

# KENWOOD

Listen to the Future

## NEXEDGE®

# NXR-700/800

NEXEDGE® VHF/UHF Digital & FM Base Units

**NXDN®**

**FleetSync®**  
by KENWOOD

### ● GENERAL FEATURES

- 136-154, 146-174 MHz
- 400-430, 450-480, 480-512 MHz
- 5 W Exciter Output
- 40 / 110 / 250 Watt VHF Systems
- 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
- 0.3 W Front Panel Speaker
- 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 – COMMON

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- UID & GID Validation
- NXR Over-the-Air Alias
- KXX-3 OCXO Option (6.25 kHz operation)

### ● DIGITAL – CONVENTIONAL MODE

- 16 RAN Repeater Controller Built-in
- 1,000 GIDs Per Site
- 1,000 UIDs Per Site
- Mixed FM/Digital Operation
- NXDN® Scrambler Included
- Conventional IP Networks

### ● DIGITAL TRUNKING OPTION

- 3,000 GIDs Per Site
- 3,000 UIDs Per Site
- 30 Channels Per Site
- Transmission Trunked Mode
- Message Trunked Mode
- Call Queuing with Priority
- Call Queue Pre-emption
- Late Entry (UID & GID)
- NXDN™ Scrambled Audio Support
- Cross-Busy
- Fail Soft Mode
- NXDN® & LTR® Traffic Channel Sharing
- 2MB Call/Activity Memory
- Compact Flash Memory Expansion

### ● 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
- ESN Validation
- Wide Area All Group Call
- Group Registration
- Auto-Roaming / Registration
- 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® 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

### ● FM LTR® TRUNKED MODE

- External LTR® Controller Interface



## Options

- **KXK-3**  
OCXO Unit  
(Required for  
6.25 kHz operation)



- **KMC-9C**  
Desktop Microphone



- **KMC-35**  
Microphone



- **KES-5**  
External Speaker



## 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.

GENERAL		NXR-700	NXR-800
Frequency Range	K K2 K3	146-174 MHz 136-154 MHz	450-480 MHz 480-512 MHz (RX) / 477-512 MHz (TX) 400-430 MHz
Channel Spacing	Analog Digital	12.5 / 15 / 25 / 30 kHz 6.25 / 12.5 kHz	12.5 / 25 kHz 6.25 / 12.5 kHz
PLL Channel Step		2.5 / 3.125 / 5 / 6.25 kHz	3.125 / 5 / 6.25 kHz
Frequency Stability	With KXK-3 (for 6.25 kHz)		± 1.5 ppm ± 0.5 ppm
Operating Voltage			13.8 V DC ± 15%
Operating Temperature Range			-22° F to + 140° F (-30° C to +60° C)
Antenna Impedance			50 Ω
Dimensions (W x H x D)	Projections not included	19.02 x 1.73 x 13.03 in (483 x 44 x 331 mm)	
Weight (net)		11 lb (5 kg)	
FCC ID	K K2 K3	K44371300 K44371301	K44371400 K44371401 K44371402
IC Certification	K K2 K3	282F-371300 282F-371301	282F-371400 282F-371402
<b>RECEIVER</b>			
Sensitivity	Digital @ 6.25kHz (3% BER) Digital @ 12.5kHz (3% BER) Analog (12 dB SINAD)		0.27 μV 0.33 μV 0.30 μV
Selectivity	Analog @ 25/30 kHz Analog @ 12.5 kHz	93 dB (± 30 kHz) 85 dB (± 12.5 kHz)	87 dB (± 25 kHz) 81 dB (± 12.5 kHz)
FM Hum & Noise	Analog @ 25/30 kHz Analog @ 12.5 kHz		60 dB 55 dB
Intermodulation Distortion			85 dB (± 50 / 100 kHz)
Spurious Response			100 dB
Audio Distortion (Ext. SP)			Less than 2% (at 0.3W)
Audio Output (Ext. SP)			3 W (at 4 Ω, less than 5% distortion)
<b>TRANSMITTER</b>			
RF Power Output			5 W to 0.5 W
Spurious & Harmonics			73 dB
FM Hum & Noise	Analog @ 25/30 kHz Analog @ 12.5 kHz		55 dB 50 dB
Audio Distortion			Less than 1% at 1000 Hz
Modulation			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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