

# THE ULTIMAX<sup>®</sup> SERIES SUB-SURFACE AERATION SYSTEM

## A) WHY AERATION?

1. Aerators are an effective, natural, environmentally-safe solution to the problems of algae build-up, aquatic weeds, bottom sludge, and aquatic odors in lakes and ponds.
2. Aeration is the preferred method of water quality control, because it effectively attacks the causes. Other methods such as lake dyes and algaecide treat the symptoms of poor water quality, algae and unpleasant odors, but fail to manage the root of the problem-poor water quality.
3. ULTIMAX<sup>®</sup> AIR INJECTORS AND HYDROMIXERS give the aquatic manager a solution to water problems when no fountain spray pattern or on-shore motor and compressor is desired.

## B) HOW DOES AN AIR INJECTOR WORK?

1. It draws in oxygen from above the water's surface, through an air intake tube, powered by a submerged electric motor.
2. The oxygen enters the propeller chamber where it is mixed rapidly at 3450 RPM by a specially designed propeller.
3. The propeller breaks down the aspirated oxygen into fine bubbles while mixing them with water entering through the protected intake chamber.
4. These bubbles are then thrust via the propeller into the water, providing horizontal circulation of oxygen. As this circulation is directional, multiple units may be necessary.
5. 2HP per surface acre is a good guideline when sizing Air Injectors. However, to create circular flow linkage, two 1HP units may be more efficient, in a uniform shaped pond of one acre. Please consult Factory.

## C) HOW DOES A HYDROMIXER WORK?

1. It ingests water into the propeller chamber, powered by a submerged electric motor.
2. The water is mixed rapidly at 3450 RPM by a specially designed propeller.
3. The propeller breaks down the modest amount of oxygen present into fine bubbles while mixing them with the water within the protected intake chamber.
4. The invigorated water is then thrust directionally out of the intake chamber.
5. 2HP per surface acre is a good guideline when sizing Hydro Mixers. However, to create circular flow linkage, two 1HP units may be more efficient, in a uniform shaped pond of one acre. Please consult Factory.

## D) FEATURES AND BENEFITS

### FLOAT MOUNTED

1. 1/2 – 5HP, single and three phase motors
2. Low profile - motor mounted below waterline
3. Rugged HD motor with 3 year warranty (1 – 5HP)
4. 3 year no maintenance warranty (1 – 5HP)
5. 2 year warranty (1/2HP)
6. 2 year no maintenance warranty (1/2HP)
7. Submerged oil cooled motor for long life
8. Shrouded propeller creates greater circulation
9. Adjustable attack angle for greatest efficiency

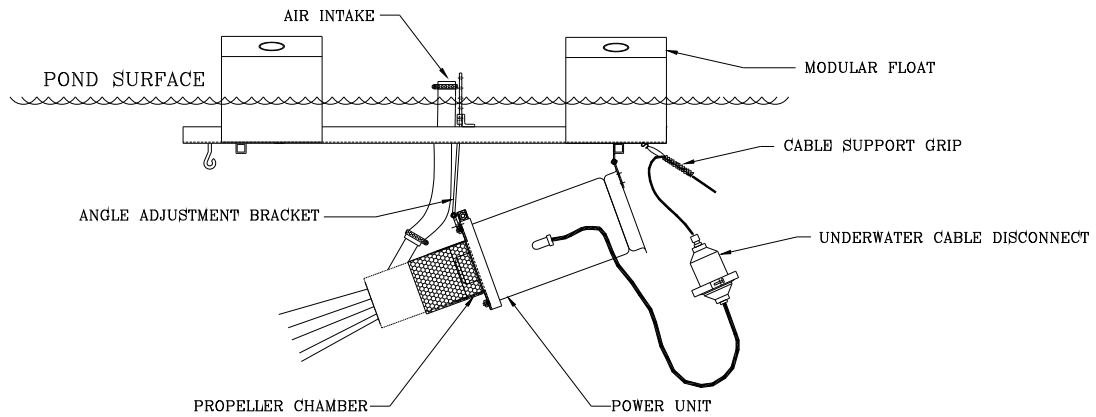
### FIXED BASE MOUNTED

1. 1/2 – 5HP, single and three phase motors
2. Low profile - motor mounted below waterline
3. Rugged HD motor with 3 year warranty (1 – 5HP)
4. 3 year no maintenance warranty (1 – 5HP)
5. 2 year warranty (1/2HP)
6. 2 year no maintenance warranty (1/2HP)
7. Submerged oil cooled motor for long life
8. Shrouded propeller creates greater circulation
9. Adjustable attack angle for greatest efficiency
10. Out of sight and silent, at the bottom of the pond
11. Easily adapted to any pond 3 to 10 feet deep
12. Ideal for fish impoundments, keeps ponds open year round (where applicable) eliminating winter kill
13. No possible freeze damage to the motor or other mechanical parts as unit is totally submerged
14. Optional Duck Decoy or Gator Head float available

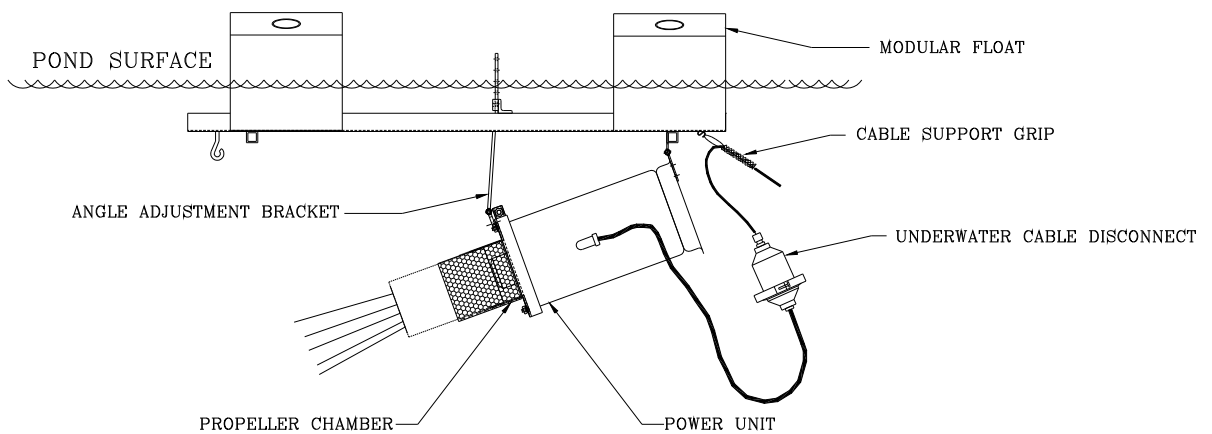
## E) EQUIPMENT TYPES

1. FLOAT MOUNTED ULTIMAX<sup>®</sup> SERIES AERATORS are visible on the surface, with the motor housing suspended via brackets from a modular float system.

### AIR INJECTOR

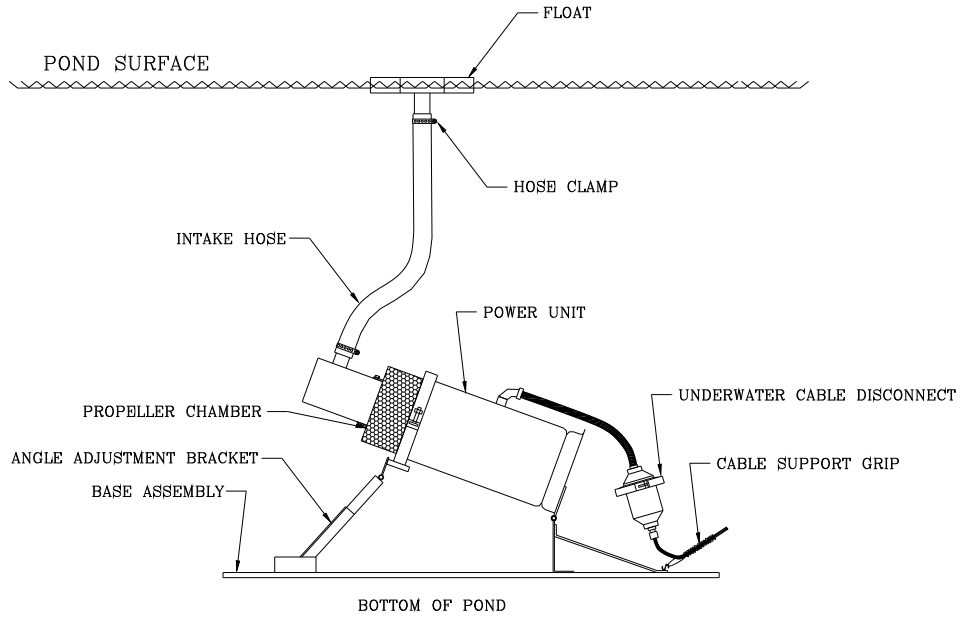


### HYDROMIXER



2. FIXED BASE MOUNTED ULTIMAX<sup>®</sup> SERIES AERATORS are attached to an acrylic base assembly and are totally submerged on the bottom of the water body.

### AIR INJECTOR



### HYDROMIXER

