



## Audio Surveillance Recorders

Solutions

TSE 6501

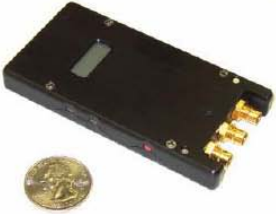





TSE 6508

TSE 6508 light

TSE 6508 USB

## SURVEILLANCE AUDIO RECORDERS

## SOLUTIONS

|  |   |
|--|---|
| <p><b>1.1. Model 6501 Advanced Digital audio surveillance Kit</b></p> <p>This covert audio recorder with high quality stereo microphone provides is released in 2007 with 3gb recording capacity. Specially designed for covert operations the recorders control software is today premium choice for surveillance ops.</p>  |    |
| <p><b>1.2. Model-6508USB Digital Recorder concealed in a USB Stick</b></p> <p>The Beowulf recorders are Gamma's new high performance, stand alone recording devices with storage capabilities from 3 hours in highest quality to 48 hours in lowest quality.</p> <p>The very small, lightweight recorders intercept all audio making them extremely suitable for close proximity operations. The recorders are operated easily using only a single button and the feed-back from three LEDs.</p> |    |
| <p><b>1.3. Model-6508USB Digital Recorder concealed in a USB Stick</b></p> <p>This unique stereo 1GB recorder is concealed in a USB stick with integrated lithium battery it provides 3 to 3 48 hrs of recording. The USB stick when switched on will record whether inserted into USB port or place on a table etc. Its including tamper proof real time clock.</p>   |  |
| <p><b>1.4. Model 6508light Digital Recorder concealed in a Lighter</b></p> <p>This standard lighter contains a 1gb miniature digital stereo recorder between 3 to 48 hours-the lighter is dual function ie its works as a lighter and records. The gas chamber is easily refilled and the integrated batters are rechargeable</p>  |  |
| <p><b>1.5. Model 6514 Recorder concealed in a key ring</b></p> <p>The Bluetooth Unit synchronizes air and HCI sniffing, provides multiple points of observation, and works in Real-time. It captures, decodes filters and displays data, and detects protocol error. It includes Gamma's FrameDecoder™ technology for swift development</p>  |  |
| <p><b>1.6. Model 6520 concealed in a calculator</b></p> <p>The working calculator has a integrated stereo recorder enabling covert recording to be carried out between 3 to 48 hours and is specially useful in recording of meetings. other items including recorder integrated into pc mouse or GSM phone battery.</p>   |  |

## DIGITAL STEREO AUDIO RECORDER

## TSE 6501

The TSE 6501 is the latest addition to TSE's growing line of premium audio collection products. Specially designed for covert applications, the recorder combines control software with re-engineered hardware that is loaded with new benefits! With the best quality, and the best features in its class, the TSE premium digital audio recorder is now the best choice!

### KEY BENEFITS:

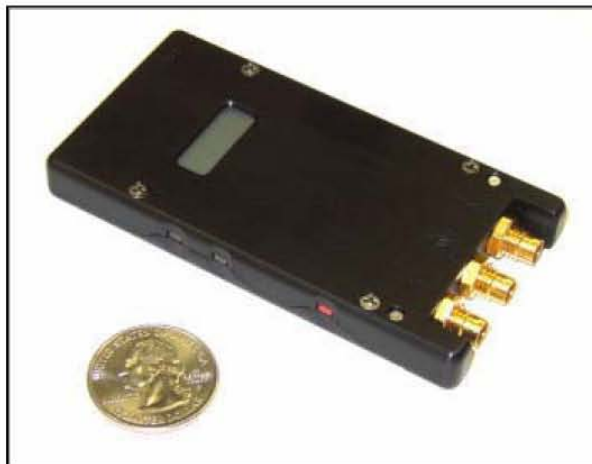
- Covert packaging
- Loss-less compression
- Super fast downloads
- Easy to use software
- Up to 36 hrs. mono or 18 hrs. stereo capacity

### BEST USES:

- Body worn surveillance
- Fixed installations
- Interview recordings
- Personal duty recorder

### WHO NEEDS THIS?

- Live surveillance teams
- Technical investigators
- Intelligence and counter-intelligence operators
- Military Law Enforcement groups



## DIGITAL STEREO AUDIO RECORDER

TSE 6501

### KEY FEATURES:

- 0.4 inches thin for easier concealment
- Fastest download speed in the industry
- Same Configuration/Download Utility and WAV File Conversion software that's easy to use
- Loss-less Data Compression algorithm for extended recording times with no digital evidence loss
- Industry first rechargeable Lithium-Ion battery to eliminate costs
- LCD display for instant feedback on record time and battery life
- Built-in high-performance stereo microphones
- Enable or disable local playback of recorded tracks
- User-defined security controls to restrict unit access
- External body worn microphones supplied
- Remote control switch
- Body worn harness

### TECHNICAL DATA;

- Independent Telocate 4-pin connectors for attaching optional mono or stereo mics, control switch, and/or external power supply (compatible with similar Microtech 4-pin connectors)
- Improved ON/OFF, NEXT/PREV track control buttons for clean, tactile response to commands
- Mini-B USB connector for standard connection to host PC
- 512 MB flash memory (Optional 1GB flash memory version available)
- Maximum record capacity of 36 hours mono or 18 hours stereo
- Rugged carrying case, USB cable, software, and user manual supplied
- Enclosure: 45w x 90L x 10h mm milled aluminum

## SMALL SIZE, HIGH PERFORMANCE DIGITAL AUDIO RECORDERS

TSE 6508

The Beowulf recorders are Gamma's new high performance, stand alone recording devices with storage capabilities from 3 hours in highest quality to 48 hours in lowest quality.

The very small, lightweight recorders intercept all audio making them extremely suitable for close proximity operations. The hassle free design with batteries and connection wires integrated makes these recorders easy to conceal in any environment. The recorders are operated easily using only a single button and the feed-back from three LEDs.

The audio is stored on internal flash using FAT16 and the Microsoft wave audio format. When the recorder is connected to a USB port on a MS-Windows compatible PC, it functions as a normal removable drive.



The Beowulf is configured from the supplied PC software and options such as real-time clock, sample frequency, recording format, compression, input gain etc. are available. The USB connector can be used as an external control input. With this feature, the user can configure the Beowulf to start and stop recordings depending on external devices, such as room light, phone line etc.

The Beowulf Recorder family will currently be available in two different versions:

### **Beowulf Standard**

The Beowulf Standard has an internal AAA battery and is available with either internal or external microphones. It is delivered with waist and ankle holster.

### **Beowulf Miniature**

The Beowulf Miniature has an internal battery, rechargeable through the USB port.

## APPLICATIONS

The Beowulf recorders are ideal for operations requiring:

- High reliability and flexibility to ensure maximum officer safety
- Long operational time
- Low probability of detection
- Close to the scene audio recordings
- Easy concealment
- Quick installation

## FEATURES

- Small size
- Very simple to operate
- Recordings in high quality stereo audio
- USB transfer of recorded data
- Timestamps using Real-time clock
- Configurable in PC software
- External Control input (start / stop recordings)

## SMALL SIZE, HIGH PERFORMANCE DIGITAL AUDIO RECORDERS

**TSE 6508**

### TECHNICAL SPECIFICATIONS

|                             |   |
|-----------------------------|---|
| <b>GENERAL</b>              |   |
| <b>Power requirements</b>   |   |
| Main battery                | Single AAA battery for Beowulf Standard             |
|                             | Internal rechargeable Lithium for Beowulf Miniature |
| <b>Power consumption</b>    |   |
| Voltage range               | 0.8-1.6 VDC   |
| Current consumption         | Typical 60 mA @ 1.5 VDC                             |
| Sleep mode                  | < 1 uA  |
| Main battery lifetime       | AAA: (1250 mAh) Up to 20 hours                      |
| Recorder memory             | 1 GB  |
| Input frequency response    | 20 Hz–12 kHz  |
| Input dynamic range         | TBD   |
| Recording modes             | Stereo or mono                                      |
| Sample rates                | 6, 8, 9.6, 12, 16 and 24 kHz                        |
| Compression                 | None, A-law   |
| A/D converter resolution    | 16 bit  |
| Signal to Noise Ratio (SNR) | 89 dB   |
| Real-time clock precision   | +/-2 minutes per month                              |
| File system                 | Microsoft FAT16 compatible                          |
| Data format                 | Microsoft Wave                                      |
| USB transfer rate           | Minimum 400 KB / Second                             |
| <b>Dimensions (HxWxD)</b>   |   |
| Standard (AAA)              | 12x51.4x30 mm / 0.5x2.0x1.2 inches                  |
| Miniature                   | 10x51.1x18.7 mm / 0.4x2.0x0.7 inches                |
| <b>Connector</b>            |   |
| USB                         | Mini-USB  |



## DIGITAL RECORDER IN A LIGHTER

### TSE 6508 light

The Beowulf Lighter contains a concealed 1 GB Beowulf Miniature digital audio recorder with an internal rechargeable Lithium battery.

The device can operate minimum 3 hours on a fully charged battery and has storage capabilities from 3 hours in highest quality to 48 hours in lowest quality.

The Beowulf has a built-in gas chamber and can function as an ordinary lighter. The audio is stored on internal flash using FAT16 and the Microsoft wave audio format. When the recorder is connected to a USB port on a MS-Windows compatible PC, it functions as a normal removable drive.

The Beowulf lighter is configured from the supplied PC software and options such as real-time clock, sample frequency, recording mode, recording format, compression, input gain, etc. are available.

### APPLICATIONS

The Beowulf Lighter is ideal for operations requiring:

- Covert recordings
- Trojan Horse recording device
- Long operational time
- Quick installation

### FEATURES

- Small size
- One button operation
- Recordings in high quality stereo audio
- Tamper proof timestamps using Real-time clock
- Dual functions - works either as an audio recorder or as an ordinary lighter



### SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Power requirements          | Internal rechargeable Lithium battery    |
| Main battery lifetime       | Internal rechargeable: min. 3 hours      |
| Recorder memory             | 1 GB                                     |
| Input frequency response    | 20 Hz - 12 kHz                           |
| Recording modes             | Stereo or mono                           |
| Sample rates                | 6, 8, 9.6, 12, 16 and 24 kHz             |
| Compression                 | None, A-law                              |
| A/D converter resolution    | 16 bit                                   |
| Signal to Noise Ratio (SNR) | 89 dB                                    |
| Real-time clock precision   | +/- 2 minutes per month                  |
| File System                 | Microsoft FAT16 compatible               |
| Data format                 | Microsoft Wave                           |
| USB Transfer rate           | Minimum 400 KB / Second                  |
| Dimensions (H x W x D)      | 15 x 74 x 27 mm / 0.6 x 2.9 x 1.1 inches |

## DIGITAL RECORDER IN A USB

## TSE 6508 USB

The Beowulf USB contains a concealed 1 GB Beowulf Miniature digital audio recorder with an internal rechargeable Lithium battery. The device can operate minimum 5 hours on a fully charged battery and has storage capabilities from 3 hours in highest quality to 48 hours in lowest quality.

The Beowulf USB has two different modes, depending on the requirements of the surveillance task:

- The USB recorder: When switched on, the Beowulf USB will continue to record, whether inserted into the USB port or placed on e.g. a table.
- The ordinary USB: When inserted into a computer, the device will function as an ordinary USB key showing a normal dialogue box.

The audio is stored on internal flash using FAT16 and the Microsoft wave audio format. When the recorder is connected to a USB port on a MS-Windows compatible PC, it functions as a normal removable drive. Beowulf USB is configured from the supplied PC software and options such as real-time clock, sample frequency, recording mode, recording format, compression, input gain, etc., are available.

### APPLICATIONS

The Beowulf USB is ideal for operations requiring:

- Covert recordings
- Trojan Horse recording device
- Long operational time
- Quick installation

### FEATURES

- Small size
- One button operation
- Recordings in high quality stereo audio
- Tamper proof timestamps using Real-time clock
- Dual functions - works either as an audio recorder or as an ordinary USB key



### SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Power requirements          | Internal rechargeable Lithium battery    |
| Main battery lifetime       | Internal rechargeable: min. 5 hours      |
| Recorder memory             | 1 GB                                     |
| Input frequency response    | 20 Hz - 12 kHz                           |
| Recording modes             | Stereo or mono                           |
| Sample rates                | 6, 8, 9.6, 12, 16 and 24 kHz             |
| Compression                 | None, A-law                              |
| A/D converter resolution    | 16 bit                                   |
| Signal to Noise Ratio (SNR) | 89 dB                                    |
| Real-time clock precision   | +/- 2 minutes per month                  |
| File System                 | Microsoft FAT16 compatible               |
| Data format                 | Microsoft Wave                           |
| USB Transfer rate           | Minimum 400 KB / Second                  |
| Dimensions (H x W x D)      | 15 x 74 x 27 mm / 0.6 x 2.9 x 1.1 inches |





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