KENWOOD

NEXEDGE®

NXR-5700/5800

NXDN™ Gen2

NEXEDGE VHF/UHF DIGITAL & FM BASE-REPEATER

Focused on the Future

Over 7 times faster and with 15 times more 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
- OCXO Unit Option (KXK-3)
- 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) will be supported later
- 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 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

OPTIONAL ACCESSORIES

KXK-3
OCXO UNIT

KMC-30
MICROPHONE

KMC-35
MICROPHONE

KTI-4
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.

SPECIFICATIONS

GENERAL		NXR-5700	NXR-5800
Frequency Range	Type 1	136-174 MHz	450-520 MHz
	Type 2		400-470 MHz
	Type 3		350-400 MHz
Channel Spacing	Analog	30*/25*/15/12.5 kHz	25*/12.5 kHz
	Digital	12.5/6.25 kHz	12.5/6.25 kHz
PLL Channel Step		6.25/5/3.125/2.5 kHz	6.25/5/3.125 kHz
Frequency Stability	Radio only	± 0.5 ppm	
	With KXK-3 (M2)	± 1.0 ppm	
	With KXK-3 (M3)	± 0.1 ppm	
Operating Voltage		13.6 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	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 in U.S.A. and some countries.

RECEIVER		NXR-5700	NXR-5800
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 @ 25/30 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 @ 25/30 kHz*	55 dB	
	Analog @ 12.5 kHz	50 dB	
Intermodulation Distortion		85 dB (± 50/100 kHz)	
Spurious Response		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		NXR-5700	NXR-5800
RF Power Output		25/5/0.5 W	
Max Duty Cycle		100 %	
Spurious & Harmonics		73 dB	
FM Hum & Noise	Analog @ 25/30 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/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