KENWOOD

NEXEDGE®

One Radio with Multi-Protocol Support

NXDN™ DMR P25

Gen2 DMR-based T3 DMR Auto Slot Select

Bluetooth® microSDHC GPS FleetSync®

NX-5700/5800/5900

VHF/UHF/700-800 MHz TRANSCEIVERS

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**
- Over-the-Air Programming (OTAP)
- **microSD/SDHC (up to 2GB/32GB) Card Slot**
- I**P54/55** 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
- 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

- DMR Tier III Trunking
- DMR Tier II Conventional
- DMR Auto Slot Select
- Enhanced Encryption (40-bit)
- Site Roaming
- 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 Enhanced Encryption (ARC4)
- 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/5900B**
  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-35/36***
  MICROPHONE [IP54/55] (without / with 12-keypad)
  *To be discontinued

- **KMC-65/66**
  MICROPHONE [IP54/55] (without / with 12-keypad)

  KMC-65   KMC-66

- **KES-5 (A)**
  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		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	12.5 / 15 / 20 / 25* / 30* kHz	12.5 / 25* kHz	12.5 / 25 kHz
	Digital	6.25 / 12.5 kHz	6.25 / 12.5 kHz	6.25 / 12.5 kHz
Power Supply		13.6 V DC ±15 %		
Current Drain	Standby	0.45 A		
	RX	2.3 A		
	TX	13 A		
Operating Temperature		-22° F to +140 °F (-30 °C to +60 °C)		
Frequency Stability (-30°C to +60°C; +25°C Ref.)		±0.5 ppm		
Dimensions (W x H x D) Radio with Control Head, Projections Not Included		6.69 x 1.89 x 6.93 in. (170 x 48 x 176 mm)		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)		3.53 lbs (1.6 kg)
FCC ID	Type 1	K44471100	K44471200	K44478500
	Type 2	—	K44471201	—
IC Certification	Type 1	282F-471100	—	282F-478500
	Type 2	—	282F-471201	—

*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		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		
	Analog (12dB SINAD)	0.25 µV		
Selectivity	Analog @ 12.5 kHz	71 dB		70 dB
	Analog @ 25 kHz	81 dB		78 dB
Intermodulation		80 dB		
Spurious Rejection		85 dB		
Audio Distortion		2 %		
Audio Output Power		4 W (Remote Control Head: 3 W)		

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
	Analog @ 25 kHz	50 dB		45 dB
Audio Distortion		2 %		
Emission Designator		16K0F3E, 14KOF3E**, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXE, 7K60FXD, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D		

**NX-5900 model only.

APPLICABLE MIL-STD & IP*

MIL Standards	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/ 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 Standards					
Dust & Water	IP54: RF Deck of the mobile radio; IP55: Remote Control Head for the mobile radio				

*All interfaces must be fully sealed with appropriate covers or by designated genuine accessories.

• 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. • Windows® is a registered trademark of Microsoft Corporation. • NXDN™ is a trademark of JVCKENWOOD Corporation and Icom Inc. • NEXEDGE® is a registered trademark of JVCKENWOOD Corporation. • FleetSync® is a registered trademark of JVCKENWOOD Corporation.