

# EN7017 Survey Kit and App Installation and Site Survey

## Installation and Operation Manual

### 1 Overview

The EN7017 survey kit and app provides security integrators with a wireless blueprint in advance of installing devices, allowing the quick preparation of accurate quotes.

#### 1.1 Inovonics Contact Information

For product and installation videos visit us at [www.inovonics.com/videos](http://www.inovonics.com/videos) or use the QR code below.

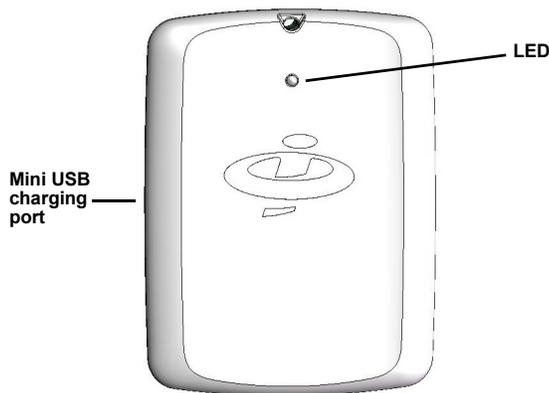


If you have any problems with this procedure, contact Inovonics technical services:

- E-mail: [support@inovonics.com](mailto:support@inovonics.com).
- Phone: (800) 782-2709; (303) 939-9336.

### 2 Installation and Startup

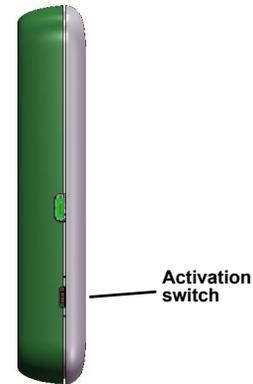
1. Use a mini USB charging cable and any standard USB charger to fully charge the survey receiver.
  - The LED will light red while charging, and turn off when fully charged.



**Figure 1** EN7017 LED and charging port.

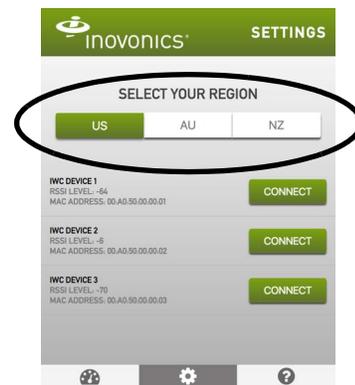
2. Use a pen or a paper clip to move the activation switch to the up position.

- The survey receiver battery can remain activated indefinitely, and once activated, the survey receiver LED will blink green until paired.



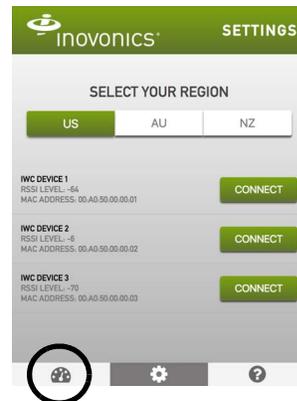
**Figure 2** Survey receiver activation switch

3. Use your Apple or Android app store to download and open the Site Survey App by Inovonics.
4. If located somewhere other than North America, use the app to select your frequency band.



**Figure 3** Select the frequency band for your location

5. Select the Inovonics device that matches the MAC address on the back of your survey receiver to pair it with the app.
  - Once paired, the receiver LED will light green.
6. Tap the display screen icon to navigate to the display screen.



**Figure 4** Navigate to the display screen

7. Press the EN1223SK pendant survey transmitter's activation button; the transmitter's LED will flash red.



8. Enter the TXID found on the back of the pendant survey transmitter to pair it with the app.

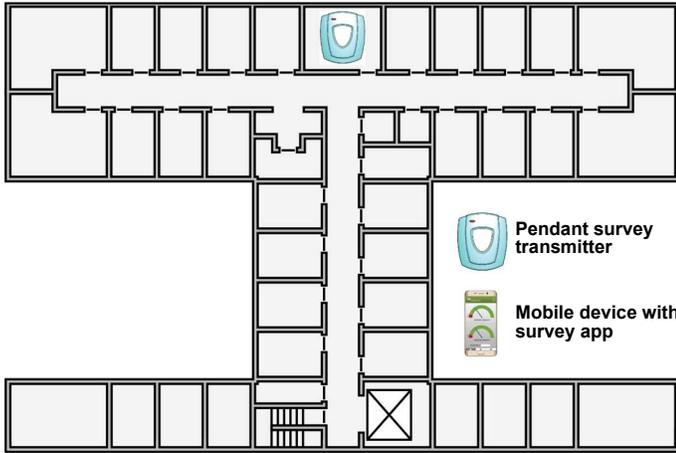


**Figure 5** Enter the pendant survey transmitter's TXID

- Once paired, the signal strength needles will begin to move, indicating you have successfully completed setup.

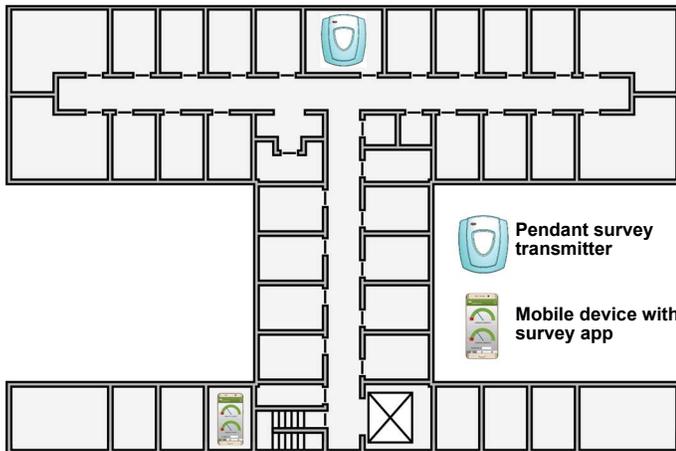
### 3 Perform a Site Survey

1. Place the activated pendant survey transmitter where you plan to install the InoVONICS receiver.



**Figure 6** Place the activated survey transmitter

2. Take the survey receiver and your mobile device to the first place you plan to install a transmitter.



**Figure 7** Move to first installation location

3. Look at the app display. If the signal strength is green, no repeater is needed.



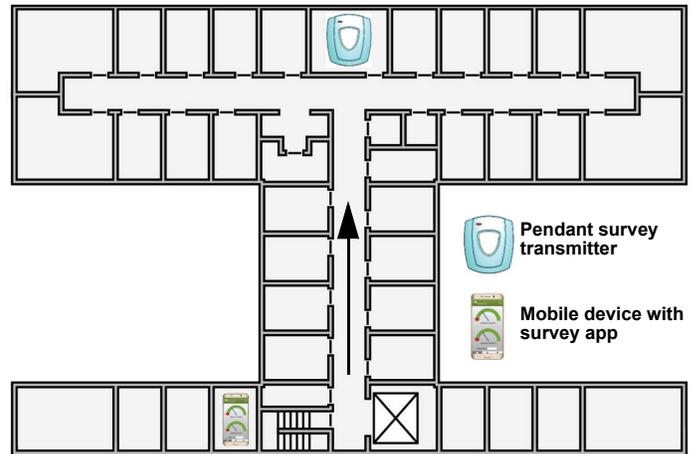
**Figure 8** If the signal strength is green, you don't need a repeater

4. If the average signal strength is green but the current signal strength dips into the red, you may need a repeater; if the average and current signal strength are red you will definitely need a repeater.



**Figure 9** You will need a repeater if both needles are in the red

5. If a repeater is needed, walk from the installation point back towards the pendant survey transmitter. When the average and current signal strength both read consistently in the green, this will be the best location to place a repeater.



**Figure 10** Find the best location for the repeater

6. Repeat steps 2 through 5 for each transmitter to be installed.

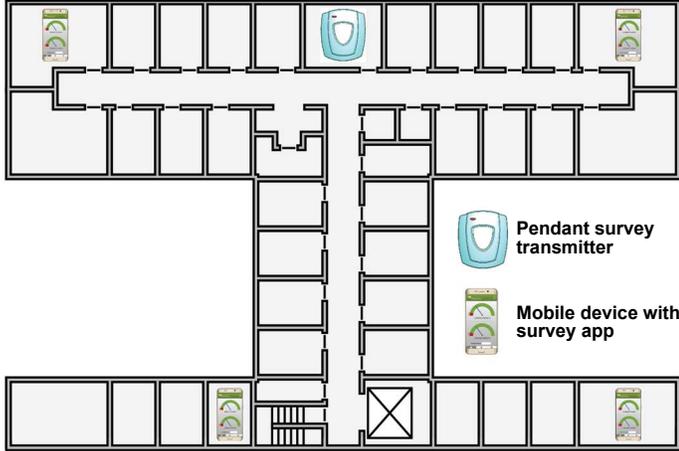


Figure 11 Repeat the procedure for each transmitter

7. Press the pendant survey transmitter activation button to turn it off.
8. Exit the app and disconnect the receiver.
  - Once disconnected, the survey receiver will automatically go into sleep mode.



Figure 12 Exit and disconnect

#### 4 Tips

Never store the EN4017SK survey receiver in direct sunlight, such as on a vehicle dashboard.

- Only charge the EN4017SK survey receiver at room temperature.
- When surveying a large site, put your mobile device in airplane mode to conserve battery life.
- InoVronics recommends ensuring your mobile device remains active, without timing out to the lock screen, while performing site surveys.
- Depending on the size and complexity of the site, you may find it useful to refer to a building blueprint or floorplan during your survey, noting where you plan to install the receiver, transmitters and any required repeaters.
- You can use the carabiner on the receiver to keep it attached to your person while performing the survey.
- You can use any InoVronics transmitter with the app however we recommend the EN1223SK pendant survey transmitter or the EN1210SK universal survey transmitter, sold separately.
- You can also use the survey app to verify message delivery with the app's status indicator.
  - If the status indicator is flashing five times per second or more, then message receipt is fine. Anything less means you are dropping messages.
  - Repositioning the transmitter to avoid obstacles like metal barriers and electronic equipment can help improve message receipt.
  - If message receipt remains low, consider adding a repeater.
- For guidance on RF gateway placement see the RF gateway's installation instructions and the *EchoStream Device Installation Recommendation* tech note. Both are available at [www.inovonics.com](http://www.inovonics.com).

- The signal from a single InoVronics transmitter will generally cover 25,000 square feet in an indoor environment. Addition of a repeater will generally expand that range to 50,000 square feet.

### 5 Antenna Warning

This device is tested with a standard SMA connector and with the antenna listed below. When integrated in the OEM's product, this fixed antenna requires installation preventing end-users from replacing them with non-approved antennas. Any antenna not in the following table must be tested to comply with FCC Section 15.203 for unique antenna connectors and Section 14.247 for emissions.

Item	Description
Chip antenna manufacturer	Johanson Technology Inc.
Chip antenna part number	2450AT18B100
Frequency range	2400-2500 MHz
Peak gain	0.5-dBi typical
Average gain	-0.5dBi typical
Return loss	9.5-dB minimum

### 6 Caution: RF Exposure

To comply with FCC RF Exposure requirements, the Original Equipment Manufacturer (OEM) must ensure to install the approved antenna in the previous.

The radiated output power of CYBLE-022001-00 with the chip antenna mounted (FCC ID: WAP2001) is far below the FCC radio frequency exposure limits. Nevertheless, use CYBLE-022001-00 in such a manner that minimizes the potential for human contact during normal operation.

### 7 FCC Notice

This device CYBLE-022001-00, including the antenna 2450AT18B100 from Johanson Technology, complies with Part 15 of the FCC Rules. The device meets the requirements for modular transmitter approval as detailed in FCC public Notice DA00-1407. Transmitter operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

**Note:** InoVronics commercializes products utilizing open source third party software. For additional information, please visit: <https://www.inovonics.com/support/embedded-third-party-licenses/>.

**Caution:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### 8 FCC Caution

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Cypress Semiconductor may void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions. May cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **9 IC Notice**

The device CYBLE-022001-00, including the antenna 2450AT18B100 from Johanson Technology, complies with Canada RSS-GEN Rules. The device meets the requirements for modular transmitter approval as detailed in RSS-GEN. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

## **10 IC Radiation Exposure Statement for Canada**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.