

## NEXEDGE®

# NX-240/340

NEXEDGE VHF/UHF Digital & FM Portable Radios

**NXDN™** FleetSync®  
by KENWOOD



Your business will have to adopt digital radios sooner or later, you know that, but you probably wonder when to make the extra investment. A leap into the unknown? Not with the new NEXEDGE NX-240/340. It operates in both analog FM and NXDN digital modes, offering a cost-effective way to migrate smoothly from legacy systems while discovering the benefits of advanced digital technology – including increased effective coverage area, low noise for superior clarity, and inherent secured voice. All this comes in a tough, compact radio that is easy to operate, delivers high-powered audio, and ensures round-the-clock reliability. Don't delay the opportunity to expand the potential of your business.

### ● NXDN DIGITAL AIR INTERFACE

NEXEDGE radios employ NXDN, an FDMA digital air interface with AMBE+2™ voice coding technology, unique filtering and a 4-level FSK modulation technique with low bit error rate (BER) even at weak RF signal strengths.

### ● ENHANCED AUDIO QUALITY

AMBE+2 VOCODER technology accurately replicates natural human speech nuances for superior voice quality, even at highway speeds. Additionally, the powerful 36mm-diameter speaker delivers up to 1 watt audio output, providing undeniably clearer and crisper audio.

### ● ULTIMATE PERFORMANCE

RF output power is 5W for both VHF (NX-240) and UHF (NX-340). Additionally, the UHF frequency coverage on the NX-340 is 70 MHz.

### ● ERGONOMIC DESIGN

The slim contours and ergonomic design of the NX-240/340 make it comfortable to hold, while the dimples on both sides ensure a firm grip.

### ● 32 CHANNELS / 2 ZONES

The NX-240/340 can be used with two conventional zones, offering up to 16 channels per zone.

### ● SWITCHABLE DIGITAL AND ANALOG DUAL MODES

The NX-240/340 is effectively two radios in one – analog and digital – operating on 12.5/25\* kHz in analog zones, and on 6.25/12.5 kHz NXDN in digital zones. For convenience, a PF key can be used to switch between zones.

\*25 kHz is not included in the models sold in the USA or US territories.

### ● 6.25/12.5 kHz NXDN DIGITAL CHANNEL

Digital communications are more spectrum-efficient and offer wider area coverage than analog.

### ● NXDN CONVENTIONAL

Compatible with NEXEDGE Digital Conventional Mode, this radio offers 64 RAN (Radio Access Numbers) and individual & conference group calling to ensure expeditious communications.

### ● NXDN TYPE-D DIGITAL TRUNKING\*

The NX-240/340 supports the NXDN Type-D digital trunking protocol.\* With this architecture, also known as distributed or decentralized trunking, all channels can operate as traffic channels without the need for a dedicated control channel. This makes it possible to develop an efficient and reliable yet affordable trunking system. Type-D trunking is thus suitable for users considering migration to a small-scale digital trunking system.

\*Requires activation

### ● HIGH SECURITY

Confidentiality in radio communications is a KENWOOD priority, and helping to maintain a high level of security in analog mode is a 16-code voice inversion scrambler, while robust NXDN encryption is available in digital mode.

### ● GPS CONNECTIVITY

The optional KMC-48GPS Speaker Microphone will enable GPS tracking applications to work with the NX-240/340. GPS data can be transmitted at programmed timing, or upon receiving a request.

### ● OTHER FEATURES

**DIGITAL:** • Over-The-Air Alias (TX only) • Paging Call • Individual Call & Conference Group Call • Status Messaging • Remote Monitor • Site Roaming • Late Entry • NXDN ESN  
**ANALOG:** • FleetSync, MDC-1200, DTMF • QT/DQT/2-tone • Compander • Squelch Level  
**GENERAL:** • Multiple Scan • 4-Color LED (Blue / Red / Green / Orange) • 2 PF Keys • 16-Position Mechanical Selector • Zone / Channel Number Voice Announcement • VOX Ready • Emergency Call • Remote Stun/Kill • Lone Worker Alert (per channel) • Time Out Timer • Busy Channel Lockout • Low Battery Warning • Battery Saver • KPG-170D Windows® FPU • Wireless Cloning • Password Protection • PTT Release Tone • Minimum Volume • Mic Sense • MIL-STD-810 C/D/E/F/G • IP54/55 Water & Dust Intrusion

## OPTIONAL ACCESSORIES

**KNB-45L**  
Li-ion BATTERY PACK  
(7.4 V/2000 mAh)



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



**KMC-45**  
SPEAKER MICROPHONE



**KHS-31**  
C-RING PTT EAR  
HANGER HEADSET



**KSC-35SK**  
RAPID CHARGER  
(for the KNB-45L)



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



**KHS-26**  
EARBUD IN-LINE  
PTT HEADSET



**KMB-28**  
SIX UNIT CHARGER  
ADAPTER (for Six  
KSC-35SK Chargers)



**KVC-22**  
DC VEHICULAR  
CHARGER ADAPTER



**KMC-48GPS**  
GPS SPEAKER  
MICROPHONE



**KHS-27**  
D-RING IN-LINE  
PTT HEADSET



**KBH-10**  
BELT CLIP



**KLH-187**  
NYLON CASE



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

		NX-240	NX-340
<b>GENERAL</b>			
Frequency Range	Type 1 Type 2	136-174 MHz	450-520 MHz 400-470 MHz
Number of Channels		32	
Zones		2	
Max. Channels per Zone		16	
Channel Spacing	Analog Digital	12.5/25* kHz 6.25/12.5* kHz	
Operating Voltage		7.5V DC ± 20 %	
Battery Life		Approx. 10/12 hours	
5-5-90 during hi-power battery saver: OFF/ON with KNB-45L (2000 mAh)			
Operating Temperature Range		-30 °C ~ +60 °C (-22 °F ~ +140 °F)	
Frequency Stability		±2.0 ppm ±1.0 ppm	
Antenna Impedance		50 Ω	
Dimensions (W x H x D)	With KNB-45L, Projections Not Included	54 x 122 x 35.3 mm (2.13 x 4.8 x 1.39 in)	
Weight (net)	Radio only With KNB-45L	165 g (5.8 oz) 281 g (9.9 oz)	
FCC ID	Type 1 Type 2	ALH443700	ALH443800 ALH443801

		NX-240	NX-340
<b>RECEIVER</b>			
Sensitivity	Digital @ 6.25 kHz (3 % BER) Digital @ 12.5 kHz (3 % BER) Analog (12 dB SINAD)	0.25 µV 0.25 µV 0.25 µV	
Selectivity	Analog @ 12.5 kHz Analog @ 25 kHz	60 dB 70 dB	
Intermodulation	Analog	70 dB	
Spurious Response	Analog	70 dB	
Audio Distortion		Less than 10 %	
Audio Output		1 W / 12 Ω (Internal Speaker) 500 mW / 8 Ω (External Output)	
<b>TRANSMITTER</b>			
RF Power Output	High / Low	5 W / 1 W	
Spurious Response		70 dB	
FM Hum & Noise	Analog @ 12.5 kHz Analog @ 25 kHz	40 dB 45 dB	
Audio Distortion		Less than 10 %	
Modulation		16K0F3E, 11K0F3E, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D, 8K30F1E, 8K30F1D, 8K30F7W	

\*Ver. 2.0 models are compatible with Analog 25 kHz and Digital 12.5 kHz Channel Spacing. However, Analog 25 kHz is not included in the models sold in the USA or US territories. Measurements made per CAI measurement procedures (digital) and TIA-603 (analog); specification are typical. Details and timing of firmware and software updates are subject to change without notice. Specifications are subject change without notice, due to advancements in technology.

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AMBE+2™ is a trademark of Digital Voice Systems Inc.  
NXDN™ is a trademark of JVCKENWOOD Corporation and Icom Inc.  
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## 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 MIL-810 and IP grade, the 2-pin connector has to be connected.

## ACCESSORIES INCLUDED

- KNB-45L Li-ion BATTERY PACK
- KSC-35S RAPID CHARGER
- KRA-26 VHF HELICAL ANTENNA (Standard Length) with NX-240
- KRA-27 UHF WHIP ANTENNA (Standard Length) with NX-340
- KBH-10 BELT CLIP
- CHANNEL STOPPER

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