KENWOOD

TK-7102H/8102H

Version 2.0

Compact Synthesized FM Mobile Radios

Simple operation and solid performance in a compact package — Kenwood's TK-7102H/8102H VHF/UHF FM transceivers offer clear, reliable mobile communications with 50W/45W (VHF/UHF) RF output and such features as QT/DQT signaling, phone/repeater access, and PC programming.

NOW UP TO 8 CHANNELS OF MEMORY

The memory structure of the TK-7102H/8102H provides versatility and convenience by allowing up to 8 channels (4 channels x 2 groups).

BUILT-IN QT/DQT SIGNALING

Continuous QT (Quiet Talk) and DQT (Digital QT) tone-coded squelch circuits eliminate unwanted signals from others using the same channel. Once a technician has programmed the radio, the user hears only calls with the specified talk group tone (39 for QT) or code (104 for DQT).

TWO PTT ID FORMATS

The TK-7102H/8102H features two PTT ID formats — DTMF (max. 16-digit DTMF code) and MSK (FleetSync™ format ID). PTT ID is a digital ANI (Automatic Number Identifier) that can be sent on each PTT, allowing clear identification of the person using the transceiver.

DTMF

Code Squelch mode provides a 3- to 10-digit ID for basic DTMF paging operations, while DTMF encode allows access to phone patches.

EASY OPERATION

Simplicity characterizes all operations. The front panel features just 4 channel keys, 2 function keys and 2 volume keys. All keys except for the power switch are backlit to facilitate nighttime operation.

SCAN

Channel scanning provides the user with a simple way to monitor multiple channels for activity, with extra flexibility offered by adjustable scan resume.

HIGH-QUALITY SPEAKER

Assuring not only powerful output but also excellent clarity is the large-diameter oval (58mm x 35mm) speaker mounted in the front panel.

TOUGH, COMPACT AND POWERFUL

Built to take rough treatment in stride, the TK-7102H/8102H meets the stringent MIL-STD 810 C/D/E standards for resistance to dust, vibration and shock. The "bathtub" construction of the chassis assures excellent heat dissipation characteristics, and installation is simplified thanks to the compact external dimensions — 160mm (W) x 43mm (H) x 107mm (D). Furthermore, the discrete final MOS FET boasts powerful output: 45W (UHF), 50W (VHF).

PC PROGRAMMING & CLONING CAPABILITY

Using the optional interface cable, the TK-7102H/8102H can be connected to a PC* for programming. One-to-one wired cloning is also possible. And password protection (1 to 10 digits) prevents unauthorized data access.

**Requires Windows™ 98/ME/2000/XP (English or Spanish versions)*

EMBEDDED MESSAGE & KENWOOD ESN

The radio's EEPROM can store an embedded message containing ID number, user and department names, etc. Additionally, a unique electronic serial number (ESN) helps to protect against theft: it cannot be removed or altered. A unit can thus be identified even if the external labels, marking or factory serial numbers have been removed.

CONNECTION WITH ACCESSORIES FOR FURTHER EXPANSION

Optional accessories such as the KDS-100 unit expands the TK-7102H/8102H for text messaging. Additionally with the appropriate GPS interface and 8-programmable function ports make the TK-7102/8102 a complete data package.

Other features

- Encryption control capability
- PC programming**
- Time out Timer (TOT)
- Ignition sense input
- Busy channel lockout
- Wide/narrow selection per channel

***Compatible with Windows 98/ME/2000/XP, English*

Options

- **KMC-30** Microphone (supplied)

- **KMC-32** 16-key Keypad Microphone

- **KES-3** External Speaker

- **KLF-2** Line Filter

- **KDS-100** Mobile Data Terminal (requires KCT-39 option)

- **KPS-15** DC Switching Power Supply

- **KMB-10** Key Lock Adapter

- **KMB-19** Installation Kit

- **KCT-36** 3m Extension Cable (for KCT-39)

- **KCT-39** Connection Cable

- **KCT-18** Ignition Sense Cable (requires KCT-39 option)

All accessories and options may not be available in all markets. Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

Specifications

	TK-7102H	TK-8102H
GENERAL		
Frequency range		
Type 1	146–174 MHz	450–490 MHz
Type 2	136–162 MHz	485–512 MHz
Channels	8 (4ch x 2 groups)	
Channel spacing (Wide / Narrow)	25 kHz / 12.5 kHz	
PLL channel stepping	2.5 kHz, 5 kHz, 6.25 kHz, 7.5 kHz	5 kHz, 6.25 kHz
Operating voltage	13.6 V DC ±15%	
Current drain		
Standby	0.4A	
Receive	1.0A	
Transmit	14.0A	
Operating temperature range	-22 °F ~ +140 °F (-30 °C ~ +60 °C)	
Frequency stability (-22 °F ~ +140 °F)	±2.5 ppm	
Dimension (W x H x D, without projections)	6-5/16 x 1-11/1 6 x 5-3/8 in. (160 x 43 x 137 mm)	
Weight (Body only, approximate)	2.6 lbs (1.18 kg)	
Antenna impedance	50 Ω	
Channel frequency spread		
Type 1	28 MHz	40 MHz
Type 2	26 MHz	27 MHz

	TK-7102H	TK-8102H
RECEIVER (TIA / EIA-603)		
Sensitivity (Wide / Narrow)	0.28 µV / 0.35 µV (12 dB SINAD)	
Selectivity (Wide / Narrow)	75 dB / 65 dB	
Intermodulation distortion (Wide / Narrow)	70 dB / 60 dB	
Spurious response	75 dB	
Audio output (4Ω, 5% distortion)	4.0 W	
TRANSMITTER (TIA / EIA-603)		
RF power output	50 W	45 W
Spurious & harmonics (High)	70 dB	
Modulation (Wide / Narrow)	16K0F3E / 11K0F3E	
FM noise (Wide / Narrow)	45 dB / 40 dB	
Audio distortion (Wide / Narrow)	Less than 3%	
Microphone impedance	600 Ω	

Kenwood reserves the right to change specifications and features without prior notice.
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Applicable MIL-STD

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
Dust	510.1/Proc. I	510.2/Proc. I	510.3/Proc. I	510.4/Proc. I, III
Vibration	514.2/Proc. VIII, X	514.3/Proc. I, Cat. 8	514.4/Proc. I, Cat. 8	514.5/Proc. I, Cat. 20
Shock	516.2/Proc. I, II, V	516.3/Proc. I, IV	516.4/Proc. I, IV	516.4/Proc. I

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