

## NX-1200/1300

### VHF/UHF TRANSCEIVERS

#### A SINGULAR SOLUTION

If you are thinking of harnessing the latest digital protocols – NXDN or DMR – to enhance business efficiency or FM analog for its simplicity, the NX-1200/1300 has you covered. Our singular 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-1200/1300 offers a single platform that's right for you.

**NXDN®** **DMR** **DMR Auto Slot Select** **FleetSync**



Standard Keypad & Basic Models

### Features

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

Choose from direct & intuitive LCD with 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 VHF/UHF

Mixed Zone - analog and digital

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 and IP55

Intrinsically safe option (Available later)

### Digital – NXDN® Mode

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 Mode

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

Built-in Programmable Voice Inversion Scrambler (per channel)

Built-in Compressor (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.

<b>KNB-45L</b> 2,000mAh/7.4V Li-Ion Battery Pack		<b>KSC-35SK</b> Fast Charger For the KNB-45L/69L 82LCM (3-Hour)		<b>KRA-22/23</b> VHF/UHF Low Profile Helical Antenna		<b>KMC-45D</b> Speaker Microphone		<b>KHS-31C</b> C-Ring PTT Ear Hanger Headset	
<b>KNB-69L</b> 2,550mAh/7.4V Li-Ion Battery Pack		<b>KSC-43K</b> Dual Chemistry Fast Charger For the KNB 29N/45L/69L/82LCM		<b>KRA-26/ 27</b> VHF Helical Antenna UHF Whip Antenna		<b>KHS-26</b> Earbud In-line PTT Headset		<b>KBH-10</b> Belt Clip	
<b>KNB-82LCM</b> 2,000mAh/7.4V, Intrinsically Safe Li-Ion Battery Pack		<b>KVC-22</b> DC Vehicular Charger Adapter		<b>KRA-41/42</b> VHF/UHF Stubby Antenna		<b>KHS-27A</b> D-Ring In-line PTT Headset			

# Specifications

General	NX-1200	NX-1300
Pre-set Frequencies		
Type 1	136-174 MHz	450-520 MHz
Type 2		400-470 MHz
Max. Channels per Radio	260 (64 for basic model)	
Number of Zones	128 (4 for basic model)	
Max. Channels per Zone	250 (16 for basic model)	
Channel Spacing		
Analog	30*1 / 25*1 / 15 / 12.5 kHz	
Digital	12.5 / 6.25 kHz	
Power Supply	7.5 VDC ±20 %	
Battery Life		
KNB-45L (2000mAh)	DMR Approx. 14.5 hours	Analog/NXDN Approx. 11 hours
KNB-69L (2550mAh)	Approx. 19 hours	Approx. 14 hours
Operating Temperature(Radio only)*2	-22°F to +140°F (-30°C to +60°C)	
Frequency Stability (-30 to +60°C, +25°C Ref)	±0.5 ppm	
Antenna Impedance	50 Ω	
Dimensions	(W x H x D) Projections Not Included	
Radio with KNB-45L/82LCM	213 x 484 x 132 in (54 x 123 x 33.5 mm)	
Radio with KNB-69L	213 x 484 x 148 in (54 x 123 x 37.5 mm)	
Weight Radio Only	617 oz (175 g)	
Radio with KNB-45L/82LCM	10.41 oz (295 g)	
Radio with KNB-69L	10.93 oz (310 g)	
FCC ID		
Type 1	K44501000	K44501101 (pending)
Type 2		K44501100
IC Certification	282F-501000	282F-501100

\*1 25 / 30 kHz in VHF/UHF Bands excluding T-Band are not included in the models sold in the USA or US territories.  
 \*2 Operating temperature specification for a Li-Ion battery is -10°C to +60°C [14°F to +140°F].

Analog measurements made per TIA603. Specifications are measured according to applicable standards. Specifications are subject change without notice, due to advancements in technology.

Receiver	NX-1200	NX-1300
Sensitivity		
NXDN* @ 6.25 kHz Digital (3% BER)		0.18 µV
NXDN* @ 12.5 kHz Digital (3% BER)		0.22 µV
DMR* @ 12.5 kHz Digital (1% BER)		0.25 µV
DMR* @ 12.5 kHz Digital (5% BER)		0.18 µV
Analog @ 12.5/25 kHz (12 dB SINAD)		0.24 µV / 0.20 µV
Selectivity		
Analog @ 12.5 / 25 kHz		68 dB / 74 dB
Intermodulation Distortion		70 dB
Spurious Response		70 dB
Audio Distortion		7%
Audio Output Power		1 W / 12 Ω (Internal Output)
Transmitter	NX-1200	NX-1300
RF Power Output (High / Low)		5 W / 4 W / 1 W
Spurious Response		-70 dB
FM Hum & Noise		
Analog @ 12.5 / 25 kHz		40 dB / 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, 7K60FXD, 7K60F7W

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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
Low Pressure	5001/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II	500.5/Procedure I, II
High Temperature	5011/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	516.4/Procedure I, IV	516.5/Procedure I, IV	516.6/Procedure I, IV

**International Protection Standard**  
 Dust & Water Protection\* IP54/55\* To meet IP54/55, the 2-pin connector cover has to be connected on the radio or the locking bracket has to be attached to the external speaker microphone.

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