

NX-5700HB/5800HB NEXEDGE VHF/UHF DIGITAL TRANSCEIVER



One NEXEDGE radio, multiple protocols*: the NX-5700HB (110 W) / NX-5800HB (100W) mobile transceivers support NXDN and P25 (Phase 1 & 2) digital protocols, plus FM analog for mixed operation. This high-power RF deck – equipped with Bluetooth®, GPS and a memory card slot – requires one of several optional remote control heads, all of which offer an intuitive controls for easy operation. The versatile NX-5700HB/5800HB can be combined with other RF decks and multiple remote control heads to create a radio system that is tailored to your interoperability requirements.

*Note that, unlike NEXEDGE 50W-class models, the NX-5700HB/5800HB mobile series does not support DMR.



Features

- Multi-digital Operation in NXDN and P25 (Phase 1 & 2) protocols
- Multi RF Deck with Low Band / VHF / UHF / 700 & 800 MHz combination
- Mixed Digital & FM Analog Operation allows gradual migration in mixed sites and easy migration with digital radios in other sites
- Variety of Optional Remote Control Heads (Note: NX-5700HB/5800HB is remote operation only)
 - Dual Remote Control Head and Multi-band (Multi RF deck) capable options
 - Easy-to-follow controls and Information Conveying Multi-line Text are built into each control head
- Maximum of 4,000 CH/Radio capacity, 512 CH/Zone, 128 Zones
- Built-In GPS Receiver for effective fleet management
- Built-in Bluetooth 4.0 for hands-free operation
- USB Micro Terminal (up to 12 Mbps)
 - PC Programming & Internal microSD Access (Requires USB driver for PC)
- Renowned KENWOOD Audio Quality can be achieved with Active Noise Reduction that utilizes built-in DSP for suppression of ambient noise
- Built-in 56-bit DES encryption
- Optional 256-bit AES encryption
- microSD/microSDHC (Up to 2GB/32GB) Memory Card Slot for increased memory capacity for "Voice & Data"
- RF output power: VHF: 110 W to 25W / UHF: 100 W to 25 W
- DB-25 & Molex 9-pin Accessory Connector
- AMBE+2™ Enhanced Vocoder
- 12 W Audio Output
- IP54/55 and MIL-STD-810 C/D/E/F/G

Digital – NXDN® Mode

- | | |
|--------------------------------------|---------------------------------|
| Gen2 & NXDN Type-C Trunked Operation | All Group Call |
| NXDN Conventional Operation | Status Messaging |
| 6.25 & 12.5 kHz Channel Spacing | Remote Stun/Kill |
| Over-the-Air Alias | Remote Check |
| Over-the-Air Programming | Short & Long Data Messages |
| Paging Call | NXDN Digital Scrambler Included |
| Emergency Call | |

Digital - P25 Mode

- | | |
|--|------------------------------------|
| P25 Phase 1 Conventional/Trunked Operation | Remote Monitor/Remote Check |
| P25 Phase 2 Trunked Operation | Radio Inhibit |
| Talk Group ID Lists | Encryption Key Zeroize & Retention |
| Individual ID Lists | P25 Over-the-Air Re-keying |
| Caller ID Display | P25 Over-the-Air Programming |

FM Modes - General

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

Multiple Configurations

The NX-5000H mobile series allows users to create a variety of configurations to suit different requirements by combining different options. Some of the standard configurations are:

- Dual Remote Control Head x Single RF Deck
- Dual Remote Control Head x Multi RF Decks
- Other combinations are available. Consult your local KENWOOD dealer for more.
- Single Remote Control Head x Single RF Deck



Unsurpassed interoperability for Public Safety and Enterprise radio users with the freedom to migrate at your own pace.



Scalable server-based system architecture for management of NEXEDGE wide area digital communications systems.



The ultimate level of sound clarity technology combining Optimization, advanced Sound Analysis and Active Noise Reduction.

Accessories

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

NX-5700B/5800B/5900B
RF Deck

KCH-19
Basic Control Head Kit

KCH-20R
Featured Control Head
- 2.75" Color TFT Display
- D-Pad & more PF keys

KCH-21RM
Handheld Control Head

KRK-14H
Control Head Interface Kit
(Adapter for the KCH-19)

KCT-71
Remote Control Cable
(Available in 3 lengths of 17ft (5.2m), 25ft (7.6m), 1.6ft (0.5m))

KCT-72
External Accessory Connection Cable for the KCH-19/20R

KMC-65M
Microphone

KMC-66M
Keypad Microphone

KES-5A
External Speaker
(40 W max input)

KCT-23
DC Power Cable
(for High Power)
M2: [10 ft/3 m] / M4: [23 ft/7 m]

KCT-18
Ignition Sense Cable

KMB-36
Mounting Bracket

KWD-AE30/AE31
Secure Cryptographic Module

KPG-180AP
OTAP Manager
· Connect to Multiple Systems
· Network Connect (NXIP/AIS)
· Direct mode (P25)
· Fast updates

KRA-40G
GPS Active Antenna

Specifications

General	NX-5700HB	NX-5800HB
Frequency Range Type 1	136-174 MHz	450-520 MHz
Max. Channels Per Radio	1024 (Up to 4000 CH with option)	
Number of Zones	128	
Max. Channels Per Radio	512	
Channel Spacing Analog Digital	12.5/15/20/25*/30* kHz 6.25 kHz/12.5 kHz	12.5/25* kHz 6.25 kHz/12.5 kHz
Power Supply	13.6V DC ± 15%	
Current Drain Standby RX TX	1.3 A 3.3 A 2.8 A	
Operating Temperature	-22°F to +140°F (-30°C to +60°C)	
Frequency Stability	±0.5 ppm	
Dimensions Radio w/Control Head	7.01 x 2.56 x 13.84 in. (178 x 65 x 351.5 mm.)	
Weight (net) Radio w/Control Head	12.1 lbs (5.5 kg)	
FCC ID Type 1 Type 2	K44499200	K44499300 K44499301

*25 and 30 kHz are not included in the models sold in the USA or US territories. P25 Digital measurements made per TIA 102CAAA, analog measurements made per TIA 603 and specifications shown are typical. Specifications are subject change without notice, due to advancements in technology.

The Bluetooth word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. SD and microSD are trademarks of SD-3C, LLC in the United States, and/or other countries. AMBE+2™ is a trademark of Digital Voice Systems Inc. NXDN® is a registered trademark of JVCKENWOOD Corporation and Icom Inc. NEXEDGE® & FleetSync® are a registered trademarks of JVCKENWOOD Corporation. All other trademarks are the property of their respective holders.

Receiver	NX-5700HB	NX-5800HB
Sensitivity NXDN® 6.25 kHz Digital (3% BER) NXDN® 12.5 kHz Digital (3% BER) P25 Digital (5% BER) P25 Digital (1% BER) Analog (12dB SINAD)	0.20 µV 0.25 µV 0.25 µV 0.40 µV 0.25 µV	
Selectivity Analog @ 12.5kHz Analog @ 25kHz	71 dB 81 dB	
Intermodulation	80 dB	
Spurious Rejection	85 dB	
Audio Distortion	3%	
Audio Output Power	12 W/4 Ω (Remote Control Head: 3 W/4 Ω)	
Transmitter	NX-5700HB	NX-5800HB
RF Power Output	110 W to 25 W	100 W to 25 W
Spurious Emission	-80 dB	
FM Hum & Noise Analog @ 12.5kHz Analog @ 25kHz	45 dB 50 dB	
Audio Distortion	2%	
Emission Designator	16K0F3E*, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F1W, 4K00F1E, 4K00F1D, 4K00F1W, 4K00F2D	

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
Low Pressure	5001/Procedure I	5002/Procedure I, II	5003/Procedure I, II	5004/Procedure I, II	5005/Procedure I, II
High Temperature	5011/Procedure I, II	5012/Procedure I, II	5013/Procedure I, II	5014/Procedure I, II	5015/Procedure I, II
Low Temperature	5021/Procedure I	5022/Procedure I, II	5023/Procedure I, II	5024/Procedure I, II	5025/Procedure I, II
Temperature Shock	5031/Procedure I	5032/Procedure I	5033/Procedure I	5034/Procedure I, II	5035/Procedure I
Solar Radiation	5051/Procedure I	5052/Procedure I	5053/Procedure I	5054/Procedure I	5055/Procedure I
Rain	5061/Procedure I, II	5062/Procedure I, II	5063/Procedure I, II	5064/Procedure I, III	5065/Procedure I, III
Humidity	5071/Procedure I, II	5072/Procedure II, III	5073/Procedure II, III	5074	5075/Procedure II
Salt Fog	5091/Procedure I	5092/Procedure I	5093/Procedure I	5094	5095
Dust	5101/Procedure I	5102/Procedure I	5103/Procedure I	5104/Procedure I, III	5105/Procedure I
Vibration	5142/Procedure VIII, X	5143/Procedure I	5144/Procedure I	5145/Procedure I	5146/Procedure I
Shock	5162/Procedure I, II, V	5163/Procedure I, IV, V	5164/Procedure I, IV, V	5165/Procedure I, IV, V	5166/Procedure I, IV, V

International Protection Standard

Dust & Water Protection

IP54/55*

*IP54: RF Deck; IP55: Remote Control Head

*All interfaces must be fully sealed with appropriate covers unless they are connected to a genuine accessory.

JVCKENWOOD USA Corporation
Communications Sector Headquarters
1440 Corporate Drive | Irving, TX 75038

Order Administration/Distribution
P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745
www.kenwood.com/usa

KENWOOD Communications
Global Website



comms.kenwood.com



ISO9001 Registered
Communications Systems Business Unit
JVCKENWOOD Corporation

ADS#03320 Print in USA.