

## NEXEDGE®

## NXR-5700/5800

### NXDN™



NEXEDGE VHF/UHF DIGITAL & FM BASE-REPEATER

## Focused on the Future

With faster and more capacity than the previous models, these new NEXEDGE repeaters represent a breakthrough in performance. Extensive data storage means they can support everything from analogue/digital conventional systems up to a highly sophisticated NEXEDGE Generation2 (Gen2) multi-site digital trunked network.

### ● GENERAL FEATURES

- Wideband Coverage
- 25/5/0.5 W RF Output Power (100% Duty Cycle)
- Two-Digit Numeric Display
- LED Status Indicators
- USB 2.0 Type-B Interface
- IP LAN/WAN Connectivity
- Ethernet Network Interface
- 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 Remote Control
- Flash Firmware Upgrading
- Remote System Firmware Updates
- Telephone Interconnect Option

### ● DIGITAL – GENERAL

- NXDN Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Bandwidth
- Built-In 0.5 ppm TCXO
- UID & GID Validation
- NXR Over-the-Air Alias
- SNMP Protocol Ready
- FER (Frame Error Rate) / RSSI Output

### ● DIGITAL – TRUNKING MODE

- NEXEDGE Gen2 Network
- \* NXDN Type-C Trunking (Gen1) I
- Transmission Trunked Mode
- Message Trunked Mode
- Busy Call Queuing
- Call Queue Pre-emption
- Late Entry (UID & GID)
- Control / Traffic Channel Switching
- Control Channel Rotation

- Cross-Busy
- Failsoft Mode
- NXDN Traffic Channel Sharing
- ESN Validation
- Auto-Roaming / Registration
- Wide Area All Group Call

### ● DIGITAL – CONVENTIONAL MODE

- Mixed FM / Digital Operation
- Conventional IP Networks
- Site Roaming Capability

### ● FM ANALOGUE MODE

- 16 QT/DQTs Repeater Control Built-in
- Hang Timer / Time Out Timer / CW ID
- External FM Controller Interface
- EIA Voter Tone Generation
- External LTR® Controller Interface
- External MPT1327 Controller Interface



## OPTIONAL ACCESSORIES

■ **KMC-30**  
MICROPHONE



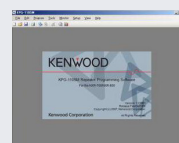
■ **KMC-35**  
MICROPHONE



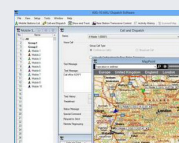
■ **KTI-4**  
TELEPHONE INTERCONNECT ADAPTER



■ **KPG-110SM**  
SYSTEM MANAGER



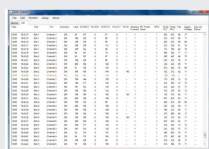
■ **KAS-10**  
AVL DISPATCH SOFTWARE



■ **KES-5**  
EXTERNAL MICROPHONE



■ **KPG-149RM**  
NEXEDGE monitor software



■ **KPG-149SA**  
NEXEDGE iPhone App



All accessories and options may not be available in all markets.  
Contact our authorized dealer for details and complete list of all accessories and options.

## SPECIFICATIONS

GENERAL		NXR-5700	NXR-5800
Frequency Range		136-174 MHz	400-470 MHz
Channel Spacing	Analogue	25/20/12.5 kHz	
	Digital	12.5/6.25 kHz	
PLL Channel Step		6.25/5/3.125/2.5 kHz	
Frequency Stability		± 0.5 ppm	
Operating Voltage		13.2 V DC (10.8 - 15.6 V DC)	
Operating Temperature Range		-30 °C to +60 °C	
Antenna Impedance		50 Ω	
Dimensions (W x H x D), Projections not included		483 x 44 x 331 mm	
Weight (net)		5 kg	

Measurements made per CAI measurement procedures (digital) and TIA-603 (analog); specifications are typical. Details and timing of firmware and software updates are subject to change without notice. Specifications are subject to change without notice, due to advancements in technology.

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AMBE+2 is a trademark of Digital Voice Systems Inc.

NXDN is a trademark of JVCKENWOOD Corporation and Icom Inc.

NEXEDGE is a registered trademark of JVCKENWOOD Corporation in U.S.A. and some countries.

RECEIVER		NXR-5700	NXR-5800
Sensitivity (Analogue)	EIA 12 dB SINAD	0.30 μV	
	EN 20 dB SINAD	-2.5 dB μV (0.38 μV)	
Sensitivity (Digital)	3 % BER	0.33 μV/0.27 μV	
	1 % BER	-2 dB μV (0.40 μV)/- 4 dB μV (0.32 μV)	
Selectivity	Analogue 25 kHz	90 dB	85 dB
	Analogue 20 kHz	87 dB	82 dB
	Analogue 12.5 kHz	82 dB	78 dB
Intermodulation Distortion (Analogue)		72 dB	
Spurious Response Rejection (Analogue)		95 dB	
Audio Distortion (Ext. SP)		Less than 2 % (at 0.3 W)	
Audio Output		3 W (at 4 Ω, less than 5 % distortion)	
TRANSMITTER		NXR-5700	NXR-5800
RF Power Output		25/5/0.5 W	
Max Duty Cycle		100 %	
Spurious & Emission		-36 dBm ≤ 1 GHz, -30 dBm > 1 GHz	
FM Noise (EIA)	Analogue 25 kHz	55 dB	
	Analogue 20 kHz	53 dB	
	Analogue 12.5 kHz	50 dB	
Modulation Distortion		Less than 1 % at 1000 Hz	
Modulation		16K0F3E, 14K0F3E, 14K0F2D, 12K0F2D, 8K50F3E, 7K50F2D, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

## APPLICABLE MIL-STD

MIL Standard	MIL 810C/D/E/F Methods/Procedures	MIL 810G Methods/Procedures
High Temperature	501.4/Procedure I, II	501.5/Procedure I, II
Low Temperature	502.4/Procedure I	502.5/Procedure II
Temperature Shock	503.4/Procedure I, II	503.5/Procedure I

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ISO9001 Registered  
 Communications Systems Business Unit  
 JVCKENWOOD Corporation

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