KENWOOD

NEXEDGE®

One Radio with Multi-Protocol Support

NX-3720HG/3820HG
NX-3920G/3921G

NXDN® — DMR Gen2 — Bluetooth® — GPS — FleetSync® — DMR base TRUNKING T3&S — DMR Auto Slot Select

MULTI-PROTOCOL DIGITAL & ANALOG MOBILE RADIOS

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. This model offers 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.

Features

Multi-protocol digital radio: Designed to operate under NXDN® or DMR digital, and FM analog protocols

NXDN Conventional and Type-C & Gen2 Trunking

DMR Tier 2 Conventional & Site Roaming

DMR Auto Slot Select

DMR Tier 3 Trunking

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)

7-color LED Bar Indicator

Remote Control Head (Option)

Optional DES and AES Encryption

External and Internal Speaker Switching

Built-in Bluetooth® for hands-free operation for IoT applications - Applicable Bluetooth profiles: HSP (Headset Profile) and SPP (Serial Port Profile)

Renowned KENWOOD Audio Quality achieved with Active Noise Reduction (ANR) that utilizes built-in DSP

Built-In GPS Receiver for effective fleet and incident management

IP54 and MIL-STD-810 C/D/E/F/G

4 Watts Audio Output Power

512 CH/128 Zones

1000 Channel option

Paging Call

Emergency Call

Status/Text Message

Remote Stun/Kill/Check

Digital – NXDN® Mode

NXDN Conventional	Remote Monitor
NXDN Type-C & Gen2 Trunking	All Group Call
6.25 & 12.5 kHz Channels	Over-the-Air Alias (OAA)
Advanced GPS	Over-the-Air Programming (OTAP)

Digital – DMR Mode

Two-slot TDMA in 12.5kHz channels	Call Interruption
DMR Tier 2 Conventional / Site Roaming	Dual-slot Direct Mode
DMR Auto Slot Select	Optional ARC4 Encryption
S-Trunking (Ver. UP) DMR Tier 3 Trunking	

Analog – FM Mode

Conventional & LTR Trunking	MDC-1200: PTT ID ANI / Caller ID Display, Emergency, Radio Check /Inhibit
FleetSync/II: PTT ID ANI / Caller ID Display, Selective Group Call, Emergency Status Text Messages	QT / DQT, DTMF, 2-Tone
	Built-in Voice Inversion Scrambler

Multi-Protocol
Unsurpassed interoperability for Enterprise radio users with the freedom to migrate at your own pace.

Gen2
Scalable server-based system architecture for management of NEXEDGE wide area digital communications systems.

Klarity
The ultimate level of sound clarity technology combining Optimization, advanced Sound Analysis and Active Noise Reduction.

Accessories

KMC-9C/59C
Desktop Microphone

KMC-65M
Microphone

KMC-66M
Keypad Microphone

KCT-18
Ignition Sense Cable
(Requires KCT-60)

KCT-23
DC Power Cable
M: 10ft (3m) / M3: 23ft (7m)

KCT-60
Connection Cable
(D-sub 15 to Molex
15 Pin Connector)

KCT-71
Remote Control Cablr
(M2: 17ft M3: 25ft   M4: 1.6ft)

KCT-72
External Accessory
Connection Cable
for KRK-18HM

KLF-2
Line Filter

KMB-10
Key Lock Adapter

KRA-40G
GPS Active Antenna

KPS-15
DC Power Supply
(23A max)

KMB-34
Mounting Case
for KPS-15

KPG-180AP
OTAP Manager

KRK-18HM
Interface Kit for a
Control Head

KRK-19BM
Interface Kit for
an RF Deck

Specifications

General	NX-3720HG	NX-3820HG	NX-3920G	NX-3921G
Frequency Range	136-174 MHz	Type 1 450-520 MHz Type 2 400-470 MHz	TX/RX: 851-870 MHz TX:806-825 MHz	TX/RX: 935-941 MHz TX: 896-902 MHz
Max. Channels Per Radio	Up to 1000 CH with option			
Number of Channels	512			
Number of Zones	128			
Channel Spacing				
Analog	12.5/15/25*/30* kHz	12.5/25* kHz	12.5/25 kHz	12.5 kHz
Digital	6.25 kHz/12.5 kHz	6.25 kHz/12.5 kHz	6.25 kHz/12.5 kHz	6.25 kHz/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	-22ºF to +140ºF (-30ºC to +60ºC)			
Frequency Stability	± 0.5 ppm			
Dimensions Radio with Control Head	(W x H x D) Projections Not Included 6.30 x 1.69 x 6.30 in (160 x 43 x 160 mm)			
Weight Radio Radio with Control Head	2.65 lbs (1.2 kg)			
FCC ID				
Type 1	K44479200	K44479300	K44502600	K44502601
Type 2		K44479301		
IC Certification				
Type 1	282F-479200			282F-502601
Type 2		282F-479301	282F-502600	

Receiver	NX-3720HG	NX-3820HG	NX-3920G	NX-3921G
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)		0.30 µV		
DMR 12.5 KHz Digital (1% BER)		0.45 µV		
Analog (12dB SINAD)		0.25 µV		
Selectivity				
Analog @ 12.5kHz		70 dB		60 dB
Analog @ 25kHz		80 dB		70 dB
Intermodulation		70 dB		
Spurious Rejection		80 dB		
Audio Distortion		2%		
Audio Output Power		4 W/4 Ω		

Transmitter	NX-3720HG	NX-3820HG	NX-3920G	NX-3921G
RF Power Output (High / Mid / Low)	50 W / 30 W / 5 W	45 W /30 W / 5 W	15 W / 5 W	
Spurious Emission	73 dB	75 dB	-70 dB	
FM Hum & Noise				
Analog @ 12.5kHz		40 dB		
Analog @ 25kHz		45 dB		
Audio Distortion		2%		
Digital Protocol	ETSI TS 102 361-1, -2, -3, -4			
Emission Designator	16K0F3E*, 14K0F3E**, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXD, 7K60FXE, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D			

*25/30 kHz in VHF/UHF Bands (except T-Band) are not included in the models sold in the USA or US territories.
** NX-3920G only
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.

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					
Dust & Water Protection*¹	IP54, IP55*²				

*¹ Applicable microphone must be connected to the radio, and all accessory connectors must be covered.   *² IP54: RF Deck; IP55: Remote Control Head.