KENWOOD

ProTalk® DIGITAL

NX-240V16P/340U16P

## Compact VHF/UHF Digital and Analog 5W Portable Radios

NXDN®

Kenwood's NX-240V16P/340U16P 16 channel 5 Watt portable radios operate in either analog FM or 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.

SWITCHABLE DIGITAL AND ANALOG DUAL MODES

The NX-240V16P/340U16P is effectively two radios in one – analog and digital – operating on 12.5kHz in analog zones, and on 6.25kHz NXDN® in digital zones. For convenience, a PF key can be used to switch between zones.

SUPERIOR CLARITY IN EXTENDED COVERAGE

NX-240V16P/340U16P 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. As RF signal strength weakens with distance, analog reception becomes increasingly noisy and intermittent. NXDN®'s low BER improves reception in fringe areas, thereby "effectively" increasing coverage as much as 20% over analog.
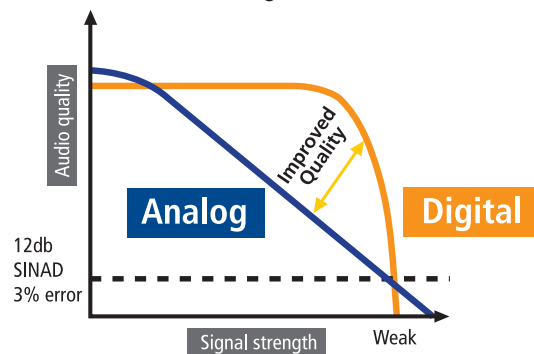
ENHANCED AUDIO QUALITY

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.

FREQUENCY & QT/DQT/RAN

Users can program a ProTalk® to any of the pre-stored frequencies, QT/DQT analog codes, RAN digital codes, thus assuring compatibility with other brands. The ProTalk® digital VHF (NX-240V16P) 16-channel model has 27 pre-stored frequencies while the ProTalk® digital UHF (NX-340U16P) 16-channel model has 99. Both models have 39 QT tones and 168 DQT codes in analog mode and 64 RAN codes in digital mode.

For licensing information, please contact the FCC at http://www.fcc.gov

PROGRAMMABLE FUNCTION KEYS

Both PF Keys can be programmed for any of the many functions available, permitting customization to suit your specific requirements.

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 with 32,767 selectable digital modes.

WIRELESS CLONING

This feature simplifies the setting up of multiple ProTalk® radios for identical functions, eliminating the need to customize individual radios. (Dealer function only)

5 WATT TRANSMIT POWER

VHF/UHF	In Steel and/or concrete reinforced buildings	High-rise buildings
UHF 5 Watt	Up to 370,000 sq.ft.	Up to 33 floors
VHF 5 Watt	Up to 300,000 sq.ft.	Up to 18 floors

Talk range will vary based on terrain, conditions and type of radio

OTHER FEATURES

• Voice Annunciation • Battery Save • Channel Confirmation Mode • B.C.L. (Busy Channel Lockout) • Key Lock • 4-color LEDs (blue, red, orange, green) • Scan Del/Add • KENWOOD ESN (Electronic Serial Number) • Adjustable Microphone Gain (by FPU): High/Normal/Low • Time-Out Timer • Low Battery Warning

Audio quality

Analog Digital

Improved Quality

12db SINAD 3% error

Signal strength Weak

3 Year Warranty

Options

- **KNB-29N**
  Ni-MH Battery Pack
  (1,500mAh)

- **KNB-45L**
  2,000mAh/7.4V
  Li-Ion Battery Pack

- **KSC-35SK**
  Fast Charger
  For the KNB-45L (3-Hour)

- **KSC-43K**
  Dual Chemistry Fast Charger
  For the KNB-29N/45L

- **KVC-22**
  DC Vehicular
  Charger Adapter

- **KRA-41**
  VHF Stubby Antenna

- **KRA-42**
  UHF Stubby Antenna

- **KRA-26**
  VHF Helical Antenna

- **KRA-27**
  UHF Whip Antenna

- **KMC-45**
  Speaker Microphone

- **KMC-21**
  Compact Speaker
  Microphone

- **KEP-2**
  Earphone Kit for
  KMC-45
  (2.5mm plug)

- **KHS-7**
  Single Muff Headset

- **KHS-7A**
  Single Muff Headset
  with In-line PTT

- **KHS-8BL**
  2-wire Palm Mic
  with Earphone (Black)

- **KHS-9BL**
  3-wire Lapel Mic
  with Earphone (Black)

- **KHS-22**
  Behind-the-head
  Headset with PTT

- **KHS-23**
  2-wire Palm Mic

- **KHS-25**
  D-Ring Ear Hanger
  with PTT & Boom Mic

- **KHS-26**
  Earbud In-line
  PTT Headset

- **KHS-27**
  D-Ring In-line
  PTT Headset

- **KHS-31**
  C-Ring PTT Ear
  Hanger Headset

- **KMB-28**
  Six Unit Charger
  Adapter (for six
  KSC-35SK chargers
  (chargers not included)

- **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.

Main Specifications

GENERAL		NX-240V16P	NX-340U16P
Pre-set Frequencies		27 (151-159 MHz)	99 (451-470 MHz)
Number of Channels		32	
Zones		2	
Max. Channels per Zone		16	
Channel Spacing	Analog	12.5 kHz	
	Digital	6.25 kHz	
Operating Voltage		7.5V DC ± 20%	
Battery Life (5-5-90 during hi-power battery saver: OFF/ON with KNB-45L (2000mAh)		Approx. 10/12 hours	
Operating Temperature Range*		-22˚ F ~ +140˚ F (-30˚ C ~ +60˚ C)	
Frequency Stability		± 2.0 ppm	± 1.0 ppm
Antenna Impedance		50 Ω	
Dimensions (W x H x D)	with KNB-45L Projections Not Included	2.13 x 4.8 x 1.39 in (54 x 122 x 35.3 mm)	
Weight (net)	Radio Only	5.8 oz (165 g)	
	with KNB-45L	9.9 oz (281 g)	
FCC ID		ALH443700	ALH443800

*-14°F ~ +140°F (-10°C ~ +60°C) When KNB-29N/45L/69L is in use.

RECEIVER		NX-240V16P	NX-340U16P
Sensitivity	Digital @ 6.25 kHz (3% BER)	0.25 µV	
	Analog (12 dB SINAD)	0.25 µV	
Selectivity	Analog @ 12.5 kHz	60 dB	
Intermodulation Distortion	Analog	60 dB	
Spurious Response	Analog	70 dB	
Audio Distortion		Less than 10%	
Audio Output		1 W / 12 Ω (Internal Output) 500mW / 8 Ω (External Output)	

TRANSMITTER		NX-240V16P	NX-340U16P
RF Power Output	High / Low	5 W / 1 W	
Spurious Response		70 dB	
FM Hum & Noise	Analog	40 dB	
Audio Distortion		Less than 10%	
Modulation		11K0F3E, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

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

ProTalk® is a registered trademark of JVCKENWOOD Corporation.
AMBE+2™ is a trademark of Digital Voice Systems Inc.
NXDN® is a registered trademark of JVCKENWOOD Corporation and Icom Inc.
NEXEDGE® is a registered trademark of JVCKENWOOD Corporation.

ACCESSORIES INCLUDED

- KNB-45L Li-Ion Battery • KSC-35SK 3-Hour Fast Charger
- KBH-10 Spring Action Belt Clip • Removable Antenna • Channel Stopper

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.

KENWOOD

ISO9001 Registered
Professional Systems Business Group
JVCKENWOOD Corporation

JQA-1205   091
QUALITY SYSTEM
UKAS MANAGEMENT SYSTEMS