INDOOR/OUTDOOR INFRARED BARRIER SENSOR

ART. 30088401-30088402-30088403-30088404-30088405-30088406

Please read this manual thoroughly before use
and keep it for future reference.

INVENTING Comelit GROUP S.P.A. INNOVATION

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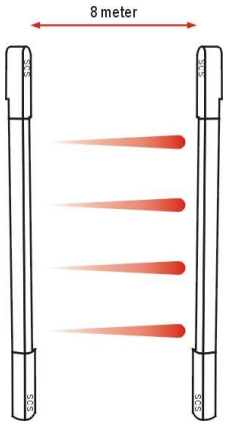


APPLICATIONS

- ◎ Indoor / Outdoor perimeter security system
- ◎ Window, Door. When the mounting space is limited
- ◎ Internal / External protection / Terrace / Sliding door

FEATURES

- ◎ Aluminum housing / PC Resin anti-UV cover / ABS side cap.
- ◎ Anti-tamper circuit triggers alarm if power is cut or end cap is removed.
- ◎ Slim aluminum housing, anti high-low temperature / fog / rains.
- ◎ 4 / 6 / 8 separate photoelectric beam sensors.
  Programmable trigger on simultaneous breaking of any single or 2 adjacent beams broken -- selected by Jumper on Rx's side cap
- ◎ Terminal block connection.
- ◎ Alarm: Break one or two adjacent beams.
- ◎ Tx power adjustment: by VR1 (on Tx's side cap).
- ◎ Sensing range: 8 meters (26 ft.) -- outdoor
  16 meters (52 ft.) -- indoor Max.
- ◎ N.O./N.C./Common relay output.
- ◎ Mounting hardware included.
- ◎ No synchronizing wires required.
- ◎ Led alignment indicator.
- ◎ Tamper switch.

SPECIFICATIONS

CE

Sensing range	8 meters (26 feet) max.-outdoor / 16 meters (52 feet) max.-indoor
Input voltage	10-24V DC
Detection method	Break one beam or two adjacent beams (1) 1 beam: 2 seconds alarm (2) 2 adjacent beams: immediately ***1 beam broken alarm trigger function can be removed; see (JP2) which located at Rx's side cap; (JP2) Jumper closed: 1 beam broken alarm (2 sec.) function existed (JP2) Jumper opened: 1 beam broken alarm (2 sec.) function removed
Signal output	Normal open / Normal close / Common relay output
Response time	50/100/150/200 ms (selectable - by SW1 slide switch-Rx)
Contact rating	1A/120V AC ; 1A/24V DC
Tx power adjustment (by VR1)	(a) when turn clockwise: become stronger (b) when turn counter-clockwise: become normal
Wiring connection	Terminal block
Power LED indicator	Green LED (on both Tx/Rx unit) On : powered Off : no power

Led indicator for beam alignment	Red LED (on Rx unit) On : when beam is broken ; Off : when beam is aligned properly
Buzzer alarm (for beam alignment)	(a) On : when sensor is connected with DC power & before beam alignment is done. (b) Off : when beam aligned properly ; automatically. ***This function can be cancelled by JP1 removed***
Tamper switch	4 pcs / each set ; 2 on both sides of Tx / 2 on both side of Rx
Operating Temperature	-45℃~55℃ (-49℉~131℉)
Dimensions	W: 35 mm / H: 30 mm / L: see following
Humidity	70% max (non condensing)

Consumption current

▲One beam broken continued 2 seconds alarm triggered **Cancelled.**

(jumper opened)

A

Conditions	30088401-30088402		30088403-30088404		30088405-30088406	
Beam Aligned	Tx	Rx	Tx	Rx	Tx	Rx
	55mA	35mA	65mA	38mA	75mA	42mA
Beam Broken	Tx	Rx	Tx	Rx	Tx	Rx
	55mA	43mA	65mA	45mA	75mA	48mA

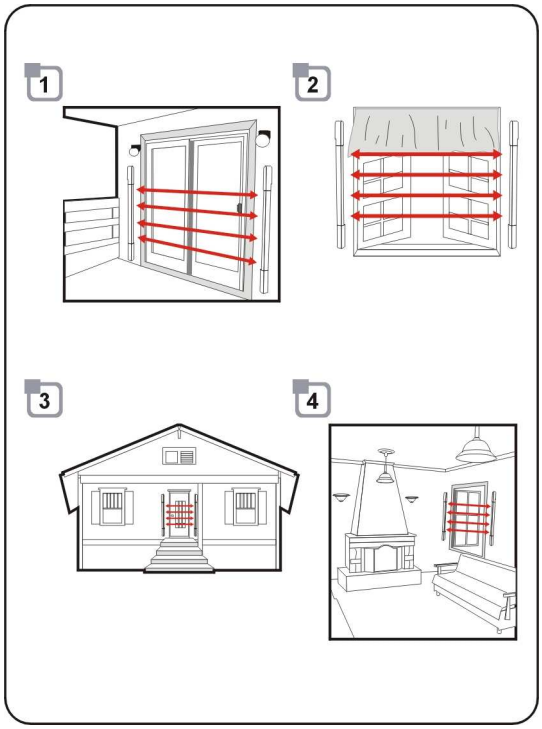
▲One beam broken continued 2 seconds alarm triggered **Existed.**

(jumper closed)

B

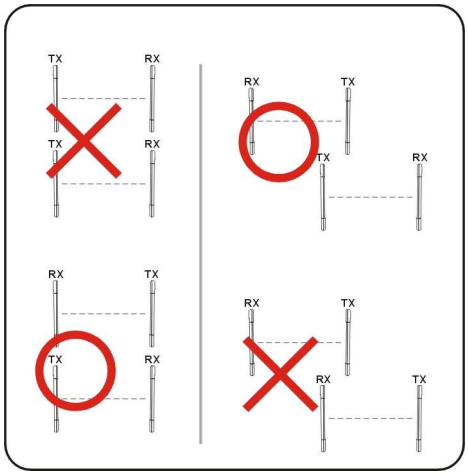
Conditions	30088401-30088402		30088403-30088404		30088405-30088406	
Beam Aligned	Tx	Rx	Tx	Rx	Tx	Rx
	55mA	40mA	65mA	43mA	75mA	45mA
Beam Broken	Tx	Rx	Tx	Rx	Tx	Rx
	55mA	48mA	65mA	52mA	75mA	55mA

APPLICATIONS

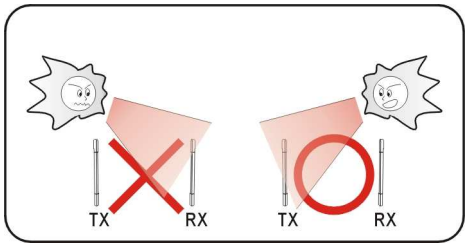


1. Terraces (sliding door)
2. Windows
3. External protections
4. Internal protections

INSTALLATION NOTES



Sunlight

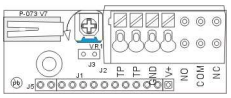


RESPONSE TIME

Broken one beam — Response time: 2 sec

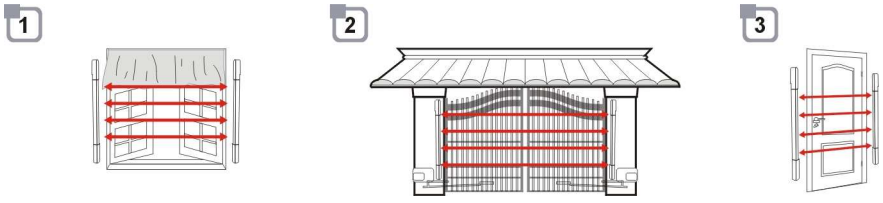
Broken two adjacent beam — Response time: adjustable

VR1 (on Tx side cap)



Normal — Strong

TYPICAL INSTALLATIONS



Windows (internal / external) — Gate — Door

DIMENSIONS

Top View

35mm (width)

Length

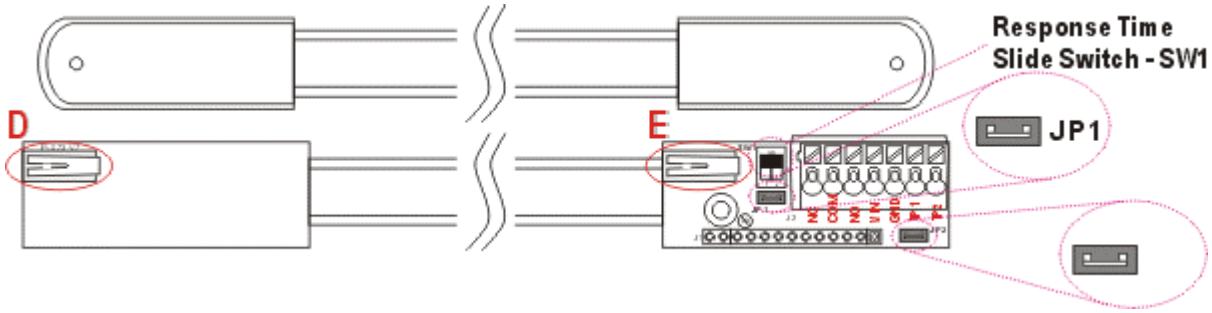
Side View

30mm (height)

Length

LENGHT

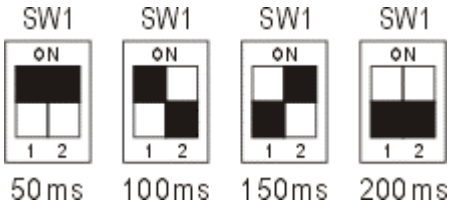
Item	Beams	Length (cm)
30088401-30088402	4	105
30088403-30088404	6	153
30088405-30088406	8	201



Left side cap Right side cap

Rx

Response time slide switch - SW1



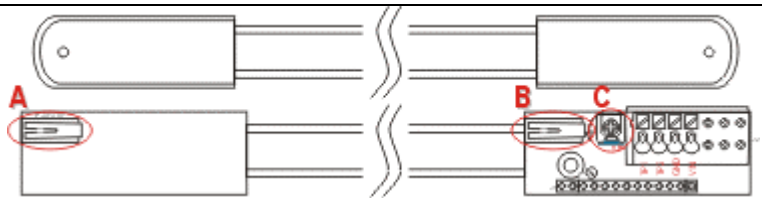
(JP2) Jumper→ When Jumper closed: one beam broken alarm (2 sec.) function existed

When Jumper opened: one beam broken alarm (2 sec.) function removed

(JP1) Jumper→ When Jumper closed: buzzer alarm for beam alignment function existed

When Jumper opened: buzzer alarm for beam alignment function removed

Tx



Left side cap Right side cap

A: Tamper switch

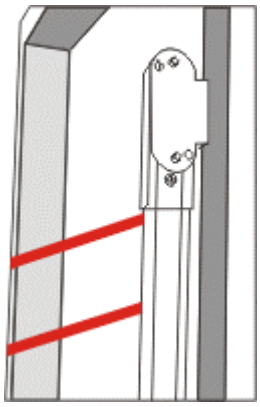
B: Tamper switch

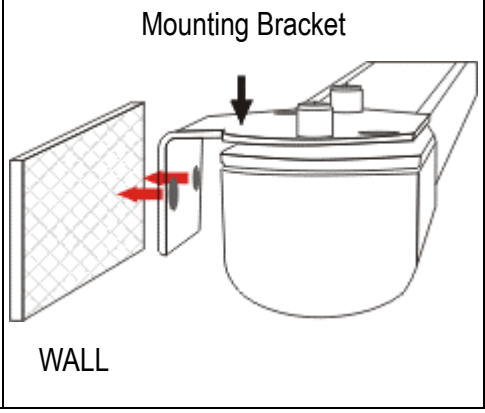
C: VR1 Potentiometer for Tx power adjustment

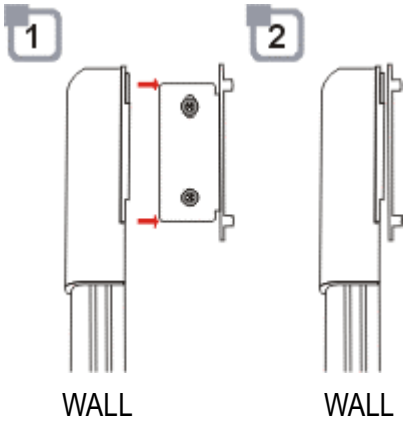
D: Tamper switch

E: Tamper switch

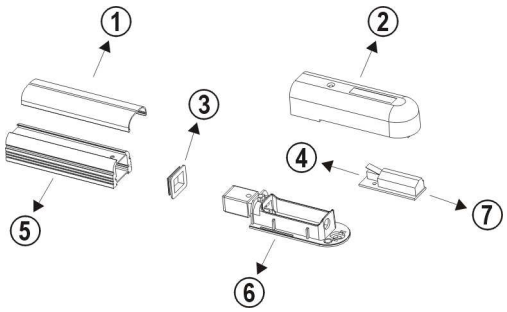
STANDARD INSTALLATION







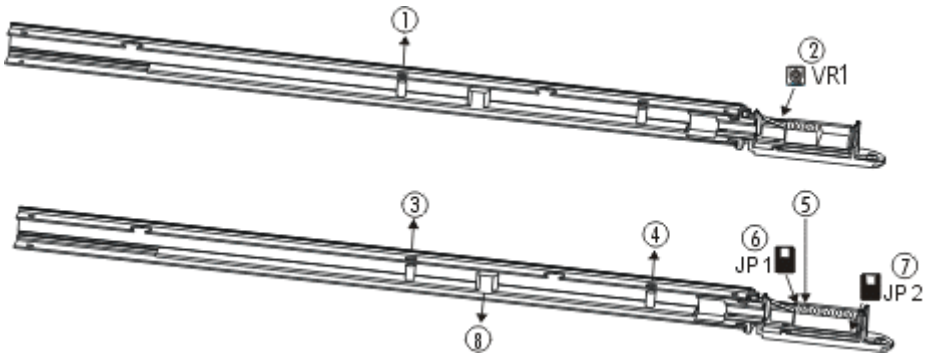
INTERNAL VIEW



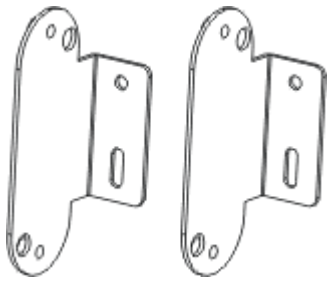
1. PC resin cover
2. ABS-side upper cap
3. Rubber ring
4. Tamper switch
5. Aluminum housing
6. ABS-side bottom casing
7. Terminal block (optional)

Sensing range V.S. Sunlight

Sunlight (lux)	Sensing Range
< 30,000	8 meters
< 40,000	7 meters
< 50,000	6 meters
< 60,000	5 meters
< 70,000	4 meters
< 80,000	3 meters



Mounting bracket



1. Power LED indicator Tx (green)
2. VR1: for Tx power adjustment
3. Beam alignment LED indicator (red)
4. Power LED indicator Rx (green)
5. SW1- Response time slide switch
6. JP1: Buzzer alarm (for beam alignment)
   Remove JP1: cancel the function after beam aligned properly
7. JP2 Jumper closed: 1 beam broken alarm (2 sec.) function existed.
   JP2 Jumper opened: 1 beam broken alarm (2 sec.) function removed.
8. Buzzer

TERMINAL BLOCK (Wiring Connection - Optional)

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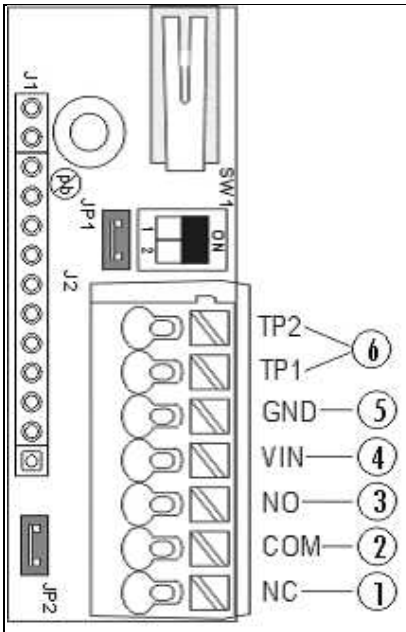
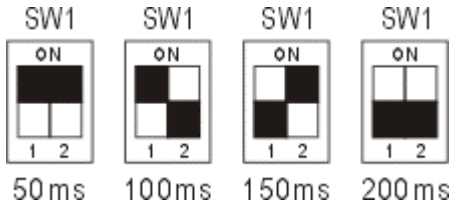
<td rowspan="2"> 
</td>
<td rowspan="2">1. Normally Close
2. Common
3. Normally Open
4. DC＋
5. DC－
6. Tamper switch</td>
<td>SW1</td>
<td> 
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&
JP2</td>
<td>(JP2) Jumper→ When Jumper closed: one beam broken alarm (2 sec.) function existed.
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