

NX-1700/1800 VHF/UHF TRANSCEIVERS

[Suffix on the model no. stands for CAI:
N=NXDN, D=DMR, and A=Analog Versions]

NX-1000 series Radios – For each and every

NXDN™ **DMR**

DMR >>>>>
Auto Slot
Select >>>>>

NXDN
D
TYPE

FleetSync®
KENWOOD

SOUND PERFORMANCE, SMOOTH OPERATION

Emulating the distinguished NX-3000 and NX-5000 series, the NX-1700/1800 mobile radio supports multiple protocols – including NXDN and DMR – as well as mixed digital & FM analog operation. As it's packed with all the features essential for making the most of these digital CAs, it clearly qualifies as a cost-effective solution for numerous enterprise- and operation-critical applications. It's also equipped with optimizable TX/RX audio quality, and a smart front panel that prioritizes simple convenience: operational status is clear at a glance from the white backlit LCD display and 7-color LED indicator.

● GENERAL FEATURES

- **"One Radio" with Multi-protocol Support:** Designed to operate under an NXDN or DMR digital CAI, and FM analog protocols
- **Upgradable Digital/Analog mode by software option** (no firmware upgrade required)
- **Easy visible, white backlit LCD display:** Alphanumeric, 10-digit, 13-character frame (aliases and icons)
- **7-color LED indicator** used to display various radio status
- **Renowned KENWOOD Audio Quality: 6 W (max) loud audio and optimizable TX/RX audio profile:** Audio Equalizer, Auto Gain Control (TX/RX) and Microphone type settings
- **Max. 260 Channels per radio, 128 Zones per radio, and 250 Channels per zone**
- **Wide band UHF 70 MHz coverage**
- **Various scan functions:** Dual/Single Priority scan, Multi/Single Zone scan and more
- **Orange-colored Emergency button & Customizable Emergency functions**
- **Lone Worker**
- **Remote Stun, Kill, Check**
- **Max/Min Volume setting**
- **Voice Announcement**
- **Electronic Serial Number (ESN)**
- **Display Customization**
- **D-sub, 15-pin connector** on the rear panel
- **GPS connectivity**
- **Horn Alert and Public Address**
- **Ignition Sense**
- **3.5 mm audio jack** for external speaker
- **IP54 and MIL-STD 810C/D/E/F/G/H**

● DIGITAL – NXDN

- FDMA – Very Narrow 6.25 kHz and Narrow 12.5 kHz Bandwidths
- NXDN Conventional: Voice and Data Services
- NXDN Type-D Trunking (Optional)
- Site Roaming
- Digital / Analog Mixed Mode
- Group / Individual Call
- Status / Short Data, Paging Call
- Remote Stun Kill, Monitor, Check & Control
- GPS Combination with additional module
- Mixed mode
- Late Entry
- Digital Bit Scrambler
- Over-the-Air Alias (OAA)

● DIGITAL – DMR

- TDMA – 2-slot 12.5 KHz Bandwidth Equivalent to 6.25 KHz Very Narrow Bandwidths
- DMR Tier II Conventional: Voice and Data services
- Site Roaming

- DMR Auto Slot Select
- Dual-slot Direct Mode
- Call Interruption
- Group / Individual Call
- Status / Short Data, Paging Call
- Remote Stun Kill, Monitor, Check & Control
- GPS Combination with additional module
- Digital Analog Mixed Mode
- Digital bit Scrambler
- ARC4 Enhanced Encryption (Optional)
- Late Entry
- Over-the-Air Alias (OAA)

● ANALOG – FM

- FM Conventional
- FleetSync/II: PTT ID, Stun/Revive, Mute hold, Talk back, Selcall
- MDC-1200: PTT ID ANI / Radio Inhibit / Uninhibit, Radio Check, Emergency
- QT / DQT, DTMF, 5-Tone
- Built-in Voice Inversion Scrambler per channel
- Compander Function per channel
- Voting



OPTIONAL ACCESSORIES

- **KMC-9C**
DESKTOP MICROPHONE
(non TDMA)



- **KMC-60**
MICROPHONE

- **KMC-62**
KEYPAD MICROPHONE
(with 16-keypad)



- **KMC-65**
MICROPHONE
[IP54/55]



- **KMC-66**
MICROPHONE
[IP54/55]
(with 12-keypad)



- **KES-5A**
EXTERNAL SPEAKER
(requires KCT-60)



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



- **KCT-23**
DC POWER CABLE



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



- **KLF-2**
LINE FILTER



- **KMB-10**
KEY LOCK ADAPTER



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-1700	NX-1800
Frequency Range		136-174 MHz	400-470 MHz
Max. Channels per Radio		260	
Number of Zones		128	
Number of Channel per Zone		250	
Channel Spacing	Analog	25 / 20 / 12.5 kHz	
	Digital	12.5 / 6.25 kHz	
Operating Voltage		13.2 V DC (10.8 V to 15.6 V DC)	
Current Drain	Standby	0.45 A max	
	RX	2.4 A max	
	TX	10 A max	
Operating Temperature		-30°C to +60°C	
Frequency Stability (-30°C to +60°C; +25°C Ref.)		± 0.5 ppm	
Dimensions (W x H x D)	Incl. Projections	161 x 43 x 168.2 mm	
	Excl. Projections	160 x 43 x 137.7 mm	
Weight (net)		1.21 kg	
Applicable Standards	ETS (EMC)	EN 301 489-1, EN 301 489-5	
	ETSI (Spectrum)	EN 300 086, EN 300 113, EN 300 219, EN 301 166	
	ETSI Safety	EN 62368-1	

RECEIVER		NX-1700	NX-1800
Sensitivity	NXDN@12.5 kHz 1 % BER	0.30 μV	
	NXDN@12.5 kHz 3 % BER	0.24 μV	
	NXDN@6.25 kHz 1 % BER	0.24 μV	
	NXDN@6.25 kHz 3 % BER	0.19 μV	
	DMR Digital 1 % BER	0.28 μV	
	DMR Digital 5 % BER	0.20 μV	
	Analog (12 dB SINAD) @ (25/20/12.5 kHz)	0.26 / 0.27 / 0.22 μV	
	Analog (20 dB SINAD) @ (25/20/12.5 kHz)	0.32 / 0.33 / 0.33 μV	
Selectivity	Analog @ 25 / 20 / 12.5 kHz	75 / 73 / 65 dB	
Intermodulation (Analog)		65 dB	
Spurious Response (Analog)		75 dB	
Audio Output (Max / Rated) at 4 Ω		6 / 4 W	
Audio Distortion at Rated Audio		3 %	
TRANSMITTER		NX-1700	NX-1800
RF Power Output (High / Low)		25 / 5 W	25 / 5 W
Spurious Emission		<1 GHz ≤ -36 dBm, 1 GHz - 4 GHz ≤ -30 dBm	
FM Hum & Noise Analog @ 25 / 20 / 12.5 kHz		45 / 43 / 40 dB	
Audio Distortion		3 %	
Digital Protocol (DMR)		ETSI TS 102 361-1, -2, -3	
Emission Designator		16K0F3E, 14K0F2D, 14K0F3E, 12K0F2D, 11K0F3E, 8K50F3E, 7K50F2D, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXE, 7K60FXD, 7K60FXW, 7K60F1E, 7K60F1D, 7K60F1W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

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

APPLICABLE MIL-STD & IP

MIL Standards	Methods / Procedures					
	810C	810D	810E	810F	810G	810H
Low Pressure	500.1/ I	500.2/ I, II	500.3/ I, II	500.4/ I, II	500.5/ I, II	500.6/ I, II
High Temperature	501.1/ I, II	501.2/ I, II	501.3/ I, II	501.4/ I, II	501.5/ I, II	501.7/ I, II
Low Temperature	502.1/ I	502.2/ I, II	502.3/ I, II	502.4/ I, II	502.5/ I, II	502.7/ I, II
Temp. Shock	503.1/ I	503.2/ I	503.3/ I	503.4/ I, II	503.5/ I	503.7/ I
Solar Radiation	505.1/ I	505.2/ I	505.3/ I	505.4/ I	505.5/ I	505.7/ I
Rain*1	506.1/ I, II	506.2/ I, II	506.3/ I, II	506.4/ I, III	506.5/ I, III	506.6/ I, III
Humidity	507.1/ I, II	507.2/ II, III	507.3/ II, III	507.4	507.5/ II	507.6/ II
Salt Fog	509.1/ I	509.2/ I	509.3/ I	509.4	509.5	509.7
Dust *1	510.1/ I	510.2/ I	510.3/ I	510.4/ I, III	510.5/ I	510.7/ I
Vibration	514.2/ V/III, X	514.3/ I	514.4/ I	514.5/ I	514.6/ I	514.8/ I
Shock	516.2/ I, II, III, V	516.3/ I, IV, V	516.4/ I, IV, V	516.5/ I, IV, V	516.6/ I, IV, V	516.8/ I, IV, V, VI
International Protection Standards						
Dust & Water	IP54*1 (per IEC60529)					

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

• NXDN™ is a trademark of JVCKENWOOD Corporation and Icom Inc. • NEXEDGE® is a registered trademark of JVCKENWOOD Corporation.
• FleetSync® is a registered trademark of JVCKENWOOD Corporation. • All other trademarks are the property of their respective holders.

JVCKENWOOD U.K. Limited

First Floor, Gleneagles, The Belfry, Colonial Way, Watford, Hertfordshire WD24 4WH, United Kingdom
<https://kenwoodcommunications.co.uk/comm/>



ISO9001 Registered
Communications Systems Business Unit
JVCKENWOOD Corporation

CL882-[E]-E-2-R1.01