

NEXEDGE®

NX-720H(G)/820H(G)

NEXEDGE® VHF/UHF Digital & FM Mobile Radios

NXDN®

FleetSync®
by KENWOOD

GPS

● GENERAL FEATURES

- 50 W (136-174 MHz) Models
- 45 W (400-470, 450-520 MHz) Models
- 260 CH-GID / 128 Zones
- 10 Character Alphanumeric Aliases
- Backlit LCD & Keys
- Function/Status LCD Icons
- Transmit/Busy/Call Alert/Warn LED
- Blue Function/Status LED
- On/Off Power Control
- 4 Up/Down Selectors
- 6 Front PF Keys
- Emergency/AUX Key
- 4W Speaker Audio
- Zone/CH Number Voice Announcement
- DB-15 Accessory Connector
- 6 Programmable AUX I/Os
- KPG-141D Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP54 Water & Dust Intrusion
- PC Serial Interface
- SDM Manual Input*¹
- Transparent Data Mode*¹
- Built-in GPS Receiver Models Available (Optional KRA-40G GPS Active Antenna required for GPS functions)

● DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming*²
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging*¹
- 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
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming

● DIGITAL TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect*³
- Transmission Trunked Mode*³
- Message Trunked Mode*³
- Call Queuing with Priority*³
- Late Entry (UID & GID)*³
- 4 Priority Monitor ID's*³
- Remote Group Add*¹
- Failsoft 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 & 12.5 kHz Channels
- Conventional & LTR® Zones
- FleetSync®/II, MDC-1200, DTMF
- QT / DQT & 2-Tone (Conventional Zones Only)
- Voice Inversion Scrambler (16 Codes)

● FleetSync®/II (FM)

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

● MDC-1200

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



Options

KMC-35 Microphone



KMC-32 16-key Keypad Microphone



KES-5 External Speaker



KCT-18 Ignition Sense Cable (requires KCT-60 option)



KMC-36 Keypad Microphone



KMC-9C Desktop Microphone



KMB-10 Key Lock Adapter



KCT-36 3m Extension Cable (for KCT-60)



KMC-30 Microphone



KES-3 External Speaker



KLF-2 Line Filter



KCT-60 Connection Cable



KRA-40G GPS Active Antenna (required for GPS functions featured on the NX-720HG/820HG)



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

Main Specifications

		NX-720H(G)	NX-820H(G)
GENERAL			
Frequency Range	Type 1	136 - 174 MHz	450 - 520 MHz
	Type 2	—	400 - 470 MHz
Number of Channels		260	
Zones		128	
Max. Channels per Zone		250	
Channel Spacing	Analog	12.5 / 15 / 25 / 30 kHz	12.5 / 25 kHz
	Digital	6.25 / 12.5 kHz	6.25 / 12.5 kHz
Operating Voltage		13.6 V DC ± 15%	
Operating Temperature Range		-22° F to +140° F (-30° C to +60° C)	
Frequency Stability		± 1.0 ppm	
Antenna Impedance		50 Ω	
Dimensions (W x H x D) Projections not included		6.30 x 1.69 x 5.35 in (160 x 43 x 136 mm)	
Weight (net)		2.64 lbs. (1.2 kg)	

Analog measurements made per TIA/EIA 603 and specifications shown are typical. Specifications are subject to change without notice, due to advancements in technology.

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LTR® is a registered trademark of Transcrypt 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 JVC KENWOOD Corporation and Icom Inc.
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Footnotes

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

*2 Requires KENWOOD OTAP Management software.

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

		NX-720H(G)	NX-820H(G)
RECEIVER			
Sensitivity	Digital @ 6.25 kHz (3% BER)	0.20 μV	
	Digital @ 12.5 kHz (3% BER)	0.28 μV	
	Analog (12 dB SINAD)	0.25 μV	
Selectivity	Analog @ 25 kHz	80 dB	
	Analog @ 12.5 kHz	70 dB	
Intermodulation	Analog	70 dB (± 50, 100 kHz)	
Spurious Response	Analog	85 dB	80 dB
Audio Distortion		Less than 3%	
Audio Output		4 W / 4 Ω	
TRANSMITTER			
RF Power Output		50 - 30 - 5 W	45 - 30 - 5 W
Spurious Response		73 dB	75 dB
FM Hum & Noise	Analog @ 25 kHz	50 dB	
	Analog @ 12.5 kHz	45 dB	
Audio Distortion		Less than 3%	
Modulation		16K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	
GPS			
TIFF (Time to First Fix) - Cold Start		< 60 seconds	
TIFF (Time to First Fix) - Hot Start		< 10 seconds	
Horizontal Accuracy		< 10 meters	

Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength).

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, III, V	516.3/Procedure I, IV, V	516.4/Procedure I, IV, V	516.5/Procedure I, IV, V	516.6/Procedure I, IV, V
International Protection Standard					
Dust & Water Protection	IP54: Radio itself				

To meet MIL-810 and IP grade, microphone and cover for the D-sub15 and SP connector have to be connected. (Do not use the KCT cable and/or SP cable.)

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