

# KENWOOD

Listen to the Future

NEXEDGE™

## NXR-700/800

NEXEDGE™ VHF/UHF Digital & FM Base Units

**NXDN®**

### ● GENERAL FEATURES

- 136-154, 146-174 MHz
- 400-430, 450-480, 480-512 MHz
- 40 / 100 / 250 Watt UHF Systems
- Repeater Operation
- Duplex / Simplex Base Operation
- 30 CH Scanning Base (Conventional)
- Two-Digit LED Display
- LED Status Indicators
- 6 Programmable Function Keys
- 3 W External Speaker Audio
- Volume Control
- Microphone Jack
- Program / Modem Interface
- Remote Termination Interface
- Programmable AUX I/O's
- DTMF Front Panel PF Key Control
- DTMF AUX Output Control
- DTMF AUX Input Monitoring
- KPG-109D Windows® FPU
- Flash Firmware Upgrading

### ● DIGITAL – GENERAL

- NXDN® Digital Air Interface
- NXDN® Scrambler Included
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- UID & GID Validation
- NXR Over-the-Air Alias
- KXX-3 OXCO Option

### ● DIGITAL – CONVENTIONAL MODE

- 16 RAN Repeater Controller Built-in
- 1,000 GIDs Per Site
- 1,000 UIDs Per Site
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming Capability

### ● DIGITAL TRUNKING OPTION

- 3,000 GIDs Per Site
- 3,000 UIDs Per Site
- 30 Channels Per Site
- Transmission Trunked Mode
- Message Trunked Mode
- Busy Call Queuing
- Call Que Pre-emption
- Late Entry (UID & GID)
- Control / Traffic Channel Switching
- Control Channel Rotation
- Cross-Busy
- Failsoft Mode
- NXDN® Traffic Channel Sharing
- 2 MB Call/Activity Memory
- Compact Flash Memory Expansion

### ● MULTI-SITE IP NETWORKS OPTION

- 48 Site Trunked IP Networks
- 60,000 GIDs Per Network
- 60,000 UIDs Per Network
- NEXEDGE™ Trunked Features
- Ethernet Network Interface
- IP LAN/WAN Connectivity
- ESN Validation
- Auto-Roaming / Registration
- Wide Area All Group Call
- Virtual Private Network
- Group Registration
- Use of Off-the-Shelf 10 Base-T/100 Base-TX Ethernet Switching & Routers

### ● KPG-110SM SYSTEM MANAGER

- Trunked Sites & IP Networks Systems Only
- Windows® 2000/XP/Vista® Compatible
- USB Secure Key Access
- Direct, Dial-Up & IP Connectivity
- Subscriber Privileging
- 127 UID Class-of-Service Entries
- 127 GID Class-of-Service Entries
- 5000 Fleets (UID/GID User Lists)
- Group Call Inter-Site Limits
- Remote Site Programming
- Real-Time Activity Monitoring
- NXR/Network Interface Diagnostics
- Call Logging / Event Download
- Remote System Firmware Updates

### ● FM MODES – GENERAL

- 25 & 12.5 kHz Channels
- Encryption/ANI Board Control

### ● FM CONVENTIONAL MODE

- 16 QT/DQT Repeater Control Built-in
- Hang Timer / Time Out Timer / CW ID
- External FM Controller Interface
- EIA Voter Tone Generation
- Voting

### ● FM TRUNKED MODE

- External LTR® Controller Interface
- External MPT Controller Interface



## Options

■ **KXX-3\***  
OCXO Unit



■ **KMC-35**  
Microphone



■ **KES-5**  
External Speaker



■ **KMC-30**  
Microphone



■ **KMC-9C**  
Desktop Microphone



\* Required for 6.25 kHz trunking or frequency stability to observe the regulations.

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

		NXR-700	NXR-800
<b>GENERAL</b>			
<b>Frequency Range</b>	<b>K</b> <b>K2</b> <b>K3</b>	146-174 MHz 136-154 MHz	450-480 MHz 480-512 MHz (RX) / 477-512 MHz (TX) 400-430 MHz
<b>Channel Spacing</b>	<b>Analog</b> <b>Digital</b>	12.5 / 15 / 25 / 30 kHz 6.25 / 12.5 kHz	12.5 / 25 kHz 6.25 / 12.5 kHz
<b>PLL Channel Step</b>		2.5 / 3.125 / 5 / 6.25 kHz	3.125 / 5 / 6.25 kHz
<b>Frequency Stability</b>	<b>Radio only</b> <b>With KXX-3 (M)</b> <b>With KXX-3 (M2)</b>		± 1.5 ppm ± 0.5 ppm ± 1.0 ppm
<b>Operating Voltage</b>			10.8 - 15.9 V DC
<b>Operating Temperature Range</b>			-30° C to +60° C (-22° F to + 140° F)
<b>Antenna Impedance</b>			50 Ω
<b>Dimensions (W x H x D)</b>	Projections not included	483 x 44 x 331 mm	
<b>Weight (net)</b>		5 kg	
<b>RECEIVER</b>			
<b>Sensitivity</b>	<b>Digital @ 6.25kHz (3% BER)</b> <b>Digital @ 12.5kHz (3% BER)</b> <b>Analog (12 dB SINAD)</b>		0.27 μV 0.33 μV 0.30 μV
<b>Selectivity</b>	<b>Analog @ 25/30 kHz</b> <b>Analog @ 12.5 kHz</b>	93 dB (± 30 kHz) 85 dB (± 12.5 kHz)	87 dB (± 25 kHz) 81 dB (± 12.5 kHz)
<b>FM Hum &amp; Noise</b>	<b>Analog @ 25/30 kHz</b> <b>Analog @ 12.5 kHz</b>		60 dB 55 dB
<b>Intermodulation Distortion</b>			85 dB (± 50 / 100 kHz)
<b>Spurious Response</b>			100 dB
<b>Audio Distortion (Ext. SP)</b>			Less than 2% (at 0.3 W)
<b>Audio Output (Ext. SP)</b>			3 W (at 4Ω, less than 5% distortion)
<b>TRANSMITTER</b>			
<b>RF Power Output</b>			5 W to 0.5 W
<b>Spurious &amp; Harmonics</b>			73 dB
<b>FM Hum &amp; Noise</b>	<b>Analog @ 25/30 kHz</b> <b>Analog @ 12.5 kHz</b>		55 dB 50 dB
<b>Audio Distortion</b>			Less than 1% at 1000 Hz
<b>Modulation</b>			16K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D

Analog measurements made per TIA/EIA 603 and specifications shown are typical. Kenwood reserves the right to change specifications without prior notice or obligation.

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## Listen to the Future

Kenwood has always connected with people through sound. Now we want to expand the world of sound in ways that only Kenwood can, listening to our customers and to the pulse of the coming age as we head toward a future of shared discovery, inspiration and enjoyment.

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