

KENWOOD

Listen to the Future

TK-7160(H)/8160(H)

VHF/UHF FM Mobile Radios

Kenwood's TK-7160(H)/8160(H) 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 voice-inversion scrambling.

ADVANCED INDUSTRIAL DESIGN

The 160-Series compact, rugged and smart industrial design offers ease of installation, practicality, durability and style.

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.

ADVANCED 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.



ENHANCED KENWOOD AUDIO

The TK-7160(H)/8160(H) provides loud clear audio even in noisy environments.

MEETS/EXCEEDS MIL-STD DRIP RAIN

The TK-7160(H)/8160(H) 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.

FleetSync® & AVL

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. Also, GPS receivers can be interfaced for FleetSync® Automatic Vehicle Location (AVL) systems.

EMERGENCY CALL

Emergency Calling notifies a dispatcher of personnel in distress by activation of a front panel emergency key. The "silent alert" and Suspend Power Off features will inconspicuously send Emergency even if the mobile's power has been turned off. Emergency Call operates with FleetSync®, DTMF or ANI board emergency signaling.

QT/DQT, DTMF & 2-TONE SIGNALLING

In addition to FleetSync®, the TK-7160(H)/8160(H) includes industry standard signalling formats: QT/DQT, 2-Tone (encode/decode) that can be utilized for talk groups, system access, selective calling, talk back paging, status messaging and remote control applications.

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 Alert, Temporary Delete, Priority Temporary Delete, Revert Channel Display facilitate user-friendly operation and eliminate confusion.



VOICE INVERSION SCRAMBLER

The built-in voice inversion scrambler provides basic communications protection against casual eavesdropping.

OTHER FEATURES

- Power-On LCD Message
- LCD Backlight Intensity
- 5 Programmable Function Keys
- Backlit Keys
- Channel & Zone Delete/Add
- Operator Selectable Tone
- Special Alert Tone Patterns
- Minimum Volume
- 8 PF Accessory Ports for External Control
- Data Ready Accessory Connector
- Horn Alert / PA Option
- Ignition-Sense Cable Options
- KDS-100 Compatible
- KGP-2A/2B Compatible
- Embedded Message with Password
- Programming Data Password
- Field Program Capability
- Cloning
- Microsoft Windows® PC Programming & Tuning
- Encryption & ANI Control Capability

FleetSync®
by KENWOOD



Options

■ KMC-35 Microphone		■ KMC-9C Control Station Desktop Microphone		■ KAP-2 Horn Alert/Public Address Relay Unit		■ KLF-2 Line Noise Filter	
■ KMC-36 Keypad Microphone		■ KCT-18 Ignition Sense Cable (requires KCT-39 option)		■ KES-3 External Speaker		■ KPS-10A DC Power Supply	
■ KMC-30 Microphone		■ KCT-36 3m Extension Cable (for KCT-39)		■ KES-5 External Speaker (requires KAP-2)		■ KDS-100 Mobile Data Terminal (requires KCT-39 option)	
■ KMC-32 Keypad Microphone		■ KCT-39 Connection Cable		■ KMB-10 Key Lock Adapter		■ 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-7160H	TK-8160	TK-8160H
GENERAL				
Frequency Range	136~174 MHz		440~480 MHz	
Number of Channels	Max.128 per Radio		Max.128 per Radio	
Zone	Max.128 per Zone		Max.128 per Zone	
Channel	Max.128 per Zone		Max.128 per Zone	
Channel Spacing	25 kHz, 30 kHz		25 kHz	
Wide	12.5 kHz, 15 kHz		12.5 kHz	
Narrow	13.6 V DC±15 %		13.6 V DC±15 %	
Operating Voltage	13.6 V DC±15 %		13.6 V DC±15 %	
Current Drain				
Standby	0.4 A	0.4 A	0.4 A	0.4 A
Receive	1.0 A	1.0 A	1.0 A	1.0 A
Transmit	8.0 A	14.0 A	8.0 A	14.0 A
Duty Cycle	Transmit: 20 %		Transmit: 20 %	
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	38 MHz		40 MHz	
Dimensions (W x H x D), Projections not included	160 mm x 43 mm x 137 mm		160 mm x 43 mm x 137 mm	
Weight (net)	1.18 kg		1.18 kg	

FleetSync® is not compatible with FleetSync II offered in some Kenwood products.
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.

	TK-7160	TK-7160H	TK-8160	TK-8160H
RECEIVER (Measurements made per EIA/TIA-603)				
Sensitivity (12dB SINAD)				
Wide		0.28 μV		0.28 μV
Narrow		0.35 μV		0.35 μV
Selectivity				
Wide		75 dB		75 dB
Narrow		65 dB		65 dB
Intermodulation Distortion				
Wide		70 dB		70 dB
Narrow		60 dB		60 dB
Spurious Response		75 dB		75 dB
Audio Output (4 Ω impedance)	4 W with less than 5 % distortion		4 W with less than 5 % distortion	
TRANSMITTER (Measurements made per EIA/TIA-603)				
RF Output Power	5 W / 25 W	25 W / 50 W	5 W / 25 W	25 W / 45 W
Spurious Response	70 dB		70 dB	
Type of Emission				
Wide	16K0F3E		16K0F3E	
Narrow	11K0F3E		11K0F3E	
FM Hum & Noise				
Wide	45 dB		45 dB	
Narrow	40 dB		40 dB	
Microphone Impedance	600 Ω		600 Ω	
Audio Distortion				
Wide	3 %		3 %	
Narrow	5 %		5 %	

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

* To meet above Mil810, weather proof microphone KMC-35 or KMC-36 has to be connected.

KENWOOD ELECTRONICS UK LIMITED

Kenwood House, Dwight Road, Watford, Herts, WD18 9EB, United Kingdom
www.kenwood-electronics.co.uk
comms@kenwood-electronics.co.uk

