



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.

PRODUCT HIGHLIGHTS

- **Multi-protocol digital** radio: Designed to operate under an 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** 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**

*The number of lines may vary depending on the display language (character set).

GENERAL FEATURES

- Audio Output Power (5 Watts, 4 Watts, and 1 Watt)
- 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)
- 1,000 CH with option
- Intrinsically Safe Option (Available later)
- 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
- 12.5 kHz Two-slot TDMA channels
- Call Interruption
- Site Roaming
- 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, Selective Call, Emergency, Radio Check / Inhibit
- QT / DQT, DTMF, 5-Tone
- Built-in Voice Inversion Scrambler



Full Keypad Model

Standard Keypad Model

Basic Model

OPTIONAL ACCESSORIES

- **KNB-55L/57L/78L***
Li-ion BATTERY PACK
(7.4 V/1480 mAh,
7.4 V/2000 mAh,
7.4 V/2860 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)
*Available Later
- **KBP-5**
BATTERY CASE (6 AA)



KNB-57L

- **KSC-25LS/25S**
RAPID CHARGER
(Li-ion Only/Tri-Chem)



KSC-25S

- **KSC-256**
MULTIPLE CHARGER
(6-pocket)

- **KMB-30**
MOUNTING BRACKET
(for KSC-256)



KSC-256

- **KRA-22/23**
VHF/UHF HELICAL
ANTENNA
(Low Profile)



KRA-22

KRA-23

- **KRA-26**
VHF HELICAL ANTENNA
(Standard Length)



- **KRA-27**
UHF WHIP ANTENNA
(Standard Length)



- **KRA-41/42**
VHF/UHF STUBBY
ANTENNA



KRA-41

KRA-42

- **KMC-45D**
SPEAKER
MICROPHONE
(IP54/55)



- **KBH-11**
BELT CLIP (2.5 in)



- **KPG-180AP**
OTAP MANAGER

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.

SPECIFICATIONS

GENERAL		NX-3220	NX-3320
Frequency Range		136-174 MHz	400-520 MHz
Max. Channels per Radio		Up to 1000 channels with option	
Number of Channels		260 (64 for no LCD models)	
Number of Zones		128 (4 for no LCD models)	
Channel Spacing	Analog	12.5/15/20/25*/30** kHz	12.5/25** kHz
	Digital	6.25/12.5 kHz	6.25/12.5 kHz
Power Supply		7.5 V 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	-30°C to +60°C	
Frequency Stability		± 2.0 ppm	± 1.0 ppm
Dimensions (W x H x D) *Projections not included	Radio only	56 x 119.6 x 36.4 mm ²	
	With KNB-55L (1,480 mAh)	56 x 119.6 x 36.4 mm ²	
	With KNB-56N (1,400 mAh)	56 x 119.6 x 42.7 mm ²	
	With KNB-57L (2,000 mAh)	56 x 119.6 x 39 mm ²	
Weight (net)	Radio only	220 g ³	
	With KNB-55L (1,480 mAh)	315 g ³	
	With KNB-56N (1,400 mAh)	410 g ³	
	With KNB-57L (2,000 mAh)	340 g ³	

*1 25 and 30 kHz are not included in the models sold in the USA or US territories.

**2 Dimensions for Full Keypad/Std Keypad Models

**3 Weight for Full Keypad Model

Specifications are measured according to applicable standards.

Specifications shown are typical and subject to change without notice, due to advancements in technology.

RECEIVER		NX-3220	NX-3320
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, 12 dB 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 (Internal Speaker)	3 % Distortion	500 mW/8 Ohms	
	5 % Distortion	1000 mW/8 Ohms	
TRANSMITTER		NX-3220	NX-3320
RF Power Output		5 W / 4 W / 1 W	
Spurious Emission		-70 dB	
FM Hum & Noise	Analog @ 25 kHz	45 dB	
	Analog @ 12.5 kHz	40 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	

APPLICABLE MIL-STD & IP

MIL Standards	Methods / Procedures					
	810C	810D	810E	810F	810G	
Low Pressure	500.1/ I	500.2/ I, II	500.3/ I, II	500.4/ I, II	500.5/ I, II	
High Temperature	501.1/ I, II	501.2/ I, II	501.3/ I, II	501.4/ I, II	501.5/ I, II	
Low Temperature	502.1/ I	502.2/ I, II	502.3/ I, II	502.4/ I, II	502.5/ I, II	
Temp. Shock	503.1/ I	503.2/ I	503.3/ I	503.4/ I, II	503.5/ I	
Solar Radiation	505.1/ I	505.2/ I	505.3/ I	505.4/ I	505.5/ I	
Rain*	506.1/ I, II	506.2/ I, II	506.3/ I, II	506.4/ I, III	506.5/ I, III	
Humidity	507.1/ I, II	507.2/ II, III	507.3/ II, III	507.4	507.5/ I	
Salt Fog	509.1/ I	509.2/ I	509.3/ I	509.4	509.5	
Dust	510.1/ I	510.2/ I	510.3/ I	510.4/ I, III	510.5/ I	
Vibration	514.2/ VIII, X	514.3/ I	514.4/ I	514.5/ I	514.6/ I	
Shock	516.2/ I, II, V	516.3/ I, IV	516.4/ I, IV	516.5/ I, IV	516.6/ I, IV	
International Protection Standards Dust & Water*		IP54, IP55, IP67				

*Audio accessory connector must be covered.

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