245

Knife-Slash Protective Vest

This protection vest against knife-slash attacks is a multi-layer production. The exterior layer consists in solid and rough nylon fabrics and the interior is a fine structured nylon material with good sliding qualities, which reduces friction on clothes that the person wears under this vest. Flexible 1.8 mm thick plastic plates serve as basic protection. The vest as well as the plates offers protection of the lateral parts of the body as well. The most vulnerable area of the body (middle of the thorax and the back) is protected by a 1 mm thick aluminium plate of 23 x 23 cm. All four protection plate pockets are equipped with a tuck-in and Velcro strip to avoid

unintended loss of the plates. Due to the light weight of only 1.5 kg and the flexible fixation of the protection plates the **PKI 9245** is very comfortable and as such is the ideal protection equipment for long-time operations.

**PKI 9250**

Protective Vests

The range of the **PKI 9250** Protective Vests offers an unlimited variety of personal protection to any member of Police-, Military- and Special-Squad-Forces. The style and specification of these vests has been widely adopted throughout the world. Because of the superior design, these vests can be worn for extended periods of time. Each vest individually is constructed in different sizes and weights as a highly cost-effective garment which provides optimum protection against knife-slash attacks and hits from fragments and bullets. Depending on required protection the **PKI 9250** Protective Vests are manufactured according to international standards (NIJ threat levels 2, 3, 3A and 4). Each vest can be up-armoured with the use of ceramic plates to give protection even against armour-piercing rounds. Ballistic collars and groin protectors are available on request.

Specifications:

- Threat level: NIJ 2, 3, 3A, 4 in buyer's option
 - Size: S, M, L, XL in buyer's option
 - Colour: white, blue, olive-green
 - Weight: from approx. 1.2 kg to 3.0 kg depending on type plus 1.0 - 3.4 kg for ceramic plates if required.
- For further detailed specifications please ask for separate leaflets indicating required threat level, size, colour and type (covert for discrete use, assault jacket etc. plus ceramic plates if necessary).
- Various models available from fragmentation to level IV protection.
 - Protection - proved according to international standards.
 - Available from concealed underwear up to fully protective jackets.
 - Lightweight and comfortable to wear

**PKI 9255**

Immediate Response Jacket

The **PKI 9255** Immediate Response Jacket provides the wearer with a stylishly designed, lightweight and easily concealable vest for having every necessary equipment right at hand whenever these are needed. Whether teargas bottles, handcuffs, electric shock units, communication devices etc. - being necessary for undercover police agents - or transceivers, bodyworn receivers, concealed monitoring devices etc. - for the discrete observations with special agents from any governmental organisation - this vest offers a maximum versatility for placing such kinds of material and equipment in the various pouches, holsters and slings being incorporated. The vest with its beige, skin-colour occurrence is the perfect carrying device for camouflaged and comfortable wearing of what you need during your mission.

Specifications:

- Material robust, washable fabric
- Size S, M, L, XL – in buyer's option
- Colour beige
- Weight 200 g
- Lightweight
- Robust, washable fabric
- Various pouches, holsters and slings for every purpose



PKI 9260

Bomb Blast Suppression Curtains

The bomb suppression curtains are designed to prevent flying fragments of glass and other secondary materials generated as a result of bomb blasts.

The curtains are easy to install and are available in various sizes and thickness of material in order to offer protection against a wide range of threat levels.

PKI 9260 bomb suppression curtains are inconspicuous and lightweight, various adjustable styles are available. Heavy duty, permanently fixed curtains can also be provided.



Specifications:

- The curtains can be custom designed according to individual requirements.

PKI 9265

Armored Vehicle

Armored vehicles are used for VIP-persons for protection against terrorist attacks. An efficient protection is not limited to the vehicle body, but also includes the windows, wheels, fuel tank, communication systems and jammers. **PKI** is prepared to offer these special vehicles, new or second-hand, which are not recognizable as such from outside. On order of a new car individual requirements can be taken into account.



Specifications:

- Car type: every bigger car
- Fuel tank: ex-proofed
- Windows: bulletproof, 45 mm thick glass
- Tyres: reinforced with synthetic core
- Jammer: full frequency range for prevention of remote ignition of explosives

For communication "open windows" can be programmed individually.

PKI 9270

Equipment against Mines

Our **PKI 9270** should belong to the basic equipment of all military and civil forces in current or former battlespaces. All tools are placed in a handy belt bag to be at hand immediately and at any time. The trip wire detector is made of carbon and extremely lightweight. This allows detection of very sensitive wire traps. Also part of the set is a telescopic mine search needle, the single parts of which are placed inside its ergonomically formed hand grip. **PKI 9270** comes with hand guard. A torch and extendible mirror complete this set, which are of useful assistance at numerous occasions.

Specifications:

- Belt bag: black
- Mine search needle: with predetermined breaking point



PKI 9275

Bomb Trailer System

The bomb trailer system was developed to enable inexperienced operators to remove a suspect explosive device to a safe location where it can be examined or destroyed in safety. This system consists in a specially designed bomb container mounted on a four-wheeled trailer which can easily be towed. The container is made of two layers of high-strength, high-impact 40 mm ballistic steel. Due to its special design the unit is able to transport an IED containing up to 4 kg of TNT. The suspect object is picked up by means of a hand-portable telescopic manipulator that is included in the system.

Specifications:

- Trailer size: 367 x 190 cm
- Dimensions of the container, outside: 100 x 100 cm
- Dimensions of the container, insider: 100 x 64 cm
- Weight: 90 kg

**PKI 9280****PKI 9285**

Bomb Fragment Protection Cover, Letter Bomb Bag

This **PKI** fragment protection cover is a very efficient first-action unit to protect from suspected explosives, that might be contained in suspicious items of mail, luggage etc. It consists of several Kevlar-layers and is specially reinforced in the centre in order to prevent from potential injuries in case of detonation. The bomb fragment protection cover is equipped with loops allowing the use of hook and line set or remote manipulator in order to place or lift up the cover.

Specifications:

- Dimensions: 2,2 x 2,2 m
- Weight: 12 kg
- Specially reinforced surface 0,4 x 0,4 m
- Miscellaneous: Also part of our product range is the **PKI 9285** letter bomb bag, that is based

on the same principle. It is suitable for a maximum letter size of DIN A4 and measures 1 x 0,8 m (unfolded) and 0,4 x 0,3 m (folded) at a weight of 3,3 kg

**PKI 9290**

Explosives Identification Set

With this set it is possible to identify all known and improvised explosive compounds. An instantaneous colour change indicates the type of explosives, even Semtex H. No special training is necessary. The set can be used indoor and outdoor independently from the climatic conditions. Even smallest quantities like 20 nanogram explosives can be identified. The complete set is supplied in a hardcover case of 1,4 kg weight.

Technical background:

The **PKI** Explosives Identification Set is our newest detection and identification system for explosives. It detects a maximum of different types of explosives due to its capability to identify also improvised explosive compounds namely explosives based on chlorite and peroxide. These explosives based on peroxide are very strong substances which can be produced with chemical substances that are openly sold. Presently terrorists often use this

sort of explosives, that is commonly known as TATP (Tri Acetone Tri Peroxide).

PKI Explosives Identification Set covers detection of:

Group A : (aromatic nitrogen) This range comprises TBT, Tetryl, TNB, DNT, picrin acid and its salts

Group B: (nitratester and nitratamine) This range comprises dynamite, nitro glycerin, RDX, C4, PETN, Semtex H, nitro cellulose and non-fuming powder. Remark: Most plastic explosives belong to this group.

Group C: anorganic nitrate (nitric acid). Explosives based on nitrate, such as ANFO (Ammonium Nitrate fuel oil), commercial and improvised explosives, which are based on anorganic nitrate, black powder, radiance powder, potassium nitrate and ammonium nitrate. Chloride and bromate comprising explosives based on potassium chloride and sodium chloride. Explosives based on peroxide comprising TATP (Tri Acetone tri Peroxide) and HMTD.



PKI 9295

Operation Overall

Excellent quality, resistivity and a modern design are the main characteristics of the **PKI** Operation Overall. It is flame-retardant, wind-proof, moisture protected and breathable. Furthermore, we offer additional protection against knife-slashes by means of an inlay for the abdomen.

Specifications:

- Material: NOMEX by DuPont
- Shoulder: abrasion-proof, water-proof CORDURA by Du Pont
- Collar: equipped with cut-restraint at shoulder, chest and back
- Rescue loop: on the back
- Superimposed pockets: for radio device etc. further pockets on the upper arm, chest, waist, buttock, tight and lower leg
- Fleece areas: for tactical labelling on the upper arm and the back
- Waist belt: width regulation by cord through reinforced belt loops of 5 cm width
- Zip: manageable with gloves, water-retardant



PKI 9300

Protective Suits

The choice of the adequate protective clothing is determined by the different characteristics of hazardous agents and the operating conditions. Protection of these clothes is provided by styling, special fabrics, their resistance against contaminations and/or heat or coldness. **PKI** offers protective suits for numerous requirements such as chemical resistance, heat protection, underwear overalls against coldness and much more. Please let us know your requirements enabling us to issue a specifically designed offer for you.



Specifications:

- One-way protective suit: protection class II, overall with hood, double zipper cover
- Protection: against anorganic acids and caustic solutions and a large variety of organic chemicals
- One-piece protective suit: polyamid fabrics, one side PVC coated
- Operation: for salvage crews, can be used with compressed air breather or complete mask
- Two-piece protective suit: comprises jacket and overall, to be worn over normal clothing
- Protection: against liquids which are self-inflammable. This clothing is meant for self-rescue and not for active fire rescue

PKI 9310**Breathing Mask**

This breathing mask offers nearly 100% of natural field of vision. The voice transmission is outstanding due to the ideally positioned speech membrane and the special sound conduct. The connecting piece comes with inhalation and exhalation valves. Speech membrane and thread connection are fixed by adjustable straps to the face mask. Impacts are diverted by the specific construction of mask.

Specifications:

- Material: neoprene of mainly non-aging and skin-friendly mixture
- Classification: EN 136-3
- Weight: 0,68 kg
- Note: normal pressure mask, round thread according to EN 148-1, suitable for safety helmet **PKI 9315**

**PKI 9315****Safety Helmet for Fire Brigade**

Numerous outstanding details make this helmet one of the best worldwide. Not only the integrated lamp but also the unmatched GFK-fabrics provide highest stability and resistance to impact even at extreme temperatures. Wearer of glasses appreciate the large face piece. The neck protection is made of heat and flame resistant material. Size adjusting can be done from outside and even with fire-fighting gloves.

Specifications:

- Classification: according to EN 443 and pr EN
- Interior: comfortable padding
- Chin strap: trapezoid for ideal fitting
- Ear protection: integrated in padding
- Colours: grey, white, blue, red, green, silver or green shining

- Note: voice radio can be built-in
- Helmet lamp:
LED technology
100.000 hours life time
very high illumination
battery 3x AA
can be removed and used as hand lamp (possible with fire-fighting gloves)

**PKI 9320****Breathing Device with Compressed Air**

Without this unit it is impossible to enter a burning building. The compressed air tank is attached to a body-comfortable strap-on device made of light carbon fibre. The straps can be twisted and is flexibly connected with the carrying tray. Lateral adjustment can be done via special straps. The shoulder straps are easily adjustable for various body sizes and are secured against unintended twisting. The compressed air hose is conducted over the shoulder.

- Manometer: after glowing display
- Various:
indicating remaining usage time
automatic alert immobility
manual emergency alert
temperature display at the push of a button
data recording
c-data can be transferred on PC via IR interface

**Specifications:**

- Weight: 4.9 kg
- Filling junction: for 300 bar
- Approval: EN 137 and vfdb 0802
- Belts and straps: flame-resistant
- Air supply: >1000 l/min, sufficient for 2 persons
- Compressed air hose: with security plug-and-socket clutch

PKI 9325

Heat Protective Suit

This suit offers protection against flames and intensive heat and has been designed for longer operations. It enables the fire fighter to cope with special high risk operations and rescue actions which require additional use of respirator as well as head-, hand- and foot protection. The sight glass is made of laminated safety glass, curved, gold steamed, 100 x 220 mm large.



Specifications:

- Material: special fabrics made of glass fibre, flame-retardant cotton lining
- Hood: suitable for fire brigade helmets and breathing masks
- Gloves: back of hand skulpo cloth, Kevlar/glass palm heat-resistant chrome split leather
- Boots: Kevlar/Glass 660g/m²
- Bag: 600 x 350 x 300 mm
- Weight: 8,8 kg
- Note: easy dressing due to front, back and leg zipper, also with respirator

PKI 9330

Medical Kit / First Aid Box

The medical kit for injuries by fire is made of ABS plastics and comes with a wall retainer. The bandaging material is suitable for first aid. Its aluminium evaporation avoids adhesion to the wound. The first aid box is equipped with a carrying handle for mobile use. The kit comprises all necessary tools for first aid of up to 5 persons according to NORM Z1020.



Specifications:

- Dimensions: 400 x 300 x 150 mm
- Colour: signal orange
- Content medical kit: compresses, bandage tissue, special bandages for face, head, hand, arm and leg, cooling pad, sterile water, infusion set, injection set, scissors, rescue blankets
- Content first aid box: first-class bandages, compresses, bandage tissue, gauze bandage, adhesive plaster, splinter tweezers, scissors, tourniquet,
- Note: The medical kit can also be adapted to individual requirements

PKI 9335

Quick Operation Tent

This inflatable tent can be used in any occasion where quick action is required such as accidents, first aid, necessary decontamination with a shower or as headquarter. The load-bearing, air-filled construction consists of both-side coated NBR fabrics. The tent comes complete with 4 windows, removable floor and additional ballast tanks for better stability on sealed surfaces.

- Size packed: 1,4 x 0,75 x 0,7 m
- Operating pressure: 0,25 bar
- Volume hose frame: approx. 1.650 l
- Filling sockets: 3 pieces
- Overpressure valves: 2 pieces diagonally arranged
- Weight (with packing blanket): approx. 90 kg
- Air filling: PA bottle 6 l/300 bar or foot-operated air pump or fan 0,25 bar, 7,8 kg, 230 V/50 Hz, 1,1 kW
- Note: tent heating, partitions, tent lighting, additional blankets on request



Specifications:

- Dimensions: 5 x 4,4 x 2,8 m
- Floor space: 20 m²

PKI 9345

Megaphone of the Latest Generation

There are different types of megaphones. The **PKI 9345** megaphone is so remarkable, as it offers a recording function i.e. the message which is to be transmitted can be stored beforehand. Common direct announcements, of course, are also possible. Its small dimensions and light weight are ideal for everywhere use, especially due to comfortable handle grip and bearing loop. Furthermore it can be used either with standard or rechargeable batteries.

Specifications:

- Dimensions: 250 x 146 x 210 mm
- Weight: 595 g

- Output power: 6 W
- Middle sound pressure: (1W/1m): 92 dB
- Power supply: 6 x 1,5 V type AA batteries
- Housing: plastic, splash-proof
- Microphone: built-in
- Digital recording: possible
- Mode of operation: play, direct announcement, record
- Volume and on/off: built-in
- Range: 500 m
- Note: megaphone with transmitter and receiver available on request, higher output power can be supplied

**PKI 9350**

Series of Handcuffs and Foot-Chains

Each item of the **PKI 9350** series has been developed over a long period and with the experience of 40 years in the field of security equipment by **PKI ELECTRONIC INTELLIGENCE GmbH**. Every handcuff and foot-chain is produced in accordance to NIJ Standard- 0307.01.

Specifications:

PKI 9350 - A Handcuffs - Latest construction with double locking and enlarged range of adjustment for smaller and larger wrist sizes. Weight 340 g

PKI 9350 - B Handcuffs made of high tensile steel, resistant against humidity and sea-water, nickel-plated and with sateen finish. Weight 285 g

PKI 9350 - C Handcuffs for transportation of

persons with extended risks of security. With special key and protected key-hole. Nickel-plated and with sateen finish. Weight 285 g

PKI 9350 - D Handcuffs. The most often sold model. Made of high tensile steel, nickel-plated and sateen finished. Weight 285 g

PKI 9350 - E Handcuffs with compound hinge for reduced movements under special tasks. Particular security is given by the double locking system. Weight: 315 g

PKI 9350 - F Foot-chains - with 355 mm chain length made of specially hardened steel and enlarged cuffs for a better adjustment to prisoner's bodysizes. Nickel-plated and sateen finished cuffs. Weight: 595 g

PKI 9350 - G Foot-chains - for extended carrying capacity. Hardened and welded like item **PKI 9350 - D**. Weight: 765 g

**PKI 9355** **PKI 9360**

Stun-Cuffs for Foot, Stun-Cuffs for Hand

Modern electronic technologies resulted in the development of stun-cuffs, of which we offer 2 different versions. **PKI 9355** continuously transmits signals via built-in GPS transmitter which are captured by a receiver (security staff). The receiver is programmable i.e. in case the prisoner leaves certain areas an automatic alarm will be released. The position of the prisoner can be located at any time and he can be arrested immediately if he tries to escape. **PKI 9355** is designed for so-called day-release prisoner.

PKI 9360 stun-cuffs for hands find their application when taking a prisoner to the court or hospital. In case he attempts to escape the stun-cuffs are activated by remote control and transmit an electric shock of 60.000 Volt. Voltage can be adjusted according to demands of staff. You never saw an escaping person stop so quickly!

Power supply with rechargeable batteries.

PKI 9360: Handcuffs with built-in receiver are only removable by the security staff. Electric shock will only be released if it is activated by the security personnel with the encoded remote transmitter. Range max. 300 m, voltage 60.000 Volt. Power supply with rechargeable batteries.

**Specifications:**

PKI 9355: GPS-system consisting of transmitter and receiver. Transmitter is fixed to foot-chains and only removable by personnel.

PKI 9380

Forensic Vehicle Laboratory

Crime is continuously increasing all over the world. In order to increase the detection rate trained personnel and adequate tools of latest technologies are crucial. The **PKI 9380** vehicle can be equipped according to requirements of your department. You determine top priorities, whether more forensic equipment, murder clarification case or a laboratory for DNA analysis is required. In order to technologically support the investigation and solving of a criminal case, we can also deliver the latest hardware.

Specifications:

- Basic equipment: emergency generator, air condition, fridge, various microscopes, chromatograph, murder clarification case, forensic case, digital images and video equipment, computer with the corresponding software, laboratory workstation, various devices for analysis, portable lighting unit, VZA bowls and case for storage, identification kit, chemical forensic kit, blood tracing kit, various versions of silicone kits, various laboratory apparatus for examination of blood and sperm, nitrate examination equipment, activating device for neutrons (NAA-kit), powder analysis unit for narcotics and ammunition, equipment for taking cadaver tissue samples, set of masks against putrefaction, various mechanical tools, etc.

- Vehicle: Mercedes Van or as per your demand
- Various: second-hand vehicles on request



PKI 9385

Artificial DNA

PKI 9385 is a chemical tincture which has an unique composition like natural DNA. The application of a small spot of this artificial DNA on valuable goods, that might be exposed to the danger of being stolen, guarantees the owner to be able to identify them later. **PKI 9385** is a transparent liquid which can hardly be removed due to the adhesive which is included in delivery. The liquid consists of different chemical elements, one of which becomes visible under UV-light. Numerized micro points represent the authenticating mark of the artificial DNA, as their

composition is unique. These DNA sequences are registered and can be analyzed in laboratories.

Specifications:

- Liquid, 10 ml filled in a little bottle: artificial DNA, transparent, a biochemical marker
- Comes with: UV-lamp for visualisation of the biochemical marker, PC software, analysis device
- Note: sufficient for thousands of markings



PKI 9390

Visual Theft Detection Set

This theft detection substance sticks on the hands or fingers of the person that touches an object on which it has been applied. The colour won't completely disappear before several days. This is a reliable and quick method to convict thefts. This special powder is the ideal protection of valuable coins, banknotes, important certificates and documents, etc. Even for outdoor purposes the **PKI 9390** is fully suitable, as for example for protection of laptops or other objects with plain surfaces.

Specifications:

- Powder/paste available in the following colours: grey, black, red
- Contents: 60 g
- Protective gloves and application sticks are included in the set.



PKI 9395

Invisible Theft Detection Set

These substances will stick on the hands or fingers on contact. Compared with the visual theft detection substances, they only become visible under UV-light. These invisible substances find their application field rather in long-term observation activities of suspicious persons. Even smallest quantities of this powder or paste will become visible under UV-light (included).

Specifications:

- Powder/paste available in the following
- Colours: neutral, turns to green under UV-light
- Contents: 60 g
- UV-light, protective gloves and application sticks included

**PKI 9400**

X-Ray Spray

The **PKI 9400** is a reasonably priced, very effective and quick technique to check incoming mail for suspicious contents. No need for electrical power or complex material. The direct visual examination protects you from false alarms in the case of metallic items such as staples or paper-clips, which may occur when using metal detectors. This X-ray spray is the perfect mail examination tool for security personnel, incoming mail departments and director's offices. The use of the **PKI 9400** is as easy as possible. Just spray it onto the suspicious envelope, which becomes transparent. After a few seconds the liquid will

evaporate without leaving any traces and free of residues. With its quick and easy use, the **PKI 9400** perfectly completes the use of metal detectors and electronic mail scanners, in order to effect a first check of the incoming mail.

Specifications:

- Contents: approx.. 170 g
- Dimensions: approx. 150 mm x 50 mm
- Total weight: approx. 210 g
- Ingredients: non-toxic, non-inflammable, highly volatile
- Packing unit: 12 cans per carton

**PKI 9405**

Document Reader

The **PKI 9405**, a very compact document reader with high-end OCR technology is an indispensable equipment for reading passports, visas and other travel documents. This unit is especially designed to allow hands-free operation. Regardless of the chip position all electronic data can be read in a one-step process. The software package can be integrated easily into complete solutions. Customized models are available, designed according to our customer's specific needs.

Specifications:

- Cameras: 2 cameras included
- Illuminations:
visible (white)
Infra red
UV (UVA)

Optical Specifications

- Image sensor: 3 Megapixel 2048 x 1536
- Image resolution: 380 PPI
- Face image resolution: 700 PPI
- Image colour depth: 24 bits/pixels RGB

Hardware Units

- Internal memory: storage of the firmware settings and factory calibration
- Firmware upgrade: via USB Built-in DSP data processing unit

**Mechanical Data**

- Size with cover: 213 x 173 x 179 mm
- Window size: 130 x 98 mm
- Case: ABS plastic on metal base
- Window glass: 4 mm tempered glass
- Operating temperature: +10°C to +40°C
- Operating humidity: 0-95%
- Weight: 2,35 kg
- No moving parts

Others

- Compliances: CD, FCC, RoHS, IEC 62471
- Interface: USB 2.0
2 pcs free USB ports
- Number of status LEDs: 3 programmable
- Power: external power supply included (100-240V AC, 50/60 Hz)

PKI 9410

Image Processing System

The **PKI 9410** is a full colour video processor for the simultaneous display of live and stored images (still pictures). It is designed for police stations, border controls, immigration and customs offices and any other place where banknotes and documents have to be checked against falsifications. For all these types of document examinations, the **PKI 9410** offers a tremendous wide range of different functions such as overlay, addition, subtraction and side by side view for easy comparison of genuine and suspect documents. The main features of the **PKI 9410** are:

- Comparison by superimposition
- Box image inside large image (PIP=Picture in Picture)
- Horizontal split screen
- Vertical split screen
- Forgery detection by superimposition

The **PKI 9410** selects one of two analogue video inputs and converts it to a digital format. Every further processing thereafter is carried out in the digital realm but still preserving a highest video



quality. The digital image can be frozen in the full resolution frame store and the output combined in various ways with the live image. After that the combined image finally is converted back to an analogue format for display on monitor. From the front panel the operator can adjust the quality of the incoming video and the way in which the two images have to be combined. Cursors are used to adjust the selected parameter or to move the

picture. The reset/home button returns the parameter to the standard setting.

Specifications:

- Power Supply:
8 to 24 VDC, nominal 12 VDC at 850 mA
Plug-top power supply unit supplied with each unit

PKI 9415

Portable Forgery Detector

- Rugged construction
- Flexible fibre optic
- Lightweight
- Four light sources
- Mains/battery operation

The **PKI 9415** is a versatile, compact and portable forgery detection system for the examination of all types of suspect documents. It is particularly useful for officials and immigration officers at sea- and airports, mobile border controls and the scene of crime officers. A large unobstructed working area allows quick and easy examination using the four integral light sources:

- A diffuse white light for visual examination in low light conditions
- Two black light lamps providing a strong ultraviolet source for examination of bleaching, alterations and fluorescent security marks
- A transmissive source for inspection of watermarks and internal threads
- An intense fibre optic illuminator for examination of intended writing and for transmission through photographs.

PKI 9415 can be operated by three different power sources: an internal battery, a wide range of AC power supplies and an external DC power source - like car batteries.

PKI 9415 is housed in a rugged ABS hardcover case with "O-Ring" sealing for the protection against water, dust and other contaminants.

Specifications:

A Light Sources

aa Ultraviolet , 2 long wave lamps each 4 Watts, 150 mm, 365nm, housed in a stainless steel reflector for maximum illumination

ab Visible Overhead, single cool white lamp, 4



b Watts ,150 mm mounted between UV lamps

ac Transmissive, 2 cool white lamps, each 4 Watts, 150 mm mounted behind a white plastic window

ad Fibre Optic Source, high intensity quartz halogen lamp with internal prefocussed optics giving maximum efficiency with the fibre optic, 9 Watts

ae Fibre Optic, flexible glass fibre light pipe, 5 mm active area, 1000 mm length, click-fit connection to light source. Stored in tool storage wallet when not in use.

B Mechanical

ba Housing, rugged ABS plastic case with soft feel handle. completely waterproof when closed

bb Size: 355 x 250 x 160 mm

bc Weight: 5.2 kg with 1.2 Ah accu, 7.25 kg with accu 7.0 Ah

bd Internal wallet for tool storage - size 175 x 115 x 35 mm

C Electrical

ca Internal Battery, option of 2 battery sizes, Standard 1.2 Ah or extended life with 7.0 Ah 1.2 Ah gives 1 hour constant use, 7 Ah gives 6 hours constant use.

cb Mains Power, 90 to 260 VAC. The battery is charged automatically

cc External DC power supply, 10 to 14 VDC via a 3.5 mm jack. Optionally leads for connection to vehicle power systems are available on request

D Switches

da Internal or external DC-source selector. Switching to external position isolates the internal battery

db Lamp change. Push button switch for sequential switching of lamps. Sequence: off - overhead white - ultraviolet - transmissive -fibre optic - off

PKI 9520

Opening Set for Car Doors

Already for many years government departments like police, special tasks forces, military and intelligence squads rely on this sophisticated set with its comprehensive scope of equipments.

PKI ELECTRONIC INTELLIGENCE recommends this set to each of these departments for European cars of latest generation with or without "Safe-Guard-Locking". The **PKI 9520** is a full set of car opening tools, accessories and illustrative documentation on videos and booklet. All parts are packed in an artificial leather bag for carrying and storage.

Specifications:

- Videos and books
- 2 video tapes with car opening methods
- 1 booklet with car opening methods
- Accessories
- 2 pressure cushions
- 1 vehicle sleeve
- 1 suction-lever for vehicle doors
- 1 wedge, 9.5 mm



- | | |
|---|---|
| 1 wedge, 19 mm | onwards |
| 1 torch lamp | 1 opener for side rods |
| • Universal Openers | 1 opener for Volkswagen Passat, from 1993 - 1995 |
| 1 universal hook, horizontal | 1 opener for Volkswagen Passat, from 1996 onwards |
| 1 universal hook, vertical | 1 opener for Opel Astra, from 1996 onwards |
| 1 opening set "hooks and slings" | 1 opener for Opel Vectra, from 1996 onwards |
| 1 opening set "Euro Strip" | 1 opener for Mercedes C180 |
| • Special Openers | 1 opener for Ford Mondeo, 1993-1997 |
| 1 opener for Opel Omega | 1 opener for BMW |
| 1 opener for Volkswagen Golf III | |
| 1 opener for Volkswagen Sharan, from 1996 | |

PKI 9525

Door Opening Kit for Cars and Rooms

Professional observation often requires the installation of surveillance devices in locked rooms or cars. In order to solve this problem we have developed an universal kit for opening doors of rooms and cars. The **PKI 9525** should be the basic equipment of every government organisation being involved in the fight against terrorism and criminal acts. It contains the standard pick sets, hooks for opening the doors of cars and a gun plug for grinding barrel locks. If required we can of course also offer the complete range of our door opening devices plus our training seminars at our premises. We wish to point out that the user of our door opening kit must have some experience and talent in order to be successful in this field.

**Specifications:**

- Dimensions of the aluminium case: 320 x 240 x 110 mm
- Weight of the case: 2kg
- Contents:

- 24 picks, 2 hooks for opening cars, 1 gun plug
- Kit for Beginners
- Universal kit for room and car locks
- Small and light-weight
- Delivered in an aluminium case

PKI 9530

Car ID Set

Very often the original chassis numbers of stolen cars, machines etc. are made invisible, grinded away or even replaced by new, forged numbers. With our **PKI 9530** the originally stamped numbers can be made visible again. This identification set especially has been assembled for the use by special police forces and other government departments being related to the identification of stolen cars or other valuable items. Basically, a testing can only be executed on iron materials and if the ID-numbers have been impacted automatically or by hand. A magnetic flux is produced in the soft-iron-core by two magnetic coils. This magnetic flux is directed into the material via the poles. If the lines of magnetic flux impact vertically hit on a material-compression, some of the lines drop out of the material and from the magnetic stray field at the compression field point. Now the

magnetic powder has to be applied on the compression point and the magnetic stray field will attract all available iron parts of the powder in order to react against the magnetic air-resistance.

Specifications:

- Content:
- 1 pce hand yoke magnet for evidence of grinded ID-numbers
- 1 pce UV lamp for visualisation of numbers
- 1 pce NFR 101 Aerosol tin, high fluorescent magnetic powder
- 1 pce cleaner for degreasing of surfaces
- Power supply: 220 VAC, 50 Hz
- Dimensions: approx. 480 x 380 x 200 mm (standard briefcase)
- Weight: approx. 12,5 kg



PKI 9535

Door Opening Case

This modern shaped case is equipped with every necessary tool for opening of locked doors. With the **PKI 9535** we have combined our long lasting experience in this field together with "State-of-the-Art" tools for a professional and quick opening of every kind of lock. It is a must for any government department, like police forces, special tasks forces and intelligence services to obtain immediate access to rooms and buildings whenever closed and locked doors prevent the direct entrance. The content of the **PKI 9535** has been determined by us in close co-operation with our customers and according to their needs. Special configurations, of course, can be effected whenever our customer is asking for. Contact us and inform us of your special requirements.

Specifications:

Content of the **PKI 9535** Door Opening Case

- Pointed pliers, straight
- Pointed pliers, cranked
- Screwdriver set
- Lubrication spray can
- Set of ring/open end spanners
- Ratchet spanner, size 17-19
- Support for pulling screws
- Pulling bell
- Pulling plate for circular locking cylinders
- Pulling plate for profile locking cylinders
- Hand-grip
- Pulling screws, 4.2mm diam. - 20 pcs
- Pulling screws, 5.5mm diam. - 20 pcs



PKI 9550

Vehicle Inspection Mirror

The **PKI 9550** Vehicle Inspection Mirror, mounted on castors, provides an efficient method for examination the underside of vehicles and to identify any suspicious item (explosives, weapons, contraband etc). Its large convex mirror offers a wide field of view and is illuminated by a strong fluorescent lamp. Two versions are available, allowing operation from either an integral "D-cell" battery pack or an external 12 VDC source -such as a car battery. It is equipped with a telescopic handle for convenient storage.

Specifications:

- Lamp:
12V fluorescent, protected within a rugged splashproof acrylic case

- Mirror:
300 mm dia. circular convex glass
- Handle:
telescopic, up to 850 mm
- Power supply:
model A - 8 pcs „D-cells“ batteries
model B - external 12 V power source connected by 8 m power lead

For the same purpose we also recommend to use our **PKI 9555** Video Surveillance Under Vehicle System using video technology instead of optical mirrors.

- Easy to manoeuvre under vehicles
- Choice of power supply
- Convex mirror with wide field of view



PKI 9555

Under Vehicle Video System

The use of car bombs, ignited by suicide terrorists, more and more become a deadly threat. Every government organisation has to protect themselves against this. The **PKI 9555** Under Vehicle Video System is the most useful device for customs, police authorities and security personnel to investigate vehicles from underneath at borders, checkpoints and premises like embassies, energy plants, banks and other security-related commercial buildings.

PKI 9555 Under Vehicle Video System enables every security personnel to identify any suspicious item (weapon, bomb, contraband etc), carried underneath a vehicle. By means of a motorised shuttle and the use of computerised video-vision system every vehicle can be examined thoroughly. The observation unit is equipped with a high resolution monochrome camera and an illumination system and transmits the pictures to the notebook for further examination and storage.



Specifications:

- Easy to manoeuvre under vehicles
- Portable and mobile
- On-time viewing by video technology.
- Recording and storage on notebook
- Camera linear CCD
- Pixel Speed 20 MHz
- Power Supply 12 VDC

- Power Consumption 600 mA
- Lens 12 mm
- Field of View 120°
- Light Source halogen lights
- Dimensions approx. 480 x 480 x 90 mm, for observation item
- Receiving station laptop

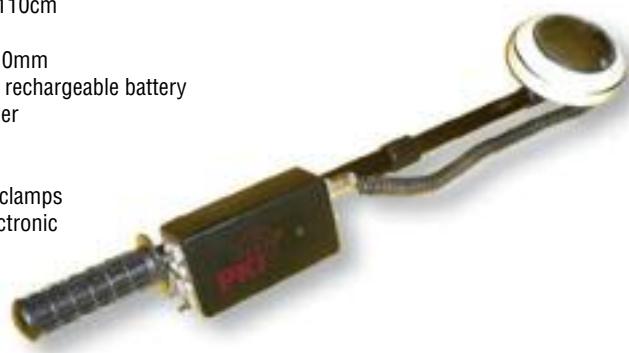
PKI 9560

Magnetic Clamps Detector

Controlling the entrance of sensitive areas means that each and every passenger car or truck has to be checked carefully. This device is a part of the different instruments used to investigate vehicles from underneath, like inspection mirrors, explosives detectors or bomb sniffers. The **PKI 9560** is only destined to detect magnetic clamps mostly used to install auto bombs, drugs, vehicle location equipment etc. beneath cars. A convex mirror on the magnet sensor allows a quick and easy optical control in conjunction with the location of magnetic waves which are indicated as an optical alarm signal. You can chose between 2 different levels of sensitivity. An additionally control lamp shows the charge level of the built-in battery and a reset switch is used to neutralise the instrument as to magnet waves.

Specifications:

- Dimensions Telescopic arm: standard 45cm, extended 110cm
- Weight: 2,6 kg
- Diameter of the sensor: 110mm
- Power supply: Built-in 12V rechargeable battery
- Accessories: Battery charger
- Easy to handle
- Easy location of magnetic clamps
- Sturdy housing for the electronic

**PKI 9565**

Non-Contact Electronic Stethoscope

The **PKI 9565** is designed to amplify faint sounds coming through solid objects such as doors, walls, windows or other suspect objects. It has especially been developed for detection work in EOD and IEDD contexts and therefore it offers many applications for police and EOD personnel. It is used essentially to detect mechanical clockwork detonators that can be incorporated in unconventional explosive or incendiary devices. Sounds picked up by the detector head are amplified and can be heard on earphones. **PKI 9565** is supplied with various acoustic sensors to cater a variety of detection remits. The detector head can be exchanged, and various heads are supplied to give an optimum performance under different conditions. The entire unit is shock- and weatherproof and is supplied in a rugged carrying case.

Specifications:

- Frequency Range low range - 400 Hz to 10 KHz
high range - 1000 Hz to 10 KHz
- Amplification up to 80 dB (10.000 times)
- Power supply 9 V block battery or NiCad

rechargeable battery

- Operation time 12 - 50 hours
- Dimensions 35 mm dia., 210 mm length (390mm long with probe)
- Weights:

stethoscope - 340 g

- headphone - 140 g
- complete - 1.800 g
- Carrying case: 360 x 300 x 88 mm

**PKI 9570**

Door Opening Set Multipick

The **PKI 9570** is used for a non-destructive opening of each kind of modern cylinder locks. Its working method is quite similar to the well known electropick system but being an advanced system, the **PKI 9570** can be used in the same way at a higher sophisticated level for nearly every known type of lock. By the use of the optionally available accessories, this system can unlock "exotic" locking systems as well. Therefore it should not be missed to have this device available in every government department being involved in fights against criminal acts and where a direct access to locked rooms is important. For the way how to use this special set please contact us for the next training held at our

premises. **PKI 9570** is powered by 24 VDC using the supplied battery pack and therefore is independent from any mains power supply. The battery pack is charged by the supplied electronically regulated mains adapter.

Specifications:

- Multipick-Handheld Unit complete with needle-holder
- 24 VDC battery pack
- Mains adapter, electronically regulated
- Set of picking needles, 50 pcs
- Spanning tools, 2 pcs
- Hexagon socket screw key, 3mm
- Operational manual



PKI 9575

Professional Lockpicking Set

In close co-operation with our customers and German authorities, **PKI ELECTRONIC INTELLIGENCE** offers this extraordinary set which successfully is in use by many police forces, fire brigades, intelligence departments and authorised locksmiths worldwide. Beside the supplied material, **PKI ELECTRONIC INTELLIGENCE**, also offers trainings and seminars in regard to every door-opening purpose. Please ask us for suitable dates. Nearly 40 years of experience in this field enabled us to offer the **PKI 9575** as the most complete set of professional tools and accessories for an immediate action in lock-picking tasks. But as the development in this specific field proceeds rapidly, we always improve our scope of supply in this regard and to the benefit of our customers

Specifications:

- 1 "PARAT" Leather case
- 1 Torx-Bit TX 20
- 1 video tape about lockpicking
- 1 Philips-bit, size 2
- 1 "ROCKO"-Vario-Set
- 1 Universal holder
- 1 "Zieh-Fix Premium"-set
- 1 Connection Sk-3/8"Avk
- 1 "Zieh-Fix" set
- 1 Nut SW 17, 3/8" drive
- 1 Pulling plate for profile locking cylinders
- 2 Ti-drills , 1.0 mm
- 1 Pulling plate for circular locking cylinders
- 2 Ti-drills, 3.5 mm
- 1 Can of cutting and lubrication spray
- 2 Ti-drills, 10.0 mm
- 1 Special screw driver TX20
- 1 Hook K 1-12
- 1 T-key nut, SW 17
- 1 Hook O 1-15
- 1 Pointed pliers, straight
- 1 Extractor set
- 1 Pointed pliers, cranked
- 1 Pick set
- 1 Screw driver, 1.2x8x150mm
- 1 Spanning tool TR-25
- 1 Screw driver, 1.6x6x150mm
- 1 Spanning tool TR-4
- 1 Plastic profile cylinder locker
- 1 Spanning tool TEN-2
- 1 Opener for "Melchert" armatures
- 1 Spanning tool TEN-5
- 1 Needle set for door foldings
- 1 Spanning tool TNT-20
- 1 Lever for door foldings
- 1 Opener for cross-bearded locks
- 1 Set of cards for door opening
- 1 Flipper
- 1 Square bolt, 8mm for extraction of 72 mm locks
- 1 Window opener
- 1 Square bolt, 10mm for extraction of 92mm locks
- 2 pick-needles, straight pick
- 3 Protective collar for "Zieh-Fix Premium"
- 2 pick-needles, angle pick
- 50 Pulling screws standard
- 1 Tubular-Pick Standard
- 50 Pulling screws extra
- 1 "Zieh-Fix" electro incl. charger
- 50 Pulling screws super
- 1 "Zieh-Fix" Novum pick needle set
- 3 Profile cylinders 30-30 mm
- 1 Video Tape " Electro-Picking"



PKI 9580

Lock Opening Device

This **PKI 9580** has been designed as an assortment around the well-known mechanical tearoff device for the opening of every kind of locked doors and has been assembled in close co-operation with a large number of our customers from all over the world. No matter what kind of locks, whether round-type or cylinder-type is to be opened, this set offers the best possible choice to every kind of government department. Even breaking of fixed links is possible with this set of high-quality tools.



Specifications:

The professionally assortment of this kit consists of the following parts:

- 1 pce carrying and storage case
- 1 pce mechanical tear-off device
- 1 pce tear-off plate for profile-cylinders, 14.7 mm diam.
- 1 pce tear-off plate for round-type cylinders, 16.8 mm diam.
- 100 ml special lubrication spray for cuts and slidings
- 1 pce special graphite slip additive for hub-screws
- 1 pce special screw-driver TX 20
- 1 pce special T-key with nut SW 17
- 1 pce short , straight pointed pliers
- 1 pce bended pointed pliers
- 1 pce screw driver 1.2 x 8 x 150 mm
- 1 pce screw driver 1.6 x 6 x 150 mm
- 1 pce Universal-profile-cylinder- locker
- 1 pce opener for Melchert-Visor-type locks
- 50 pcs pulling-screws, type standard for mechanical tear-off device
- 50 pcs pulling-screws, type extra for mechanical tear-off device
- 50 pcs pulling screws, type super for mechanical tear-off device
- 1 pce profile cylinder 30-30 mm
- 1 pce VHS-Video-Demonstration-Cassette

PKI 9585

Door Opening Kit for Cars

In many cases of surveillance it is of utmost importance to open a monitored car without any risk of damage in order to install for example microphones, cameras or GPS-systems. For this application there are different systems available which we have combined in one set:

- 1.) Decoder for car lock cylinders
- 2.) Lock picks for car lock cylinders
- 3.) Car lock scanner
- 4.) Car Killing Kit

These special tools can also be delivered separately. In most cases it is important to find out the model and year of manufacture of the car, for example by using our decoder for car lock cylinders. With this code you are now able to directly compose a special key for the car by using the provided master keys. For this, you do not need any further tools or machines. Everything is contained in the set. Our software can decode even the latest generations of car lock cylinders and then offer a proposal for the key code. Concerning the lock picks it is also



essential to know the model and year of manufacture of the car. Please indicate this together with your order. The tools of the car lock scanner are used to crack the code of the plates integrated in the tumbler of the car lock cylinders even of the latest generation. By means of the

cracked code it is now possible to cut a matching key. The car killing kit consists of different bent needles made out of steel wire which are inserted through the rubber joint in order to reach the locking mechanism of the car.

PKI 9590

Electric Powered Multipick Door Opening Kit

This door opening kit works with up to 44.000 vibrations per minute. Even locks with more than 20 tumblers on several locking sections can be opened within seconds. The frequency of the strokes can be adjusted continuously. The power supply is guaranteed by means of a built-in battery. Most of the opening kits of our competitors destroy the door lock which is of course acceptable in case of an emergency. However, such tools cannot be used for surveillance operations. **PKI 9590** can be used in order to open and relock all current available key cylinders without damaging them at all. This is imperative for all kind of room surveillance. The PKI 9590 works in such a way that a special pick is inserted into the locking canal of the key cylinder. The pick is then put into extremely high vibrations which are transferred at the correct

angle to the locking bolts of the key cylinder. The locking bolts put into such a vibration fall into their corresponding locking positions and such enabling the core of the key cylinder to rotate freely as if it was opened by using a matching key.

Specifications:

- Dimensions 38 x 28 x 8 cm
- Power Supply 24V battery pack
- Hand set with plain needle holder
- Accessories electronically controlled charging unit 220V
- 50 plain picks
- 2 chuck tools
- 3mm Allen wrench
- Instruction manual in English

**PKI 9595**

Thermal Lance - Complete Unit

If there is no chance to open a door with conventional tools or if this is not possible because of any special material, we recommend our thermal lance. It penetrates any material like cast iron, steel, stainless steel, concrete, granite, nickel, ceramic or titanium compound as well as aluminium. The fuel rods reach a temperature of up to 5.500°C at the tip and therefore can cut, melt or liquefy the different materials indicated above. Each lance burns about 30-40 seconds. There is no other equipment available which is so versatile and reliable. The **PKI 9595** contains everything in order to carry all tools with you. The application is very simple and safe, because

no dangerous acetylene or high power are required.

Specifications:

- Carrying device for fixing a 5l air tank and oxygene mounting
- Belt for fixing the provided 12V battery incl. charging unit
- Leather Tubular for the 450mm long lances and scratch plate
- Further Accessories protective goggles, ignition cable, earth cable, oxygene hose, protective gloves as well as 9 pcs. lances 6,35 x 450mm and 6 pcs. lances 9,53 x 450mm



PKI 9600

Forged Chassis Numbers Identification Set

Unfortunately the number of stolen cars is steadily increasing. The police has to face a serious problem. Even when they trace stolen cars, the original stamped chassis number often has been made invisible, grinded off or has been replaced by a new, forged number. Now **PKI** created the easy-to-use **PKI 9600** set which is indispensable in order to prove the car theft, as it makes the originally stamped chassis number visible again. You simply have to apply the adequate etching gel on the place where you suspect the chassis number, to treat it with the included brush and afterward with the neutralising liquid. In order to protect your hands always put on the included gloves. After this treatment the chassis number will clearly reappear.

There is a magnetic (**PKI 9530**) and a chemical (**PKI 9600**) procedure as the surface of the material with chassis numbers may vary from one car type to the other. So it could be very useful to test both methods.



Specifications:

- Dimensions of the aluminium case:
32 x 25 x 10 cm
- Weight: 1 kg
- Contents: 3 bottles with etching gel for aluminium, steel and copper
2 bottles with neutralising liquid
1 brush, 1 magnifier with UV-light

PKI 9605

Key Copying Kit

Wherever it is necessary to place monitoring devices into a room, non-destructive methods to open and close locked doors are required. For such purposes, different methods are possible. Whether using our lock-picking devices or casting a perfect copy of the original key - in any way we can supply the right solutions. With our **PKI 9605** Key Copying Kit we offer the best way for all special forces to enter the room as often as required under the condition that the original key is available at least once. For each and every type of key you can easily obtain a totally identical copy of the original, without the need of any key blank and within only a few minutes. The original has to be fixed in the supplied mould and the mixed-up impression material has to be filled into this. After curing of the material, the original key has to be removed and the remaining shape is to be filled with the supplied special casting metal material. With this mould, several similar



copies of the original can be done, one by one, within seconds.

Specifications:

- 1 pc. metal casting mould
- 2 pcs. support for keys
- 1 block special metal casting material
- 1 pc. burner with gas-cartridge
- 1 pc. mixing bowl
- 1 bottle hardener
- 1 bottle interlace agent
- 1 box impression material
- 1 set tools, with screwdriver, knife, spatula, one-way syringes, casting spoon etc.
- 1 pc. operating manual
- 1 pc. carrying case for the whole kit

PKI 9615

IR Light Barrier

Very often the surrounding conditions only allow a mobile and flexible intrusion protection especially in sensitive areas like mobile camps for police or military forces, industrial and / or private sectors where no mains supply is available. The **PKI 9615** is the smallest device available in the world-market for IR motion detection. Consisting of palmsized transmitter and receiver, the **PKI 9615** secures an area with a diameter of up to 70 m against unauthorised intrusions. If a person crosses the invisible beam between transmitter and receiver, a radio-controlled acoustical and visible alarm signal is given to the receiver (pager). Optionally, this signal can also be transferred to a mobile phone by means of an interface.

Specifications:

- IR-Wavelength: approx. 940 Nanometers (invisible to human eyes)



- Secured area: 1 - 70 m
- Distance of alarm transmission: up to 400 m (depending on surrounding conditions) or unlimited range to GSM mobile phone via interface
- Alarm: acoustical and optical on alarm receiver (pager)
- Power supply: 9 VDC standard block battery
- Dimensions. approx. 65 x 40 x 20 mm
- Weight: approx. 300 g

PKI 9620

Telescopic Assault Ladder

PKI 9620 is a telescopic ladder for immediate access to various buildings whenever these cannot be entered from the inside. Therefore it is a must for every SWATTeam, special police forces and military departments being in charge of criminal acts like taking hostages, bomb disposal and acting against drug dealers. As it is designed to be most compact, easy to store and quick to assemble, it offers the best features for a mobile, operational task. It extends from a compact format to either full length or any intermediate length. Handling is very easy, you only pull out from closed condition to required length. Maximum length is about 3.6 meters. Other types with less length are available upon request (1.4, 2.0, 2.6 and 3.2 meters). Made of top-class aluminium with hard rubber caps at the top and bottom, this assault ladder provides a high loading capacity and prevention of slippage when in use. It is certified to many world-wide standards in regard to safety and durability.

**Specifications:**

- Max. standard loading: 150 kg
- Closed length: 89 cm
- Extended length: max. 3,6 m
- Weight: 13 kg
- Carrying bag: approx. 102 x 51 x 11 cm

PKI 9625

Special Entry Tool

This low velocity, indirect acting tool is designed for police, fire fighters, military and emergency response personnel to quickly gain access through locked doors, gates, security bars, fences etc. It uses special breaching modules with drive/cutting heads that move at speeds over 60 m per second. **PKI 9625** is an indirect acting powder actuated tool which uses the expanding gases of a powder load to drive a piston rod forward. The piston rod then engages and drives a chisel or other type of object through a lock, bolt, padlock, window bar, or similar.

**Specifications:**

- Size: with flying chisel attached
495 mm x 45 mm x 159 mm
- Weight / tool: loaded tool with flying chisel attached 2.9 kg
- Weight / full kit: 6,8 kg
- Chisels and piston: forged tool steel, specially

- heat treated for impact stresses
- Striking force: 13.6000 kg at chisel head with red powder loads
- Tools:
flying chisel 75 mm
Boltbuster chisel 25 mm

- Lockbuster rod 69 mm
- Re-cock time for next shot: less than 1 second
- Power loads: 10 cartridges low velocity strip loads 3 (green) for training, 5 (red) for operations

PKI 9630

Flexible Ladder

This ladder is made from anodised aluminium and flexible stainless steel wire sides that can easily be coiled for transportation or stowage. **PKI** Flexible Ladder has a wide application range in rescue work, where quick access and fast extraction of persons in danger is crucial.

**Specifications:**

- Rungs: 15 cm wide
- Space between rungs: 30 cm
- Length: 10 -20 m
- Weight: 2,4 - 4,8 kg
- Max. load: 120 kg

PKI 9635

Street Barriers

A large variety of operations require street barriers, e.g. cleaning works after terrorist attacks or safeguarding of vehicles, buildings etc. or at demonstrations. We can deliver street barriers in different sizes and colours. They are easy to pile and therefore space-saving during transport by truck. Furthermore they offer retainers for signboards like "police control", "diversion" or similar.



Specifications:

- Material: steel or aluminium tube
- Dimensions: 280 x 120 x 50cm
- Colour: standard red/white, other colours on request

PKI 9640

Fluorescent Safety Products

Some special objects have always to be visible even at power blackout, such as exits and stairs, but also signs for fire extinguishers, fire alarm or emergency exits, direction arrows etc. In addition various kinds of signs we also offer self-adhesive fluorescent tapes. Should this still be insufficient we are able to supply fluorescent colour. Even if there is no light anymore this colour afterglows up to 30 minutes.



Specifications:

- Dimensions signs: 320 x 160 mm
- Material: polivinylchlorid, self-adhesive
- Dimensions fluorescent tapes: roll length 30 m x 0,30 m
- Specific weight colour: 1.4
- Lasts for: 1 kg/m²
- Packed in: 50 kg
- Note: These products can be stored for 1 year.

PKI 9645

10W Power LED Torch Lamp

The **PKI 9645** is one of the strongest torch lamps in the market and outshines any torch lamp with standard bulbs. Due to the solid aluminium housing its use is as versatile as could be, e.g. for outdoor operations. The energy-saving LED-lights allow extremely efficient use of battery power, which makes this torch a unique accessory at numerous activities.



Specifications:

- Dimensions: Ø 30 x 150 mm
- Weight: 180 g
- Power supply: rechargeable battery
- Operation time: 600 lm = 1 h / 90 lm = 10 h
- Capacity: 600 / 90 lm switchable
- Maximum capacity: up to 900 lm
- Various: extra solid aluminium housing, with non-slip hand grip, holster, rechargeable battery and power plug included.

PKI 9650

High Tension Lance

The new **PKI 9650** High Tension Lance is the extended development to our **PKI 9700** Electric Shock Baton. **PKI**'s R&D-department has developed this tactical device for every kind of riot control where aggressors have to be kept away from sensitive areas. In combination with our **PKI 9150** Protective Shield the **PKI 9650** High Tension Lance offers a perfect solution for an effective control of any riot situation. Several police officers or members of other Anti-Riot-Squads should row up, creating a „living wall“ against the insurgents but yet being well protected and having the best possible means of defence in hands for controlling and repelling of critical events. The **PKI 9650** is made of special, rigid and heavy duty plastic tubes incorporating the battery compartment, electronic boards and copper conductors for transferring the high tension to the contact-pins. Due to its length of 1.600 mm any person can be kept at a secure distance. Just by pressing the integrated button the **PKI 9650** will produce audible, high tension cracking noises and sparks between the contact pins. If even this will not stop the crowd, the



direct body contact with the electric pins of **PKI 9650** High Tension Lance immediately will immobilise the aggressor for several minutes.

Specifications:

- Total length 1600 mm
- Effective range from 1600 - 2400 mm telescopic
- Diameter 50 mm
- Weight 2,8 kg

- Max. output voltage 45.000 V
- Power supply rechargeable battery
- 45.000 Volts max. output power
- Low current
- Portable and well balanced
- Rigid but lightweight construction
- Battery operated
- Not effecting harmful injuries

PKI 9655 **PKI 9660** **PKI 9665**

Mast Systems for Police Vehicles, Mast Systems for Antennas, Mast Systems for Illumination



Fast installation of mast systems is often indispensable. According to customer's requirements our systems can be mounted onto vehicles or used in open space. They are available in light, medium and heavy duty versions depending on their height and weight of the object to be fixed, e.g. camera, illumination devices, antenna etc. Out of our range of more than 30 different mast systems we have selected 3 versions. Please ask for a detailed quotation that are suitable for military purposes as well.

Specifications:

- PKI 9655** 9 m height top load up to 15 kg
- PKI 9660** 30 m height top load up to 75 kg
- PKI 9665** 20 m height top load up to 70 kg

Various: Every mast can be mounted freestanding or onto a vehicle. Extension is effected by hydraulic or hoisting winch.

PKI 9670

Generator

A lot of our **PKI**-devices are used at emergency cases like terrorist attacks, earth quakes etc. where no conventional power supply is available. Our various generators of different power classes are the ideal solution **PKI** offers all types of generators from standard hand-held to stationary devices. In general we can recommend two types: diesel engines and patrol 4-stroke engines, but of course all special demands will be considered.

Specifications:

- Power: 1-10 kW continuous power, portable version or on wheels
10-400 kW stationary version
- Working voltage: 230 V or/and 380 V AC
- Frequency: 50 Hz
- Speciality: generator integrated in stable frame construction
- Protection class: IP 23
- Acoustic level: 83 dB(A)



PKI 9675

Telescopic Ladder

The advantage of telescopic ladders is that they are easy to store if you don't need them. In the case of emergency, however, they are ready to hand immediately. The **PKI 9675** has a total length of 3.80 m and can carry up to 150 kg. A handy and useful ladder, which is indispensable for any household.

Specifications:

- Dimensions: 78 cm (folded),
380 cm (expanded)
- Max. carrying capacity: 150 kg
- Material: aluminium
- Weight: 10,7 kg



PKI 9680

Portable Plasma Cutter

This plasma cutter cuts iron plates like butter which is often of highest importance at special operations. The plasma flame reaches a temperature of 8000°C. The **PKI 9680** weights only 6 kg and is powered by a separate generator which is included and allows long working times. A battery pack can also be used for shorter times of operation (depending on power).

Specifications:

- Dimensions: 500 x 700 x 300 mm
- Weight: 6 kg
- Power supply: 220 V/50 Hz, generator, batteries and power switch
- Plasma flame: 8000°C
- Note: The operator imperatively must wear the included protection mask due to strong UV rays.



PKI 9685

Hydraulic Spreader

The **PKI 9685** is a multi-functional item for various operations, such as spreading, pulling, holding, separating and much more. The spreading head with anti-sliding teeth is made of super-high strength light aluminium alloy for navigation and aeronautics. It ensures that the spreading and holding operation is safe and reliable. Our system adopts German seals and hydraulic oil for navigation, which ensures the use in an environment of -30°C to +55°C and in a depth of 30 m under water. **PKI 9685** complies with German DIN 14751.

Specifications:

- Dimensions: 704 x 280 x 185 mm
- Weight: 17 kg
- Working pressure: 63 MPa
- Spreading force: 42-120 kN
- Spreading distance: 630 mm
- Pulling force: 55 kN
- Pulling stroke: 500 mm
- Hydraulic pump: on request

**PKI 9690**

Hydraulic Cutter

PKI 9690 has a powerful cutting function and is able to cut round steel up to a diameter of 30 mm. The cylinder is made of high strength light alloy for aeronautics. The surface is ceramic treated. The cutter is made of special tool steel, which can be sharpened repeatedly. The system adapts German seals and hydraulic oil for navigation which ensures the use in an environment of -30°C to +55°C and in a depth of 30 m under water. **PKI 9690** complies with German DIN 14751.

Specifications:

- Dimensions: 730 x 190 x 165 mm
- Weight: 12.8 kg
- Working pressure: 63 MPa
- Max. cutting force: 420 kN
- Max. cutting capacity: 30 mm diam.
- Max. opening capacity: 150 mm
- Hydraulic pump: on request

**PKI 9695**

Hydraulic Door Opener

This **PKI 9695** hydraulic door opener is indispensable for special forces who need to get attack-like access to rooms. Very often only seconds determine whether for example a terrorist can escape or not. The spreading jaws are equipped with anti slip coating. **PKI 9695** complies with German DIN 14751.

Specifications:

- Dimensions: 140 x 110 x 235 mm
- Weight: 7 kg
- Temperature range: -30°C to +55°C
- Wedging angle: 28°
- Working pressure: 63 Mpa
- Load: up to 9 t.
- Note: In addition to **PKI 9695** a small, portable hydraulic compressor can be supplied on request.



PKI 9700

Electric Shock Baton

The **PKI 9700** Electric Shock Baton is the most versatile instrument to protect police officers, anti-terrorist squads and security guards from personal attacks at demonstrations, riots and other dangerous situations. Even private security companies should be equipped with this device for their own personal protection during their daily tasks. The unit is small enough to be placed into a belt sling like provided with our **PKI 9255** Immediate Response Jacket or can be fixed to the hand by the attached sling and then being right at hand at any time. The **PKI 9700**, coated by hard rubber material, provides an electric shock to the aggressor whenever touched but also can be used as a common baton. Additionally the **PKI 9700** produces a cracking noise and high voltage sparks whenever the electric shock function is activated by the integrated switch. This already will stop any further attack but even if the aggressive person steps forward, a single touch, of some seconds only, to its hip or upper-body region will immobilise him for a certain time, without causing any dangerous, long-lasting or even lethal injuries.



Specifications:

- Max. output voltage approx. 30.000 V
- Dimensions approx. 40mm diameter x 380 mm length
- Weight approx. 300 gr.
- Power supply standard battery 9 V

- Highly versatile
- High power - up to 30.000 V
- Low current
- Immobilising aggressors by non-lethal but yet effective electric shocks
- Battery operated

PKI 9705

Door Latch Opening Set

Especially locks of the new generation with end-to-end bolts are appropriate for this kind of opening set. Just install the lifting tool between the door and the door handle plate, in order to obtain the necessary gap that allows introducing the square bolt tool. Actuate the bolt with the tool in order to unlock the door latch. The **PKI 9705** is also appropriate for double rabbet doors and self-closing systems. Our handle plate lifting tool can be used on all door systems with enough ridges that allow placing it precisely and to exert

force on it. The tools are delivered in a solid hard-cover plastic case with inlays.

Specifications:

- Handle plate lifting tool
- Bolt, square, 8 mm for 72 distances
- Bolt, square, 9 mm for FH-doors
- 2x bolts, square, 10 mm for 92 distances
- Long pliers
- Set of latch pick needles
- Set of latch opening cards



PKI 9710

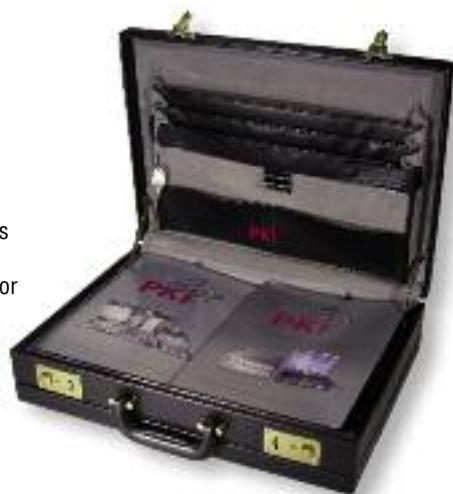
Safety Suitcase

The **PKI 9710** has been developed for secure transportation of various valuable items, such as cash money, jewels, important documents, etc. It features multiple functions to avoid theft and pilferage. Sensors are integrated in the handle and both surfaces of the suitcase, which can be activated, so that the **PKI 9710** emits high-voltage pulsed electric shocks of 30 KV. The wireless activation is done by means of a small remote control that must be carried separately from the suitcase. This remote control also activates the "loss function", which prevents from simply forgetting it somewhere during voyages or theft. If the distance between the remote control and the **PKI 9710** exceeds 3-15 m, a loud warning signal will be emitted. If ever the suitcase has really been stolen by someone, for your own protection you should wait until the person has obtained a distance of at least 50 m, in order to activate the anti-robery function of

the suitcase, which will activate the alarm signal as well as the high-voltage electric shocks.

Specifications:

- Activation distances: 3-15 m for alarm signal, approx. 50 m for high-voltage electric shocks
- Electric shocks: high-voltage >30 KV
- Audio alarm: > 85 dB
- Power supply:
- Remote control: battery
- Electric shocks: 12 VDC / 6 x alkaline batteries or equivalent rechargeable batteries
- Material: high-quality PVC or leather in black or red colour, according to customer's request
- Double code locks



PKI 9715**GSM Remote Control**

It is hard to believe but today's GSM-technology allows many actions for remote controls all over the world. This is what our **PKI 9715** can do. Switching on and off electric heaters, lamps, radio sets or other household equipment is as well possible as activating mains-powered monitoring devices like those shown in this catalogue. No matter whether you are in Spain and you must activate a certain device at home in Germany, or in your office in Turkey or anywhere else in the world - distances are of no importance. Of course, it is up to you what kind of device you wish to switch on or off but the **PKI 9715** is the right choice for all such operations.

With its potentialfree in- and outputs, the minimised dimensions of only 68 x 60 x 30 mm and the low weight it can easily be installed wherever you might need it. Simply place a commercial and prepaid SIM-card into the slot and off it goes.

**Specifications:**

- Frequency: GSM 900/1800 MHz
- Peak: switching current 300 VA
- Power supply: 110 - 240 VAC or 12 VDC with mains adapter/charger
- Dimensions: approx. 68 x 60 x 30 mm
- Weight: approx. 220 g

PKI 9720**Wireless Remote Control**

This professional wireless remote control activates respectively deactivates electronic devices from a distance of up to 1000 m with a coded signal. **PKI 9720** operates absolutely safely and interference-free to and from other electronic devices. Therefore it is the best possible solution, if you need a wireless remote control for all of your equipment. As standard, the **PKI 9720** is supplied as a single-channel version. Multichannel versions are available upon request.

Specifications:

- Switching channel one, potentialfree connection

with 100VA breaking capacity

- Transmitting frequency: UHF-range, coded
- Transmitting range: up to 1000 m (depending on surrounding conditions)
- Power supply: 9 VDC standard block batteries for receiver and/or mains adapter for transmitter
- Dimensions:
Transmitter - approx. 140 x 75 x 22 mm
Receiver - approx. 100 x 60 x 20 mm
- Weights:
Transmitter - approx. 350 g
Receiver - approx. 220 g

**PKI 9725****Telescopic Batons**

Already for a long time the **PKI 9725** Telescopic Batons are the standard equipment of police officers in many countries all over the world. **PKI ELECTRONIC INTELLIGENCE**, with its 40 years of experience in this business, and being a registered supplier in more than 60 countries, now can offer the latest development in this field.

Each baton is equipped with a special anti-slip rubber handle (Vinyl-Grip) and there is a vast difference to common batons in regard to quality, stability and reliability.

We can now offer various versions of the **PKI 9725** Telescopic Baton:

Version A made of aluminium, length 41 cm, weight 207 g

Version B made of aluminium, length 53 cm, weight 250 g

Version C made of aluminium, length 66 cm, weight 300 g

Version D made of aluminium, length 79 cm, weight 420 g

Version E made of steel, length 41 cm, weight 377 g

Version F made of steel, length 53 cm, weight 462 g

Version G made of steel, length 66 cm, weight 577 g

Version H made of steel, length 79 cm, weight 683 g

Version I made of black coated steel, length 41 cm, weight 377 g

Version J made of black coated steel, length 53 cm, weight 462 g

Version K made of black coated steel, length 66 cm, weight 577 g

Version L made of black coated steel, length 79 cm, weight 683 g

Please ask us for further information about each version.



PKI 9730

Solar Case

Nothing works without power supply, however there are numerous possibilities to ensure power for electric devices even at blackouts. Our **PKI 9730** solar case is one of these possibilities. Uninterrupted power supply is not only important for our special devices but also for standard equipment. The built-in lead-acid battery with 12V, 18 Ah is permanently recharged by solar energy via solar panels. The integrated inverter converts 12 V DC to 110 or 220 AC, so that a reliable power supply of 120 W is always available.

Specifications:

- Dimensions: 32 x 24 x 18 cm
- Weight: 10 kg
- Temperature range: -20°C to +60°C
- Solar panels: 2x 6W mono-crystalline silicon
- Carrying case: fire-proof PVC



PKI 9735

150W Solar Inverter and Outdoor UPS

There is no easier way! This handy power supply with integrated solar cell batteries, recharger and AC output reliably provides power for our **PKI** devices at various operations especially at blackouts. The batteries will be recharged by solar cells, AC adapter or inside the car via cigarette plug. The built-in batteries are equipped with overload protection.

Specifications:

- Dimensions: 200 x 155 x 55 mm
- Weight: 1.6 kg
- Solar panel: polycrystalline
- Built-in batteries: 12V DC, 2,2 A
- Output power: 150 w (max.)
- Output voltage: 120 V / 220 V
- Low battery alarm



PKI 9740

Digital Alarm System

- Handheld receiver
- PIR motion detector
- Shock sensor
- Radar motion detector
- Safety shut-off mat
- Handheld panic alarm

In general, a mission does not only consist in protection of furniture and fixtures. During a surveillance operation it is of utmost importance that the target person does not have any suspicions. One crucial point in order to avoid unpleasant surprises is to secure the target place accordingly, so that the surveillance operator is protected whilst installing the devices and can be warned timely, if persons are approaching the target room. Our alarm sensors are easy to install fully unobtrusively and their wireless functioning is completely autarkic, as each sensor is equipped with transmitter and battery. This allows extreme easy and fast installation. All sensors can be installed according to personal and individual requirements. The alarm is given via the handheld receiver, and can be selected between acoustic, optical and vibration alert. The distance between the sensors and the receiver can be up to 300 m.

Specifications:

Handheld receiver

- Channels: 4
- Frequency: 430 MHz
- Alarm: acoustic, optical, vibration



- Power supply: 4 x batteries type AAA 1.5 V
- Dimensions: 112 x 58 x 23 mm
- Housing: aluminium
- Operating time: 30 days in stand-by mode (with one set of batteries)

- Operating time: 40 day in stand-by mode
- Power supply: 3 coin cells
- Housing: aluminium
- Dimensions: ONLY Ø 16 mm x 88 mm

Wireless PIR motion detector

- Data transmission: digital, encoded
- Frequency: 430 MHz
- Start-up delay: 1 min. after activation
- Detecting range: 8 m
- Transmission power: 50 mW
- Transmission range: 300 m

Wireless shock sensor

- Data transmission: digital, encoded
- Frequency: 430 mm
- Transmission power: 50 mW
- Transmission range: 300 m
- Operating time: 180 days
- Power supply: 2 coin cells
- Housing: aluminium

PKI 9740

Digital Alarm System

- Dimensions: 70 x 51 x 9 mm
- Note: Start-up delay 1 min. after activation, perfect for surveillance of vehicles

Wireless radar motion detector

- Data transmission: digital, encoded
- Frequency: 430 MHz
- Transmission power: 50 mW
- Transmission range: 300 m
- Covered range: 0.3 - 5 m, 60°
- Power supply: 12V DC batteries
- Dimensions: 110 x 160 x 120 mm
- Operating time: 30 hours
- Note: a very reliable motion detector, even through doors, windows, walls, bricks, etc.
- Start-up delay after activation: 1 min.

Wireless safety shut-off mat

- Data transmission: digital, encoded
- Frequency: 430 MHz
- Transmission power: 50mW
- Transmission range: 300 m
- Operating time: 180 days in stand-by mode
- Power supply: 2 x coin cells
- Housing: aluminium
- Dimensions: 590 x 180 mm (transmitter: 70 x 51 x 9 mm)
- Note: reliably secures doors, halls and entries

Wireless panic alarm

- Data transmission: digital, encoded
- Frequency: 430 MHz
- Transmission power: 50mW

- Transmission range: 300 m
- Operating time: 100 days in stand-by mode
- Power supply: 3 x coin cells
- Dimensions: 64 x 34 x 13 mm
- Note: housed in a keyring pendant, wireless alarm release at the push of a button

In addition to our above mentioned sensors and detectors, we can also supply further types, such as IR or laser light barriers, acoustic sensors, etc. according to your requirements and needs. Also part of our product range are various versions of audio/video devices, wireless and pocket-sized, including receiver and recorder and are listed in our catalogue as well.

PKI 9745

Irritant Gas Defence System

The **PKI 9745** has been developed as ancillary component for already installed alarm systems. It consists in a defence system with irritant gas, which is approved as protection against people, combined with a warning announcement. Its housing is made in extra solid stainless steel to protect against damage. Once the main alarm system is turned on, the **PKI 9745** switches into standby mode. Only an alert will activate the defence system. At first a loud warning message will be announced: "Leave the secure area immediately, or irritant gas will be released". This clear and unmistakable warning gives the intruder the possibility to retreat. Otherwise, if he ignores it and continues to enter the detection range of the **PKI 9745**, the irritant gas will automatically be ejected. If this discouraged the intruder and he backs out, the **PKI 9745** will turn back into standby mode. If the intruder however

continues to approach, further irritant gas ejections will be released. After each ejection the dose of irritant gas will be increased. By turning off the alarm system, the **PKI 9745** will be turned off as well.

Specifications:

- Irritant gas, approved as protection against people in 400 ml cartridges covering areas up to 300 m². Stainless steel housing with adjustable wall bracket, control unit protected against damage, with LED-display and key switch to protect against unintended activation, cable length 1.5 m
- Operating temperature: -20° to +45°C
- Dimensions: diameter approx. 160mm, length 330 mm
- Weight: approx. 6.5 kg

**PKI 9750**

Defence Tool

These tools are indispensable for all persons working as security guards, whether at government departments or in industrial companies like power plants, metal- or chemical factories etc. In order to avoid that they are seriously injured or even die when doing their job or by being attacked by demonstrators, terrorists or other crowds ready to use violence, they must be equipped with adequate defence devices. However, it is necessary to practise the application of these special tools. With our special training courses we can provide each user with the necessary knowledge to use our equipment correctly and to avoid injuries. Unlike the tools of many other suppliers the **PKI 9750** includes a wide range of features, i.e. baton, torch light and tear gas in one tool. Optionally tools with bent hooks for capturing a person or tools with a grip and long lance to keep



the aggressor at a safe distance are also available.

Specifications:

- Dimensions 40 - 60 cm
- Weight Approx. 150 g

- Material Plastic, aluminium and iron
- Sturdy finishing
- Shock-proof material
- Easy to handle
- Light-weight

PKI 9760

NBC Protection Suit

This protection suit belongs to a group of activated carbon fabrics which has been designed in order to meet the latest challenge in case of a NBC thread. This suit offers both advantages, i.e. total protection and high air- and water vapour permeability and reduces the threat of heat stress by its excellent wearing comfort. **PKI 9760** is especially convenient for operation in hot climatic conditions.

Specifications:

- Weight: 520 g/m²
- Air permeability: 250 mm/s
- Water vapour resistance: ISO 11092
- Thermal resistance: 0,030 m² K/W
- Protection against chemical warfare: laid drop test and falling drop test
- Protection against a 10 gm² HD challenge for 24 hrs ≤ 4 µg/cm²

- Gas test: protection against a 20 mg m³ HD challenge for 6 hrs ≤ 500 mg min/m³
- Possibilities of decontamination: hot gas/hot vapour (180°C/30 min.) twice
- Burning resistance: protection against heat and flames (EN 15025) level A
- Available NBCF (F=fire) protection suit: high protection against fire and heat radiation
- Washable: at 40°C
- Shelf-life: min. 10 years



PKI 9765

Fight Suit

This suit has been designed especially against punch weapons. It is particularly effective against hard attacks of special arm- and leg techniques. Due to its especially comfortable design, this fight suit won't constrain the fighter's agility in the case of an attack or defense situation.

Specifications:

- Material: upper shell cotton mixture 300 g/m², in addition firmly tufted with Cordura at chest and back, inner cloth humidity adjusting, stuffing by punch-absorbing fabrics. At chest, back, abdomen, upper and lower arm, tights, shin and calf-bone additional protectors are available made of punch resistant plastics.
- Miscellaneous: excellent flexibility and extraordinary wearing comfort, Velcro and fleece shutters to fix all protectors
- Available sizes: S / M / L / XL



PKI 9770

Underneath Vest

A complete body protecting vest not only consists of protection plates against punch-knife-slash and bullet attacks but of various elements which have to be considered carefully. Besides high protection the vest has to provide a maximum of comfort to the wearer so that it is steadily worn.

Specifications:

- Available colours: black, blue, green
- Protection: against punch and knife-slash
- Knife-slash restraint: 35 Nm
- Note: Use of this vest makes sense when application of guns is highly unlikely.
This means areas with personnel access control such as prisons, at court, or major events where special security attention is paid.



PKI 9780**UV-Set**

This UV-set consists in a strong UV-LED light, UV-ink, UV-pen and UV-spray and offers all facilities to convict perpetrators. Once applied on different surfaces and items, the UV-substances remain invisible for the human eye and can only be visualized by means of the strong UV-LED light. This is also the case for texts written with our UV-ink. To do so, just fill the UV-ink into a common fountain pen. If a person touches the UV-marked items, these UV-substances will stick on his hands, fingers or clothes. Afterwards he can easily be identified with the UV-LED light. Of special interest is our UV-spray. Applied onto bank notes, floor grounds, jewelleries etc. it adheres to them during several days and transmits itself to the person that touches them.

Afterwards nothing is easier than to provide evidence with our strong UV-LED light.

Specifications:

- UV-LED light:
Wave-length: 380 - 390 nm
Power supply: 2 x batteries type AA
Dimensions: ø 34 x 176 mm
Weight: 112 g
- UV-pen: ø 10 x 60 mm
- UV-ink: contents 20 ml
- UV-spray: contents 200 ml
- Assembled in an aluminium case of 250 x 200 x 85 mm
- Weight: 1,2 kg

**PKI 9785****UV-Marker Spray**

This invisible UV-spray can easily and inconspicuously be applied on various items to be secured. It remains on the items during several days and sticks on the hands or fingers of the person that touches these marked objects. By means of the UV-torch, that is included in the set, even smallest traces will become visible.

Specifications:

- Contents: 345 ml
- Colour: neutral, turns to green under UV-light
- UV-light, protective gloves and application sticks included.

**PKI 9790****Invisible Theft Detection Set**

These substances will stick on the hands or fingers on contact. Compared with the visual theft detection substances, they only become visible under UV-light. These invisible substances find their application field rather in long-term observation activities of suspicious persons. Even smallest quantities of this powder or paste will become visible under UV-light (included).

Specifications:

- Powder/paste available in the following colours:
neutral, turns to green under UV-light
- Contents: 60 g
- UV-light, protective gloves and application sticks included

**PKI 9795****Computer Data Restorage**

It happens quite often and is unforeseeable: the PC data is destroyed or lost by interference of hard ware, user failure, deletion or data formatting by mistake or virus attacks. But we can offer help! After receipt of your PC we will issue a diagnostic report stating which data could be restored and at which level. Hereafter we will submit a firm offer to you. All data will be restored bit by bit in painstaking detail. Your PC will be opened in clean room in order to realize a 1:1 copy of the hard disk. Afterwards the structure of your file system will be reconstituted and the lost, corrupt or damaged datas is available again. Our forensic scientists will also analyse whether electronic documents are forged, modified or deleted. Please ask us for electronic search for traces and data protection.



PKI 9800

Perpetrator Convincing Kit

Visible perpetrator materials are special powders or pastes that are applied on valuable items like bank-notes, documents, laptops etc. Touching these marked items will create a long-lasting, clearly visible and permanently existing dot on the fingers and hands. Even persistent washing with water and soap cannot remove these stains which easily detect the theft. Invisible perpetrator materials, however, are special powders or pastes which are only visible under special UV-lamps (like our **PKI 5405**) and are invisible to the naked human eye. With the **PKI 9800**, we offer a complete set of every necessary material for a rapid and effective perception of perpetrators. Other companies only offer single components which then have to be assembled to a workable kit. Our complete case **PKI 9800**

offers all this in a "all-in-one" assembly of state-of-the-art materials, guarantying that each government department is perfectly equipped with an outstanding assortment of visible and invisible powders and pastes plus every necessary tool in order to identify the perpetrator.



Specifications:

- Coloured powders and pastes, black, red, green, yellow, silver and copper for the visible marking
- Powders and pastes for the invisible marking incl. mini-UVlamp, application sticks and protective gloves and various fingerprint-lifting foils and marking crayon

PKI 9805

Explosives Test Kit

The **PKI 9805** is in service with many governments all over the world and is designed and assembled as an exclusive and extremely cost-effective and easy-to-use system for detection of all types of military and other explosives. Due to its minimized false alarm rate and low price ratio it is delivered to security forces in far greater numbers than conventional explosive detectors, which tend to be expensive and usually require a technically trained operator. Each **PKI 9805** comes with a clearly comprehensible set of instruction manuals so that an operator without any technical background - can immediately use the test kit in an operational environment. The complete kit is fitted in a sturdy plastic carrying and storage case with every necessary tool for an immediate and on the spot testing.



Specifications:

The complete set of the **PKI 9805** is containing the test devices for:

- SEMTEX
- C4
- TNT
- RDX
- PETN

in less than three minutes, providing a fast and extremely accurate result.

For home-made explosives a separate kit - the **PKI 9805/A** - is also available.

Please ask us for full information about this set.

PKI 9810

Bomb Search Kit

The **PKI 9810** is an inexpensive kit designed for IED search operations. It provides a range of tools for carrying out general searches in buildings, ships and vehicles and contains a portable endoscope/boroscope, a portable hand lamp, a portable drill as well as an assortment of tools. Whenever immediate visual inspection behind walls and panelling is required, the portable drill enables inspection via holes to be drilled through all types of material, allowing rapid internal and visual inspection by means of the supplied endoscope and hand lamp. Large and small inspection mirrors are also included to facilitate searches in confined spaces. The kit furthermore provides a range of tools for removing panelling and covers and is suitable for carrying out general searches in vehicles and ships as normally having to be done by customs authorities.



Specifications:

- Portable endoscope/boroscope
- Portable drill set and bits
- Portable hand lamp
- 63 piece socket set & bits
- 25 piece hexagon spanner set, metric and imperial
- 24 piece combination spanner, metric and imperial
- Vehicle door trim/panel removing tool
- Combination pliers 7" insulated
- Telescopic search mirror pole
- Mirror to fit telescopic pole - 63.5 mm diam.
- Dental mirror - 22 mm diam.
- Adjustable spanner - 300 mm
- Wrecking bar 340 x 45 mm
- Safety torch - suitable for zone 0, 2xD cell
- Screwdriver - 400 mm, 5.5 mm flat tip
- Screwdriver - 400 mm, 8 mm flat tip

PKI 9815

Body Cooling System

The **PKI 9815** is designed to keep the whole body cool in high ambient temperatures using iced water to remove body heat. **PKI 9815** offers a safe and cool environment for people who must maintain a high level of efficiency and concentration under extreme heat. When wearing heavy protective clothing - such as our bomb protection suit **PKI 9820** - or when particularly strenuous work has to be maintained over a long period in hot and humid environments (like firefighters, personnel in non-air-conditioned armoured vehicles, mineworkers etc.), the **PKI 9815** is the right choice. Made from flame-retardant, knitted material it is ideal for IED-, EOD-, surveillance and chemical clean-up operations in hot climates. The suit requires no hazardous pressurised canister or toxic cooling agent and also offers protection against heat and flash fire balls. The one-piece suit covers the trunk of the body, the upper arm and upper leg areas and the head (close fitting/open faced hood).

It comes as a complete system with:

- 12 VDC pump
- 1.5 kg iced water bottles
- Rechargeable batteries
- Charger

One size fits all!

Specifications:

- Heat removal rate 270 Watts (full suit)
- Endurance min 45 min at 35°C
- Weight:
 - Suit - 1 kg
 - Cooling unit dry - 0.5 kg
 - Water - 0.7 kg
 - Battery Pack - 0.5 kg
- Material stretch flame retardant fabric
- Cooling unit
 - Pump - 12 VDC
 - Cooling source - ice cubes and water. Second water/ice bottle is supplied as stand-by

**PKI 9820**

Bomb Protection Suit

The **PKI 9820** is a new and state-of-the-art, up-armoured suit which already is in use at many government departments worldwide. It provides the highest protection level of all bomb suits currently manufactured, whilst at the same time offering maximum comfort and flexibility to the operator. The ballistic levels and materials used in the various components of the **PKI 9820** are tested and evaluated according to the full quality assurance standard laid down by the appropriate government organisations.

The suit consists of the following separate items:

- Jacket with attached collar
- Trousers
- Helmet with visor and air-cooling fan
- Separate overshoes
- Neck protection plate
- Chest protection plate
- Groin protection plate

All the ballistic inserts used in the **PKI 9820** are made of waterproof treated KEVLAR-HT which are enclosed in a special water-resistant and anti-ultraviolet membrane. The outer cover is supplied in flame-retarding NOMEX III. In hot and humid countries the **PKI 9820** can be supplied in conjunction with the **PKI 9815** Body Cooling System.

Materials

Helmet: GRP skin with elastomeric aramid core and inner lining (adjustable to various sizes), integrated microphone/earpiece with extension

lead for connection to any radio transceiver, ambient sound facility, air cooling fan, helmet mounted torch with rechargeable batteries, anti-ballistic hardened acrylic/polycarbonate laminate visor, aluminium carrying case.

Jacket & Trousers: Ballistic inserts: multi-layer water-repellent Kevlar 129 HT, Outer cover: Fire-retardant cotton. Colour: Navy blue or Military green. Proprietary: Armoured steel plates with closed cell, linear foam

Specifications:

- Outer Cover NOMEX III
- Insert KEVYLAR 129 HT, spinal protector, neck protector,
- Suit 600 m/s (without armoured blast plates)
- Weight of suit approx. 26 kg with steel blast plate approx. 15 kg without blast plates
- Weight of helmet approx. 4.7 kg
- Armoured Blast Plates 1600 ms (groin, chest and neck)
- Helmet 600 ms
- Visor 740 ms anti-ballistic hardened acrylic/polycarbonate laminate
- Power Pack 12 VDC with auxiliary socket to power
- Air blower min. 200 litres per minute, 3 speed, can accommodate an NBC canister
- Optional accessories helmet-mounted torch or video camera.

For these 220 VAC or 12 VDC provides 90% recharge within 15 min.



PKI 9825

Search Suit

The **PKI 9825** has been designed specifically for personnel involved in searching and clearing of mines and terrorist explosives devices. As a lightweight search suit, it fills the gap between our Bomb Protection Suit and conventional clothing in cases where maximum protection is not necessary or where greater freedom of movement is required. It is suitable for most EOD search projects, affording a high degree of ballistic protection whilst not encumbering the wearer unduly. The outer material of the **PKI 9825** is constructed of fire-retardant NOMEX III and includes the latest KEVLAR fibres technology. A steel plate is available as an optional extra.

Components

Arms: Separate adjustable sleeves provide optimum movement.

Jacket: Provides front, back, side, shoulder and neck protection, with addition of up-armouring pockets for inserting optional ceramic or armoured steel plates.

Groin protector: Removable insert.

Trousers: The unique design provides freedom of movement and optimum protection of the legs.

Helmet & Visor: These, in conjunction with the search suit's high collar, provide maximum protection.

Specifications:

- Arms, jacket, groin protector and trousers V 50 (17 grain FSP) – 475 m/s
- Helmet V 50 (17 grain FSP) – 450 m/s
- Visor Acrylic/Polycarbonate V 50 (17 grain FSP) – 450 m/s
- Colour Navy blue or olive green



PKI 9830

Robotic Telescope Manipulator

The new **PKI 9830** has been developed by **PKI ELECTRONIC INTELLIGENCE GmbH**, in close cooperation with experts from all over the world.

It allows EOD operators to manipulate suspect devices and objects at a secure distance of 3 meters. This significantly increases the operator's security if a device should detonate.

PKI 9830 is made of tube sections being linked together with a powered claw attachment at the operating end. A counterweight tube assembly which balances the manipulator is behind the operator. The final section has a frangible joint, which fails in the event of an unplanned detonation. This ensures that the load, transferred to the operator, is reduced to its minimum. An optional fragment shield, in front of the operator, offers extended protection. The claws of the **PKI 9830** opens, closes and rotates under power control. The angle is adjusted manually with locking screws.

The whole manipulator can be folded a size fitting in a standard Pelican carrying case.



Specifications:

- Distance between operator and claw 3 meters
- Maximum lift weight up to 15 kg
- Claw rotation 360° continuous
- Claw opening max. 200 mm
- Manipulator weight 21.5 kg, folded and stored in case, 14 kg assembled and ready for use
- Claw anodised 6082 aluminium
- Tubes anodised 6082 aluminium, total number

- 8 pieces (5 pieces in front of the operator, 3 pieces behind the operator with counter balance), connected by polyacetal tapered locking collars
- Electrical connectors gold plated, 5 Amp, 24 strand, 0.2 mm diam.
- Claw control Non-latching toggle switches plus adjustable load control by potentiometer

- Counterweight Stainless steel – approx. 10 kg
- Motor specification 9Amp carbon brush
- Charger 110/240 VAC – plug style to suit end user
- Battery 12 VDC, 3 Ah nickel metal hydride

PKI 9835**Tactical EOD Shield**

The **PKI 9835** has been developed for the use by explosive disposal and tactical teams. Years of research and attention to details finally have resulted in a highly protective shield with outstanding manoeuvrability, being now available with the **PKI 9835**, and already in use in many countries throughout the world. It provides a maximum protection against overpressure and fragmentation during explosive disposal operations whilst being light enough to be held with one hand. This shield is equipped with removable spring-loaded legs making it self-supporting for lengthy operations. In the stowed position, the legs latch into the edge of the shield for easy storage and manoeuvrability. Just one quick push releases the supporting legs into the deployed position, allowing the shield to be self-supporting.

Specifications:

- Materials Multiple layer, compression moulded, KEVLAR composite laminate Ballistic Visor -LEXAN
- Ballistic protection V-50 rating as per NATO STANAG 2920, 555 m/s (ballistic protection against firearms available upon request)
- Impact attenuation Forehead and forearm impact attenuating by special shock absorbing

foam-pads built into the inside surface of the shield. These are designed to absorb shocks from fragments, bullets and pressure-wave impacts.

- Dimensions 130 x 76 cm
- Weight
Shield - 13.5 kg
Spring loaded legs - 1.6 kg
Optional shoulder harness - 1.0 kg
- Handles The shield includes interchangeable handles (forearm and hand) to facilitate left or right handed approaches, or a vertical mounted strap and foldaway handle system. Other handle configurations are available
- Colour Standard matt black (other colours upon request)

**PKI 9840****Bomb Suppression Blanket & Safety Circle**

The **PKI 9840** is the most cost-effective and easy to use equipment currently available for protection against fragments and shrapnels from explosive devices. It has been designed for the use by both unskilled personnel as well as skilled Explosives Ordnance Disposal (EOD) operators, when confronted with a suspect explosive device in public area. **PKI 9840** is already in use at many armed forces, police units, government and corporate offices etc. in numerous countries worldwide. The **PKI 9840** safety circle is placed around the suspect bomb and then the bomb blanket, which has four heavy-duty webbing carrying handles, is carefully placed over the safety circle surrounding the bomb. This eliminates any direct contact with the bomb and provides a safe environment for its examination and disposal. Two or more safety circles can be used together for larger bomb devices. Should the bomb explode, the safety circle directs the force of the explosion upwards, then the bomb blanket flexes and detains most of the fragments. The **PKI 9840** is a light-weight, highly protective equipment made out of multiple-layer ballistic material and folds up into a compact, easily portable bag.

Specifications:

- Size 1.5 x 2.0 meters
- Weight approx. 13.5 kg
- Protection level
V 50 (17 grain FSP) - 400 m/s
Different sizes and protection levels can be made on order



PKI 9845

Postal Bomb Container

The **PKI 9845** is designed for protection of targeted people as well as for ordinary staff, handling suspicious mails. As postal bombs, whether real or imagined, are an omnipresent problem, the identification of such suspicious items in the daily mail is vital. But even when this is successfully done, there still remains the problem of how to minimise the danger to personnel and property. For this the **PKI 9845** offers the right solution, as it is specially developed for this purpose and being the most cost-effective product in the world market. It is already in use at many government departments, police stations, EOD-teams and other large industrial companies worldwide. The container is designed to retain any suspicious item of mail in an upright position. An internally fitted net holds the item in such a position that

removal, X-Ray scanning and controlled explosion remain possible. The **PKI 9845** is made of special glass re-enforced plastic material with additional fire-resistant resin and it is large enough to accommodate a briefcase. Blast will be directed upwards and an explosion device of up to 0.5 kg can be absorbed. Most explosive devices that have been discovered so far did not contain more than 0.5 kg of explosive material.



Specifications:

- Height: 900 mm
- Outside diameter: 493 mm
- Thickness of container's wall: 18-19 mm
- Weight: approx. 50 kg
- Ballistic protection: V 50 at 480 m/s
- Colour: matt black
- Shelf-life: not less than 10 years

PKI 9850

Observation Vehicle

- State-of-the-art vehicle
- Fully equipped with audio/video observation devices according to buyer's request

The **PKI 9850** should be used by police, special forces, security forces, border guards etc. in order to control mass happenings as well as extreme situations, disasters, rescue operations and border protection. The **PKI 9850** has been developed in response to the market's needs and we hereby created and present a fully equipped observation vehicle for any observation task. This mobile monitoring centre is based on the most technically advanced CCTV equipment and will be supplied with discreet monitoring, editing and recording devices plus high frequency signal transmission and GPR's. The car can be equipped with IR-cameras and directional microphones, if desired by the customer. The configuration of the built-in technologies and equipment depends on the client's needs. It may

vary from simply one camera system with monitor and recording device to the most advanced systems comprising remote control, digital cameras, pneumatically telescopic mast with highdefinition, long-range cameras, GSM and UMTS picture transmission, satellite communication and integration with existing monitoring and command centres. The crew of the **PKI 9850** can handle each device by independent power supply (either external 230 V power supply, built-in power generator or powercells / accus withconverters). Refrigerator and coffeemaker are supplied as standard.



Specifications:

- As each **PKI 9850** varies according to customer's needs we would like you to contact us with your full list of requirements and we shall work out a personally tailored, complete offer for you.

PKI 9855

Digital Speed Control Device

The **PKI 9855** is the latest generation of police speed laser with outstanding performance and features. It has been updated to provide a larger range, a quicker target detection and a mode for inclement weather, guaranteeing that the **PKI 9855** can be operated even in bad weather incl. snow, rain and fog. **PKI 9855** is the only laser on the market to provide the user with information on both speed and range, in the heads-up display. This informs the operator of the distance of every target, without having to check the LCD constantly. The **PKI 9855** is totally user-friendly as all the keys are back lighted and clearly labelled. Each key has an obvious and clear function. **PKI 9855** generates a continuous Doppler-type audio tone which correlates to the target speed - just like the audio on a police radar. This audio is a substantial aid to

understanding and building a target tracking history providing a better evidentiary case for citations. Various accessories are available:

- Waterproof carrying case
- Large heavy-duty tripod
- Side window stabilisation head
- Shoulder stock stabilisation head
- Smart charging platform
- Double capacity NiMH battery handle
- NiCad battery handle
- 12 VDC corded handle



Specifications:

- Acquisition time less than 0.4 seconds
- Nominal range min – 2 m, max – 1.200 m
- Range accuracy less than or equal 1/3 m
- Speed measure +/- 2 kph to +/- 480 kph
- Speed accuracy + 1 kph, - 2 kph

- Dimensions 21,8 x 15,3 x 10,7 cm
- Weight 1,7 kg
- Housing metal case with rubber end caps

PKI 9860

Special EOD Vehicle

This special vehicle offers everything that is necessary for bomb disposal. It includes a generator for 220 V and 0,65 KVA. A portable X-ray device for verification of hazardous objects can be connected. You only have to place the potential bomb onto the extendable table behind a steel plate for identification and analysis. The vehicle is equipped with explosive sniffer, metal locating devices, stethoscopes, shovels, picks and much more. Furthermore a complete communication system is built in which can also be delivered in scrambled version on request.

**PKI 9865**

Mine Shoes

The **PKI 9865** Mine Shoes are built on the theory of air cushions, which support the body while reducing the pressure in relation to the minefield. **PKI 9865** Mine Shoes are the culmination of years of research and have been designed and developed by teams who tested and used them in the field. **PKI 9865** represents a totally unique concept enabling the wearer to traverse a mine field over mud, water or any other terrain safely. By simply slipping the compact unit out of his luggage and inflating the air cushions, the user can continue his way within only some seconds. The shoes fold up into a small lightweight package that can easily be stored in a rucksack. The mine shoes are made of sturdy nylon, nylon-reinforced PVC, coated aluminium and steel alloys. The five-air-cushions are of specially designed, patented material created for maximum strength and resiliency.

**Specifications:**

- Fully inflatable/deflatable within seconds
- Foldable into a small pack 360 x 160 x 120 mm
- Lightweight 2.3 kg
- Completely portable
- Made of tough nylon, nylon reinforced PVC; air

cushions of PVC L 152 type, upper rigid frame of aluminium and steel alloys. Self-locking, error-proof device with no moving parts
 • Metallic parts will not interfere with mine detectors or any other metal detectors.

PKI 9870

Magnetic Locator

The **PKI 9870** is the No. 1 around the world in performance and reliability of detectors for location of the magnetic field of iron and steel objects and energised power lines. It has an easy to read digital and bar graph display for signal strength and polarity and provides audio detection signals that peak in frequency when the locator's tip is held directly over the target.

Designed for one-hand operations, the ON/OFF/SENSITIVITY and VOLUME controls are located on the underside of the cover. This provides easy access, protects the knobs and contributes to their overall ruggedness and dependability. Once a target is located by using the audio signal, the digital readout and polarity indicator will help to visually pinpoint it and to determine its orientation, whether the pipes are vertical or horizontal.

- One-hand operation
- Digital readout and expanding bar graph display for signal strength and polarity
- Four sensitivity settings
- Piezoelectric speaker
- Analogue output for data logger entry using

headset jack and standard stereo audio plug
 • No response to aluminium, brass or copper

Specifications:

- Audio mode choice of two modes:
 "Mode B" - audio signal always present
 "Mode A" - audio signal is only present when locator is within detection range of a target.
- Signal strength and Polarity four settings for sensitivity read out by a 3-digit LCD readout
- Battery status digitally indicated on bar graph
- Operating time approx. 60 hours on 2 Lithium 9-Volt batteries
- Dimensions approx. 8 x 8 x 100 cm
- Weight approx. 3.2 kg
- Carrying case rugged case for storage and transportation



PKI 9875

Cable Locator

The **PKI 9875** is the latest development of metal and cable detectors and is designed to detect the presence of both buried and surface laid command cables or wires that could be used to activate Improvised Explosive Devices (IEDs). **PKI 9875** is lightweight, durable and easy to operate. It has a unique ergonomic design, i.e. the operator can use it for long periods in all types of terrain without wearing out. **PKI 9875** is powered by 3 standard LR20 batteries, providing an 8-hours continuous operation. It is packed in a sturdy IP67-rated transportation case. During operation the unit can be carried in the supplied, water-resistant rucksack.



Specifications:

- Weight:
 - short version - 0,9 kg
 - long version - 1,2 kg
- Weight complete in transportation case:
 - approx. 4,0 kg

PKI 9880

Explosive Ordnance Disruptor

The **PKI 9880** is a well proven device developed for SWAT-Teams, Special Police and Military Forces or any other EOD and IED teams. It is extensively used all over the world and is designed to disrupt improvised explosive devices (IEDs) in thin-walled packages, and offers a high probability of avoiding the detonation or explosion of the suspect device. Being a multi-shot device, **PKI 9880** is capable of many firings without any distortion of the main body and requires a minimum maintenance. Training of EOD personnel can be carried out using the equipment without detriment to its performance. This disruptor is to be positioned by using an anti-roll clamp or an optional, lightweight stand to ensure accurate positioning. It can easily be fitted to a remotely operated vehicle. Preparation of the unit can be carried out behind covers, or away from the vicinity of the IED to ensure the operator's safety. **PKI 9880** is constructed from anti-corrosive, precision-made machine parts which are subject to rigid quality control during manufacture. The main body material is subject to the flaw material requirements of international standards. The complete kit is supplied in a canvas bag with stitched pockets to secure all items supplied:



- split sleeve adaptor
- contact cover
- disruptor main body
- disruptor rear body
- water bottle
- loading tool
- cleaning brush
- cleaning rod
- screw drivers
- anti-roll clamp

Cartridges are supplied in multiples of 20, packed in H83 containers, complete with internal furniture pistons, closure caps and polythene bags

Specifications:

- Total weight:
 - approx. 4 kg

- Overall length of barrel:

485 mm

- Weight of barrel:

approx. 2.95 kg

- Canvas bag:

500 x 300 x 200 mm,
colour olive green

PKI 9885

Surface Penetrating Radar

The **PKI 9885** is a revolutionary, high-performance system designed for detecting any object concealed under the ground or behind walls. It has been designed according to the specific requests of several government authorities worldwide and is now in full operation with Police, Military, VIP-protection and commercial companies. The unit is completely weatherproof and can operate in any type of soil condition. Depth of detection depends on size of object and type of soil, but is typically up to 3 meters.

The complete system consists of 3 main parts:

- the controller (which in fact is a ruggedised personal computer)
- the antenna set
- the transmitter/receiver head, which transmits the information from the antenna to the controller

The **PKI 9885** works by sending out pulses of electromagnetic energy and detecting the electrical echo caused by dielectric differences within the surface being investigated. One of the main features is that during a search, as the antenna is moved across a surface, the data is shown in colour and in real time on the monitor.



This means that an anomaly beneath the surface can be seen immediately whenever the **PKI 9885** passes over it, thus making instant and on-site decisions possible. The data can be downloaded and printed on a paper-strip or stored on the hard disc for further processing or inclusion in a survey report. The standard system is supplied with a 500 MHz antenna which has a typical penetration depth of 1.5 to 2.5 meters in good conditions, i.e. where sand and peat are good and salt water and clay are poor. The other

antennas in the range are the 250 MHz (typical penetration depth of 2.5 to 4.5 meters) and the 1 GHz and 2 GHz antennas. As a general guide, the lower frequency antennas (250 and 500 MHZ) are normally used for work below ground and the higher frequency for work above the ground. Important to know is that as soon as the penetration depth increases, the resolution will decrease. Hence the 1 GHz and 2 GHz antennas are very useful for locating very small objects behind a surface - such as a wall.

PKI 9890

Explosive Isolation Unit

The Explosive Isolation unit is a simple-to-use and intrinsically safe steel box developed for safe confinement of postal bombs, explosives and IED devices. It is lined with an unique blast attenuation material that resembles a "sponge" to absorb blast and fragments. These are contained within the unit, thus allowing for the fast and effective collection of forensic evidence if required.

Specifications:

- External size: 630 x 650 x 680 mm
- Inner size: 475 x 380 x 350 mm
- Weight: 100 kg

**PKI 9895**

Protected Trash Can

The **PKI** Protected Trash Can provides 360° lateral protection against blast pressure and fragments. It is used all over the world in airports, trains and subway stations, street markets, sport stadiums, government buildings and public areas. This trash can save lives and protect against serious injuries, as well as against contact and center detonation. **PKI** Trash Can is also designed as a secure depository for temporary storage of suspicious objects until authorities arrive.

Specifications:

- Dimensions:
diam. 450 mm - 790 mm
height: 750 - 1050 mm
- Weight: 140 - 920 kg
- Colours: red and stainless steel
- Note: Of course, the **PKI** Trash Can can also be used as a normal trash-can.



PKI 9900

Theft Evidence Kit

PKI 9900 has especially been designed for mobile and on-site use whenever doubts exist and the investigator needs evidences. This aluminium case contains the most important tools and materials to collect such evidences in order to convict the theft.

Contents:

- 1 pce Mobile tube with lamp, battery and charger
- 1 pce Neon-bulb for tube lamp
- 1 pce UV-bulb for tube lamp
- 1 pce UV-light sensitive ink
- 1 pce UV-light sensitive ink, quick drying
- 1 pce UV-light sensitive paste, white/blue
- 1 pce UV-light sensitive paste, orange/red

- 1 pce UV-light sensitive paste, white
- 3 pcs UV-light sensitive crayon, water resistant
- 1 pce Crayon holder
- 1 pce Colour-transfer powder, violet/red
- 1 pce Colour-transfer powder, green/turquoise
- 1 pce Colour-transfer powder, violet
- 1 pce Colour-transfer powder, blue
- 1 pce Colour-transfer powder, lilac
- 5 pairs Disposable gloves
- 1 pce Detergent

Specifications:

- Weight: approx. 5.5 kg, including the aluminium case
- Dimensions: 46 x 35 x 16 cm



PKI 9905

Tire- and Footprint Investigation Kit

PKI 9905 is highly suitable for the investigator to make individual casts of foot- and tireprints in sand, mud, snow or any other surface where traces remain on the ground. Each necessary tool and material is stowed in a sturdy aluminium case, designed for the use at site and in mobile operations.

Contents:

- 1 pce protecting spray for prints
- 1 pce special oil spray
- 1 pce wire netting
- 2 pcs mixing-bowls
- 1 pce wide-neck bottle, small
- 1 pce wide-neck bottle, large
- 1 pce wide-neck bottle, large, filled with printlifting mixture

- 1 pce diffusor for printing powder
- 1 pce shake sieve
- 2 pcs casting strips
- 1 pce forceps, large size
- 1 set screwdrivers
- 1 pce foot rule
- 1 pce stirring rod for mixing bowls
- 1 pce pocket saw
- 1 pce pair of scissors
- 1 pce disposable towels
- 5 pairs disposable gloves
- 5 pcs pull-string bags, large size
- 5 pcs pull-string bags, medium size
- 1 pce spatula, medium size
- 1 pce spatula, small size
- 1 pce protection foil
- 1 pce footprint lifting tape



PKI 9910

Standard Scene of Crime Investigation Kit

The contents of the **PKI 9910** meet the basic requirements for securing evidence at the scene of crime. Each necessary part is packed in a rigid, handy case and provides the full scope of tools and materials for an immediate action at site.

Contents:

- 1 pce glass cutter
- 1 pce post mortem spoon
- 1 pce splinter forceps
- 1 pce pair of scissors
- 1 pce nail cleaner
- 1 pce magnifying glass
- 1 pce forceps, medium size
- 1 pce foot rule
- 1 pce pencil
- 1 pce ball-point pen
- 1 pack self-adhesive labels
- 1 pce magnetic latent finger print kit
- 1 pce booklet, double pages of fingerprint colour foils
- 1 pce marabu brush with diffusor
- 1 pce transparent container with 6 inserts

- 4 pcs glass tubes with lid
- 1 roll fingerprint lifting tape, 10 cm
- 1 roll fingerprint lifting tape, 5 cm
- 1 pce fingerprint colour pad
- 1 pce illuminated magnifying glass

Beside this basic assortment, we can offer an advanced version. For this please see our **PKI 9915** Advanced Scene of Crime Investigation Kit.

Specifications:

- Weight: approx. 6.5 kg, including carrying case
- Dimensions: 51 x 38 x 21 cm



PKI 9915**Advanced Scene of Crime Investigation Kit**

Beside our standard kit **PKI 9910** we herewith offer the advanced model **PKI 9915**. The contents of this case almost offer a universal application for investigative work at the scene of crime. Although having an enlarged range of tools and materials, it is still supplied in a handy case.

Contents:

- 1 pce universal pocket knife
- 1 pce ripping chisel, small
- 1 pce hammer
- 1 pce ripping chisel, large
- 1 pce crayon holder
- 1 pce steel rule
- 1 pce oil crayon for crayon holder
- 1 pce compass
- 1 pce universal pliers
- 1 pce first-Aid kit
- 1 pce wire scissors
- 2 pcs transparent container, small
- 1 pce glass cutter
- 2 pcs wide-neck bottles
- 1 pce pointed pliers
- 1 pce bottle with pipette
- 1 pce post mortem spoon
- 1 pce glass stirring rod
- 1 pce horse-shoe magnet
- 1 pce measuring spoon
- 1 pce splinter forceps
- 1 pce voltage tester
- 1 pce pair of scissors
- 1 pce transparent container with 6 inserts
- 1 pce small chisel
- 1 pce transparent container, large
- 1 pce nail cleaner
- 1 pce transparent container w. sliding lid



- 1 pce magnifying glass
- 1 pce forceps, medium size
- 1 pce foot rule
- 1 pce plumber pliers
- 1 pce pencil
- 1 pce pocket saw
- 1 pce ball-point pen
- 7 pcs glass tubes with lid
- 1 pack self-adhesive labels
- 1 roll polypropylene string, green
- 1 pce magnetic latent finger print kit
- 1 roll polypropylene string, red
- 1 pce caliper
- 1 roll polypropylene string, blue
- 1 pce booklet w. double pages of fingerprint foils
- 2 pairs disposable gloves

- 1 pce marabu brush with diffusor
- 5 pairs disposable gloves, extra strong
- 1 pce zephyr brush with diffusor
- 10 pcs closure bags
- 10 pcs impregnated cleaning towels
- 5 pcs pull-string bags, medium size
- 1 pce flashlight
- 5 pcs pull-string bags, large size
- 1 set screwdrivers
- 1 roll fingerprint lifting tape, 5 cm
- 1 pce flat file
- 1 roll fingerprint lifting tape, 10 cm

Specifications:

- Weight: 11 kg, including carrying case
- Dimensions: 51 x 38 x 21,5 cm

PKI 9920**Fire Investigation Kit**

The combination of tools and materials in this kit has especially been designed for officials working on cases of fire and having to determine the cause. Each and every necessary part is securely packed in a sturdy aluminium case.

Contents:

- 1 pce combined volt/ohmmeter
- 10 pcs impregnated cleaning towels
- 1 pce compass
- 1 pce powder container
- 1 pce voltage tester brushes
- 1 pce steel measuring tape, 10 m
- 1 roll insulating tape
- 1 pce steel measuring tape, 2m
- 5 pairs disposable gloves
- 1 pce marking set, consisting of
- 10 pcs closure bags
- 10 x pointed rods
- 5 pcs pull-string bag, large size
- 5 x positioning legs
- 5 pcs pull-string bag, medium size
- 1 x number set, 1-20
- 1 pce mobile tube lamp
- 1 pce writing and drawing map
- 1 pce ripping chisel
- 1 pce hammer
- 1 pce pair of scissors
- 1 pce universal knife
- 1 pce splinter forceps
- 1 pce crayon holder
- 1 pce oil crayon for crayon holder
- 1 pce glass cutter
- 1 pce foot rule
- 1 pce magnifying glass
- 1 pce pointed pliers
- 1 pce combination pliers
- 1 pce screwdriver set
- 1 pce post mortem spoon
- 9 pcs glass tubes with lid
- 1 pce candle with holder
- 1 pce plumber pliers
- 3 pcs wide-neck bottle
- 1 pce transparent container with 6 inserts
- 1 pce hand saw with 3 inserts

**Specifications:**

- Weight:
- 12,5 kg, including carrying case
- Dimensions: 51 x 38 x 21 cm

PKI 9925

Narcotics Investigation Kit

PKI 9925 enables the drug investigator to verify suspicious goods on site. The results allow to determine if further investigative work is required. The complete kit comes in a handy aluminium case, which can easily be carried and handled.

Contents:

- 1 pce narcotic traces sweeper with accessories
- 1 pce package drug test "A" (10 per pack)
- 1 pce drug-quick-test
- 1 pce package drug test "B" (10 per pack)
- 1 pce hand drill tool
- 1 pce package drug test "D" (10 per pack)
- 1 pce magnifying glass, small size
- 1 pce package drug test "E" (10 per pack)
- 1 pce forceps, small size
- 1 pce package drug test "G" (10 per pack)
- 1 pce pair of scissors
- 1 pce package drug test "K" (10 per pack)
- 1 pce sample spoon
- 1 pce scalpel
- 1 pce universal knife
- 1 pce one-way syringe
- 1 pce chemical spoon, double
- 1 pce soap
- 1 pce one-way scalpel
- 1 pce forceps, medium size



- 1 pce one-way syringe with cannula
- 1 pce pair of scissors
- 1 pce package of round filters
- 1 pce bottle cleaner brush
- 1 pce drill with 2 inserts, small size
- 1 pce universal pocket knife
- 1 pce magnifying glass, large size
- 3 pcs pipette bottle

- 1 pce transparent container with sliding lid
- 1 pce transparent container, large size
- 2 pcs transparent container with 6 inserts
- 1 pce package of closure bags

Specifications:

- Weight: 10,5 kg, including carrying case
- Dimensions: 51 x 38 x 21 cm

PKI 9930

Rapid Analysing Kit

The **PKI 9930** is designed for analysis of environmental parameters directly at the measuring point. It is used for determination and measurement of nitride, nitrate, ammonium, free chlorine/halogen, chromate, free cyanamide, fluorides, copper, nickel, lipophilic agents (oil/fats), phenols, pH-value, sulphite, zinc etc. The complete kit is packed in a sturdy aluminium case, easy to handle and providing each necessary tool and material for on-site investigation.

Contents:

- 5 pcs wide-neck bottles, PE, 1 litre
- 5 pcs wide-neck bottles, Glass, 1 litre
- 1 pce bottle support/holder for 6 bottles
- 1 pce probe sampling device with telescopic handle
- 1 pce funnel
- 1 pce thermometer -50°C to + 150°C
- 1 pack pH-test strips (200 pcs)
- 1 pack oil-testing strips (100 pcs)
- 1 pce felt pen, black
- 1 pce felt pen, orange
- 1 pce felt pen, blue
- 1 pce felt pen, green
- 30 pcs mini grip bags, various sizes
- 1 pce pair of scissors
- 1 set adhesive labels, different sizes
- 2 pairs protective gloves, rubber, colour red
- 5 pairs disposal gloves
- 1 pce hygienic towel
- 1 pce clipboard
- 1 pce protective eye-glasses

- 1 pce shovel, small
- 1 pce spoon spatula
- 1 pce protective foil
- 1 pce water canister

Specifications:

- Weight 14,5 kg, including carrying case
- Dimensions 63,5 x 43,5 x 25,5 cm



PKI 9935

Two-Line-Rigging Kit

This two-line rigging Kit is combining multiple access and disposal capabilities into one single highly effective unit. The equipment can be deployed in a wide range of IEDD scenarios involving buildings, vehicles and urban/rural locations. An excellent stand-alone kit, featuring an extensive range of components that easily achieves the essential functions of movement, attachment, anchoring, reach and manipulation and handling.

The kit comprises:

- a total of 100 components with over 30 component types for different use
- two color-coded, high strength, low stretch core lines
- robust reels with winding handle, brake and adjustable clutch
- reel bags, to protect the lines and reels, also to provide utmost carrying capacity
- high strength, heat-treated hooks
- standard and break-away pulleys for changing the movement direction
- standard pulleys for rigging in combination to improve mechanical solidity
- unique heavy duty jet clamp anchor for clamping to door/window frames
- heavy duty cantilever-designed crocodile clamps for attaching to heavy sheet materials
- full technical instruction manual

**PKI 9940**

EOD / IEDD Rigging Kits

This lightweight EOD/IEDD rigging kit consists in specialist equipment suitable for both semi-remote and manual stages of an IEDD task. It permits rapid and straightforward deployment. Its ability to deploy the various components quickly in all operational settings is possible due to the use of a custom-designed backpack. This backpack provides dedicated stowage for the comprehensive rigging kit, as well as other essential EOD/IEDD items. The stowage pockets inside the main compartment can be re-configured easily by the user according to personal needs.

The EOD/IEDD rigging kit comprises:**Movement:**

main line, secondary line

Attachment and anchoring:

hooks and eyes, lightweight spring grip, vice jaw grip, self-adhesive anchor pads, suction anchors, shock cord, seizers, rope and wire slings, pitons, karabiners, grip, D-clamp, stoppers, screw eye, door stops

Reach: extension rods, telescopic arm and hooks

Manipulation and handling: standard snatch block/pulleys, self-opening snatch block/break-away pulley, splitter ball

Visual search:

tactical search mirror, telescopic arm and mirror

Manual tools: EOD pocket tool kit



PKI 9945

Hook and Line Kit

This hook and line kit comprises a huge variety of components for attaching a line to a suspect IED and then manoeuvring it along a complex route in a single operation. The 120 m line enables the removal operation to be conducted remotely. The kit includes devices for anchoring snatch blocks to floors, walls, windows and door frames, as well as a sledge and telescopic pole. The sledge can be used to improve the manoeuvrability of a suspect object on stairs or rough ground and to prevent snagging at corners. The telescopic pole which extends up to 3 m allows remote fixation of hooks and lines. All components fit into a compact carrying case and can easily be carried by one man leaving one hand free.



Specifications:

- Size: 113 x 56 x 40 cm
- Weight: 25 kg

PKI 9950

Hook and Line Kit No. 1

This hook and line kit consists of:

- 1 x 100 m Kevlar line of 5,5 mm diameter, mounted on a drum with brake and rewind handle
- 1 x anchor line mounted on a steel case
- 1 x auxiliary line
- 12 x snatch blocks
- 2 x pulling handles
- 8 x extension rods
- 12 x perspex collars
- 2 x belt slings
- 4 x hooks, large
- 4 x hooks, medium
- 4 x hooks, small
- 4 x tangs
- 4 x double hooks, medium



PKI 9955

Hook and Line Kit No. 2

This hook and line kit consists of:

- 2 x reel and line 150 m x 5,5 mm Ø
- 4 x snatch blocks
- 2 x barbed tang hooks
- 2 x 12 mm Ø, single plain tang hooks
- 2 x 25 mm Ø, single plain tang hooks
- 2 x 50 mm Ø, single plain tang hooks
- 2 x 25 mm Ø, double plain tang hooks
- 2 x 25 mm Ø, double barbed tang hooks
- 5 x 25 mm Ø, rings
- 2 x treble tang fish hook with eye
- 2 x 2 m x 3 mm Ø, rope sling
- 2 x 2 m x 4 mm Ø, rope sling
- 2 x 2 m x 5 mm Ø, rope sling
- 2 x 2 m x 1,5 mm Ø, wire sling
- 2 x 2 m x 2 mm Ø, wire sling
- 2 x 2 m x 3 mm Ø, wire sling
- 8 x pitons (various sizes)

- 4 x 15 mm screw gate karabiner
- 1 x double suction pad anchor
- 1 x single suction pad anchor
- 1 x 2 m x 10 mm Ø, shock cord
- 3 x 1 m x 10 mm Ø, shock cord
- 1 x 2 m x 12 mm Ø, shock cord
- 3 x 1 m x 12 mm Ø, shock cord
- 2 x 35 mm jaw length seizers
- 2 x 50 mm self grip
- 1 x self grip anchor
- 1 x metal case



PKI 9960**Hook and Line Kit No. 3****This hook and line kit consists of:**

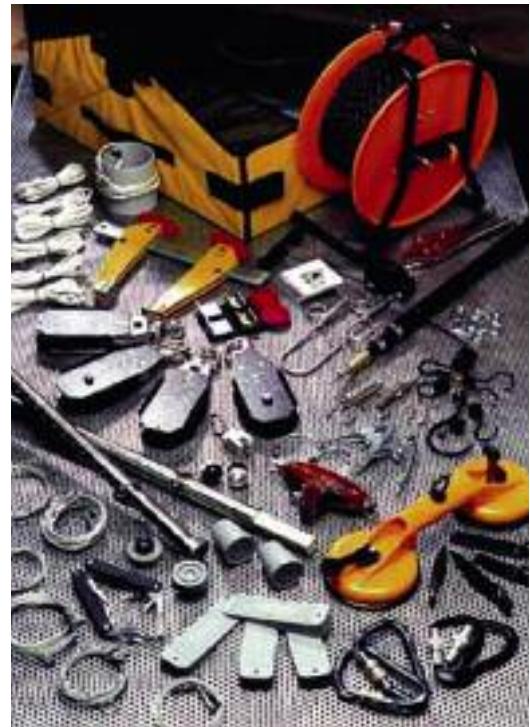
- 1 x line, 100 m long, 5,5 mm Ø, with snap hook
- 1 x anchor line, fitted with snap hooks at both ends
- 1 x hook, small single plain
- 1 x hook, medium single plain
- 2 x hook, medium double plain
- 1 x hook, large single plain
- 1 x hook, 25 mm wide mouth and spring gate
- 1 x hook, 50 mm wide mouth and spring gate
- 4 x 25 mm eye
- 1 x hook triple barbed with key ring
- 1 x combined telescopic inspection arm and pole
- 1 x triple barb hook mount for tele pole
- 1 x spring gate hook mount for tele pole
- 2 x rope sling, 3 mm Ø x 2 m long
- 2 x rope sling, 4 mm Ø x 2 m long
- 2 x rope sling, 5 mm Ø x 2 m long
- 1 x wire sling, 1,5 mm Ø x 2 m long
- 1 x wire sling, 2,0 mm Ø x 2 m long
- 1 x wire sling, 3,0 mm Ø x 2 m long
- 1 x shock cord, 10 mm Ø x 2 m long
- 1 x shock cord, 10 mm Ø x 1 m long
- 2 x piton large chisel point
- 2 x cantilever clamp
- 1 x self locking forceps
- 1 x self locking "mole grip" with 25 m eye
- 1 x self grip "C" pliers with eye
- 1 x spring loaded self grip clamp
- 4 x karabiner (alloy) 18 mm screwgate 27 kn
- 2 x karabiner (alloy) 25 mm screwgate 27 kn
- 2 x door stop
- 2 x wedge it black
- 1 x wall stopper small



- 1 x wall stopper large
- 15 x sticky eye
- 2 x single suction pad
- 2 x torpedo release
- 2 x extension rods
- 10 x screw eye self tap
- 2 x snatch block
- 2 x auto opening snatch block
- 2 x shackle D shape 13 mm gate
- 1 x pocket search mirror
- 1 x 140 mm Ø stainless steel screw fitting mirror
- 1 x toolkit, in roll up holder
- 1 x small backpack, mounts onto main pack
- 1 x main backpack

PKI 9965**Hook and Line Kit No. 4****This hook and line kit consists of:**

- 1 x reel & line 120 m x 5,5 mm Ø
- 5 x snatch block - various
- 2 x splitter ball
- 1 x 12 mm Ø single plain tang hook
- 1 x 25 mm Ø single plain tang hook
- 1 x 50 mm Ø single plain tang hook
- 1 x 25 mm Ø double plain tang hook
- 1 x treble tang hook
- 1 x 25 mm Ø ring
- 2 x 2 m x 3 mm Ø rope sling
- 2 x 2 m x 4 mm Ø rope sling
- 2 x 2 m x 5 mm Ø rope sling
- 2 x 2 m x 1,5 mm Ø wire sling
- 2 x 2 m x 2 mm Ø wire sling
- 2 x 2 m x 3 mm Ø wire sling
- 4 x piton- various
- 1 x mole grip
- 1 x "D" shackle
- 2 x 15 mm opening screw gate karabiner
- 10 x screw eye
- 2 x 25 mm opening screw gate karabiner
- 1 x clamp anchor complete
- 1 x pulling handle
- 2 x door anchor



PKI 9970

Special Operations Search Kit

This lightweight and highly portable search kit is used for counter-terrorist tasks and other tactical situations. It enables search personnel to deploy with a compact but comprehensive range of search equipment. The **PKI 9970** is the perfect search kit to carry out a wide range of search activities in the most demanding of environments and under hostile tactical conditions if required. The equipment is contained in a specifically designed backpack that offers a comfortable ergonomic design combined with the practicality of equipment stowage. The equipment is laid out and designed to enable search personnel to gain access to the required grouping of equipment quickly and easily. The backpack has also been designed including extra free space, allowing search personnel to insert some of their own personal equipment if required. An additional hardened air transport case is available upon request.



The Special Operations Search Kit comprises:

Illumination:

head and hand held torches

Search:

search mirrors, mirror search arms, telescopic arms, miniature visual search equipment, endoscope

Surveillance:

binoculars, compact camera for night vision

Tools:

socket set, pliers, grips, wrench set, screw drivers, cordless drill and bits, pocket tool

Protection:

coveralls, gloves, goggles

Consumable and sundries:

seals, markers, ties, tapes, shock cords, releasing fluid, line, door wedges

Carrying equipment:

search backpack, thigh pouch, ancillaries, hold all

Optional equipment:

freight/flight container

PKI 9975

Bomb Tec Kit

The Tec Kit is a modern and highly effective rigging kit for bomb technicians and search personnel. The components provide a sound baseline capability, covering all essential functions of a reliable rigging kit in a cost-effective and user-friendly package.

The range of components covers all necessary functions, such as movement, attachment, anchoring, reach and manipulation as well as handling. Used with proven rigging technique the Tec Kit can reduce the operator's risk and improve the efficiency of the task.



The Tec Kit comprises:

- 1 reel c/w dual-purpose transport bag
- 1 main line 120 m
- 1 pulling handle
- 1 12 mm hook plain tip
- 1 25 mm hook plain tip
- 1 50 mm hook plain tip
- 1 25 mm double hook plain tip
- 5 20 mm ring (attaches to hook)
- 1 fish hook, triple tang barbed with eye
- 1 lightweight spring grip
- 1 vice jaw grip
- 10 self adhesive anchor pad
- 1 shock cord, 1 mm diam. 1 m
- 3 extension rod, 300 mm
- 2 rope sling, 4 mm diam. 2 m length

- 1 wire sling 2 mm diam. 2 m length
- 2 piton no. 5, 70 mm
- 2 suction anchor, single pad
- 2 karabiner, 15 mm gate
- 1 grip
- 1 seizer

- 2 rubber door wedge
- 1 wedge it, 3-function door stop with eye
- 2 self-opening snatch block/pulley
- 2 splitter ball
- 2 standard snatch block
- 1 pocket search mirror

PKI 9980**Vehicle Access Kit**

Dealing successfully with an IEDD task involving a vehicle can be both physically demanding and technically complex, so that successful execution may require the use of special access equipment. This kit contains a range of field-proven special access tools for use when opening vehicles remotely in order to gain access during IEDD tasks. All items are simple to operate and can be rigged in seconds, thus minimizing the time that the bomb technician remains at risk for a suspect device.

The kit comprises:

- 1 remote window breaker
- 1 door handle lifter
- 2 key/handle clamp
- 1 door button pusher
- 1 multi-purpose clamp

**PKI 9985****EOD Operators Tool Kit**

This portable tool kit is designed for use by bomb technicians. It contains a comprehensive and high-quality selection of more than 60 hand tools for access, investigation and render safe procedures during EOD/IEDD tasks. The complete kit is supplied in a soft-sided carrying roll with easy-grip handle for convenient access and quick tool selection.

**The EOD operators tool kit comprises:**

- Screwdriver, flat 3.2 mm X 64
- Screwdriver, Philips 0-PTX75m 3.2 mm
- Screwdrivers, jewellers set of 6
- Wrench, adjustable 150 mm
- Hexagon wrench set
- Vice grip wrench 250 mm
- Pliers combination 180 mm
- Seizers - metal
- Tweezers style 178 mm
- Wire cutters, electrical
- Tin snips universal
- Utility knife heavy duty
- Flexi saw 385 mm
- Mini saw
- Wire strippers 16-26AWG
- Needle files set
- Spring hook C-lift
- Magilite (2x AA cell)
- Battery AA size Alkaline
- Cable ties small /medium 10ea
- Insulated dental mirror 22 mm
- Nylon cord 1.2 mm - 10 m
- Wrecking bar 300 mm
- Claw hammer 453,6 g
- Non conductive probe BLK acetal 6 mm
- Tool roll black cordura
- Screwdriver, flat 5 mm x 100
- Screwdriver Philips 1-PTX75 5.0 mm
- Screwdrivers, TX-Star/Torx set
- Wrench, adjustable 250 mm
- Vice grip wrench 125 mm
- Pliers snipe nose 40 mm
- Pliers adjustable 250 mm
-
- Tweezers style 2 curved 174 mm
- Wire cutters, fine
- Craft knife
- Blade dispenser heavy duty
- Pad saw + blades
- Mini saw blades 10 pack
- Scissors 150 mm
- Grey rubber door wedge
- Spring hook C-W
- AA7" Bend-a-Beam
- Paint brush 1" dust removal
- PVC insulation tape
- Mirror telescopic/articulated 295/455 mm
- Measuring tape steel 3 m
- Scriber double ended
- Cold chisel engineers 15 x 150 mm approx.
- non conductive probe WHT acetal 6 mm

PKI 9990

Special Operations Tool Kit

The design and construction of this special operations backpack makes it a suitable comprehensive tool kit for any conventional EOD/IEDD team to deploy with.

The internal colour-coded compartments of this tool kit are designed to hold the specific tooling in a range of removable internal pouches and fixed netting compartments. Layout is based on tool set grouping and operational precedents when using manual equipment. The layout may be changed at the operator's discretion. The backpack has also been designed to include extra free space allowing the operator to insert some of their own personal equipment.

All the tools have been selected for their quality and reliability with some of them offering multi role capability to reduce total weight. The tools offer the capabilities for search, access, diagnostics and render safe.

Special operation tool kit comprises:

Search:

head torch, mini hand torch, large hand torch, binoculars, metal detector (multi range)

Access:

cordless drill, including accessories and drill bits, knives, saws, nibbler, gas powered hot knife

Diagnostics:

multimeter and diagnostics cabling attachments, electricians probes, hook retrieval equipment, inspection and pick up tooling, consumable components for diagnostics work, cordless glue gun and a range of adhesives

Render Safe:

screw drivers - electricians and industrial,



sockets and wrench sets, pliers - electricians and industrial, file sets, layout matting, heavy duty tooling - grips, hammer, lifters, wrench bar, electricians tools - strippers, test equipment, tweezers

Optional equipment: freight/flight container

Carrying equipment:

tool backpack, thigh pouch ancillaries hold all

PKI 9995

Equipment for Fire Brigades and Rescue Service

The following equipment is indispensable for the fight against terrorism. After an attack of terrorists the appropriate technical equipment must of course be available immediately in order to arrange the necessary rescue activities without any delay. As there is a wide range of such equipment, we can only suggest a list indicating a selection of the available products. If you are interested in any of the equipment or vehicles, we shall be pleased to submit you a detailed quotation. As a special service to our customers we also offer second-hand equipment and vehicles for fire brigades and rescue teams.

- fire fighting helmets, lamps for helmets, walkie-talkies, additional accessories for helmets
- protective clothing, boots, gloves, heat protective equipment

- Breathing apparatus sets, thermal imaging cameras, radiation protection, cardiopulmonary resuscitation machines, respirator masks, compressed air bottles, hazmat equipment

- Valves, pressure hoses, siphon pipes, hose reels, couplers, repair sets for hoses

- Fire extinguishers, extinguishing agent, fire blankets, portable extinguishers, immersion pumps, portable pumps etc.

- Power generators, electrical equipment, lamps, spotlight, cable drums, battery charging units

- Audio/visual warning equipment, megaphones, flashing warning lights, warning and traffic management system

- Different types of ladders, rescue equipment, rescue stretchers, ambulance boxes, rescue

- blankets, antifall guard equipment, safety belts etc.

- Ventilation systems, rescue cutting tools, motor saws, cut-off saws, drilling machines, cable winches, accessories

- Hydraulic rescue equipment, cutting devices, hydraulic power units, battery-driven rescue equipment, lifting pads

- Equipment for hazardous waste cleanup, catchment tanks, vessels for waste disposal, sealing material, pumps for oil and chemicals, hose pumps, binding agent for oil, oil barriers, high pressure cleaners

PKI 9995

Mobile operation container

Unfortunately there will be many injured persons after a terrorist attack or an earth quake who need immediate help. Hospitals are often working to capacity. This makes our mobile operation container so valuable. The 20' container includes a fully equipped operation room with anaesthesia device, X-ray unit, oxygen tank and air condition. Of course, the container can be equipped according to customer's requirements especially with regard to medication, bandages and medical tools. **PKI 9995** can be used under unfavourable climatic conditions. The air condition with filter against bacteria complies with the hygienic requirements of German hospitals.

**Specifications:**

- Dimensions: 20' container
- Transport: container van
- Note: Several containers can be combined to a hospital centre.
- Offer: according to your requirements on request

PKI 9995

Fire-fighting Vehicle

In order to extinguish special fires in chemical industry or in warehouses with hazardous products, on airports etc. you need extinguishing powder. **PKI 9995** is especially designed for these purposes and includes 2 tanks with 3000 kg extinguishing powder each. All controlling parts of the extinguishing system are available in the driver's cabin. Two different extinguishing agents are available (powder and foam).

**Specifications:**

- Tank capacity: 2 x 3000 kg
- Range: 20 m
- Extinguishing powder: 12 kg/s
- Note: special offers on request

Below please find a list of the fire brigade and rescue vehicles which we can deliver new and/or second-hand:

Fire Brigade:

- fire-fighting vehicles
- vehicles for portable pumps
- personnel carrier
- pump water tender
- salvage trucks
- equipment vehicles
(also for hazardous material)
- vehicles for operation controllers
- airport fire-fighting vehicles
- vehicles with turnable ladder

**Rescue Services and Others:**

- Ambulances
- Mobile intensive car unit
- Catastrophe cars
- Police cars
- Surveillance vehicles

TRAINING PROGRAM



PKI ELECTRONIC INTELLIGENCE GmbH GERMANY

PKI 10000

Training and Consultancy

- Wide spectrum of specialist subjects
- Tailor-made to customer's requirements
- Highly skilled training personnel
- Fully protected and secure training centre
- In-house accommodation for students

PKI ELECTRONIC INTELLIGENCE Training Services form an important and often integral part of implementing a successful security operation. A major factor in **PKI**'s philosophy is the conviction, that training and understanding of products and technology are a critical factor and major strength in finding successful security solutions.

PKI's Training Services provide specialist courses covering a wide range of topics. The exact requirement, scope, style and level of training is normally defined after a fact-finding visit to the end-user's location. During this meeting with the client and final user of **PKI**'s products the gain of specific knowledge will be determined and a syllabus of the coming training-course is defined. Every service provided can and will be individualised to meet our client's requirements.

PKI's highly trained personnel consist of only selected engineers with very special skills who are called upon by many governmental security



organisations to give advice and consultation. Key factors are flexibility, personalised service, professionalism and utmost discretion. Total integrity and security of the client's information is guaranteed at all times.

The training centre is located on our own 20.000 square meters territory in Lütjensee (30 min. away from the centre of Hamburg) allowing the

necessary outdoor exercises and system training in a secure environment without any external interference or disturbance. The complete area can be protected by security guards if requested.

PKI 10000

Training and Consultancy

The whole range of Training Services includes seminars in the fields of:

1) Surveillance

including courses on academic basis, general techniques & equipment, audio surveillance, video surveillance, still photography, mobile surveillance, vehicle tracking, maintenance and service etc.

2) Counter Surveillance

including courses on basic threats, professional threats, general techniques and equipment, countermeasure methods, countermeasure devices etc.

3) Crime Investigation

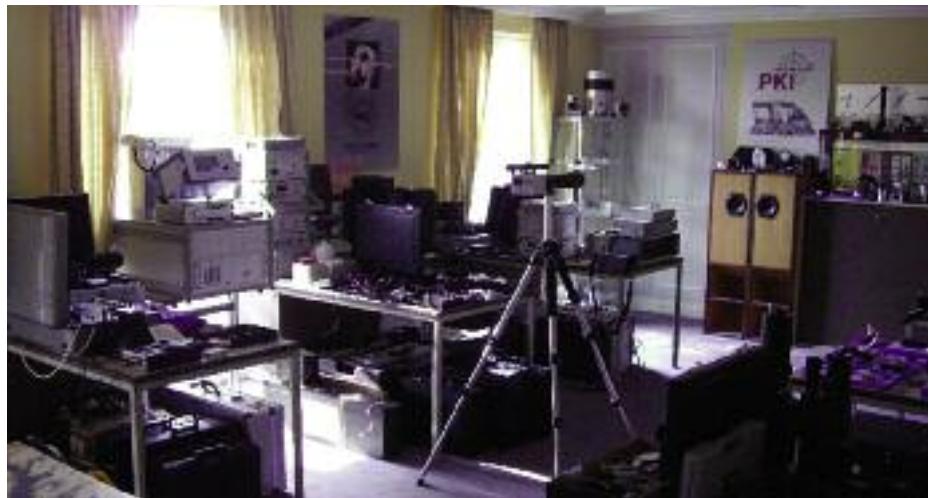
including courses on photography, evidence collecting, analyst database etc.

4) Protective Security

including courses on static location, close protection, VIP security, VIP drivers and team leaders etc.

5) Methods of Entry

including courses on basic systems, advanced



systems, techniques and equipment on how to gain access to closed rooms etc.

6) Anti Riot / Anti Drugs

including courses on EOD/IED disposal, basic demolitions, advanced demolitions, sniper, narcotic detection etc.

In each of these specialised seminars detailed understanding is passed on in academic bases, possible threats, maintenance and service, techniques and equipment plus the knowledge about every feature of **PKI**'s products and how to use these with a maximum of effectiveness.

PKI 10000

Training Program

PKI Electronic Intelligence offers training courses as we are convinced that understanding of products and technology are most important for a successful operation. The training courses are held at our own premises, located on our own 20.000 square meters territory. The training centre allows the necessary outside exercises and systems training in a secure environment without any external interference or disturbances.

The ground floor consists of 2 comprehensive equipped training class rooms including workshops, offices, 2 show rooms and the main dining room with adjacent central kitchen including cooking staff for preparation of daily meals.

The upper floor is designed for the accommodation of up to 12 students in single apartments. Each comfortably designed apartment is equipped with sleeping room, bathroom and some of them are equipped with their own kitchen.

The following training courses are available:

Training Course Overview "Surveillance"

Academic Course	Basic Mathematics General English Language Computer Studies Basic Electronics	4 weeks
Techniques & Equipment	Audio & Video Surveillance Body worn operations Room surveillance Telephone tapping Vehicle eavesdropping Camouflage Laser monitoring Infrared monitoring Optical systems Audio/Video transmission Audio/Video enhancement Low noise drilling Protection against counter measure Tactical deployments Search and inspection techniques	4 weeks or adapted to client's requirements and equipment selection
Audio Surveillance	Wired/Wireless Systems Body worn operations Room surveillance Telephone tapping Stethoscopes Laser monitoring Infra red monitoring RF & GSM transmission Graphic/Parametric equaliser Audio enhancement Tactical deployments	3 weeks or adapted to client requirements and equipment selection
Video Surveillance	Surveillance PCB cameras PCB camera lenses Long range lenses Body worn surveillance Room surveillance Open area surveillance Day / Night video Image intensifiers Infrared illumination Camouflage Recovering Rigid / flexible endoscopes Low noise drilling Vehicle fits Video transmission RF GSM ISDN / analogue telephone Scrambling Encryption Repeater Remote control Enhancement & filter Video enhancement Stand alone system PC based system	3 weeks or adapted to client requirements and equipment selection

PKI 10000

Training Program

Still photography	Traditional Photography Film processing Digital Photography Digital Imaging Image Intensifiers Infrared	2 weeks
Surveillance Course I Static Surveillance	Personal Security Orders & Briefings Recognition Equipment Dress & Appearance	2 weeks
Surveillance Course II Foot Surveillance	Personal Security Covert fits Equipment Orientation & map studies Communications Dress & Appearance Information reporting	2 weeks
Surveillance Course III Mobile Surveillance	Covert fits Equipment Orientation & map studies Evasive & defensive driving Information reporting	2 weeks
Vehicle tracking	Tracking methods RF beacon & Directional Finding DF RF System components Covert installation GSM + GPS tracking Mapping software Vehicle & object preparing Practical exercises	2 weeks alternatively 1 week w/o GSM & GPS
Maintenance & Service	Theoretic background Function of equipment Electronic boards and circuits Circuit diagrams Trouble shooting Board & part exchange Measuring & testing equipment General Maintenance	depends on the type and range of selected equipment
Electronic Counter Surveillance	Analogue threats Manual search methods Electronic search methods	basic training: 3 weeks
Basic	RF detection & locating Cable checking Spectrum analysis Microphone detection IR & Laser threats Software help tools Sweep planning & concept Active protection	Adapted training depending on client's requirements and equipment selection
Electronic Counter Surveillance	Including - Basic - Digital threats Spread Spectrum	basic training: 5 weeks
Advanced	Frequency hopping Manual & optical search Electronic search methods RF detection Location of bugs Telephone cable checking Mains cable checking Spectrum analysis Microphone detection IR threats Smart attacks Attacks through PBX Attacks via ISDN Software help tools Sweep planning Sweep concept Masking Jamming Scrambling Encryption	Adapted: depending on client requirements and equipment selection

PKI 10000

Training Program

Training Course Overview "Crime Investigation"

Scenes of crime Photography	Crime scene protocol Choice of equipment Techniques of exposure Lighting Traditional photography Digital photography Digital Imaging Photos as evidence Specialist techniques Practical exercises	2 weeks
Scenes of crime Evidence	Preservation of crime scenes Preservation of evidence Fingerprint techniques Footprint moulding	2 weeks
Investigation & Analyst Database	Range of training courses to meet the requirements of analysts and investigators and technical database developer	varies according to the level of courses adapted to the client's requirements
Basic Course Investigators & Analysis Operational Users Technical Users Designer & Researcher		

Training Course Overview "Protective Security"

Protective Security Static Location	Threat identification Terrorist operations I.E.D. Information & Office Security Personal Security	2 weeks
Protective security Close Protection	Threat Identification Terrorist operations Personal Security Escort organisations Attack procedures Weapon handling	2 weeks
Protective Security VIP Drivers	Threat Identification Terrorist operations Vehicle security Convoy procedures Evasive & defensive driving	1 week
Protective Security Team Leaders	Threat Identification Security levels VIP protection Protection profiles Counter sniper & attack	1 week

Training Course Overview "Covered Methods of Entry"

Basic Systems	Theory of locking mechanisms Introduction to lock pick tools Padlocks Lock recognition Making of tools Various methods of entry Vehicles Office Equipment Key pressing and recording Key cutting	Standard: 2 weeks Adapted: depending on client requirements and equipment selection
Advanced Systems	Recognition Impression Alarm systems PIR systems Introduction to safes Projects Forces entry	Standard: 2 weeks Adapted: depending on client requirements and equipment

Training Course Overview "Anti Riot"

Explosive Ordnance Device (E.O.D) Disposal	Basic chemistry of explosives Basic explosives Classification of explosives & ammunition Ammunition design principles Ammunition & explosive markings	3 weeks
---	---	---------

PKI 10000

Training Program

Improvised Explosive Device (I.E.D.) Disposal	Demolition stores & accessories Explosives safety & handling Methods of initiation & misfire drills Theoretic basic of disposal Disposal of blinds & uxo's theory Remote equipment EOD specialist equipment Demonstration of explosives Dry training exercises Confidence testing Live exercises	3 weeks
Explosive Demolitions (Basic)	IED philosophy IED types & construction Commercial & home made explosive (HME.) IED disrupters IED team manual equipment Remote equipment Duties of an IED team No. 2 Incident control point drills Questioning techniques & task Appreciation Basic search techniques Access & render safe procedures Vehicle clearance procedures Manual operations Military booby trap mechanisms Radiography Equipment practice Practical exercises	2 weeks
Explosive Demolitions (advanced)	Safety rules Electrical rules Rules for detonation cord Initiation sets Electric & flash initiation Ring mains & mains lines Standard charges Steel cutting Wood cutting Attack methods Booby trap switches Practical Exercises	4 weeks

Training Course Overview "Anti Riot"

Sniper courses	Various course levels for	each course
Basic	Sniper beginners	1-2 weeks
Advanced	Sniper veterans	
Tactical Operations	Emergency team officers	
Tactical Command	SWAT team leaders	
Narcotic Detection Dog training	Obedience Evaluation and Training Basic Safety Considerations Basic Detection Training Dog's Sense of Smell Scent Association Improving Indication Skills Building Search Strategies and Patterns Vehicle Search Strategies and Patterns Luggage and packages Open area searches Handler training	8 - 12 weeks (dog training)

Terms of Sale, Delivery and Payment

of PKI ELECTRONIC INTELLIGENCE GmbH
- hereinafter called PKI -

1) Purview

These conditions are valid for all **PKI** sales, deliveries, services and offers. Placing orders with **PKI** means acceptance of this. These terms will even be valid for coming bills of sale and commercial contacts if they are not mentioned explicitly. Differences, in particular the purchaser's own terms of trade and verbal agreements, are only valid if **PKI** expressly agree to them in writing.

2) Product Information

Although any product information was current at the time this document was approved for printing, **PKI** reserves the right to change specifications, designs and models without notice. **PKI** does not assume any responsibility or liability for typographical errors which may appear herein and such errors are subject to correction. Technical data are subject to change without prior notice.

3) Quotations and Acceptance of Orders

PKI's quotations are non-binding and we reserve the right to reject any order in whole or in part. In particular, quotations are subject to the goods still being available and to their not having been previously sold. Also **PKI** reserves the right to make price adjustments, unless **PKI** has expressly designated the quotation in writing as binding. All orders received are subject to final acceptance by **PKI** and agreements made verbally, by telephone, or through our representative are only valid if **PKI** has confirmed them in writing and only in accordance with the terms set forth herein.

4) Specification and Application of Goods

Illustrations, details of size, weight and technical specifications generally are only approximate. Samples are not binding and are only representative of the type, unless **PKI** has expressly guaranteed certain properties in writing. **PKI** does not guarantee the suitability of equipment for the purchaser's intended application. **PKI** also excludes liability to the purchaser as well as to third parties.

5) Delivery

Purchaser's requested delivery schedule will be met by **PKI** to the best of its ability. Delivery dates are quoted to the best of **PKI**'s knowledge based on the period of time likely to be required for delivery, but are only binding if this expressly is stated in writing. Partial deliveries are always allowed and count as individual transactions.

6) Prices

All prices indicated are "ex works" and do not include packing, freight and insurance charges for equipment shipped overseas. The purchaser is responsible for any further transportation method. Additional charges relating to freight, insurance, handling, documentation, stamp duties, import duties or tariffs have to be born by the purchaser. In any case, where **PKI** supplies their goods, the INCOTERMS - as per latest edition - shall be considered as being the basis of delivery.

7) Payment

PKI only supplies goods to firms abroad against an irrevocable letter of credit issued by customer's bank and being confirmed by a first-class German bank, or on 100% prepaid cash-in-advance payment into **PKI**'s named bank-account. In every case payment is to be made in EURO-currency.

8) Guarantee

PKI only warrants for new products that are limited in use because of wrong material or insufficient workmanship within a period of 12 months from date of shipment.

Identifiable defects have to be indicated in written form and within two weeks from date of shipment.

Not identifiable defects have to be indicated in written form at detection, within than the warranty period of 12 months starting from date of shipment.

9) Legal Statute and Place of Jurisdiction

All cases of disagreement arising from **PKI**'s transactions with customers are exclusively subject to the law of the Federal Republic of Germany. In all cases of dispute with customers local jurisdiction solely lies with the Hamburg Courts but **PKI** is also entitled to take legal action at the place of the orderer.

10) Copyright

PKI reserve all rights of copyright, publication or reproduction of any part of this catalogue whatsoever. No part of this catalogue may be copied or reproduced in any form without prior consent from **PKI ELECTRONIC INTELLIGENCE GmbH**. Failure to comply with these restrictions will result in legal proceedings.

PKI - Additional Information

You can also find the product range of **PKI Electronic Intelligence GmbH** on the enclosed CD-ROM. In case this catalogue should have been delivered without CD-ROM, we shall of course send you the same if required. However, you can also see the complete **PKI** delivery program on our website www.pki-electronic.com.



PKI Building



PKI ELECTRONIC INTELLIGENCE GmbH GERMANY

Großenseer Str.18 • D-22952 Lütjensee / Hamburg / Germany
Tel.: 49(0)4154 - 98 96 32 • Fax: 49(0)4154 - 740 16
E-mail: information@pki-electronic.com
Internet: www.pki-electronic.com