KENWOOD

10 COMPETITIVE ADVANTAGES

NEXEDGE®

10th ANNIVERSARY NEXEDGE®

KENWOOD

1

IMPRESSIVE VERSATILITY

NEXEDGE offers:

- Conventional
- Multi-Site Conventional
- Voting
- Multi-Site Conventional with Voting
- Type C Gen1
- Type C Gen2
- Simulcast

A NX-5000 Series NEXEDGE radio can simultaneously support two digital protocols plus analog, such as FM/NXDN/P25, for a seamless interface with local first responders using P25, achieving true interoperability. The NEXEDGE multi-deck configuration enables EMS teams, Battalion Chiefs and others to access multiple networks and bands, including tri-band operation, with minimal equipment.

NEXEDGE was first to market with on-the-fly configuration of work groups for rapid collaboration with secure voice or text communications and it is the only digital to offer Over the Air alias. Broadcast Group Call is a one way voice feature that allows a designated individual to call either a specific Group or all subscriber units for vital information such as emergency evacuation instructions. Associated Group ID allows a user to register and monitor more than one talk group even though no other users on the talk group are registered at that site.

NEXEDGE radios are engineered with unequalled audio quality and built to meet the highest military specifications for durability and reliability for use in the most rugged work environments, which is why so many Class 1 railroads and other critical infrastructure organizations rely on NEXEDGE.

KENWOOD

2

ROBUST INFRASTRUCTURE

NEXEDGE Gen2 is built on a server-based architecture, designed to accommodate the need for expanded capacity.

The System Controller Server is at the heart of the Gen2 infrastructure and acts as the media server for connected sites. Controllers are stackable devices that can support up to 1,152 sites and 24 System Codes, linking multiple sites and channels for higher reliability and lower cost.

Gen2 provides more sites, centralized configuration and enhanced management capabilities, while using existing network monitoring applications and seamless roaming. SMR operators can update and expand their systems without any service disruption.

KENWOOD

3

SMART SCALABILITY

As a starter investment, customers can buy one or more NXR repeaters and NX subscriber units and immediately begin realizing the benefits of NEXEDGE digital features. Inherent scalability means customers can adjust to changes in coverage or user need without making significant changes in the existing system infrastructure.

NEXEDGE is an IP-based system with robust, web-based management tools that users can activate from anywhere they have network access. Rather than relying on pre-programmed time stamps, Gen2 systems dynamically manage GPS updates, showing where units are registered at all times, updating more than 500 units a minute.

NEXEDGE provides SNMP reporting, important for alarms and status messaging on system component status, preventing downtime and enabling proactive program maintenance.

KENWOOD

4

SPECTRUM EFFICIENCY

The NXDN air interface fits into both 12.5 kHz and 6.25 kHz bandwidth channel operations, enabling frequency stability that exceeds regulatory and emissions mask requirements in all bands.

Very narrow 6.25 kHz bandwidth mode offers a high carrier-to-noise ratio (CNR) so radios can communicate over greater distances.

The ability to operate at 6.25 kHz gives users extra protection from interference. Other digital protocols operating at 12.5 kHz have the potential to cause interference in a neighboring system, which is eliminated with NEXEDGE 6.25 kHz operation.

Although no date has been set for the inevitable move to 6.25 kHz very narrow band operation throughout the U.S., NEXEDGE customers are future proofed and ready for that migration.

KENWOOD

5

AUDIO EXCELLENCE

KENWOOD has an unmatched reputation for research, development and manufacture of high performance audio components and systems. This renowned crisp, clear and loud audio is integrated into all KENWOOD two-way radio products.

KENWOOD subscriber programming software includes audio equalizers for reception and transmission, allowing system managers to customize audio for each individual subscriber unit.

The NX-5000 and NX-3000 are the only radios to provide Active Noise Reduction (ANR), the highest-grade noise reduction, at an attractive price. With NEXEDGE, sound clarity is uncompromised even in poor coverage and areas with loud background noise. The addition of the KENWOOD KMC-54W speaker microphone further suppresses environmental noise.

KENWOOD

6

MANUFACTURING EXPERTISE

Many radio companies outsource the manufacture of many of their products. Not true with KENWOOD branded products. Our parent company, JVCKENWOOD, manufactures products in its own strategically located factories, maintaining the highest standards in manufacturing quality, with a commitment to maximizing performance with each generation of new product.

KENWOOD radios are designed based on user feedback and built to ensure efficient operation and preserve radio users' safety in all work conditions.

A product manufactured in Japan has a significant brand advantage and the NEXEDGE F model radios have a further edge in bid situations when products must be manufactured in a favored nation.

KENWOOD

7

SUPERIOR COVERAGE

The NEXEDGE Series of advanced digital radios uses the NXDN protocol. This is a widely supported open standard Common Air Interface (CAI) for mobile communications. As well as providing wider coverage, NEXEDGE delivers clear voice quality even over potentially unreliable communications channels and in the noisiest environments.

RF signal strength weakens with distance, which is why analog reception becomes increasingly noisy and intermittent. A digital NXDN signal is audible at a greater range than is possible with an analog signal.

The low Bit Error Rate (BER) of NXDN also improves reception even in fringe areas. Coverage is expanded by as much as 20% over FM analog, resulting in a 50% increase in the coverage area for digital 6.25 kHz. NXDN digital can recover audio from a weak signal by analyzing the transmission and filling in the missing pieces with the use of Forward Error Correction (FEC), further extending range.

KENWOOD

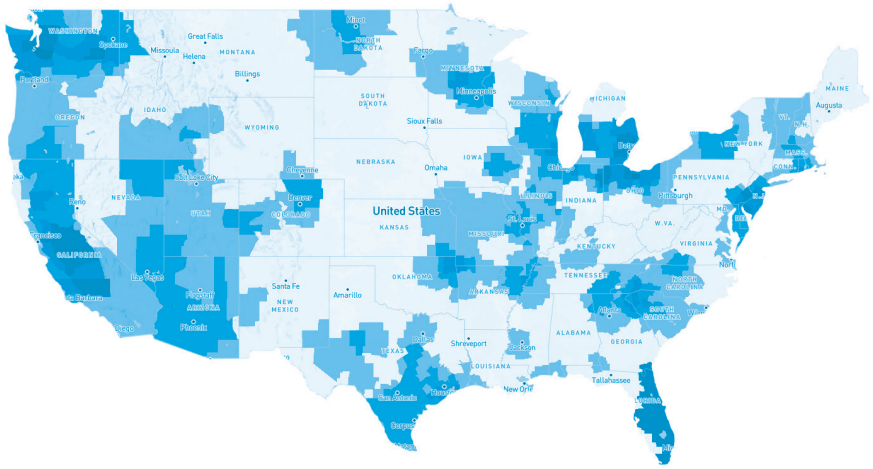
8

NATIONAL FOOTPRINT

KENWOOD and its partner dealers have created one of the largest two-way radio networks in the U.S. With over 910 sites and 3,576 repeater channels, this robust network can support local, county, state-wide and regional radio communications requirements.

The NEXEDGE Bridge in the Gen1 format connects up to eight systems and, because KENWOOD dealers work cooperatively, NEXEDGE SMR operators can provide customers with true wide area coverage at a competitive price.

KENWOOD SMR dealers in this national network view themselves as cooperative allies instead of competitors. Each operator can achieve a greater market presence through that cooperation, supported by NEXEDGE technology.



KENWOOD

WORLDWIDE ACCEPTANCE

NEXEDGE is celebrating its 10th anniversary since its launch, with more than 2 million units sold worldwide and more U.S. dealers selling the technology than any other digital protocol, supported by JVCKENWOOD, a strong international brand with a 90-year history. NXDN has been recognized by the International Telecommunications Union (ITU) as an International Open Standard.

10th ANNIVERSARY NEXEDGE®

Established in 2008, the NXDN Forum has grown into a multi-faceted membership organization dedicated to meeting the digital migration needs for the next generation of radio communications. The NXDN Forum is inclusive and allows any manufacturer to develop products using the NXDN Common Air Interface without any fees. This sharing of intellectual property demonstrates the willingness of NXDN developers to create an open, competitive environment free of unnecessary restrictions. The Forum continues to grow worldwide along with the number of compatible products. Many two-way radio manufacturers are members including ICOM, Alinco, Ritron and Hytera.

The NEXEDGE Developers are a network of third party vendors that provide gateways to NEXEDGE products, allowing a PoC device to communicate on a NEXEDGE system, allowing users to have access to a smaller wireless device to expand their LMR coverage area.

KENWOOD

10

COST SAVINGS

KENWOOD radios are available at every price point, making them available to a broad range of users. Other cost considerations that make NEXEDGE less expensive over the life of the system include:

- Propagation studies and field system deployments reveal that, compared to NEXEDGE, other digital protocols require more sites for comparable coverage. More sites require more maintenance which also adds to personnel cost. NEXEDGE requires less site equipment and fewer employees to maintain, for a significant cost benefit to the customer.

- DMR operation requires extremely tight timing, which requires ongoing maintenance and additional personnel, leading to added expense.

- Poor coverage penetration, especially in tall metal/concrete structures, requires complex internal antenna systems, an added cost which is not a requirement for most NEXEDGE systems.

KENWOOD

LEARN MORE ABOUT KENWOOD NEXEDGE® SOLUTIONS:

JVCKENWOOD USA Corporation
1440 Corporate Drive
Irving, TX 75038
1-800-950-5005

Visit our web site at: http://www.kenwood.com/usa
See our national network of NEXEDGE SMR operators: http://www.kenwood.com/usa/com/systems/coverage/

JVCKENWOOD