

KENWOOD

NEXEDGE®

NX-3720(G)/3820(G)

NXDN™ **DMR**

NEXEDGE VHF/UHF Multi-Protocol
Digital & Analog Mobile Radios



Bluetooth®

GPS

FleetSync®

5-tone

This adaptable mobile radio supports 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. Designed with flexibility in mind, it's packed with convenient features like Bluetooth® for hands-free operation and built-in GPS. And providing greater freedom of installation, the radio's frnt panel can be used as a remote control head (this requires an optional upgrade, to be available in future). Additionally, for expansion capability a software license certification system facilitates extensive customization.

PRODUCTS 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
- **4-Line** Text message Frame (2 Lines of Text, icon & key guide) Note: the number of lines may vary depending on the display language (character set)
- **7-Color** LED indicator
- External and Internal Speaker Switching
- **Built-in GPS Receiver** 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; availability depends on the model)
- 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
- **IP54 & MIL-STD-810 C/D/E/F/G**

GENERAL FEATURES

- Audio Output Power (4 W at 4 Ohm)
 - 512 CH / 128 Zones
 - 1000 CH option
 - 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
- 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, DTMF, 5-Tone
- Built-in Voice Inversion Scrambler



OPTIONAL ACCESSORIES

- **KMC-53M**

Desktop microphone (tuned for NXDN; no support for TDMA)



- **KMC-35M/36M**

IP54/55 microphone (without/with 12-key pad)



- **KES-35W**

External speaker (compact low profile; 3.5 mm plug)



- **KES-5M**

External speaker (40 W max. input, requires KAP-2)



- **KCT-18M**

Ignition sense cable (requires KCT-60)



- **KCT-23M/23M3**

DC power cable (3 m / 7 m)



- **KLF-2M**

Line Filter - 13.2 V



- **KCT-60M**

Connection cable (D-sub 15 to Molex 15 Pin connector)



- **KMB-10M**

Key lock adapter



- **KRA-40GM**

GPS active antenna



- **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-3720(G)	NX-3820(G)
Frequency Range	136 ~ 174 MHz	400 ~ 470 MHz
Max. Channels per Radio	Up to 1000 channels with option	
Number of Channels	512	
Number of Zones	128	
Channel Spacing	Analog	12.5 / 20 / 25 kHz
	Digital	6.25 / 12.5 kHz
Operating Voltage	13.2 V DC (10.8 ~ 15.6 V DC)	
Current Drain	Standby	0.45 A
	RX	2.3 A
	TX	9 A
Operating Temperature	-30°C to +60°C	
Frequency Stability	± 1.0 ppm	
Antenna Impedance	50 Ohm	
Dimensions (W x H x D) Radio with Control Head — projections not included —	160 x 43 x 160 mm	
Weight (net) Radio with Control Head	1.2 kg	
Applicable Standards	ETSI (EMC)	EN 301 489-3, EN 301 489-5, EN 301 489-17
	ETSI (Spectrum)	EN 300 086, EN 300 113, EN 300 219, EN 300 328, EN 300 440, EN 301 166
	ETSI Safety	EN 60065, EN 60215, EN 60950-1

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

RECEIVER	NX-3720(G)	NX-3820(G)	
Sensitivity - Digital	NXDN 3% BER (6.25 kHz/12.5 kHz)	0.20 µV / 0.28 µV	
	NXDN 1% BER (6.25 kHz/12.5 kHz)	-5.0 dBµV (0.28 µV) / -2 dBµV (0.40 µV)	
	DMR 12.5 kHz Digital, 5% BER	-4.5 dBµV (0.30 µV)	
	DMR 12.5 kHz Digital, 1% BER	-2 dBµV (0.40 µV)	
Sensitivity - Analog	EIA 12 dB SINAD (12.5/20 & 25 kHz)	0.25 µV	
	EN 20 dB SINAD (12.5/20 & 25 kHz)	-1 dBµV (0.45 µV) / -3 dBµV (0.35 µV) / -3 dBµV (0.35 µV)	
Selectivity	Analog 12.5 kHz	70 dB	68 dB
	Analog 20 kHz	78 dB	76 dB
	Analog 25 kHz	80 dB	78 dB
Intermodulation	70 dB		
Spurious Rejection	80 dB		
Audio Distortion	2%		
Audio Output	4 W / 4 Ohm		
TRANSMITTER	NX-3720(G)	NX-3820(G)	
RF Power Output (High / Low)	25 W / 5 W		
Spurious Emission	-36 dBm ≤ 1 GHz, -30 dBm > 1 GHz		
FM Hum & Noise	Analog @ 25 kHz	50 dB	
	Analog @ 20 kHz	50 dB	
	Analog @ 12.5 kHz	45 dB	
Audio Distortion	2 %		
Digital Protocol	ETSI TS 102 361-1, -2, -3		
Emission Designator	16K0F3E, 14K0F2D, 14K0F3E, 12K0F2D, 8K50F3E, 8K30F1E, 8K30F1D, 8K30F7W, 7K50F2D, 7K60FXE, 7K60FXD, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D		

NORMES 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 / II
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, V	516.4 / I, IV, V	516.5 / I, IV, V	516.6 / i, IV, V

International Protection Standards

Dust & Water*	IP54 (Radio unit itself)
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*Microphone KMC-35 or KMC-36 must be connected to the radio, and all accessory connectors must be covered.

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