

NX-3400/3420

800-900 MHz DIGITAL TRANSCEIVER

NXDN™ **DMR**



FleetSync®
by KENWOOD

GPS

Bluetooth®

This versatile handheld radio supports both NXDN and DMR digital protocols as well as mixed digital & FM analog operation, enabling it to serve with distinction in a wide range of enterprise- and operation-critical applications. Compact yet designed with durability in mind, it's packed with convenient features like Bluetooth® for hands-free operation and built-in GPS. Additionally, for expansion capability a software license certification system facilitates extensive customization.

PRODUCT HIGHLIGHTS

- **Multi-protocol digital radio:** Designed to operate under an NXDN or DMR digital, and FM analog protocols
- **Mixed Digital & FM Analog Operation** allows gradual migration at your own pace
- **4-Line Basic Frame** (2 lines of icon & key guide) / 14 Characters
- **5-Line Text Message Frame** (3 Lines of Text, icon & key guide)*
- **7-Color Light Bar Indicator** on the top panel
- **4-way Directional-pad (D-pad)** for intuitive control and operation
- **Built-in GPS Receiver/Antenna** for effective fleet management
- **Built-in Bluetooth** for hands-free operation – Applicable Bluetooth profiles: HSP (Headset Profile provided) and SPP (Serial Port Profile available as an option)
- **Renowned KENWOOD Audio Quality with Active Noise Reduction (ANR)** that utilizes built-in DSP
- **Software DES and AES Encryptions** for Digital protocols
- **Built-in Motion Sensor** (Man-down, Stationary and Motion Detection)
- **MIL-STD-810 C/D/E/F/G**

*The number of lines may vary depending on the display language (character set).

GENERAL FEATURES

- Audio Output Power: 1 Watt
- Dual band, 800-900 MHz capability
- Two models with different audio connectors are available:
 - NX-3400: Universal audio connector model with 14 accessory contact points to connect with a variety of options, as well as loud audio output and dual mic ANR capabilities
 - NX-3420: 2-pin audio connector model with 6 contact points to connect with a variety of options, and single mic ANR capability



- Intrinsically Safe Option
- Paging Call
- Emergency Call
- Status/Text Message
- Remote Stun/Kill/Check

DIGITAL - NXDN MODE

- NXDN Type-C & Gen2 Trunked
- NXDN Conventional
- 6.25 & 12.5 kHz Channels
- All Group Call
- Over-the-Air Alias (OAA)
- Over-the-Air Programming (OTAP)

DIGITAL - DMR MODE

- DMR Tier III Trunking
- S-Trunking (Ver. UP)
- DMR Tier II conventional, DMR Auto Slot Select & Site Roaming
- 12.5 kHz Two-slot TDMA channels
- Call Interruption
- Dual-slot Direct Mode
- Enhanced Encryption
- Energy Efficient

ANALOG - FM MODE

- Conventional & LTR Trunking
- FleetSync/II: PTT ID ANI / Caller ID Display, Selective Group Call, Emergency Status / Text Messages
- MDC-1200: PTT ID ANI / Caller ID Display, Selective Call, Emergency, Radio Check / Inhibit
- QT / DQT, DTMF
- Built-in Voice Inversion Scrambler



OPTIONAL ACCESSORIES

- **KNB-55L/57L/78L**
Li-ion BATTERY PACK
(7.4 V/1480 mAh,
7.4 V/2000 mAh,
7.4 V/2860 mAh)
- **KNB-56N**
Ni-MH BATTERY PACK
(7.4 V/1400 mAh)
- **KNB-79LC**
Li-ion BATTERY PACK
(7.4 V/2860 mAh,
Intrinsically Safe)
- **KBP-5**
BATTERY CASE (6 AA)



KNB-57L

- **KSC-25LS/25S**
RAPID CHARGER
(Li-ion Only/Tri-Chem)



KSC-25S

- **KSC-256/256A**
MULTIPLE CHARGER
(6-pocket)



KSC-256

- **KRA-38**
800/900 MHz
Whip Antenna



- **KBH-11**
BELT CLIP (2.5 in)



- **KPG-180AP**
OTAP MANAGER (PC software)

For NX-3420 2-pin audio connector model

- **KMC-45D**
SPEAKER
MICROPHONE
(IP54/55)



For NX-3400 Universal audio connector model

- **KMC-41D**
SPEAKER MICROPHONE (IP54/55)



KMC-41D

- **KMC-54WD**
SPEAKER
MICROPHONE
(with dual-sided
2-mic for superior
ANR, IP67)



KMC-54WD

- **KMC-70**
SPEAKER MICROPHONE (with IP68, 3-button and Digital
NR; Green Housing [GR] version is also available)

- **KMC-72**
SPEAKER MICROPHONE (with IP67, and 2-button)

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-3400/3420	
Frequency Range		TX/RX: 851-870, 935-941 MHz TX: 806-825, 896-902 MHz	
Max. Channels per Radio		Up to 1000 channels with option	
Number of Channels		NX-3400: 512 / NX-3420: 260	
Number of Zones		128	
Channel Spacing	Analog	12.5/25*1 kHz	
	Digital	6.25/12.5 kHz	
Power Supply		7.5 V DC $\pm$ 20 %	
Battery Life*2 (Average battery life at 5-5-90)		FDMA Conv. / Trunk.	TDMA Conv. / Trunk.
	KNB-55L (1480 mAh)	9 / 7 h	12 / 9 h
	KNB-56N (1400 mAh)	8 / 6 h	10.5 / 8 h
	KNB-57L (2000 mAh)	13 / 10 h	17 / 13 h
	KNB-78L (2860 mAh)	18.5 / 14 h	24 / 18.5 h
	KNB-79LC (2860 mAh)*3	15.5 / 12 h	20.5 / 16 h
Operating Temperature		-30°C to +60°C	
Frequency Stability (-30°C to +60°C; +25°C Ref.)		$\pm$ 0.5 ppm	
Dimensions (W x H x D) Projections not included	Radio only	56 x 119.6 x 36.4 mm	
	with KNB-55L	56 x 119.6 x 36.4 mm	
	with KNB-56N	56 x 119.6 x 42.7 mm	
	with KNB-57L	56 x 119.6 x 39.0 mm	
	with KNB-78L/79LC	56 x 119.6 x 44.9 mm	
Weight (net)	Radio only	220 g	
	with KNB-55L	315 g	
	with KNB-56N	410 g	
	with KNB-57L	340 g	
	with KNB-78L	385 g	
	with KNB-79LC	395 g	

RECEIVER		NX-3400/3420
Sensitivity	NXDN 6.25 kHz Digital, 3 % BER	0.20 μ V
	NXDN 12.5 kHz Digital, 3 % BER	0.25 μ V
	DMR 12.5 kHz Digital, 5 % BER	0.25 μ V
	DMR 12.5 kHz Digital, 1 % BER	0.45 μ V
	Analog, 12 dB SINAD	0.25 μ V
Selectivity	Analog @ 12.5 kHz	60 dB
	Analog @ 25 kHz	70 dB
	Intermodulation	70 dB
Spurious Rejection		70 dB
Audio Distortion		3 %
Audio Output (Internal Speaker)	3 % Distortion	500 mW
	5 % Distortion	1000 mW
TRANSMITTER		NX-3400/3420
RF Power Output		3 W / 1 W
Spurious Emission		-70 dB
FM Hum & Noise	Analog @ 25 kHz	45 dB
	Analog @ 12.5 kHz	40 dB
Audio Distortion		3 %
Digital Protocol		ETSI TS 102 361-1, -2, -3, -4
Emission Designator		16K0F3E**1, 14K0F3E**4, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXD, 7K60FXE, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D

*1 25 kHz is not included in 900 MHz band.

*2 Battery life is measured by battery save ON, GPS/Bluetooth OFF.

*3 Typical value under the condition charged with KSC-25S/25LS.

*4 800 MHz band only

Specifications are measured according to applicable standards.

Specifications shown are typical and subject to change without notice, due to advancements in technology.

APPLICABLE 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*5	IP54, IP55, IP67				

*5 Audio accessory connector must be covered.

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CL872M-E-2