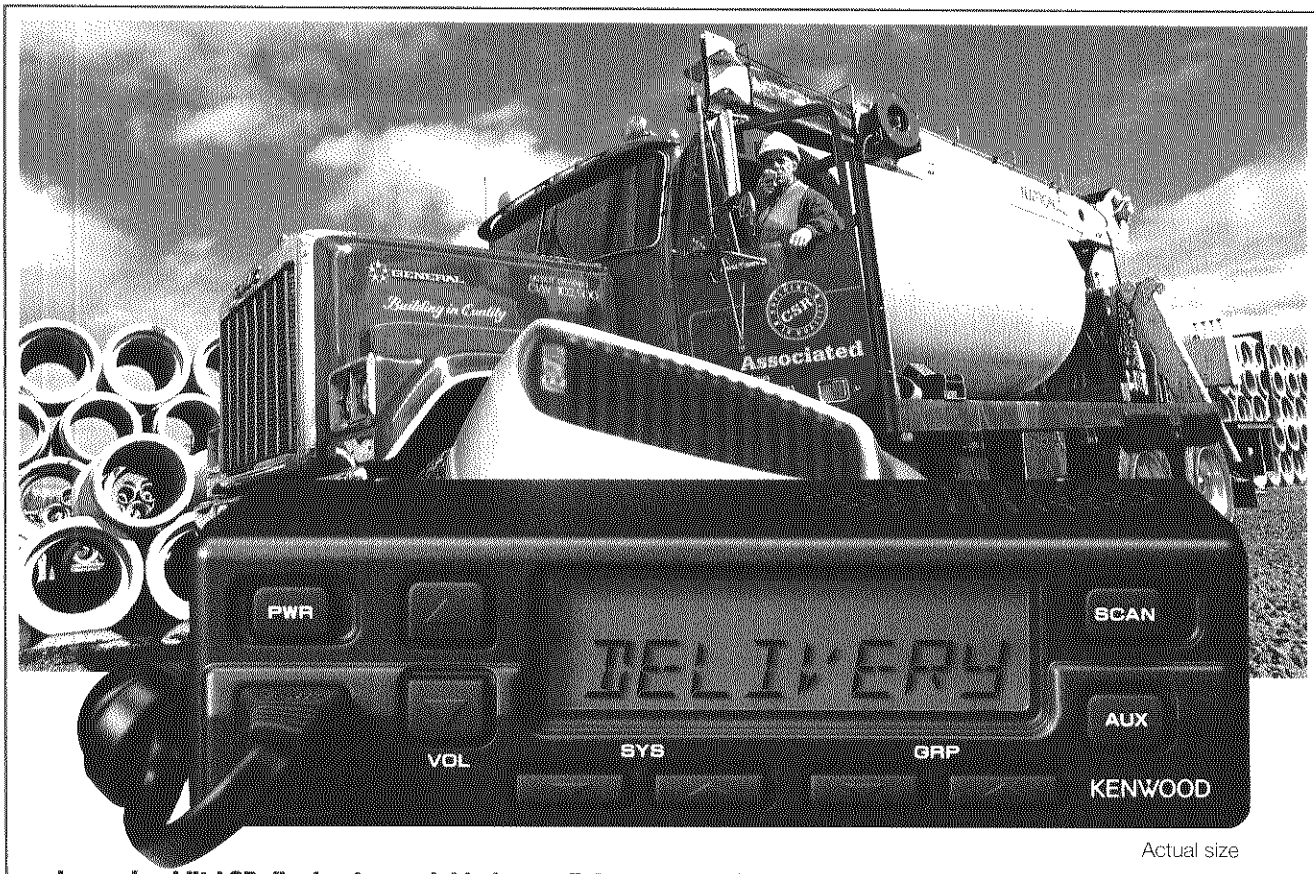
KENWOOD

Trunked Compact Mobile Radios

TK-940/941

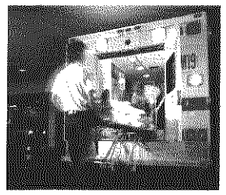


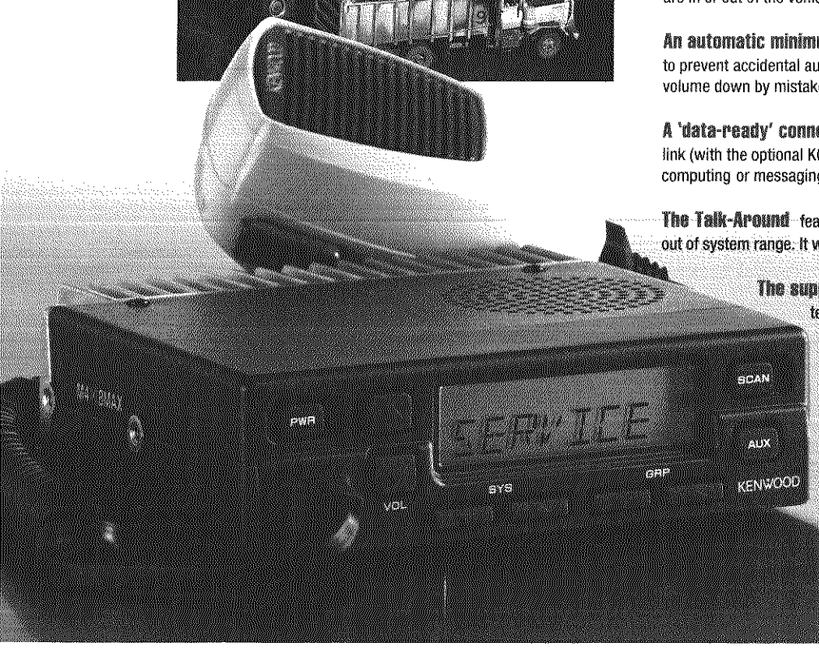
Actual size

- Large backlit LCD display is readable in any light
- Programmable up to 32 systems in flexible channel/group configurations for the most complex or simplest applications
- Light and compact design allows installation in almost any location in any vehicle
- Multiple System Scans provide easy channel management
- Rugged die-cast chassis and MIL-STD compliance for years of service under adverse conditions
- A 'data-ready' connection cable (optional KCT-19) enables integration with mobile devices such as laptops/modems, mobile data terminals, personal digital assistants (PDA's), and status messaging units
- High sensitivity and selectivity gives top performance in both urban and rural areas
- Flash ROM memory programmed through the mic jack makes future radio enhancements easy
- Computerized programming & tuning lessens the load on technical staff

Great things come in small packages. The new Kenwood TK-940/941.

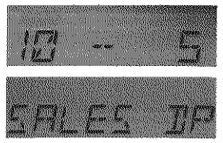
Kenwood didn't just design the smallest trunked mobile on the market — they also packed the new TK-940 (800 MHz) and TK-941 (900 MHz) series with a host of user and technical advancements placing it in a league by itself. Kenwood listened to real world needs and delivered world class technology.



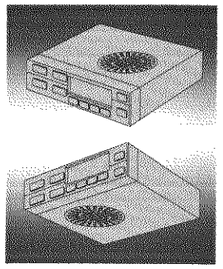


The outside story

The large backlit LCD display provides high legibility under virtually any lighting conditions — from direct sunlight to total darkness. This high resolution 13 segment/8 character alphanumeric display communicates a variety of operational and status information, well-suited to multi-system/multi-group applications.



The rotatable front panel is an ingenious feature that allows the installer to place the radio in awkward locations while leaving the speaker open and the display oriented correctly for user viewing.



Up to 32 systems can be programmed. You can define a mix of systems, channels, and groups to fit specific requirements. For example, you could program 32 systems with 5 channels per system and 11 groups; or 32 systems with 20 channels per system and 5 groups.

System Scan and Group Scan allow call reception on multiple systems from multiple talk groups. Other scanning features include Off-hook scan, Off-hook revert, and System add/delete.

Auto System Search further enhances user convenience by automatically searching for and locking onto an available telephone channel and initiating access for dial tone.

Call lights and horn alert can signal users of an incoming call whether they are in or out of the vehicle.

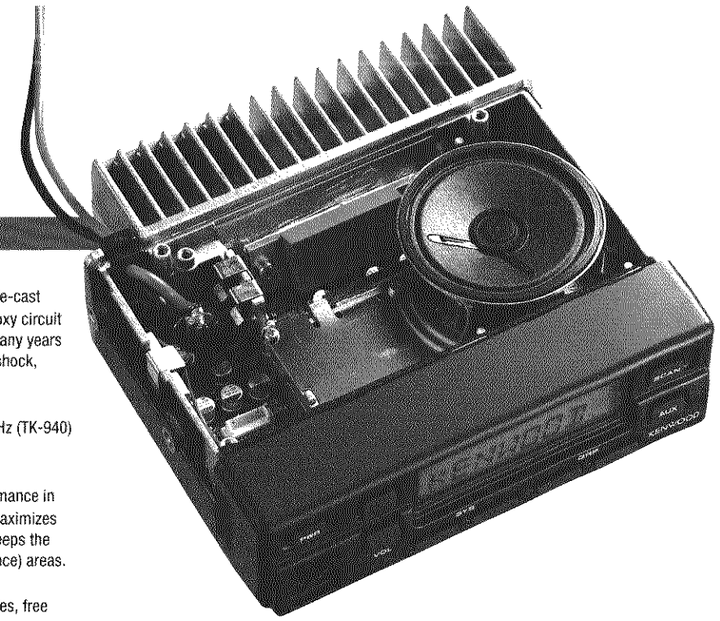
An automatic minimum volume level can be programmed (in any of 32 steps) to prevent accidental audio loss; no more missed calls because someone turned the volume down by mistake.

A 'data-ready' connection port means the TK-940/941 can provide an RF data link (with the optional KCT-19 cable) for advanced mobile users who have computing or messaging devices in their vehicles.

The Talk-Around feature is handy for close-in simplex work or when the user is out of system range. It works in both conventional and trunked modes.

The supplied heavy duty microphone comes with a modular telephone-type connector and tough cable for demanding users. The optional KMC-18/18A DTMF microphone is also available for telephone interconnect applications.

The inside story



Rugged construction is used throughout the TK-940/941, from the die-cast chassis and heatsink to the thick break- and moisture-resistant glass-epoxy circuit board. This approach means that performance will be stable even after many years of hard use. Meets MIL-STD 810 C, D & E specifications for resistance to shock, vibration and dust.

15 watts RF power output gives you the punch you need on 800 MHz (TK-940) and 900 MHz (TK-941).

High receiver sensitivity and selectivity provide superior performance in both rural and urban settings. High sensitivity in the 800/900 MHz band maximizes operating range while the high selectivity and spurious/image rejection keeps the receive audio clean when operating in high RFI (radio frequency interference) areas.

Trunked system features include fixed priority/block decode ID codes, free system ringback for telephone interconnect operation, transmit inhibit, and transpond function.

The E²PROM is technician-programmable with software on a PC connected to the microphone jack. This enables rapid set-up of even complicated configurations. The technician can also perform precision alignment adjustments on the radio through this PC interface.

The programmable time-out-timer can be set to limit the transmit time in 15 second steps, between a range of 15 and 600 seconds. This guards against overly-long key ups in dispatch or telephone interconnect systems.

A programmable auxiliary switch can be set to control a host of functions including Horn Alert, Del/Add, Auto-Tel, Home System/Group (fixed call), Group Name (alphanumeric) ON/OFF, and optional Signaling Reset, and Manual Relay.

QT (Quiet-Talk) and DQT (Digital Quiet Talk) and be set up for use on conventional channels, which can also be included in the scan map.

Kenwood Radios Mean Business.

OPTIONS

KMC-9
Control Station Desk Top Microphone

KMC-18A
DTMF Hand Dial/Dual ANI Microphone

KMC-18
DTMF Hand Microphone

KMC-2A
Noise Canceling Hand Microphone

KPS-10A
DC Power Supply

KES-4
External Speaker

KES-3
External Speaker

KSP-1A
External Speaker

KCT-19
Accessories Connection Cable

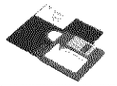
KDD-4
DTMF Decoder

KLF-2
Line Noise Filter

KMB-2B
Mounting Case

KCT-18
Ignition Sens Cable (requires KCT-19)

KPG-4
Programming Interface Cable (dealer option)



KPG-25D
Programming Software Discs (dealer option)

Specifications

	TK-940	TK-941
GENERAL		
Frequency range	RX: 851 ~ 870 MHz TX: 806 ~ 825 MHz, 851 ~ 870 MHz	RX: 935 ~ 941 MHz TX: 896 ~ 902 MHz, 935 ~ 941 MHz
Systems	Max. 32	Max. 32
Groups	Max. 250	Max. 250
Conventional channels	Max. 308	Max. 308
Channel spacing	25 kHz (PLL step: 12.5 kHz)	12.5 kHz
Input voltage (negative ground)	13.6 V DC	13.6 V DC
Current drain Standby Receive Transmit	 Less than 0.4 A Less than 1.0 A Less than 7.0 A	 Less than 0.4 A Less than 1.0 A Less than 7.0 A
Duty cycle	RX: 100%; TX: 20%	RX: 100%; TX: 20%
Operating temperature range	-22° F ~ +140° F (-30° C ~ +60° C)	-22° F ~ +140° F (-30° C ~ +60° C)
Dimensions (W x H x D)	5-33/64 x 1-37/64 x 5-5/16 in. (140 x 40 x 135 mm)	5-33/64 x 1-37/64 x 5-5/16 in. (140 x 40 x 135 mm)
Weight (net)	2.09 lbs. (950 g)	2.09 lbs. (950 g)
FCC ID	ALHTK-940-1	ALHTK-941-1
FCC compliance	FCC part 90	FCC part 90

Applicable EIA environmental standards: EIA 152C, 204C for shock, vibration, humidity

	TK-940	TK-941
RECEIVER (Measurements made per EIA standard EIA-204-C)		
RF input impedance	50 Ω	50 Ω
Sensitivity EIA 12 dB SINAD	 0.25 µV	 0.25 µV
Modulation acceptance	±7 kHz	±3.5 kHz
Selectivity	-75 dB	-68 dB
Intermodulation distortion	-70 dB	-65 dB
Spurious & Image rejection (except 1/2 IF)	-75 dB	-75 dB
Channel frequency spread	19 MHz	6 MHz
Audio output	4 W at less than 5% distortion	4 W at less than 5% distortion
TRANSMITTER (Measurements made per EIA standard EIA-152-B)		
RF power output	15 W	15 W
RF output impedance	50 Ω	50 Ω
Spurious & harmonics	-60 dB	-60 dB
Modulation	F3E, F1D, F2D	F3E, F1D, F2D
FM noise	-45 dB	-40 dB
Microphone impedance	Low impedance	Low impedance
Audio distortion	Less than 3% at 1 kHz	Less than 5% at 1 kHz
Frequency stability (-30° C ~ +60° C)	 ±0.00025%	 ±0.00015%
Channel frequency spread	64 MHz	45 MHz

Kenwood follows a policy of continuous advancement in development.
For this reason specifications may be changed without notice.

Applicable MIL-STD

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures
Dust	510.1/Procedure 1	510.2/Procedure 1	510.3/Procedure 1
Vibration	514.2/Procedure 8, 10	514.3/Procedure 1	514.4/Procedure 1
Shock	516.2/Procedure 1, 2, 3, 5	516.3/Procedure 1, 3, 4, 5, 6	516.4/Procedure 1, 3, 4, 5, 6

ISO 9002
Meets ISO Manufacturing Quality System

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