

KENWOOD

TK-7100H/8100H

VHF/UHF FM Transceivers

Fully equipped with a wide range of user-friendly features and offering famous Kenwood quality, the TK-7100H/8100H radios will improve your powers of communication. These mobiles are handy for any and all applications thanks to their compact body and durable chassis.

ALPHANUMERIC LCD DISPLAY

The luminous LCD found on the TK-7100H/8100H offers user-friendly operation thanks to its 13-segment, 8-digit alphanumeric display with multiple capabilities.



64 CHANNELS

Providing you with more versatility and convenience, the memory allocation of the TK-7100H/8100H allows programming of up to 8 groups within 64 channels.

SCAN FUNCTIONS

Priority Scan and Group Scan (single/multi) can be set; add and delete channel(s) function can also be performed.

TOUGH, COMPACT AND POWERFUL

Built to take rough treatment in stride, the TK-7100H/8100H meets the stringent MIL-STD 810 C/D/E/F 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 137mm (D). Furthermore, the discrete final MOS FET boasts powerful 45W (UHF) and 50W (VHF) output.

HIGH-QUALITY SPEAKER

The large-diameter oval (58mm x 35mm) speaker mounted in the front panel assures excellent clarity.

DTMF / MSK PTT ID

The TK-7100H/8100H 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.

* DMS (Digital Message System) function has been renamed to FleetSync.

VERSATILE DTMF MODES

The TK-7100H/8100H can be set for the following DTMF encode and decode modes:

- **Code Squelch:** DTMF code squelch provides a 3- to 10-digit ID for DTMF paging operations.
- **Selective Call:** DTMF selective calling is a signalling function comprised of DTMF codes (ID code + Intermediate code + Status code) that allows reception even if the radio is left unattended. SQ opens when the set ID and intermediate code matches the maximum display of the 5-digit numeric status code.
- **Number display*:** When the DTMF code is received — such as the PTT ID number — it is displayed on the LCD for instant recognition.

* Does not operate while Code Squelch or Selective Call is activated.



OPERATOR SELECTABLE TONE

Users can freely change the 16 QT/DQT signalling tones that were set with the FPU; each signalling tone can also have an 8-digit name.

OTHER FEATURES

- Built-in QT/DQT Signalling
- SmarTrunk II™ OMNI capability (requires SmarTrunk board*)
- Data Ready (KDS-100, KGP-2A/2B, and 8 Programmable Function Port)
- Encryption Control Capability
- PC**/Self Programming
- AVL capability (with KGP-2A/2B)
- Backlit keys for all buttons
- Ignition sense input
- 4-Programmable Keys
- Busy Channel Lockout
- Embedded Message
- Security features including Radio stun, Radio password, Data password, Embedded message, and Kenwood ESN
- Channel direct
- Time out Timer (TOT)
- Wide/narrow selection per channel

*SmarTrunk board is available from SmarTrunk Systems, Inc.

**Compatible with Windows 98/ME/2000/XP, English or Spanish version.



Options

■ **KMC-30**
Microphone



■ **KMB-10**
Key Lock Adapter



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



■ **KMC-32**
16-key Keypad
Microphone



■ **KMB-19**
Installation Kit



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



■ **KES-3**
External Speaker



■ **KGP-2A**
GPS Receiver Modem
(requires KCT-39 option)



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



■ **KLF-2**
Line Filter



■ **KGP-2B**
GPS Controller Modem
(requires KCT-39 option)



■ **KCT-39**
Connection Cable



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-7100H	TK-8100H
GENERAL		
Frequency Range	146-174 MHz	440-480 MHz
Channels / Groups	64 CH / 8 GRP (Up to 64 channels can be allocated into 8 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		0.4 A
Receive		1.0 A
Transmit (High Power)		14.0 A
Operating Temperature Range	-30°C ~ +60°C	
Frequency Stability (-30°C ~ +60°C)	±2.5 ppm	
Dimensions (W x H x D, without projections)	160 mm x 43 mm x 137 mm	
Weight (Body only, approximate)	1.18 kg	
Antenna Impedance	50 Ω	
Channel Frequency Spread	28 MHz	40 MHz

	TK-7100H	TK-8100H
RECEIVER (Measurements made per EIA/TIA-603)		
Sensitivity (Wide / Narrow)	0.28μV / 0.35μV (12dB 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 (Measurements made per EIA/TIA-603)		
RF Power Output (High / Low)	50W / 25W	45W / 25W
Spurious & Harmonics (High Power)	70 dB	
Modulation (Wide / Narrow)	16K0F3E / 11K0F3E	
FM Noise (Wide / Narrow)	45 dB / 40 dB	
Audio Distortion (Wide / Narrow)	Less than 3%	
Microphone Impedance	600Ω	

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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/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, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.4/Procedure I



JQA-1205
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ISO9001 Registered
Communications Equipment Division
Kenwood Corporation
ISO9001 certification

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