KENWOOD

NEXEDGE®

NX-3220/3320

VHF/UHF MULTI-PROTOCOL DIGITAL & ANALOG PORTABLE RADIOS

This versatile handheld radio supports both NXDN® and DMR digital protocols as well as mixed digital & FM analog operation, enabling it to serve with distinction in a wide range of enterprise and operation critical applications. Compact yet designed with durability in mind, it's packed with convenient features like Bluetooth® for hands-free operation and built-in GPS. Three different models are available: Full Keypad model with LCD, Standard Keypad model with LCD and a large 4-way D-pad, and the Basic Model without LCD or keypad. Additionally, for expansion capability a software license certification system facilitates extensive customization.

Full Keypad Model
Standard & Basic Models
(Not proportionately accurate)

7-color Light Bar Indicator

FEATURES

- Multi-protocol digital radio: Designed to operate NXDN® or DMR digital, and FM analog protocols
- NXDN® Conventional and Type-C & Gen2 Trunking
- DMR Tier II & Site Roaming
- Mixed Digital & FM Analog Operation allows gradual migration at your own pace
- 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide) / 14 Characters
- 5-Line Text Message Frame (3 Lines of Text, icon & key guide)
- 7-color Light Bar Indicator on the top panel. Individual color can be set for each channel.
- 4-way Directional-pad (D-pad) for intuitive control and operation
- Built-In GPS Receiver/Antenna for effective fleet management
- Built-in Bluetooth® for hands-free operation - Applicable Bluetooth profiles: HSP (Headset Profile provided) and SPP (Serial Port Profile available as an option)
- Renowned KENWOOD Audio Quality achieved with Active Noise Reduction (ANR) that utilizes built-in DSP
- Software DES and AES Encryptions for NXDN Conventional Trunking and AES for DMR Conventional protocols
- Built-in Motion Sensor (Man-down, Stationary and Motion Detection)
- IP54/55/67 and MIL-STD-810 C/D/E/F/G
- 1 Watt Audio Output Power
- UHF: 120 MHz capability
- Available models: Full Keypad (w/ LCD and full keypad), Standard Keypad (w/ LCD and 4-way large D-pad/4 key), and Basic (w/o LCD and keypad)
- 260 CH/128 Zones (64 CH/4 Zones for Basic model)
- Maximum of 1,000 CH/Radio with option
- Intrinsically Safe Option (Future Availability)
- Paging Call
- Emergency Call
- Status/Text Message
- Remote Stun/Kill/Check

DIGITAL – NXDN® MODE

- NXDN Type-C & Gen2 Trunked
- NXDN Conventional
- 6.25 & 12.5 kHz Channels
- All Group Call
- Over-the-Air Alias (OAA)
- Over-the-Air Programming (OTAP)

DIGITAL – DMR MODE

- Complies with ETSI DMR Tier II standards
- Two-slot TDMA in 12.5 kHz channels
- Call Interruption
- Dual-slot Direct Mode
- ARC4 Encryption
- Energy Efficient

ANALOG - FM MODE

- Conventional & LTR Trunking
- 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, 2-Tone
- Built-in Voice Inversion Scrambler

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.

NXDN® DMR Gen2 Bluetooth® GPS FleetSync®

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Accessories

NX-3220/3320 Portable Radios

- KNB-55L/57L/78L
  Li-ion Battery Pack
  (7.4V/1480mAh, 7.4V/2000mAh, 7.4V/2860mAh)
- KNB-56N
  Ni-MH Battery Pack
  (7.2 V/1400 mAh)


KNB 55L

- KBP-5
  Battery Case (6 AA)
- KSC-25LSK/25SK
  Rapid Charger
  (Li-ion Only/Tri-Chem)


KSC-25SK

- KSC-256K
  Multiple Charger
  (6-pocket)

- KMB-30
  Mounting Bracket
  (for KSC-256)

- KVC-23
  Vehicular Charger
- KRA-22
  VHF Low Profile
  Helical Antenna

- KRA-23
  UHF Low Profile
  Helical Antenna

- KRA-25
  High Gain
  Whip Antenna

- KRA-26
  VHF Helical Antenna

- KRA-27
  UHF Whip Antenna

- KRA-28
  Broadband VHF
  Whip Antenna

- KEP-2
  Earphone Kit for
  KMC-45D (2.5mm plug)

- KMC-45D
  Speaker Microphone
  (IP54/55 & TDMA)

- KHS-7
  Headset (Single Muff / Single Muff & In-line PTT / Heavy Duty Behind-the-Head)

- KHS-7A
  Lightweight Single
  Muff Headset

- KHS-8
  2-wire Palm Mic with
  Earphone (Black)

- KHS-9BL
  3-wire Lapel Mic
  with Earphone (Black)

- KHS-10
  Headset (Single Muff
  Single Muff & In-line PTT
  Heavy Duty Behind-the-Head)

- KHS-22
  Head Set

- KHS-26
  Head Set
  (with Ear Bud In-Line PTT)

- KHS-27A
  Head Set
  (with D-Ring In-Line PTT)

- KHS-31C
  Head Set
  (with C-Ring)

- KBH-11
  Belt Clip (2.5")

- KPG-180P
  OTAP Manager
- KLH-206
  Leather Case
- KLH-207
  Nylon Case

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

Specifications

	NX-3220	NX-3320
GENERAL		
Frequency Range	136-174 MHz	400-520 MHz
Max. Channels Per Radio	Up to 1000 CH with option	
Number of Channels	260 (64 for no LCD models)	
Number of Zones	128 (4 for no LCD models)	
Channel Spacing		
Analog	12.5/15/25*/30* kHz	12.5/25* kHz
Digital	6.25kHz/12.5 kHz	6.25kHz/12.5kHz
Power Supply	7.5V DC ± 20%	
Battery Life	(FDMA/TDMA) 5-5-90	
KNB-55L (1,480 mAh)	Approx. 8 hours	Approx. 9.5 hours
KNB-56N (1,400 mAh	Approx. 8 hours	Approx. 9 hours
KNB-57L (2,000 mAh)	Approx. 11 hours	Approx. 13.5 hours
Operating Temperature	-22°F to +140°F (-30°C to +60°C)	
Frequency Stability	±2.0 ppm	±1.0 ppm
Dimensions	(W x H x D) Projections Not Included	
Radio Full Keypad Model	2.20 x 4.71 x 1.43 in (56 x 119.6 x 36.4 mm)	
KNB-55L (1,480 mAh)	2.20 x 4.71 x 1.43 in (56 x 119.6 x 36.4 mm)	
KNB-56N (1,400 mAh)	2.20 x 4.71 x 1.68 in (56 x 119.6 x 42.7 mm)	
KNB-57L (2,000 mAh)	2.20 x 4.71 x 1.53 in (56 x 119.6 x 39 mm)	
Weight Radio Full Keypad Model	7.8 oz (220 g)	
KNB-55L (1,480 mAh)	11.1 oz (315 g)	
KNB-56N (1,400 mAh)	14.5 oz (410 g)	
KNB-57L (2,000 mAh)	12.0 oz (340 g)	
FCC ID	K44479000	K44479100
IC Certification	282F-479000	282F-479100

	NX-3220	NX-3320
RECEIVER		
Sensitivity		
NXDN® 6.25 kHz Digital (3% BER)	0.20 µV	
NXDN®12.5 kHz Digital (3% BER)	0.25 µV	
DMR 12.5 KHz Digital (5% BER)	0.30 µV	
DMR 12.5 KHz Digital (1% BER)	0.45 µV	
Analog (12dB SINAD)	0.25 µV	
Selectivity		
Analog @ 12.5 kHz	65 dB	
Analog @ 25 kHz	72 dB	
Intermodulation	70 dB	
Spurious Rejection	70 dB	
Audio Distortion	3%	
Audio Output Power	500 mW/8Ω (3% Distortion) / 1,000 mW/8Ω (5% Distortion)	
TRANSMITTER		
RF Power Output (High / Mid / Low)	5 W / 4 W / 1 W	
Spurious Emission	-70 dB	
FM Hum & Noise		
Analog @ 12.5 kHz	40 dB	
Analog @ 25kHz	45 dB	
Audio Distortion	3%	
Digital Protocol	ETSI TS 102 361-1, -2, -3	
Emission Designator	16K0F3E*, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXD, 7K60FXE, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

*1 25 and 30 kHz are not included in the models sold in the USA or US territories.
Analog measurements made per TIA603. Specifications are measured according to applicable standards.
Specifications shown are typical and 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
International Protection Standard					
Dust & Water Protection*	IP54/55/67				

*Radio must equip 2PIN accessory cover.

KENWOOD

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