

# KENWOOD

Listen to the Future

## NEXEDGE®

# NXR-900

### NEXEDGE® 800 MHz Digital & Analog Repeater

#### NXDN®

#### FleetSync®

#### ● GENERAL FEATURES

- 800 MHz (RX: 806-825, TX: 851-870 MHz)
- 360 mW Exciter Output
- 40 / 80 / 130 Watt 800 MHz Systems
- Repeater Operation
- Two-Digit LED Display
- LED Status Indicators
- 6 Programmable Function Keys
- 0.3 W Front Panel Speaker
- 3 W External Speaker Audio
- Volume Control
- 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
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- UID & GID Validation
- NXR Over-the-Air Alias
- NXDN® Scrambler Included
- High Stability 0.5 PPM TCXO Included

#### ● 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 Queue Pre-emption
- Late Entry (UID & GID)
- Control Channel Rotation
- Cross-Busy
- Fail Soft Mode
- NXDN® & LTR® Traffic Channel Sharing
- 2MB Call/Activity Memory
- Compact Flash Memory Expansion
- ESN Validation

#### ● MULTI-SITE IP NETWORK OPTION

- 48 Site Trunked IP Network
- 65,519 GIDs Per Network
- 65,519 UIDs per Network
- NEXEDGE® Trunked Features
- Ethernet Network Interface
- IP LAN/WAN Connectivity
- Wide Area All Group Call
- Group Registration
- Auto-Roaming / Registration
- Virtual Private Network
- Use of Off-the-Shelf 10 Base-T/100 Base-TX Ethernet Switching & Routers

#### ● KPG-110SM SYSTEM MANAGER

- Trunked Sites & IP Network Systems Only
- Windows® 2000/XP/Vista®/7 Compatible
- USB Secure Key Access
- Direct, Dial-Up & IP Connectivity
- Subscriber Privileging
- 127 UID/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
- NPSPAC 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

#### ● FM TRUNKED MODE

- External LTR® Controller Interface
- External MPT Controller Interface



## Options

■ **KMC-35**  
Microphone



■ **KES-5**  
External Speaker



■ **KMC-9C**  
Desktop Microphone



## Main Specifications

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.

		<b>NXR-900</b>
<b>GENERAL</b>		
<b>Frequency Range</b>		806-825 MHz 851-870 MHz
	Receive	
	Transmit	
<b>Channel Spacing</b>	Analog	12.5 / 25 kHz
	Digital	6.25 / 12.5 kHz
<b>PLL Channel Step</b>		3.125 / 6.25 kHz
<b>Frequency Stability</b>		± 0.5 ppm
<b>Operating Voltage</b>		13.8 V DC ± 15%
<b>Operating Temperature Range</b>		-22° F to + 140° F (-30° C to +60° C)
<b>Antenna Impedance</b>		50 Ω
<b>Dimensions (W x H x D)</b>	Projections not included	19.02 x 1.73 x 13.03 in (483 x 44 x 331 mm)
<b>Weight (net)</b>		11 lb (5 kg)
<b>FCC ID</b>		K44417100
<b>IC Certification</b>		282F-417100
<b>RECEIVER</b>		
<b>Sensitivity</b>	Digital @ 6.25kHz (3% BER)	0.27 μV
	Digital @ 12.5kHz (3% BER)	0.33 μV
	Analog (12 dB SINAD)	0.30 μV
<b>Selectivity</b>	Analog @ 25 kHz	81 dB
	Analog @ 12.5 kHz	73 dB
<b>FM Hum &amp; Noise</b>	Analog @ 25 kHz	55 dB
	Analog @ 12.5 kHz	50 dB
<b>Intermodulation Distortion</b>		84 dB (± 50 / 100 kHz)
<b>Spurious Response</b>		93 dB
<b>Audio Distortion (Ext. SP)</b>		Less than 2% (at 0.3W)
<b>Audio Output (Ext. SP)</b>		3 W (at 4 Ω, less than 5% distortion)
<b>TRANSMITTER</b>		
<b>RF Power Output</b>		360 mW to 100 mW
<b>Spurious &amp; Harmonics</b>		73 dB
<b>FM Hum &amp; Noise</b>	Analog @ 25 kHz	50 dB
	Analog @ 12.5 kHz	45 dB
<b>Audio Distortion</b>		Less than 1% at 1000 Hz
<b>Modulation</b>		16K0F3E, 14K0F3E, 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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