

NEXEDGE®

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



NXDN™

VHF/UHF DIGITAL TRANSCEIVER

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



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 to 50 W (136-174 MHz) Models
- 5 W to 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 2015



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 2015

Existing accessories compatible with the NX-5700/5800

■ KMC-35
MICROPHONE



■ KMC-36
KEYPAD MICROPHONE



■ KES-3
EXTERNAL SPEAKER
(Compact low profile;
ø3.5 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.

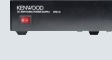


RELAY UNIT

■ 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 Digital	12.5/15/20/25/30* kHz 6.25/12.5 kHz
Power Supply	13.6 V DC ±15 %	
Current Drain	Standby RX TX	0.45 A 2.3 A 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)	6.69 x 1.89 x 6.93 in. (170 x 48 x 176 mm)	
Radio with Control Head Included	6.69 x 1.89 x 6.93 in. (170 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 102CAA and specifications shown are typical.

Details and timing of firmware and software updates are subject to change without notice. Specifications

		Mobile Radios	
RECEIVER		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*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, V	516.4/I, IV, V	516.5/I, IV, V	516.6/I, IV, V
International Protection Standard					
Dust & Water	IP54, IP55*2				

*1: Blowing rain protection for the mobile radio's Remote Control Head only. *2: IP54: RF Deck of the mobile radio; IP55: Remote Control Head for the mobile radio

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