

# KENWOOD

## NEXEDGE®

# NXR-5700/5800

## NEXEDGE VHF/UHF DIGITAL & FM BASE-REPEATER

**NXDN®** 

### Focused on the Future

Over 7x faster processing speed and 15x more memory capacity than the previous models, these new NEXEDGE repeaters represent a breakthrough in performance. Extensive data storage means they can support everything from analog/digital conventional systems up to a highly sophisticated NEXEDGE Generation2 (Gen2) multi-site digital trunked network. And further adding to their future-proof credentials is upcoming support for Digital Simulcast. Stay ahead of the curve, with cutting-edge communications.

#### 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

- Type-C Gen1 and Gen2 Networks
- 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
- Digital Voting
- RF Link
- Digital Simulcast  
(To be supported in future)

#### FM ANALOG 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



**KMC-35**  
Microphone

**KTI-4M**  
Telephone Interconnect Adapter


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.

## Main Specifications

		NXR-5700	NXR-5800
<b>GENERAL</b>			
Frequency Range	Type 1 Type 2	136-174 MHz - 400-470 MHz	450-520 MHz 400-470 MHz
Channel Spacing	Analog Digital	30*/25*/15/12.5 kHz 12.5/6.25 kHz	25*/12.5 kHz
PLL Channel Step		6.25/5/3.125/2.5 kHz	6.25/5/3.125 kHz
Operating Voltage		13.6 V DC (10.8 - 15.6 V DC)	
Operating Temperature Range		-22° F ~ +140° F (-30° C ~ +60° C)	
Frequency Stability		± 0.5 ppm	
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	Type 1 Type 2	K44474500 K44474600 K44474601	
IC Certification	Type 1 Type 2	282F-474500 - 282F-474601	

\*25 and 30 kHz are not included in the models sold in the USA or US territories.  
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.

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		NXR-5700	NXR-5800
<b>RECEIVER</b>			
Sensitivity	Digital @ 6.25 kHz (3% BER) Digital @ 12.5 kHz (3% BER) Analog (12 dB SINAD)	0.27 µV 0.33 µV 0.30 µV	
Selectivity	Analog @ 30*/25* kHz Analog @ 12.5 kHz	92 dB (± 30 kHz) 84 dB (± 12.5 kHz)	86 dB (± 25 kHz) 80 dB (± 12.5 kHz)
FM Hum & Noise	Analog @ 30*/25* kHz Analog @ 12.5 kHz		55 dB 50 dB
Intermodulation Distortion	Analog		85 dB (± 50/100 kHz)
Spurious Response	Analog		100 dB
Audio Distortion (Ext.SP)			Less than 2% (at 0.3 W)
Audio Output (Ext.SP)			3 W (at 4 Ω Less than 5 % distortion)
<b>TRANSMITTER</b>			
RF Power Output High / Mid / Low			25 / 5 / 0.5 W
RMax Duty Cycle			100%
Spurious & Harmonics			73 dB
FM Hum & Noise	Analog @ 30*/25* kHz Analog @ 12.5 kHz		55 dB 50 dB
Audio Distortion			Less than 1% at 1000 Hz
Emission Designator			16K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D

## Applicable MIL-STD

MIL Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II	501.5/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I	502.3/Procedure I	502.4/Procedure I	502.5/Procedure II
Temperature Shock	503.1/Procedure I, II	503.2/Procedure I, II	503.3/Procedure I, II	503.4/Procedure I, II	503.5/Procedure I

# KENWOOD

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