

# KENWOOD

## NX-5700(B)/5800(B)

VHF/UHF DIGITAL TRANSCEIVER  
MULTI-PROTOCOL DIGITAL & ANALOG Mobile RADIOS



**NXDN**®

NEXEDGE® Bluetooth® **GPS** **FleetSync**®  
by KENWOOD

### ● FEATURE HIGHLIGHTS

- **Multi-Protocol** operation in P25 (Phase I&II), 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
- Over-the-Air Programming<sup>2</sup>

### ● DIGITAL – NXDN® MODE

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

<sup>1</sup> Only supports TYPE-C Protocol

<sup>2</sup> Requires KENWOOD OTAP Management software.

<sup>3</sup> 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



# Options

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

**KCH-19**  
Basic Control Head Kit

**KCH-20R\***  
Featured Control Head

**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

**KMC-35**  
Microphone

**KMC-36**  
Keypad Microphone

**KES-3**  
External Speaker  
(compact low profile;  
3.5 mm plug)

**KES-5**  
External Speaker  
(40 W max input,  
requires KAP-2)

**KCT-23**  
DC Power Cable

**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  
(23A max)

## Main Specifications

All accessories and options may not be available in all markets. Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

	NX-5700(B)	NX-5800(B)
<b>GENERAL</b>		
<b>Frequency Range</b>		
Type 1	136-174 MHz	450-520 MHz
Type 2		380-470 MHz
<b>Max. Channels Per Radio</b>	1024 (Up to 4000 CH with option)	
<b>Number of Zones</b>	128	
<b>Max. Channels per Zone</b>	512	
<b>Channel Spacing</b>		
Analog	12.5/15/25*/30* kHz	12.5/25* kHz
Digital	6.25/12.5 kHz	6.25/12.5 kHz
<b>Power Supply</b>	13.6 V DC ±15%	
<b>Current Drain</b>		
Standby	0.45 A	
RX	2.3 A	
TX	13 A	
<b>Operating Temperature</b>	-22°F to +140°F (-30°C to +60°C)	
<b>Frequency Stability</b>	±1.0 ppm	
<b>Dimensions (W x H x D)</b>		
Projections not included	6.69 x 1.89 x 6.93 in. (170.0 x 48.0 x 176 mm.)	
<b>Weight (net)</b>	3.53 lbs (1.6 kg)	
<b>FCC ID</b>		
Type 1	Pending	K44471200
Type 2		K44471201
<b>IC Certification</b>		
Type 1	Pending	-
Type 2		282F-471201

\*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 102CAA and specifications shown are typical. Specifications are subject to change without notice, due to advancements in technology.

	NX-5700(B)	NX-5800(B)
<b>RECEIVER</b>		
<b>Sensitivity</b>		
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	
<b>Selectivity</b>		
P25 Digital	63 dB	
Analog @12.5 kHz	71 dB	
Analog @ 25 kHz	81 dB	
<b>Intermodulation</b>		
	80 dB	
<b>Spurious Rejection</b>		
	85 dB	
<b>Audio Distortion</b>		
Digital	2 %	
<b>Audio Output Power</b>		
	4 W/4 Ω (Remote Control Head: 3 W/4 Ω)	
<b>TRANSMITTER</b>		
<b>RF Power Output</b>		
	50 W to 5 W	45 W to 5 W
<b>Spurious Emission</b>		
	-73 dB	-75 dB
<b>FM Hum &amp; Noise</b>		
Analog @ 12.5 kHz	45 dB	
Analog @ 25 kHz	50 dB	
<b>Audio Distortion</b>		
	2%	
<b>Modulation</b>		
	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

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## Applicable MIL-STD & IP

MIL Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
<b>Low Pressure</b>	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II	500.5/Procedure I, II
<b>High Temperature</b>	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
<b>Low Temperature</b>	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II	502.5/Procedure I, II
<b>Temperature Shock</b>	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II	503.5/Procedure I
<b>Solar Radiation</b>	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I	505.5/Procedure I
<b>Rain*1</b>	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III	506.5/Procedure I, III
<b>Humidity</b>	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4	507.5/Procedure II
<b>Salt Fog</b>	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4	509.5
<b>Dust</b>	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III	510.5/Procedure I
<b>Vibration</b>	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I	514.6/Procedure I
<b>Shock</b>	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV	516.6/Procedure I, IV
<b>International Protection Standard</b>					
<b>Dust &amp; Water</b>	IP54/55*2				

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

# KENWOOD

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