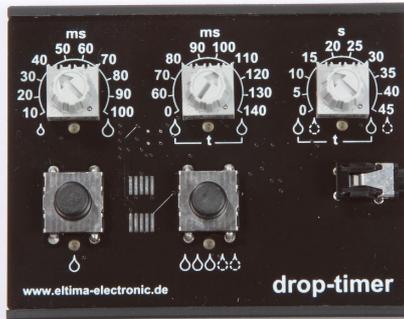
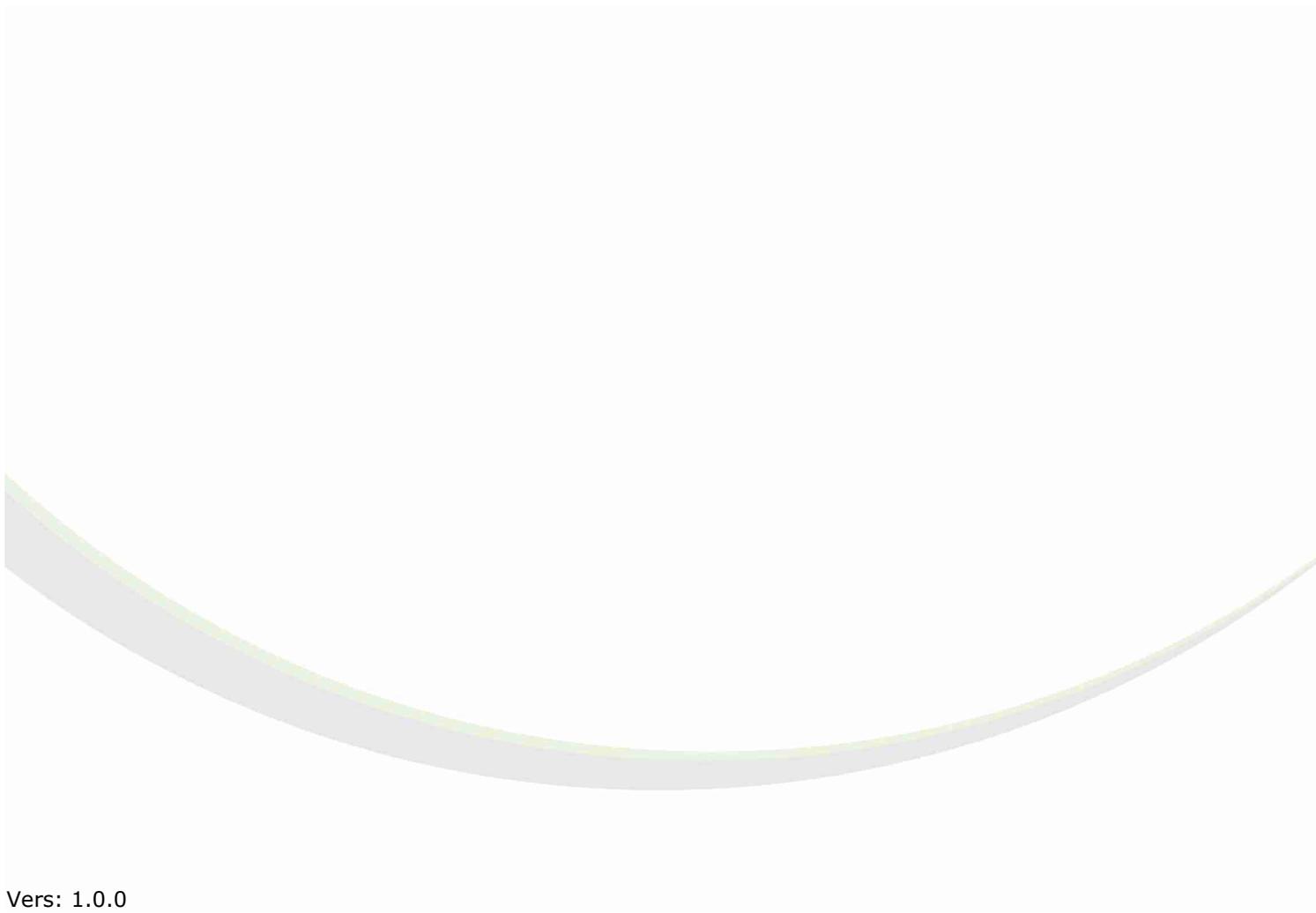


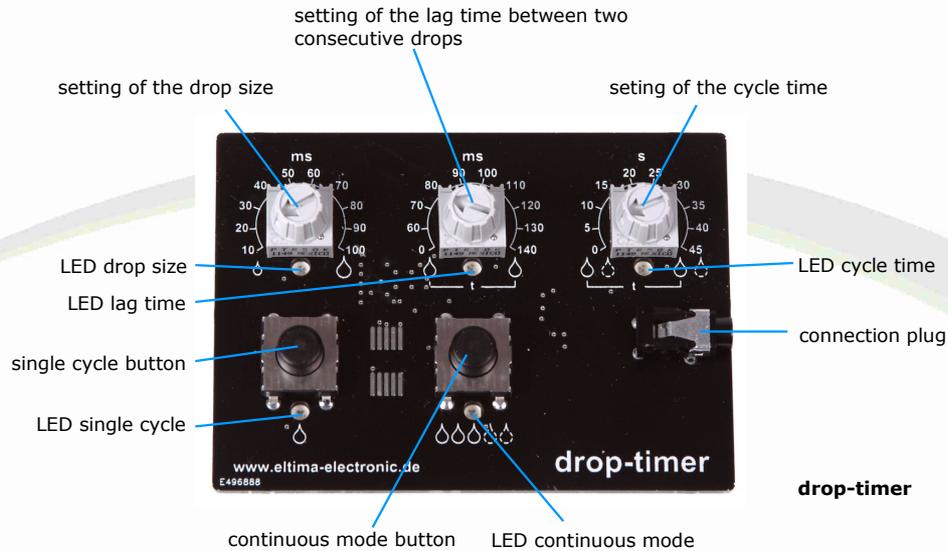
User Manual

drop-timer

timer for drop photography







connection cord

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Dear customer,

thank you for purchasing our timer for drop photography **drop timer**. It shall be a reliable tool for you that is both handy and easy to operate.

Please do not hesitate to contact us if you should miss anything or have further improvement proposals. Only like this the product will be able to develop to fully meet your requirements.

Please read this manual carefully before using the timer. It is supposed to get you acquainted with operating the system and all its functions. Afterwards you will be able to use all the advantages which **drop-timer** offers.

Intended purpose

This **drop timer** was solely designed for the control of the eltima [drop dispenser article no. 50049](#). Please do only use it for this purpose!

Symbols



Symbol for tips concerning the handling of the device.



Important advice concerning the function of the device.



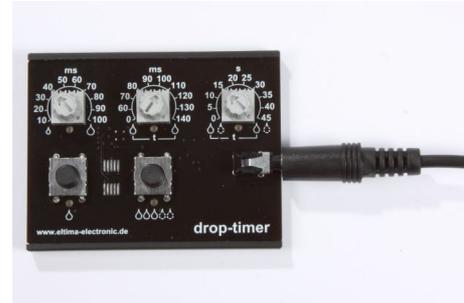
Important advice to prevent damage of the timer or connected devices.

Maintenance and storage

- The drop timer is not waterproof and therefore neither suitable for use in rain nor under water. Please contact the manufacturer immediately in case it should get wet. Water drops can be wiped off with a dry cloth.
- Do not drop it or expose it to severe blows.
- Do not try to make alterations yourself.

Connecting the drop dispenser

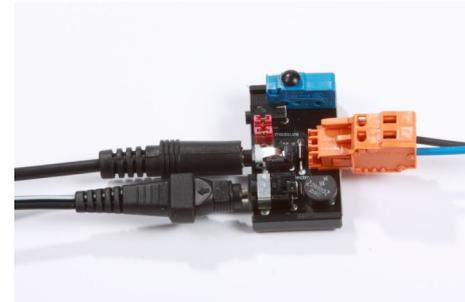
- Install the eltima drop dispenser as described in its user manual.
- Then, **first** plug one end of the connection cable into the connection jack of the drop timer.



- Plug the other end of the connection cable into the middle jack of the drop dispenser's adapter board.

Note: The 2.5 mm connection cable that was included in the scope of delivery of the drop dispenser is not used here.

- Ready



Generating single drops

- Set the drop size you wish by the help of the left potentiometer, e.g. 40 μ s.
The longer the time you choose, the larger the drop.
- Set the middle potentiometer to zero.



The setting of the right potentiometer for the cycle time is of no importance when using this operating mode.

- Press the button for the single cycle shortly. The electronic valve will release for the set time period and generate a drop of according size. The LED for the drop size will be on throughout the switch-on time of the electronic valve. At the same time the LED for the single cycle will be on.



Although the range of the middle potentiometer starts with zero, the shortest time period you can choose is 60 ms. In order to make sure that only one drop is released, settings below this value will be classified as zero.



Generating drops

Generating drop collisions

- Set the drop size you wish by the help of the left potentiometer.
- Using the middle potentiometer, set the time lag between two drops.



The setting of the right potentiometer for setting the cycle time is of no importance when using this operating mode.

- Press the button for the single cycle shortly. The electronic valve releases the first drop and then, after the set time lag, the second drop. The LED for the drop size will be on each time throughout the switch-on time of the electronic valve. The LED for the drop distance will be on within the pause between the two drops. The LED for the single cycle will be on throughout the whole cycle.



The perfect time lag between two drops in order to generate drop collisions (leading to the formation of an umbrella) must be determined experimentally. It depends, among other things, on the drop size, the height of fall, the viscosity or the surface tension of the used fluid.



Due to the precision of the whole system, made up of the **drop timer**, drop dispenser and light barrier, the general form of the generated crests, pillars, umbrellas etc. will be fairly much the same for each release.

Nevertheless there will be substantial differences in the filigree structure of the generated forms that will also be highly important for the attractiveness of the picture.

As soon as you have found a setting that is generally fitting, the system can be set into a continuous mode. Using the right potentiometer, one can set a time period for the whole cycle in seconds. The latter should be chosen in such a way that there is enough time for the fluid in the basin to calm down after each drop or drop on drop, so that the surface is totally smooth again before the next drop is released. This time period may, depending on the surface of the catch basin, take several seconds.

In order to start the continuous mode, press the button for continuous mode.

Throughout the continuous mode the LEDs for drop size and distance will be on as described above. The LED for the cycle time will be on throughout the pauses between the single cycles. The LED for the continuous mode indicates that this mode of operation is active.

In order to stop the continuous mode, press the button for the continuous mode again when the LED for the cycle time is on.



Specifications

Type

Microcontrolled timer for eltima drop dispenser

Physical dimensions

L x B x H [mm]: 75 x 59 x 18

Weight

100 g

Power supply

12 V, supplied by the eltima drop dispenser

Power consumption

max. 100 mW

Settable times

drop size [ms]: 0 bis 110

time lag between two drops [ms]: 60 bis 150

cycle time [s]: 0 bis 48

Operating modes

single cycle

continuous

Scope of delivery

drop-timer

connection cable 3.5 mm jack, 2.5 m

Old electric devices do not belong to domestic waste!

Electrical- and electronic devices must be separated from domestic waste before disposal, according to policy 2002/96/EG and national law. They have to be disposed at government certified waste disposal sites.

This may be done by returning the old device where you are buying a new one or by dispensing the waste at authorized collecting points for the recycling of electro- and electronic devices.

Inappropriate handling of old electronic devices can be harmful for health and environment. By means of appropriate disposal of electronic products you make an important contribution towards an effective use of natural resources.

Do not dispose of batteries and accumulators in domestic waste!

As final consumer you are legally bound to return batteries and accumulators. Return these to collection points that are subject to public law or to places where batteries or accumulators are sold. Here batteries and accumulators can be returned for free.



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light barriers for photography

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