

KENWOOD

Listen to the Future



TK-7160E/8160E

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, 5-Tone Signalling, 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 use.

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.

MIL-STD 810C/D/E/F

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 4W high power front mounted speakers and renowned Kenwood audio technology, the TK-7160/8160 provides loud clear audio even in noisy environments.

ALPHANUMERIC 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® DIGITAL SIGNALLING

Kenwood's FleetSync® digital signalling 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.

5-TONE SIGNALLING

In addition to FleetSync®, the TK-7160/8160 includes 5-Tone selective calls in 6-different formats, EIA, EEA, CCIR, ZVEI, ZVEI2 and the Kenwood format, and it also can include GPS position data.

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.

OTHER FEATURES

- GPS Compatible
- Voting
- QT/DQT, DTMF
- Voice Inversion Scrambler
- Programmable Function Keys
- Programmable Channel Spacing
- 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 Heavy-duty Microphone		■ KMC-9C Control Station Desktop Microphone		■ KES-3 External Speaker		■ KDS-100 Mobile Data Terminal (requires KCT-39 option)	
■ KMC-36 Heavy-duty Keypad Microphone		■ KCT-18 Ignition Sense Cable (requires KCT-39 option)		■ KMB-10 Key Lock Adapter		■ KGP-2A GPS Receiver Modem (requires KCT-39 option)	
■ KMC-30 Microphone		■ KCT-36 3m Extension Cable (for KCT-39)		■ KLF-2 Line Noise Filter		■ KGP-2B GPS Controller Modem (requires KCT-39 option)	
■ KMC-32 Keypad Microphone		■ KCT-39 Connection Cable (16-pin)					

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	136~174 MHz	440~470 MHz
E type	—	400~430 MHz
E3 type	—	—
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
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	EN 300 086, EN 300 113, EN 300 219, EN 301 489	EN 300 086, EN 300 113, EN 300 219, EN 301 489
E-mark (95/54/EC)		
E type	e11*72/245*95/54*3016*00	e11*72/245*95/54*3017*00
E3 type	—	e11*72/245*95/54*3018*00

	TK-7160	TK-8160
RECEIVER		
Sensitivity (EIA 12dB SINAD)	0.28 μV / 0.28 μV / 0.35 μV	0.28 μV / 0.28 μV / 0.35 μV
Sensitivity (EN 20dB SINAD)	-3dB μV / -3dB μV / -2dB μV	-3dB μV / -3dB μV / -2dB μV
25kHz/20kHz*/12.5kHz		
Adjacent Channel Selectivity	70 dB / 70 dB / 60 dB	70 dB / 70 dB / 60 dB
25kHz/20kHz*/12.5kHz		
Intermodulation	65 dB	65 dB
Spurious Response Rejection	70 dB	70 dB
Audio Output (4 Ω impedance)	4 W with less than 5 % distortion	4 W with less than 5 % distortion
TRANSMITTER		
RF Output Power	5 – 25 W	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
FM Noise (EIA)	45 dB / 40 dB	45 dB / 40 dB
Modulation Distortion	3 % / 5 %	3 % / 5 %
Microphone Impedance	600 Ω	600 Ω

*TK-8160 E3 type: channel spacing 12.5 kHz / 25 kHz

Measurements made per EN Standards.

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

FleetSync™ is a registered trademark of Kenwood Corporation.

Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

All other trademarks are property of their respective owners.

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.

Listen to the Future

Kenwood has always connected with people through sound.
Now we want to expand the world of sound in ways that only Kenwood can,
listening to our customers and to the pulse of the coming age
as we head toward a future of shared discovery,
inspiration and enjoyment.

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