KENWOOD

NEXEDGE®

NX-720/820

NEXEDGE® VHF/UHF Digital &FM Mobile Radios

NXDN® FleetSync® by KENWOOD

GENERAL FEATURES

- 25 W or 50 W (136-174 MHz) Models
- 25 W or 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
- External GPS Receiver Available

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)
- 5-Tone Encode/Decode (Conventional Zones Only)*4
- 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

http://nexedge.kenwood.com

Options

KMC-35
Microphone

KMC-32
16-key Keypad Microphone

KES-3
External Speaker

KMC-36
Keypad Microphone

KMC-9C
Desktop Microphone

KLF-2
Line Filter

KMC-30
Microphone

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-720	NX-820
GENERAL			
Frequency Range	**HK**	136 - 174 MHz	450 - 520 MHz
	HK2	—	400 - 470 MHz
	E	136 - 174 MHz	400 - 470 MHz
Number of Channels		260	
Zones		128	
Max. Channels per Zone		250	
Channel Spacing	**Analog**	12.5 / 25 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		-30° C to +60° C	
Frequency Stability		± 1.0 ppm	
Antenna Impedance		50 Ω	
Dimensions (W x H X D) Projections not included		160 x 43 x 136 mm	
Weight (net)		1.2 kg	

		NX-720	NX-820
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	**HK**	50 - 30 - 5 W	45 - 30 - 5 W
	HK2	—	45 - 30 - 5 W
	E	25 - 5w	25 - 5w
Spurious Response	**HK**	73 dB	75 dB
	HK2	—	75 dB
	E	-36dBm ≤ 1GHz. -30dBm > 1GHz	
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	

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

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.

*4 E-type Firmware only

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.)

Kenwood Electronics Singapore Pte. Ltd.
1 Ang Mo Kio, Street 63,
Singapore 569110
http://asia.kenwood.com