



WaveMaker 2



- 160 GALLON WAVE MAKER
- TOP QUALITY & HIGHLY EFFICIENT
- 1 YEAR WARRANTY



ASSEMBLY PARTS

NOTE: Make sure all connections are secure. Examine for damages before installation.



PARTS CHECK LIST

- ✓ Controller
- ✓ 4 WM-4 Pumps
- ✓ AC 110v Transformer
- ✓ 4 mounting brackets
- ✓ 4 Suction cup mounts

SET UP/OPERATION

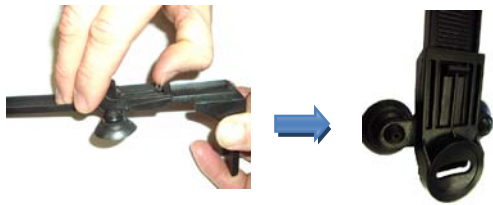
Note: Wave maker is designed for aquarium use only. Carefully read this manual and all safety precautions on page 5 before installing and operating your new wave maker.

Introduction: The Aqua Euro Systems wave maker simulates random ocean wave movements in your aquarium by varying the speeds and the timing each pump is ran thus eliminating stagnant 'dead spots' in you aquarium. The water movement created mimics the feel of the waves that fish and corals like as a result it enhances coral plant, invertebrate and fish health as well as stimulation and growth.

1. Remove all accessories from box and examine for damages.
2. Follow instructions on page 3 for proper use of mounting kits.
3. Keep all power connectors dry and away from water.
4. For optimum performance place pumps at 4' to 7' bellow water surface. If using in deep aquariums place pump away from sand bed.
5. Choose a suitable location for your pumps were no corals will be in direct contact with the front of the pump. Keep pumps away from sand bed to avoid steering sand.

TO USE BRACKET HOLDER:

1. To use the hanging bracket remove the clamp holder by lifting it from the rail and pulling out.



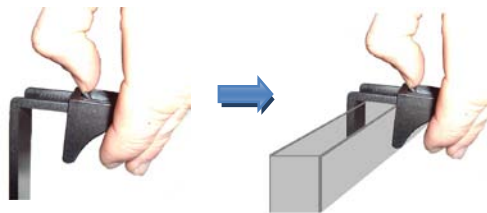
2. Remove the black plastic nut on the back of pump



3. Insert pump tread thru bracket holder and secure with the black plastic nut.



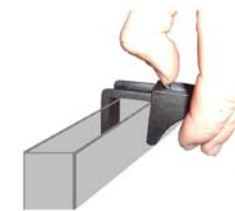
4. Adjust the top bracket clamp to fit the thickness of the Aquarium by lifting and sliding center clamp out of unit



5. Slide the pump into the bracket until you reach the desired location.



6. Hang bracket in aquarium and adjust the side clamp to secure bracket to aquarium

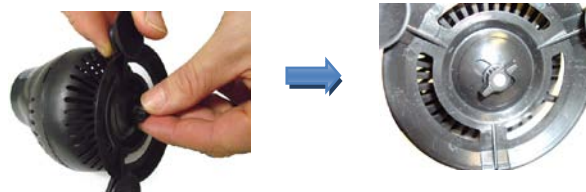


TO USE SUCTION CUPS HOLDER:

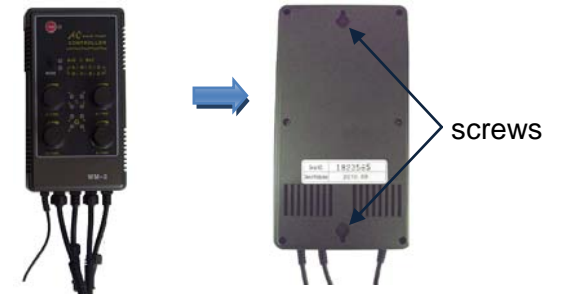
1. Remove the black plastic nut on the back of pump



2. Insert pump tread thru round suction cup mounting and secure in place with the pump black plastic nut.



3. Gently press mount into desire location in aquarium. Connect all the pump power cords to controller then connect AC transformer to controller. Mount & secure controller to wall with 2 screws (not included)





- The controller allows you to rotate the pumps in sets of two or to rotate each units at a time
- The A, B, C & D - TIME mode allows you to adjust the length of time each pump will run.
- The Feed mode will slow down the movement of the waves for a period of time to allow you to spot feed your aquarium inhabitants. Once the time has completed the pumps will begin their preset water flow range.

The wave maker controller allows you to set each pump with an individual water flow speed. The first mode in the controller will alternate to turn ON pumps A & D then it will switch to pumps B & D. That means you will have a set of 2 pumps running at a time. The second mode will alternate each pump to run at a time clockwise. The second mode is optimum to use as a night mode. The switching speed and current duration will vary for each aquarium depending on the volume of water in your aquarium. The longer you set the intervals between switching cycles the better the spread of the water movement to all areas in the aquarium. To set the proper wave movement and time for your aquarium start both pumps at their lowest time and wave movement and increase until you see the waves reaching the center of aquarium or longer. The speed of the waves are measure by percentage were 30% is the lowest speed and 100% is the highest speed of the pump. You can then also increase the time you like to have each pump running. For best results place pumps into an open water column and avoid placing pumps directly in front of rocks or corals.

MAINTENANCE

Warning: Do not touch pump, cord or electrical plugs with wet hands. Disconnect controller AC transformer from electricity (power supply) before performing maintenance or moving the pumps.

Every Year:

An annual clean up is recommended. If a decrease in performance has occurred and the pump has developed lime deposits, perform a complete clean up as needed.

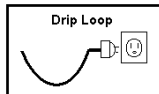
1. Unplug the transformer from power supply (hands must be dry)
2. Remove pumps from aquarium
3. Rinse all parts with clean water, use brush if necessary
4. Pull out pump cover and clean any residue on the wheel.
5. Use vinegar to remove any lime residue

SAFETY



WARNING: FOLLOW THE SAFETY PRECAUTIONS BELOW TO PREVENT PROPERTY DAMAGE, FIRE, PERSONAL INJURY AND LOSS OF LIFE.

- Do not operate the pumps without water as heat will damage its components.
- Disconnect all electrical equipment before working in the aquarium. Do not yank power cord to disconnect from outlet, grab plug firmly and pull.
- Keep controller and power supply away from water.
- Create a drip loop for power cord to prevent water from running the length of the power cord and reaching the power outlet. If power cord does get wet do not disconnect power cord but do disconnect the fuse or circuit breaker corresponding to that outlet.



- Connect AC Adaptor (transformer) to ground fault circuit interrupter (GFCI).
- Do not touch electrical plug with wet hands to connect AC transformer to outlet.
- Do not attempt to repair a damaged pump and/or controller.
- Do not operate the pumps if cords or plugs have been damaged in any way.
- Do not connect controller to a separate timer or on/off system.
- Only use in 110v 60Hz electrical input.
- The water temperature in the aquarium should not exceed 95°F.
- Do not clean pumps with any chemicals that contain alcohol or ammonia.
- Do not use outdoors.
- Keep away from children.
- If unit will be stored, first dry unit thoroughly and place in a dry area at room temperature.
- The water movement generated with this unit can cause pressure to some glass aquariums thus causing them to break. It is highly recommended to verify with the original manufacturer of your aquarium if it will be able to sustain the extra stress generated by the wave movements.

Aqua Euro Systems™ One-Year Limited Warranty

Inspect wave maker when it is received. If any parts of the wave maker are received damaged, notify the carrier, note damage on freight bill. Otherwise no claim can be made against the carrier.

Aqua Euro Systems™ guarantees this product, to the original purchaser, against defects in components, materials and workmanship (that occur under normal use) for a period of ONE (1) YEAR from the date of retail purchase. The warranty is not transferable and is confined to the original retail purchaser only. The warranty does not extend to damages caused by power surges, improper installation or any form of abuse. The warranty does not apply if (1) damages result from misuse, accident, lack of reasonable care or abuse, (2) the product is not purchased from Aqua Euro Systems™ or an authorized dealer, (3) damage due to modification or alteration that is made to the product (4) wrong circuitry or unspecified electrical input to the pump(s) and/or controller, (5) the site (location where the product is kept) conditions do not conform to the recommended operating conditions for the pumps and/or controller, (6) the original brand name is removed, obliterated or altered from the product.

Contact the company at www.aquaeurosystems.com

Purchaser pays any postage, shipping and insurance fees to return wave maker

In the event of product failure within the warranty period, please contact the store where the product was purchased for further instructions for repair or replacement. Repair or replacement will be carried out through Aqua Euro Systems™ or its authorized dealers. A return authorization number and a copy of original purchase receipt are required for return of the defective product. After any repairs/replacement of the unit, this warranty will thereafter continue and remain in force only for the unexpired period of warranty. Moreover, the time taken for repair/replacement and in transit whether under the warranty or otherwise shall not be excluded from the warranty period.

Limitation of Implied Warranties and Exclusion of Certain Damages.

Limit of Liability: For any single claim, the limit of liability under this contract is the least of the cost of (1) authorized repairs, (2) replacement with a product or equal or greater value, (3) reimbursement for authorized repairs or replacement, or (4) the price that you paid for the product. (No cash refunds will be made). The total liability under this contract is the purchase price you paid for the product; in the event we replace the product or reimburse you for replacement of the product with another product of equal or greater value, we shall have satisfied all obligations owed under this contract.