NEXEDGE®

Two-way Radio for Every Profession

Gen2

NXDN™ DMR

Bluetooth® GPS FleetSync®

NX-3000 SERIES
NEXEDGE VHF/UHF MULTI-PROTOCOL DIGITAL & ANALOG RADIOS
NX-3000 — Answering the Needs of Every Profession.

From enterprise- to operation-critical applications, the NX-3000 Series will shine in a host of different business categories. In addition to the great convenience afforded by a host of powerful features, optional software upgrades facilitate after-purchase enhancements to create a radio that perfectly matches specific customer requirements. And thanks to the NX-3000’s support for multiple protocols, it can be seamlessly integrated into an existing system, where it will instantly become an indispensable communications asset.

Model Lineup

Portable Radios
NX-3000 Series portables are available in 3 configurations, each of which is available with a choice of 2 different connectors.

NX-3220 (VHF)/NX-3320 (UHF), 2-pin connector
NX-3200 (VHF)/NX-3300 (UHF), 14-pin Universal connector

*Product releases are not necessarily simultaneous.

Mobile Radios
Mobile radios come in 4 configurations; a base model (NX-3720/NX-3820), base model with built-in GPS and Bluetooth modules (NX-3720G/ NX-3820G), high-powered model (NX-3720H/ NX-3820H), and high-powered model with GPS and Bluetooth modules (NX-3720HG/ NX-3820HG).
One Radio with Multi-Protocol Support

Customize at Will
The NX-3000 Series offers future-proof flexibility with support for both NXDN and DMR digital protocols as well as FM analog – all in a single radio. A desired digital protocol can be selected at will, giving you the freedom to migrate to digital or expand your digital environment further at your own pace. Also, it offers unique capability to add or delete functions at will.

NXDN Digital Protocol
Along with the narrow 12.5 kHz support, NXDN employs the very narrow 6.25 kHz bandwidth using FDMA technology. NXDN provides excellent spectrum efficiency, wide coverage and scalability. NXDN Type-C Trunking and Gen 2 Trunking offer flexibility and performance, including the ability to link up to 1,000 sites.

DMR Digital Protocol
If you are looking for a small, simple, cost-effective system, DMR is a fine choice. Thanks to 2-slot TDMA, DMR can obtain 2 talk paths within 12.5 kHz bandwidth, effectively doubling the capacity for a single license and/or repeater.

FM Analog
FM analog protocol is offered in 25 kHz and narrow 12.5 kHz channel spacing. Conventional and LTR systems are available, with QT/DQT, DTMF, 2-tone/5-tone, MDC-1200, and FleetSync® signaling.

*1 Some limitations apply in certain regions when configuring wide channel spacing. *2 Signaling availability varies depending on the region.

Active Noise Reduction (ANR)
KENWOOD’s ANR can discriminate between voice and noise, making full use of DSP to eliminate ambient noise so that the caller appears to be talking in a noiseless environment. Moreover, even more advanced digital noise reduction is offered by KENWOOD microphones, such as the optional Speaker Microphone KMC-54WD with its dual-mic system that is designed to work with portable models featuring the 14-pin Universal Connector.

Optimizing Audio
It is possible to customize audio processing by adjusting the TX/RX audio equalizer, auto gain control, and audio profile in ANR. Noise reduction can set to switch off automatically when the background noise level is sufficiently low that it doesn’t impact communications; this Low Noise Level Adjustment function ensures there will be no deterioration in audio quality in such situations.

Auto Recording
When receiving a call while otherwise occupied, there are a chance you could miss a name, number or other key information. In such cases, Auto Recording is handy as it records and plays back past conversations.

Knowing without Looking
Voice announcement will keep you informed of the new number of a changed zone/channel, function status and transceiver status when the PF button is pressed, as well as reception status. Announcements are made in any one of 11 languages, configured on the subscriber unit. Also, among several user-programmable functions is the ability to prerecord any phrase and add it to the built-in Voice Announcement Library for guidance. Voice guidance includes zone/channel name, button function on/off status, transceiver status, and other phrases registered with the status list.
Integrated GPS for Location Management
Thanks to the integrated GPS receiver/antenna, the current location of the radio can be sent to a recipient. Positional data enables effective management when used with applications like KAS-20 AVL & Dispatch Software. GPS data acquired at set time intervals can be stored in the radio’s memory.

Bluetooth®
Bluetooth is a means of wireless transfer of audio and data between two Bluetooth-compatible devices. The NX-3000 supports Bluetooth Headset Profile (HSP), which can be used to pair the radio and a Bluetooth-compatible headset to initiate a voice call using the mic of the headset. What’s more, the radio is also compatible with Bluetooth Serial Port Profile (SPP) to enable communication with peripheral devices for various applications.

Maintenance & Robustness
All KENWOOD radios go through stringent tests before shipment, including drop, immersion, splash, key punch, extreme temperature, dust, and heavy rain to simulate the harshest operating conditions experienced in a variety of applications. The portable radios also meet international ingress protection standards, including IP54, IP55, and IP67. The mobile radios feature IP54 protection. Also, all radios meet the MIL-STD 810 standards, including IP54, IP55, and IP67. The mobile radios also meet international ingress protection standards set by the U.S. Department of Defense.

Tough & Robust
All KENWOOD radios go through stringent tests before shipment, including drop, immersion, splash, key punch, extreme temperature, dust, and heavy rain to simulate the harshest operating conditions experienced in a variety of applications. The portable radios also meet international ingress protection standards, including IP54, IP55, and IP67. The mobile radios feature IP54 protection. Also, all radios meet the MIL-STD 810 C & G standards set by the U.S. Department of Defense.

Text Messaging
The NX-3000 Series enables sending/receiving text messages when using either digital protocol. These can be simple canned status messages (confirming receipt, etc.) or short text messages (ideal for relaying addresses and phone numbers). FM analog can also be used.

Over-the-Air Programming (OTAP) and Over-the-Air Alias (OAA)
OTAP allows simultaneous writing of configuration data to subscriber units in NXDN mode using wireless communications, which is updated remotely from a base station. Exclusive to NXDN system, this convenient function can be performed by installing OTAP Manager Software KPG-180AP to a PC, which transfers the configuration to the base station transceiver to distribute the data. OAA is another convenient feature only available on the NXDN trunking systems that displays the caller ID name on the radio display even if the ID is not configured for display. This feature is especially handy when you are roaming on a system and new subscriber units from the system in service are temporarily added.

Conventional and Trunking Systems Compatible with the NX-3000 Series

**Conventional**

- **Conventional**
  - NXDN/DMR Digital Conventional
- **Conventional IP Network**
  - NXDN/DMR Digital Conventional IP Site Roaming
- **Multi-site Trunking (NXDN Type-C)**
  - NXDN Type-C Trunking
- **Enhanced Multi-site Trunking (NXDN Gen2)**
  - NXDN Gen2 Trunking

**Cost & capacity baseline**

- **Cost effective coverage**
  - More capacity and coverage
- **Most capacity, coverage, and control**
  - Centralized control with server-based architecture

**No trunking**

- **Up to 16 (unicast) or 48 (multicast) sites**
- **Up to 48 sites**
- **Up to 1,000 sites**
### Accessories

#### Battery Packs
- **KNB-55L/57L** Li-ion Battery Pack (7.4 V/1480 mAh, 7.4 V/2000 mAh)
- **KNB-56N** Ni-MH Battery Pack (7.2 V/1400 mAh)
- **KNB-78L*** Li-ion Battery Pack (7.4 V/2860 mAh)
  - *Available Later*

#### Headphones/Earpieces/Microphones
- For 2-pin connector portables
  - **KMC-45D** Speaker Microphone (IP54/55)
  - **KEP-1** Earphone Kit (3.5mm) for KMC-45D Speaker Microphone
- For Universal connector portables
  - **KMC-41D** Speaker Microphone (IP54/55)
  - **KMC-54WD** Speaker Microphone (with dual-sided 2-Mic for superior ANR, IP67)

#### Chargers
- **KSC-25LS/25S** Rapid Charger (Li-ion Only/Tri-Chem)
- **KSC-256** Multiple Charger (6-pocket)
- **KMB-5** Battery Case (6 AA)
- **KES-3** External Speaker (compact low profile; 3.5 mm plug)
- **KES-5** External Speaker (40 W max input, requires KCT-60)

#### Antennas
- **KRA-22/23** VHF/UHF Helical Antenna (Low Profile)
- **KRA-26** VHF Helical Antenna (Standard Length)
- **KRA-27** UHF Whip Antenna (Standard Length)
- **KRA-41/42** VHF/UHF Stubby Antenna

#### Others
- **KBH-11** Belt Clip (2.5 in)

#### General Software Applications
- **KPG-180AP** OTAP Manager
- **KAS-20** AVL & Dispatch Software
### APPLICABLE MIL-STD/IP

<table>
<thead>
<tr>
<th>MIL Standard</th>
<th>B10C</th>
<th>B10D</th>
<th>B10E</th>
<th>B10F</th>
<th>B10G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure</td>
<td>500 I</td>
<td>500 J</td>
<td>500 k</td>
<td>500 l</td>
<td>500 m</td>
</tr>
<tr>
<td>High Temperature</td>
<td>500 N</td>
<td>500 O</td>
<td>500 P</td>
<td>500 Q</td>
<td>500 R</td>
</tr>
<tr>
<td>Low Temperature</td>
<td>500 S</td>
<td>500 T</td>
<td>500 U</td>
<td>500 V</td>
<td>500 W</td>
</tr>
<tr>
<td>Temp. Shock</td>
<td>500 X</td>
<td>500 Y</td>
<td>500 Z</td>
<td>500 AA</td>
<td>500 AB</td>
</tr>
<tr>
<td>Solar Radiation</td>
<td>500 AC</td>
<td>500 AD</td>
<td>500 AE</td>
<td>500 AF</td>
<td>500 AG</td>
</tr>
<tr>
<td>Rain</td>
<td>500 AH</td>
<td>500 AI</td>
<td>500 AJ</td>
<td>500 AK</td>
<td>500 AL</td>
</tr>
<tr>
<td>Spurious Emission</td>
<td>500 AM</td>
<td>500 AN</td>
<td>500 AO</td>
<td>500 AP</td>
<td>500 AQ</td>
</tr>
<tr>
<td>FM Hum &amp; Noise</td>
<td>500 AR</td>
<td>500 AS</td>
<td>500 AT</td>
<td>500 AU</td>
<td>500 AV</td>
</tr>
<tr>
<td>FM Hum &amp; Noise</td>
<td>500 AW</td>
<td>500 AX</td>
<td>500 YA</td>
<td>500 YB</td>
<td>500 YC</td>
</tr>
<tr>
<td>Audio Distortion</td>
<td>500 YD</td>
<td>500 YE</td>
<td>500 YF</td>
<td>500 YG</td>
<td>500 YH</td>
</tr>
<tr>
<td>EMI</td>
<td>500 YI</td>
<td>500 YJ</td>
<td>500 YK</td>
<td>500 YL</td>
<td>500 YM</td>
</tr>
<tr>
<td>ESD</td>
<td>500 YN</td>
<td>500 YO</td>
<td>500 YP</td>
<td>500 YQ</td>
<td>500 YR</td>
</tr>
<tr>
<td>Dust &amp; Water</td>
<td>500 YS</td>
<td>500 YT</td>
<td>500 YU</td>
<td>500 YV</td>
<td>500 YW</td>
</tr>
</tbody>
</table>

*1 Audio-accessory connector must be covered. *2 Microphone KMC-15 or KMC-16 must be connected to the radio, and all accessory connectors must be covered.

** Notes:**
- The Bluetooth word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. **KEMKIT** is a trademark of JVCKENWOOD Corporation and Icom Inc. **NXEDGE** is a registered trademark of JVCKENWOOD Corporation.
- **Flexifile** is a registered trademark of JVCKENWOOD Corporation. All other trademarks are the property of their respective holders.