

# KENWOOD

Listen to the Future



## TK-7150/8150

VHF/UHF FM Mobile Radios

**FleetSync**<sup>®</sup>  
by KENWOOD

### GENERAL FEATURES

- 50 W (136-174 MHz)
- 45 W (450-500 MHz)
- Conventional & LTR<sup>®</sup> Zones
- Remote Control Head Option<sup>1</sup>
- 12 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- 3-Digit Sub-Display
- Function / Status LCD Icons
- Transmit & Receive LEDs
- Rotary Selector Knob
- Rotary Volume Knob
- 6 PF Keys with Labels
- Emergency / AUX Key
- Enhanced Kenwood Audio
- 3.5 W Front Panel Speaker
- 13 W External Speaker Output
- Companded Audio
- Encryption & ANI Board Control
- Emergency Call Features
- DTMF Encode / Decode
- Special Alert Tone Patterns

- Time Out Timer
- Busy Channel Lockout
- Timed Power Off
- DB-25 Accessory Connector
- 4 Programmable AUX I/Os
- 4 Programmable AUX Outputs
- Ext. Speaker, PA, Ignition Connector<sup>2</sup>
- Ignition Sense<sup>3</sup>
- Public Address/Horn Alert Output<sup>4</sup>
- MIL-Spec / Noise-Cancel Mic Opt.
- MIL-Spec / Noise Cancel DTMF Mic Opt.
- Windows<sup>®</sup> Programming & Tuning
- Windows<sup>®</sup> Firmware Uploading
- Front Panel Test / Tune
- Cloning
- MIL-STD-810 C/D/E/F

### CONVENTIONAL ZONES

- 128 Channels / 128 Zones
- QT / DQT
- Two-Tone Decode

- Single / Two-Tone Encode
- Operator Selectable Tone
- Dual Priority Scan
- Single & Multi-Zone Scan
- List Scan

### TRUNKED ZONES

- 250 GID / 32 Zones
- Kenwood LTR<sup>®</sup> Features

### FleetSync<sup>®</sup>

- FleetSync<sup>®</sup> or FleetSync<sup>®</sup> II
- PTT ID Digital ANI
- Selective Call & Group Call
- Status Messaging
- Emergency Status
- Caller ID Display
- Short & Long Text Messages<sup>5</sup>
- FleetSync<sup>®</sup> GPS Ready<sup>6</sup>
- Send GPS PF Key<sup>6</sup>
- PC Serial Interface



# Options

■ **KMC-9C**  
Desktop Microphone



■ **KMC-27A**  
Microphone  
(noise-canceling)



■ **KMC-27B**  
Microphone



■ **KMC-28A**  
Keypad Microphone  
(noise-canceling)



■ **KCT-18**  
Ignition Sense Cable



■ **KCT-22**  
Remote Control Cable

8 feet



17 feet



25 feet



■ **KCT-23**  
DC Power Cable

Medium Power  
Dash (10 feet)



Medium Power Remote  
(Positive: 23 feet,  
Negative: 3.3 feet)



■ **KES-5**  
External Speaker



■ **KLF-2**  
Line Filter



■ **KPS-10A**  
Regulated DC  
Power Supply



■ **KPS-15**  
DC Switching  
Power Supply



■ **KRK-9**  
Single Control Head  
Remote Kit



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-7150	TK-8150
<b>GENERAL</b>		
Frequency Range		
Type1:	136~174MHz	450~500MHz
Number of Channels (Zone)*		
Conventional CH:	Max.128 (1 zone x 128ch ~ 128 zones x 1ch)	
Trunking ID:	Max. 250/zone (max.32 zones)	
Channel Spacing		
Wide:	25kHz, 30kHz	25kHz
Narrow:	12.5kHz, 15kHz	12.5kHz
Operating Voltage	13.6V DC±15%	
Current Drain		
Standby:	0.5A	0.5A
Receive:	2.3A	2.3A
Transmit:	Less than 12A	Less than 13A
Duty Cycle	Transmit: 20%	
Operating Temperature Range	-22°F ~ +140°F (-30°C ~ +60°C)	
Frequency Stability (-22°F ~ +140°F)	±0.00025%	
Antenna Impedance	50 Ω	
Dimensions (W x H x D)	7-1/12" x 2" x 7" (180mm x 50mm x 170mm)	
Weight (net)	5.9 lbs (2.7kg)	
FCC ID	ALH32273110	ALH32283110
Band Spread	38MHz	50MHz

\* During simultaneous operation of conventional and LTR® modes. Conventional channel/trunking ID can be programmed up to 512. FleetSync® is a trademark of Kenwood Corporation. LTR® is a registered trademark of Transcrypt International.

Model	TK-7150	TK-8150
<b>RECEIVER (Measurements made per EIA/TIA-603)</b>		
Sensitivity		
12dB SINAD:		0.35µV
20dB Quieting:		0.45µV
Selectivity		
Wide:	84dB (±30kHz)	80dB (±25kHz)
Narrow:	76dB (±15kHz), 76dB (±12.5kHz)	73dB (±12.5kHz)
Intermodulation		
Wide:	77dB (±30, 60kHz)	79dB (±25, 50kHz)
Narrow:	75dB (±15, 30kHz)	73dB (±12.5, 25kHz)
Spurious Response	85dB	
Audio Output		
External:	12W (@ 4 Ω 3% distortion) 13W (@ 4 Ω 5% distortion)	
Internal:	3.2W (@ 16 Ω 3% distortion) 3.5W (@ 16 Ω 5% distortion)	
<b>TRANSMITTER (Measurements made per EIA/TIA-603)</b>		
RF Output Power	50 to 15 watts	45 to 15 watts
High:	50 watts	45 watts
Low:	15 watts	15 watts
Type of Emission		
Wide:	16K0F3E, 20K0F1D	
Narrow:	11K0F3E, 11K2F1D	
Spurious Response	75dB	
FM Hum & Noise		
Wide:	48dB	
Narrow:	42dB	
Microphone Impedance	600 Ω	
Audio Distortion	Less than 1% at 1000Hz	

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

# Applicable MIL-STD & IP

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
<b>Low Pressure</b>	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II
<b>High Temperature</b>	501.1/Procedure I, II	501.2/Procedure I, II Cat. A1	501.3/Procedure I, II Cat. A1	501.4/Procedure I, II
<b>Low Temperature</b>	502.1/Procedure I	502.2/Procedure I, II Cat. C1	502.3/Procedure I, II Cat. C1	502.4/Procedure I, II
<b>Temperature Shock</b>	503.1/Procedure I	503.2/Procedure I Cat. A1, C1	503.3/Procedure I Cat. A1, C1	503.4/Procedure I, II
<b>Solar Radiation</b>	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I
<b>Rain</b>	506.1/Procedure II	506.2/Procedure II	506.3/Procedure II	506.4/Procedure III
<b>Humidity</b>	507.1/Procedure II	507.2/Procedure II	507.3/Procedure II	507.4
<b>Salt Fog</b>	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4
<b>Dust</b>	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III
<b>Vibration</b>	514.2/Procedure VIII, X	514.3/Procedure I Cat. 8	514.4/Procedure I Cat. 8	514.5/Procedure I Cat. 20
<b>Shock</b>	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

footnotes from Front:  
<sup>1</sup> KRK-9, KCT-22MIM2/IM3, KCT-23MIM3 remote control options required.  
<sup>2</sup> 6-Pin Accessory Connector for external speaker, PA Output & ignition sense input.  
<sup>3</sup> KCT-18 ignition sense cable option required; plugs into mobile 6-pin jack ignition sense input.  
<sup>4</sup> Built-in PA/HA outputs (no option board required); Horn Alert operates for 2-Tone or DTMF selective call decode only.  
<sup>5</sup> Short Text Messages are radio stored & LCD displayed; Long Text Messages require a KDS-100 and KCT-40.  
<sup>6</sup> FleetSync® GPS features require an internal GPS board or externally wired GPS receiver with NMEA TTL level serial data output to the internal COM 1 or 2 set to "GPS".

# KENWOOD

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ISO9001 certification