# **Reply Plus**

# **Breakthrough Functionality in a Compact Size**

The all-new Reply Plus lets you fully harness the wisdom and creativity of your audience with an interactive, leading edge response device. Audience feedback is more involved than answering a simple yes/no question at a meeting. Savvy groups are now using response systems that are capable of multi-digit input for training, medical education, employee surveys, market research and much more.

Reply Plus includes an easy-to-read display that allows participants to enter and view answer choices with up to 11 characters. It supports advanced applications that require more than basic multiple choice input. As a result, the Plus provides breakthrough functionality for research, training, assessment and facilitated group decision-making activities.

The base station connects via USB or ethernet connectors, opening the door for multi-site meetings and distance learning.

The lightweight Plus is nearly 25% smaller and lighter weight than it's predecessor. The Plus adds a 2-line LCD display, additional interactive keys and status icons to its impressive list of features. The device's range and scalability have also significantly expanded, with a base station range of 650 feet and a 500 keypad capability.

Reply Plus uses breakthrough frequency hopping spread spectrum (FHSS) radio technology to achieve superior range, reliability and security. The system can be used license-free worldwide on the 2.4 GHz band.



# **Technical Specification for Wireless Keypad Model Reply Plus**

## **Enclosure**

- Compact, ultra-durable moulded ABS plastic case
- Dimensions: 5.25" L x 2.2" W x 1" H
- Weight: 3.9 ounces with batteries installed
- Colour: Light Titanium and Grey

#### **User Input**

19 keys for entering simple or complex responses. Numbers (0-9) and three customizable soft keys, plus special keys for Send, Alert, Search, Clear and Power.

#### Display

Two line LCD with backlit keys is easy to read in all lighting conditions. Display shows user entry plus confirms when the base station accepts the keypad's input.

Screen icons show response accuracy and type, battery level, login status, signal strength, link activity and keypad address and channel number.

#### RF Technology

Employs specially designed 2.4 GHz frequency hopping spread spectrum (FHSS) transceivers.

• FHSS offers excellent range, immunity to interference, and security.

Patented and proprietary radio protocol.

- Creates a secure communications network between keypads and their associated base station.
- User entries are acknowledged when received by the base station (patented feature).
- Permits Plus systems to operate reliably in the presence of other RF devices (WLANs, PDAs, phones, etc.).
- Integrated error checking discriminates system signals from all other RF traffic to ensure data accuracy and to enhance security.

Internal antenna is protected by the keypad enclosure.

#### **User Identification**

Each keypad has an RF device identity ("address") between 1-500 and a channel identity between 1-31. Addresses are user programmable. Each keypad has a unique device serial number.

## Range

Spread spectrum technology is designed to operate in an indoor area  $650 \times 650$  feet (200 x 200 meters). A room's geometry and RF propagation characteristics will influence the actual range experienced.

## **Speed**

Default speed is 200 keypads per second. Polling rates are adjustable and can achieve ½-second speed in groups of 100 or less.

# **Power and Power Management**

Powered by two standard AA batteries.

- Keypad powers down after each response to conserve battery life.
- Battery life is ~10,000 responses or battery shelf life, whichever comes first.
- Low battery indicated on display. The keypad can also transmit a low battery alert to the base station.

## **Communications Security**

A proprietary response verification protocol integral to the radio design provides a high degree of signal security.

Frequency hopping and proprietary data communications are additional deterrents to clandestine interception.

An alarm can be enabled to sound when a keypad leaves the coverage area.

#### **Scalability**

500 keypads per base station channel identity and 31 identities available for 15,500 keypads per room/site. Firmware resides in high performance microprocessor chips that can be reprogrammed to facilitate easy upgrade during the life of the product.

Add keypads to an existing system by simply assigning them to a base station channel and an available address (can be completed automatically or manually).

# **Base Station: Reply Plus Model WRS970**

Connects to the presenter's PC through USB or ethernet port. Controlled by Reply and OptionPower® software applications.



Dimensions: 6.25" W x 2.25" H x 5" D.

Unit Weight: 9 ounces.

Capacity: 500 keypads per channel identity and 31 identities allows up to 15,500 keypads per room.

**Speed:** Base station polling cycles are adjustable to optimize speed for group size. For example, a group of 100 keypads can be polled every one-half second, whereas a group of 3,750 can be polled every 2.5 seconds.

Connections: Attaches to the operator's PC by USB or ethernet connection (USB cable included).

Power Source: Powered by computer USB connection with 50 mA current draw, or by Power Over Ethernet (POE) using midspan and power injector.

## **Compliance and Patents**

FCC, IC, CE certified. Call for details regarding these and other regulatory certifications.
U.S. Patent Nos. Re. 35,449; 5,724,357; 6,021,119; 6,665,000. European Patent No. EP 0 697 773. Other U.S. and foreign patents and patents pending.

#### Warranty

2 YEAR limited warranty, factory parts and labour.