

# KENWOOD

Listen to the Future



## TK-7100H/8100H

VHF/UHF FM Transceivers

FleetSync<sup>®</sup>  
by KENWOOD

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



### ALPHANUMERIC LCD DISPLAY

The brightly lit LCD display found on the TK-7100H/8100H offers user-friendly operation thanks to its 13-segment, 8-digit multi-capability alphanumeric display.

### 64 CHANNELS

The memory structure of the TK-7100H/8100H provides versatility and convenience by allowing up to 64 channels in 8 groups.

### SCAN FUNCTIONS

Priority and group scan (single/multi) is available and allows channel(s) to be added and deleted.

### 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. The "bathtub" construction of the chassis assures excellent

heat dissipation characteristics, and installation is simplified thanks to the compact external dimensions — 6.30in (W) x 1.69in (H) x 5.39in (D). Furthermore, the discrete final MOS FET boasts powerful 45W (UHF) and 50W (VHF) output.

### HIGH-QUALITY SPEAKER

The large-diameter oval (2.28in x 1.38in) 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<sup>®</sup> 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.

### 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.

■ **Selective Call:** DTMF selective calling is a signalling function comprised of DTMF codes (ID code +

Intermediate code + Status code) that allows direct radio calling even if the radio is left unattended. When the set ID and intermediate codes match, the radio's squelch will open and a numeric status code of up to 5-digits can be displayed.

■ **Number display\*:** When the DTMF code, such as the PTT ID number is received, it will display on the LCD.

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

### OPERATOR SELECTABLE TONE (OST)

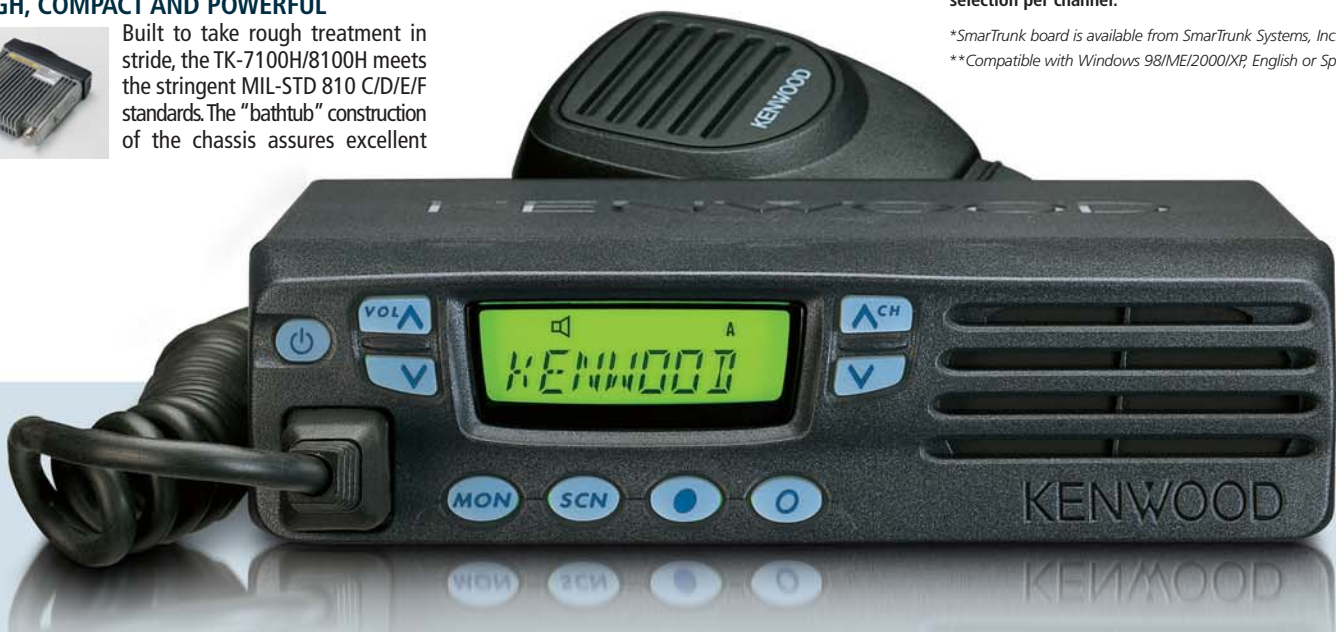
The user may change the QT/DQT signalling tones that are set with the FPU using the OST function. The FPU allows for these assignable tones to have an 8-digit name thus easing selection in the OST mode.

### 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 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

<p>■ <b>KMC-30</b> Microphone (supplied microphone)</p> 	<p>■ <b>KCT-36</b> 3m Extension Cable (for KCT-39)</p> 	<p>■ <b>KMB-10</b> Key Lock Adapter</p> 	<p>■ <b>KMB-19</b> Installation Kit</p> 
<p>■ <b>KMC-32</b> 16-Key Keypad Microphone</p> 	<p>■ <b>KCT-39</b> Connection Cable</p> 	<p>■ <b>KLF-2</b> Line Noise Filter</p> 	<p>■ <b>KGP-2A</b> GPS Receiver Modem Unit (requires KCT-39 option)</p> 
<p>■ <b>KCT-18</b> Ignition Sense Cable (require KCT-39 option)</p> 	<p>■ <b>KES-3</b> External Speaker</p> 	<p>■ <b>KPS-10A</b> DC Power Supply</p> 	<p>■ <b>KPS-15</b> DC Power Supply</p> 
			<p>■ <b>KGP-2B</b> GPS-2B</p> 
			<p>■ <b>KDS-100</b> Mobile Data Terminal (requires KCT-39 option)</p> 

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-7100H	TK-8100H
<b>GENERAL</b>		
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		64
Channel Spacing		
Wide		25 kHz
Narrow		12.5 kHz
PLL Channel Step	25 kHz / 5 kHz 6.25 kHz / 7.5 kHz	5 kHz / 6.25 kHz
Operating Voltage	13.6V DC±15%	
Current Drain		
Standby		0.4 A
Receive		1.0 A
Transmit (High Power)		14.0 A
Operating Temperature Range	-22°F ~ +140°F (C -30°C ~ +60°C)	
Frequency Stability (-22°F ~ +140°F)	±2.5ppm	
Antenna Impedance	50 Ω	
Channel Frequency Spread		
Type 1	28 MHz	40 MHz
Type 2	—	27 MHz
Type 3	—	30 MHz
Dimensions (W x H x D)	6-6/5" x 1-11/16" x 5-3/8" (160 mm x 43 mm x 137 mm)	
weight (net) (body only, approx.)	2.6 lbs (1.18 kg)	

Model	TK-7100H	TK-8100H
<b>RECEIVER (Measurements made per EIA/TIA-603)</b>		
Sensitivity (12dB SINAD)		
Wide		0.28 μV
Narrow		0.35 μV
Selectivity		
Wide		75 dB
Narrow		60 dB
Intermodulation Distortion		
Wide		70 dB
Narrow		60 dB
Spurious Response		75 dB
Audio Output	(4W at 4 Ω) with less than 5% distortion)	
<b>TRANSMITTER (Measurements made per EIA/TIA-603)</b>		
RF Output Power		
High	50 W	45 W
Low	25 W	25 W
Spurious Response (High Power)		70 dB
Modulation		
High		16KØF3E
Low		11KØF3E
FM Hum & Noise		
Wide		45 dB
Narrow		40 dB
Microphone Impedance	600 Ω	
Audio Distortion	Less than 3%	

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

SmarTrunk II™ is a registered trademark of SmarTrunk Systems, Inc.  
FleetSync® is a registered trademark of Kenwood Corporation.

# 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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