

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
- 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)

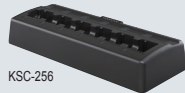
- **KNB-79LC**
Li-ion BATTERY PACK
(7.4 V/2860 mAh,
Intrinsically Safe)

- **KBP-5**
BATTERY CASE (6 AA)

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



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



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



- **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 ±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.)		± 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 µV
	NXDN 12.5 kHz Digital, 3 % BER	0.25 µV
	DMR 12.5 kHz Digital, 5 % BER	0.25 µV
	DMR 12.5 kHz Digital, 1 % BER	0.45 µV
	Analog, 12 dB SINAD	0.25 µV
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*, 14K0F3E**, 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

Analog measurements made per TIA603. 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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