

OptionFinder Micro



The Next Generation OptionFinder System

OptionFinder Micro is the next generation single digit response system. This advanced two-way radio platform is smaller, lighter, faster, and offers five numeric keys for multiple choice responses with confirmation of every response.

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

OptionFinder Micro is compatible with previous versions of OptionPower and OptionFinder software. It provides a seamless migration path for clients who need to replace an existing system.

The OptionFinder G2 base station is small, light and portable. It uses a convenient USB connector, internal antenna array and weighs only eight ounces. One base station can receive responses from up to 250 keypads and operates at a range of 300 feet(100 meters)

Technical Specification for Wireless Keypad Model: OptionFinder Micro

Enclosure

Compact case. Rugged ABS plastic construction.

- Wearable with optional lanyard.
- Dimensions: 3 in. L x 1.5 in. W x 0.4 in. H.
- Weight: Less than 1 oz. (with battery installed).
- Colour: Blue

User Input

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

Display

Green and Red LEDs confirm user key presses and indicate when the Base Station accepts the keypad's inputs.

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 G2 systems to operate reliably in the presence of other RF devices (WLANs, PDAs, phones)
- Integrated error checking discriminates system signals from all other RF traffic to ensure data accuracy and enhance security.
- Internal antenna is protected by the keypad enclosure.

User Identification

- Each keypad has an RF device identity ("address") between 1-250 and a channel identity between 1-15
- Addresses may be changed by using an optional 960X-T portable programmer.
- Each keypad also has a unique device serial number.
- Serial numbers are permanent and set during manufacturing.
- Both the address and serial number are transmitted with each keypad's response.

Range

Spread spectrum technology is designed to operate in an indoor area 300 x 300 feet (100 x 100 meters). A room's geometry and RF propagation characteristics will influence actual range experienced.

Speed

Determined by Base Station. See Base Station Model 940 specification.

Power and Power Management

- Powered by one replaceable lithium coin cell battery.
- Keypad powers down after each response 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

250 keypads per Base Station channel identity. 15 identities available for 3,750 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 programming new units to unused addresses.

OptionFinder Micro Keypad Programmer

Model 960X-T

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

Base Station: OptionFinder G2 - Model 940B

Connects to presenter PC through USB port. Controlled by OptionFinder and OptionPower software applications.



Dimensions: 6.5" W x 2.25" H x 5" D.(16.51cm x 6.35cm x 12.7cm)

Unit Weight: 8 ounces (227 gram)

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

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

Power Source: Powered by computer USB connection. Current draw 50 mA.

Compliance and Patents

FCC, IC, CE certified. Call for details regarding these and other regulatory certifications.

Warranty

2 YEAR limited warranty, factory parts and labour.