



Control Algae in Fish Farms with the LG Sonic Aquaculture

- ✔ Eliminate algae and prevent biofouling on the nets
- ✔ Easy to install and maintain
- ✔ Safe for fish, plants and other aquatic life

Chemical-free Algae Control Solution

A combination of high temperatures, stagnant water, and nutrient overload can result in excessive algae growth. Causing a depletion of oxygen in the water, release of toxins and taste/odor problems.



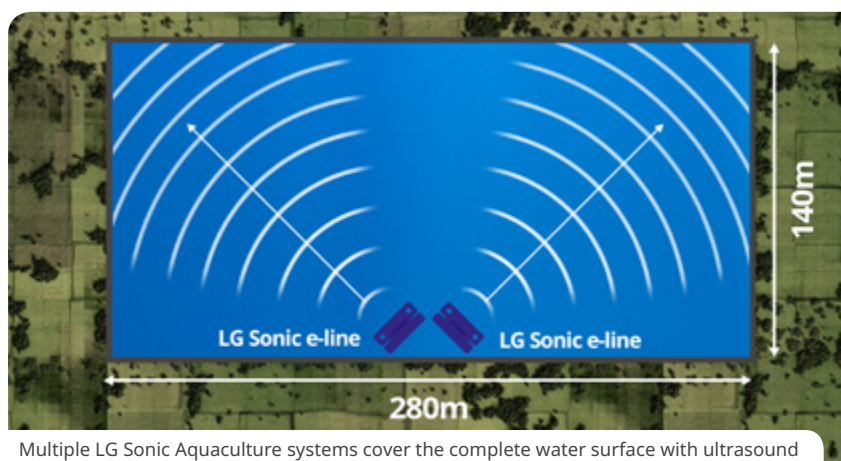
LG Sonic Aquaculture

The LG Sonic Aquaculture provides an environmentally friendly solution to control algae in open sea cages and RAS systems with the use of ultrasound technology

The Advantages of our Technology

- ✔ Eliminate algae and prevent biofouling on the nets
- ✔ Prevent the growth of new algae
- ✔ Improve the water quality
- ✔ Safe for fish, plants, and other aquatic life

The solution is to install one or multiple systems that transmit specific ultrasonic parameters depending on the type of algae.



Each LG Sonic Aquaculture system has an ultrasonic treatment range up to 200 meter (650 feet)

Control Algae in Fish Ponds and Cages

The LG Sonic Aquaculture is an advanced system that emits specific ultrasonic parameters in order to control algae in n open sea cages and RAS systems.

Recirculating Aquaculture Systems



Prevent the blockage of filters and release of toxins without harming the fish.

Fish Cages



Eliminate algae and prevent biofouling growth on the nets.


Over 10,000 LG Sonic products have been successfully installed in a wide range of applications in 52 different countries

MPC-Buoy for Larger Water Surfaces



Control and Monitor Algae

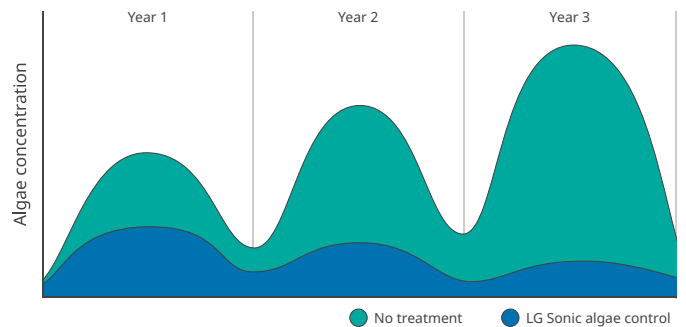
The MPC-Buoy is a floating, solar-powered system that combines real-time water quality monitoring and ultrasonic sound waves to effectively control algae in lakes and reservoirs.

[Learn more about the MPC-Buoy](#) 

LG Sonic Ultrasonic Algae Control Treatment Process

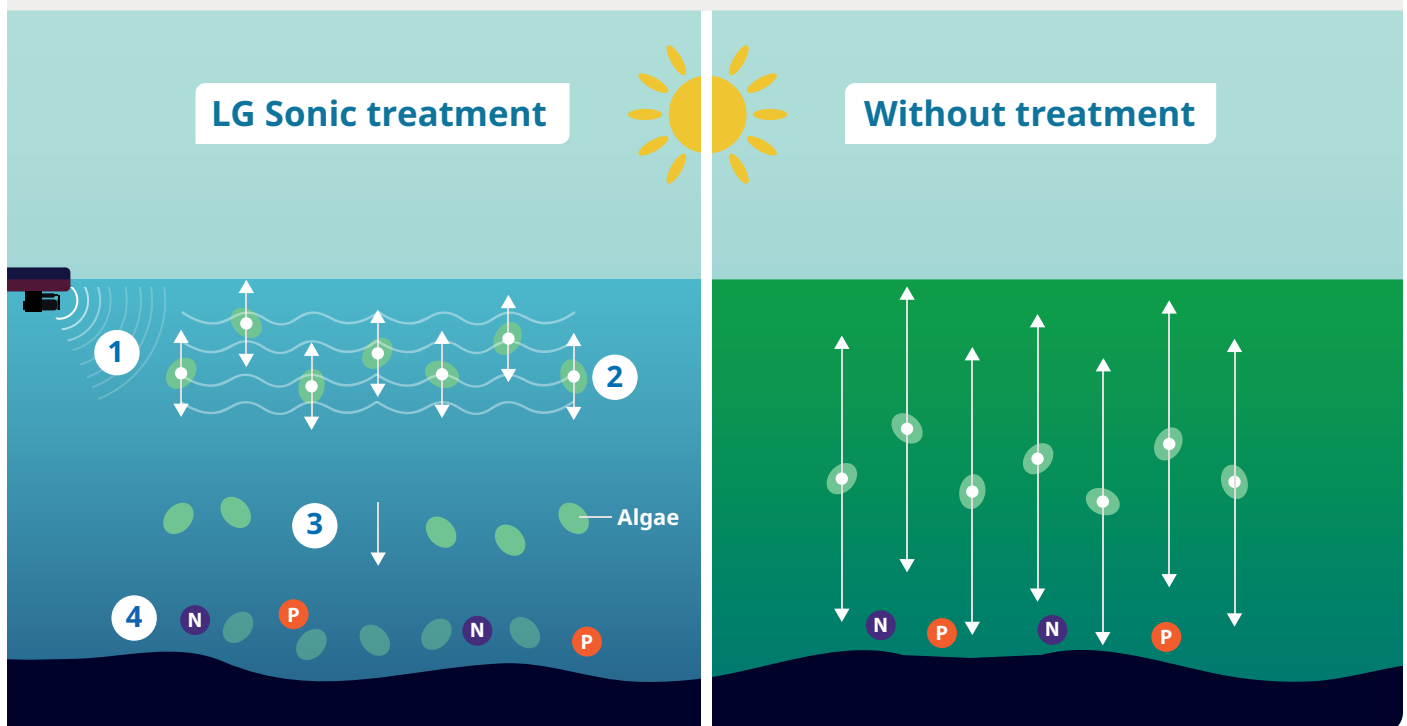
Why it is Important to Control Algae Growth

Algal blooms cause a reduced light penetration, depletion of oxygen, and release of toxins from the algae, which are unfavourable conditions for fish and plants. LG Sonic ultrasonic technology contributes to a healthy ecosystem by controlling the algae growth. After one year of treatment, the algal levels will reduce even more as the increased clarity of the water will result in plant growth and increased oxygen levels.



How Ultrasound Targets the Algae

- 1 The ultrasound creates a sound layer in the top layer of the water.
- 2 The ultrasound affects the buoyancy of the algae, **fixing** them in the water column.
- 3 Due to a lack of sunlight and nutrients, the algae will die and sink to the bottom of the reservoir.
- 4 The algae are degraded by the bacteria present.



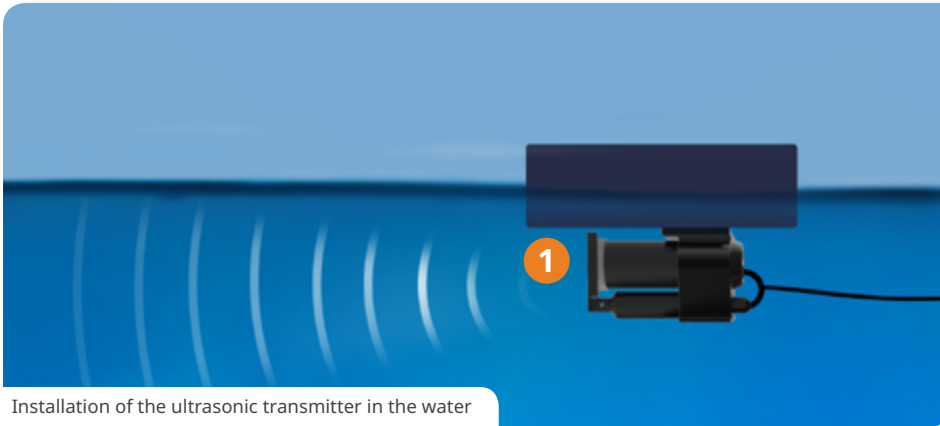
Chameleon Technology™ to Adapt the Ultrasonic Treatment to the Type of Algae

Chameleon Technology™ makes it possible to change the ultrasonic program according to the water conditions, type of algae, and type of application, thereby providing the most effective solution for each specific situation.

- ✔ More efficient algae control
- ✔ Shorter treatment time
- ✔ Prevent the occurrence of resistant algae

[Learn more about ultrasonic algae control](#)

LG Sonic Aquaculture Features



Control box to select treatment program

1 Ultrasonic transmitter for effective algae control

- ✔ Treatment range up to 200m/650ft per device
- ✔ Integrated Aquawiper™, an automatic cleansing system for the ultrasonic transmitters
- ✔ Chameleon Technology™, adjusts the ultrasonic program to the specific water conditions

2 Weatherproof control box

- ✔ Weatherproof design to protect against outdoor conditions
- ✔ LCD display with control buttons to select 12 different ultrasonic programs
- ✔ It is possible to add multiple ultrasonic transmitters to one control box for the treatment of multiple tanks or water surfaces with curves

3 Remote control monitoring to prevent frequent site visits

- ✔ GSM/GPRS control allows the user to monitor and change the ultrasound program remotely
- ✔ Receive status updates and alerts when power outages occur.

Optional

Installation bracket

Bracket to install LG Sonic Aquaculture without a float. Easy removable for maintenance checks.

Check the ultrasonic transmitter with the e-line tester

Device to check whether your LG Sonic device is still working, sending the correct frequency program and if the ultrasound is being spread throughout your whole water body.

Onshore solar system for autonomous power supply

The LG Sonic Aquaculture can work autonomous on solar energy. LG Sonic provides a complete solar system including a solar panel, batteries, and a charge regulator.

Easy installation with the flexi-arm

The flexi-arm can be adjusted to fit every application and can be extended up to 5 meters.

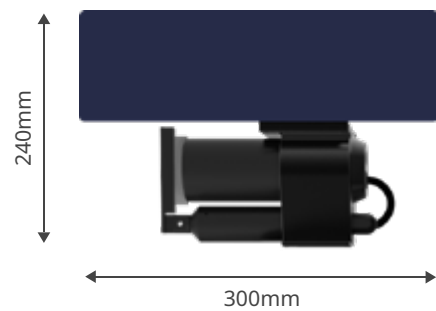
Technical Specifications

Ultrasonic transmitter	<ul style="list-style-type: none"> • Unique Chameleon Technology™ • 12 pre-installed ultrasonic programs • Max freq/program, 80 • Ultrasonic generator integrated in the ultrasonic transmitter • Transmitter cable, 20m/65ft (extension possible) • Float
Control box	<ul style="list-style-type: none"> • Choose between 1, 2 or 4 transmitter outputs to one control box • LCD display with control buttons • Remote control monitoring, GSM/GPRS • AC input voltage, 100-240V AC, 50/60hz • DC input voltage, 24V DC • Energy consumption, 25 Watt • Weatherproof design, Aluminum • Ingress protection, IP67
Aquawiper™	<ul style="list-style-type: none"> • IP67 underwater housing • 360° turning angle • Industrial-designed brush

Control box



Ultrasonic transmitter



Company Profile

Mission

We at LG Sonic have the mission to eliminate harmful chemicals in the water treatment industry. Therefore, we developed a chemical-free technology that controls algae without disturbing the natural balance within water ecosystems. We work together with different European Universities and Research Institutes, many of which are European funded research and development projects.

Since 1999, LG Sonic has been a leading international manufacturer of ultrasonic algae control and biofouling prevention systems



Our Solutions

- **MPC-Buoy**
Control and monitor algae in lakes and reservoirs
- **LG Sonic e-line**
Control algae in ponds
- **LG Sonic Industrial Line**
Biofouling prevention in industrial systems
- **Ecohull**
Prevent biofouling and reduce the use of antifouling paint with the Ecohull

Track Record

- Coordinator of several European FP7 projects: ClearWater PMPC and Dronic (€3.2 million)
- Official Innovation Partner of American Water, U.S. largest water and waste water utility
- Winner of several innovation awards: Aquatech Innovation Award (2015), Global TAG excellence award (2015), WssTP Water Innovation Award (2014)



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