KENWOOD

NEXEDGE®

One Radio with Multi-Protocol Support

# NX-1700H/1800H

VHF/UHF TRANSCEIVERS

NXDN® DMR DMR Auto Slot Select FleetSync®

### 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 numerous enterprise and operation-critical applications. It's also equipped with optimizable TX/RX audio quality, and a customizable front panel that prioritizes simple convenience: operational status is clear at a glance from the white backlit LCD display and 7-color LED indicator.

## Features

"One Radio" with Multi-protocol Support:
Designed to operate under an NXDN or DMR digital, 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

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

Dual Priority Scan

Max/Min Volume setting

Voice Announcement

Electronic Serial Number (ESN)

Display Customization

D-sub, 15-pin GPIO and audio connector

GPS connectivity (Optional receiver required)

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® Mode

FDMA – Very Narrow 6.25 kHz and Narrow 12.5 kHz Bandwidths

NXDN Conventional:

Voice and Data Services

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)

Transparent Data

## Digital – DMR Mode

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)

## FM Modes – General

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 channel

Compander Function per channel

## Accessories

All accessories may not be available in all markets.
Contact an authorized Kenwood dealer for details and complete list of all accessories.

**KMC-9C**
Desktop Microphone (non TDMA)

**KMC-59C**
Desktop Microphone

**KMC-60**
Microphone

**KMC-62**
16-Keypad Microphone

**KMC-65M**
Microphone [IP54/55]

**KMC-66M**
12-Keypad Microphone [IP54/55]

**KES-5A**
20W External Speaker (Requires KCT-60)

**KES-9P**
10W External Speaker

**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

**KPS-15**
DC Power Supply (23A max)

**KMB-34**
Mounting Case for KPS-15

## 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 Channels per Zone | 250 | |
| Channel Spacing | | |
| Analog | 12.5/25 kHz | |
| Digital | 6.25/12.5 kHz | |
| Power Supply | 13.6 V DC ±15% | |
| Current Drain | | |
| Standby | 0.45 A | |
| RX | 2.4 A | |
| TX | 13 A | |
| Operating Temperature | -22ºF to +140ºF (-30ºC to +60ºC) | |
| Frequency Stability | ± 0.5 ppm | |
| Dimensions | (W x H x D) Projections Not Included<br>6.34 x 1.69 x 6.62 in.<br>(161 x 43 x 168.2 mm.) | |
| Weight Radio | 2.67 lbs (1.21 kg) | |
| ISED Certification | | |
| Type 1 | 282F-517000 | 282F-517100 |
| Type 2 | | |

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.

| Receiver | NX-1700H | NX-1800H |
|---|---|---|
| Sensitivity | | |
| NXDN* 6.25 kHz Digital (3% BER) | 0.18 µV | |
| NXDN*12.5 kHz Digital (3% BER) | 0.22 µV | |
| DMR Digital 12 kHz (5% BER) | 0.18 µV | |
| Analog 12 kHz (12dB SINAD) | 0.20 µV | |
| Analog 25 kHz (12dB SINAD) | 0.24 µV | |
| Selectivity | | |
| Analog @ 12.5kHz | 65 dB | |
| Analog @ 25kHz | 81 dB | |
| Intermodulation | 73 dB | |
| Spurious Rejection | 75 dB | |
| Audio Distortion | 3% | |
| Audio Output Power | 6 W/ 4 W 4 Ω | |

| Transmitter | NX-1700H | NX-1800H |
|---|---|---|
| RF Power Output | 50 W / 25 W / 5 W | 45 W / 25 W / 5 W |
| Spurious Emission | -73 dB | -75 dB |
| FM Hum & Noise | | |
| Analog @ 12.5kHz | 40 dB | |
| Analog @ 25kHz | 50 dB | |
| Audio Distortion | 3% | |
| Emission Designator | 16K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D, 7K60FXD, 7K60FXW, 7K60FXE, 7K60F1E, 7K60F1D, 7K60F1W | |

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## 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 | MIL 810H 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 | 500.6/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 | 501.7/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 | 502.7/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 | 503.7/Procedure I |
| Solar Radiation | 505.1/Procedure I | 505.2/Procedure I | 505.3/Procedure I | 505.4/Procedure I | 505.5/Procedure I | 505.7/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 | 506.6/Procedure I, III |
| Humidity | 507.1/Procedure I, II | 507.2/Procedure II, III | 507.3/Procedure II, III | 507.4 | 507.5/Prcedure II | 507.6/Prcedure II |
| Salt Fog | 509.1/Procedure I | 509.2/Procedure I | 509.3/Procedure I | 509.4 | 509.5 | 509.7 |
| Dust | 510.1/Procedure I | 510.2/Procedure I | 510.3/Procedure I | 510.4/Procedure I, III | 510.5/Procedure I | 510.7/Procedure I |
| Vibration | 514.2/Procedure VIII, X | 514.3/Procedure I | 514.4/Procedure I | 514.5/Procedure I | 514.6/Procedure I | 514.8/Procedure I |
| Shock | 516.2/Procedure I, II, III, 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 | 516.8/Procedure I, IV, V, VI |
| International Protection Standard | | | | | | |
| Dust & Water Protection*1 | IP54 (per IEC60529) | | | | | |

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

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