

## LED SIGNALING ON THE RECEIVER PLATE

**LED on:** Photocell misaligned (with obstruction)

**LED off:** Photocell aligned (no obstruction)

### WARRANTY TERM

MOTOPPAR, Indústria e Comércio de Automatizadores Ltda., Located at Av. Labieno da Costa Machado, nº 3526, Industrial District, Garça / SP, CEP 17400-000, CNPJ 52.605.821 / 0001-55, IE 315.011.558.113 guarantees this against defects in design, manufacture and assembly, and / or jointly and severally as a result of defects in the quality of the material that makes it improper or inappropriate for the intended use for a legal term of ninety (90) days from the date of acquisition.

Provided that the installation guidelines described in the operating instructions are observed. In the event of a defect, during the warranty period, MOTOPPAR's liability is limited to the repair or replacement of the apparatus of its manufacture.

As a result of the credibility and trust deposited in the PPA products, we added to the above term another 275 days, reaching a total of 1 (one) year; also counted from the date of acquisition to be proven by the consumer through the proof of purchase.

In the additional time of 275 days, visits and transportation will be charged in locations where there are no authorized services. The costs of transporting the appliance and / or technician are also borne by the consumer owner.

A substituição ou conserto do equipamento não prorroga o prazo de garantia.

This warranty will lose its effect if the product:

- Suffer damage caused by accidents or agents of nature, such as lightning, flooding, landslides, etc. ;
- It is installed in an improper electrical network or even in disagreement with any of the installation instructions stated in the manual;
- it is not used for its intended purpose;
- it is not used under normal conditions;
- Suffer damage from accessories or equipment attached to the product.



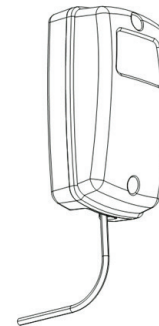
## F32 PLUS PHOTOCELL

Rev. 1



### TECHNICAL CHARACTERISTICS

- Compatible with all control boards on the market;
- Maximum reach:
  - External Area: up to 32 meters;
  - Internal Area: up to 40 meters;
- Power Supply Voltage: 12 to 24Vdc;
- Maximum current consumption: 65mA;
- Output NA, NF and pulsed (configurable);
- Immediate activation;
- Digital and microcontrolled technology;
- Immune to noise;
- LED indicative of tuning;
- Resistant to bad weather.



### PHOTOCELL PRECAUTIONS

- Avoid installing the receiver unit directly facing the sun;
- Make sure the cable outlet is down;
- Install the photocell away from obstructions that may obstruct the beam;
- When using the product on a smooth or polished floor (surfaces with high light reflection), install the photocell at least 40 cm high from the floor. This will prevent the reflection of the floor from affecting the proper functioning of the sensor.

## INSTALLATION

**Step 1:** Secure the transmitting and receiving units, aligned with each other, to a minimum height of 30 cm from the floor and so that the wires are down to avoid possible water infiltration.



**Step 2:** Select the mode of operation of the photocell via the jumpers detailed below.

### Jumpers on Receiver

**Jumper INV:** This jumper reverses the relay operating state.

- Closed: Normal Operation (factory default).
- Open: Reverses the Relay Status (In this situation, the relay remains activated while the photocell is aligned, ie the NO becomes NF and vice versa).

**Jumper P/RL:** Selects the operation mode of the photocell, relay contacts (NA or NF) or pulsed.

**NOTE!** If the pulse mode is selected, the INV jumper becomes useless.

### Jumpers on Transmitter

They select the maximum working distance of the photocell.

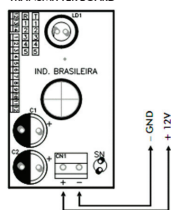
Jumper 01: 0 to 5 meters

Jumper 02: 5 to 15 meters

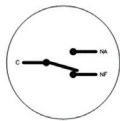
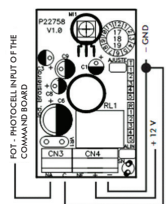
Jumper 03: From 15 to 40 meters (if it is external area, those 40 meters become 32 meters)

**Step 3:** Power the transmitter and receiver boards with power from the operator command board or from an external source, observing the polarity on the red wire (+) and brown wire (-).

TRANSMITTER BOARD

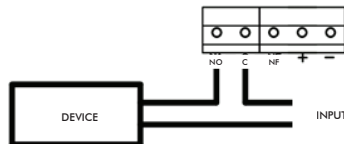


RECEIVER BOARD

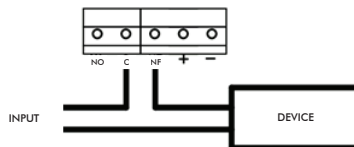


## RECEIVER CONECTIONS

If you chose to use the Relay (Jumper in RL)



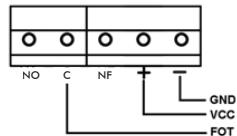
In case of a NO circuit, when the photocell is obstructed, it will close the contact with the C, and consequently activate the device.



In case of NF circuit, when the photocell is obstructed, it will open the contact with the C, and consequently will deactivate the device.

**NOTE!** It is mandatory that the Jumper P / RL is set to operate the relay mode, ie the jumper RL is closed.

If you chose to use the Pulsating mode (Jumper in P)



Onde:

**GND** = Alimentação negativa (-) da central de comando do automatizador.

**VCC** = Alimentação positiva (+) da central de comando do automatizador.

**FOT** = Entrada da fotocélula da central de comando do automatizador.

**NOTE!** It is mandatory that the Jumper P / RL is set to operate the Pulsed mode, ie the jumper P closed.

**NOTE!** When the photocell is used in the pulsed mode and with power from an external source, the GND (negative) of the source must be connected to the GND of the control center.