

KENWOOD

TK-7100/8100

Compact Synthesized FM Mobile Radios

Compact yet offering many powerful features, Kenwood's TK-7100/8100 mobiles are designed to play the leading role in your communications. These radios are also built tough enough to withstand all the rigors of today's demanding applications.

ALPHANUMERIC LCD DISPLAY

The luminous LCD found on the TK-7100/8100 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-7100/8100 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 CONSTRUCTION

Built to take rough treatment in stride, the TK-7100/8100 meets ten 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 — 160mm (W) x 43mm (H) x 107mm (D).



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-7100/8100 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-7100/8100 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

<p>■ KMC-30 Microphone</p> 	<p>■ KPS-10A Regulated DC Power Supply</p> 	<p>■ KDS-100 Mobile Data Terminal (requires KCT-39 option)</p> 
<p>■ KMC-32 16-key Keypad Microphone</p> 	<p>■ KMB-10 Key Lock Adapter</p> 	<p>■ KCT-18 Ignition Sense Cable (requires KCT-39 option)</p> 
<p>■ KMC-9C Desktop Microphone</p> 	<p>■ KMB-19 Installation Kit</p> 	<p>■ KCT-36 3m Extension Cable (for KCT-39)</p> 
<p>■ KES-3 External Speaker</p> 	<p>■ KGP-2A GPS Receiver Modem (requires KCT-39 option)</p> 	<p>■ KCT-39 Connection Cable</p> 
<p>■ KLF-2 Line Filter</p> 	<p>■ KGP-2B GPS Controller Modem (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

	TK-7100	TK-8100
GENERAL		
Frequency Range		
Type 1	146-174 MHz	440-480 MHz
Type 2	136-162 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	8.0 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 107 mm	
Weight (Body only, approximate)	1.0 kg	
Antenna Impedance	50 Ω	
Channel Frequency Spread		
Type 1	28 MHz	40 MHz
Type 2	26 MHz	—

	TK-7100	TK-8100
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)	25W / 5W	
Spurious & Harmonics	70 dB	
Modulation (Wide / Narrow)	16K0F3E / 11K0F3E	
FM Noise (Wide / Narrow)	45 dB / 40 dB	
Audio Distortion	Less than 3%	
Microphone Impedance	600Ω	

Kenwood reserves the right to change specifications and features without prior notice.
SmarTrunk II™ is a trademark of SmarTrunk Systems, Inc.
FleetSync™ is a 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 I, 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
Sand & 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

KENWOOD CORPORATION

2967-3, Ishikawa-machi, Hachioji-shi, Tokyo, 192-8525 Japan

KENWOOD ELECTRONICS SINGAPORE PTE LTD.

1 Genting Lane #07-00 Kenwood Building Singapore 349544

