KENWOOD

NEXEDGE®

One Radio with Multi-Protocol Support

NX-5200/5300/5400

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

The NX-5000 Series offers unsurpassed interoperability for a wide variety of users as it supports three digital CAIs — NXDN, DMR (Tier 2 & 3) and P25 (Phase 1 & 2) — plus FM analog in a single radio. Best of all, a desired CAI can be selected at will, giving you the freedom to migrate at your own pace — whether you are intent on going fully digital, undecided about which digital system to pick, or just wanting to maintain both digital and analog for a while. A NX-5000 radio can simultaneously support two digital protocols plus analog, offering the following combinations: FM/DMR/NXDN, FM/NXDN/P25, and FM/DMR/P25.

Full-Keypad & Standard Models

Features

Multi-Digital operation in NXDN, DMR (Tier 2 & 3), and P25 (Phase 1 & 2)

Any combination of two digital protocols may 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 and Multi-line Text to convey information

4-way Directional-pad (D-pad) and 2-Position Lever Switch for intuitive control

Built-In GPS Receiver/Antenna for effective fleet and incident management

Bluetooth® Module Built-in for hands-free and IoT applications operation

Renowned KENWOOD Audio Quality 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 man down detection

microSD/microSDHC Up to 2GB/32GB Memory Card Slot for increased memory capacity for "Voice & Data"

IP67/68 and MIL-STD-810 C/D/E/F/G

6 W (138-174 MHz) Models

5 W (406.1 to 470 MHz) Models

3 W (700/800 MHz) Models

Full Key Models (w/numeric keypad) and Standard Key Models (w/o numeric keypad)

1,024 Channels, Maximum 512CH/Zone, 128 Zones. Option: 4,000 CH with License

1 W Speaker Audio

CSA Intrinsically Safe Class I, II, III, Division 1, Groups A, B, C, D, E, F, G Division 2 Groups A,B,C,D

Digital – NXDN® Mode

- NXDN Conventional
- NXDN Type-C & Gen2 Trunking
- 6.25 & 12.5 kHz Channels
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill
- Remote Check
- Over-the-Air Alias (OAA)
- Over-the-Air Programming (OTAP)
- Short & Long Data Messages
- NXDN Digital Scrambler

Digital – DMR Mode

- Two-slot TDMA in 12.5 kHz channels
- DMR Tier 2 Conventional
- DMR Tier 3 Trunking
- DMR Over-the-Air Programming
- Call Interruption
- Dual-slot Direct Mode
- Energy Efficient
- Optional ARC4 encryption

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
- Enhanced Encryption Key Zeroize & Retention
- P25 Over-the-Air Re-keying
- P25 Over-the-Air Programming
- P25 Two-Tone Paging Decode

FM Modes – General

- 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 & Two-Tone
- Built-in Voice Inversion Scrambler

Intelligent Battery System (option)

System consists of the optional high-capacity Battery Series (KNB-L1/L2/L3/N4/LS5/LS6/LS7), Rapid Charger (KSC-Y32), and Battery Reader (KAS-12) software

Up to 60 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 5,000 batteries can be managed at a time (requires an additional option)

Accessories

All accessories may not be available in all markets.
Contact an authorized Kenwood dealer for details and complete list of all accessories.

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

KSC-32K
Rapid Charger

KRA-23
UHF Helical Antenna
(Low Profile)

KRA-29P
UHF Broadband Antenna
(406-470MHz)

KMC-70GR
Green Speaker Microphone
(with dual-sided 2-mic for superior ANR, IP67)

KNB-LS6
Li-Ion Battery (2,000mAh)
CSA Intrinsically Safe
(IP67/68 Immersion)

KNB-LS7
Li-ion Battery (3,800mAh)
CSA Intrinsically Safe
(IP67/68 Immersion)

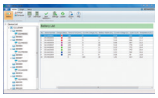
KSC-326AK
Rapid Charger
(6-unit Rapid Rate)

KRA-26
VHF Helical Antenna
(Standard Length)

KRA-32
700/800MHz
Whip Antenna

KBH-11
Belt Clip (2.5")

KAS-12/PRO
Battery Reader
(PC Software)



KRA-27
UHF Whip Antenna
(Standard Length)

KMC-72W
Speaker Microphone
(IP67)

KWD-AE30/AE31
Secure Cryptographic Module

KSC-Y32K
Rapid Charger

KRA-22
VHF Helical Antenna
(Low Profile)

KRA-25
High Gain VHF
Whip Antenna

KMC-70
Speaker Microphone
(with dual-sided 2-mic for superior ANR, IP67)

KPG-180AP
OTAP Manager

Specifications

General	NX-5200	NX-5300	NX-5400
Frequency Range	138-174 MHz	406.1-470 MHz	RX: 763-776, 851-870 MHz TX: 763-776, 793-806, 806-825, 851-870 MHz
Max. Channels Per Radio	1,024 (Up to 4,000 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	6.25 kHz/12.5 kHz	6.25 kHz/12.5 kHz	12.5 kHz (6.25 kHz)
Power Supply	7.5V DC ± 20%		
Battery Life	(5-5-90/10-10-80 duty cycle)		
KNB-L1/LS6 (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	-22ºF to +140ºF (-30ºC to +60ºC)		
Frequency Stability	± 0.5 ppm		
Dimensions/Weight Radio w/battery	(W x H x D) Projections Not Included		
KNB-L1 (2,000 mAh)	2.28 x 5.47 x 1.44 in. (58.0 x 138.9 x 36.5 mm)		13.5 oz (382 g)
KNB-L2 (2,600 mAh)	2.28 x 5.47 x 1.56 in. (58.0 x 138.9 x 39.5 mm)		14.3 oz (406 g)
KNB-L3 (3,400 mAh)	2.28 x 5.47 x 1.77 in. (58.0 x 138.9 x 44.9 mm)		15.8 oz (449 g)
IC Certification			
Type 1	282F-431400		282D-442000
Type 2		282F-431501	

Receiver	NX-5200	NX5300	NX-5400
Sensitivity			
NXDN* 6.25 kHz Digital (3% BER)		0.20 µV	
NXDN*12.5 kHz Digital (3% BER)		0.25 µV	
DMR Digital (5% BER)		0.25 µV	
DMR Digital (1% BER)		0.40 µV	
P25 Digital (5% BER)		0.25 µV	
P25 Digital (1% BER)		0.40 µV	
Analog (12dB SINAD)		0.25 µV	
Selectivity			
Analog @ 12.5kHz	67 dB		64 dB
Analog @ 25kHz		73 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	NX-5200	NX-5300	NX-5400
RF Power Output	6 W to 1 W	5 W to 1 W	3 W to 1 W
Spurious Emission	-70 dB		
FM Hum & Noise			
Analog @ 12.5kHz		40 dB	
Analog @ 25kHz		45 dB	
Audio Distortion	Less than 2%		
Emission Designator	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXE, 7K60FXD, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D		16K0F3E, 14K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXE, 7K60FXD,4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D

Analog measurements made per TIA603. Specifications are measured according to applicable standards.
P25 Digital measurements made per TIA 102CAAA and specifications shown are typical.
Specifications are subject to change without notice, due to advancements in technology.

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
Immersion				512.4/Procedure I	512.5/Procedure I
International Protection Standard					
Dust & Immersion	IP67/68*				
CSA Intrinsically Safe:	Class I, II, III, Division 1, Groups A, B, C, D, E, F, G Division 2 Groups A,B,C,D				

*Conditions: Portable radio immersed for 2 hours at a depth of 1 meter (IP68=1m/2H)

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