

## NEXEDGE®

# NX-740H/840H

NEXEDGE® VHF/UHF Digital & FM Mobile Radios

## NXDN® FleetSync®

It's true that analogue radios are still playing a role in mobile communications today. But the future is unquestionably digital, and the new NEXEDGE® NX-740H/840H demonstrates why, offering increased effective coverage area, low noise for superior clarity, and inherently secure voice communications. As you would expect from KENWOOD, intuitive operation, high-powered performance, and round-the-clock reliability come as standard. But there's more. This mobile radio has a dual personality: it operates in both analog FM and NXDN® digital modes, enabling smooth migration from legacy systems.

### ● 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 in noisy environments. Additionally, the powerful oval speaker delivers up to 4 watt (4Ω impedance) audio output, providing undeniably clearer and crisper audio.

### ● ULTIMATE PERFORMANCE

Maximum RF output power is 50W on the NX-740H VHF model, 45W on the NX-840H UHF model. Additionally, the UHF frequency coverage on the NX-840 Series is 70 MHz.

### ● 32 CHANNELS / 2 ZONES

This radio can be used with two conventional zones, offering up to 16 channels per zone.

### ● SWITCHABLE DIGITAL AND ANALOG DUAL MODES

The NX-740/840 Series is effectively two radios in one – analogue and digital – operating on 12.5 kHz in analogue zones, and on 6.25 kHz NXDN® in digital zones.\* For convenience, a PF key can be used to switch between zones.

\*12.5 kHz in digital zones and 25 kHz in analog zones are not covered.

### ● 6.25 kHz NXDN® DIGITAL CHANNEL

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

### ● NXDN® DIGITAL CONVENTIONAL

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

### ● GPS FEATURE

Connecting a GPS unit to the NX-740/840 Series enables you to transmit accurate vehicle location (GPS) data to the central base station for fleet management purpose.

### ● EXTERNAL D-SUB 15-PIN INTERFACE

The radio's D-Sub 15-pin terminal can be used to connect peripherals, enabling Ignition Sense, External Switch, Horn Alert, etc. Molex interface compatibility is provided by the optional KCT-60 cable.

### ● 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  
**ANALOGUE:** • FleetSync®, MDC-1200, DTMF • QT/DQT/2-tone • Comander • Squelch Level  
**GENERAL:** • Multiple Scan • 4-Color LED (Blue / Red / Green / Orange) • 9 PF Keys • Voice Announcement (select a language from English, Spanish, or Russian) • Emergency Call • Remote Stun/Kill • Lone Worker Alert • Time Out Timer • Busy Channel Lockout • Horn Alert • Ignition Sense • KPG-175D Windows® FPU • Wired Cloning • Password Protection • PTT Release Tone • Minimum Volume • Mic Sense • MIL-STD-810 C/D/E/F/G • IP54 Water & Dust Intrusion



## Options

■ **KMC-30**  
Microphone



■ **KMC-32**  
Keypad Microphone



■ **KMC-35**  
Microphone



■ **KMC-36**  
Keypad Microphone



■ **KMC-9C**  
Base Microphone



■ **KES-3**  
External Speaker



■ **KES-5**  
External Speaker



■ **KMB-10**  
Key Lock Adapter



■ **KCT-18**  
Ignition Sense  
Cable



■ **KCT-36**  
Extension Cable



■ **KCT-60**  
Connection Cable



■ **KLF-2**  
Line Filter



All accessories and options may not be available in all markets. Contact an authorised Kenwood dealer for details and complete list of all accessories and options.

## Main Specifications

	NX-740H	NX-840H
<b>GENERAL</b>		
Frequency Range	136-174 MHz	400-470 MHz
Number of Channels	Max. 32	
Number of Zones	2	
Max. Channels per Zone	16	
Channel Spacing	Analogue Digital	12.5 kHz 6.25 kHz
Operating Voltage	13.6V DC ± 15%	
Operating Temperature Range	-30°C ~ +60°C	
Frequency Stability	±2.0 ppm	±1.0 ppm
Antenna Impedance	50 Ω	
Dimensions (W x H x D)	Projections Not Included	160 x 43 x 122.6 mm
Weight (net)	Radio only	1.10 kg

	NX-740H	NX-840H
<b>RECEIVER</b>		
Sensitivity	Digital (6.25 kHz) Analogue (12 dB SINAD)	0.28 μV 0.28 μV
Selectivity	Analogue (12.5 kHz)	65 dB
Intermodulation Distortion	Analogue (12.5 kHz)	65 dB
Spurious Response	Analogue (12.5 kHz)	75 dB
Audio Output (4Ω impedance)	4W with less than 5 % distortion	
<b>TRANSMITTER</b>		
RF Power Output	5 W – 50 W	5 W – 45 W
Spurious Response	70 dB	
FM Hum & Noise	Analogue	40 dB
Audio Distortion	Less than 5%	
Modulation	11K0F3E, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

Specifications are subject to change without notice, due to advancements in technology. Measurements made per EIA/TIA-603 and Specification are typical. Digital measurements made per CAI measurement procedure.

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Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

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

NXDN® is a registered 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 cat. 20
Shock	516.2/Procedure I, II, III, V	516.3/Procedure I, IV, V	516.4/Procedure I, IV, V	516.5/Procedure I, IV, V	516.6/Procedure I, IV, V
International Protection Standard					
Dust & Water Protection	IP54*				

\* Required conditions: Microphone (KMC-35 or KMC-36) is connected; Cap shall be installed on the speaker connector; Cover shall be installed at D-sub connector (15pin); and KCT cable and/or SP cable are not connected.

## ACCESSORIES INCLUDED

- KMC-30 Microphone
- DC Cable
- Fuse
- Set of screws
- Mic Hanger
- Bracket

Supplied accessories may vary depending on the market.

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