



NEXEDGE®

NX-220E/320E

NEXEDGE® VHF/UHF Digital & FM Portable Radios

NXDN®

FleetSync®
by KENWOOD

5-tone

GENERAL FEATURES

- 5 W (136-174 MHz) Models
- 5 W (400-470 MHz) Models
- Meets ETSI EN Standards
- 260 CH-GID / 128 Zones (LCD Models)
- 64 CH-GID / 4 Zones (Non LCD Models)
- 12-Key Keypad Models
- 8 Character Alphanumeric Aliases
- Backlit LCD & Keys
- Function / Status LCD Icons
- Transmit / Busy / Call Alert / Warn LED
- On / Off Volume Knob
- 16-Position Mechanical Selector
- 4 Front PF Keys (LCD Models)
- 3 Side PF Keys
- Emergency / AUX Key
- Built-in Motion Sensor
- 500 mW Speaker Audio
- Zone / CH Number Voice Announcement
- KMC-48GPS Speaker-Mic Option
- KPG-141D Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP54/55 Water & Dust Intrusion
- PC Serial Interface
- SDM Manual Input*1
- Transparent Data Mode*1

DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging*1 *2
- Remote Stun / Kill*1
- Remote Check*1
- Short & Long Data Messages*1
- GPS Location with Voice*1
- NXDN® Scrambler Included

DIGITAL – CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call*3
- Mixed FM / Digital Operation
- Conventional IP Networks
- Site Roaming

DIGITAL – TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect
- Transmission Trunked Mode*4
- Message Trunked Mode*4
- Call Queuing with Priority*4
- Late Entry (UID & GID)*4
- 4 Priority Monitor ID's*4
- Remote Group Add*1
- Failsafe Mode

MULTI-SITE IP NETWORK COMPATIBLE

- 60,000 GIDs / UIDs
- Wide Area Group Call
- Auto Roaming Registration
- Group Registration

SCAN

- Single Zone / Multi-Zone / List Scan
- Single Priority Scan (Conventional)

FM MODES – GENERAL

- 25, 20 & 12.5 kHz Channels
- Conventional & LTR® Zones
- FleetSync® / II, MDC-1200, DTMF*3
- QT / DQT & 2-Tone (Conventional Zones only)*3
- 5-Tone Encode / Decode (Conventional Zones Only)*3
- Voice Inversion Scrambler (16 Codes)

dPMR

- Kenwood NEXEDGE® mid tier digital two-way radios can now be adapted to operate as dPMR radios

FleetSync® / II (FM)

- PTT ID ANI / Caller ID*3
- Selective / Group Call*3
- Emergency, Status & Text Messages*1

MDC-1200

- PTT ID ANI / Caller ID*3
- Emergency, Radio Check & Inhibit

*1 Requires NX subscriber unit PC Serial Interface compatible software application (e.g. Kenwood AVL & Dispatch Messaging software) or hardware (e.g. console).

*2 Non LCD Models -Pre-programmed key operation

*3 Non LCD Models -Some screen / key-based functions are not available.

*4 These trunked features are primarily system programming and operational dependent. Priority Monitor also requires NX subscriber settings.



NX-220E2/320E2

NX-220E/320E

NX-220E3/320E3

Options

■ **KNB-55L**
Li-Ion Battery
(1480mAh)



■ **KNB-56N**
Ni-MH Battery
(1400mAh)



■ **KNB-57L**
Li-Ion Battery
(2000mAh)



■ **KBP-5**
6 AA Alkaline
Battery Case



■ **KSC-25**
Rapid Charger



■ **KSC-30**
Regular Charger
for Ni-MH Batteries



■ **KSC-256**
Rapid Rate 6-Unit
Charger



■ **KMC-45**
Speaker Microphone



■ **KMC-21**
Speaker Microphone



■ **KMC-48GPS**
GPS Speaker
Microphone



■ **KRA-22/23**
VHF/UHF Helical
Antenna



■ **KRA-26/27**
VHF Helical/UHF
Whip Antenna



■ **KMB-30**
Wall Mount Bracket
for KSC-256



■ **KEP-2**
2.5mm Earphone
Kit for KMC-45



■ **KHS-7/7A**
Single Muff Headset



■ **KHS-8BL**
2-wire Palm Mic.
w/Earphone



■ **KHS-9BL**
3-wire Palm Mic.
w/Earphone



■ **KHS-10-OH**
Heavy-Duty Noise
Reduction Headset



■ **KHS-21**
Headset w/Boom Mic.
& PTT



■ **KHS-22**
Headset w/Boom Mic.
& PTT



■ **KHS-29F**
Clip Mic. w/Earhanger



■ **EMC-12**
Clip Mic. w/Earphone
& PTT (VOX Ready)



■ **KBH-12**
Belt clip



■ **KWR-1**
Water Resistant Bag



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

GENERAL	NX-220	NX-320
Frequency Range	136-174 MHz	400-470 MHz
Number of Channels	LCD models Non LCD models	260 ch 64 ch
Zones	LCD models Non LCD models	128 zone 4 zone
Max. Channels per Zone	LCD models Non LCD models	250 ch 16 ch
Channel Spacing	Analogue Digital	12.5 / 20 / 25 kHz 6.25 / 12.5 kHz
Operating Voltage		7.5 V DC ± 20%
Battery Life (5-5-90)	KNB-55L (1480 mAh) KNB-56N (1400 mAh) KNB-57L (2000 mAh)	Approx. 8.5 hours Approx. 8.5 hours Approx. 11.5 hours
Operating Temperature Range		-30° C to +60° C
Frequency Stability		± 2.0 ppm
Antenna Impedance		50 Ω
Dimensions (W x H x D)	Projections not included	
	LCD models	
	56.0 x 110.5 x 36.9 mm (radio only)	
	56.0 x 110.5 x 37.5 mm (with KNB-55L)	
	56.0 x 110.5 x 39.5 mm (with KNB-57L)	
	Non LCD models	
	56.0 x 110.5 x 37.5 mm (radio only)	
	56.0 x 110.5 x 38.1 mm (with KNB-55L)	
	56.0 x 110.5 x 40.1 mm (with KNB-57L)	
Weight (net)	LCD models	
	210 g (radio only)	
	305 g (with KNB-55L)	
	330 g (with KNB-57L)	
	Non LCD models	
	205 g (radio only)	
	300 g (with KNB-55L)	
	325 g (with KNB-57L)	
Applicable Standards	ETSI R & TTE	
	EN 300 086, EN 300 113, EN 300 219, EN 301 489, EN 301 166	
	ETSI Safety	
	EN 60065, EN 60950-1, EN 60215	

RECEIVER	NX-220	NX-320
Sensitivity (Analogue)	EIA 12dB SINAD EN 20dB SINAD	0.28 μV / 0.28 μV / 0.32 μV -3 dB μV (0.35 μV) / -3 dB μV (0.35 μV) / -1 dB μV (0.45 μV)
Sensitivity (Digital)	3% BER 1% BER	0.32 μV / 0.25 μV -1 dB μV (0.45 μV) / -4 dB μV (0.32 μV)
Adjacent Channel Selectivity (Analogue)	(25kHz / 20kHz / 12.5kHz)	76 dB / 74 dB / 68 dB
Intermodulation (Analogue)		65 dB
Spurious Response Rejection (Analogue)		75 dB
Audio Distortion		Less than 3%
Audio Output		500 mW / 8 Ω
TRANSMITTER		
RF Power Output	High / Low	5 W / 1 W
Modulation Limiting (Analogue)		± 5.0 kHz at 25 kHz ± 4.0 kHz at 20 kHz ± 2.5 kHz at 12.5 kHz
Spurious Emission		-36 dBm ≤ 1 GHz, -30 dBm > 1 GHz
FM Noise (EIA)	(Analogue, 25 kHz / 20 kHz / 12.5 kHz)	45 dB / 45 dB / 40 dB
Modulation Distortion		Less than 3%
Microphone Impedance		1.8 kΩ
Modulation		16K0F3E, 14K0F3E, 14K0F2D, 12K0F2D, 8K50F3E, 7K50F2D, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D

Analogue measurements made per TIA/EIA 603 and specifications shown are typical. Kenwood reserves the right to change specifications without prior notice or obligation.

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LTR® is a registered trademark of Transcript International.

AMBE+2™ is a trademark of Digital Voice Systems Inc.

Windows® is a registered trademark of Microsoft Corporation.

NXDN® is a registered trademark of Kenwood Corporation and Icom Inc.

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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				

To meet MIL-810 and IP grade, the 2-pin connector has to be connected.

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ISO9001 Registered
Communications Equipment Division
Kenwood Corporation
ISO9001 certification

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