Zoom

VHF/UHF/700-800 MHz DIGITAL TRANSCEIVER

P25 (I&II)/NXDN™ MULTI-DIGITAL & FM ANALOG PORTABLE RADIOS

NX-5200/5300/5400

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).

Full Key   Standard Key

Two configurations to choose from

Choose between two portable configurations – one without a numeric keypad and the other with numeric keypad (16-key model). Both styles feature the 4-way Directional-pad (D-pad) and 2-position lever switch.

NX-5200/5300/5400 (actual size)

Full-color, 1.74-inch color LCD

A 1.74-inch (240 x 180 pixel) 65,536-color Transflective LCD, capable of displaying a multi-line text and colored icons, can be viewed clearly in direct sunlight or in the dark, even while wearing polarized sunglasses.
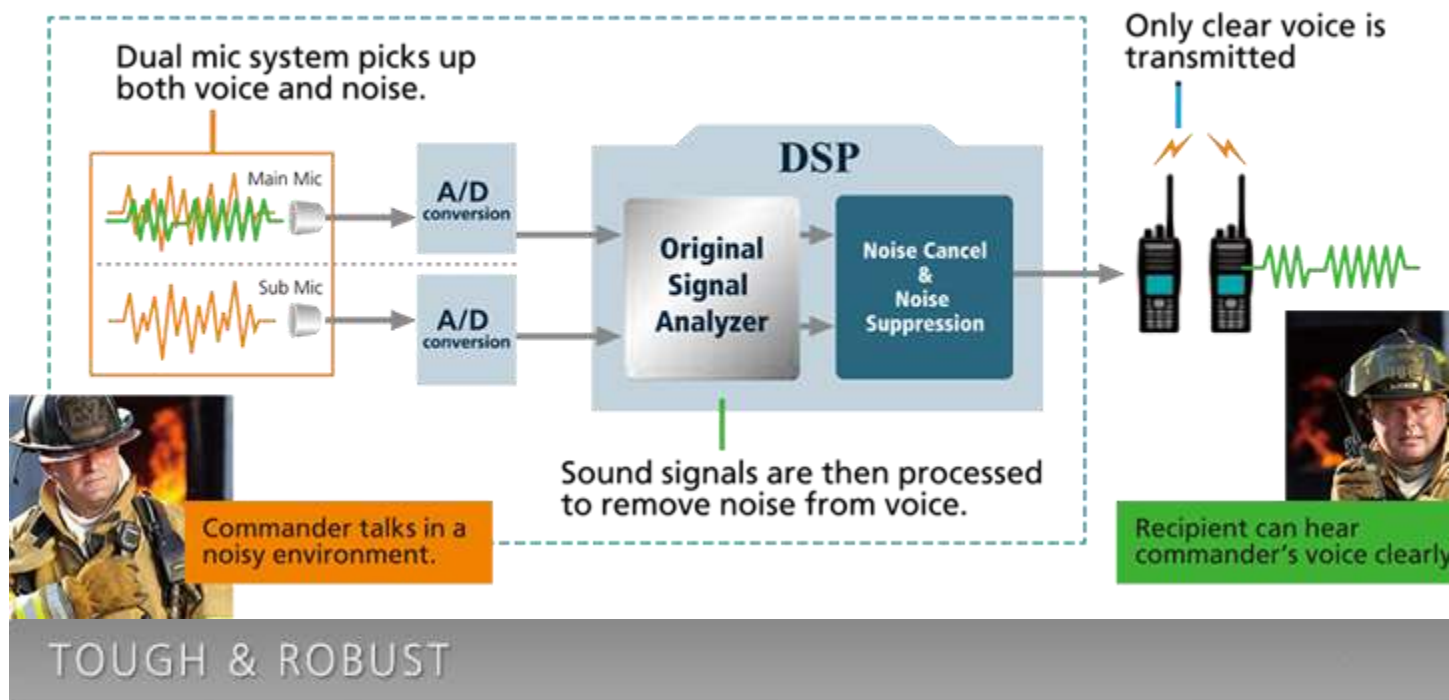
RENOWNED KENWOOD AUDIO

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.

Dual mic system picks up both voice and noise.

Only clear voice is transmitted

Main Mic

Sub Mic

A/D conversion

A/D conversion

DSP

Original Signal Analyzer

Noise Cancel & Noise Suppression

Sound signals are then processed to remove noise from voice.

Commander talks in a noisy environment.

Recipient can hear commander's voice clearly

TOUGH & ROBUST

MIL-STD Environmental and Ingress Protection Standards

MIL-810   IPX8

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.

INTELLIGENT BATTERY MANAGEMENT SYSTEM.

Manage Multiple Batteries to Extend Lifetime

Extend battery lifetime and ensure that the batteries are optimally maintained. The system comprises High-capacity Li-Ion Battery Series (KNB-L1/L2/L3), Intelligent Charger (KSC-Y32), and Battery Reader software (KAS-12).

* Up to 1,000 batteries can be managed at a time (requires additional option).
* Long Life Charging Mode: stops recharging at 80% capacity to extend life.
* Deterioration (end-of-life) notification

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

High-capacity Li-Ion Battery Series

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

Intelligent Charger KSC-Y32

Battery conditions are displayed in color illuminated indicators on the charger, which are also displayed on a connected PC with the same color scheme.
Color-coordinated patterns provide users with at-a-glance information for comprehensive battery management.

Conceptual Diagram of the Intelligent Battery Management System

Battery conditions are displayed in color illuminated indicators on the charger, which are also displayed on a connected PC with the same color scheme.
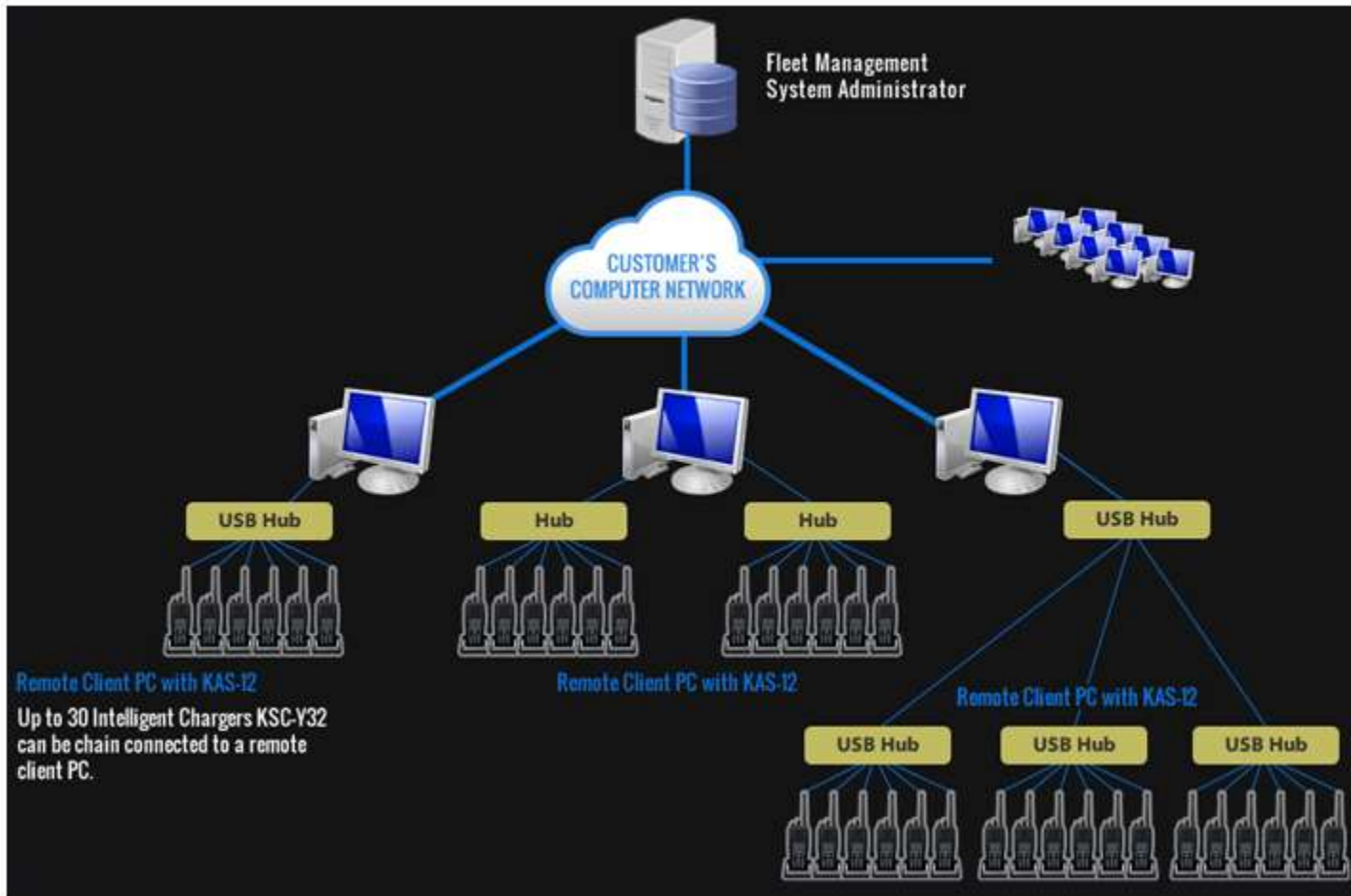Color-coordinated patterns provide users with at-a-glance information for comprehensive battery management.

Fleet Management System Administrator

CUSTOMER'S COMPUTER NETWORK

USB Hub

Hub

Hub

USB Hub

Remote Client PC with KAS-12

Up to 30 Intelligent Chargers KSC-Y32 can be chain connected to a remote client PC.

Remote Client PC with KAS-12

Remote Client PC with KAS-12

USB Hub

USB Hub

USB Hub

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 GUI and Multi-line Text Display
- 1,000 mW Speaker Audio (@8 Ω, 5% distortion)
- 4-way Directional-pad (D-pad) and 2-Position Lever Switch
- 6 Front & 2 Side PF keys
- 12-Key Keypad Models Available
- Emergency / AUX Key
- MDC-1200

- FleetSync®/II
- Maximum of 4,000 CH/Radio capacity, 512 CH/Zone, 128 Zones
- Intrinsically Safe Option