

# NX-1000 series Radios - For each and every











# NX-1700H/1800H VHF/UHF TRANSCEIVERS

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

## SOUND PERFORMANCE, SMOOTH OPERATION

Emulating the distinguished NX-3000 and NX-5000 series, the NX-1700H/1800H 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 CAIs, it clearly qualifies as a cost-effective solution for numerous enterprise- and operationcritical 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

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)

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

### 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, 2-Tone
- Built-in Voice Inversion Scrambler per
- Compander Function per channel



### OPTIONAL ACCESSORIES

• KMC-9C DESKTOP MICROPHONE (non TDMA)







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

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



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



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



• KLF-2 LINE FILTER



• KMB-10 KEY LOCK ADAPTER



• KPS-15 DC POWER SUPPLY

• KMB-34 MOUNTING CASE FOR KPS-15 AND MOBILE RADIOS

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-1700H	NX-1800H	
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*1	25 / 12.5 kHz		
	Digital	12.5 / 6.25 kHz		
Operating Voltage		13.6 V DC +/-15 %		
	Standby	0.45 A max		
Current Drain	RX	2.4 A max		
	TX	13 A max		
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		
Dimensions	Incl. Projections	6.34 x 1.69 x 6.62 in (161 x 43 x 168.2 mm)		
(W x H x D)	Excl. Projections	6.30 x 1.69 x 5.42 in (160 x 43 x 137.7 mm)		
Weight (net)		2.67 lb (1.21 kg)		
FCC ID (Pending)	Type 1	K44517000	-	
rcc ib (Pending)	Type 2	-	K44517100	
ISED Certification (Pending)	Type 1	282F-517000	-	
	Type 2	_	282F-517100	

RECEIVER		NX-1700H	NX-1800H		
Sensitivity	NXDN 12.5 kHz Digital, 3 % BER	0.22 μV			
	NXDN 6.25 kHz Digital, 3 % BER	0.18 μV			
	DMR 12.5 kHz Digital, 5 % BER	0.18 μV			
	Analog 25 kHz, 12 dB SINAD	0.24 μV			
	Analog 12.5 kHz, 12 dB SINAD	0.20 μV			
Selectivity	Analog @ 25 kHz	75 dB			
	Analog @ 12.5 kHz	65 dB			
Intermodulation (Analog)		73 dB			
Spurious Response (Analog)		75 dB			
Audio Output (Max / Rated) at 4 Ω		6 / 4 W			
Audio Distortion at Rated Audio		3 %			
TRANSMITTER		NX-1700H	NX-1800H		
RF Power Output (High / Mid / Low)		50 / 25 / 5 W	45 / 25 / 5 W		
Spurious Emission		-73 dB	-75 dB		
FM Hum &	Analog @ 25 kHz	45 dB			
Noise	Analog @ 12.5 kHz	40 dB			
Audio Distortion		3 %			
Digital Protocol (DMR)		ETSI TS 102 361-1, -2, -3			
Emission Designator		16K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D, 7K60FXD, 7K60FXW, 7K60FXE, 7K60F1E, 7K60F1D, 7K60F1W			

<sup>\*1: 25</sup> and 30 kHz in VHF/UHF bands are not included in the models sold in the USA or US territories.

Analog measurements made per TIA603. Specfications are measured according to applicable standards.

Specfications 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	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*2	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*2	510.1/ I	510.2/ I	510.3/ I	510.4/ I, III	510.5/ I	510.7/ I		
Vibration	514.2/ VIII, 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 S	standards							
Dust & Water	IP54*2 (ner IFC60529)							

<sup>\*2:</sup> All interfaces must be fully sealed with appropriate covers or by designated genuine accessories.

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