

KENWOOD

Listen to the Future

NEXEDGE™

KENWOOD DIGITAL SYSTEMS

NEXEDGE™ Multiple Solutions, One System

NEXEDGE™

Delivering DIGITAL Extending ANALOG

Advanced features, extended coverage, strong security and 12.5 / 6.25 kHz compatibility are just some of the benefits of adopting next-generation NEXEDGE™ for advanced digital communications. In addition, NEXEDGE™ is designed for self-paced migration and upgrades by offering continued service to analog fleets as long as needed and software-driven upgrades for adding advanced digital system configurations and operations.

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The image features a large, dark grey circular logo in the upper center containing the word "NEXEDGE" in a white, sans-serif font, followed by a trademark symbol (TM). The background is a composite image showing three men in the foreground using two-way radios. The man on the left is wearing a light blue short-sleeved shirt and glasses, smiling while holding a radio. The man in the center is wearing a dark suit, white shirt, and red tie, looking serious while holding a radio. The man on the right is wearing a dark cap, a high-visibility yellow vest over a dark jacket, and is looking to the side while holding a radio. The background behind them shows an industrial or construction site with scaffolding and a clear blue sky. The entire image is overlaid with a faint, light blue geometric pattern of overlapping circles and squares.

NEXEDGE™

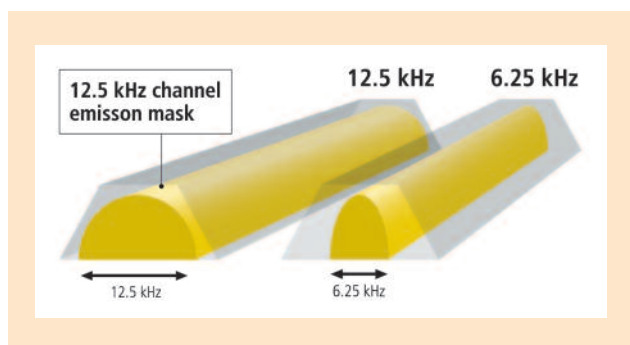
Advantages

Stacking up

NEXEDGE™ makes sound business sense

Timeless Spectrum Efficiency

All NEXEDGE™ equipment operates in 25 & 12.5 kHz analog and 12.5 & 6.25 kHz NXDN® digital modes – satisfying spectrum requirements today & tomorrow.



Operationally Fit

NEXEDGE™ systems are configurable in traditional conventional, trunked and wide area trunked network operation modes. IP connectivity for NEXEDGE™ trunked sites provides wide area calling and system scalability over existing private LAN/WAN assets and commercial services.

Migration by Design

NEXEDGE™ supports both NXDN® digital and analog modes via common transceiver technology. Service to both analog and digital fleets provides a self-paced migration path that accommodates any budgetary, administrative, organizational or time constraints.

NEXEDGE™ uses existing power amps and site management equipment providing a return on existing investments and a choice of multiple suppliers for years to come.

NEXEDGE™ Conventional operates in 12.5 kHz “Mixed Mode” so that analog and digital fleets can share the same channel.

NEXEDGE™ digital trunked traffic channels can be shared with analog conventional, analog trunked or both types of traffic.

Digital Voice Technology

NEXEDGE™ uses the AMBE+2™ VOCODER, a state-of-the-art voice digitization and compression technology offering enhanced Forward Error Correction and noise reduction that offers superior clarity at varying signal strengths.



Advantages

Secure Privacy

NEXEDGE's NXDN® digital signal offers inherent security against casual electronic eavesdropping versus easily intercepted analog radio. The built-in NXDN® scrambling provides security and confidentiality for communications within the same system and talk group. Inter-site IP links are further secured through encrypted VPN tunneling. The NEXEDGE™ system manager allows operators to validate/invalidate unit and group IDs for system access via IP access as fleet organization changes or as temporary or seasonal users come and go. Each NEXEDGE™ subscriber radio has a factory embedded unchangeable unique one-of-a-kind Electronic Serial Number (ESN) that can be invalidated to prohibit access to unauthorized, cloned, lost or stolen radios while preserving the organization's unit and talk group ID numbering schemes.

Asset Management with ROI

The NEXEDGE™ System Manager for NXDN® trunked sites and networks reduces operational and maintenance costs with remote programming, firmware uploading, subscriber unit privileging, monitoring and diagnostic capabilities all from a secure user-friendly Windows®-based application via direct connection, dial-up modem, or IP connection.

Critical Features for Critical Jobs

NEXEDGE™ 65,519 ID range accommodates group and individual private unit-to-unit calling for large fleets and multi-user shared systems.

The NEXEDGE™ Over-the-Air Alias feature sends each user's text name over the air, providing a user friendly caller ID even if the receiving radios alias list hasn't been updated.

Paging with alert provides traditional "beeper" and talk back pager functionality while voice storage options allow users to recall and playback missed dispatcher voice calls. Emergency features can alert a dispatcher, a supervisor or a whole talk group to a unit in distress. The All Group Call and Broadcast Call features provide facility-wide general announcements or communications command and control during emergency evacuation or lock down procedures. Remote Stun/Kill and Revive temporarily or permanently disables lost or compromised subscriber units that may compromise security or cause system interference and Remote Check enables a dispatcher to verify if a unit is in system range. All subscribers have simultaneous voice and GPS capability for automatic fleet tracking.

Technologies & Operating Modes

Adding Up

NEXEDGE™ offers you the formidable advantages of tomorrow's technologies

The NXDN® Digital Advantage

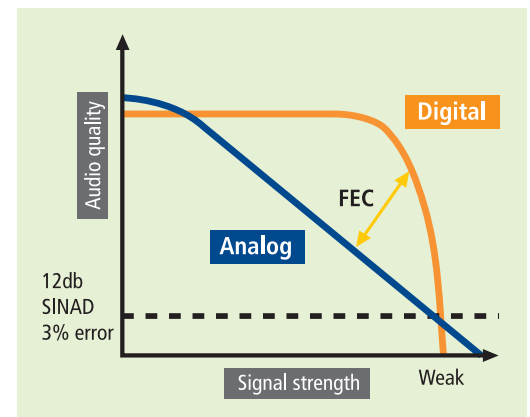
As signal strength decreases, noise and dropouts increase in analog systems thus degrading intelligibility.

NXDN® signal reduces noise and detects and corrects digital errors before being heard by the user thus increasing the effective range beyond that of analog systems.

NEXEDGE™ systems support the following NXDN® digital modes:

- NXDN® Conventional
- NXDN® Trunked
- NEXEDGE™ Multi-Site IP Networks

In addition, NEXEDGE™ equipment can support legacy analog modes.



NXDN® Conventional Mode

NXR-700/800 base units include a 16-RAN (Radio Access Number) capacity conventional repeater controller for 16 user group site sharing. The 65,519 (each) Group ID and Unit ID capacity adds group and individual selective calling capability beyond conventional analog. Also, Mixed mode operation allows analog & NXDN® conventional units to share the same RF channel.

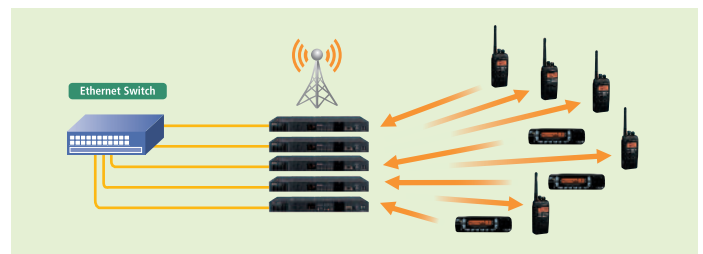


Technologies & Operating Modes

NXDN® Trunked Mode

NEXEDGE™ trunked mode provides increased capacity, enhanced call capabilities, improved security and faster communications with less required user operation than conventional systems. The system automatically assigns channels for faster, efficient use of spectrum, allowing users to concentrate on the job at hand. The 3,000 (each) Unit ID and Group ID per-site capacity provides ample unit and fleet organization capabilities. Group and Individual calls enjoy complete privacy as other users in the system cannot monitor the calls. The Priority Monitor feature will monitor for up to 4 high-priority talk groups and switch users to those calls in progress so important calls are not missed. During peak

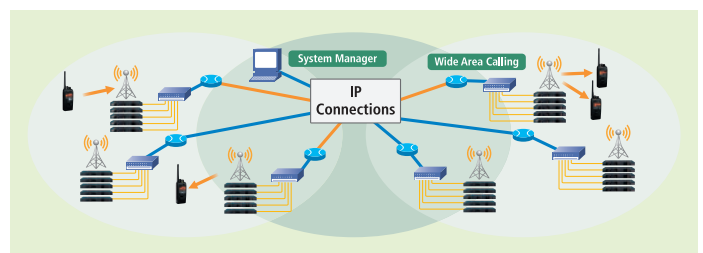
usage hours, system Call Queuing stacks call requests and processes calls when a channel becomes available. System operators can assign important individuals higher queue priority and even pre-empt lower priority users for more important dispatch and emergency calls.



NEXEDGE™ Multi-Site IP Networks

The network option leverages the power of IP to link up to 16 digital trunked sites together for wide area roaming and calling capabilities. Scalable networks can be created over existing IT assets, private microwave, spread-spectrum links or carrier services using standard 10/100 Base-T Ethernet switches and routers. IPSec VPN tunneling provides encrypted, secure communications links within any IP network. Subscriber units use advanced control channel hunting algorithms, RF signal strength and digital signal quality (low bit-error-rate) to automatically determine the best sites to

register on while moving through a network. The 60,000 Group ID and Unit ID network capacity is sufficient for large organizations and multi-user system sharing.



Ready to Deploy

High-performance NEXEDGE™ hardware



NX-200/300

VHF/UHF Digital & FM Portable Radios

Despite their compact lightweight design, these handheld radios are fully equipped for both digital and analog operating modes. The clear backlit display and ergonomic layout of the controls enhance operating ease, while the rugged MIL-STD construction ensures all-weather reliability.



KMC-38GPS

GPS Speaker Microphone

A rugged MILSTD/IP54/55 compliant microphone, its built-in GPS receiver will display the users coordinates in the portable LCD for navigation or field work.

The radio can be programmed to send its position per user control, automatically along with voice, and/or on command from a dispatch mapping software such as Kenwood's KAS-10 AVL software.



KSC-326

Six Unit Rapid Charger

Essential for portable users small and large, the KSC-326 charges up to 6 portables with battery attached in under 2 hours. The in-line design and wall mount option conserves desk space and provides a between-shift drop station.



Products & Accessories



NX-700/800

VHF/UHF Digital & FM Mobile Radios

As smart in operation as they are in looks, these NX-700/800 radios feature everything necessary to take full advantage of both digital and analog operating modes.

Mobile users will appreciate the large dot-matrix LCD, intuitive controls and multi-scan capabilities.

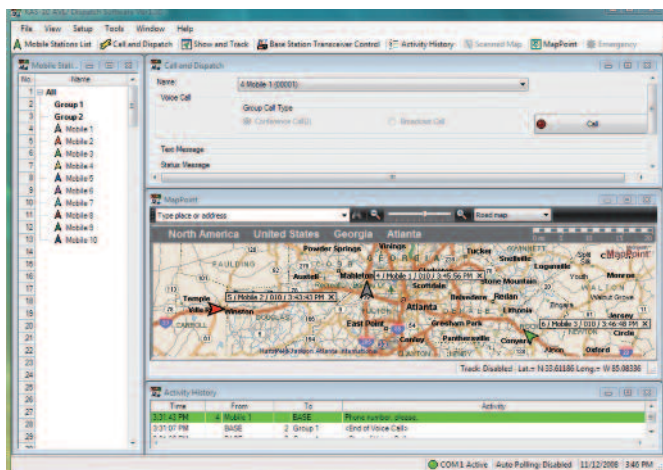


NXR-700/800

VHF/UHF Digital & FM Base Units

These low-profile base units fully support all NXDN® digital operating modes and VHF/UHF analog modes, providing rock-solid 24/7 operation. Featuring an LED screen, status

indicators and programmable function keys, they are simple to set up and easy to maintain.



KAS-10

AVL & Dispatch Software

AVL, a powerful fleet management tool, provides timely movement and location for better scheduling of deliveries, jobs assignment, re-routes, customer service and personnel safety.

The KAS-10 provides single control station AVL, PTT ID and dispatch messaging on digital NEXEDGE™ or analog FleetSync® systems. The KAS-10 can use imported raster-based maps or business-grade metropolitan maps with Microsoft® MapPoint® 2006/2009* installed.

*MapPoint® version compatibility varies by region: 2009 for the US, 2006 for Europe.

For details and specifications, refer to the individual product catalogs.

In Active Service

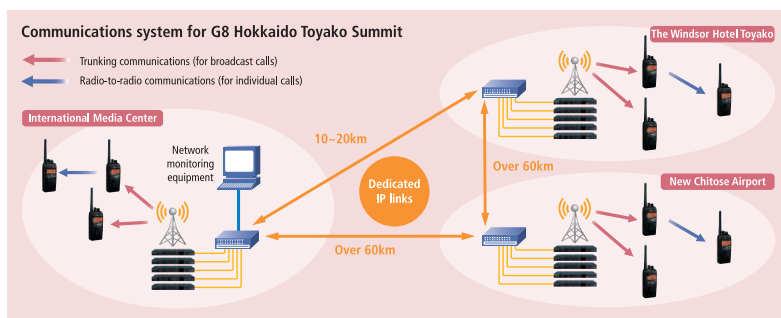
How NEXEDGE™ is already making a difference

G8 Hokkaido Toyoko Summit

For the G8 Summit at Toyoko in Hokkaido, which was held in July 2008, Kenwood's NEXEDGE™ was chosen to provide group-call communications for Japan's Ministry of Foreign Affairs. Ministry officials wanted to link three sites – New Chitose Airport, the International Media Center, and the Summit venue – while allowing radio-to-radio communications within each area.



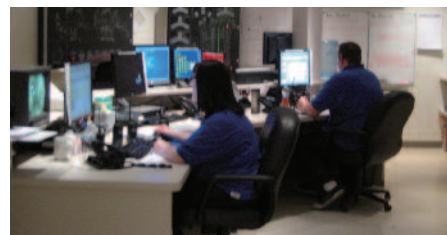
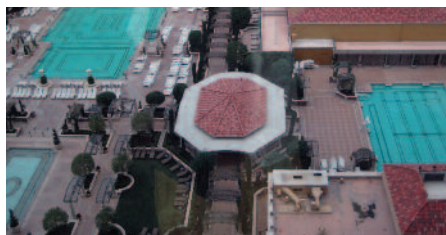
The system had to guarantee security and confidentiality, as well as clear voice quality. And the perfect solution was NEXEDGE™. During the Summit the system performed flawlessly and the Ministry expressed its satisfaction. For its part, Kenwood is proud that NEXEDGE™ could play a key role in supporting an event of such international importance.



The Venetian Las Vegas Hotel Casino (supplied by Anderson Communications, Inc.)

Opened in 1999, the Venetian Resort Hotel Casino is one of the largest luxury resorts in the world, and it continues to grow. With the addition of the Venezia Tower and the Palazzo – increasing the number of rooms to over 7,000 – the management needed to add another 1,000 radios to the 2,000 already in use. They picked NEXEDGE™ as it allowed them to migrate gracefully from their 12-channel LTR® system, doubling capacity to 24 channels without buying more frequencies. Being reliable,

adaptable and scalable were all important factors, but so too was cost: since NEXEDGE™ enables analog and digital radios to coexist, the management can continue to make use of their assets as they switch over, department by department, to digital radios. Additionally, in fringe areas where signal strength was a problem, voice quality is now crystal clear. And as this Venice-themed hotel continues to expand, NEXEDGE™ will grow with them; site networking is included, so new properties can be added seamlessly.



CN Tower, Toronto (supplied by Mobile Business Communications Ltd.)

Since 1976, Toronto's CN Tower – the tallest freestanding structure in North America – has played a key role in the city's telecommunications infrastructure, and it also offers visitors a superb view from its two observation decks. A building of this unusual nature poses some special challenges for the people who work there – and that goes for their radio system too. According to Kerry Adams, President of MBC – the Toronto dealer who installed the CN Tower system – **ensuring that a solid signal propagates throughout the facility was an important factor in the selection of NEXEDGE™ – with its 6.25 kHz capability** – to replace the previous analog LTR® trunked system. **The new digital trunked system also brought them increased capacity, allowing for multiple talk groups** – not previously possible with the LTR® system – so

employees in different departments can all be talking simultaneously yet independently, enjoying excellent voice quality with greater protection from eavesdropping. And as the new system uses the same 450 MHz band, migration was smooth. NEXEDGE™ has proved to be an ideal solution for this famous Canadian landmark.



A Beep, Chicago

A Beep was started in 1996 as a paging service, but now the company is one of the largest SMR operators in Chicago. To compete effectively with cellular systems, they selected NEXEDGE™ for their new Diga-Talk service. They cite 5 key reasons for their choice: **IP networking, 6.25 kHz modulation, sound quality, system layout, and cost. Ease of management, and proven Kenwood quality and support only made the decision easier.** With 9 sites linked by IP network and another 3 scheduled, A Beep can offer

wide area seamless roaming over the entire Chicago metropolitan area, which has a population of 9 million.

Increased coverage brings portable radios more availability in the field, just like mobile radios. Also, Diga-Talk can satisfy the needs of smaller companies, not just fleet customers. The opportunities for messaging and GPS are also attracting new clients, such as limousine services, cab companies, and landscapers.



Listen to the Future

Kenwood has always connected with people through sound. Now we want to expand the world of sound in ways that only Kenwood can, listening to our customers and to the pulse of the coming age as we head toward a future of shared discovery, inspiration and enjoyment.

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