

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

# NX1200A-E/1300A-E

## VHF/UHF TRANSCEIVERS

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

**NXDN™** **DMR**

**FleetSync®**  
by KENWOOD

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

## ONE-“K”-FITS-ALL: 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 NX1200A-E/1300A-E 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 NX1200A-E/1300A-E offers a single platform that’s right for you.



Standard Keypad model



Full Keypad model



Basic model

### ● GENERAL FEATURES

- **Wide variations, “One” platform:** To meet various demands — NXDN or DMR digital CAI and FM analog only models are available
- **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**
- **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 and IP55**
- **IP67** (only a combination with Full keypad + KNB-84L)
- **Intrinsically safe option**

### ● DIGITAL – NXDN

- FDMA – Very narrow 6.25 kHz & narrow 12.5 kHz bandwidths
- NXDN Type-D Trunking
- 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
- Built-in Programmable Voice Inversion Scrambler (per channel)
- Built-in Compander (per channel)

## OPTIONAL ACCESSORIES

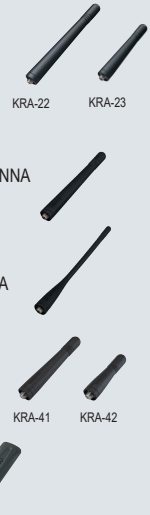
- **KNB-45L/69L/84L**  
Li-ion BATTERY PACK (7.4 V/2000 mAh, 7.4 V/2450 mAh/7.4 V/1900 mAh [IP67])
- **KNB-53N**  
Ni-MH BATTERY PACK (7.2 V/1400 mAh)
- **KNB-82LC**  
Li-ion BATTERY PACK (7.4 V/1900 mAh, Intrinsically Safe)
- **KSC-35S**  
RAPID CHARGER (for Li-ion KNB-45L/69L/82LC/84L)
- **KSC-43**  
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/84L)
- **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 authorized KENWOOD dealer for details and complete list of all accessories and options.

## SPECIFICATIONS

GENERAL		NX1200A-E	1300A-E
Frequency Range	Type 1	136-174 MHz	450-520 MHz
	Type 2		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	Analog	30*1 / 25*1 / 15 / 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(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	
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/84L	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)	
Projections not included; for Std keypad model	With KNB-69L	2.13 x 4.84 x 1.48 in / 10.93 oz (54 x 123 x 37.5 mm / 310 g)	
FCC ID (Pending)	Type 1	K44501001	K44501103
	Type 2	—	K44501102
IC Certification (Pending)	Type 1	282F-501001	—
	Type 2	—	282F-501102

RECEIVER		NX1200A-E	1300A-E
Sensitivity	NXDN@6.25 kHz 3 % BER	0.18 µV	
	NXDN@12.5 kHz 3 % BER	0.22 µV	
	DMR@12.5 kHz 1 % BER	0.25 µV	
	DMR@12.5 kHz 5 % BER	0.18 µV	
	Analog@12.5 / 25 kHz (12 dB SINAD)	0.24 / 0.20 µV	
Selectivity	Analog@12.5 / 25 kHz	68 / 74 dB	
Intermodulation		70 dB	
Spurious Rejection		70 dB	
Audio Distortion		7 %	
Audio Output (Internal)		1 W	
TRANSMITTER		NX-1200	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, 7K60FXD, 7K60F7W	

\*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].  
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.

## 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*3	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 or IP67*3				
Dust & Water*2	IP54/55 or IP67*3				

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

\*3 The IP67 rating is limited to certain NX-1000 Series models, and availability may vary depending on sales region. Currently, only **Full Keypad NX-1000 Series models fitted with the KNB-84L Battery Pack** meet or exceed the IP67 rating. No other combinations qualify for the IP67 rating for dust/water ingress; this is because of the manufacturing process and/or construction of the radio and/or battery pack.

- NXDN™ is a trademark of JVCKENWOOD Corporation and Icom Inc. • FleetSync® is a registered trademark of JVCKENWOOD Corporation.
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