# 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 13segment, 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<sup>TM</sup> 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-32** 16-key Keypad Microphone



**■ KMB-10** Key Lock Adapter

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



**■ KMC-9C** Desktop Microphone



**■ KMB-19** Installation Kit

**■ KGP-2A** 



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



**■ KES-3** External Speaker



GPS Receiver Modem (requires KCT-39 option)



**■ KCT-39** 



KLF-2 Line Filter



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

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-7100 TK-8100			
GENERAL				
Frequency Range				
Type 1	146-174 MHz	440-480 MHz		
Type 2	136-162 MHz	<del>-</del>		
Channels / Groups		64 CH / 8 GRP		
(		Jp 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,	5 kHz, 6.25 kHz		
	6.25 kHz, 7.5 kHz			
Operating Voltage	13.6 V, [	13.6 V, DC ±15%		
Current drain				
Standby	0.4 A			
Receive	1.0 A			
Transmit	8.0 A			
Operating Temperature Range		~ +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	<del>-</del>		

	TK-7100	TK-8100				
RECEIVER (Measurements made per EIA/TIA-603)						
Sensitivity (Wide / Narrow)	0.28μV / 0.35μ	0.28μV / 0.35μV (12dB SINAD)				
Selectivity (Wide / Narrow)	75 dB / 65 dB					
Intermodulation Distortion (Wide / Narrow)	70 dB / 60 dB					
Spurious Response	75	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 t	han 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

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