



VHF/UHF DIGITAL TRANSCEIVER

NEXEDGE® VHF/UHF 700-800MHz DIGITAL TRANSCEIVER
P25 (I&II) / NXDN® / DMR MULTI_DIGITAL & FM ANALOG
MOBILE RADIOS

NX-5700/5800/5900

ONE RADIO, MULTI-PROTOCOL SUPPORT.



The NX-5000 Series offers unsurpassed interoperability for a wide variety of users as it supports three digital CAIs — NXDN, DMR and P25 (Phase 1 & 2) — plus FM analog in a single radio. Best of all, a desired CAI can be selected at will, giving you the freedom to migrate at your own pace — whether you are intent on going fully digital, undecided about which digital system to pick, or just wanting to maintain both digital and analog for a while. An NX-5000 radio can simultaneously support two digital protocols plus analog, offering the following combinations: FM/DMR/ NXDN, FM/NXDN/P25, and FM/DMR/P25.

NXDN:

A desired CAI can be selected at will – whether you are intent on going fully digital, undecided about which digital system to pick, or just wanting to maintain both

digital and analog for a while.

The NXDN air interface can fit into the very narrow 6.25 kHz bandwidth using FDMA technology. Ensuring spectrum efficiency, wide coverage and virtually unlimited scalability, it provides for nationwide expansion: Type-C Trunking Gen2 offers enhanced features, flexibility and performance, linking up to 1,000 sites or 24 networks.

DMR:

For simple conventional communications, making use of existing infrastructure, DMR is an excellent, cost-effective solution. Being energy-efficient, it offers longer battery life. And thanks to 2-slot TDMA, it is possible to obtain 2 talk paths within an analog 12.5 kHz bandwidth, thus doubling the capacity. The NX-5000 Series supports Tier II conventional mode.

P25:

This digital CAI ensures interoperability among public safety agencies in North America, Australia and New Zealand. The NX-5000 Series is compatible with Phase 1 (conventional and trunked), and Phase 2 (trunked).



INTUITIVE DISPLAY & OPERABILITY:MOBILES



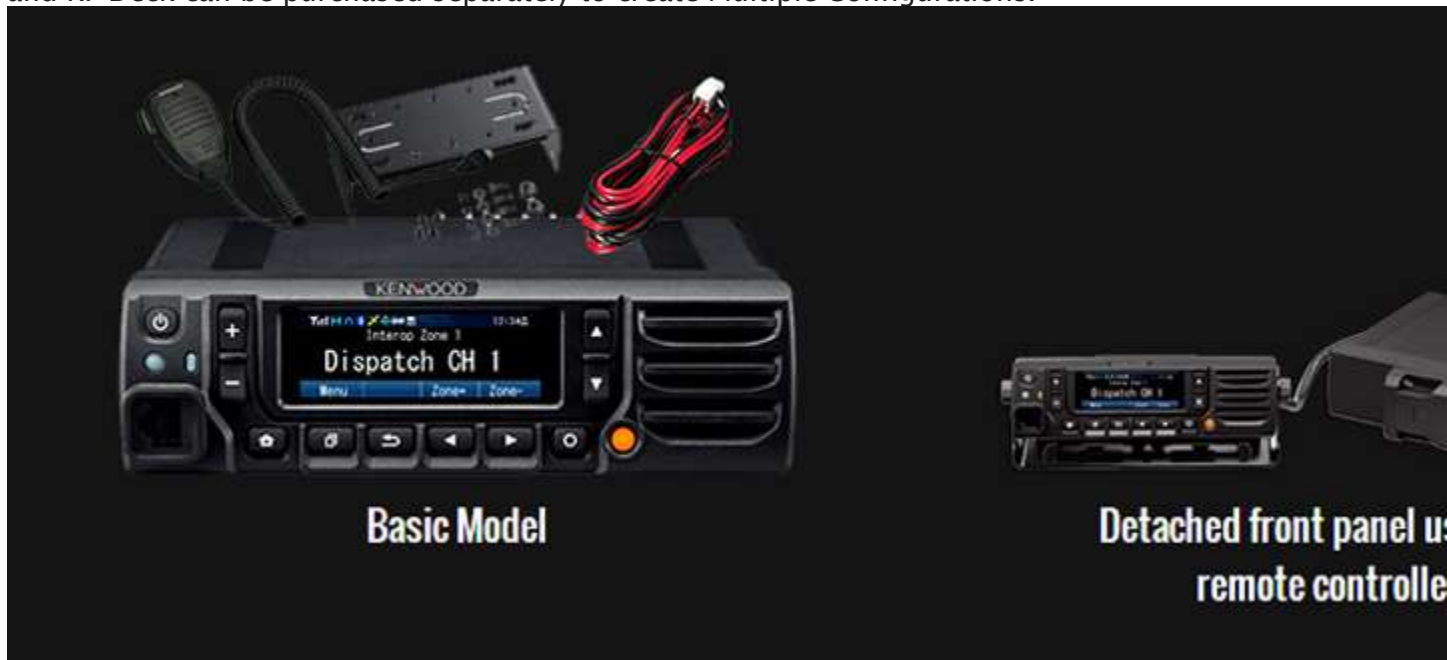
NX-5700(B)/5800(B) (actual size)

Full-color display and more

Integrated luminance sensor on a 2.55-inch (154 x 422 pixel) 65,536-color TFT display automatically adjusts the brightness of the backlight. On the screen, text data is shown in multi-line, as much as 5 lines.

Detachable front panel

The front panel can be removed and used as a remote controller. Also the Featured Panel* and RF Deck can be purchased separately to create Multiple Configurations.



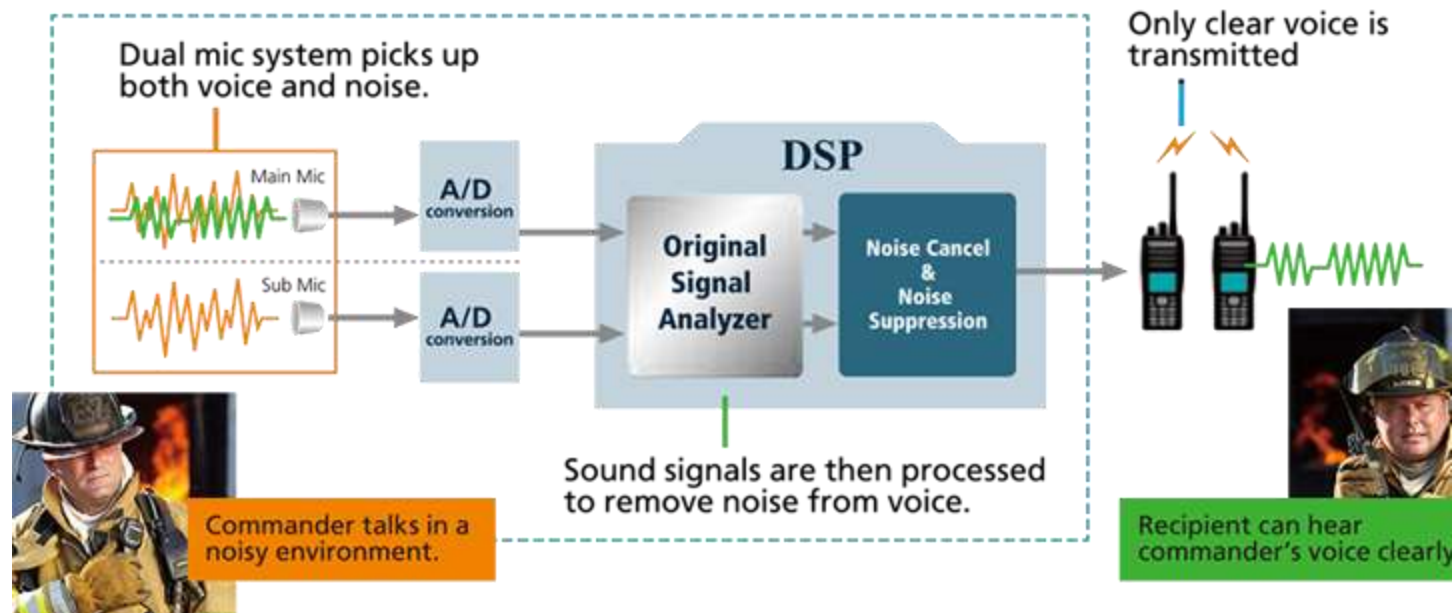
RENOWNED KENWOOD AUDIO



Clear Communications Even in Noisy Environments.



In addition to sophisticated sound analysis and optimization technologies, these radios feature Active Noise Cancelling based on leading-edge digital technology to offer clear communications even in very noisy environments.



TOUGH & ROBUST

MIL-STD Environmental and Ingress Protection Standards



During the development stage, NX-5000 Series radios go through a number of stringent tests as shown below. As a result, the portable radios complying with IP67/68 immersion standards offer max. 2-hour protection at a depth of 1 meter*, while the mobile radios comply with IP54/55 dust/water ingress protection standards.

*Applies for IP68

FEATURE PACKED

BUILT-IN BLUETOOTH®



Hands-free operation is vital for many NX-5000 users. The radios' built-in Bluetooth® module is compatible with Headset and Serial Port Profiles (ver. 3.0) and keeps your hands free.

GPS TO TRANSMIT YOUR POSITION

Featuring an integrated GPS module and antenna, NX-5000 portable radios can transmit positional data, enabling effective management when used with tracking applications like KAS-10 software. Mobile models can support GPS with the optional KRA-40G.



SD CARD SLOT

For storing voice and data, memory capacity can be increased up to a huge 32GB on a microSD card.*

* Purchase a card separately

ENCRYPTION EQUIPPED

Secure communications are an essential requirement, especially for public safety applications.

NX-5000 radios are equipped with 56-bit key Data Encryption Standard (DES) encryption. For even higher protection the radios can support 256-bit Advanced Encryption Standard (AES) encryption with optional module.

SENSORS FOR USER SAFETY



Man-down Detection, Stationary Detection, or Motion Detection will be automatically engaged when the embedded acceleration and tilt sensors detect unusual behavior. Lone Worker function automatically places the radio in Emergency Mode if it is not operated for a certain period of time.

The bright orange Emergency Button is located at the top (portables) or front (mobiles) of the radio for high visibility and instant access when needed.

MULTIPLE CONFIGURATIONS

Create a variety of configurations to suit diverse requirements

The NX-5700(B)/5800(B) mobile radios allow users to create a variety of configurations to suit diverse requirements by combining different options.

1. Single Remote Control Head x Single RF Deck

The detachable front control panel of the NX-5700/5800 is used as a Remote Control Head. Suited for distribution and courier services.



3. Dual Remote Control Heads x Single RF Deck

One controller can be mounted on the dashboard with the other at the rear. Useful for EMS applications.



2. Single Remote Control Head x Multi RF Decks*

Operate multiple radios as if they were one by adding an RF Deck. Recommended for law enforcement agencies.



4. Dual Remote Control Heads x Multi RF Decks

This adds the convenience of a dual control head multi RF decks (3 max.) configuration. Best suited for law enforcement agencies.



OTHER FEATURES

- Multi-Digital + FM Analog Operation
 - Gen2 & NXDN® Conventional/Type-C Trunking Protocol
 - DMR Tier II Conventional
 - P25 Conventional/Trunking (Phase 1 /Phase 2)
- FM Analog Conventional & LTR Zones
- Color 2.55" (154 x 422 pixel) TFT Display
- Color GUI and Multi-line Text Display
- 4 W/4 Ω; 3 W/4 Ω for the Remote Control Head
- 6 Front PF keys & 4 Up / Down Selectors

- Emergency Button
- MDC-1200
- FleetSync®/II
- Maximum of 4,000 CH/Radio capacity, 512 CH/Zone, 128 Zo

SPECIFICATIONS

		Mobile Radios		
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		

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		±1.0 ppm		
Dimensions (W x H x D)	Radio w / Control Head (KCH-19)	6.69 x 1.89 x 6.93 in (170.0 x 48.0 x 176.0 mm)		6.73 x 1.89 x 7.72 in (171.0 x 48.0 x 196 mm)
Weight (Net)	Radio w / Control Head(KCH-19)	3.53 lbs (1.6 kg)		
FCC ID	Type 1	K44471100	K44471200	K44478500
	Type 2	—	K444712011	—
IC Certification	Type 1	282F-471100	—	282F-478500
	Type 2	—	282F-471201	—

Sensitivity	NXDN 6.25 kHz Digital (3 % BER)	0.20 μ V	
	NXDN 12.5 kHz Digital (3 % BER)	0.25 μ V	
	DMR Digital (5% BER)	0.25 μ V	
	DMR Digital (1% BER)	0.40 μ V	
	P25 Digital (5 % BER)	0.25 μ V	
	P25h Digital (1 % BER)	0.40 μ V	
	Analog (12 dB SINAD)	0.25 μ V	
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/4 Ω (Remote Control Head: 3 W/4 Ω)	
TRANSMITTER			
RF Power Output Power		50 to 5 W	45 to 5 W 30 to 2 W (700 MHz) 35 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, 14K0F3E*, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 8K30F1E,8K30F1D, 8K30F7W, 7K60FXE, 7K60FXD, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

*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