



WSE



WSI

SADRIN WS SMA

**mini-barrier
wireless
battery powered**

Installation manual

1. FEATURES



There are two versions of SADRIN WS:

- **WSE** battery (3,6 V – 19 Ah) in an appropriate case included positioned outside the column;
- **WSI** AA batteries (3,6 V – 2,7 mAh) inside the column.

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.

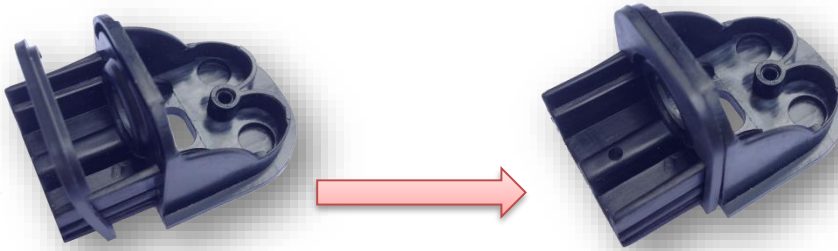
It is protected by blinding sunlight up to 300,000 lux, in any case it is advisable to check the progress of the sun to avoid direct sunlight.

It's possible add up to 6 expansions getting a profile up to 3 meters and 8 different beams.

The new cap facilitates the application of the barrier wall without having to pierce the aluminum profile.

2. MONTAGGIO

1. Remove devices from the carton pipe by applying pressure on the board to facilitate the exit;
2. Remove the caps and remove the IR cover.
If you need to reduce the length of profile, cut it taking care to avoid metal waste from falling onto electronic circuits;
3. Insert the square gasket in the cap up to match it;



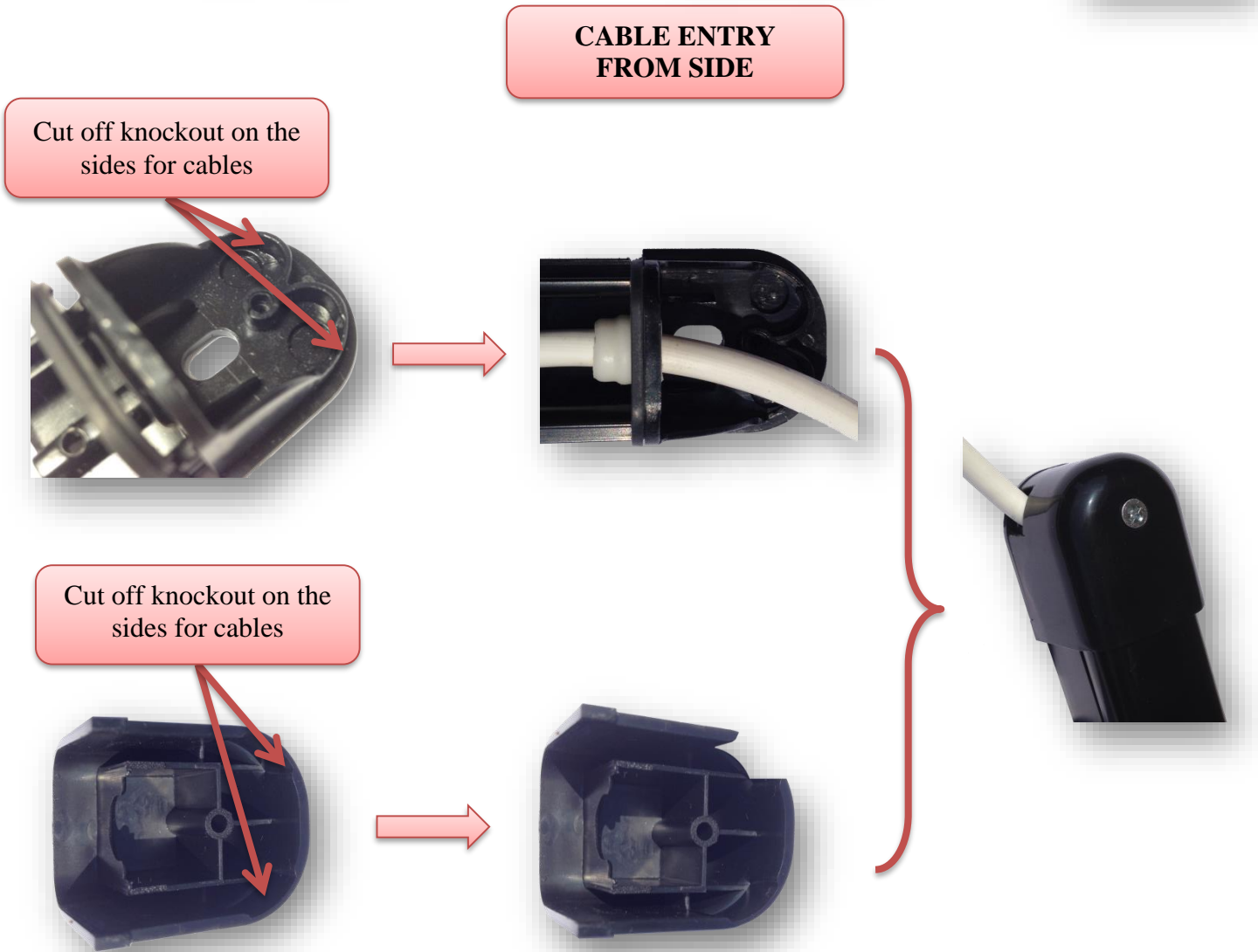
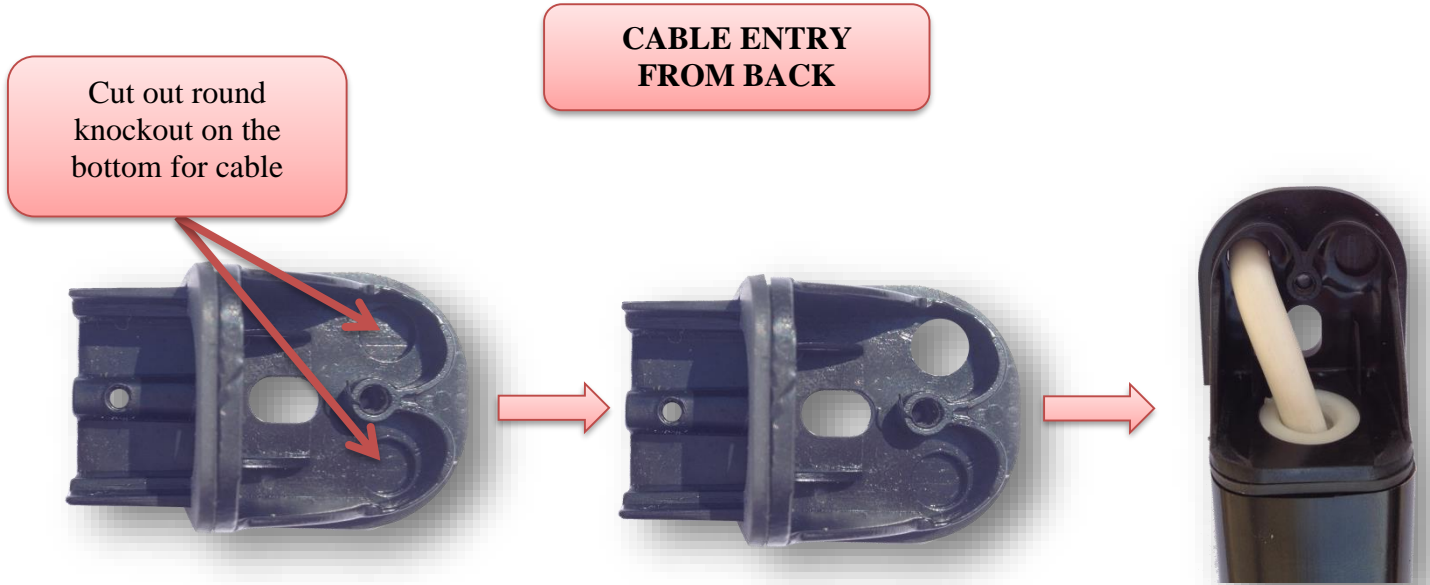
4. Insert the cable gland into the groove;



5. Cutting the cable gland to the cable section;
6. Insert the cap in the aluminum profile to match up to the metal;



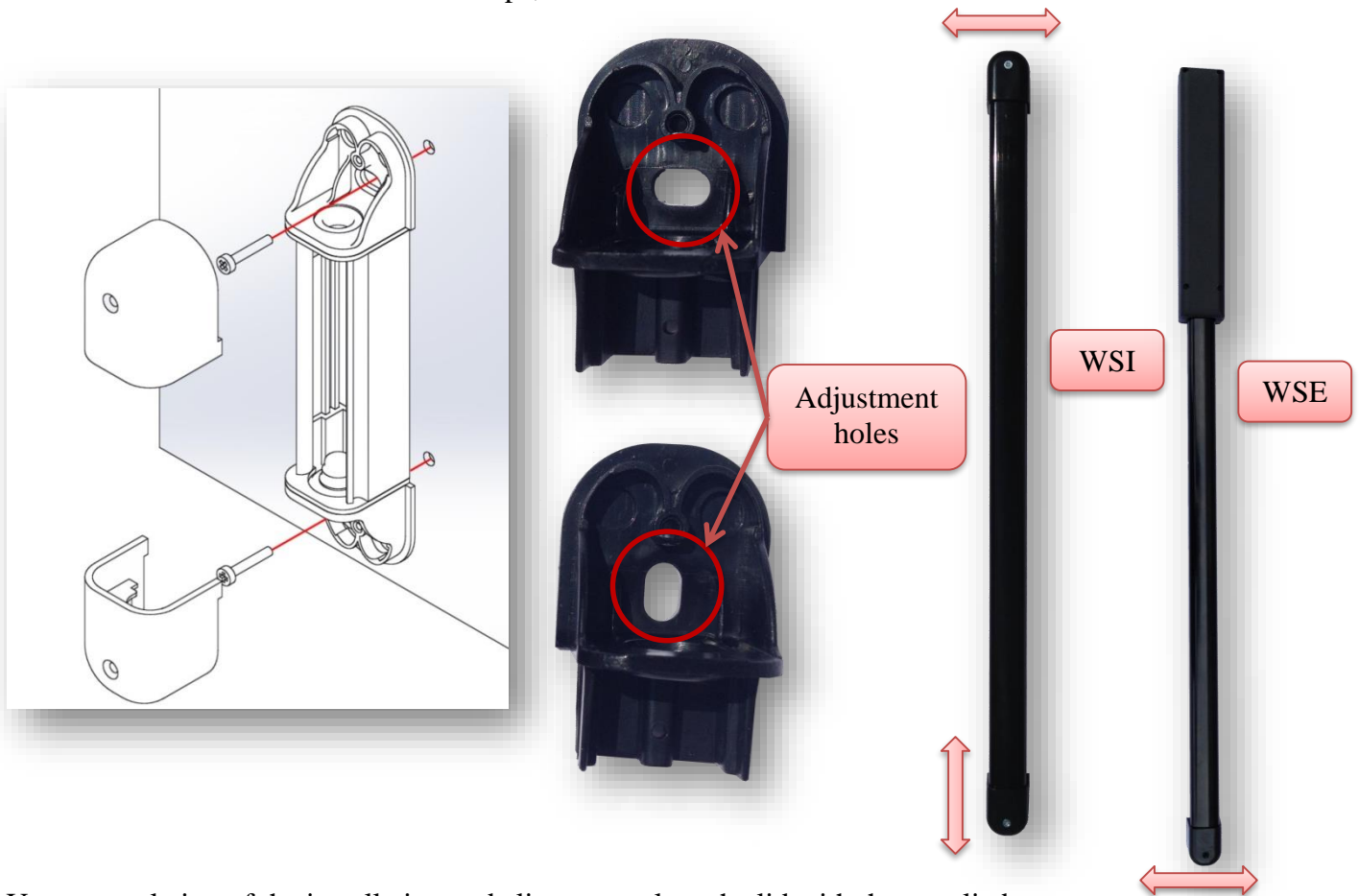
7. Open the knockout present on the cap and on the cover, to allow the passage of the cable from the outside of the barrier;



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



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



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



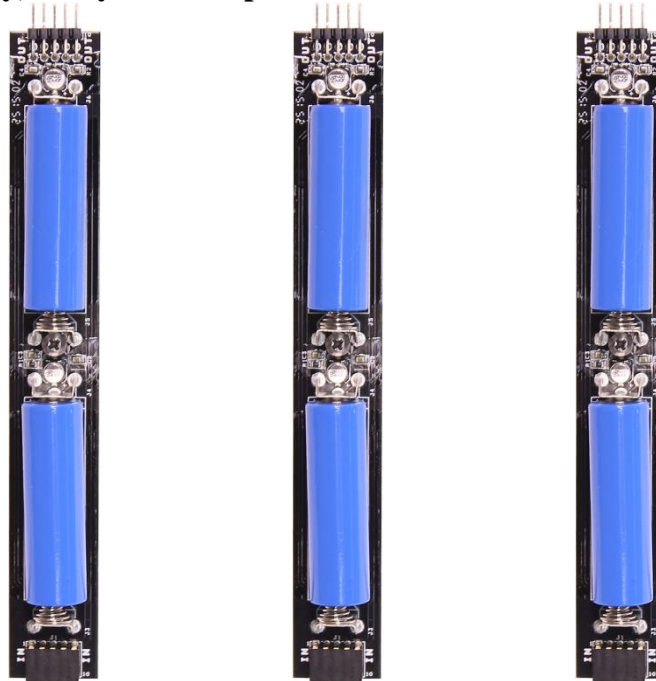
NOTE: The barrier must be installed with terminal block on the top.

3. BATTERY

WSE battery (3,6 V – 19 Ah) in an appropriate case included positioned outside the column;

WSI AA batteries (3,6 V – 2,7 mAh) inside the column, is possible to increase the number of batteries inside in the column adding more expansion boards.

NOTE: in case of low battery, the system will provide an acoustic information during alarm event.



3.1. Battery life

RAY IN COLUMN	WSE	WSI
2	6 years ***	2 years *
4	3,5 years ***	1 year *
6	3 years ***	1,5 years **
8	2 years ***	1 year **

* Value relate to 2 batteries 3,6 V – 2,7 mAh

** Value relate to 4 batteries 3,6 V – 2,7 mAh

*** Value relate to 1 battery 3,6 V – 19 Ah

4. INSTALLATION

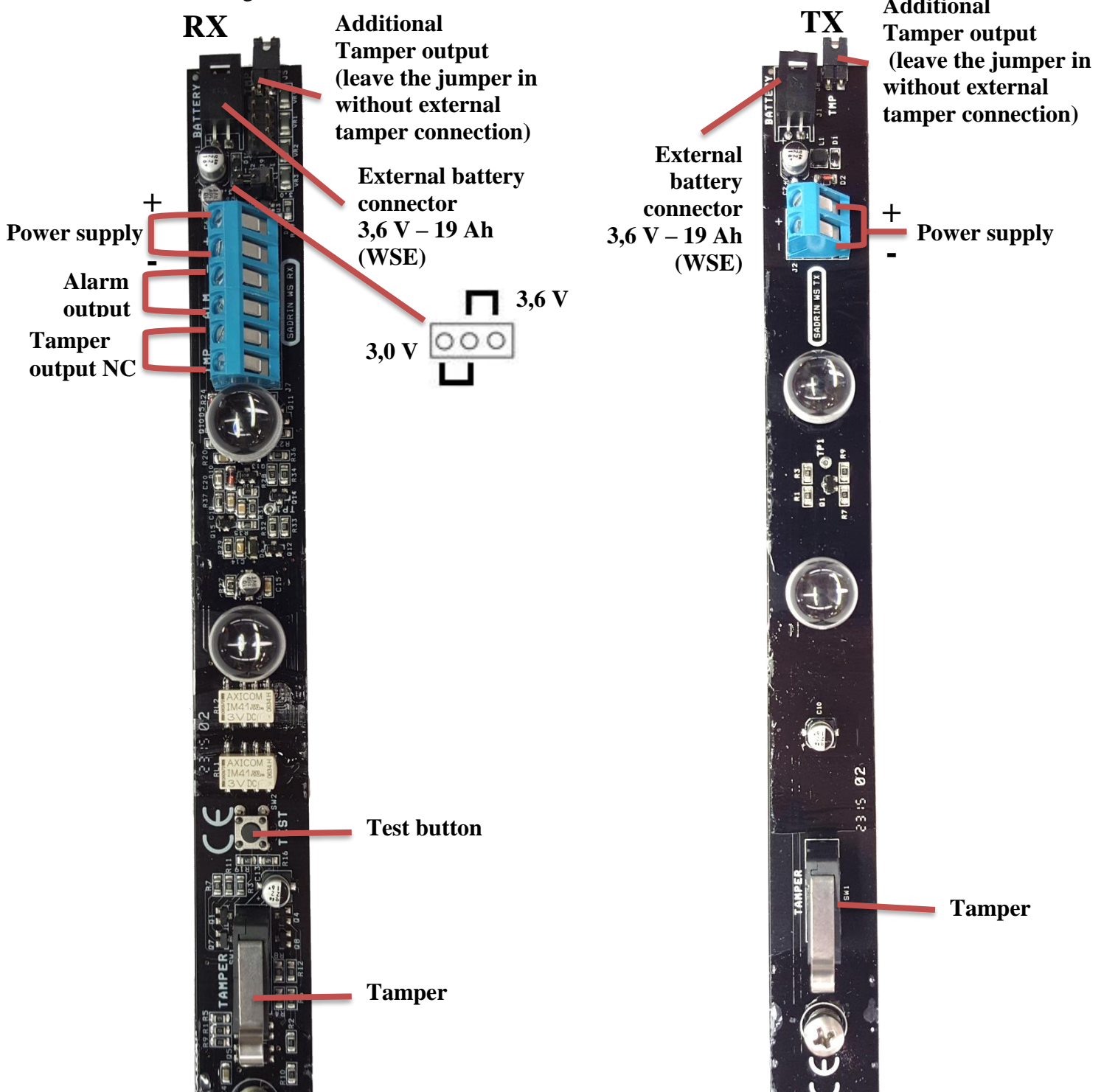
Place the optics to the desired height by turning the screws on the circuit, make the connections to the terminal blocks and seal the cables entry to prevent the entry of water and insects.

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

Avoid installing in the immediate vicinity of other light sources such as infrared photocells for gates or cameras.

5. CONNECTIONS

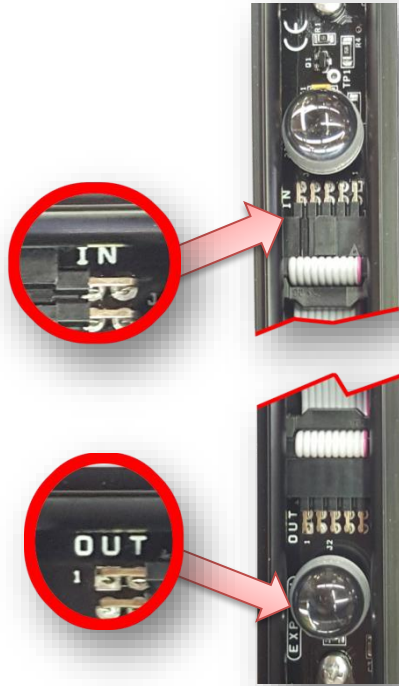
To prevent radio interference use for the connection between the wireless transmitter and barrier shielded cable with the shield to the negative terminal.



You can power the radio transmitter with a voltage of 3.0V or 3.7V power supply using the terminals of the barrier. The configuration of the output voltage is suitably positioning the jumper.

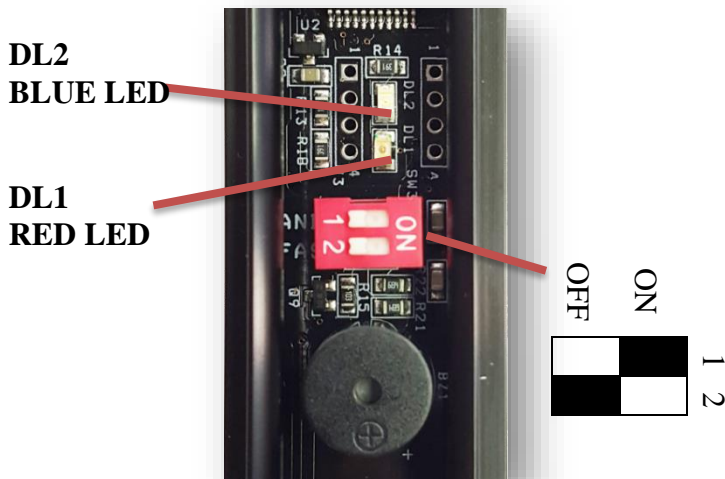
Note: Receiver column gets optically the tamper information of Transmitter.

Note: Make sure that the expansions are connected correctly (OUT> IN).



6. PROGRAMMING AND OPERATION

Connect the battery to the dedicated input paying attention to polarities and verifying the LEDs blinking for 5sec.

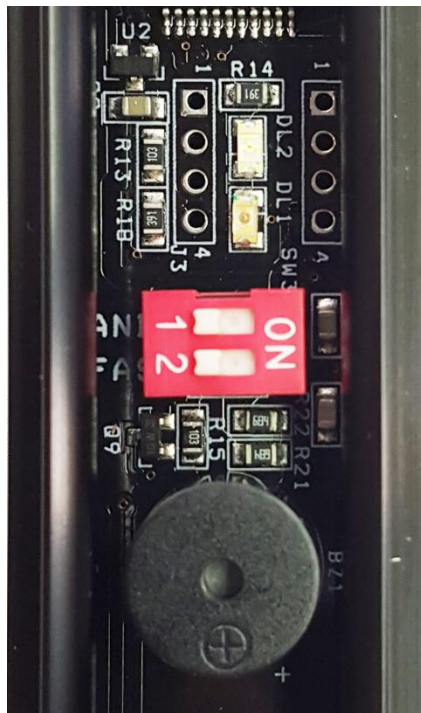


1. To enter in TEST lift dip1 on transmitter motherboard.
2. Press the test button on the receiver motherboard for 5 seconds until the entrance of the programming mode signaled by the blue LED test.
3. At this stage it is possible to perform the alignment of the barrier, which will be the maximum value when the test LED and the buzzer will provide a continuous signal.

4. To exit the test re-press the button for 5 seconds until the LED flashes red and you activate the feature WALK TEST: for 30 seconds the barrier will give a continuously buzzer sound in case of a beam interruption, and also the blue LED will flash in case the tampers are open. Interrupt each beam to check the proper functioning of all the optics with buzzer sound.
5. At the end of this phase, testing blue LED is on and the red LED will flash until it is repositioned dip1 TEST motherboard transmitter OFF allowing resynchronization of the barrier.

Note: reading of the alignment is performed only on the CPU board. Make sure that the two columns are parallel to each other.

7. DIPSWITCH SETTING



RX COLUMN

- | | | |
|---|-------------|---|
| 1 | AND | ON position, there is an alarm event when obscured by at least two beams. |
| 2 | FAST | ON position to decrease the delay time making the barrier more sensitive. |

TX COLUMN

- | | | |
|---|-------------|--|
| 1 | TEST | ON position activates the TEST phase alignment of the barrier. |
| 2 | / | Not in use. |

8. TECHNICAL FEATURES

ARTICOLO	SADRIN WS 205	SADRIN WS 410	SADRIN WS 615	SADRIN WS 820
Max range outdoor	From 0,4 to 5 meters			
Synchronism	Optical			
Dual beam optical	Yes with 35mm lenses in AND			
Optics	Pulsed rays with a wavelength 950 nm			
Max configuration	2TX+2RX	4TX+4RX	6TX+6RX	8TX+8RX
Beam operating	Parallel			
Power supply	3,6 Volt - 19 Ah WSE / 3,6 Volt -2,7 Ah WSI			
Alarm output	Relay with free contact Nc / No (Column RX)			
Tamper output	Tamper opening column (on both columns)			
Protection degree	IP54			
Profile dimension	25mm x 22 mm x (500 to 4000mm)			
Battery case dimension (WSE)	225X40X39 mm			
Useful space for transmitter (WSE)	100X34X36 mm			

9. F.A.Q.

- | | |
|---------------------------------------|---|
| ○ The system stays in alarm | <ul style="list-style-type: none"> • Check that the expansions are correctly linked by flat cable; |
| ○ The system gives false alarm | <ul style="list-style-type: none"> • Make sure that there are no animals or objects that might obscure the optical beam, otherwise activate the AND; • Make sure the receiver is not affected perpendicularly by sunlight; • To prevent radio interference, use as a link between the wireless transmitter and barrier a shielded cable with the shield to the negative of terminal block; |

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