

# KENWOOD

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## TK-5220/5320

VHF/UHF FM & P25 Digital Portable Radios



FleetSync<sup>®</sup>  
by KENWOOD

### GENERAL FEATURES

- 5 Watt (136-174 MHz)
- 5 Watt (400-470, 450-520 MHz)
- 128 Zones / 512 Channels
- Backlit Dot Matrix LCD
- 14 Character Alphanumeric Aliases
- 3-Digit Sub-Display
- Function / Status LCD Icons
- RSSI Indicator
- Transmit / Busy / Call Alert / Warn LED
- On/Off Volume Knob
- 16-Position Selector Knob
- 4 Front Menu-Driven PF Keys
- 2 Side PF Keys

- Orange Emergency / AUX Key
- 12-Keypad Models
- VOX Ready
- Emergency Features
- Battery Level
- Transceiver Password
- Date & 12/24 Hour Time Clock
- Windows<sup>®</sup> Programming & Tuning
- Windows<sup>®</sup> Firmware Uploading
- Easy Option Port
- Voice Guide & Storage (option)
- Weather-Sealed Accessory Connector
- MIL-STD-810 C/D/E/F
- IP54/55 Water & Dust Protection
- Immersion (IP67) Option\*
- Intrinsically Safe Option

### FleetSync<sup>®</sup> /II (FM)

- PTT ID Digital ANI
- Caller ID Display
- Status Messaging
- Emergency & Stun Statuses
- Selective & Group Call
- Text Messaging
- Send/Display GPS (KPG-38GPS)

### MDC-1200

- PTT ID Digital ANI
- Caller ID Display
- Emergency Status
- Radio Check
- Radio Inhibit

### SCAN TYPES (FM & P25)

- Single Zone/Multi-Zone Scan
- Scan Lists<sup>1</sup>
- Conventional Scan
- Limited Talk Group Scan<sup>1</sup>
- Priority Monitor Scan<sup>1</sup>
- Dual Priority Scan

### FM

- QT / DQT
- Operator Selectable Tone
- Two-Tone Decode / Encode
- DTMF Encode / Decode / Stun
- Special Alert Tone Patterns
- Encryption / ANI Board Control
- Companded Audio





















### P25 DIGITAL

- P25 Digital Conventional
- AMBE+2<sup>™</sup> Enhanced VOCODER
- Talk Group ID Lists
- Individual ID Lists
- Caller ID Display
- Remote Monitor / Check, Radio Inhibit
- Encryption Key Zeroize and Retention
- DES Encryption Module
- AES & DES Encryption Module
- KPG-93 KVL Key Loader Interface Cable
- P25 Digital Trunking Option \*
- P25 GPS Location \*

\*Future availability



# Options

<ul style="list-style-type: none"> <li><b>KNB-47L</b> Li-Ion Battery (1950 mAh)</li> <li><b>KNB-48L</b> Li-Ion Battery (2550 mAh)</li> <li><b>KNB-50NC</b> Ni-MH Battery Intrinsically Safe (2000 mAh)</li> <li><b>KSC-32</b> Tri-chemistry Rapid Rate Charger</li> <li><b>KSC-326</b> Rapid Rate Six Unit Charger</li> <li><b>KPG-93</b> Keyloader Interface Cable</li> </ul>	   	<ul style="list-style-type: none"> <li><b>KVC-15</b> Rapid Rate Vehicular Charger Adapter for KSC-32</li> <li><b>KVC-20L</b> D.C. Vehicular Charger Li-Ion/Polymer</li> <li><b>KRA-22/23</b> VHF/UHF Helical Antenna</li> <li><b>KRA-26/27</b> VHF/UHF Whip Antenna</li> <li><b>KRA-16/17</b> VHF/UHF Stubby Antenna</li> </ul>	    	<ul style="list-style-type: none"> <li><b>KRA-25</b> VHF High Gain Antenna</li> <li><b>KMC-41M</b> MIL-STD &amp; IP 54/55 Speaker Microphone</li> <li><b>KMC-38GSP</b> GPS Speaker Microphone</li> <li><b>KEP-1</b> Heavy Duty Earphone</li> <li><b>KHS-11BL</b> 2-Wire Mini Lapel Mic. with Earphone</li> <li><b>KHS-12BL</b> 3-Wire Mini Lapel Mic. with Earphone</li> </ul>	     	<ul style="list-style-type: none"> <li><b>KHS-14</b> Lightweight Single Muff Headset</li> <li><b>KHS-15-OH</b> Over-the-Head Heavy Duty Headset</li> <li><b>KHS-15-BH</b> Behind-the-Head Heavy Duty Headset</li> <li><b>VGS-1</b> Voice Guide &amp; Storage Unit</li> <li><b>KBH-11</b> Belt Clip (2.5")</li> </ul>	    
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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-5220	TK-5320
<b>GENERAL</b>		
Frequency Range		
Type 1	136-174 MHz	450-520 MHz
Type 2		400-470 MHz
Number of Channels	512	
Zones	128	
Max. Channels per Zone	250	
Channel Spacing		
Analog	12.5 / 15 / 25 / 30 kHz	12.5 / 25 KHz
Digital	12.5 kHz	12.5 kHz
Operating Voltage	7.5 VDC ± 20 %	
Battery Life	5-5-90 duty cycle	12.5 hours
(with KNB-48L)	10-10-80 duty cycle	8.5 hours
Operating Temperature Range	-22° F to +140° F (-30° C to +60° C)	
Frequency Stability	± 2.0 ppm	± 1.0 ppm
Antenna Impedance	50 Ω	
Dimensions (W x H x D) (projections not included)		
Radio Only	2.28 x 5.02 x 1.63 in. (58 x 127.5 x 41.3 mm.)	
with KNB-47L	2.28 x 5.02 x 1.63 in. (58 x 127.5 x 41.3 mm.)	
with KNB-48L	2.28 x 5.02 x 1.91 in. (58 x 127.5 x 48.5 mm.)	
Weight (Net)		
Radio Only	8.82 oz. (250 g)	
with KNB-47L	13.23 oz. (375 g)	
with KNB-48L	14.29 oz. (405 g)	
FCC ID		
Type 1	ALH378400	ALH378500
Type 2		ALH378501
IC Certification		
Type 1	282D-378400	282D-378500
Type 2		282D-378501

Model	TK-5220	TK-5320
<b>RECEIVER</b>		
Sensitivity		
Digital (5 % BER)		0.25 µV
Digital (1 % BER)		0.40 µV
Analog 12 dB SINAD		0.25 µV
Selectivity		
Digital		-60 dB
Analog @ 25kHz		-72 dB
Analog @ 12.5 kHz		-65 dB
Intermodulation Distortion		-70 dB
Spurious & Image		-75 dB
Audio Distortion		Less than 3.0 %
Audio Output		500 mW / 8 Ω
<b>TRANSMITTER</b>		
RF Power Output		5 W / 1 W
Spurious & Harmonics		70 dB
FM Hum & Noise		
Analog @ 25 kHz		45 dB
Analog @ 12.5 kHz		40 dB
Audio Distortion		Less than 3 %
Modulation		11K0F3E, 16K0F3E, 8K10F1E, 8K10F1D

Analog measurements made per TIA/EIA 603  
Digital measurements made per TIA/EIA 102CAAA

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.  
AMBE+2™ is a trademark of Digital Voice Systems Inc.  
The P25 Logo is used under license and is a registered trademark of the Project 25 Technology Interest Group.  
KPG-93 adapts the Motorola, KVL3000/3000 Plus Key Loader to the TK-5220/5320.

# 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	501.3/Procedure I, II	501.4/Procedure I, II
<b>Low Temperature</b>	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
<b>Temperature Shock</b>	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	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 I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III
<b>Humidity</b>	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	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	514.4/Procedure I	514.5/Procedure I
<b>Shock</b>	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV
<b>Immersion(option)</b>	512.1/Procedure I	512.2/Procedure I	512.3/Procedure I	512.4/Procedure I
<b>International Protection Standard</b>				
<b>Dust &amp; Water Protection</b>	IP54/55			
<b>Immersion</b>	IP67*			

footnotes from front:  
\* Scan Lists currently available in analog mode. Scan Lists (P25), Limited Talk Group Scan and Priority Monitor Scan available in a future P25 trunked option release.

\*Future availability

# KENWOOD

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