KENWOOD

NEXEDGE® NX-5700(B)/NX-5800(B)

NXDN™

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

Bluetooth® | microSD HC | GPS | FleetSync®

🔵 MAIN FEATURES

- **Multi-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** for effective fleet management
- **Bluetooth® Module built-in** for hands-free operation
- Renowned KENWOOD Audio Quality can be achieved with **Active Noise Cancelling** that utilizes built-in DSP with two microphones for suppression of ambient noise
- 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 Phase 1 Conventional/Trunked Operation
- P25 Phase 2 Trunked Operation
- 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 Operation
- NXDN™ Type-C Trunked Operation
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channel Spacing
- Over-the-Air Alias
- Over-the-Air Programming*¹
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging*²
- Remote Stun/Kill*²
- Remote Check*²
- Short & Long Data Messages*²
- GPS Location
- NXDN™ Digital Scrambler Included

*1 Requires KENWOOD OTAP Management software.
*2 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 Remote Control Head x Single RF Deck:**
  The simplest configuration can be achieved by turning the front control panel of the NX-5700/5800 into a Remote Control Head.
- **Single Remote Control Head x Multi RF Decks*:**
  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 Remote Control Heads x Single RF Deck*:**
  One controller can be mounted on the dashboard, with the other at the rear.
- **Dual Remote Control Heads x Multi RF Decks*:**
  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

⬤ OPTIONAL ACCESSORIES

- **NX-5700B/5800B**
  RF DECK

- **KCH-19**
  BASIC CONTROL
  HEAD KIT

- **KCH-20R***
  FEATURED CONTROL HEAD

- **KRK-15B**
  CONTROL HEAD
  REMOTE KIT
  (Adapter for the RF Deck)

- **KRK-14H**
  CONTROL HEAD INTERFACE KIT
  (Adapter for the Head)

- **KCT-71**
  REMOTE CONTROL CABLE
  (Available in 3 lengths of 17 ft (5.2 m),
  25 ft (7.6 m), 1.6 ft (0.5 m)*)

- **KWD-AE30/AE31**
  SECURE CRYPTOGRAPHIC
  MODULE

- **KPG-180AP***
  OTAP MANAGER

  *Available later

Existing accessories compatible with the NX-5700/5800

- **KMC-35**
  MICROPHONE

- **KMC-36**
  KEYPAD MICROPHONE

- **KES-3**
  EXTERNAL SPEAKER
  (Compact low profile;
  Φ3.5 mm plug)

- **KES-5**
  EXTERNAL SPEAKER
  (40 W max input, Requires KAP-2)

- **KCT-23**
  DC POWER CABLE
  M: 10 ft (3 m) / M3: 23 ft (7 m)

- **KCT-46**
  IGNITION SENSE CABLE

- **KLF-2**
  LINE FILTER

- **KMB-10**
  KEY LOCK ADAPTER

- **KAP-2**
  HORN ALERT/P.A.
  RELAY UNIT

- **KRA-40G**
  GPS ACTIVE ANTENNA

- **KPS-15**
  DC POWER SUPPLY
  (23 A max)

⬤ SPECIFICATIONS

GENERAL		Mobile Radios	
		NX-5700(B)	NX-5800(B)
Frequency Range		136-174 MHz	Type 1: 450-520 MHz Type 2: 380-470 MHz
Max. Channels Per Radio		1024 (Up to 4000 channels with option)	
Number of Zones		128	
Max. Channels Per Zone		512	
Channel Spacing	Analog	12.5/15/20/25*/30* kHz	12.5/25* kHz
	Digital	6.25/12.5 kHz	6.25/12.5 kHz
Power Supply		13.6 V DC ±15%	
Current Drain	Standby	0.45 A	
	RX	2.3 A	
	TX	13 A	
Operating Temperature		-22°F to +140°F (-30°C to +60°C)	
Frequency Stability		±1.0 ppm	
Dimensions (W x H x D) Radio with Control Head, Projections Not Included		6.69 x 1.89 x 6.93 in. (171 x 48 x 176 mm)	
Weight: Radio with Control Head		3.53 lbs (1.6 kg)	

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

RECEIVER		Mobile Radios	
		NX-5700(B)	NX-5800(B)
Sensitivity	NXDN 6.25 kHz Digital (3% BER)	0.20 μV	
	NXDN 12.5 kHz 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	P25 Digital	63 dB	
	Analog @ 12.5 kHz	71 dB	
	Analog @ 25 kHz	81 dB	
Intermodulation		80 dB	
Spurious Rejection		87 dB	85 dB
Audio Distortion		2%	
Audio Output Power		4 W/4 Ω (Remote Control Head: 3 W/4 Ω)	

TRANSMITTER		NX-5700(B)	NX-5800(B)
RF Power Output Power		50 to 5 W	45 to 5 W
Spurious Emission		-73 dB	-75 dB
FM Hum & Noise	Analog @ 12.5 kHz	45 dB	
	Analog @ 25 kHz	50 dB	
Audio Distortion		2%	
Emission Designator		16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

⬤ 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	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, V	516.4/ I, IV, V	516.5/ I, IV, V	516.6/ I, IV, V
International Protection Standard					
Dust & Water	IP54, IP55*[1]				

*1: IP54: RF Deck of the mobile radio; IP55: Remote Control Head for the mobile radio

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