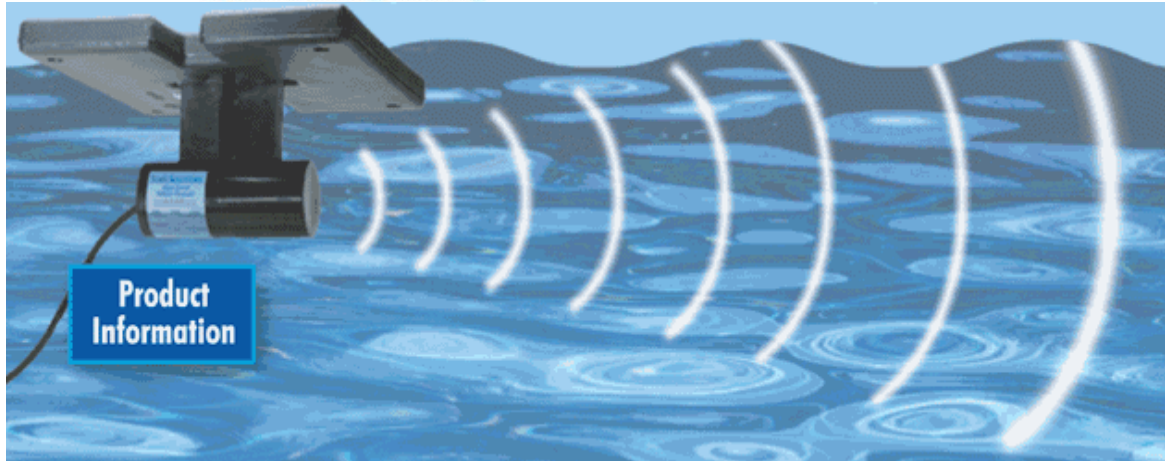




Installation & Operation Manual

The transducer (Metal Cylinder) Must always be installed horizontally.

There should be no obstacles in front of transducer.

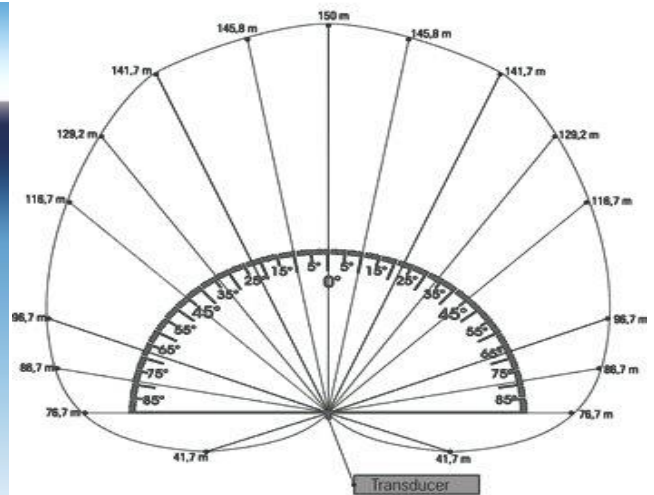
The standard mains voltage for the device is in the range of 220 Volts, A.C. 50 Hz., with 5 Amps Plug top. The electrical cable length provided between the plug top and electronic signal generator box is 2 meter and transducer cable from electronic signal box to transducer is 10 meter. Therefore the electronics box should be placed closed to electrical power outlet **in cool and dry place** and transducer should be 10 meter away from the electronics box.

Do not kept transducer wire in roll, Pleae open the roll and kept zigzag if wire is in excess. To avoid coil induction. Do not run transducer out of water, in dry do not throw transducer, Handle with care as it contains dedicated ceramic PZT device.

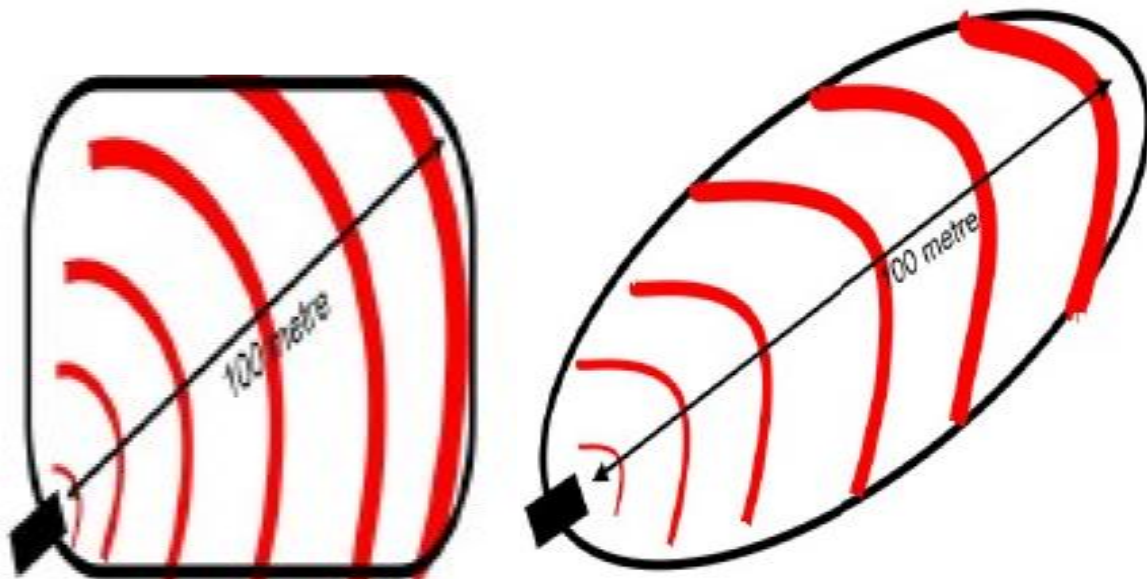
Before submerging the transducer in the water, the cable to the signal generator electronic box should be connected. Once the transducer has been connected, it can be submerged in the water (make sure it is 6" below water surface). Because the operating angle of the radiated ultrasonic waves is 180 Deg. The transducer should be positioned closed to a **Side Bank** or in **Corner** of the pond. So that it points out into the pond can reach and kill all the algae with its radiated ultrasonic waves.

The electronics box is made of polycarbonate with good UV – resistance and it is self extinguishing (IP 66 - 67).

Power consumption is around 40 Watt for a pond of 25 meter. The systems once installed virtually maintenance free. The benefits are not only through algae reduction but also from the reduce deposits in pipelines, pumps, etc. after the unit is installed. This helps in reduction in cleaning frequencies of pumping system, pipelines, and heat exchangers etc. and premature failures of water circulation systems.



Installation Tips:- Always make sure the 'transducer front' points towards the longest to be treated distance in the water.



Installation notes:

- Keep the electronic box stored in a safe and dry place, with the cables pointing downwards.
- Ultrasonic waves kills algae and does NOT remove it. • Sometimes it takes weeks to see the effect on the algae.

Simple tests :-

When in doubt of electricity reaching the circuit box:

- Check whether the LED on the circuit box blinks 4 seconds on and 1 second off.

When in doubt of the sound transmission to the transducer:

- Put the transducer front on your forehead. You will "feel" the ultrasound vibration.
- Look at the front of the transducer. If the center is clean, it works.

When in doubt: Of the effect of ultrasound on the algae: Do the bottle/glass test



Instructions for shortening the transducer cord.

Depending on how close you have the control box located to the transducer placement, you may have some excess cord to deal with. First of all, resist the urge to coil the excess wire. Current running through any wire will create a magnetic field. Normally this will not result in a large loss of signal; however, if you coil the wire it will create an inductance field, much like an electromagnet and will result in a weaker signal to the transducer. If you only need to shorten the cord length a small amount and don't want to cut it, use the criss-cross bundling method shown below.



Note :- Ultrasonic Algae control is environment friendly sound technology, No Harmful chemicals are added in water to kill algae, Ultrasound is not a hard chemical which kill all algae immediately with in a short span of time,

Only sound vibration at various frequencies are used to vibrate and break algae cell., So efficiency of the unit is depend on many factors, like Environmental Condition, Pond location, Atmospheric temperature, dust, Nitrogenous / fertilizer residue present in water,

use of fertilizer in surrounding area, and climatic conditions, So some time it is observed that it take few months to show the result, One has to wait some time and not to expect immediate result.



Figure 2 2 units in large pond

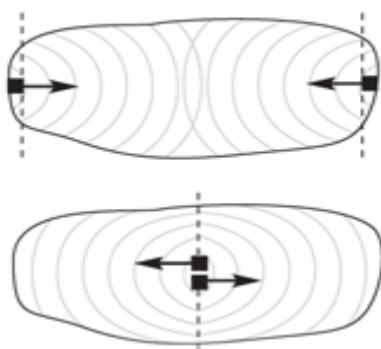


Figure 3

