

# KENWOOD

Listen to the Future



## TK-5210/5310

VHF/UHF FM & Project 25 Digital Portable Radios



FleetSync<sup>®</sup>  
by KENWOOD

### GENERAL FEATURES

- 5 Watt (136-174 MHz)
- 4 Watt (450-520, 380-470 MHz)
- 50 Zones / 512 Channels
- Personality Lists
- Backlit Dot Matrix LCD<sup>1</sup>
- 16 Character Alphanumeric Aliases<sup>1</sup>
- 3-Digit Sub-Display<sup>1</sup>
- Function / Status LCD Icons<sup>1</sup>
- RSSI Indicator
- Transmit / Busy / Call Alert / Warn LED
- On/Off Volume Knob
- 16-Position Selector Knob
- 2-Position PF Lever Switch
- 3-Position PF Concentric Switch
- 4 Front Menu-Driven PF Keys<sup>1</sup>
- 3 Side PF Keys
- Orange Emergency / AUX Key
- 12-Key DTMF / PF Keypad<sup>2</sup>
- Enhanced Kenwood Audio
- Voice Annunciation
- VOX Ready
- Emergency Features
- Tactical Group<sup>1</sup>
- Battery Level Indicator<sup>1</sup>

- Transceiver Password<sup>1</sup>
- Date & 12/24 Hour Time Clock<sup>1</sup>
- Windows<sup>®</sup> Programming & Tuning<sup>3</sup>
- Windows<sup>®</sup> Firmware Uploading<sup>3</sup>
- Self-Programming & Tuning<sup>1</sup>
- Cloning<sup>1</sup>
- Easy Option Port
- Weather-Sealed Accessory Connector
- MIL-STD-810 C/D/E/F
- IP54/55 Water & Dust Protection
- Immersion (IP66/67) Option
- Intrinsically Safe Option

### SCAN TYPES (FM & P25)

- Single Zone/Multi-Zone Scan<sup>7</sup>
- Scan Lists
- Conventional Scan
- Limited Talk Group Scan<sup>4</sup>
- Priority Monitor Scan<sup>4</sup>
- Dual Priority Scan

### FM

- QT / DQT
- Operator Selectable Tone
- Two-Tone Decode / Encode
- DTMF Encode / Decode / Stun
- Special Alert Tone Patterns<sup>5</sup>
- Encryption / ANI Board Control
- Companded Audio

### FleetSync<sup>®</sup> (FM)

- FleetSync<sup>®</sup> or FleetSync<sup>®</sup> II
- PTT ID Digital ANI
- Caller ID Display
- Status Messaging
- Emergency & Stun Statuses
- Selective & Group Call
- Text Messaging

### P25 DIGITAL

- P25 Digital Conventional
- P25 Digital Trunking Option
- IMBE<sup>™</sup> VOCODER
- Talk Group ID Lists
- Individual ID Lists
- Caller ID Display
- Remote Monitor/Remote Check
- Radio Inhibit
- Encryption Key Delete
- Encryption Key Zeroize (SCM required)<sup>7</sup>
- Encryption Key Retention (SCM required)<sup>7</sup>
- DES 16-Key Secure Encryption Module Option<sup>7</sup>
- AES FIPS 140-2 & DES 16-Key SCM Option<sup>7</sup>
- KPG-93 KVL Key Loader Interface Cable<sup>6</sup>



Three models available:  
Basic Unit: No LCD, No front Keys  
16-Character LCD, 4 Menu-driven PF Keys  
16-Character LCD, 4 Menu-driven PF Keys, 12-Key DTMF/PF Keypad  
(Not actual size)

# Options

<ul style="list-style-type: none"> <li>■ <b>KNB-32N</b> Ni-MH Rechargeable Battery Pack (2500 mAh)</li> <li>■ <b>KNB-41NC</b> Ni-MH Battery Pack Intrinsically Safe (2500 mAh)</li> <li>■ <b>KBP-6</b> Battery Case</li> <li>■ <b>KSC-32</b> Tri-chemistry Rapid Charger</li> <li>■ <b>KPG-93</b> Keyloader Interface Cable</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>KRA-25</b> VHF High Gain Antenna</li> <li>■ <b>KRA-26</b> VHF Helical Antenna</li> <li>■ <b>KRA-27</b> UHF Whip Antenna</li> <li>■ <b>KRA-28</b> VHF Broad Band Antenna (140-170 MHz)</li> <li>■ <b>KRA-29</b> UHF Broad Band Antenna (380-430 MHz)</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>KMC-25</b> Speaker Microphone</li> <li>■ <b>KMC-26</b> Speaker Microphone with Antenna Connector</li> <li>■ <b>KEP-1</b> Heavy Duty Earphone</li> <li>■ <b>KHS-11</b> 2-Wire Palm 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-BH</b> Heavy Duty Behind-the-Head Headset</li> <li>■ <b>KHS-15-OH</b> Heavy Duty Over-the-Head Headset</li> <li>■ <b>KBH-11</b> Belt Clip (2.5")</li> </ul>
--	--	--	---

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-5210	TK-5310
<b>GENERAL</b>		
Models (Type 1)		
Basic Model	TK-5210K	TK-5310K
4-key w/LCD Model	TK-5210K2	TK-5310K2
Full key w/LCD Model	TK-5210K3	TK-5310K3
Models (Type 2)		
Basic Model		TK-5310K4
4-key w/LCD Model		TK-5310K5
Full key w/LCD Model		TK-5310K6
Frequency Range		
Type 1	136-174 MHz	450-520 MHz
Type 2		380-470 MHz
Number of Channels		
		512
Zones		
		50
Max. Channels per Zone		
		250
Channel Spacing		
Analog	12.5 / 15 / 20 / 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 (10-10-80) duty cycle		
KNB-32N, 7.5 VDC, 2500 mAh	12 hours (8 hours)	
KNB-41NC, 7.5V DC, 2500mAh	12 hours (8 hours)	
KBP-6, AA Alkaline x6 Batteries (@ 1W)	8 hours (5 hours)	
Operating Temperature Range		
	-22° F to +140° F (-30° C to +60° C)	
Frequency Stability (-22° F to +140° F)		
	± 2.0 ppm	
Antenna Impedance		
	50 Ω	
Dimensions (W x H x D) (projections not included)		
with KNB-32N	2.28 x 6.10 x 1.80 in. (58 x 155 x 45.7 mm.)	
with KNB-41NC	2.28 x 6.10 x 1.84 in. (58 x 155 x 46.7 mm.)	
with KBP-6	2.36 x 6.10 x 1.84 in. (60 x 155 x 46.7 mm.)	
Weight (Radio only)		
Basic Model	11.11 oz. (315 g)	
4-key w/LCD Model	11.64 oz. (330 g)	
Full key w/LCD Model	11.64 oz. (330 g)	

Model	TK-5210	TK-5310
<b>GENERAL</b>		
Weight with antenna & Belt Clip (4-Key w/LCD model)		
	with KNB-32N 23.28 oz. (660 g)	
	with KNB-41NC 24.00 oz. (680 g)	
FCC ID	Type 1 ALH35733110	ALH39913110
	Type 2	ALH39913120
IC Certification	Type 1 282D-35733110	282D-39913120
	Type 2	282D-39913120
<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 @ 25/30 kHz	-78 dB	-75 dB (25 KHz)
Analog @ 12.5 kHz		-67 dB
Intermodulation Distortion		
Digital		-75 dB
Analog @ 25/30 kHz	-75 dB	-75 dB (25 KHz)
Analog @ 12.5 kHz		-68 dB
Spurious & Image		
Digital	-80 dB	-75 dB
Analog	-80 dB	-75 dB
Audio Distortion		
Digital		Less than 1.5 %
Analog		Less than 2 %
Audio Output		500 mW / 8 Ω
<b>TRANSMITTER</b>		
RF Power Output	5 W / 1 W	4 W / 1 W
Spurious & Harmonics		70 dB
FM Hum & Noise		
Analog @ 25 kHz	50 dB	48 dB
Analog @ 12.5 kHz	45 dB	42 dB
Audio Distortion		
		Less than 2 %
Modulation	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D	

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

Kenwood reserves the right to change specifications without prior notice or obligation.  
FleetSynch™ is a registered trademark of Kenwood Corporation.  
Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.  
IMBE™ 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.

footnotes from front:  
1 K2/K3 LCD models only.  
2 K3 LCD, keypad model only.  
3 KPG-95D Software: Windows® 98/NT/2000/Me/XP compatible.  
4 P25 Trunking Option required.  
5 Operates for 2-Tone, DTMF, FleetSynch™ selective calling in FM mode only.  
6 KPG-93 adapts the Motorola®, KVL3000/3000 Plus Key Loader to the TK-5210/5310.  
7 Feature/Option was added for TK-5210 Version 2 radios (SN 80600001 or later)

# 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	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	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, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV
Immersion(option)	512.1/Procedure I	512.2/Procedure I	512.3/Procedure I	512.4/Procedure I
<b>International Protection Standard</b>				
Dust & Water Protection	IP54/55			
Dust & Water Jet Intrusion	IP66*			
Immersion	IP67*			

\*IP66/67 Optional Package

# KENWOOD

Kenwood U.S.A. Corporation  
Communications Sector Headquarters  
3975 Johns Creek Court, Suite 300, Suwanee, GA 30024-1265  
Order Administration/Distribution  
P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745

Kenwood Electronics Canada Inc.  
Canadian Headquarters and Distribution  
6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

