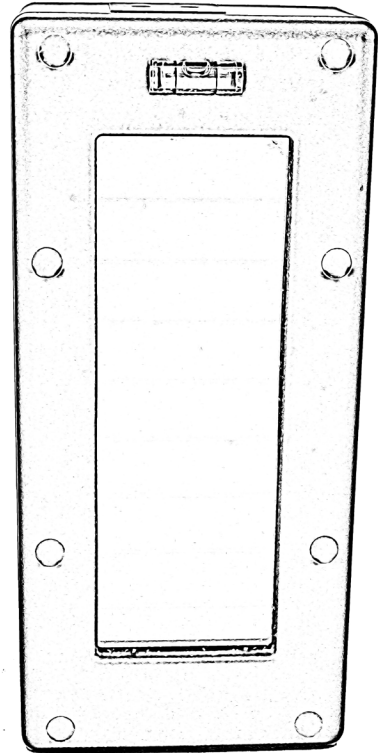




**Dakota Alert**  
*WIRELESS SECURITY EQUIPMENT*

**Solar Break Beam  
Transmitter**  
SBB-4000



***USER GUIDE***

## PACKAGE CONTENTS:

- Break Beam Transmitters (2 Sensors)
- Mounting Hardware

- *User Guide*

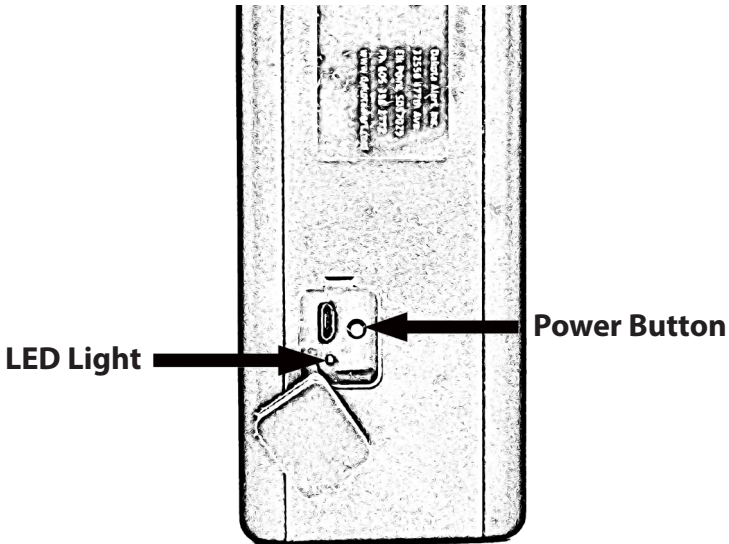
### **Tools Needed**

- Philips Screwdriver
- Adjustable Wrench

***NOTE: It is recommended to charge both the "A" and "B" unit via a USB Micro charger (not included) before starting the initial set-up.***

#### PAIRING THE SENSORS:

1. Before mounting the sensors in a permanent location, start by placing them on a table or other flat surface about 6 to 12 inches apart with the three IR lenses pointing towards each other.
2. Press and release the power button on the B sensor. The LED will start flashing red.
3. Press and release the power button on the A sensor and the LED will start flashing green.
4. When the LED stops flashing on the A sensor, the pairing is complete (about 30 seconds).
5. Test the pairing by completely blocking the beams. A piece of cardboard can be used or physically move the beams so they are not aligned. The LED on the A sensor will flash for about two seconds.

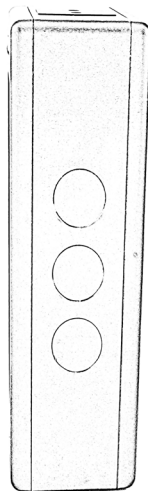


## CODING THE RECEIVER:

1. The SBB-4000 can send a signal to any of the Dakota Alert 4000 series receivers.
2. Please refer to your receiver manual for coding instructions of your particular receiver.
3. To activate the SBB-4000 to send a signal to your receiver, either break the beams while they are paired or quickly press and release the power button on the A sensor. A signal will be sent to the receiver for code learning.
4. If coding more than one set of beams to a receiver, repeat steps 2 and 3 for each additional pair of beams.

## SETTING REMINDER SIGNAL FOR CONTINUOUSLY INTERRUPTED BEAMS:

1. If the beams are continuously interrupted, the A sensor will send a reminder signal to the receiver. The factory default is to send a signal every 20 seconds if the beams are continuously interrupted.
2. To change the reminder duration to 5 minutes, press and hold the power button of the A sensor for about 5 seconds then release. The LED will start flashing red.
3. To change back to the 20 second reminder duration, press and hold the power button of the A sensor for 5 seconds then release. The LED will now flash green.
4. After you are finished pairing, coding and setting the reminder time, insert the rubber plugs into the holes near the power button on both the A and B to ensure that water does not enter the beams during outdoor use.



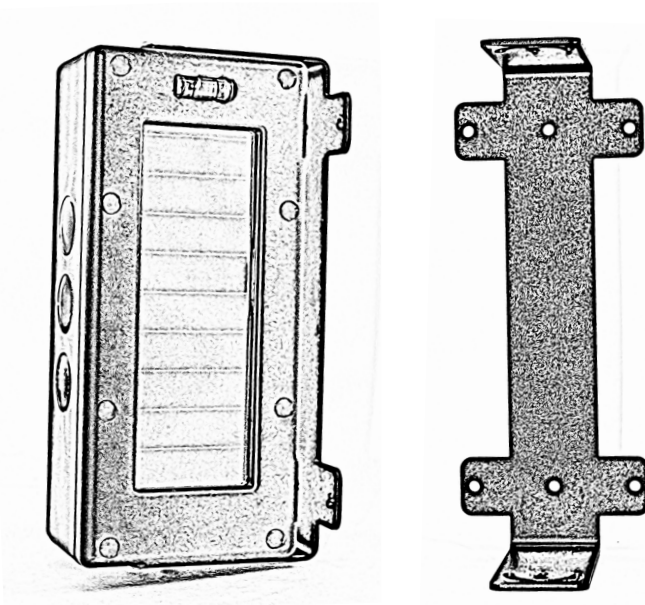
## MOUNTING THE SENSORS:

### **Before mounting, choose a suitable location:**

- The recommended mounting height is about 3 feet. This will help to avoid false alerts from small animals crossing under the beams.
- The sensor can be mounted up to 300 feet apart.
- Mount the sensor on a solid object such as a wall, post or pipe.

### Mounting to a flat surface:

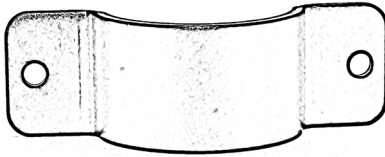
1. Use appropriate crews or fasteners to mount the back of the "C" bracket to a flat surface such as a wall or wood post.
2. Make sure both the A and B units are powered on and the rubber plug is inserted into the power button hole.
3. Use the provided small screws and split ring lock washers to mount the A and B beams to the "C" brackets.
4. Align the A and B units so that the lenses are pointing towards each other.
5. If the beams are paired, you will get a signal when you walk between the beams. If you get a signal every 20 seconds (5 minutes optional), this is the reminder signal and the beams are not aligned. Slightly reposition the beams until the reminder stops and the beams are activated by walking between them.



### Mounting to a pipe:

With the provided pipe adaptor, the beams can be mounted to a 1.5" O.D. pipe.

1. Use the provided screws, small "C" adaptor and rubber adaptor to connect the "C" bracket to the pipe.
2. Make sure both the A and B units are powered on and the rubber plug is inserted into the power button hole.
3. Use the provided small screws and split ring lock washers to mount the A and B beams to the "C" brackets.
4. Align the A and B units so that the lenses are pointing towards each other.
5. If the beams are paired, you will get a signal when you walk between the beams. If you get a signal every 20 seconds (5 minutes optional), this is the reminder signal and the beams are not aligned. Slightly reposition the beams until the reminder stops and the beams are activated by walking between them.

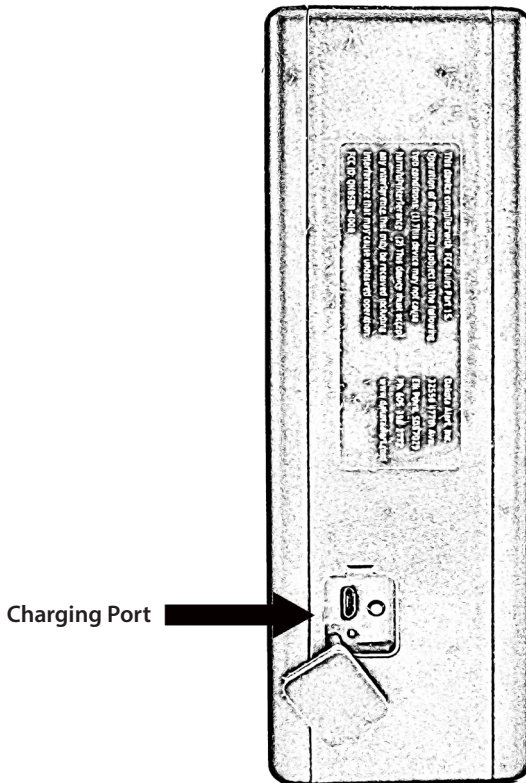


## RECHARGING THE BEAMS:

The beams will charge automatically outdoors with the built-in solar panels. If the beams are used in an interior location with no light, they can be manually charged.

1. For interior locations, remove the rubber plug from the power button.
2. Locate the USB Micro charging port.
3. Connect a USB Micro charger (not included) to the port.

**NOTE:** You can either leave the charger connected indefinitely or you can fully charge the beams periodically. When the beams are fully charged the built-in batteries will usually hold a charge for about a month, depending on activations.



## TROUBLE SHOOTING:

### **If you are getting false signals:**

- Make sure there are no tree branches or other obstructions that may be periodically blocking the beams.
- If the signal is occurring every 20 seconds (5 minutes), this indicates that the beams are either misaligned or there is something continuously blocking the beams.
- You may receive false signals during extreme rain, snow, or fog.  
If you are getting no signals:
  - Make sure both the A and B units are powered on.
  - Make sure the beams are coded to your receiver.
  - Make sure the beams are charged. You may need to manually charge with a USB Micro charger.
  - Move the beams closer to your receiver.
  - Keep the A sensor away from large metal objects that may interfere with the radio signal.

### **Specifications:**

- Power source: 18650 rechargeable lithium battery, solar charger or USB Micro (not included).
- Frequency: 433.92 MHz
- Wireless range: up to 1 mile
- Maximum detection range: Up to 300 feet.
- Operating temperature: -20 to 120F.

\*Actual range will vary depending on local terrain and obstructions.

### **Tech Support:**

If you have any troubles using this product after reading the manual, please contact us. You can reach us by phone at 605-356-2772 from 8:30 Am to 5:00 PM Monday through Friday (Central Standard Time). We will be happy to answer any questions and help in any way we can.



**Safety information:**

- Only use this product for the detection of moving objects such as people or vehicles.
- Don not disassemble or attempt to repair the product.
- Do not install this unit with any other infrared detectors as this may cause false signals.
- Do clean and inspect the beams regularly for proper use. If any trouble is found, please contact Dakota Alert, Inc.

**Warranty:**

Dakota Alert warrants this product to be free of defects in materials and workmanship for a period of one year from the date of purchase. This warranty does not cover damage resulting from accident, abuse, act of God, or improper operation. If this product does become defective, simply return it to Dakota Alert. Please include a note describing the troubles along with your name and return address as well as the original sales receipt. If the product is covered under the warranty it will be repaired or replaced at no charge. If it is not covered by the warranty, you will be notified of any charges before work is done

## Legal Notices:

This device complies with Part 15 of the FCC Rules. 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.

Changes or modifications not expressly approved by the party responsible for compliance could 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.

**WARNING:** Cancer and Reproductive Harm. Go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov) for more information



**Dakota Alert, Inc.**

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