



● FEATURE HIGHLIGHTS

- **Multi-Digital** operation in NXDN, DMR and P25 (Phases 1 & 2) protocols
- **Any combination of two digital protocols** can be selected from NXDN, DMR, and P25
- **Mixed Digital & FM Analog Operation** allows intelligent migration in mixed sites and easy migration with digital radios in other sites
- **Large, Color 1.74" (240 x 180 pixels) Transflective TFT Display** for better interface even in direct sunlight and with use of polarized sunglasses.
- **Easy to follow GUI** for at-a-glance operational status checking and **Multi-line Text** to convey more information
- **4-way Directional-pad (D-pad) and 2-Position Lever Switch** for intuitive control and operation
- **Built-in GPS Receiver/Antenna** for effective fleet management
- **Bluetooth® Module built-in** for hands-free operation
- Renowned KENWOOD Audio Quality can be achieved with **Active Noise Reduction (ANR)** that utilizes built-in DSP with two microphones for suppression of ambient noise
- **Built-in 56-bit DES Encryption**
- **Optional 256-bit AES Encryption**
- **Built-in Motion Sensor** for life-critical man down detection
- **microSD/microSDHC Memory Card Slot** for increased memory capacity for "Voice & Data"
- **IP67/68 and MIL-STD-810 C/D/E/F/G**

● GENERAL FEATURES

- 6 W (136-174 MHz) Model
- 5 W (400-470 MHz) Model
- Full Key Models (w/ numeric keypad) and Standard Key Models (w/o numeric keypad)
- Maximum of 4,000 CH/Radio capacity, 512 CH/Zone, 128 Zones
- AMBE+2™ Enhanced Vocoder
- 1 W Loud Speaker Audio

● DIGITAL – NXDN MODE

- Gen2 & NXDN Type-C Trunked Operation
- NXDN Conventional Operation
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call

- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill
- Remote Check
- Short & Long Data Messages
- NXDN Digital Scrambler

● DIGITAL – DMR MODE

- Complies with ETSI DMR Tier II standards
- Two-slot TDMA in 12.5kHz channels
- Call Interruption
- Dual-slot Direct Mode
- Energy Efficient

● DIGITAL – P25 MODE

- P25 Phase 1 Conventional/Trunked Operation
- P25 Phase 2 Trunked Operation
- Talk Group ID Lists
- Individual ID Lists
- Caller ID Display
- Remote Monitor/Remote Check
- Radio Inhibit
- Encryption Key Zeroize & Retention
- P25 Over-the-Air Re-keying
- P25 Over-the-Air Programming

● ANALOG – FM MODE

- Conventional & LTR Zones
- FleetSync®/II: PTT ID ANI / Caller ID Display, Selective Group Call, Emergency Status / Text Messages
- MDC-1200: PTT ID ANI / Caller ID Display, Emergency, Radio Check / Inhibit
- QT / DQT & 5-Tone
- Built-in Voice Inversion Scrambler

● INTELLIGENT BATTERY SYSTEM

- System consists of a Li-ion or Ni-MH rechargeable battery (KNB-L1/L2/L3/N4), Rapid Charger (KSC-Y32), and Battery Reader (KAS-12/12PRO) software
- Up to 60 Rapid Chargers can be chain-connected to a PC
- KAS-12 Battery Reader software can display and manage information
- Up to 5,000 batteries can be managed at a time with the addition of optional KAS-12PRO license upgrade



Full Keypad Model

Limited Keypad Model

OPTIONAL ACCESSORIES

<ul style="list-style-type: none"> KNB-L1 Li-ion BATTERY PACK, IP67/68 (7.4 V/2000 mAh) 		<ul style="list-style-type: none"> KSC-Y32 RAPID CHARGER 		<ul style="list-style-type: none"> KRA-22 VHF HELICAL ANTENNA (Low Profile) 		<ul style="list-style-type: none"> KMC-54WD SPEAKER MICROPHONE • 2-mic digital noise cancelling via the radio's DSP • 3.5mm-diameter earphone jack • Complies with MIL-STD 810C/D/E/F/G • IP65/67 Dust & Water* 	
<ul style="list-style-type: none"> KNB-L2 Li-ion BATTERY PACK, IP67/68 (7.4 V/2600 mAh) 		<ul style="list-style-type: none"> KSC-32/32S RAPID CHARGER 		<ul style="list-style-type: none"> KRA-23 UHF HELICAL ANTENNA (Low Profile) 			
<ul style="list-style-type: none"> KNB-L3 Li-ion BATTERY PACK, IP67/68 (7.4 V/3400 mAh) 		<ul style="list-style-type: none"> KSC-326/326S MULTIPLE CHARGER (6-unit Rapid Rate) 		<ul style="list-style-type: none"> KRA-26 VHF HELICAL ANTENNA (Standard Length) 		<ul style="list-style-type: none"> KMC-42WD SPEAKER MICROPHONE (IP67) 	
<ul style="list-style-type: none"> KNB-N4 Ni-MH BATTERY PACK, IP67/68 (7.2 V/2500 mAh) 		<ul style="list-style-type: none"> KBP-8 BATTERY CASE (12AA Alkaline Battery) 		<ul style="list-style-type: none"> KRA-27 UHF WHIP ANTENNA (Standard Length) 		<ul style="list-style-type: none"> KWD-AE31 SECURE CRYPTOGRAPHIC MODULE 	
				<ul style="list-style-type: none"> KRA-41 VHF STUBBY ANTENNA 		<ul style="list-style-type: none"> KPG-180AP OTAP MANAGER 	
				<ul style="list-style-type: none"> KRA-42 UHF STUBBY ANTENNA 		<ul style="list-style-type: none"> KAS-12/12PRO BATTERY READER (PC Software) 	

*The earphone jack cap must be closed tightly.

Intrinsically Safe Batteries are also available.

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

GENERAL	Portable Radios		
	NX-5200	NX-5300	
Frequency Range	136-174 MHz	400-470 MHz	
Max. Channels Per Radio	1024 (Up to 4000 channels with option)		
Number of Zones	128		
Max. Channels Per Zone	512		
Channel Spacing	Analog Digital	12.5/20/25 kHz 6.25/12.5 kHz	
Power Supply	7.5 V DC ±20 %		
Battery Life (5-5-90/10-10-80 duty cycle)	KNB-L1 (2,000 mAh)	10 hours / 6.5 hours	
	KNB-L2 (2,600 mAh)	12.5 hours / 8.5 hours	
	KNB-L3 (3,400 mAh)	17 hours / 11 hours	
	KNB-N4 (2,500 mAh)	12.5 hours / 8.5 hours	
	KBP-8 (w/ AA battery x12)	High Power: Approx. 11 hours / 8 hours, Low Power: Approx. 25 hours / 18 hours	
Operating Temperature	-30 °C to +60 °C		
Frequency Stability	±2.0 ppm	±1.0 ppm	
Dimensions (W x H x D)	KNB-L1 (2,000 mAh)	58.0 x 138.9 x 36.5 mm	
	KNB-L2 (2,600 mAh)	58.0 x 138.9 x 39.5 mm	
	KNB-L3 (3,400 mAh)	58.0 x 138.9 x 44.9 mm	
	KNB-N4 (2,500 mAh)	58.0 x 166.4 x 45.2 mm	
Projections Not Included	KNB-L1 (2,000 mAh)	382 g	
	KNB-L2 (2,600 mAh)	406 g	
Weight (Net) Radio w/ Battery	KNB-L3 (3,400 mAh)	449 g	
	KNB-N4 (2,500 mAh)	579 g	
	KBP-8 (w/ AA x 12)	712 g	
	ETSI (EMC)	EN 301 489-3, EN 301 489-5, EN 301 489-17	
Applicable Standards	ETSI (Spectrum)	EN 300 086, EN 300 113, EN 300 219, EN 300 328, EN 300 440, EN 301 166	
	ETSI Safety	EN 60065, EN 60215, EN 60950-1	

Specifications are measured according to applicable standards, and subject to change without notice, due to advancements in technology.

RECEIVER	Portable Radios	
	NX-5200	NX-5300
Sensitivity (Digital)	NXDN 3 % BER (6.25 kHz/12.5 kHz)	0.25 µV / 0.32 µV
	NXDN 1 % BER (6.25 kHz/12.5 kHz)	-4 dB µV (0.32 µV) / -1 dB µV (0.45 µV)
	DMR 5 % BER	0.3 µV (-117.5 dBm)
	DMR 1 % BER	0.45 µV (-114 dBm)
	P25 5 % BER	0.28 µV
Sensitivity (Analog)	12 dB SINAD (12.5/20&25 kHz)	0.32 µV / 0.28 µV
	20 dB SINAD (12.5/20&25 kHz)	-1 dB µV (0.45 µV) / -3 dB µV (0.35 µV)
Selectivity	Analog 12.5 kHz	68 dB
	Analog 20 kHz	74 dB
	Analog 25 kHz	76 dB
Intermodulation	65 dB	
Spurious Rejection	75 dB	
Audio Distortion	3 %	
Audio Output Power	500 mW/8 Ω (3 % Distortion) / 1,000 mW/8 Ω (5 % Distortion)	
TRANSMITTER	NX-5200	NX-5300
RF Power Output Power	6 to 1 W	5 to 1 W
Spurious Emission	-36 dBm ≤1 GHz, -30 dBm > 1 GHz	
FM Hum & Noise (Analog): @12.5/20/25 kHz	40/45/45 dB	
Audio Distortion	2 %	
Emission Designator	16K0F3E, 14K0F2D, 14K0F3E, 12K0F2D, 11K0F3E, 8K50F3E, 7K50F2D, 8K30F1E, 8K30F1D, 8K30F7W, 8K10F1E, 8K10F1D, 8K10F1W, 7K60FXE, 7K60FXD, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

APPLICABLE MIL-STD & IP

MIL Standard	810C Methods/ Procedures	810D Methods/ Procedures	810E Methods/ Procedures	810F Methods/ Procedures	810G Methods/ Procedures
Low Pressure	500.1/I	500.2/I, II	500.3/I, II	500.4/I, II	500.5/I, II
High Temperature	501.1/I, II	501.2/I, II	501.3/I, II	501.4/I, II	501.5/I, II
Low Temperature	502.1/I	502.2/I, II	502.3/I, II	502.4/I, II	502.5/I, II
Temp. Shock	503.1/I	503.2/I	503.3/I, II	503.4/I, II	503.5/I
Solar Radiation	505.1/I	505.2/I	505.3/I	505.4/I	505.5/I
Rain	506.1/I, II	506.2/I, II	506.3/I, II	506.4/I, III	506.5/I, III
Humidity	507.1/I, II	507.2/II, III	507.3/II, III	507.4	507.5/II
Salt Fog	509.1/I	509.2/I	509.3/I	509.4	509.5
Dust	510.1/I	510.2/I	510.3/I	510.4/I, III	510.5/I
Vibration	514.2/VIII, X	514.3/I	514.4/I	514.5/I	514.6/I
Shock	516.2/I, II, V	516.3/I, IV	516.4/I, IV	516.5/I, IV	516.6/I, IV
Immersion	—	—	—	512.4/I	512.5/I
International Protection Standard					
Dust & Water	IP54, IP55				
Immersion	IP67, IP68*				

*Conditions: Portable radio immersed for 2 hours at a depth of 1 meter

• The Bluetooth word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. • SD and microSD are trademarks of SD-3C, LLC in the United States, and/or other countries • AMBE+2™ is a trademark of Digital Voice Systems Inc. • Windows® is a registered trademark of Microsoft Corporation. • NXDN™ is a trademark of JVCKENWOOD Corporation and Icom Inc. • NEXEDGE® is a registered trademark of JVCKENWOOD Corporation. • FleetSync® is a registered trademark of JVCKENWOOD Corporation.

JVCKENWOOD U.K. Limited

12 Priestley Way, London NW2 7BA, United Kingdom

www.kenwood.electronics.co.uk
http://comms.kenwood.com

