

### GENERAL FEATURES

- 800 MHz (RX: 806-825, TX: 851-870 MHz)
- 900 MHz (RX: 896-902, TX: 935-941 MHz)
- 360 mW Exciter Output
- 40 / 80 / 130 Watt 800 MHz Systems
- 40 / 75 / 130 Watt 900 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
- High Stability 0.5 ppm TCXO Included
- Telephone Inconnect Option
- 6.25 & 12.5 kHz Channels
- UID & GID Validation
- NXDN® Over-the-Air Alias
- NXDN® Scrambler Included
- High Stability 0.5 ppm TCXO Included
- Telephone Interconnect 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 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

#### NEXEDGE Generation1 System (Gen1)

- 48 Site Trunked IP Network
- 65,519 GIDs Per Network
- 65,519 UIDs per Network
- NEXEDGE® Trunked Features
- KPG-110SM System Manager (Windows® Application)
- Subscriber Privileging
- 127 UID/GID Class Of Service Entries
- 5,000 Fleets (UID/GID User Lists)
- Real-Time Activity Monitoring
- NXR/Network Interface Diagnostics
- 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

### NEXEDGE Generation2 System (Gen2)

- All Gen1 Functionalities
- 1,152 Site Trunked IP Network
- Up to 24 System Controllers (48 sites each)
- Up to 24 different system codes with System Bridge \*
- 5,000 UID/GID Class Of Service Entries
- 1,000 Console Connection per System
- 1,000 Multi User Access
- Web browser Configuration without KPG-109D Programming Software.
- Network Management by Network Manager Client (Windows® Application)
- Centralized Log Management
- Automatic Updating Firmware via Network
- Less and Fast Reboot/Restart
- SNMP Compatible \*
- Direct Frequency Assignment
- Large GPS Capacity \*
- Fleet Priority Channel
- Registration Monitor
- Dynamic Control Channel
- Automatic ESN Collection
- Automatic Stun/Kill
- Call Traffic Management
- Call Preemption for Console

### 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

\*Future Release



## Options

### KXK-3M3

OCXO Unit  
(Required for  
operation in 900 MHz)



### KMC-9C

Desktop Microphone



### KTI-4M

Telephone Interconnect  
Adapter (Requires telephone patch)



### 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.

		NXR-900	NXR-901
<b>GENERAL</b>			
Frequency Range	Receive	806-825 MHz	896-902 MHz
	Transmit	851-870 MHz	935-941 MHz
Channel Spacing	Analog	12.5 / 25 kHz	12.5 kHz
	Digital	6.25 / 12.5 kHz	6.25/12.5 kHz
PLL Channel Step		3.125 / 6.25 kHz	
Frequency Stability		± 0.5 ppm	
	With KXK-3M3	± 0.1 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		K44417100	K44417101
IC Certification		282F-417100	282F-417101
<b>RECEIVER</b>			
Sensitivity	Digital @ 6.25kHz (3% BER)	0.27 μV	
	Digital @ 12.5kHz (3% BER)	0.33 μV	
	Analog (12 dB SINAD)	0.30 μV	
Selectivity	Analog @ 25 kHz	81 dB	-
	Analog @ 12.5 kHz	73 dB	73 dB
FM Hum & Noise	Analog @ 25 kHz	55 dB	-
	Analog @ 12.5 kHz	50 dB	50 dB
Intermodulation Distortion	Analog @ 25 kHz	84 dB	-
	Analog @ 12.5 kHz	82 dB	82 dB
Spurious Response		93 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		360 mW to 100 mW	
Spurious & Harmonics		73 dB	
FM Hum & Noise	Analog @ 25 kHz	50 dB	-
	Analog @ 12.5 kHz	45 dB	45 dB
Audio Distortion		Less than 1% at 1000 Hz	
Modulation		16K0F3E*, 14K0F3E*, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

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

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\* NXR-900 only

This device, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

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ADS#40415 Printed in USA