

**G-Sonic** 

DE Bedienungsanleitung EN Installation Manual \* FR Mode d'emploi \* IT Manuale di istruzioni \* ES Manual de instalación \*

**RU** техническое руководство \*

\* PDF download www.clicksonic.com/faq-gsonic

## Foreword

Dear customers,

The purchase of this G-Sonic algae remover was the right decision and we thank you for your confidence in our products.

Your device has been designed, manufactured and tested with the utmost care.

Please read this user manual carefully before using the instrument. Here you will find all the information you need to get the most out of your instrument.

Pay particular attention to the safety instructions on the following pages.

If you have any questions or problems, please contact your dealer or the ClickSonic team.

We hope you enjoy your new G-Sonic Algae destroyer.

Your ClickSonic Team



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# Safety instructions

Your G-Sonic device has been manufactured in accordance with the strictest standards. In order to use your device in complete safety, you should observe the following information:

Please read these instructions carefully before putting your G-SONIC device into operation. It contains important information on the connection, use, safety and maintenance of your device.

If the device is damaged (e.g., due to transport damage), it must not be put into operation. If in doubt, contact your dealer or the ClickSonic team.

The click generator may only be operated under water!

The electronic box may only be connected to an earthed 230V earth contact socket which is additionally protected by a residual current device (FI switch) with a rated residual current of max. 30mA.

The electronics box must be at least 3 meters away from the water. It must not be located in a place that can be flooded. Under no circumstances must the electronics box be exposed to permanent wetness 1) or extreme temperature fluctuations, it must not stand in the blazing sun or in a place where heat can accumulate.

In winter, the snow pressure can cause water to penetrate the electronics box. To ensure longevity, store the electronics box in a dry place. In case of water damage to the electronics, any warranty is excluded.

The signal cable to the click generator in the water is a special cable, which may only be extended with the G-Sonic extension cable. The extension cables are available in the online shop.

The signal cable must not be wound up, as signal interference can occur. Place the signal cable where it cannot be damaged by lawnmowers, hedge trimmers, etc.



When burying the signal cable, protect the cable (from injuries during gardening, marten bites, etc.) with an empty cable tube (inner diameter at least 20mm, the ring of the signal connector is 19mm) up to the click generator in the water.

The 230 Volt power cable can be extended with a commercially available power extension cable with protective contact rubber coupling.

### Important information about the device

1) The single device (G-Sonic 10, 20, 50) electronic box is waterproof according to the IP67 standard: dustproof, protection against strong jets of water and short immersion in water.

The multiple device G-Sonic 100 is not dust and waterproof and must be stored in a dry & dustfree place.

2) The click generator with the signal cable as well as the extension cables with all plug connections are waterproof according to the standard IP68: dustproof, protection against permanent submersion in water.

To use the G-Sonic Algae Remover, the water must have a minimum water depth of 50cm. In shallow waters, less than 50cm, the click signals cannot spread optimally, the effect is reduced by approx. 50%. The next stronger G-Sonic device should be used for compensation.

## List of G-Sonic components

- 1. Electronics box with 1m power cable and EU device plug
- 2. Click generator with 4-15m signal cable (length depending on model) with signal plug (IP68) 2)
- 3. Click generator plastic fastening bracket
- 4. Operating instructions

Check all parts for damage, if you notice damage, do not continue assembly and installation, contact your dealer or the ClickSonic team.



Note: EU-CH power adapters, floats, and extension cords are optionally available in the online shop.

### Installation

Carefully remove the cable ties from the signal cable and connect the signal cable to the electronics box.

We recommend mounting the electronics box in a dry place, at least 30cm from the floor or in a dry shaft. In case of snowfall, the electronics box must be removed, as the snow cover exerts a pressure on the housing, whereby water can penetrate into the electronics and damage them.

### Note: The electronics box should only be opened if it is to be fixed to a wall

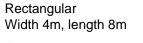
After mounting, carefully place the cover back on the lower part of the housing.

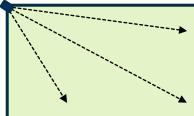
- $\Rightarrow$  Pay attention to the cleanliness of the seals. With some silicone paste the seal can be freshly lubricated to increase the tightness.
- $\Rightarrow$  So that the LED control lamps are well transferred, pay attention with the assembly that the LED rods sit nicely on the LED's of the board on it.

# Click generator positioning

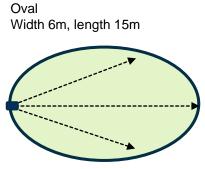
Determine the optimal orientation for the click generator by finding out in which position the comparatively largest water surface can be treated by the click sound propagation. Here are three examples:

Width 4m, length 8m Width 6m, length 15m B 4m, L top 8m, bottom 15m



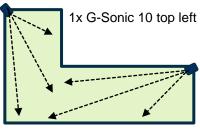


1x G-Sonic 10 in the corner



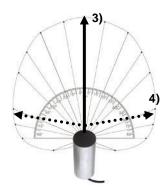
1x G-Sonic 20 in the center

L Form W 4m, L top 8m, bottom 15m



1x G-Sonic 20 below right

<u>Important:</u> The click generator is placed in a corner with alignment to the opposite corner so that the click tones do not cancel each other out. Imaginable like a billiard ball which is always in motion.



The range, respectively the G-Sonic model is determined by the length 3) of the water object.

The click generator has an opening angle of approx. 160° 4), comparable to a underwater music loudspeaker.

## Click generator assembly



The click generator should be placed 10-15cm 5) horizontally below the waterline. In this layer the largest algae production takes place due to the light intensity.

The piezo element (red), the high-precision loudspeaker, is in the front of the click generator

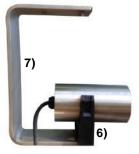
head. The click generator must protrude at least 1-2cm (red) above the edge of the pelvis.



In the example, the click generator protrudes over the edge of the pool. The click signals are this way optimally distributed to all sides as well as to the depth.

#### Important:

Always place the click generator <u>from the depth zone to the shallow</u> <u>zone</u>, see Figure 8 on page 7.



With the included plastic click generator bracket 6), it can be attached to an individually made frame 7) (not included).

Important: The click generator is not allowed to come be in contact with metal.

With the G-Sonic 10 the click generator has a diameter of 52mm. The retaining brackets are for tubes up to 50mm and the cams therefore do not engage. If you want to use the retaining bracket (optional),

the cams of the plastic bracket must be shortened by 1mm on the left and right, e.g.

with a metal saw as drawn in white.



### Start up

Insert the mains plug into the socket. A slight ticking can be heard on the click generator for operational control. To hear the clicks, hold the click generator close to the ear.

A green and red LED will light up on the electronics box.

- $\Rightarrow$  The green LED (Power OK) lights up continuously and indicates that the power supply is OK.
- ⇒ The **red LED** (Signal OK) flashes at irregular intervals and shows that the click signals are being sent to the click generator.

## Operation

The G-Sonic must be in operation during the day (from sunrise to sunset). Overnight, when no photosynthesis takes place, e.g. from 22 o'clock to 5 o'clock in the morning, the G-Sonic can be switched off, e.g. with a timer.

Depending on the type of algae, the algae usually die within 2-3 weeks, with thread algae it can take up to 6-8 weeks. From the second to fourth week, the first damage to the algae can be observed. The algae lose colour and become paler. Depending on the type of algae, the burst alga rises on top (until the first rain comes) or sinks immediately to the ground. The dead algae are no longer bound, have no solid matter and buzz around loosely in the water with the smallest movement.

When swimming you can only hear interval-like click sounds. Young people and people with good hearing can hear the click tones just below 20 kHz. If they are annoying, it is good to know that they are not dangerous or harmful to humans. The device can easily be switched off or equipped with a mechanical timer with normally open/ normally closed function (e.g. Hager WH14230200Q). Animals and pets can also hear the click tones and should not swim or dive under water for safety reasons.

#### Important:

During the dying process, the burst algae, some of which are still (half-)alive, must now be netted regularly, at least once a week. If this is not done, the water is fed with the nutrients from the burst algae and still serves as food for living algae.

To ensure correct operation, the click generator must be checked regularly for alignment and contamination. It is quite normal for algae to accumulate on the click generator. The full volume of the click tones is only built up after several centimetres, from which the algae then die.

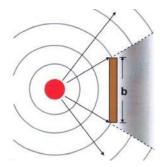
To ensure correct operation, the clicker generator must be checked regularly for alignment and contamination. It is quite normal for algae to accumulate on the clicker.

The full volume of the clicker sound is only built up after several centimetres, from which the algae then die.

## Defect

In the event of a defect, we will send you a checklist for self-inspection, otherwise the complete G-Sonic unit (click generator and the electronics box) must be sent to our EU repair workshop (not to Switzerland). Please get in touch with us.

## Tips



=> Objects in the sound field of the click generator impede the propagation of sound waves and algae can still occur. Water currents, air bubbles, stones, plants, plant tubs and other obstacles have to be removed for best results.

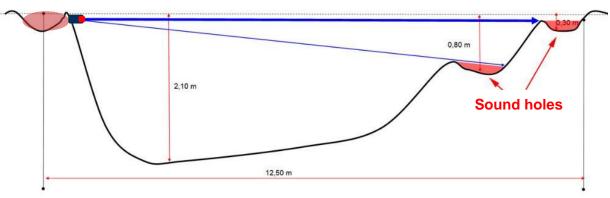
### Important:

The optimal propagation of the click tones plays a decisive role. Wherever the click tones arrive directly, the algae die.

=> Avoid sound holes: in uneven areas, so-called sound valleys, the click tones do not go directly, so algae can still form. With gravel or larger gravel,

use smaller stones to reduce sound holes, or fill up so that no sound holes arise at all.

### Figure 8



- ⇒ Continuous supply or refilling of spring, tap or fresh water. More than 5% per day can lead to new algae formation. The refill water, also tap water, contains a lot of nutrients.
- ⇒ Water currents, water hammers (waterfall, fountain) or air bubbles (aerators) interrupt the click tones and prevent sound propagation. If not otherwise possible, the click generator must be placed lower, below the water impact depth, so that the click sounds can spread below.
- ⇒ If there are several water objects, a G-Sonic device must be placed in each one. The circuit must be closed, as fresh algae are added from outside and constantly "infect" the water object.
- ⇒ During cleaning work, filter the pond water and return it to the pond, e.g. with a fine filter bag for water recirculation, which retains particles as small as 100 microns.
- ⇒ If refill water is added to the water object, algae will initially form again. The fresh water (spring or refill water) contains many nutrients.
- ⇒ Frequently asked questions can be found under Service/Help on <u>https://www.clicksonic.com/en/frequently-asked-questions/</u>

Our FAQ answer the most frequently asked questions. In many cases you will not only get a quick and easy answer to your question, but also further interesting information. G-Sonic installation instructions, checklist, and many more.

- ⇒ Information about G-Sonic handling, checklist, installation, lifetime, etc.
- $\Rightarrow$  Fighting algae in the pond tips that help  $\checkmark$
- ⇒ Cyanobacteria, blue-green algae in water and their treatment
- $\Rightarrow$  Successfully combat & effectively destroy thread algae  $\star$
- ⇒ Fadenalgen im Teich entfernen ohne Chemie
- $\Rightarrow$  10 tips \* for effective pond cleaning  $\checkmark$
- ⇒ Clear turbid pond water \* Tips for clear water √
- ⇒ Water quality, water values and water tests for pond, garden and swimming pond & Co 🧚

# Professional pond cleaning equipment

Natural ponds are sensitive ecosystems that are exposed to the weather all year round. Regular cleaning and nutrient removal if possible, with water recirculation, are therefore sensible.



www.teichschlammsauger.com

In our partner shop TEICHSCHLAMMSAUGER you will find professional pond sludge vacuum cleaner models and a large selection of accessories for the effective cleaning of your pond.

- ⇒ Motor brushes & motor scrubbers: pond floor and wall cleaners
- ⇒ Poolrobots: Biopool cleaners
- ⇒ Water recirculation: screen filters and fine filter bags
- ⇒ Pond sludge cleaners: Impeller, turbine vacuum cleaners with build in waste water pumps
- ⇒ Pond cleaning accessories: brushes, telescopic poles, suction nozzles, hose extensions, etc.