

## NX-1000 series

### NX-1200/1300

#### VHF/UHF TRANSCEIVERS

NX-1200/1300 (DE/DE2/DE3) = DMR

NX-1200/1300 (NE/NE2/NE3) = NXDN

NX-1200/1300 (AE3) = Analogue

**NXDN™** **DMR**

**FleetSync®**  
by KENWOOD

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

### A universal radio: DMR + FM Analogue or NXDN + FM Analogue

If you are thinking of harnessing the latest digital protocols – DMR or NXDN – to enhance business efficiency, the NX-1200/1300 has you covered. Our entry level solution offers the widest selection of two-way radios for everyday use. The models also include basic and keypad variations, with or without a high-contrast backlit LCD. Other features include a 7-colour LED indicator and the popular KENWOOD 2-pin audio accessory connector. 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 gruelling of 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.

#### ● GENERAL FEATURES

- **Wide variations, "One" platform:** To meet various demands — NXDN or DMR digital CAI (Common Air Interface) models are available
- **Choose from direct & intuitive LCD with full & standard keypad or basic versions**
- **Easy visible Display: 8-digit LCD** models featuring high-contrast, white backlit LCD
- **Large 7-Colour 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**
- **Wide band UHF 70MHz coverage**
- **Renowned KENWOOD Audio Quality:** TX/RX audio profile with optimisable digital processor
  - Audio Equaliser: 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:** Customisable Emergency Profile
- **Lone Worker**
- **Max / Min Volume setting & Volume control**
- **Voice Announcement**
- **Remote Stun / Kill / Check**
- **Front Panel Programming Mode** (for Keypad models)
- **Electronic Serial Number (ESN)**
- **MIL-STD-810 C/D/E/F/G**
- **IP67, IP54 and IP55**
- **Intrinsically safe option (Available later)**

#### ● DIGITAL – NXDN

- FDMA – Very narrow 6.25 kHz & narrow
- 12.5 kHz bandwidths
- Type-D Trunking (Single site)
- NXDN Conventional Operation
- Site Roaming
- Digital / Analogue 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 / Analogue 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)

#### ● ANALOGUE – FM

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

NX1200/1300 (AE3)  
Analogue Non-Keypad

NX-1200/1200 (DE3/NE3)  
DMR/NXDN Non-Keypad



NX-1200/1300 (DE/NE)  
Full Keypad



NX-1200/1200 (DE2/NE2)  
Half Keypad

## OPTIONAL ACCESSORIES

- **KNB-45L/69L**  
Li-ion BATTERY PACK (7.4 V/2000 mAh, 7.4 V/2450 mAh)
- **KNB-84L**  
Li-ion BATTERY PACK (7.4 V/1900 mAh)
- **KNB-82LC**  
Li-ion BATTERY PACK (7.4 V/1900 mAh, Intrinsically Safe)\*  
\*1 Available later
- **KNB-53N**  
Ni-MH BATTERY PACK (7.2 V/1400 mAh)
- **KSC-35S**  
RAPID CHARGER (for Li-ion KNB-45L/69L/82LC)
- **KSC-43**  
RAPID CHARGER (for Li-ion KNB-45L/69L/82LC & Ni-MH KNB-53N)
- **KSC-356A**  
MULTIPLE CHARGER (6-pocket for Li-ion KNB-45L/69L/82LC)
- **KSC-35SCR**  
CHARGER POCKET (6-pocket for KMB-35A)



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

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



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



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



- **KMC-45D**  
SPEAKER MICROPHONE



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



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



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



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



- **KBH-10**  
BELT CLIP



All accessories and options may not be available in all markets. Contact an authorised KENWOOD dealer for details and complete list of all accessories and options.

## SPECIFICATIONS

GENERAL		NX-1200	NX-1300
Frequency Range		136-174 MHz	400-470 MHz
Max. Channels per Radio		260 (64 for no LCD models)	
Number of Zones		128 (4 for no LCD models)	
Max. Channels per Zone		250 (16 for no LCD models)	
Channel Spacing	Analogue	25 / 20 / 12.5 kHz	
	Digital	12.5 / 6.25 kHz	
Power Supply		7.5 VDC ±20 %	
Battery Life (5-5-90)		TDMA	FDMA/FM
	KNB-45L/84L	14.5 H	11 H
	KNB-53N	10 H	7 H
	KNB-69L	19 H	14 H
Operating Temperature		-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)	Radio only	2.13 x 4.84 x 1.32 in / 6.17 oz (54 x 123 x 33.5 mm / 175 g)	
	With KNB-45L/82LC	2.13 x 4.84 x 1.32 in / 10.41 oz (54 x 123 x 33.5 mm / 295 g)	
	With KNB-53N	2.13 x 4.84 x 1.32 in / 12.88 oz (54 x 123 x 33.5 mm / 365 g)	
	With KNB-69L	2.13 x 4.84 x 1.48 in / 10.93 oz (54 x 123 x 37.5 mm / 310 g)	
Projections not included; for Std keypad model			

Specifications are measured according to applicable standards. Specifications shown are typical and subject to change without notice, due to advancements in technology. Details and timing of firmware and software updates are subject to change without notice.

RECEIVER		NX-1200	NX-1300
Sensitivity	NXDN@12.5/6.25 kHz 1% BER	-4.4 dBµVemf (0.30 µV) / -6.4 dBµVemf (0.24 µV)	
	NXDN@12.5/6.25 kHz 3% BER	-6.4 dBµVemf (0.24 µV) / -8.4 dBµVemf (0.19 µV)	
	DMR@12.5 kHz 1% BER	5.0 dBµVemf (0.28 µV)	
	DMR@12.5 kHz 5% BER	-8.0 dBµVemf (0.20 µV)	
	Analogue (12 dB SINAD) (25/20/12.5 kHz)	-5.7 dBµVemf (0.26 µV) / -5.4 dBµVemf (0.27 µV) / -7.1 dBµVemf (0.22 µV)	
	Analogue (20 dB SINAD) (25/20/12.5 kHz)	-3.9 dBµVemf (0.32 µV) / -3.6 dBµVemf (0.33 µV) / -3.6 dBµVemf (0.33 µV)	
Selectivity	Analogue@ 25/20/12.5 kHz	74 / 72 / 67 dB	
Intermodulation		65 dB	
Spurious Rejection		70 dB	
Audio Distortion		7 %	
Audio Output (Internal)		1 W	
TRANSMITTER		NX-1200	NX-1300
RF Power Output		5 / 4 / 2.5 / 1 W	
Spurious Emission		<1GHz ≤ -36dBm, 1GHz - 4GHz ≤ -30dBm	
FM Hum & Noise Analog@12.5 / 25 kHz		45 / 45 / 40 dB	
Audio Distortion		2 %	
DMR Digital Protocol		ETSI TS 102 361-1, -2, -3	
Emission Designator		16K0F3E, 14K0F2D, 14K0F3E, 12K0F2D, 11K0F3E, 8K50F3E, 7K50F2D, 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 <sup>3</sup>	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		IP54, 55, 67*3			
Dust & Water <sup>2/3</sup>					

\*2 To meet MIL-810 and IP grade, audio accessory connector must be covered.

\*3 NX-1200DE/1300DE and NX-1200NE/1300NE models only, when used with KNB-84L Battery Pack

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