



## Architects and Engineers Specifications

### Wireless Signal Repeater Section:

The wireless repeater shall be the model WNC-MRCORD. The device shall operate on a supervised wireless frequency to ensure signal integrity between patient initiating devices and the central nurse call console.

- 1. Operation:** The unit shall receive, decode, and re-transmit signals from compatible wireless transmitters without altering the original data packet.
- 2. Reliability:** The unit must include an internal battery backup capable of supporting full operations for a minimum of 4 hours during a primary power failure.
- 3. Supervision:** The repeater shall send a supervisory signal to the master station at intervals not exceeding 60 minutes.
- 4. Construction:** The housing shall be constructed of impact-resistant, flame-retardant ABS plastic suitable for clinical environments.

## Wireless Mini Repeater Cord (WNC-MRCORD)

The WNC-MRCORD is a high-performance wireless signal booster designed to extend the range and reliability of wireless nurse call systems. It is engineered to bridge communication gaps in large healthcare facilities, ensuring that emergency signals from patient rooms reach the central monitoring station without interference or signal degradation.

The Wireless Mini Repeater Cord serves as a critical infrastructure component for wireless nurse call ecosystems. By capturing, amplifying, and re-transmitting signals from call buttons and pull cords, it effectively doubles the transmission range of peripheral devices. Its compact "corded" form factor allows for flexible placement, making it ideal for retrofitting older buildings where structural barriers often impede wireless signals.

## Product Specifications

- **Operating Frequency:** 902–928 MHz (Frequency Hopping Spread Spectrum)
- **Power Input:** 100-240V AC, 50/60Hz
- **Dimensions:** 3.5" L x 1.5" W x 1.0" D (Approximate)
- **Operating Temp:** 32°F to 120°F (0°C to 49°C)
- **Signal Range:** Up to 1,000 ft. (Line of Sight)
- **Battery Type:** Rechargeable Lithium Polymer

## Equipment Options

- **Mounting Kits:** Available with adhesive backing for non-permanent placement or screw-mount brackets for secure installation.
- **Power Supply:** Standard AC wall adapter (included) with optional 12V DC hardwire leads for integrated systems.
- **External Antenna:** Support for high-gain antenna attachments to further extend range in high-interference environments.

## Standard Features

- **Plug-and-Play Integration:** Automatically syncs with existing wireless nurse call frequencies.
- **LED Status Indicators:** Visual confirmation for power status and active signal transmission.
- **Supervised Signal:** Periodic "heartbeat" check-ins with the master console to ensure the repeater is online.
- **Interference Filtering:** Advanced digital logic to filter out noise from other wireless medical devices.
- **Internal Battery Backup:** Integrated power reservoir to maintain signal continuity during brief power outages.

## More Features

- **Dynamic Routing:** Intelligently selects the strongest signal path in multi-repeater environments.
- **Low Profile Design:** Specifically shaped to prevent accidental snags or disconnection in high-traffic hallways.
- **UV-Stable Enclosure:** Built with medical-grade plastics to withstand harsh cleaning agents and prevent yellowing.

## Compliance and Certification

The WNC-MRCORD meets rigorous safety and communication standards required for healthcare life-safety systems:

- **FCC Part 15:** Compliant for intentional radiators (Class B).
- **UL 1069:** Designed to meet the standards for Hospital Signaling and Nurse Call Equipment.
- **RoHS:** Lead-free construction and compliant with the Restriction of Hazardous Substances Directive.
- **CE Mark:** Certified for European safety and environmental standards where applicable.