KENWOOD

TENTATIVE

NEXEDGE® NX-5700(B)/NX-5800(B)

NXDN™

VHF/UHF DIGITAL TRANSCEIVER
P25 (I&II)//NXDN™ TRIPLE DIGITAL & FM ANALOG MOBILE RADIOS

Bluetooth® microSD GPS FleetSync®

MAIN FEATURES

- **Triple Digital** operation in P25 (Phases 1 & 2) and NXDN™ protocols
- **Mixed Digital & FM Analog Operation** allows intelligent migration in mixed sites and easy migration with digital radios in other sites
- **Large, Color 2.55" (154 x 422 pixels) TFT Display** for at-a-glance operational status checking
- **Easy to follow GUI** and **Multi-line Text** to convey more information
- **Dual Remote Control Head** Option and **Multi-Band (Multi RF Deck) Control** Option providing scalable configurations for various operations and applications
- **Built-In GPS Receiver/Antenna** for effective fleet management
- **Bluetooth® Module built-in** for hands-free operation
- **Active Noise Reduction (ANR)** utilizing built-in DSP for suppression of ambient noise
- Renowned **KENWOOD Digital Audio Quality**
- Built-in **56-bit DES Encryption**
- Optional **256-bit AES Encryption**
- **microSD/microSDHC Memory Card Slot** for increased memory capacity for "Voice & Data"
- **IP54/55** and **MIL-STD-810 C/D/E/F/G**

GENERAL FEATURES

- 5 W – 50 W (136-174 MHz) Models
- 5 W – 45 W (380-470, 450-520 MHz) Models
- Maximum of 4,000 CH/Radio capacity, 512 CH/Zone, 128 Zones
- DB-25 Accessory Connector
- 4 W Speaker Audio

DIGITAL – P25 MODE

- P25 Conventional/Trunking (Phase 1/Phase 2) Protocol
- AMBE+2™ Enhanced Vocoder
- Talk Group ID Lists
- Individual ID Lists
- Caller ID Display
- Remote Monitor/Remote Check
- Radio Inhibit
- Encryption Key Zeroize & Retention
- P25 GPS Location
- P25 Over-the-Air Re-keying
- P25 Over-the-Air Programming*2

DIGITAL – NXDN™ MODE

- NXDN™ Conventional/Trunking Protocol*1
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channel Spacing
- Over-the-Air Alias
- Over-the-Air Programming*2
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging*3
- Remote Stun/Kill*3
- Remote Check*3
- Short & Long Data Messages*3
- GPS Location
- NXDN™ Digital Scrambler Included

*1 Only supports TYPE-C Protocol
*2 Requires KENWOOD OTAP Management software.
*3 Requires NX subscriber unit PC serial interface compatible software application (e.g. KENWOOD AVL & Dispatch Messaging software) or hardware (e.g. console).

FM MODES – GENERAL

- Conventional & LTR Zones
- FleetSync®/II: PTT ID ANI / Caller ID Display, Selective / Group Call, Emergency Status / Text Messages
- MDC-1200: PTT ID ANI / Caller ID Display, Emergency, Radio Check / Inhibit
- QT / DQT & Two-Tone
- Built-in Voice Inversion Scrambler

MULTIPLE CONFIGURATIONS (OPTION)

The NX-5700(B)/5800(B) allows users to create a variety of configurations to suit different requirements by combining different options.

- **Single RF Deck/Single Remote Control Head:** The simplest configuration can be achieved by turning the front control panel of the NX-5700/5800 into a Remote Control Head.
- **Single RF Deck/Dual Remote Control Heads*:** One controller can be mounted on the dashboard, with the other at the rear.
- **Dual RF Decks/Single Remote Control Head*:** You can operate two radios (e.g. VHF and UHF bands) as if they were one by adding an NX-5700B/5800B RF Deck .
- **Dual RF Decks/Dual Remote Control Heads*:** This adds the convenience of a dual control head to the above configuration. Advantage: 2 operators can control 2 radios (e.g. VHF and UHF bands) from separate control heads.

*Available later

New Options for the NX-5700(B)/5800(B) Mobile Radios

- **TK-5700B/5800B**
  RF Deck
- **KCH-19**
  Control Head Kit
- **KRK-14H**
  Control Head Interface Kit
  (adapter for the Head)
- **KRK-15B**
  Control Head Remote Kit
  (adapter for the RF Deck)
- **KCT-71**
  Remote Control Cable (available in 3 lengths of 17ft (5.2m), 25ft (7.6m), 1.6ft (0.5m)*)
- **KWD-AE30/AE31**
  Secure Cryptographic Module
- **KPG-180AP**
  OTAP Manager

*Available later

Main Specifications

		NX-5700(B)	NX-5800(B)
GENERAL			
Frequency Range	**Type 1**	136-174 MHz	450-520 MHz
	Type 2		380-470 MHz
Max. Channels Per Radio		1024 (Up to 4000 CH with option)	
Number of Zones		128	
Max. Channels Per Zone		512	
Channel Spacing	**Analog**	12.5/15/25*/30* kHz	12.5/25* kHz
	Digital	6.25/12.5 kHz	6.25/12.5 kHz
Operating Voltage		13.6 V DC ±15%	
Current Drain	**Standby**	0.45 A	
	RX	2.3 A	
	TX	12 A	
Operating Temperature Range		-22°F to +140°F (-30°C to +60°C)	
Frequency Stability		±1.0 ppm	
Antenna Impedance		50 Ω	
Dimensions (W x H x D) Projections not included		6.69 x 1.89 x 7.48 in. (170.0 x 48.0 x 190.0 mm.)	
Weight (net)		4.63 lbs (2.1 kg)	

*25 and 30 kHz are not included in the models sold in the USA or US territories.
Analog measurements made per TIA/EIA 603 and specifications shown are typical.
Digital measurements made per TIA 102CAAA and specifications shown are typical.
Specifications are subject to change without notice, due to advancements in technology.

		NX-5700(B)	NX-5800(B)
RECEIVER			
Sensitivity	**NXDN 6.25KHz Digital (3% BER)**	0.20 µV	
	NXDN 12.5KHz Digital (3% BER)	0.25 µV	
	P25 Digital (5% BER)	0.25 µV	
	P25 Digital (1% BER)	0.40 µV	
	Analog (12dB SINAD)	0.25 µV	
Selectivity	**Digital**	-63 dB	
	Analog @12.5 kHz	-70 dB	
	Analog @ 25 kHz	-80 dB	
Intermodulation Distortion		-75 dB	
Spurious Response		-85 dB	
Audio Distortion		2.0%	
Audio Output (Remote Control Head)		4 W/4 Ω (3 W/4 Ω)	
TRANSMITTER			
RF Power Output		50 W to 5 W	45 W to 5 W
Spurious Response		73 dB	75 dB
FM Hum & Noise	**Analog @ 25 kHz**	45 dB	
	Analog @ 12.5 kHz	40 dB	
Audio Distortion		2%	
Modulation		16K0F3E, 11K0F3E, 8K30F1E,8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D,4K00F7W, 4K00F2D, 8K10F1W	

Applicable MIL-STD & IP

MIL Standard	810C Methods/Procedures	810D Methods/Procedures	810E Methods/Procedures	810F Methods/Procedures	810G Methods/Procedures
Low Pressure	500.1/ I	500.2/ I, II	500.3/ I, II	500.4/ I, II	500.5/ I, II
High Temperature	501.1/ I, II	501.2/ I, II	501.3/ I, II	501.4/ I, II	501.5/ I, II
Low Temperature	502.1/ I	502.2/ I, II	502.3/ I, II	502.4/ I, II	502.5/ I, II
Temp. Shock	503.1/ I	503.2/ I	503.3/ I	503.4/ I, II	503.5/ I
Solar Radiation	505.1/ I	505.2/ I	505.3/ I	505.4/ I	505.5/ I
Rain*1	506.1/ I, II	506.2/ I, II	506.3/ I, II	506.4/ I, III	506.5/ I, III
Humidity	507.1/ I, II	507.2/ II, III	507.3/ II, III	507.4	507.5/ II
Salt Fog	509.1/ I	509.2/ I	509.3/ I	509.4	509.5
Dust	510.1/ I	510.2/ I	510.3/ I	510.4/ I, III	510.5/ I
Vibration	514.2/ VIII, X	514.3/ I	514.4/ I	514.5/ I	514.6/ I
Shock	516.2/ I, II, V	516.3/ I, IV	516.4/ I, IV	516.5/ I, IV	516.6/ I, IV
International Protection Standard					
Dust & Water	IP54, IP55*2				

*1: Blowing rain protection for the Remote Control Head only. *2: IP54: RF Deck; IP55: Remote Control Head

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JQA-1205
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CL-794K-E-2