

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
GENERAL			
Frequency Range	Type 1	136-174 MHz	450-520 MHz
	Type 2	-	400-470 MHz
Channel Spacing	Analog	30*/25*/15/12.5 kHz	25*/12.5 kHz
	Digital	12.5/6.25 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	K44474500	K44474600
	Type 2	-	K44474601
IC Certification	Type 1	282F-474500	-
	Type 2	-	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.

LTR® is a registered trademark of EFJohnson Technologies.
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.

		NXR-5700	NXR-5800
RECEIVER			
Sensitivity	Digital @ 6.25 kHz (3% BER)	0.27 μV	
	Digital @ 12.5 kHz (3% BER)	0.33 μV	
	Analog (12 dB SINAD)	0.30 μV	
Selectivity	Analog @ 30*/25* kHz	92 dB (± 30 kHz)	86 dB (± 25 kHz)
	Analog @ 12.5 kHz	84 dB (± 12.5 kHz)	80 dB (± 12.5 kHz)
FM Hum & Noise	Analog @ 30*/25* kHz	55 dB	
	Analog @ 12.5 kHz	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)	
TRANSMITTER			
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	55 dB	
	Analog @ 12.5 kHz	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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