



Reply® Worldwide Technical Specifications

ENCLOSURE

Each wireless keypad is housed in a compact, rugged, translucent charcoal ABS plastic case. Construction accommodates a tactile membrane keyboard design similar to Standard Reply.®

Dimensions: 6" L x 2.5" W x 1" H. Weight: 5 ounces (with batteries* installed).

* Batteries not included.

USER INPUT

There are fifteen keys total. Ten numeric keys are for entering multiple-choice responses. Three 'soft' keys are available for special use input. "Asterisk" and "Clear" keys provide extra functions.

Input can be "speed scored" to 0.05 second (50 millisecond) resolution to identify group response sequence ("fastest finger") during competitive events.

DISPLAY

Seven-segment LED is easy to read in all lighting conditions. Display coordinates with numbers (1–9, 0) and soft key symbols (1–3 bars in stock configuration). Display shows user entry plus confirms when the Base Station accepts the keypad's input.

USER IDENTIFICATION

Each keypad has a radio frequency (RF) address between 1–250 plus a channel identity between 1–15. Addresses are user programmable. Each keypad also has a unique device serial number. Serial numbers are permanent and set during manufacturing. Both the address and serial number may be transmitted with each keypad's response.

RF TECHNOLOGY

Two-way RF keypad uses eligible license-free/license-exempt frequencies for communicating key presses to the Base Station and receiving from the Base Station control information and keypad input acknowledgments. It employs Fleetwood-engineered 2.4 GHz frequency hopping spread spectrum (FHSS) transceivers. FHSS offers excellent range, immunity to interference, and security. 15 channel identities are available to provide installation flexibility and support up to 3,750 keypads per room. Internal antenna is protected by the keypad enclosure.

It is patented and proprietary radio protocol, which 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 is just one of the many patented features of Reply systems. This technology permits Reply 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 enhance security.

POWER AND POWER MANAGEMENT

Keypad is powered by two standard AA batteries (not included). Keypad powers down after each response to conserve battery life. Battery life is ~100,000 responses or battery shelf life, whichever comes first. Low battery is indicated on display.

RANGE

Spread spectrum technology is designed to operate in an indoor area 450 x 450 feet (150 x 150 meters). A room's geometry and RF propagation characteristics will influence actual range experienced. Elevating the base station often results in a performance advantage.

SPEED

Speed is adjusted by Base Station. Default setting is 100 keypads per second. Polling rates are adjustable and can achieve 1/2 second speed in smaller groups (less than 50). Time stamping identifies keypad input sequence in group's order of response.

SCALABILITY

Firmware resides in high performance microprocessor chips that can be reprogrammed to facilitate easy 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.

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.

CAPACITY

250 keypads per Base Station channel identity. Stock configuration: Default. 15 identities available for 3,750 keypads per room/site.

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.

SYSTEM CONFIGURATION

A basic Reply Worldwide system consists of the following:

- [1] Reply Worldwide Wireless Keypad per participant
- [1] Reply Worldwide Base Station for every 250 keypads of the same radio channel in a room.
- [1] Copy of ReplyPoll® or other application software.

Optional accessories (purchased separately) include base station carry cases and keypad carry cases. Training, on-site technical support, and similar ‘for fee’ services are also extra.

ADDITIONAL SYSTEM COMPONENTS & ACCESSORIES

Base Station Model CRS940

Base Station is a compact and programmable interface to your PC, controlled by software (purchased separately). It also operates with current Reply-compliant polling software. See “*Application Software*” below. It connects to the operator’s PC by USB connection. (USB cable included.) Power source: USB. Current draw 50mA. Dimensions: 6.5" W x 5" D x 2.25" H. Unit Weight: 8 ounces. (Add 5 ounces for cable.)

Capacity: 250 keypads per channel identity. 15 identities allows 3,750 keypads 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 every 2.5 seconds.

Base Station does not include accessories such as software and carry cases. These additional items are priced separately.

Modular Carry Case Model CRS899M

Ruggedized shipping case has perimeter clasps. It is styled as a checked luggage piece. Configurations: Holds multiple keypads and/or base stations. Weight (case and foam only): ~13 pounds. Weight (loaded): ~33 pounds. Dimensions: 24.25" W x 8.75" D x 19.5" H.

Application Software

Base Station requires application software to manage keypad data collection. Software, such as ReplyPoll (visit www.cpwireless.com/replypoll.htm to download Trial Versions of ReplyPoll and User Manual) or other software designed for Standard Reply may be used. Compatibility of third party software is not guaranteed.

Pricing

CRS5200	Wireless Keypad	\$139.00 USD
CRS940	Base Station	\$850.00 USD

To purchase a keypad system or replacement parts, please visit www.cpwireless.com/order.php.