1. **WARNING!** Do not immerse filter in water! To guard against injury, electric shock, and/or fire, basic safety precautions must be observed, including the following:

   **REVIEW AND FOLLOW ALL SAFETY INSTRUCTIONS!**

2. **DANGER!** To avoid possible electric shock, special care should be taken since water is employed in the use of aquatic equipment. For each of the following situations, do not attempt repairs by yourself; return the appliance to an authorized service facility for service or discard the appliance:

   A. If the filter falls into water, **DO NOT REACH FOR IT!** Power must be disconnected prior to retrieval. If the electrical components of the filter get wet, disconnect filter from the electrical receptacle immediately.

   B. If the filter shows any abnormal signs of behavior, unplug the filter immediately.

   C. Carefully examine the filter after installation. The filter should not be plugged in if the power cord is damaged or if there is water on components that should not be wet.

   D. Do not operate the filter if there are signs of damage due to transit or if the filter has been dropped.

   E. A drip-loop must be used to avoid possibility of the plug or electrical receptacle getting wet. Position the aquarium and cabinet to one side of the electrical receptacle to prevent water from dripping on the receptacle. A drip-loop is suggested for each cord connected to an aquatic appliance. If the receptacle does get wet, **DO NOT UNPLUG THE CORD.** Instead, disconnect the fuse or circuit breaker that supplies power to the filter/receptacle.

   F. It is highly suggested that all aquatic equipment employ the use of a GFCI (ground fault circuit interrupter) enabled receptacle or an inline GFCI.

3. Minimum age requirement to install, maintain, or operate this filter is **18+** years of age. Never allow small children to touch or play with this filter. Close supervision is required when any electrical device is used by or near children.

4. Always unplug the device from the receptacle when appliance is not in use, prior to removal, installation, or maintenance. Never yank the power cord! Grasp the plug and pull to disconnect.

5. Do not use this filter for other than its intended use. Do not use attachments or accessories not recommended or sold for use with this filter.

6. This filter is intended to be used indoors. Do not store or operate this filter where it will be exposed to weather or in extreme temperatures (freezing).

7. **RISK OF ELECTRIC SHOCK OR INJURY!** Always unplug filter prior to performing any type of maintenance. Never submerge this filter or place in areas of high heat.

8. The filter is designed to operate while filled with water. If the filter runs “dry” over an extended period of time, the motor should be examined to determine if its plastic surfaces have warped or melted. If so, replace the motor.

9. Read and observe all important notices on the filter. Make sure the filter is securely installed before operating it.

10. If an extension cord is necessary, a cord with a proper rating should be used in conjunction with a GFCI enabled outlet. Extensions rated for less amperes or watts than the appliance will overheat. Arrange the cord so that it will not be exposed to moisture, tripped on, or yanked from receptacle. Never use a extension cord unless plug can be fully inserted. Do not attempt to defeat or bypass cord safety features.

11. This filter is intended for indoor, household use only. To avoid injury, do not touch hot or moving parts.

**ADDITIONAL SAFETY INFORMATION TO ENSURE SAFE AND OPTIMAL OPERATION**

1. **HANDLE WITH CARE!** Always handle this appliance with care to avoid personal injury. Never attempt to lift or move this pump with wet hands.

2. Always observe proper maintenance to ensure optimal performance and operation.

3. Keep this pump in a well-ventilated area away from heating or cooling vents. Do not place near objects or equipment that generate heat.

4. Do not place near flammable substances of any kind or near electronic components and systems (stereo systems, televisions, etc.).

5. BioMaxx Power Filters are not recommended for use with aquariums that have sand on the bottom.
Installation:

1. Lift the filter cover and remove the strainer tube and the adjustable leveler stand-off from the main cartridge compartment. Install the adjustable leveler stand-off to the base of the filter box and the strainer tube to the end of the intake-tube assembly.
2. Hang the filter on the rear wall of the aquarium rim and rotate the adjustable leveler stand-off until the filter box is level with the aquarium (Note: There should be at least a one-inch clearance between the bottom of the strainer tube and gravel).
3. Fill the filter compartment with water until it overflows into the cartridge compartment.
4. Install the filter cover and connect power using a drip-loop at the end of the cord. The filter should start automatically within 30-seconds. If the filter does not start, slide the intake-tube assembly up and down with one or two strokes.
5. Adjust flow via the control valve located at the top of the intake-tube assembly.

Additional Operation Tips:

a. At feeding time, reduce flow using control valve. This will help prevent the filter from overloading with food. It will also extend the life of the BioMaxx cartridge.

b. Clean the filter or its parts using only warm water. Do not use detergents or soap as they may be harmful to fish.

c. When use of medication is required, remove the cartridge as it absorbs/filters most medications.

d. If the filter is noisy, lift the intake-tube assembly momentarily while the filter is running and reinstall. Wait one minute and repeat as necessary. Trapped air bubbles are an additional source of noise; they will dissipate overnight.

Maintenance:

Cartridge Changes: When water flows excessively from the intake-tube chamber into the aquarium, it is time to change the BioMaxx filter cartridge. The cartridge should be changed once per month to prevent backflow and avoid filtration problems resulting from a clogged cartridge.

Cleaning Intake-Tube Assembly: Unplug power cord and remove filter box cover. Lift the intake-tube assembly out of filter. Remove magnet impeller assembly. Clean all parts under running water. If needed, use a filter stem spring brush (available at your dealer). The flow control valve can be removed to aid in cleaning. Before replacing the knob, wet its “o”-ring with water, or coat the surface of the “o”-ring with a small amount of non-medicated petroleum jelly.

Motor Maintenance: CAUTION: Only remove the motor when absolutely necessary. Unplug power cord, empty filter box, and place it upside down on a flat surface. Grasp motor with one hand and filter box with the other. Gently turn motor counter-clockwise until its sidewall is parallel to the raised line on the bottom of the filter box. Hold filter box with one hand and gently pull/tilt the motor until free. Clean inside of motor well with a cotton swab. Do not use a metal instrument of any kind. Before replacing motor, wet the “o”-ring with water, or coat its surface with a small amount of non-medicated petroleum jelly. Replace motor and filter box with water. Check to be sure that motor is seated properly and does not leak. Re-install filter.

Troubleshooting:

If the filter doesn’t start, lift the intake-tube assembly out of the filter and remove the magnet impeller assembly located inside the motor. Use tweezers to remove any stringy or hair-like material that may have twisted around the shaft. Hold the assembly by its endcaps and try to spin the magnet. If the magnet doesn’t spin freely, rinse under a jet of tap water to “unlock” it. Now hold the magnet and try to spin the impeller one turn in either direction. If the impeller doesn’t spin freely, rinse under a jet of tap water to “unlock” it. If rinsing doesn’t free up the magnet or impeller, replace the impeller assembly. If you’ve replaced the assembly and the filter still won’t start, it is possible the carbon or aquarium gravel may have lodged at the bottom of the motor well. Slide the intake-tube assembly up and down in the filter box (with water still in it). If this doesn’t work, unplug the filter and empty it in your sink. Insert a drinking straw—not a metal instrument—into the motor well and try to break up any sediment. Rinse the motor well and re-assemble the filter.

To determine if the motor is functioning, plug it into an electric outlet and hold the Magnet Impeller Assembly against its outside wall. If you feel a magnetic attraction, the motor is functional. If not, replace the motor.