KENWOOD

NEXEDGE®

NX-740H/840H

NEXEDGE VHF/UHF Digital & FM Mobile Radios

NXDN™ FleetSync® by KENWOOD

It's true that analog radios are still playing a role in mobile communications. 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 inherent secured voice. 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 at highway speeds. Additionally, the powerful 57 x 35 mm oval speaker delivers up to 4W (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-840H is 70 MHz.

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.

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-740H/840H 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 CHANNELS

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

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.

NXDN TYPE-D DIGITAL TRUNKING*

The NX-740H/840H 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

GPS FEATURE

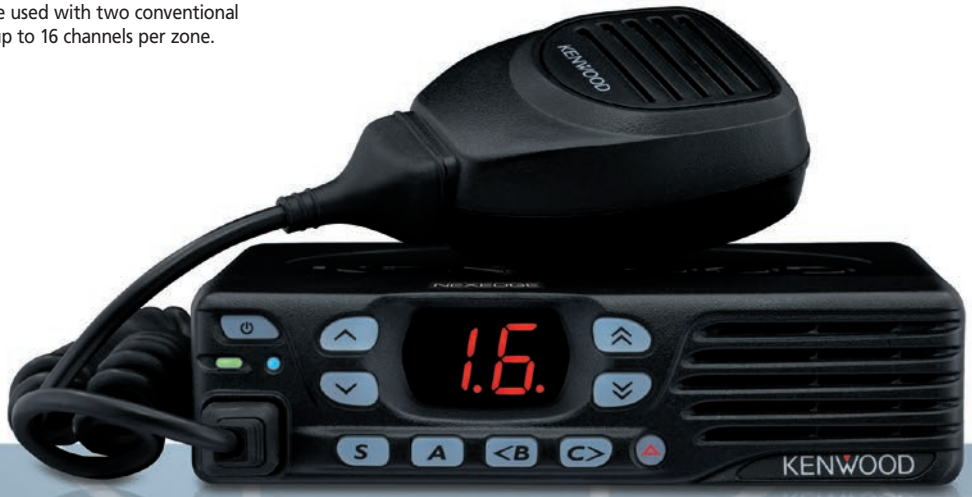
Connecting a GPS unit to the NX-740H/840H enables you to transmit accurate vehicle location (GPS) data to the central base station for fleet management purpose.

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



http://nexedge.kenwood.com

OPTIONAL ACCESSORIES

- **KMC-27A** Microphone 
- **KMC-27B** Microphone 
- **KMC-28B** Keypad Microphone 
- **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 
- **KCT-18** Ignition Sense Cable 
- **KCT-36** Extension Cable 
- **KCT-60** Connection Cable 
- **KMB-10** Key Lock Adapter 
- **KPS-10A** DC Power Supply 
- **KPS-15** DC Power Supply 
- **KMB-24** Mounting Case for KPS-15

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-740H	NX-840H
GENERAL			
Frequency Range		[Type 1] 136-174 MHz	[Type 1] 450-520 MHz [Type 2] 400-470 MHz
Number of Channels		Max. 32	
Number of Zones		2	
Max. Channels per Zone		16	
Channel Spacing	**Analog**	12.5/25 kHz	
	Digital	6.25/12.5 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	
FCC ID	**Type 1**	K44452600	K44452700
	Type 2	—	K44452701
IC Certification	**Type 1**	282F-452600	—
	Type 2	—	282F-452701

		NX-740H	NX-840H
RECEIVER			
Sensitivity	**Digital @ 6.25 kHz (3 % BER)**	0.28 µV	
	Digital @ 12.5 kHz (3 % BER)	0.28 µV	
	Analog (12 dB SINAD)	0.28 µV	
Selectivity	**Analog @ 12.5 kHz**	65 dB	
	Analog @ 25 kHz	75 dB	
Intermodulation	**Analog**	70 dB	
Spurious Response	**Analog**	75 dB	
Audio Distortion		Less than 5 %	
Audio Output		4W / 4Ω	
TRANSMITTER			
RF Power Output		50-5 W	45-5 W
Spurious Response		70 dB	
FM Hum & Noise	**Analog @ 12.5 kHz**	40 dB	
	Analog @ 25 kHz	45 dB	
Audio Distortion		Less than 5 %	
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.

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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