



TK-7102H/8102H

Compact Synthesized FM Mobile Radios

FleetSync®

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 RF output and such features as QT/DQT signalling, phone/repeater access, and PC programming.

BUILT-IN QT/DQT SIGNALLING

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).

BUSY CHANNEL LOCKOUT

If another talk group is already on the air, this feature enhances channel management by preventing transmission.

SELECTABLE WIDE/NARROW CHANNEL BANDWIDTH

The TK-7102H/8102H can handle both existing wideband systems and emerging narrow band applications, making it possible to future-proof your investment.

DTMF / MSK PTT ID

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.

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 POWER OUTPUT

The newly developed discrete final MOS FET boasts powerful 45W output for the UHF range and 50W for the VHF range

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 CONSTRUCTION

Built to take rough treatment in stride, the TK-7102H/8102H meets the stringent MIL-STD 810 C/D/E standards. The "bathtub" construction of the chassis assures excellent heat dissipation characteristics,





and installation is simplified thanks to the compact external dimensions — 160mm (W) \times 43mm (H) \times 107mm (D).

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.

*Compatible with Windows® 95/98/2000/XP

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.

TIME OUT TIMER

TOT terminates transmission after a set time, returning the unit to receive mode. There is also an alarm to alert the user to imminent TOT activation



Options



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

Model	TK-7102H	TK-8102H	
GENERAL			
Frequency Range			
Type 1	146-174 MHz	450-490 MHz	
Type 2	136-162 MHz	485-512 MHz	
Type 3	_	400-430 MHz	
Number of Channels	4		
Channel Spacing			
Wide	25 kHz		
Narrow	12.5 kH:		
Channel Step	2.5 kHz / 5 kHz 6.25 kHz / 7.5 kHz	5 kHz / 6.25 kHz	
Operating Voltage	13.6V DC±	15%	
Current Drain	13.07 DC1		
Standby	0.4 A		
Receive	1.0 A		
Transmit (High Power)	1.0 A 14.0 A		
Operating Temperature Range	-30°C ~ +60°C		
Frequency Stability	-30°C ~ +60°C ±2.5ppm		
(-30°C ~ +60°C)	±2.5μρι		
Antenna Impedance	50 Ω		
Channel Frequency Spread	50 12		
Type 1	28 MHz	40 MHz	
Type 2			
	26 MHz	27 MHz	
Type 3		30 MHz	
Dimensions (W x H x D)	6.20" 4.60"	F 20"	
	6.29" x 1.69"		
. 1.7. 0	(160 mm x 43 mm	x 13/ mm)	
weight (net)		N	
(body only, approx.)	2.6 lbs (1.18 kg)		
RECEIVER (Measurements made	per EIA/TIA-603)		
Sensitivity (12dB SINAD)			
Wide	0.28 μV		
A.I.	0.35 μV		
Narrow	0.35 μV		
	0.35 μV		
	0.35 μV 75 dB		
Selectivity			
Selectivity Wide Narrow	75 dB		
Selectivity Wide	75 dB		
Selectivity Wide Narrow Intermodulation Distortion	75 dB 60 dB		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow	75 dB 60 dB 70 dB 60 dB		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response	75 dB 60 dB 70 dB 60 dB 75 dB	5% distortion)	
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than	5% distortion)	
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements ma	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than	5% distortion)	
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements ma	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603)		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements ma	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603)	5% distortion) 45 W	
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements materials) Spurious Response	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603)		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements markers of the control of the contro	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603)		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements managements managements) RF Output Power Spurious Response (High Power) Modulation	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603) 50 W		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements materials of the companies of the compa	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603) 50 W 70 dB		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements materials of the control of the cont	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603) 50 W		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements materials of the control of the cont	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603) 50 W 70 dB		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements materials of the control of the cont	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603) 50 W 70 dB		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements markers of the control of the contro	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603) 50 W 70 dB 16KØF3E 11KØF3E		
Selectivity Wide Narrow Intermodulation Distortion Wide Narrow Spurious Response Audio Output TRANSMITTER (Measurements materials of the control of the cont	75 dB 60 dB 70 dB 60 dB 75 dB (4W at 4 Ω) with less than ade per EIA/TIA-603) 50 W 70 dB 16KØF3E 11KØF3E	45 W	

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Applicable MIL-STD

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I
Humidity	507.1/Procedure II	507.2/Procedure II, III	507.3/Procedure II, III	507.4
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III
Vibration	514.2/Procedure VIII, X	514.3/Procedure I, Cat. 8	514.4/Procedure I, Cat. 8	514.5/Procedure I, Cat. 20
Shock	516.2/Procedure I, II, III, V	516.3/Procedure I, IV, V	516.4/Procedure I, IV, V	516.5/Procedure I, IV, V



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