

KENWOOD

NEXEDGE®

NX-5700/5800

NXDN™



NEXEDGE VHF/UHF MULTI-PROTOCOL
DIGITAL & ANALOGUE MOBILE RADIOS



Bluetooth®



GPS

FleetSync™

MAIN FEATURES

- Multi-Digital operation in P25 (Phases 1 & 2), NXDN and DMR* protocols
- Mixed Digital & FM Analogue Operation allows intelligent migration in mixed sites and easy migration with digital radios in other sites
- Large, Colour 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 with Optional GPS Active Antenna (KRA-40G) 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 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

* The radio platform is ready for DMR and 5-Tone, software for these features will follow.

GENERAL FEATURES

- 25 W to 5 W (136-174 MHz) Model
- 25 W to 5 W (400-470 MHz) Model
- Maximum of 4,000 CH/Radio capacity, 512 CH/Zone, 128 Zones
- DB-25 Accessory Connector
- 4 W Speaker Audio

DIGITAL – NXDN MODE

- Gen2 & NXDN Type-C Trunked Operation
- NXDN Conventional 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

DIGITAL – P25 MODE

- P25 Phase 1 Conventional/Trunked Operation
- P25 Phase 2 Trunked Operation
- AMBE+2™ Enhanced Vocoder
- Talk Group ID Lists
- P25 in conventional mode
- 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*1

*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).

ANALOGUE – FM MODE

- 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 & 2-Tone
- Built-in Voice Inversion Scrambler

MULTIPLE CONFIGURATIONS (OPTION)

The NX-5700/5800 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.
- Dual Remote Control Heads x Single RF Deck: By combining an optional Remote Head (KCH-19 or KCH-20R) to a radio, one controller can be mounted on the dashboard, with the other at the rear.
- Dual Remote Control Heads x Multi RF Decks: By having two radios (e.g. NX-5700 and NX-5800), user can enjoy the convenience of controlling 2 radios from 2 controllers. Of course, a panel can be replaced with optional Remote Control Head (KCH-20R).
- Other combinations are available. Consult your local KENWOOD dealer for more.



E-Type

OPTIONAL ACCESSORIES

<ul style="list-style-type: none"> ■ 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) 	<ul style="list-style-type: none"> ■ KCT-71 REMOTE CONTROL CABLE (Available in 3 lengths of 5.2 m, 7.6 m, and 0.5 m) ■ KWD-AE31 SECURE CRYPTOGRAPHIC MODULE ■ KMC-35 MICROPHONE ■ KMC-36 KEYPAD MICROPHONE ■ KCT-73MIC EXTERNAL MIC KIT (Cable length: 3 m) 	<ul style="list-style-type: none"> ■ KCT-74PTT EXTERNAL PTT KIT (Cable length: 3 m) ■ 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: 3m / M3: 7m 	<ul style="list-style-type: none"> ■ 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 ■ KPG-180AP OTAP MANAGER
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SPECIFICATIONS

GENERAL	Mobile Radios	
	NX-5700	NX-5800
Frequency Range	136-174 MHz	400-470 MHz
Max. Channels Per Radio	1024 (Up to 4000 channels with option)	
Number of Zones	128	
Max. Channels Per Zone	512	
Channel Spacing	Analogue 12.5/20/25 kHz	Digital 6.25/12.5 kHz
Power Supply	13.2 V DC (10.8 - 15.6 V DC)	
Current Drain	Standby 0.45 A	RX 2.3 A
		TX 9 A
Operating Temperature	-30 °C to +60 °C	
Frequency Stability	±1.0 ppm	
Dimensions (W x H x D)	171 x 48 x 176 mm	
Radio with Control Head	1.6 kg	
Weight: Radio with Control Head	1.6 kg	
Applicable Standards	ETSI (EMC)	EN 301 489-3, EN 301 489-5, EN 301 489-17
	ETSI (Spectrum)	EN 300 086, EN 300 113, EN 300 219, EN 300 328, EN 300 440, EN 301 166
	ETSI Safety	EN 60065, EN 60215, EN 60950-1

Analogue measurements made per EN Standards or TIA 603 and specifications shown are typical. P25 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 to change without notice, due to advancements in technology.

RECEIVER	Mobile Radios	
	NX-5700	NX-5800
Sensitivity (Digital)	NXDN 3 % BER (6.25 kHz/12.5 kHz) P25 5 % BER	0.25 μ V / 0.32 μ V -4 dB μ V (0.32 μ V) / -1 dB μ V (0.45 μ V) 0.28 μ V
Sensitivity (Analogue)	12 dB SINAD (12.5/20&25 kHz) 20 dB SINAD (12.5/20&25 kHz) P25 Digital	0.32 μ V / 0.28 μ V -1 dB μ V (0.45 μ V) / -3 dB μ V (0.35 μ V) 63 dB
Selectivity	Analogue 12.5 kHz Analogue 20 kHz Analogue 25 kHz	70 dB 78 dB 80 dB
Intermodulation (Analogue)		70 dB
Spurious Rejection (Analogue)		80 dB
Audio Distortion		2 %
Audio Output Power	4 W/4 Ω (Remote Control Head: 3 W/4 Ω)	
TRANSMITTER	NX-5700	NX-5800
RF Power Output Power	25 to 5 W	
Spurious Emission	-36 dBm \leq 1 GHz, -30 dBm $>$ 1 GHz	
FM Hum & Noise (Analogue)	@25/20/12.5 kHz	45/50/50 dB
Audio Distortion	2 %	
Emission Designator	16K0F3E, 14K0F2D, 14K0F3E, 12K0F2D, 11K0F3E, 8K50F3E, 7K50F2D, 8K30F1E, 8K30F1D, 8K30F7W, 8K10F1E, 8K10F1D, 8K10F7W, 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/I, III	507.3/I, 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 Remote Control Head only. *2: IP54: RF Deck; IP55: Remote Control Head.

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