

# BI205-BI205W-BI410-BI410W-BI615-BI615W-BI820-BI820W-**BI825-BI825W**

# Installation manual



#### **1. FEATURES**

Each individual beam is formed by two parallel beams 4 cm distant, this system allows to eliminate all the false alarms caused by insects (flies, butterflies etc..) That can be laid at the TX or RX LED, so to get the alarm condition is necessary to obscure both the rays that compose the beam.

The barrier is composed of a transmission unit (TX), which emits beams of synchronized modulated infrared rays, and by a receiving unit (RX), which receives all the beams emitted in tune with the synchronization signals.

In the event of interruption of one or more beams, depending on the mode of the AND or programming time DIPSWITCH on board, the receiver will indicate the alarm status via an LED indicator and relay contact placed on the card.

The interlocking profile, allows you to insert or remove the cover of polycarbonate, without having to remove the barrier from the wall.

It is possible to adjust the position of the beams at the required height by loosening the locking screw present on each circuit, making them slide in the guide and then retighten the screw.

The barrier SADRIN is designed to be immune to disturbances of cell phones that can be used in close proximity to it without generating false alarms and maintaining its operating characteristics.

It is protected by blinding sunlight up to 300,000 lux, in any case it is advisable to check the progress of the sun to avoid direct sunlight.

You can add up to 8 expansions getting a profile up to 4 meters and 10 different beams.

#### 2. MOUNTING

- 1. Remove devices from the pipe by applying pressure on the board to facilitate delivery;
- Remove the caps and remove the cover extruded. If you need to reduce the length of profile cutting and taking care to avoid metal slag from falling onto electronic circuits;
- 3. Insert the square gasket in the cap up to the square to match;



4. Insert the cable gland gasket into the groove;



- 5. Cutting the cable gland gasket to the desidered height;
- 6. Insert the cap in the aluminum profile to match up to the gasket with the metal;



7. Open the grooves present on the cap and on the cover, to allow the passage of the cable from the outside of the barrier;



8. On the bottom cover of the column to make a small incision to ensure drainage of rainwater that could accumulate inside the closing;



9. Attach the whole structure to the wall; you can make small adjustments both horizontally and vertically thanks to the holes located on the caps;



10. Upon completion of the installation and alignment, close the lid with the supplied screw.





#### 3. INSTALLATION

Remove the caps and remove the cover extruded. If you need to reduce the length of the profile cut, being careful to avoid metal slag from falling onto electronic circuits. Drill the aluminum profile at two ends (for the barriers longer may require additional holes, in which case it may be necessary to temporarily disconnect the connection cable) and secure the profile to the wall.

Place the optics to the desired height by turning the screws on the circuit, make the connections to the terminal blocks and seal the cable routing to prevent the entry of water and insects.

Make sure the screws are tight so that there is electrical contact between the board and the metal section that acts as a screen to interference.

Select, activating dip switch, the number of pairs of bundles installed in the barrier.



N.B. Make sure that the expansions are properly connected (OUT>IN).



Power and control that the SYNC LED lights are flashing on the both circuit SADRIN TX and SADRIN RX. In the case where only the TX LED is blinking, check the connections of the synchronism.

Test the barrier interrupting a pair of beams at a time making sure the ALARM LED is lit.

After test complete program the desired operating mode as reported in the table below.

FUNCTION	<b>DIP POSITION</b>	DELAY	
AND	AND - ON	500ms	
	FAST - OFF		
FAST	AND - OFF	100ms	
	FAST - ON		
NORMAL	AND - OFF	250ma	
	FAST - OFF	250ms	

Programming has been completed, if desired, turn off the LED with the appropriate jumper and close the barriers.



#### 4. CONNECTIONS

Use shielded cables and connect the shield to the negative logic supply-12VDC (GND). In addition to the ordinary supply, tamper and alarm relay, you MUST link between the transmitter and the receiver SADRIN TX - SADRIN RX the two-wire synchronous (+sync TX to + SincRX) (-sync TX to, -sync RX).



NB: Only for expansions is provided the switch. The beam 1e2 can not be selected because they are already present on the motherboard

### **5. CABLES & CABLING**

#### The wiring must be done using two separate cables:

- The first (type shielded 0.5 mm <sup>2</sup> minimum) supplies the barrier and allows the transmission of the alarm signal and the tamper.
- The second (type shielded 0.22 mm <sup>2</sup> minimum) is a cable that allows the transmission of the synchronization signal between TX and RX.
- N.B. The shield of this cable must be connected to the negative of 13.8 VDC to all\_columns.



#### 6. TECHNICAL CHARACTERISTICS

MODEL	SADRIN 205	SADRIN 410	SADRIN 615	SADRIN 820	
Max range outdoor	Blak 15m; White 5m				
Sinchronism	wired				
Dual beam optical	Yes with 35mm lenses in AND				
Max configuration	2TX+2RX	4TX+4RX	6TX+6RX	8TX+8RX	
Beam operating	Parallel				
Supply	13,8 Vdc				
Consumption (tx+rx)	60mA	90mA	120mA	150mA	
<b>Optional heaters</b>	Up to -50°C, 12Vdc From 560mA to 3920mA tx + rx)				
Alarm output	Free contact relay (on RX side)				
Tamper output	On both column				
Protection degree	IP54				
Dimension	25mm x 22 mm from 500 to 4000mm				
Weight per column	250g	500g	750g	1000g	

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