

RLS3c

ALGE-TIMING



Manual

Important Information

General

Before using your **ALGE-TIMING** device read the complete manual carefully. It is part of the device and contains important information about installation, safety and its intended use. This manual cannot cover all conceivable applications. For further information or in case of problems that are mentioned not at all or not sufficiently detailed, please contact your **ALGE-TIMING** representative. You can find contact details on our homepage www.alge-timing.com

Safety

Apart from the information of this manual all general safety and accident prevention regulations of the legislator must be taken into account.

The device must only be used by trained persons. The setting-up and installation must only be executed according to the manufacturer's data.

Intended Use

The device must only be used for its intended applications. Technical modifications and any misuse are prohibited because of the risks involved! **ALGE-TIMING** is not liable for damages that are caused by improper use or incorrect operation.

Power supply

The stated voltage on the type plate must correspond to voltage of the power source. Check all connections and plugs before usage. Damaged connection wires must be replaced immediately by an authorized electrician. The device must only be connected to an electric supply that has been installed by an electrician according to IEC 60364-1. Never touch the mains plug with wet hands! Never touch live parts!

Cleaning

Please clean the outside of the device only with a smooth cloth. Detergents can cause damage. Never submerge in water, never open or clean with wet cloth. The cleaning must not be carried out by hose or high-pressure (risk of short circuits or other damage).

Liability Limitations

All technical information, data and information for installation and operation correspond to the latest status at time of printing and are made in all conscience considering our past experience and knowledge. Information, pictures and description do not entitle to base any claims. The manufacturer is not liable for damage due to failure to observe the manual, improper use, incorrect repairs, technical modifications, use of unauthorized spare parts. Translations are made in all conscience. We assume no liability for translation mistakes, even if the translation is carried out by us or on our behalf.

Disposal

If a label is placed on the device showing a crossed out dustbin on wheels (see drawing), the European directive 2002/96/EG applies for this device.

Please get informed about the applicable regulations for separate collection of electrical and electronic waste in your country and do not dispose of the old devices as household waste. Correct disposal of old equipment protects the environment and humans against negative consequences!



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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 tree-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 be 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:**

not triggered: < 35 mA

all 3 covered: < 50 mA

at 12 V supply (external):

not 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, active low

Reaction time: 300 μ s, 2 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

