



● GENERAL FEATURES

- 3.0 W (806 - 870 MHz)
- 260 CH-GID / 128 Zones
- 4 Front PF Keys, 12-Key Keypad
- 8 Character Alphanumeric Aliases
- Backlit LCD & Keys
- Function / Status LCD Icons
- Transmit / Busy / Call Alert / Warn LED
- On / Off Volume Knob
- 16-Position Selector
- 3 Side PF Keys
- Emergency / AUX Key
- Built-in Motion Sensor
- 500 mW Speaker Audio
- Zone / CH# Voice Announcement
- KMC-48GPS Speaker Mic Option
- KPG-141D/DN Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP54/55 Dust & Water Intrusion
- PC Serial Interface
- SDM Manual Input¹
- Transparent Data Mode¹

● DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging¹
- Remote Stun / Kill¹
- Remote Check¹
- Short & Long Data Messages¹
- GPS Location with Voice¹
- NXDN® Scrambler Included

● DIGITAL – CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Mixed FM / Digital Operation
- Conventional IP Networks
- Site Roaming

● DIGITAL – TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect
- Transmission Trunked Mode²
- Message Trunked Mode²
- Call Queuing with Priority²
- Late Entry (UID & GID)²
- 4 Priority Monitor ID's²
- Remote Re-Grouping¹
- Failsoft Mode

● MULTI-SITE IP NETWORKS COMPATIBLE

- 60,000 GIDs / UIDs
- Wide Area Group Call
- Auto Roaming Registration
- Group Registration

● MULTI-SYSTEM COMPATIBLE

- 8 Trunked Networks³
- UID Lists for each network

● SCAN

- Single Zone / Multi-Zone / List Scan
- Single Priority Scan (Conventional)

● ANALOG MODES – GENERAL

- 12.5 & 25 kHz Channels
- NPSPAC Channels
- Conventional & LTR® or MPT Zones
- FleetSync®/II, MDC-1200, DTMF²
- QT/DQT Two-Tone (Conventional Zones Only)²
- Voice Inversion Scrambler (16 Codes)

● MPT ZONES*

- Single-Site Trunking
- Multi-Site Network Trunking
- 8 Network Capacity
- Network Roaming / Registration

● FleetSync®/II

- PTT ID ANI / Caller ID²
- Selective / Group Call²
- Emergency, Status & Text Messages¹

● MDC-1200

- PTT ID ANI / Caller ID
- Emergency, Radio Check & Inhibit

* Optional feature

Options

■ KNB-55L

Li-ion Battery Pack
(1,480mAh)

■ KNB-56N

Ni-MH Battery Pack
(1,400mAh)

■ KNB-57L

Li-ion Battery Pack
(2,000mAh)

■ KBP-5

Battery Case

■ KSC-25/30

Rapid Charger
Single Unit Charger

■ KSC-256K

Six Unit Gang Charger



■ KRA-38

800/900 MHz
Whip Antenna

■ KMC-21

Speaker Microphone

■ KMC-45

Speaker Microphone

■ KMC-48GPS

GPS Speaker
Microphone

■ KVC-3/4

Vehicular Charger Adapter

■ KHS-7A

Lightweight Single
Muff Headset



■ KHS-8BL

2-wire Palm Mic with
Earphone (Black)

■ KHS-9BL

3-wire Lapel Mic
with Earphone (Black)

■ KHS-22

Headset w/Boom Mic
& PTT

■ KHS-23

2-Wire Cell Style/PTT
Palm Mic

■ KHS-25

2-Wire Cell Style/PTT
Palm Mic



■ KHS-26

Clip Mic
w/Earphone

■ KHS-27

D-Ring Earhanger
w/PTT & Mic

■ KLH-179

Heavy Duty
Leather Case

■ KLH-180

Nylon Case

■ KBH-12

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.

Main Specifications

		NX-420
GENERAL		
Frequency Range	Receive	851 - 870 MHz
	Transmit	806 - 825, 851 - 870 MHz
Number of Channels		260
Zones		128
Max. Channels per Zone		250
Channel Spacing	Analog	12.5 / 25 kHz
	Digital	6.25 / 12.5 kHz
Operating Voltage		7.5V DC $\pm$ 20%
Battery Life 5-5-90	KNB-55L (1480)	Approx. 8.5 hours
	KNB-56N (1400)	Approx. 8.5 hours
	KNB-57L (2000)	Approx. 11.5 hours
Operating Temperature Range		-22° F to +140° F (-30° C to +60° C)
Frequency Stability		$\pm$ 1.0 ppm
Antenna Impedance		50 Ω
Dimensions (W x H x D)	Radio Only	2.2" x 4.35" x 1.45" (56.0 x 110.5 x 36.9 mm)
	with KNB-55L	2.2" x 4.35" x 1.48" (56.0 x 110.5 x 37.5 mm)
	with KNB-56N	2.2" x 4.35" x 1.7" (56.0 x 110.5 x 43.2 mm)
	with KNB-57L	2.2" x 4.35" x 1.56" (56.0 x 110.5 x 39.5 mm)
Weight (net)	Radio Only	7.4 oz (210 g)
	with KNB-55L	10.8 oz (305 g)
	with KNB-56N	14.3 oz (405 g)
	with KNB-57L	11.6 oz (330 g)
FCC ID		ALH458200
IC Certification		282D-458200

		NX-420
RECEIVER		
Sensitivity	Digital @ 6.25 kHz (3% BER)	0.20 μ V
	Digital @ 12.5 kHz (3% BER)	0.25 μ V
	Analog (12 dB SINAD)	0.25 μ V
Selectivity	Analog @ 25 kHz	72 dB
	Analog @ 12.5 kHz	65 dB
Intermodulation Distortion	Analog	70 dB
Spurious Response	Analog	70 dB
Audio Distortion		Less than 3%
Audio Output		500 mW / 8 Ω
TRANSMITTER		
RF Power Output		3 W / 1 W
Spurious Response		70 dB
FM Hum & Noise	Analog @ 25 kHz	45 dB
	Analog @ 12.5 kHz	40 dB
Audio Distortion		Less than 3%
Modulation		16K0F3E, 14K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D

*Operating temperature range of the KNB-55L/57L: +14°F to +140°F (-10°C to +60°C)

Analog measurements made per TIA/EIA 603 and specifications shown are typical. Specifications are subject to change without notice, due to advancements in technology.

Footnotes from front:

¹ Requires compatible PC software application (e.g. KAS-10) or console.

² These trunked features are primarily system programming and operational dependent. Priority Monitor also requires NX subscriber settings.

³ Up to 8 different Trunked networks can be configured per radio (each in a zone)

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LTR® is a registered trademark of Transcript International.

AMBE+2™ is a trademark of Digital Voice Systems Inc.

Windows® is a registered trademark of Microsoft Corporation.

NXDN® is a registered trademark of JVCKENWOOD Corporation and Icom Inc.

NEXEDGE® is a registered trademark of JVCKENWOOD Corporation.

Applicable 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	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II	500.5/Procedure I, II
High Temperature	501.1/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 MIL810 and IP grade, the 2-pin connector has to be connected.

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