KENWOOD

NEXEDGE®

One Radio with Multi-Protocol Support

NX-3720HG/3820HG

VHF/UHF TRANSCEIVERS

This 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 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 front 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.

PRODUCT 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/Antenna 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 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

- S-Trunking
- DMR Tier III Trunking
- DMR Tier II Conventional
- DMR Auto Slot Select
- Site Roaming
- Two-slot TDMA in 12.5 kHz 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, 2-Tone
- Built-in Voice Inversion Scrambler

OPTIONAL ACCESSORIES

- **KMC-59C**
  DESKTOP MICROPHONE
- **KMC-35/36***
  MICROPHONE [IP54/55] (without / with 12-keypad)
  *To be discontinued
- **KMC-65/66**
  MICROPHONE [IP54/55] (without / with 12-keypad)

KMC-65

KMC-66

- **KES-3**
  EXTERNAL SPEAKER
  (compact low profile;
  3.5 mm plug)

- **KES-5**
  EXTERNAL SPEAKER
  (40 W max input,
  requires KAP-2)

- **KCT-23**
  DC POWER CABLE

- **KCT-60**
  CONNECTION CABLE
  (D-sub 15 to Molex 15 Pin
  Connector)

- **KCT-18**
  IGNITION SENSE CABLE
  (requires KCT-60)

- **KLF-2**
  LINE FILTER

- **KMB-10**
  KEY LOCK ADAPTER

- **KRA-40G**
  GPS ACTIVE
  ANTENNA

- **KPS-15**
  DC POWER SUPPLY
- **KMB-34**
  MOUNTING CASE FOR KPS-15
  AND MOBILE RADIOS
- **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-3720HG	NX-3820HG
Frequency Range		136-174 MHz	Type 1: 450-520 MHz Type 2: 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 / 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 %	
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 (-30°C to +60°C; +25°C Ref.)		± 0.5 ppm	
Antenna Impedance		50 Ohms	
Dimensions (W x H x D) Radio with Control Head *Projections not included		6.30 x 1.69 x 6.30 in (160 x 43 x 160 mm)	
Weight (net) Radio with Control Head		2.65 lb (1.2 kg)	
FCC ID	Type 1	K44479200	K44479300
	Type 2	—	K44479301
IC Certification	Type 1	282F-479200	—
	Type 2	—	282F-479301

RECEIVER		NX-3720HG	NX-3820HG
Sensitivity	NXDN 6.25 kHz Digital, 3 % BER	0.20 µV	
	NXDN 12.5 kHz Digital, 3 % BER	0.25 µV	
	DMR 12.5 kHz Digital, 5 % BER	0.25 µV	
	DMR 12.5 kHz Digital, 1 % BER	0.45 µV	
	Analog, 12 dB 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		4 W	
TRANSMITTER		**NX-3720HG**	**NX-3820HG**
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 @ 25 kHz	45 dB	
	Analog @ 12.5 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	

*25 and 30 kHz are not included in the models sold in the USA or US territories.
Analog measurements made per TIA603. Specifications are measured according to applicable standards.
Specifications shown are typical and subject to change without notice, due to advancements in technology.

APPLICABLE 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, V	516.5/ I, IV, V	516.6/ I, IV, V
International Protection Standards					
Dust & Water	IP54: RF Deck; IP55: Remote Control Head				

*All interfaces must be fully sealed with appropriate covers or by designated genuine accessories.

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Global Website

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