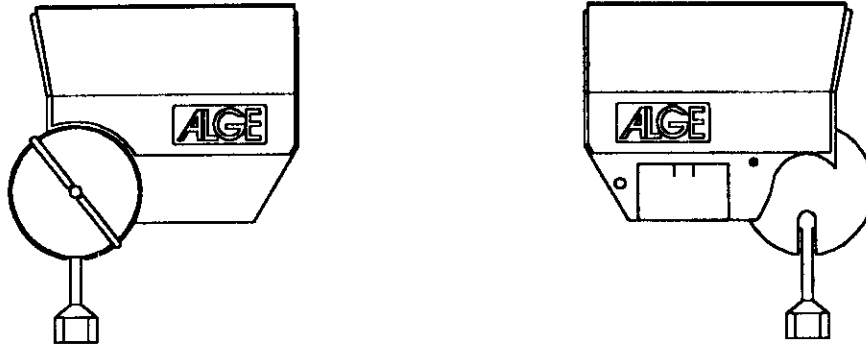


## ALGE PHOTOCELL RLS1cd

The ALGE photocell RLS1cd is made with most advanced electronic. You can use it for distances from 0 to 150 Meters.



### **Principal:**

The transmitter TX of the photocell sends a modulated infrared beam. The RX receiver controls the beam and makes an impulse for each interruption.

### **Transmitter TX:**

The transmitter has a built in transmitter and receiver. You can use it together with a reflector as a reflection photocell.

With the switch on the backside of the photocell you can turn the internal battery of the photocell on and off.

### **Receiver RX:**

The receiver RX has a built in transmitter and receiver. Together with a reflector you can use it as a reflection photocell

With the switch on the backside of the receiver you can turn the transmitter on and off. You have to turn the transmitter on to adjust the photocell (switch in the upper position). For the timing mode you have to turn the transmitter off.

Switch in upper position: transmitter on  
Switch in lower position: transmitter off

**Power supply for the photocell RLS1cd:**

The receiver is supplied from the timing device (stop cable 001) or by the internal battery. The transmitter TX is always supplied by the internal battery. As internal battery you can use a alkaline or NiCd baby battery.

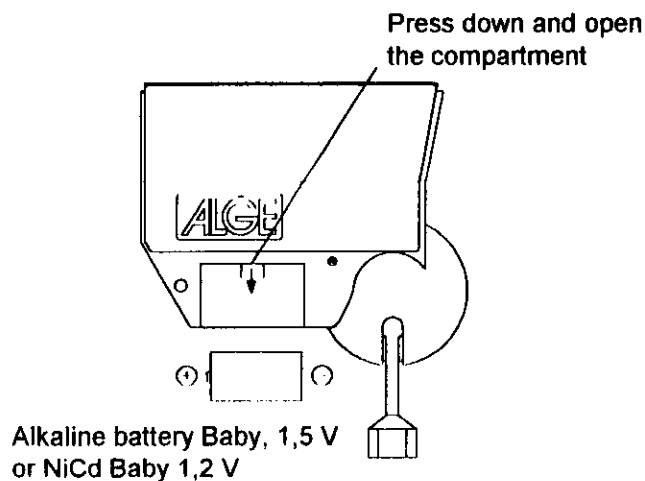
If the receiver works with the internal battery, you can use a 2-core cable (e.g. ALGE cable reel KT300 with 300 m fieldtelephoneline).

**Working time of the RLS1cd supplied by the internal battery:**

Transmitter TX:	alkaline battery	about 40 hours
	NiCd rechargeable	about 18 hours
Receiver RX:	alkaline battery	about 160 hours (transmitter turned off)
	NiCd rechargeable battery	about 72 hours (transmitter turned off)

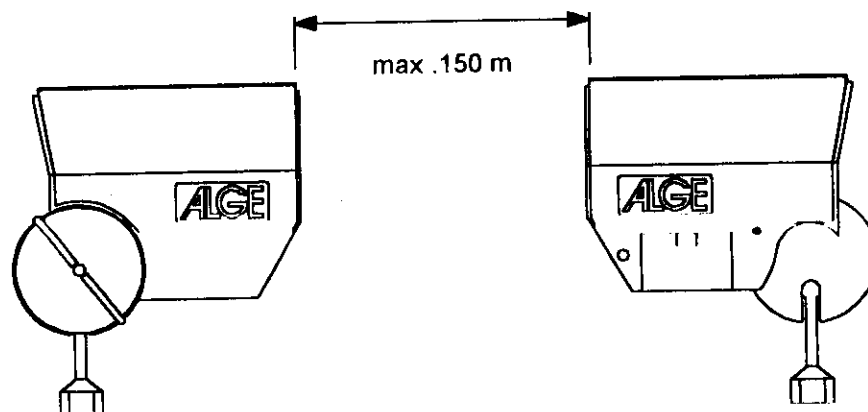
The internal battery of the receiver RX is automatically turned off by plugging cable 027-02 (the case of the plug is connected with ground). If you do not use the receiver, unplug the cable. Otherwise the RX is not tuned off.

The transmitter TX you can turn on and off at the switch on the backside.

**Input of the battery:**

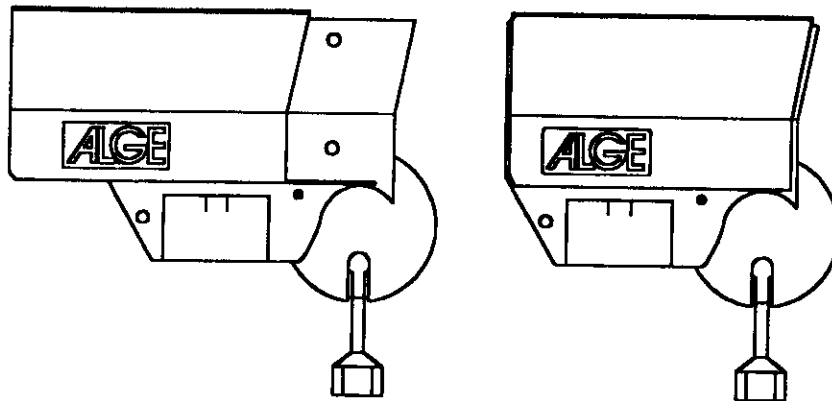
**Adjustment of the Photocell RLS1cd:**

- Fasten the fastening-bracket for the TX and RX at a pole
- Screw the RX and TX on the fastening bracket
- Twist TX and RX toward each other
- Move switch of TX to the upper position
- Move the switch of the RX to the lower position.
- Connect the cable (e.g. 001-10) from the RX to the timing device
- Turn timing device on
- Aim the RX by using the sight on top of the TX
- Adjust TX until the instrument of the RX is as far as possible in the green field
- Fasten the socket joint of the TX
- Aim the TX by using the sight on top of the RX
- Adjust the RX until the instrument of the TX is as far as possible in the green field
- Fasten the socket joint of the RX
- Turn switch of RX to the upper position (transmitter is turned off)
- In case of an interruption of the infrared beam of the photocell you hear a beep of the timing device. The needle of the lever moves into the white area.



**Weather Cover:**

You can move the weather cover in order to protect the lens from snow and rain. The lens should be protected during timing.

**Technical Data of the Photocell RLS1cd:****Transmitter TX:**

**Power Supply:** 5 VDC / 25 mA max. or internal baby battery

**Max. Distance:** 0 to 150 m

**Output:** NPN transistor, open collector, active low

**Reaction time:** 300  $\mu$ s, 2 ms adjusted

**Impulse length:** 20 to 1400 ms adjustable

**Switch:** upper position: internal battery on  
lower position: internal battery off

**Measurements:** 160 x 135 x 58

**Weight:** 0,6 kg

**Receiver RX:**

**Power Supply:** 5 VDC / 25 mA max. or internal baby battery

**Max. Distance:** 0 to 150 m

**Output:** NPN transistor, open collector, active low

**Reaction time:** 300  $\mu$ s, 2 ms adjusted

**Impulse length:** 20 to 1400 ms adjustable

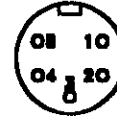
**Switch:** lower position transmitter on (to adjust the photocell, or if used with reflector)  
upper position transmitter off (during timing mode)

**Measurements:** 160 x 135 x 58

**Weight:** 0,6 kg

*Pin Connection of the RLS1cd plug:*

- 1 ..... Signal output
- 2 ..... Signal output
- 3 ..... 0 Volt
- 4 ..... empty
- 5 ..... +5V stabilized
- Case Ground... negative pole of battery



*Working time of the RLS1cd supplied by the internal battery:*

Transmitter TX:	alkaline battery	about 40 hours
	NiCd rechargeable	about 18 hours
Receiver RX:	alkaline battery	about 160 hours (transmitter turned off)
	NiCd rechargeable battery	about 72 hours (transmitter turned off)

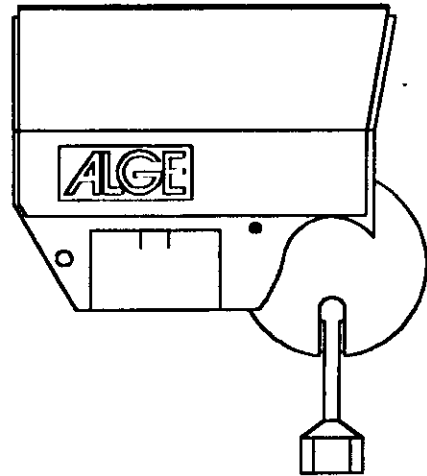
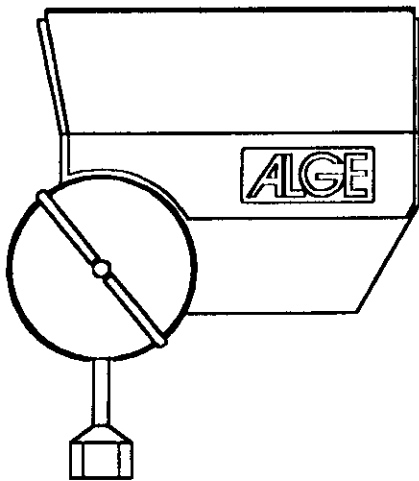
**Standard Photocell RLS1cd Package:**

- Transmitter TX
  - meter to adjust the photocell and control the power supply
  - battery compartment
  - sight to adjust the photocell
  - weather cover to protect the lens
  - socket joint to fasten the photocell
  - alkaline baby battery
- Receiver RX
  - meter to adjust the photocell and control the power supply
  - battery compartment
  - sight to adjust the photocell
  - weather cover to protect the lens
  - socket joint to fasten the photocell
  - alkaline baby battery
- Fastening bracket for transmitter TX and receiver RX
- Photocell cable 001-10 (10 Meter stop cable)

**Accessories:**

- Impulse cable for receiver with internal battery 027-02
- Alkaline battery, baby
- NiCd rechargeable, baby
- External battery cable 028-02 (7 to 30 V) with potential free contact
- Tripod for photocell and reflector
- Case with foam insert for photocell and accessories (TN 622)
- Cable reel with 300 or 500 Meter 2-core fieldtelephoneline (KT300 or KT500)
- Startcable 002-10 (standard 10 m, on request up to 100 m)
- Intermediate time cable 003-10 (standard 10 m, on request up to 100 m)
- Stop cable 001-10 (standard 10 m, on request up to 100 m)

# PHOTOCELL RLS1cd



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