# **KENWOOD**

# NX-3720HG/3820HG

NEXEDGE

**NEXEDGE® VHF/UHF MULTI-PROTOCOL DIGITAL & ANALOG MOBILE RADIOS** 

NXDN® DMR Bluetooth GPS FleetSync

The adaptable mobile 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. Designed with flexability 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 front panel can be used as a remote control head (this requires an optional upgrade, to be available in the future). Additionally, for expansion capability a software license certification system facilitates extensive customization.

#### FEATURE HIGHLIGHTS

- Multi-protocol digital radio: Designed to operate NXDN or DMR digital, and FM analog protocols
- NXDN<sup>®</sup> 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 can be achieved with Active Noise Reduction (ANR) that utilizes built-in DSP
- Software DES and AES Encryptions for NXDN Conventional/Trunking and DMR Conventional protocols
- MIL-STD-810 C/D/E/F/G

#### GENERAL FEATURES

- Audio Output Power (4 Watts at 4 ohms)
- 512 CH/128 Zones
- Maximum of 1000 CH/Radio with option
- Paging Call
- Emergency Call
- Status/Text Message
- Remote Stun/Kill/Check

#### DIGITAL – NXDN<sup>®</sup> 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
- Two-slot TDMA in 12.5 kHz channels
- Call Interruption
- Dual-slot Direct Mode
- ARC4 Encryption
- Energy Efficient

#### 🌑 ANALOG – FM MODES

- 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
- OT / DOT, 2-Tone
- Built-in Voice Inversion Scrambler



### Options



## Main Specifications

	NX-3720HG	NX-3820HG			
GENERAL					
Frequency Range	136-174 MHz	Type 1 450-520 MHz			
		Type 2 400-470 MHz			
Max. Channels Per Radio	Up to 1,000 CH with option				
Number of Channels	512				
Number of Zones	128				
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	13.6 V DC ±15%				
Current Drain					
Standby	0.45 A				
RX	2.3 A				
TX	12 A				
Operating Temperature	-22°F to +140°F (-30°C to +60°C)				
Frequency Stability	±1.0 ppm (-22°F to +140°F)				
Antenna Impedance	50 Ω				
Dimensions (W x H x D)	(W x H x D) Projections Not Included				
Radio w/Control Head	6.30 x 1.69 x 6.30 in (160 x 43 x 160 mm)				
Weight (net)	2 CE III (4				
Radio w/Control Head	2.65 lbs (1.2 kg)				
FCC ID					
Type 1	K44479200	K44479300			
Type 2	-	K44479301			
IC Certification					
Туре 1	282F-479200	÷			
Type 2	-	282F-479301			

	NX-3720HG	NX-3820HG		
RECEIVER				
Sensitivity				
NXDN <sup>®</sup> 6.25 kHz Digital (3% BER)	0.20 µ	V		
NXDN <sup>®</sup> 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 (12dB SINAD)	0.25 µV			
Selectivity				
Analog @12.5 kHz	70 dB			
Analog @ 25 kHz	80 dB			
Intermodulation	70 dB			
Spurious Rejection	80 dB			
Audio Distortion	2 %			
Audio Output Power	4 W/4 Ω			
TRANSMITTER				
RF Power Output (High / Mid / Low)	50 W / 30 W / 5 W	45 W /30 W / 5 W		
Spurious Emission	-73 dB	-75 dB		
FM Hum & Noise				
Analog @ 12.5 kHz	45 dB			
Analog @ 25 kHz	40 dB			
Audio Distortion	2%			
Digital Protocol	ETSI TS 102 361-1, -2, -3			
Emission Designator	16K0F3E*, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXD,			
-	7K60FXE, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D			

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.

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\*25 and 30 kHz are not included in the models sold in the USA or US territories. Analog measurements made per EN Standards or TIA 603 and specifications shown are typical. Specifications are subject to change without notice, due to advancements in technology.

### 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, V	516.4/Procedure I, IV, V	516.5/Procedure I, IV, V	516.6/Procedure I, IV, V
International Protection Standard					
Duct 9 Motor*	IDE 4 (Padio unit itcolf)				

Dust & Water\* IP54 (Radio unit itself)

\*Microphone KMC-35 or KMC-36 must be connected to the radio, and all accessory connectors must be covered.

## KENWOOD

#### JVCKENWOOD USA Corporation

Communications Sector Headquarters 3970 Johns Creek Court, Suite 100, Suwanee, GA 30024-1265

Order Administration/Distribution RO. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745 www.kenwood.com/usa JVCKENWOOD Canada Inc. Canadian Headquarters and Distribution 6070 Kestrel Road, Mississauga, Ontario, Canada LST 1S8 www.kenwood.com/ca



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