

KENWOOD

NEXEDGE®

NX-3220/3320

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

NXDN®

DMR



Bluetooth®

GPS

FleetSync®
by KENWOOD

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.

● FEATURE HIGHLIGHTS

- **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
- **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** can be achieved with **Active Noise Reduction (ANR)** that utilizes built-in DSP
- Software DES and AES Encryptions for NXDN Conventional/Trunking and 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**

● GENERAL FEATURES

- 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



Full Keypad Model

Standard & Basic Models
(Not proportionately accurate)

Options

■ **KNB-55L/57L**
Li-ion Battery Pack
(7.4 V/1480 mAh, 7.4 V/2000 mAh)

■ **KNB-56N**
Ni-MH Battery Pack
(7.2 V/1400 mAh)

■ **KNB-68LC**
Li-ion Battery Pack
(7.4 V/2000 mAh, Intrinsically Safe*)

■ **KBP-5**
Battery Case (6 AA)

■ **KSC-25LSK/25SK**
Rapid Charger
(Li-ion Only/Tri-Chem)

■ **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

*Future Availability

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-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 \pm 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	\pm 2.0 ppm	\pm 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

*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.

	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	

The Bluetooth word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc.
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.
All other trademarks are the property of their respective holders.

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*	IP54/55/67				

*Radio must equip 2PIN accessory cover.

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

www.kenwood.com/usa

JVCKENWOOD Canada Inc.

Canadian Headquarters and Distribution

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

www.kenwood.com/ca



ISO9001 Registered
JVCKENWOOD Corporation

ADS#06917 Printed in USA