

NEXEDGE®

NX-5700/5800/5900

NXDN™

DMR



NEXEDGE VHF/UHF/700-800 MHz
MULTI-PROTOCOL DIGITAL & ANALOG MOBILE RADIOS



● FEATURE HIGHLIGHTS

- **Multi-Digital** operation in NXDN, DMR, and P25 (Phase 1 & 2) protocols
- **Any combination of two digital protocols** can be selected from NXDN, DMR, and P25
- **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** 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 Reduction (ANR)** 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

- 50 W to 5 W (136-174 MHz) Models
- 45 W to 5 W (380-470, 450-520 MHz) Models
- 30 W to 2 W (700 MHz) Model
- 35 W to 2 W (800 MHz) Model
- Maximum of 4,000 CH/Radio capacity, 512 CH/Zone, 128 Zones
- DB-25 Accessory Connector
- AMBE+2™ Enhanced Vocoder
- 4 W Speaker Audio

● DIGITAL – NXDN MODE

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

● DIGITAL – DMR MODE

- Complies with ETSI DMR Tier II standards
- Two-slot TDMA in 12.5kHz channels
- Call Interruption
- Dual-slot Direct Mode
- Energy Efficient

● DIGITAL – P25 MODE

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

● 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

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

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



OPTIONAL ACCESSORIES

• 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 17 ft (5.2 m), 25 ft (7.6 m), 1.6 ft (0.5 m))

• KCT-72 REMOTE CONTROL CABLE

• KWD-AE30/AE31 SECURE CRYPTOGRAPHIC MODULE

• KPG-180AP OTAP MANAGER

• 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)

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.

SPECIFICATIONS

GENERAL	Mobile Radios		
	NX-5700	NX-5800	NX-5900
Frequency Range	136-174 MHz	Type 1: 450-520 MHz Type 2: 380-470 MHz	RX: 763-776, 851-870 MHz TX: 763-776, 793-806, 806-825, 851-870 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	12.5/25* 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	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, Projections Not Included	6.73 x 1.89 x 7.72 in. (171.0 x 48.0 x 196 mm)		
Weight: Radio with Control Head	3.53 lbs (1.6 kg)		
FCC ID	Type 1 Type 2	K44471100 —	K44471200 K44471201 —
IC Certification	Type 1 Type 2	282F-471100 —	282F-478500 — —

*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 EN Standards
or TIA 603 and specifications shown are typical.
Specifications are subject change without notice, due to advancements in technology.

RECEIVER	Mobile Radios		
	NX-5700	NX-5800	NX-5900
Sensitivity	NXDN 6.25 kHz Digital (3 % BER)	0.20 µV	
	NXDN 12.5 kHz Digital (3 % BER)	0.25 µV	
	DMR Digital (5 % BER)	0.25 µV	
	DMR Digital (1 % BER)	0.40 µV	
	P25 Digital (5 % BER)	0.25 µV	
	P25 Digital (1 % BER)	0.40 µV	
Selectivity	Analog (12dB SINAD)	0.25 µV	
	Analog @ 12.5 kHz	71 dB	70 dB
Intermodulation	Analog @ 25 kHz	81 dB	78 dB
	—	80 dB	85 dB
Spurious Rejection	85 dB		
Audio Distortion	2 %		
Audio Output Power	4 W/4 Ω (Remote Control Head: 3 W/4 Ω)		
TRANSMITTER	NX-5700	NX-5800	NX-5900
RF Power Output Power	50 to 5 W	45 to 5 W	30 W to 2 W (700 MHz) 35 W to 2 W (800 MHz)
Spurious Emission	-73 dB	-75 dB	-80 dB
FM Hum & Noise	Analog @ 12.5 kHz	45 dB	40 dB
Audio Distortion	Analog @ 25 kHz	50 dB	45 dB
	—	2 %	2 %
Emission Designator	16K0F3E, 14K0F3E**, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXE, 7K60FXD, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D		

**NX-5900 model only.

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/ I
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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