KENWOOD

NEXEDGE®

One Radio with Multi-Protocol Support

NX-5200/5300/5400

VHF/UHF/700-800 MHz TRANSCEIVERS

NXDN™ DMR P25 Gen2 DMR-based TRUNKING DMR Auto Slot Select Bluetooth® microSD GPS FleetSync®

Full Keypad Model

Limited Keypad Model

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 1.74" (240 x 180 pixels) Transflective TFT Display** for better interface even in direct sunlight and with use of polarized sunglasses
- **Easy to follow GUI** for at-a-glance operational status checking and **Multi-line Text** to convey more information
- **4-way Directional-pad (D-pad)** and **2-Position Lever Switch** for intuitive control and operation
- **Built-In GPS Receiver/Antenna** 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)
- **Built-in Motion Sensor** for life-critical man down detection
- **microSD/SDHC (up to 2GB/32GB) Memory Card Slot**
- **IP67/68** and **MIL-STD-810 C/D/E/F/G**

GENERAL FEATURES

- 6 W (136-174 MHz) Models
- 5 W (380-470, 450-520 MHz) Models
- 3 W (700/800 MHz) Models
- Full Key Models (w/ numeric keypad) and Standard Key Models (w/o numeric keypad)
- Maximum of 4,000 CH/Radio capacity, 512 CH/Zone, 128 Zones
- AMBE+2™ Enhanced Vocoder
- 1 W Loud Speaker Audio

DIGITAL – NXDN MODE

- Gen2 & NXDN Type-C Trunked Operation
- NXDN Conventional Operation
- 6.25 & 12.5 kHz Channels
- 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

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

FM MODES – GENERAL

- Conventional & LTR Zones
- NPSPAC (USA only) Channels (±4.0 Modulation)
- 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

INTELLIGENT BATTERY SYSTEM

- System consists of a Li-ion or Ni-MH rechargeable battery (KNB-L1/L2/L3/N4), Rapid Charger (KSC-Y32), and Battery Reader (KAS-12/12PRO) software
- Up to 60 Rapid Chargers can be chain-connected to a PC
- KAS-12 Battery Reader software can display and manage information
- Up to 5,000 batteries can be managed at a time with the addition of optional KAS-12PRO license upgrade

OPTIONAL ACCESSORIES

- **KNB-L1/L2/L3**
  Li-ion BATTERY PACK (IP67/68 immersion)

KNB-L1 7.4 V/2000 mAh
KNB-L2 7.4 V/2600 mAh
KNB-L3 7.4 V/3400 mAh

- **KNB-L11**
  Li-ion BATTERY PACK
  7.2 V/3900 mAh
  (IP67/68 Immersion)

- **KBP-8**
  BATTERY CASE
  (12AA Alkaline Battery)

Intrinsically Safe Batteries are also available.

- **KSC-52A/B**
  SINGLE UNIT CHARGER

- **KSC-526**
  6-UNIT CHARGER BASE

- **KSC-52PA/B**
  CHARGING POCKET

- **KAS-12/12PRO**
  BATTERY READER
  (PC Software)

- **KRA-22**
  VHF HELICAL ANTENNA
  (Low Profile)

- **KRA-23**
  UHF HELICAL ANTENNA
  (Low Profile)

- **KRA-26**
  VHF HELICAL ANTENNA
  (Standard Length)

- **KRA-27**
  UHF WHIP ANTENNA
  (Standard Length)

- **KRA-32**
  700/800 MHz WHIP ANTENNA

- **KRA-41**
  VHF STUBBY ANTENNA

- **KRA-42**
  UHF STUBBY ANTENNA

- **KWD-AE30/AE31**
  SECURE CRYPTOGRAPHIC MODULE
- **KPG-180AP**
  OTAP MANAGER

- **KMC-70**
  SPEAKER MICROPHONE [IP68]
  (3-button, DSP Active Noise Reduction;
  Green Housing [GR] version is also available)

KMC-70 KMC-70GR

- **KMC-72**
  SPEAKER MICROPHONE [IP67]
  (2-button, Built-in noise canceler)

- **KBH-11**
  BELT CLIP

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-5200	NX-5300	NX-5400
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*1 / 30*1 kHz	12.5 / 25*1 kHz	12.5 / 25 kHz
	Digital	6.25 / 12.5 kHz	6.25 / 12.5 kHz	12.5 kHz (6.25 kHz)
Power Supply		7.5 V DC ±20 %		
Battery Life (5-5-90/10-10-80 duty cycle)	KNB-L1 (2,000 mAh)	10 hours / 6.5 hours		
	KNB-L2 (2,600 mAh)	12.5 hours / 8.5 hours		
	KNB-L3 (3,400 mAh)	17 hours / 11 hours		
	KNB-N4 (2,500 mAh)	12 hours / 8.5 hours		
	KBP-8 (w/ AA x12)	High Power: 11 hours / 8 hours Low Power: 26 hours / 18.5 hours		
Operating Temperature (Radio only)*2		-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 w/ Battery, Projections Not Included	KNB-L1 (2,000 mAh)	2.28 x 5.47 x 1.44 in (58.0 x 138.9 x 36.5 mm)		
	KNB-L2 (2,600 mAh)	2.28 x 5.47 x 1.56 in (58.0 x 138.9 x 39.5 mm)		
	KNB-L3 (3,400 mAh)	2.28 x 5.47 x 1.77 in (58.0 x 138.9 x 44.9 mm)		
	KNB-N4 (2,500 mAh)	2.28 x 6.55 x 1.78 in (58.0 x 166.4 x 45.2 mm)		
	KBP-8 (w/ AA x 12)	2.64 x 8.59 x 2.12 in (67.0 x 218.3 x 53.9 mm)		
Weight	Radio Only	9.21 oz (261 g)		
	KNB-L1 (2,000 mAh)	13.5 oz (382 g)		
	KNB-L2 (2,600 mAh)	14.3 oz (406 g)		
	KNB-L3 (3,400 mAh)	15.8 oz (449 g)		
	KNB-N4 (2,500 mAh)	20.4 oz (579 g)		
FCC ID	Type 1	K44431400	K44431500	ALH442000
	Type 2	—	K44431501	—
IC Certification	Type 1	282F-431400	—	282D-442000
	Type 2	—	282F-431501	—

RECEIVER		NX-5200	NX-5300	NX-5400
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 (12 dB SINAD)	0.25 µV		
Selectivity	Analog @ 12.5 kHz	67 dB		64 dB
	Analog @ 25 kHz	73 dB		
Intermodulation		73 dB		75 dB
Spurious Rejection		80 dB	75 dB	
Audio Distortion		3 %		
Audio Output Power		500 mW (3 % Distortion)/1,000 mW (5 % Distortion)		
TRANSMITTER		**NX-5200**	**NX-5300**	**NX-5400**
RF Power Output Power		6 to 1 W	5 to 1 W	3 to 1 W
Spurious Emission		-70 dB		
FM Hum & Noise	Analog @ 12.5 kHz	40 dB		
	Analog @ 25 kHz	45 dB		
Audio Distortion		2 %		
Emission Designator		16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXE, 7K60FXD, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D		16K0F3E, 14K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXE, 7K60FXD, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D

*1 25 and 30 kHz are not included in the models sold in the USA or US territories.
*2 Operating temperature specification for a Li-ion battery is 14°F to +140°F (-10°C to +60°C).
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.

APPLICABLE MIL-STD & IP*3

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	516.4/ I, IV	516.5/ I, IV	516.6/ I, IV
Immersion	—	—	—	512.4/I	512.5/I
International Protection Standards					
Dust & Water	IP54, IP55				
Immersion	IP67, IP68				

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

DCG RADIO
— DIVERSIFIED COMMUNICATIONS GROUP —
Phone: (513) 794-1275
Email: info@dcgradio.com
1008 Seabrook Way Cincinnati, OH 45245

KENWOOD Communications Global Website
comms.kenwood.com

JQA-1205 091
ISO9001 Registered
Communications Systems Business Unit
JVCKENWOOD Corporation