KENWOOD

Listen to the Future

TK-7160/8160

VHF/UHF FM Mobile Radios

5-tone FleetSync® by KENWOOD

Kenwood's TK-7160/8160 mobiles provide the performance, power and quality for reliable communications in a wide range of mobile applications and environments. Advanced features include a 128-channel/ 128-zone capacity, FleetSync® and easy-to-see 13-segment/8-character backlit LCD.

NEW CONCEPT DESIGN

Kenwood employed premium industrial design concepts to make the TK-7160/8160 functionally practical, rugged and an attractive piece of equipment to carry.

128 CHANNELS / 128 ZONES

The convenient 128-channel / 128-zone capability accommodates virtually any current or future capacity requirement for single or multiple site radio systems.

MEETS/EXCEEDS MIL-STD DRIP RAIN

The TK-7160/8160 is built to survive the hard knocks and harsh weather environments of many type mobile installations. These mobiles meet or exceed the MIL-STD 810 C, D, E, & F environmental standards including the "drip rain" test.*

* MIL-STD compatibility requires the KMC-35 or KMC-36 microphone.

ENHANCED KENWOOD AUDIO & FRONT MOUNTED SPEAKERS

Equipped with front mounted speakers and renowned Kenwood audio technology, the TK-7160/8160 provides loud clear audio even in noisy environments.

8-CHARACTER LCD DISPLAY

The backlit LCD with 8-character, 13 segment aliases with and icons provides an easy-to-read channel, function and FleetSync® messaging display day or night.

LONE WORKER

This ingenious feature provides an extra layer of security and safety for individuals who work remotely as well as for those who work in hazardous areas. As long as the buttons are pressed regularly, the radio operates normally; however, if there is a long lapse (programmable), it will sound an alert. In the absence of further response from the user, the TK-7160/8160 will place an emergency call to a predetermined person or group of people.

FleetSync® – PTT ID, SELCALL & EMERGENCY

Kenwood's FleetSync® digital signaling system includes PTT ID digital ANI for instant radio call identification and Emergency status for personnel safety. FleetSync® also includes status messaging, selective calling, caller ID display, and stun features. Emergency Calling notifies a dispatcher of personnel in distress by activation of emergency key.

SCAN

Multi-channel call monitoring can be customized for users with single/multi-zone scan and delete/ add scan features. Priority Scan automatically checks a primary channel for activity while receiving a call on a non-priority channel. Convenience features such as Priority-channel Stop Tone, Temporary Delete and Revert Channel Display facilitate user-friendly operation and eliminate confusion.

QT/DQT, DTMF & 5-TONE SIGNALING

In addition to FleetSync®, the TK-7160/8160 includes industry standard signaling formats: QT/DQT, 5-Tone. In particular, 5-tone signaling has been significantly enhanced for greater flexibility, and it also can include GPS position data.

OTHER FEATURES

- Voice Inversion Scrambler
- Programmable Function Keys
- Wide 5K/Wide 4K*/Narrow per Channel (*Wide 4K available only for E-type models)
- Embedded Messages
- Ignition Sense Input & Cable Option
- Horn Alert Option (External relay unit required)
- Microsoft Windows® PC Programming & Tuning
- Encryption & ANI Control Capability
- Operator Selectable Tone

Options

- **KMC-35** Microphone 
- **KMC-36** Keypad Microphone 
- **KMC-30** Microphone 
- **KMC-32** Keypad Microphone 
- **KMC-9C** Control Station Desktop Microphone 
- **KCT-18** Ignition Sense Cable (requires KCT-39 option) 
- **KCT-36** 3m Extension Cable (for KCT-39) 
- **KCT-39** Connection Cable (16-pin) 
- **KES-3** External Speaker 
- **KMB-10** Key Lock Adapter 
- **KLF-2** Line Noise Filter 
- **KDS-100** Mobile Data Terminal (requires KCT-39 option) 
- **KGP-2A** GPS Receiver Modem (requires KCT-39 option) 
- **KGP-2B** GPS Controller Modem (requires KCT-39 option) 

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-7160	TK-8160
GENERAL		
Frequency Range		
E type	136~174 MHz	440~470 MHz
E3 type	—	400~430 MHz
X2 type	—	470~512 MHz
Number of Channels	Max.128ch's Total per Radio	Max.128ch's Total per Radio
Zone	Max.128 per Radio	Max.128 per Radio
Channel	Max.128 per Zone	Max.128 per Zone
Channel Spacing	25 kHz / 20 kHz / 12.5 kHz	25 kHz / 20 kHz / 12.5 kHz
Operating Voltage	13.6 V DC±15 %	13.6 V DC±15 %
Current Drain		
Standby	0.4 A	0.4 A
Receive	1.0 A	1.0 A
Transmit	8.0 A	8.0 A
Operating Temperature Range	-30 °C ~ +60 °C	-30 °C ~ +60 °C
Frequency Stability	±2.5 ppm (-30 °C ~ +60 °C)	±2.5 ppm (-30 °C ~ +60 °C)
Antenna Impedance	50 Ω	50 Ω
Channel Frequency Spread		
E type	38 MHz	30 MHz
E3 type	—	30 MHz
X2 type	—	42 MHz
Dimensions (W x H x D), Projections not included	160 mm x 43 mm x 107 mm	160 mm x 43 mm x 107 mm
Weight (net)	1.00 kg	1.00 kg
Applicable Standards (E, E3)	EN 300 086, EN 300 113, EN 300 219, EN 301 489	EN 300 086, EN 300 113, EN 300 219, EN 301 489
Other Applicable Standards	AS-4295	AS-4295

	TK-7160	TK-8160
RECEIVER		
Sensitivity (EIA 12dB SINAD) Sensitivity (EN 20dB SINAD) 25kHz/20kHz*/12.5kHz	0.28 µV / 0.28 µV / 0.35 µV -3dB µV / -3dB µV / -2dB µV	0.28 µV / 0.28 µV / 0.35 µV -3dB µV / -3dB µV / -2dB µV
Adjacent Channel Selectivity 25kHz/20kHz*/12.5kHz	70 dB / 70 dB / 60 dB	70 dB / 70 dB / 60 dB (X2 type: 73dB / 65dB)
Intermodulation	65 dB	65 dB (X2 type: 70 dB)
Spurious Response Regection	70 dB	70 dB
Audio Output (4 Ω impedance)	4 W with less than 5 % distortion	4 W with less than 5 % distortion
Measurement	EN Standard	EN Standard
TRANSMITTER		
RF Output Power	5 – 25 W	5 – 25 W (X2 type: 5 / 25 W)
Modulation Limiting	±5.0 kHz at 25 kHz ±4.0 kHz at 20 kHz ±2.5 kHz at 12.5 kHz	±5.0 kHz at 25 kHz ±4.0 kHz at 20 kHz ±2.5 kHz at 12.5 kHz
Spurious Emission	-36 dBm≤1 GHz , -30 dBm>1 GHz	-36 dBm≤1 GHz , -30 dBm>1 GHz (X2 type: -30 dBm)
FM Noise (EIA)	45 dB / 40 dB	45 dB / 40 dB
Modulation Distortion	3 % / 5 %	3 % / 5 %
Microphone Impedance	600 Ω	600 Ω
Measurement	EN Standard	EN Standard

* 20kHz: E type only

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

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
Rain*	506.1/Procedure II	506.2/Procedure II	506.3/Procedure II	506.4/Procedure III
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
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	514.4/Procedure I	514.5/Procedure I
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

* Required condition for Drip-Rain: KCT cable and/or SP cable are not connected; KMC-35/36 Microphone is connected.

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ISO9001 Registered
Communications Equipment Division
Kenwood Corporation

KENWOOD MEANS BUSINESS

Kenwood Electronics U.K. Ltd.
Kenwood House, Dwight Road, Watford, Herts, WD18 9EB, United Kingdom