KENWOOD

NEXEDGE®

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 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, 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 management
- Bluetooth® Module Built-in for hands-free 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 (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 1024 CH, 128 Zones (4000 Ch. Opt)
- 1 W 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

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 Battery Series (KNB-L1/L2/L3/N4/LS5), 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)

Multi-Protocol

Unsurpassed interoperability for Public Safety and Enterprise radio users with the freedom to migrate at your own pace.

Gen2

Scalable server-based system architecture for management of NEXEDGE wide area digital communications systems.

Klarity

The ultimate level of sound clarity technology combining Optimization, advanced Sound Analysis and Active Noise Reduction.

P25 NXDN® DMR Gen2 Bluetooth® microSD HC GPS FleetSync® by KENWOOD

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Accessories

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

- KNB-N4
  Ni-MH Battery Pack
  (IP67/68 Immersion)

- KNB-LS5
  Li-ion Battery (2,000mAh)
  CSA US Intrinsically Safe

- KBP-8
  Alkaline Battery Case

- KSC-Y32
  Rapid Charger

- KSC-32
  Rapid Charger

- KSC-326/326S
  Rapid Charger
  (6-unit Rapid Rate)

- KAS-12/PRO
  Battery Reader
  (PC Software)

- KRA-22
  VHF Helical Antenna
  (Low Profile)

- KRA-23
  UHF Helical Antenna
  (Low Profile)

- KRA-26
  VHF Helical Antenna
  (Standard Length)

- KRA-27
  UHF Whip Antenna
  (Standard Length)

- KRA-32
  700/800MHz
  Whip Antenna

- KRA-41
  VHF Stubby Antenna

- KRA-42
  UHF Stubby Antenna

- KMC-42WD
  Speaker Microphone
  (IP67)

- 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

Specifications

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

	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	6.25 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 (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 hours / 8.5 hours		
KBP-8 (w/AA x12)	High Power 11 hours / 8 hours / Low Power 26 hours / 18.5 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/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)
KNB-N4 (2,500 mAh)	2.28 x 6.55 x 1.78 in. (58.0 x 166.4 x 45.2 mm)		20.4 oz (579 g)
KBP-8	2.64 x 8.59 x 2.12 in. (67.0 x 218.3 x 53.9 mm)		5.1 oz (712 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.
P25 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		
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 @ 12.5 kHz	67 dB		64 dB
Analog @ 25 kHz	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			
RF Power Output Power	6 W to 1 W	5 W to 1 W	3 W to 1 W
Spurious Emission	-70 dB		
FM Hum & Noise			
Analog @ 12.5 kHz	40 dB		
Analog @ 25 kHz	45 dB		
Audio Distortion	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

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 & Water Protection	IP54/55				
Immersion	IP6768*				

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

KENWOOD

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