

MANUAL PXB



The reflective photobeam PXB has been designed in order to provide security door management with accuracy.

TECHNICAL FEATURES

- Operating voltage 12-36 V DC or 10-24V AC.
- Polarization filter.
- Range up to 15 m.
- Protected against soiling.
- Inmune to external light sources.
- 2 independent cable entries.
- Reversal power supply polarity protection.
- Easy adjustment.
- Soiling and alignment led indicator.
- 12 V DC is available but the range can decrease.

CHARACTERISTICS

Polarisation filter: This function guarantees even the detection of shiny objects.

Protection: Not affected by soiling, rain, fog and snow. Besides, inmune to sunlight and external light sources.

The casing allows the device to be installed at the outside.

Cable entry: With 2 optional cable entries at the front and bottom side of the case.

Relay output: Characterised by a potential-free change over contact.

Screws alignment: The adjustment of the 3 screws on the pcb assures the light beam is perfectly aligned with the mirror once the photobeam has been installed on the wall.

Soiling indication: The LED flashes.

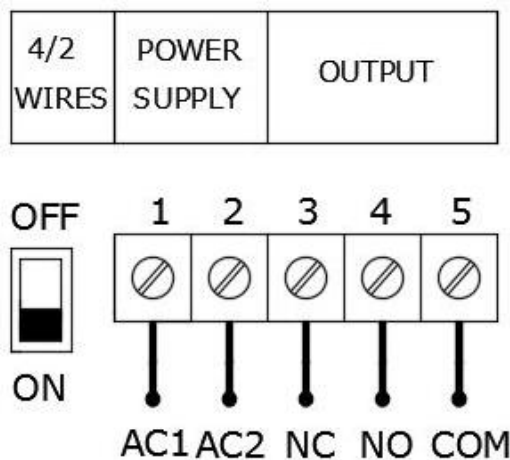
Alignment indication: The LED lights up red when the alignment is not accurate with the reflective mirror. Once the alignment is correct the LED switches to green color.

Test input: Available terminal for communicating with those control boards that have a terminal test (and have it unabled). It is based in a constant signal and its function is to block the door in case the communication is interrupted. In other words, when the photobeam is turned off (power goes off, interrupting the safety signal).

TECHNICAL DATA

Power Supply	12...36 V DC / 10 ~ 24 V AC
Current consumption	30 mA /24 V(max)
Switch rating	Min 1 mA /5 V DC Max 0.5 A/ 48 V AC (resistive load) Max 0.6 A/ 50 V AC
Light	689 nm pulsed, polarised
Operational	<100 ms
Angle	1.5° aprox
Output Relay	Change over contact
Switching type	Responsive to brightness
Connection	Screw max 1,5 mm ²
Protection degree	IP 67 EN6052
Operating temperature	-25...60°C
Weight	60 g
Dimmensions	85x43x39mm ³ (L x W x H)

CONNECTIONS



4/2 WIRES SELECTION

This switch configures the photobeam connection as 4 wires or as blue bus (2wires).

DIP OFF (up) → 4 wires connection.

DIP ON (down) → 2 wires connection.*

*These 2 wires configuration has been designed for those control boards that can work as

“blue bus” that only need 2 wires for power supply and security signal.

ALIGNMENT

The alignment LED lights on when the reflector is not adjusted correctly, this provides an easy installation of them, the LED lights off when the beam is centered properly with the mirror.

ADJUSTEMENT

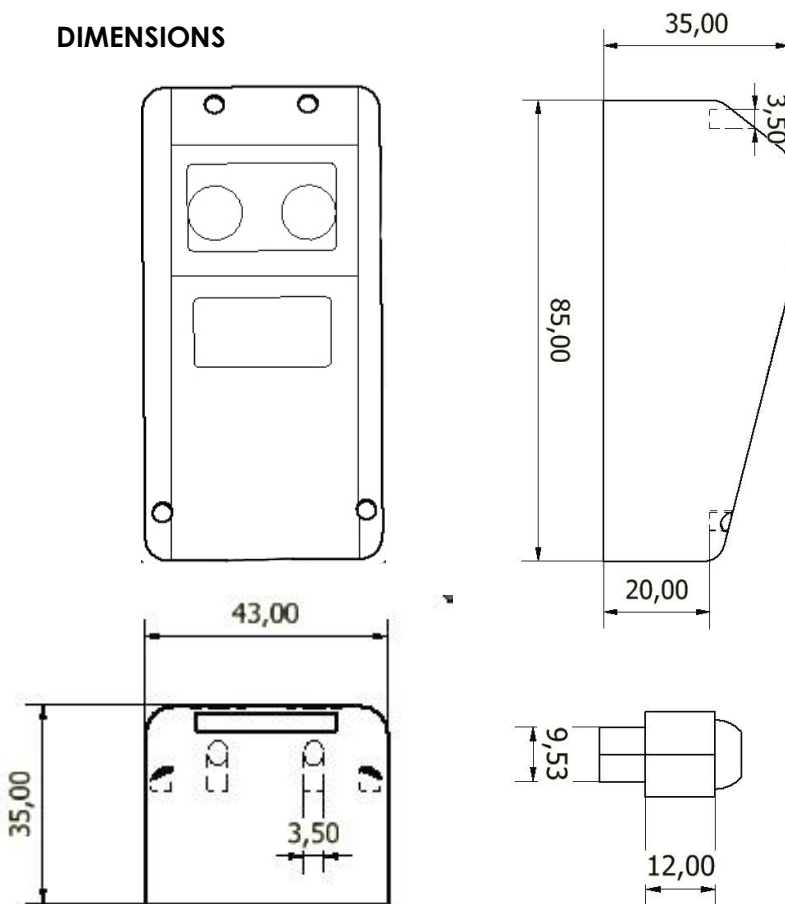
Once the photobeam has been installed, the light beam can be adjusted by using 3 screws.

By default the screws are unscrewed by 1 turn, the maximum are 3 turns.

The optical sensor is optimally aligned when the red LED lights on.

LED lights off red – 100% of the cone of lights is hitting the reflector.

DIMENSIONS



REFLECTOR

Screwable mounting reflective mirror.
Diameter mirror: 83mm.
Diameter case: 90mm.
Range: aprox 10m.



DECLARATION OF CONFORMITY

EMC directive 89/336/EEC

EN 61000-6-2

EN 61000-6-4