

RLS3c

ALGE-TIMING



Manual

The three-fold photocell RLS3c consists of three on top of each other arranged reflexions photocells. The internal control of these three photocells can be changed over a switch and it is qualified for different types of functions.

Switch-setting M (Multi)

An impulse will only be triggered off, if all three photocells will be covered. So the photocell can not be affected by hands or legs of the athlete.
The freeing of the photocell will occur if all the three photocells are free again.



Usage: athletics, training

Switch-setting S (Single)

As soon as one photocell is covered, an impulse will be triggered off.
So a photocell-curtain will be generated and you can collect data of the first part of the body (e.g. legs and arms of athlete).
The freeing of the photocell will occur if all the three photocells are free again.



Usage: Speed of football, agility, equitation, etc.

The three-fold photocell has two identical DIN-plugs and can be supplied by an ALGE timing device, whereas the cable must not be longer than 30m.

If you require a longer cable between photocell and timing device, you have to supply the photocell separately.

You can use the ALGE-charger or any other 12V battery. At external supply, the loop resistance of the control cable must not be more than 2000 Ohm.

Elements of the three-fold photocell RLS3c:

- photocell RLS3c
- reflector
- tripod TRI128 (2 pc.)
- cable 001-30 (30 m stop-cable)

Available accessories:

- case with foam-insert for secure transport of the photocell incl. tripods (K3)
- start-cable 002-10, 002-20, 002-30
- intermediate-time-cable 003-10, 003-20, 003-30
- customer specific cables
- cable-reel

Adjusting of photocell RLS3c:

- Check if the switch is on the right position – S or M. The switch is mounted between the instruments and the connector sockets
- Mount photocell and reflector on the tripod. Adjust the photocell and reflector at the appropriate height.
- Dispose the photocell and reflector adverse of each other (e.g. at the finish line). The photocell should be at the same side as the timing device (cable length).
- The photocell should not handicap the shooting of photofinish timing devices (e.g. OptiC). That means that you have to dispose the photocell 1 or 2m away of the track. If this is not possible, dispose them curtly in front of the finish line.
- Connect three-fold photocell RLS3c and timing device with cable 001-xx (red cable).
- Switch-on the timing device.
- Unfasten the ball joint of the photocell and adjust the photocell to the reflector so that all three instruments are in the green range on the reverse.
Use the visor (borehole on the above margin of the photocell) for adjusting.
Focus on the reflector through the visor.
- If all three instruments are in the green range, fix the ball joint.

Attention:

If you adjust the photocell, the instrument signalize it on the ALGE timing device (needle oscillates).

The photocell should always be protected by a barrier so that no one can accidentally adjust it.

Technical data:

Power supply: 7 to 15 VDC (Pin 4) or 5 VDC / 25 mA max. (Pin 5)

Electric power consumption:

at 5 V supply of Timer S4:

un-triggered: < 35 mA

all 3 covered: <50 mA

at 12 V supply (external):

un-triggered: < 40 mA

all 3 covered: <55 mA

Reach: 5 to 15 meter
For distances less than 5 meters please contact your appropriate ALGE representative.

Output: NPN transistor, open collector, activ low

Reaction time: 300 μ s, 2 ms adjusted

Impulse length: 20 to 1400 ms adjusted

Dimensions: 200 x 370 x 120 mm

Weight: 2 kg (RLS3c with reflector)

Plug occupancy:

- 1 Signal-output (Start)
- 2 Signal-output (Finish)
- 3 GND
- 4 Supply voltage 7 to 15 VDC
- 5 +5V stabilized

