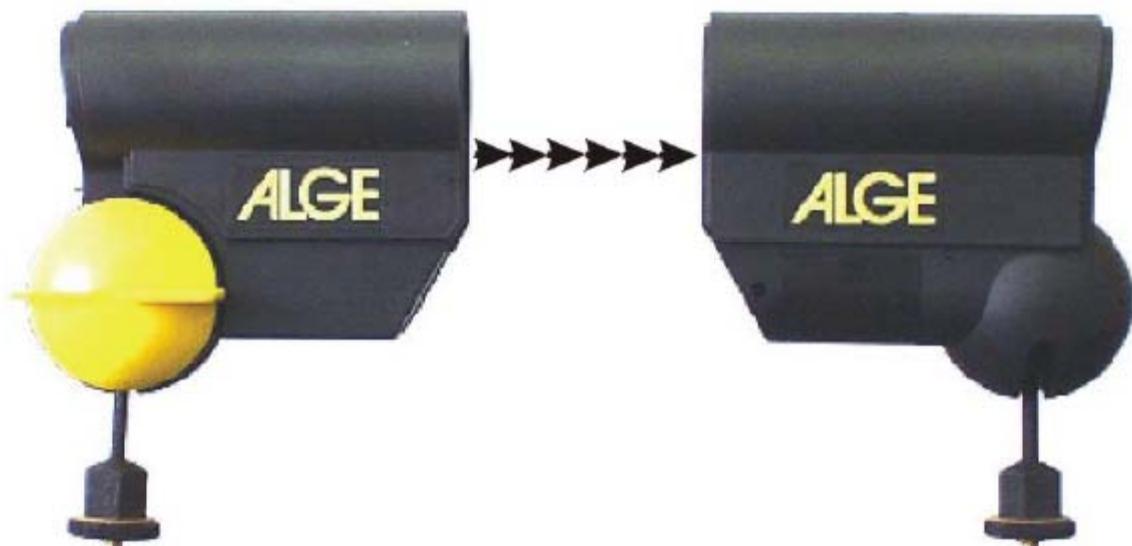


# Photozell RLS1n-RX



**Transmitter – Receiver Photocell RLS1n-RX**

The ALGE photocell system RLS1nd can be used between distances of 0 to 150 meters between transmitter and receiver.

**Principle:**

Transmitter RLS1n sends a modulated infra-red ray. The ray is controlled by the receiver RLS1n-RX against interferences. In case of interference of the ray, the receiver will trigger out an impulse.

**Receiving photocell RLS1n-RX:**

The receiver has got a transmitting and receiving electronic. A switcher at the back of the photocells is for switching-on or off the transmitting parts, the other one to switch-on or off the battery.

The transmitting part must be switched-on in order to make any adjustments (switcher on"adjust").

At measuring, switch the transmitting part of the receiver to "race".

The receiver RLS1n-RX can be used – together with a reflector – as reflection photocell. Then the switcher must stand on "adjust".

**Supply :****Receiver RLS1n-RX:**

The receiver is supplied by a 3-wired cable of the timing device or by an internal battery. If the receiving part is supplied by an internal battery, then you can use a 2-wired cable to the timing device (e.g. cable reel with 300m field telephone cord KT300).

**Operating time by usage of batteries:**

|                         |                  |   |
|-------------------------|------------------|---|
| Receiving part RLS1nRX: | Alkaline battery | approx. 160 hours (transmitting part OFF) |
|                         | NiCd accumulator | approx. 72 hours (transmitting part OFF)  |

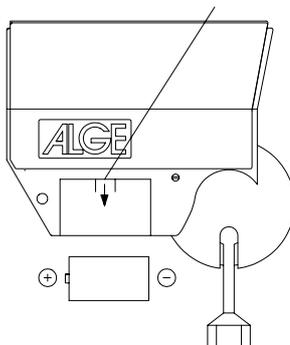
The details above are valid at 20°C. If the photocell is used at –20°C, then the operating time will decrease at a Alkaline battery for approx. 75%, at a NiCd-battery for approx. 20%.

**Instrument display:****Receiver RLS1nRX:**

|                             |   |
|-----------------------------|---|
| approx. 1/4 in white field: | not adjusted or ray interrupted                 |
| green field:                | adjusted to transmitter and ray not interrupted |

## Insert of battery:

push tappet downward  
in order to open the battery case



## Switch-on internal battery:

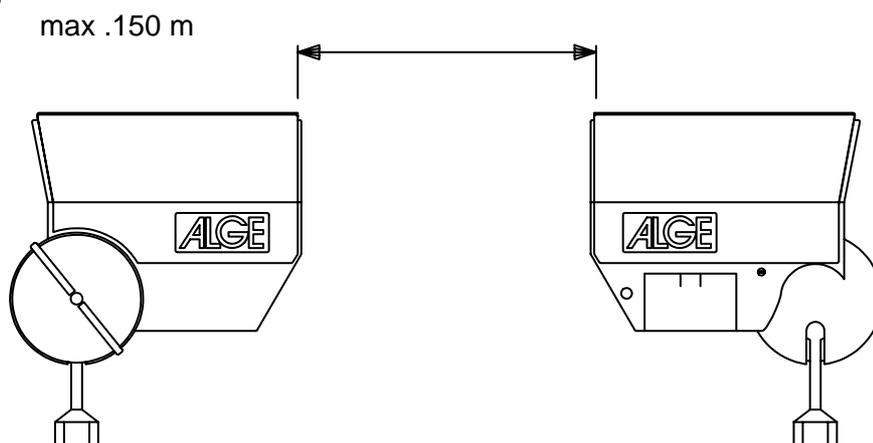
The battery of transmitter or receiver is switched-on by the swicher (on/off).

Position "ON" = on, Position "OFF" = off

**ATTENTION:** If a battery is inside of a photocell, so please don't forget to switch-off the photocell after an event!

## Adjusting the photocell RLS1nd:

- + Mount fastening angle for transmitter and receiver on a peg.
- + Screw on the photocell at the fastening angle.
- + Bring the transmitter and receiver into line and tighten the ball-shaped head (rotate yellow head clockwise).
- + Switch-on transmitter and receiver (on).
- + Adjust second switcher of receiver RLS1nRX to "adjust".
- + Connect cable (e.g. 001-10) to receiver RLS1nRX and timing device
- + Switch-on the timing device.
- + Locate the receiver with help of the justification of the transmitter.
- + Adjust transmitter, until instrument of receiver is as far as possible in the green field.
- + Tighten the ball joint of the transmitter.
- + Locate the transmitter with help of the justification of the receiver.
- + Adjust receiver, until instrument of transmitter is as far as possible in the green field.
- + Tighten the ball joint of the receiver.
- + Adjust the switcher of the receiver to "race".
- + If the infra-red ray is interrupted, the timing device will beep and shows the stopped time.



### Weather protection cover:

You can excerpt the weather protection cover at the transmitter or receiver forwardly. By excerpted cover, the lense is protected against snow and rain.

If the photocell is used at a glacier, you always have to use the cover!

The direct insolation through the lense of the photocell must be avoided necessarily! Direct insolation through the lense will destroy the photocell (burning glass effect).



### Technical data of the photocell RLS1nd:

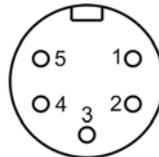
#### Receiver RLS1nRX:

Range: 0 to 150 meter

Power supply: 5 VDC / 25 mA max. , or internal baby battery 1,2 V

Plug assignment:

- 1..... Signal output
- 2..... Signal output
- 3..... 0 Volt
- 4..... empty
- 5..... +5V stabilized



Output: NPN transistor, open collector, aktiv low

Reaction time: 300 µs, 2 ms adjustable

Impulse length: 20 to 1400 ms adjustable

Switcher: on: battery on  
off: battery off

Race Adjust: Adjust: Transmitting part is switched-on (to adjust the photocell or to use as reflection photocell (max. 25 mA))

Race: Transmitting part is switched-off (during timing as receiver (max. 6 mA))

Dimensions: 160 x 135 x 58 mm

Weight: 0,6 kg



Impulse length of 20 up to 1400 ms adjustable (screw with little screw driver)