PHOTO30

Infra-red photocells rev 1

ELCA
via Malintoppi, 32
63023 Fermo(AP) Italy
Tel 0734 608484
Fax 0734 605080

CE

DESCRIPTION: Infra-red rays photocells for outdoor use, safety device. Power supply (12 or 24 Vcc/Vca)
The kit is composed by : 1 transmitter photocell (TX), 1 receiver photocell (RX), 4 screws to fix the case on the wall [6], 2 screws to fix the cover to the plate [4], 2 screw for covers [4]

TECHNICAL INFORMATION:
ALIMENTATION = 12/24 Vac/Vcc
CURRENT TX+RX = 24Vac-70mA, 24Vcc-55mA
RELE' CONTACT = max 24 Vdc - 0.5A
ENVIRONMENT TEMPERATURE = -15/+60 °C
OPTIC wavelength 950nm Radiation ± 15°
RANGE = 20m . The power of range can be reduced 70% in bad conditions (snow, dust, etc…)
BOX IP 54 ; SIZE = 85 x 40 x 30 mm

INSTALLATION:

1) Fix the photocell plate to the wall using the screws (fig.2), the height from earth level has to be around of 40/60 cm (fig.1)

ATTENTION !!: If you don't use the screws equipped , pay attention that the screw doesn't repot and doesn't touch the electronic board (see fig.3)

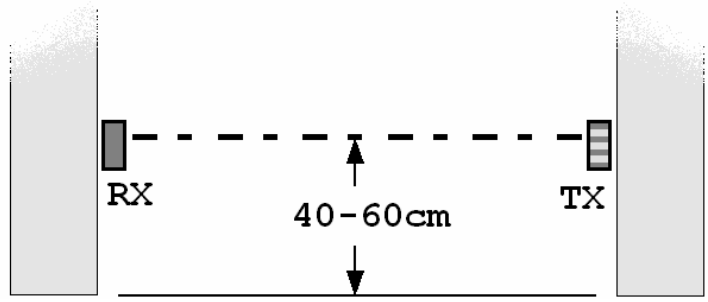

FIG. 1

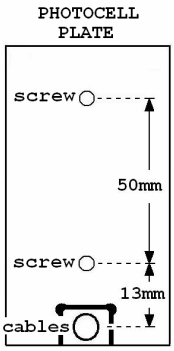

FIG. 2

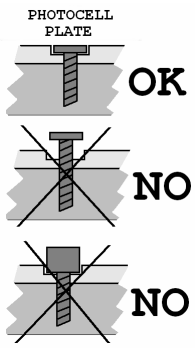

FIG. 3

2)

PAY ATTENTION TO THE LINE BETWEEN THE PHOTOCELLS, MAKE A GOOD ALLIGMENT BETWEEN TX AND RX

If the distance between the two photocells is more than 5 mt , you must pay attention to the line and to install the photocell (RX) in the best position far from the sun rays, (see fig. 4), or to use the shadow for photocell [mod .E1206]

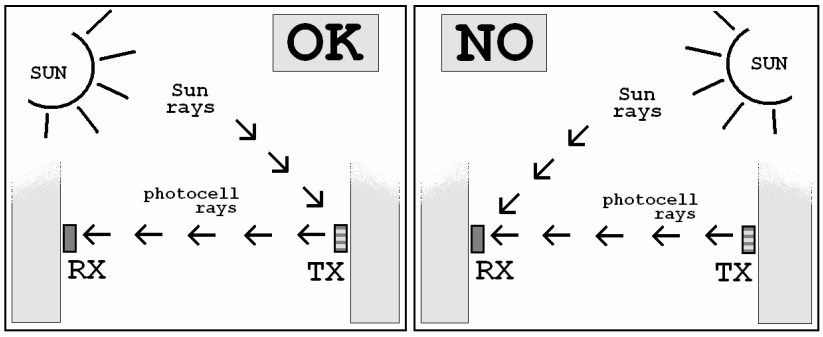

FIG. 4

If you install two couples of photocells and the distance is less than 50cm (between the two infra-red rays), you must install the two photocells (TX) in cross way (see fig.5) .

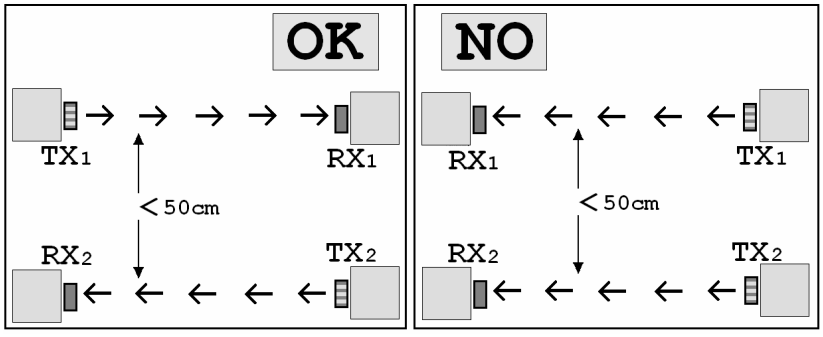

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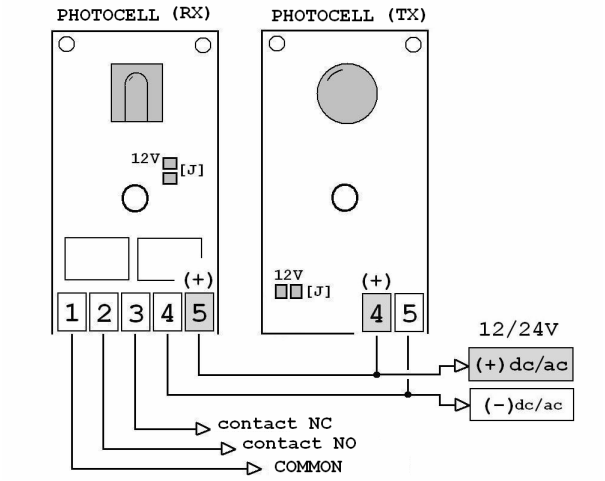
FIG. 5

3) Put the electronic boards inside their boxes and connect (see fig. 6 = for one couple of photocells).
If you need , connect the two series of photocells at the same input of the board, connect in series the contacts normally closed NC (see fig. 7).

ATTENTION!! : If you use an ALIMENTATION of 12Vdc/Vac, you have to solder together the little bridges [J] of photocell (RX) and photocell (TX) (see fig.6)



STANDARD CONNECTION
ALIMENTATION

24Vac	MIN	20Vac
	MAX	26Vac
24Vcc	MIN	20Vcc
	MAX	27Vcc

Solder together the little bridges [J]

12Vac	MIN	11Vac
	MAX	15Vac
12Vcc	MIN	11Vac
	MAX	20Vcc

FIG. 6

CONNECTION IN SERIES OF 2 COUPLES OF PHOTOCELLS

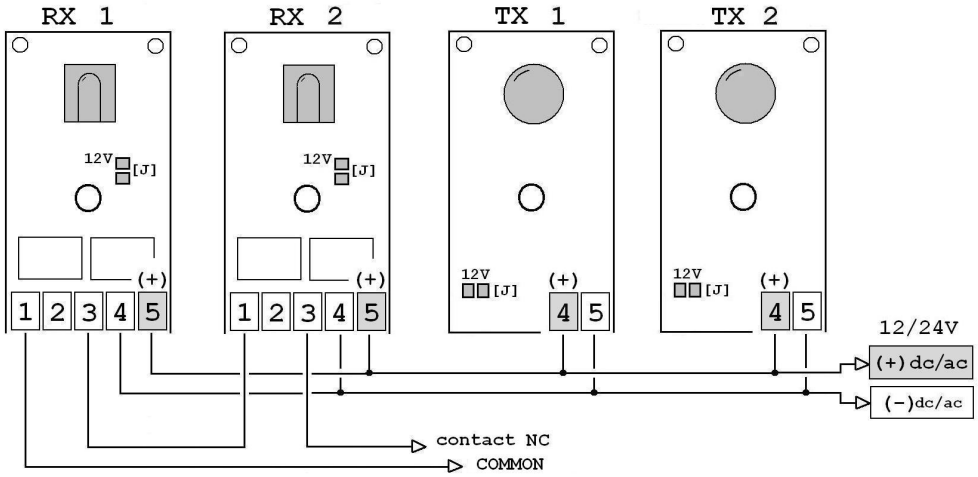


FIG. 7

4) Feed the photocells and check the line between the photocell (RX) and photocell (TX) . The led of photocell (RX) turns on when the infra-red beam is interrupted (fig. 9).

5) Close the photocells with their covers , screws and stoppers [4],

ATTENTION: Cover the screws with their stoppers to avoid that the water goes inside (fig. 8).

6) Make the working test WITH THE COVERS ASSEMBLED = Stay near the photocell (RX) , when the infra-red beam is interrupted the relè switches over (fig. 9).

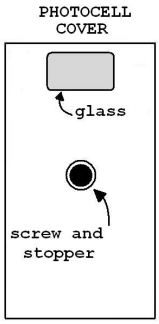


FIG. 8

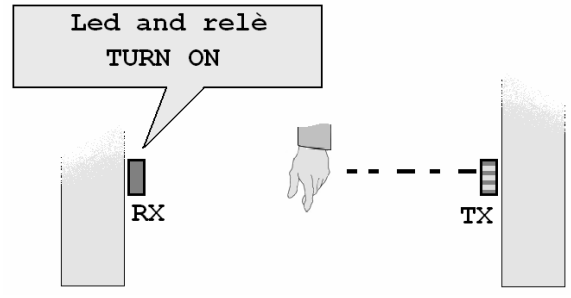


FIG. 9