**Summit Access Control**

1675 West Yale Ave
Englewood, Co 80110
303-799-9757 Telephone
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Tech-Support: 1-303-799-9757
E-mail: techsupport@securitybrandsinc.com

# Dual Photo Eye Infrared Beams



## INSTALLATION AND PROGRAMMING INSTRUCTIONS

**MODEL
S-RXTX-30M
95 ft. Outdoor Range (30m)**

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**Techincal Support: 800-541-5677 Monday thru Friday 8:00 a.m. to 4:30 p.m. MST**

REV E

# Summit 2-Year Limited Warranty

**What item(s) this warranty applies to:**
Summit Access Control "S-RXTX-30M" access controls.

Serial # _____

**What is covered:**
Any defect in materials or workmanship.

**For how long:**
Two years from date of purchase.

**What we will do:**
If your Summit Access Control product is defective and returned within 2 years of the date of purchase, we will repair it or, at our option, replace it at no charge to you. If we repair your SUMMIT ACCESS CONTROL product, we may use new or reconditioned parts. If we choose to replace your SUMMIT ACCESS CONTROL product, we may replace it with a new or reconditioned one of the same or similar design. The repair or replacement will be warranted for (a) 90 days or (b) the remainder of the original two year warranty period, whichever is longer.

**Limitations:**
Implied warranties, including those of fitness for a particular purpose and merchant ability (an unwritten warranty that the product is fit for ordinary use), are limited to two years from date of purchase. We will not pay for loss of time, inconvenience, loss of use of your SUMMIT ACCESS CONTROL product, service calls, or property damage caused by your SUMMIT ACCESS CONTROL product or its failure to work, or any other incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusions or limitations may not apply to you.

**What we ask you to do:**
To get warranty service for your SUMMIT ACCESS CONTROL product, you must provide proof of the date of purchase. Contact the original dealer or installer of the product and return your SUMMIT ACCESS CONTROL product along with the receipt to them. If you have problems locating the dealer or installer contact Security Brands, Inc. at (800) 541-5677 and we will direct you to an authorized dealer or distributor of Security Brands, Inc. products. If you ship your SUMMIT ACCESS CONTROL product, you must prepay all shipping costs. We suggest that you retain your original packing material in the event you need to ship your SUMMIT ACCESS CONTROL product. On return, include your name, address, phone number, proof of date of purchase, and a brief description of the operating problem.

**What this warranty does not cover:**
This warranty does not cover defects resulting from accidents, damage while in transit, alterations, unauthorized repair, failure to follow instructions, misuse, fire, flood, lighting,or acts of God. Nor do we warrant your SUMMIT ACCESS CONTROL product to be compatible with any particular external device or peripheral. If your warranty has expired on your SUMMIT ACCESS CONTROL product or if your product is NOT covered contact your dealer or installer for advice on whether we will repair your SUMMIT ACCESS CONTROL product and other repair information, including estimated repair costs and other charges. We, at our option, may replace rather than repair your SUMMIT ACCESS CONTROL product with a new or similar design if the damage to the unit is severe or extensive.

This warranty is the only one we give on this product, and it sets forth all our responsibilities regarding your SUMMIT ACCESS CONTROL product. There are no other express warranties.

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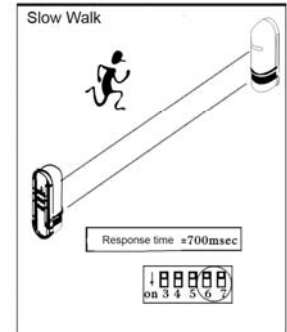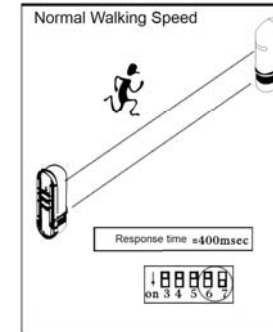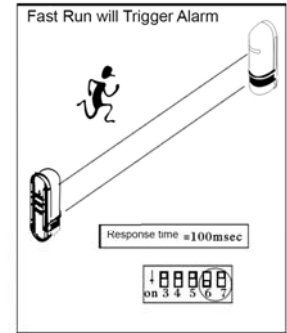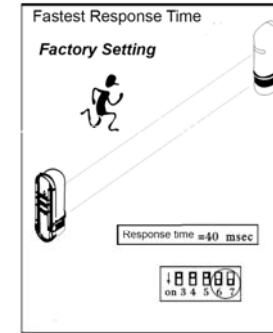www.securitybrandsinc.com

## Response Time
Adjustment

Factory Setting will allow for the fastest alarm response time and is recommend when using this as a reversing device.

When the photo beams are used for an alarm application this response time may need to be adjusted to minimize false alarm from Animals and slow moving items.
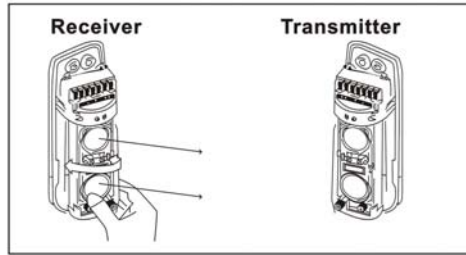
**Fastest Response Time**
*Factory Setting*
Response time =40 msec

**Fast Run will Trigger Alarm**
Response time =100msec

**Normal Walking Speed**
Response time =400msec

**Slow Walk**
Response time =700msec

# Troubleshooting:

| Situation | Possible Cause | Solution |
|---|---|---|
| Transmitter LED does not Light UP | Insufficient voltage and/or incorrectly wired power | Check connections and verify supply voltage in correct range 12 to 24 VAC/VDC |
| Receiver LED does not light up | Insufficient voltage and/or incorrectly wired power | Check connections and verify supply voltage in correct range 12 to 24 VAC/VDC |
| Receiver Alarm LED will not light when beam is interrupted | Incorrect beam alignment<br>Response time is to short<br>Incorrect or insufficient voltage | Re-align beams<br>Increase the response time<br>Re-Check voltage |
| Receiver alarm indicator LED ON after the beam is blocked, However NO alarm relay closer | Poor Connection or damaged wiring | Check all wiring and Terminal Strip connections |
| Receiver Alarm LED will not turn off | Incorrect Alignment<br>Obstruction between beams<br>Damaged or Dirty Cover | Re-align beams<br>Remove any obstructions<br>Clean or replace covers |
| Intermittent alarm signal output | Sensitivity is to sensitive<br>Mounting location is bad | Decrease the response time<br>Try a new mounting location<br>Increase the height of Mounting from the ground |

## Alignment Adjustment

Misalignment Can Cause Large Variations in Sensitive and performance of your photo beams
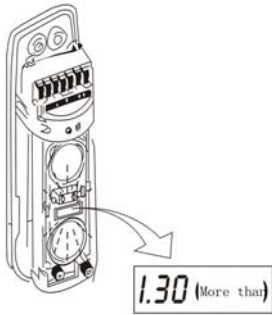
1. Verify the Transmitter and Receiver are wired correctly and the dip switches are set according to application
2. Align Receiver and transmitter from the Bottom of the lens to optimize alignment
3. For Fine tuning the alignment use the adjustment screws at the bottom of the receiver and transmitter

**Receiver**      **Transmitter**

## Sensitivity Adjustment

LED

1. Verify the Transmitter and Receiver are wired correctly and the dip switches are set according to application
2. Align Receiver and transmitter from the Bottom of the lens to optimize alignment
3. For Fine tuning the alignment use the adjustment screws at the bottom of the receiver and transmitter. This allows for fine tuning the alignment

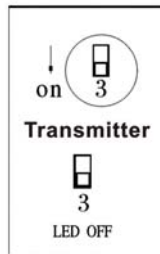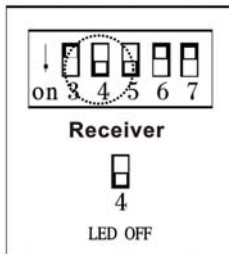### LED Voltage Adjustment AID

This Photo beam is equipped with a LED Strength Digital Display

1. A Minimum value of 1.30 is recommend for optimal success of this product.
2. If you value is below 1.30 then please review the above steps

**1.30** (More than)

NOTES Turn off the digital display after adjustment (with switch NO. 5)

## Note:

After the final adjustment turn dip switch #3 of the transmitter to OFF and dip switch #4 on the receiver to OFF. This will turn off the LED and thus conserve energy.

on 3 4 5 6 7
**Receiver**
4
LED OFF

on 3
**Transmitter**
3
LED OFF

### Dip Switch Settings

on 3
**Transmitter**
Dip Switch
#3 Power Supply LED
ON/OFF (On By Default)

on 3 4 5 6 7
**Receiver**
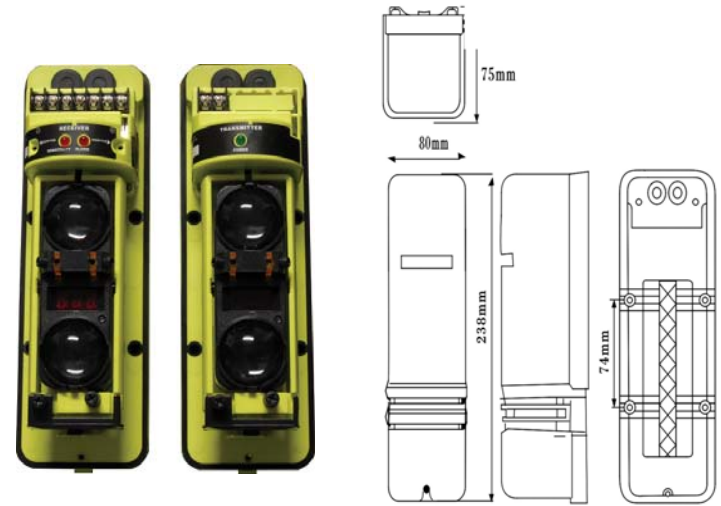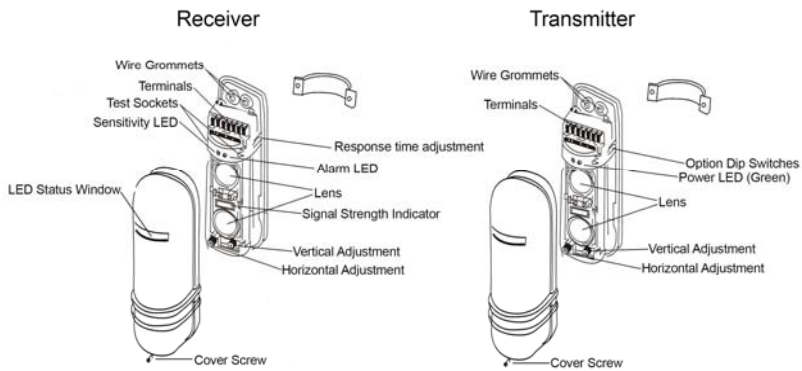Dip Switch
#3 Alarm output N.O./N.C.
ON/OFF (Off by default)
#4 Alarm Fault LED
ON/OFF (Off by default)
#5 Signal Strength LED
ON/OFF (On by default)
#6, 7 Sensivity Adjustment Time
ON/OFF (On by default)

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75mm

80mm

238mm

74mm

| Model NO. | | | |
|---|---|---|---|
| S-RXTX-30M | | Feet | Meters |
| Detecting distance | 〈outdoor〉 | 95 Feet | 30 m |
| | 〈indoor〉 | 295 Feet | 90 m |
| Beams | | 2 Beams Infrared photoelectric | |
| Optical source | | LED | |
| Respond speed | | 50 〜 700 m sec | |
| Alarm output | | Contact capability ACDC 30V 0.5A max | |
| Power input | | 10 - 30 VDC/VAC | |
| Consumption current | | 77mA Max | |
| Temperature Operation Range | | - 25 ° C 〜 55 ° C / - 13 ° F 〜 131 ° F | |
| Alarm output | | contact capability DC 30V 0. 5 A max. | |
| Optical axis horizontal adjusting angle | | 180 ° （±90 °） | |
| Optical axis vertical adjusting | | 20 ° （±10 °） | |
| LED Indicator Feedback | | TX - Green Led for Power | |
| | | RX - Digital Strength Meter | |
| | | RX - Red Led for Alarm Signal | |
| | | RX - Red LED for Sensitivity | |
| Material | | ABS Resin High Impact Plastic | |
| Mounting Hardware | | Mounting Hardware Included | |
| Weight | | 2.8 Pounds | |
| Dimensions | | 3 1/4" Wide X 9 3/8" Tall X 3 1/8" Deep | |

## Page 4

Receiver | Transmitter

Receiver labels: Wire Grommets, Terminals, Test Sockets, Sensitivity LED, LED Status Window, Response time adjustment, Alarm LED, Lens, Signal Strength Indicator, Vertical Adjustment, Horizontal Adjustment, Cover Screw

Transmitter labels: Wire Grommets, Terminals, Option Dip Switches, Power LED (Green), Lens, Vertical Adjustment, Horizontal Adjustment, Cover Screw
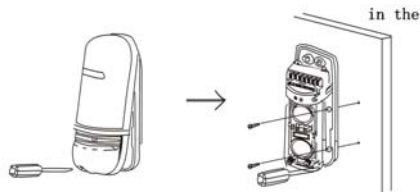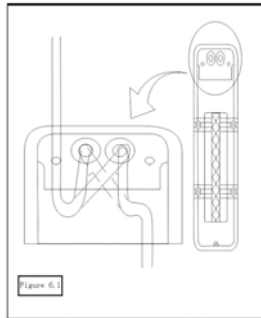
## Choose a Mounting Location
For Optimal Operation and prevent erratic false alarms

• Do not mount where the transmitter or receiver could be splashed by water or mud.

• Do not mount where the unit will be exposed to extreme illumination of Light. For example direct strong sunlight, outdoor lighting or a passing traffic.

• Do not mount where animals will be able to break both beams.

• Do not mount lower than 33" from the ground to avoider grass, small animals, snow build up and water spray from traffic.

• Do not mount to unsecure or flexible materials.

## Mounting Photo Eye
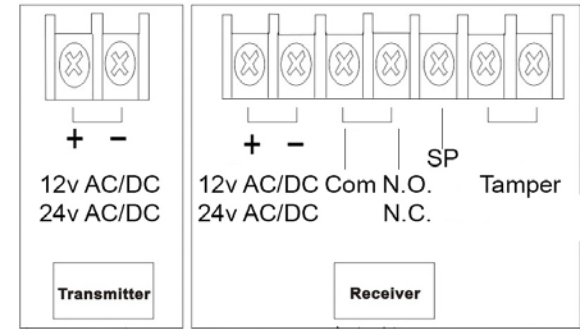
in the

## Wire Routing
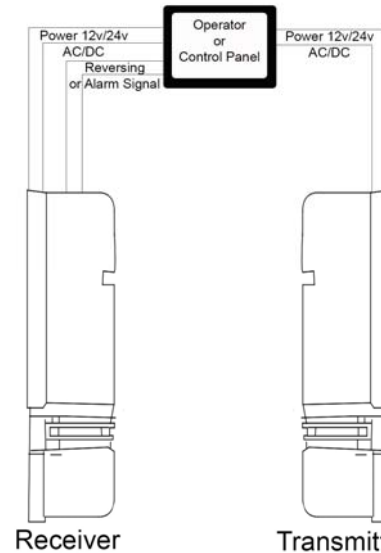
Figure 6.1

## Installation Notes
## Wiring
Choosing the Correct Wire Size according to wire run distance

| Cable Size/Wire Run Chart | | |
|---|---|---|
| Model | S-RXTX-30M | |
| Wire Size | 12V | 24V |
| AWG 22 | 650 ft. | 4300 ft. |
| AWG 18 | 1800 ft. | 8800 ft. |
| AWG 16 | 2480 ft. | 17244 ft. |

Run wiring from the alarm control panel or Gate Operator to the photo beam transmitter and receiver.
Shielded cable is the best option to reduce the chance of interference. If this cable will be outdoors and buried all cable should be run in conduit and local building codes observed.

## Page 5

Transmitter:
+ − 12v AC/DC / 24v AC/DC

Receiver:
+ − Com N.O. N.C. SP Tamper
12v AC/DC / 24v AC/DC

Power: 12v - 24v AC/DC
****SP - Terminal is not active. Do not Connect to this terminal****

Power 12v/24v AC/DC — Reversing or Alarm Signal — Operator or Control Panel — Power 12v/24v AC/DC

Receiver | Transmitter

## Wiring
1. Secure the terminal screw tightly to get a good connection
2. If a terminal screw is not used make sure it is secure as well
3. Grounding is necessary in some installation locations.
4. IMPORTANT NOTE be sure to select the correct setting for Dip SWITCH #3 N/O or N/C according to your application

DIP SW #3

VERY IMPORTANT NOTE
VERIFY YOUR APPLICATION
is a N/O or N/C Connection

on 1 2 3 4 5 6 7

N/O = Down Dip SW On Position
N/C = UP Dip SW Off Position
*N/O normally used for reversing application*
*N/C normally used for Alarm application*