

# KENWOOD

Listen to the Future



## TK-7302H/8302H

Compact VHF/UHF FM Mobile Radios

FleetSync<sup>®</sup>  
by KENWOOD



GPS

Kenwood's TK-7302/8302, wide frequency bandwidth compact mobiles are packaged in a tough platform compliant with international IP and U.S. DOD Military environmental standards. The TK-7302/8302 includes traditional two way radio features for repeater access, group and individual selective calling, priority channel scan to monitor multiple channels and voice security options to "keep your business... your business". A decidedly user-friendly design, this mobile offers high-quality audio, a multi-lingual voice synthesized channel announcement feature and a large backlit display with adjustable brightness.

### 16 CHANNELS, 2 ZONES

The 16 channel capability provides ample capacity for multiple radio systems and the two zones provides a selectable channel group partition useful for a variety of applications such as region, department, and work group select.

### INTERFACE CONNECTIONS

Two accessory interfaces are provided for custom vehicle installations, accessory connections and specialized fixed applications. Ignition Sense automatically powers the mobile on/off in unison with the vehicles engine. Selective call features can trigger an "alert output" to flash headlamps or ambers to hail users outside the vehicle or dispatchers away from the mobile control station. The mobile alert and external switch outputs can be used to remotely control lights, doors and other equipment in fixed applications.

### SIGNALLING

#### QT/DQT

Kenwood's QT and DQT are compatible with industry standard sub-audible tone and digital coded squelch format that un-mute audio only when the desired talk group is on the air.

### FleetSync<sup>®</sup>

Kenwood's FleetSync<sup>®</sup> features included in this model are "PTT ID" for radio unit identification; "Emergency" for alerting a dispatcher in times of critical need; "Selective Call" for page alerting individuals or groups; and two front panel activated FleetSync<sup>®</sup> status messages.

### MDC-1200

The TK-7302/8302 supports MDC-1200\* format PTT ID unit identification and Emergency encode and dispatcher features such as Stun/Revive for remote disabling a mobile unit for commercial or security reasons and Radio Check to verify if mobile is powered on and within system range.

\*Only FleetSync<sup>®</sup> or MDC-1200 can be enabled.

### DTMF

DTMF encode features include PTT ID for radio unit identification, Emergency, autodial memory and manual DTMF mic dialing for phone and remote control applications. Decode features include Selective Call for individual and group page alerting, and radio stun.

### Emergency

For hazardous and hostile duty environments, a key can be programmed for emergency use to alert the dispatcher or other group members using FleetSync<sup>®</sup>, MDC-1200 or DTMF signalling.

### VOICE SECURITY

The built-in voice scrambler provides basic protection against casual eavesdropping. Up to 16 of 2097 possible inversion frequencies can be chosen and assigned to any channel for added security. An optional aftermarket voice scrambler module with higher security can be installed if required.

### GPS LOCATION

The TK-7302/8302 supports external GPS receivers or an internal GPS module for FleetSync<sup>®</sup> automatic vehicle location for fleet management purposes. Other GPS AVL receiver/modem systems can be installed using the TK-7302/8302 data features.

### PROGRAMMABLE LEDS

The noticeably cool blue LED is programmable for any one of eight functions (default: Priority Channel). Two red dots in the 2-digit channel LED display are individually programmable or programmable in combination with the blue LED to indicate other functions. The orange Call LED and blue LED can be programmed to indicate FleetSync<sup>®</sup> Individual, Group or Selective Call.

### OTHER FEATURES

- Key Lock
- Companded Audio
- Scrambler/Encryption Board Control
- Busy Channel Lockout (BCL)
- Time-out Timer
- Horn Alert Function
- 8 Programmable AUX Outputs
- Password Protection
- Operator Selectable Tone
- Embedded Message
- ESN (Electronic Serial Number)
- Radio Stun
- Microphone Gain
- Microsoft Windows<sup>®</sup> Programming & Tuning



# Options

**KMC-30**  
Microphone



**KES-3**  
External Speaker



**KLF-2**  
Line Filter



**KCT-60**  
DB15-to-15 Pin  
Molex Adapter Cable



**KMC-32**  
16-key Keypad  
Microphone



**KES-5**  
External Speaker  
(requires KCT-60 option)



**KCT-18**  
Ignition Sense Cable  
(requires KCT-60 option)



**KMC-9C**  
Desktop Microphone



**KMB-10**  
Key Lock Adapter



**KCT-36**  
3m Extension Cable  
(for KCT-60)



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

Model	TK-7302H	TK-8302H
<b>GENERAL</b>		
Frequency Range		
Type 1	136-174 MHz	-
Type 2	-	400-470 MHz
Number of Channels		
Zone		2
Channel		Max. 16
Channel Spacing	25 kHz/12.5 kHz	
Operating Voltage	13.6V DC±15%	
Current Drain		
Standby		0.4 A
Receive		1.0 A
Transmit	14.0 A	14.0 A
Operating Temperature Range	-22°F ~ +140°F (-30°C ~ +60°C)	
Frequency Stability	±2.5 ppm (-30°C ~ +60°C)	
Antenna Impedance	50 Ω	
Dimensions (W x H x D)		
Projections not included	6.3" x 1.7" x 5.4" (160 x 43 x 137 mm)	
Weight (Net)	41.6oz (1,180g)	
FCC ID		
Type 1	K44407601	-
Type 2	-	K44407703
IC Certification		
Type 1	282F-407601	-
Type 2	-	282F-407703

Model	TK-7302H	TK-8302H
<b>RECEIVER (Measurements made per TIA/EIA-603)</b>		
Sensitivity (12dB SINAD)		
Wide		0.28 μV
Narrow		0.35 μV
Selectivity		
Wide		75 dB
Narrow		65 dB
Intermodulation Distortion		
Wide		70 dB
Narrow		60 dB
Spurious Response		75 dB
Audio Output (4 Ω Impedance)	4 W with less than 5% distortion	
<b>TRANSMITTER (Measurements made per TIA/EIA-603)</b>		
RF Power Output	5 W ~ 50 W	5 W ~ 45 W
Spurious Response		70 dB
Type of Emission		
Wide		16KØF3E
Narrow		11KØF3E
FM Hum & Noise		
Wide		45 dB
Narrow		40 dB
Microphone Impedance	600 Ω	
Audio Distortion	Less than 5%	

Kenwood follows a policy of continuous advancement in development.  
For this reason specifications may be changed without notice.  
FleetSync® is a trademark of Kenwood Corporation.  
Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

# Applicable MIL-STD & IP

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 <sup>2</sup>	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4
Salt Fog <sup>2</sup>	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4
Dust <sup>2</sup>	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
<b>International Protection Standard</b>				
Dust & Water Protection <sup>2</sup>	IP54			

\*2: Necessary conditions are: (1) KMC-35/36 microphone is connected; (2) cap is installed on speaker connector; (3) cover is installed on D-sub 15-pin connector; and (4) neither KCT cable nor SP cable is connected.



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