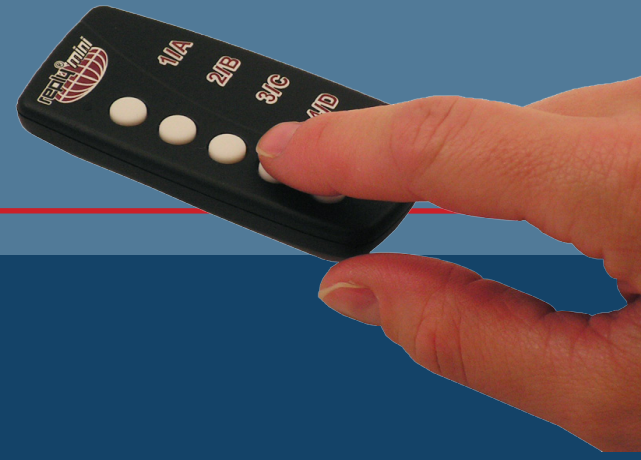


# Reply® Mini



## *Advanced radio frequency (RF) technology*

*Frequency Hopping Spread Spectrum  
for excellent range and security*

*Works with many Reply® software  
applications and PowerPoint® add-ins*

*Miniature design is easy to transport  
and comfortable to hold or wear*

## **Technical Specifications for Wireless Keypad Model CRS5000**

### **Enclosure**

- Compact case. Rugged ABS plastic construction.
  - Styled to fit comfortably in hand.
  - Wearable with optional lanyard.
- Dimensions: 3 in. L x 1.5 in. W x 0.4 in. H.
- Weight: Less than 1 ounce (0.8 ounce /23 grams) with battery installed.
- Color: Black. (Other colors available. Cost premium, minimum order quantity, and special terms apply.)

### **User Identification**

- Each keypad has an RF device identity (“address”) between 1-250 and a channel identity between either 1-15 (standard version; stocked item) or 1-72 (custom arena version; special order; special terms and pricing apply).
  - Addresses may be changed by using an optional WRS960X-T portable programmer.
- Each keypad also has a unique device serial number.
  - Serial numbers are permanent and set during manufacturing.
- Both address and serial number identification are transmitted with each keypad’s response.

### **User Input**

- 5 elastomeric buttons for entering multiple choice responses. Buttons are labeled 1-5, A-E.
- Entries can be “speed scored” to 0.05 second (50 milli-second) resolution to identify group response sequence (“fastest finger”) during competitive events.

### **Display**

- Green and red LED lights to confirm user keypresses and indicate when the Base Station accepts the keypad’s inputs.

### **RF Technology**

- Two-way RF keypad uses eligible *license-free/license-exempt* frequencies to communicate key presses to the Base Station and receive from the Base Station control information and acknowledgments of successful entries.
- Employs Fleetwood-engineered 2.4 GHz *frequency hopping* spread spectrum (FHSS) transceivers.
  - FHSS offers excellent range, immunity to interference, and signal 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. *This message acknowledgment method is just one of the many patented features of Reply® systems.*
  - Permits Reply® systems to operate 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 enhance security.
- Depending on version, 15-72 channel identities are available to provide installation flexibility and support up to 3,750-18,000 keypads per room.
- Internal antenna is protected by the keypad enclosure.

### **Range**

- Reply® Mini is designed to operate in an indoor area 300 x 300 feet. [Note: Other Reply® products offer greater range. See appropriate specification sheets or contact us.]
- A room’s geometry, radio propagation characteristics, and proximity to RF interferers will influence actual range experienced. Elevating the base station often results in a performance advantage.

## Capacity

- 250 keypads per Base Station channel identity.  
[Note: Other Reply® products offer higher capacity. See appropriate specification sheets or contact us.]
  - Stock configuration: Default. 15 identities available for 3,750 keypads per room/site.
  - Arena configuration: Non-stock. *Special terms and pricing apply.* Up to 72 identities for 18,000 users per venue.

## Speed

- Determined by Base Station. See Base Station Model CRS940 specification.
- Time stamping is available to identify each keypad's input sequence in group's response.

## Power and Power Management

- Powered by one replaceable lithium coin cell battery.
- Keypad powers down after each response transmission to conserve battery life.
- Battery life is ~20,000 responses or battery shelf life, whichever comes first.
- Low battery indicated on display. Also, keypad can transmit a low battery warning to 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.

## Scalability

- Firmware resides in high performance microprocessor chips that can be reprogrammed to facilitate upgrade during the life of the product.
- Adding keypads to an existing system requires them to be set to unused addresses. No change is required on the Base Station when adding keypads of the same channel identity.

## Compliance and Patents

- FCC, IC, CE certified. Call for details regarding these and other regulatory certifications.
- U.S. Patent Nos. 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 labor). Call for details.

## Additional System Components and Accessories

### Reply (Worldwide) Base Station Model CRS940

- A compact and programmable interface to your PC.
  - Operated by value-added software\*\* (priced separately).
- Dimensions: 6.5" W x 2.25" H x 5" D.
- Capacity: 250 keypads per channel identity.
  - Stock version: 15 identities allows 3,750 pads per room.
  - Arena version: *Special terms and pricing apply.* Up to 72 identities allows up to 18,000 pads per room.
- Speed: Base Station polling cycles are adjustable to optimize speed to group size. For example, a group of 50 keypads can be polled every one-half second, whereas a group of 3,750 can be polled in parallel every 2.5 seconds.
- Connections: Attaches to operator's PC by USB connection. (cable included). Creates a virtual com port on the PC.
- Power Source: USB. Current draw 50 mA.

### Reply (Worldwide) Base Station Model CRS941

- USB Stick version of CRS940.
  - Dimensions: 3.1"L x .9"W x .57"H.
  - Same performance characteristics as CRS940.
- Base stations do not include accessories such as software\*\* and carrycases. These additional items are priced separately.

### Reply® (Worldwide) Handheld Base Station Model WRS960X

- A completely portable base station that communicates with Reply (Worldwide) CRS5200 keypads and Reply® Mini CRS5000 keypads *without* a PC or software.
  - Poll *anywhere* power, PCs, or displays are not available.
- Dimensions: 6"L x 2.5"W x 1"D.
- Capacity: 50 keypads per channel identity.
- Speed: 0.5 second collection time for a group of 50 keypads.
- Connections: USB for flash drives that load questionnaires and store polling session results.
- Power Source: 3 x AAA cell alkaline batteries (not included).
- See Reply® Solo specifications for more details.

### Reply® Mini Keypad Programmer Model WRS960X-T

- A portable device that quickly re-programs Reply® Mini keypad addresses and channels *without* a PC or software.
- Dimensions: 6"L x 2.5"W x 1"D.

## Modular Carrycases

- Wide variety available, ranging from compact ballistic nylon bags to ruggedized shipping cases with perimeter clasps.
- Keypads and base stations purchased separately.
- Refer to Accessories Price Sheet for additional details.

## Application Software

- \*\* CRS940/941 Base Station requires application software to manage keypad data collection and analyze responses.
- Multiple titles are available to conduct surveys, delegate voting, group decision making, market research, classroom learning, and other advanced applications.
- Contact your reseller for specifications and pricing of this value added software.

## System Configuration

A basic Reply® Mini system consists of...

- One Reply® Mini Wireless Keypad per participant
- One Reply® (Worldwide) Base Station per 250 keypads of the same radio channel in a room, and
- One copy of value-added application software.

Optional accessories (purchased separately) include base station and keypad carrycases, lanyards and more. Training, on-site technical support, and similar 'for fee' services are also extra.

## Pricing

Suggested resale prices are available at [www.replysystems.com](http://www.replysystems.com). Quantity and industry partner discounts are available through our preferred resellers.

*All specifications and suggested resale prices are subject to change without notice.*



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