

KENWOOD

starcomm wireless

NX-5200/5300/5400



NXDN®

NEXEDGE® VHF/UHF / 700-800MHz
MULTI-PROTOCOL DIGITAL & ANALOG PORTABLE RADIOS

NEXEDGE® Bluetooth®

FEATURE HIGHLIGHTS

- **Multi-Protocol** operation in P25 (Phase I&II), NXDN® and Analog protocols
- **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
- **Active Noise Reduction (ANR)** utilizing built-in DSP with two microphones for suppression of ambient noise
- **Renowned KENWOOD Digital Audio Quality**
- 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

- 5 W (136-174 MHz) Models
- 5 W (380-470, 450-520 MHz) Models
- 3 W (700/800 MHz) Models
- 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
- 1 W Loud Speaker Audio

DIGITAL – P25 MODE

- P25 Conventional Trunking (Phase 1/Phase 2) Protocol
- AMBE+2™ Enhanced Vocoder
- Talk Group ID Lists
- Individual ID Lists
- Caller ID Display
- Remote Monitor/Remote Check
- Radio Inhibit

- Encryption Key Zeroize & Retention
- P25 GPS Location
- Over-the-Air Programming²

DIGITAL – NXDN® MODE

- NXDN® Conventional/Trunking Protocol¹
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming²
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging³
- Remote Stun/Kill³
- Remote Check³
- Short & Long Data Messages³
- GPS Location
- NXDN® Digital Scrambler Included

FM MODES – GENERAL

- Conventional & LTR Zones
- NPSPAC (USA only) Channels (±4.0 Modulation)
- 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 & Two-Tone
- Built-in Voice Inversion Scrambler

INTELLIGENT BATTERY SYSTEM (Option)

- System consists of the optional high-capacity Li-Ion Battery Series (KNB-L1/L2/L3), Rapid Charger (KSC-Y32), and Battery Reader (KAS-12) software
- Up to 30 Rapid Chargers can be chain-connected to a PC installed with the KAS-12
- KAS-12 Battery Reader software can display and manage information including battery type, model name, voltage, temperature, discharge cycle, expected life, and remaining capacity
- Up to 1,000 batteries can be managed at a time (requires an additional option)

¹ Only supports TYPE-C Protocol

² Requires KENWOOD OTAP Management software.

³ Requires NX subscriber unit PC serial interface compatible software application (e.g. KENWOOD AVL & Dispatch Messaging software) or hardware (e.g. console).



Options

KNB-L1/L2/L3
Li-ion Battery Pack
(IP67/68 Immersion)



KSC-Y32
Rapid Charger



KSC-32/32S
Rapid Charger



KSC-326/326S
Rapid Charger



KAS-12
Battery Reader
(PC Software)

KRA-26
VHF Helical Antenna
(Standard Length)



KRA-27
UHF Whip Antenna
(Standard Length)



KRA-32
700/800MHz Whip Antenna



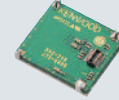
KMC-41D
Speaker Microphone (IP54/55)



KMC-54W
Speaker Microphone
• 2-mic digital noise cancelling via the radio's DSP
• 3.5mm-diameter EP jack
• Complies with MIL-STD 810C/D/E/F/G
• IP65/67 Dust & Water*



KWD-AE30/AE31
Secure Cryptographic Module



KPG-180AP
OTAP Manager

KBH-11
Belt Clip



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.

Main Specifications

	NX-5200	NX-5300	NX-5400
GENERAL			
Frequency Range	136-174 MHz	Type 1: 450-520 MHz Type 2: 380-470 MHz	RX: 763-776, 851-870 MHz TX: 763-776, 793-806, 806-825, 851-870 MHz
Max. Channels Per Radio	1024 (Up to 4000 CH with option)		
Number of Zones	128		
Max. Channels per Zone	512		
Channel Spacing			
Analog	12.5/15/20/25*/30* kHz	12.5/25 kHz*	12.5/25 kHz
Digital	6.25kHz/12.5kHz	6.25kHz/12.5kHz	12.5 kHz (6.25 kHz)
Power Supply	7.5V DC ± 20%		
Battery Life (5-5-90/10-10-90 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		
Operating Temperature	-22°F to +140°F (-30°C to +60°C)		
Frequency Stability	±2.0 ppm	±1.0 ppm	±1.5 ppm
Dimensions Radio w/Control Head	(W x H x D)		
KNB-L1 (2,000 mAh)	2.28 x 5.47 x 1.52 in. (58 x 139 x 38.8 mm)		
KNB-L2 (2,600 mAh)	2.28 x 5.47 x 1.65 in. (58 x 139 x 41.8 mm)		
KNB-L3 (3,400 mAh)	2.28 x 5.47 x 1.86 in. (58 x 139 x 47.2 mm)		
Weight (net) Radio w/Control Head			
KNB-L1 (2,000 mAh)	15.52 oz (440 g)		
KNB-L2 (2,600 mAh)	16.57 oz (470 g)		
KNB-L3 (3,400 mAh)	17.98 oz (510 g)		
FCC ID			
Type 1	K44431400	K44431500	ALH442000
Type 2		K44431501	
IC Certification			
Type 1	282F-431400	-	282D-442000
Type 2		282F-431501	

*25 and 30 kHz are not included in the models sold in the USA or US territories. Analog measurements made per TIA 603 and specifications shown are typical. Digital measurements made per TIA 102CAAA and specifications shown are typical. Specifications are subject to change without notice, due to advancements in technology.

	NX-5200	NX-5300	NX-5400
RECEIVER			
Sensitivity			
NXDN® 6.25 kHz Digital (3% BER)	0.20 µV	-	-
NXDN® 12.5 kHz Digital (3% BER)	0.25 µV	-	-
P25 Digital (5% BER)		0.25 µV	
P25 Digital (1% BER)		0.40 µV	
Analog (12dB SINAD)		0.24 µV	
Selectivity			
P25 Digital		60 dB	
Analog @ 25 kHz		73 dB	
Analog @12.5 kHz		67 dB	64 dB
Intermodulation		73 dB	75 dB
Spurious Rejection	80 dB		75 dB
Audio Distortion	3%		
Audio Output Power	500 mW/8Ω (3% Distortion) / 1,000 mW /8Ω (5% Distortion)		
TRANSMITTER			
RF Power Output Power	5 W to 1 W		3 W to 1 W
Spurious Emission	-70 dB		
FM Hum & Noise			
Analog @ 25 kHz		40 dB	
Analog @ 12.5 kHz		45 dB	
Audio Distortion	2%		
Modulation	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D		16K0F3E, 14K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D

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Applicable MIL-STD & IP

MIL Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II	500.5/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	501.5/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II	502.5/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II	503.5/Procedure I
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I	505.5/Procedure I
Rain	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III	506.5/Procedure I, III
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4	507.5/Procedure II
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4	509.5
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III	510.5/Procedure I
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I	514.6/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV	516.6/Procedure I, IV
International Protection Standard					
Dust & Water Protection	IP54/55				
Immersion	IP67/68*				

*IP68=1m/2H or 2m/0.5H

KENWOOD

JVCKENWOOD USA Corporation
Communications Sector Headquarters
3970 Johns Creek Court, Suite 100, 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
www.kenwood.ca



www.jvckenwood.com



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