# KENWOOD

## NX-1000 series
### Radios – For each and every

**NXDN**™  **DMR**

**FleetSync**® by KENWOOD

**DMR Auto Slot Select**

# NX-1300 - K7
## UHF TRANSCEIVERS
**[Suffix on the model no. stands for CAI: N=NXDN and D=DMR Versions]**

## ONE-"K"-FITS-ALL: A SINGULAR SOLUTION

If you are thinking of harnessing the latest digital protocols – NXDN or DMR – to enhance business efficiency, the NX-1300 has you covered. Our One-"K"-Fits-All solution offers the widest selection of two-way radios for everyday use. The model matrix also includes basic and keypad variations, with or without a high-contrast backlit LCD. Other features include a 7-color LED indicator and the popular KENWOOD 2-pin audio accessory connector. Plus, mixed-mode operation ensures seamless integration with legacy radios while smoothing the onward migration path to digital. But whatever your specific needs, audio quality is what determines clear voice communications – which is why KENWOOD radios are used under the most grueling conditions, like the cockpit of a racing car. Thanks to our extensive experience with professional systems, reliability is second to none. So whatever your radio requirements, KENWOOD's NX-1300 offers a single platform that's right for you.

### ⬤ GENERAL FEATURES

- **Wide variations, "One" platform:** To meet various demands — NXDN or DMR digital CAI models are available
- **Choose from direct & intuitive LCD with full keypad, standard keypad or basic enclosures**
- **Easy visible Display: 8-digit LCD** models featuring high-contrast, white backlit LCD
- **Large 7-Color LED indicator on the top panel**
    - Selective Power-on LED
    - Selective Call Alert LED
    - Battery Level Indication
    - Multi-status function indication
- **RF output power 5W both on UHF**
- **Wide band UHF 70MHz coverage**
- **Renowned KENWOOD Audio Quality:** TX/RX audio profile with optimizable digital processor
    - Audio Equalizer: Flat, High, Low
    - Auto Gain Control: On, High, Low, Off
    - Noise Suppressor
    - Microphone type settings
- **Multiple Scan Functions;** Dual Priority, Single Priority, Single Zone, Multi, Normal Scan
- **VOX & PTT –triggered Semi- VOX, Voice-operated TX**
- **Emergency Function:** Customizable Emergency Profile
- **Lone Worker**
- **Max / Min Volume setting & Volume control**
- **Voice Announcement**
- **Remote Stun / Kill / Check**
- **Front Panel Programming Mode** (for Keypad model)
- **Electronic Serial Number (ESN)**
- **MIL-STD-810 C/D/E/F/G**
- **IP54 / 55**

### ⬤ DIGITAL – NXDN

- FDMA – Very narrow 6.25 kHz & narrow 12.5 kHz bandwidths
- NXDN Conventional Operation
- Site Roaming
- Digital / Analog Mixed mode
- Group / Individual Call
- Status / Short data, Paging Call
- Remote Stun / Kill, Monitor, Check & Control
- Digital Bit Scrambler
- Late Entry
- Over-the-Air Alias (OAA)

### ⬤ DIGITAL – DMR

- TDMA 2-slot 12.5 kHz bandwidth equivalent to 6.25 kHz very narrow bandwidth
- DMR Tier II Conventional Operation
- Site Roaming
- DMR Auto Slot Select
- Dual Slot Direct Mode
- Digital / Analog Mixed mode
- Call Interruption
- Group / Individual Call
- Status / Short data, Paging Call
- Remote Stun / Kill, Monitor, Check & Control
- Enhanced Encryption (ARC4)
- Digital Bit Scrambler
- Late Entry
- Over-the-Air Alias (OAA)

### ⬤ ANALOG – FM

- FM Conventional Operation
- FleetSync: PTT ID, Stun/Revive, Talk back, Selcall
- MDC1200: PTT ID, Radio Inhibit / Uninhibit, Radio check, Emergency
- QT / DQT, DTMF, 2-tone, 5-tone
- Built-in Programmable Voice Inversion Scrambler (per channel)
- Built-in Compander (per channel)
- Voting

## ● OPTIONAL ACCESSORIES

- **KNB-45L/69L**
  Li-ion BATTERY PACK (7.4 V/2000 mAh, 7.4 V/2450 mAh)

- **KNB-53N**
  Ni-MH BATTERY PACK (7.2 V/1400 mAh)

- **KNB-82LC**
  Li-ion BATTERY PACK (7.4 V/1900 mAh, Intrinsically Safe) [IP67]*  *Available later

- **KNB-84L**
  Li-ion BATTERY PACK (7.4 V/1900 mAh) [IP67]

- **KSC-35S**
  RAPID CHARGER (for Li-ion KNB-45L/69L/82LC/84L)

- **KSC-43**
  RAPID CHARGER (for Li-ion KNB-45L/69L/82LC/84L & Ni-MH KNB-53N)

- **KSC-356A**
  MULTIPLE CHARGER (6-pocket for Li-ion KNB-45L/69L/82LC)

KNB-45L   KNB-69L
KSC-35S
KSC-43
KSC-356A

- **KMB-35A**
  MULTI CHARGER ADAPTER (for KSC-35SCR)

- **KVC-22**
  DC VEHICULAR CHARGER ADAPTER (for KSC-35S)
  KVC-22

- **EMC-11/12**
  CLIP MICROPHONE WITH EARPHONE (STD, EAR-HANGING)
  EMC-12

- **KHS-35F**
  HEADSET (EAR-HOOK)

- **KMC-45D**
  SPEAKER MICROPHONE

- **KRA-22/23**
  VHF/UHF HELICAL ANTENNA (Low Profile)
  KRA-22   KRA-23

- **KRA-26**
  VHF HELICAL ANTENNA (Standard Length)

- **KRA-27**
  UHF WHIP ANTENNA (Standard Length)

- **KRA-41/42**
  VHF/UHF STUBBY ANTENNA
  KRA-41   KRA-42

- **KBH-10**
  BELT CLIP

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-1300 | |
|---|---|---|---|
| Frequency Range | | 350 - 400 MHz | |
| Max. Channels per Radio | | 260 (64 for Basic models) | |
| Number of Zones | | 128 (4 for Basic models) | |
| Max. Channels per Zone | | 250 (16 for Basic models) | |
| Channel Spacing | Analog | 30 / 25 / 15 / 12.5 kHz | |
| | Digital | 12.5 / 6.25 kHz | |
| Power Supply | | 7.5 VDC ±20 % | |
| Battery Life (5-5-90) for Std keypad model | | TDMA | FDMA |
| | KNB-45L/84L | 14.5 H | 11 H |
| | KNB-53N | 10 H | 7 H |
| | KNB-69L | 19 H | 14 H |
| Operating Temperature (Radio only)*1 | | -30°C to +60°C | |
| Frequency Stability (-30 to +60°C; +25°C Ref.) | | ±0.5 ppm | |
| Dimensions (W x H x D) / Weight (net) Projections not included; for Std keypad model | Radio only | 54 x 123 x 33.5 mm / 175 g | |
| | With KNB-45L/84L | 54 x 123 x 33.5 mm / 295 g | |
| | With KNB-53N | 54 x 123 x 33.5 mm / 365 g | |
| | With KNB-69L | 54 x 123 x 37.5 mm / 310 g | |

*1 Operating temperature specification for a Li-ion battery is -10°C to +60°C.
All specifications shown are typical.
Analog measurements made per TIA-603 and specifications shown are typical.
NXDN CAI & EN300-113, EN301 166 and specifications shown are typical.
Details and timing of firmware and software updates are subject to change without notice.
Specifications are subject change without notice, due to advancements in technology.

| RECEIVER | | NX-1300 |
|---|---|---|
| Sensitivity | NXDN@6.25 kHz 3 % BER | 0.19 µV |
| | NXDN@12.5 kHz 3 % BER | 0.24 µV |
| | DMR@12.5 kHz 1 % BER | 0.28 µV |
| | DMR@12.5 kHz 5 % BER | 0.20 µV |
| | Analog@12.5 / 25 kHz (12 dB SINAD) | 0.22 / 0.26 µV |
| Selectivity | Analog@12.5 / 25 kHz | 67 / 74 dB |
| Intermodulation | | 65 dB |
| Spurious Rejection | | 70 dB |
| Audio Distortion | | 7 % |
| Audio Output (Internal) | | 1 W |
| **TRANSMITTER** | | **NX-1300** |
| RF Power Output | | 5 / 4 / 1 W |
| Spurious Emission | | -70 dB |
| FM Hum & Noise   Analog@12.5 / 25 kHz | | 40 / 45 dB |
| Audio Distortion | | 2 % |
| DMR Digital Protocol | | ETSI TS 102 361-1, -2, -3 |
| Emission Designator | | 16K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D, 7K60FXE, 7K60FXD |

## ● 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 | 516.4/ I, IV | 516.5/ I, IV | 516.6/ I, IV |
| International Protection Standards | | | | | |
| Dust & Water | IP54/55 | | | | |

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

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

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