

### KoiAir<sup>™</sup> 1 & 2 Water Garden Aeration Kit

### **INSTALLATION INSTRUCTIONS**



# **GREAT FOR ALL SEASONS!**



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## **IMPORTANT INFORMATION:**

- Never connect to an extension cord. This may result in equipment failure.
- Do not allow anything to rest on the power cord.
- Do not place the unit where people may step on the power cord.
- Never override electrical or mechanical interlock devices.
- Never attempt maintenance functions that are not specified in the user manual.
- Never operate the system if unusual noises or odors are detected. Disconnect the power cord from the outlet and call for service.

# A DANGER: A

- Read the operating instructions carefully.
- To reduce the risk of electric shock, connect only to a properly grounded grounding-type receptacle.
- THIS UNIT IS TO BE USED IN A CIRCUIT PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER.
- This unit has not been investigated for use in swimming pool areas.
- Disconnect unit from power source before handling.
- Repair and exchange of cable must be carried through by the supplier/manufacturer.

### WINTER OPERATION: A DANGER: A

Operating in freezing conditions on an ice-covered water garden will cause open water areas, even in freezing conditions. Also, the ice thickness around these open areas will be much thinner than the ice over the remainder of the pond. Injury or fatality may result from falling through the ice. Airmax strongly recommends the danger of thin ice around the diffuser site be clearly posted at frequent intervals. Owner assumes all responsibility for operating KoiAir Aeration Kit during winter months.

If you choose to turn off your system for the winter, do the following:

- Unplug the system and remove the diffuser(s), airline(s) and compressor.
- Store in a dry area protected from the elements such as a garage or basement (climate control recommended).

### INSTALLING YOUR KoiAir<sup>™</sup> AERATION SYSTEM:

**1** Decide on a Location Decide on a location for the compressor. It's important to elevate the compressor a few inches above ground level, making sure the compressor is above the pond's water surface. If power is not available at the pond's edge, the compressor may be located at the power source and extra airline can be added (up to 100') to reach your desired diffuser location. NOTE: It is recommended the compressor be covered and not exposed directly to the elements. This can be accomplished by purchasing a small TrueRock<sup>™</sup> cover (Item #510330). If you decide to use your own cover, make sure it will keep water from coming in direct contact with the compressor and there is plenty of ventilation.

### Connect The Airline

**Single Diffuser Systems:** Connect the weighted airline to the outlet on the compressor using the included 2<sup>1</sup>/<sub>4</sub>" rubber connector and spring clamps. Connect the other end of the airline to the diffuser using the check valve and barbed fitting. Ensure the check valve is installed with the arrows pointing towards the diffuser plate. No clamp is needed on the diffuser end.

**Multiple Diffuser Systems:** Connect the included 2¼" rubber connector to the compressor and secure it with a squeeze clamp. Connect the bottom of the three-way air manifold to this rubber connector, using another squeeze clamp to hold it in place. Measure the distance from the compressor to the locations of your diffusers, accounting for the pond's depth. Cut the weighted airline to the appropriate lengths and connect them from the three-way air manifold to each diffuser, ensuring the check valves are installed with arrows pointing towards the diffusers. No clamps are needed for the airline connections.

# GETTING TO KNOW YOUR KoiAir AERATION SYSTEM:



KoiAir 2 shown above.

	KoiAir 1 (for ponds up to 8,000 gallons)	KoiAir 2 (for ponds 8,000 - 16,000 gallons)
A High Efficiency Compressor	<b>KA20:</b> 17 Watts @ 115 Volts	<b>KA40:</b> 35 Watts @ 115 Volts
B EasySet" Weighted Airline	Includes 25' of weighted airline.	Includes 50' of weighted airline.
C Check Valve	(1) Check Valves Make sure arrows point to diffuser	(2) Check Valve Make sure arrows point to diffuser
D Coupler	(2) Squeeze Clamps (1) Rubber Coupler	(2) Squeeze Clamps (1) Rubber Coupler
E Control Valve	N/A	Includes control valve to balance airflow between both diffusers
<b>F</b> KoiAir Weighted Diffuser	(1) KoiAir Diffuser (4' Max Depth)	(2) KoiAir Diffusers (4' Max Depth)
<b>G</b> 3/8 x 3/4-Inch (Barb x MPT)	(1) Barbed Connector	(2) Barbed Connector

### **Place Your Diffuser(s)**

➡ Find a location in your water garden to place the diffuser. If you have two diffusers, distribute them equally throughout the water garden. Do not exceed the max depth rating of 4' when placing your diffusers. Depths in excess of this rating will greatly reduce airflow to the diffuser and cause excess strain on the compressor reducing its life expectancy. In cases of extreme temperatures (hot or cold), it is recommended to relocate plates from the deepest points of your pond.

#### Adjust Your Valves (Systems with Multiple Diffusers Only)

Adjust three-way air manifold to balance airflow between diffusers, if desired. It is not necessary to have even airflow between diffusers, nor will it have any effect on the life expectancy of the compressor. Valve positions are as follows:



A. Valve Pointing Down: Air Flow comes up from bottom and goes left.

**B.** Valve Pointing Between Bottom and Right: Air Flow comes up from bottom and goes left and right.

C. Valve Pointing Right: Air Flow comes up from bottom and goes right.

## **MAINTENANCE SAFETY:**

- Always use parts that are supplied or approved by Airmax. Use of other parts may result in poor performance and could create a hazardous situation.
- Always unplug the system from the outlet and refer servicing to a qualified electrician under the following conditions:
  - 1. When the power cord is damaged or frayed.
  - 2. If the compressor is producing unusual noises or odors.

# **REGULAR MAINTENANCE:**

### **Diaphragm Maintenance**

It is recommended that you perform diaphragm maintenance (Using KoiAir 1 Maintenance Kit - Item #510145 or KoiAir 2 Maintenance Kit - Item #510146) every 12 months.

#### **Membrane Stick Maintenance**

No maintenance required. Replace membrane sticks (#510168) if visibly damaged or if system has poor performance.

#### **Air Filter Cleaning**

Unscrew the cover on the back of the compressor to expose the air filter. Remove the air filter and brush away any dust particles. Air filter should be replaced every 3-6 months. (KoiAir 1- #510153, KoiAir 2- #510149)

# **PRODUCT WARRANTY:**

The KoiAir Aeration Kit comes with a 3-Year Limited Warranty. This limited warranty is extended exclusively to the original purchaser and begins from the date of original purchase receipt. Membrane sticks, airline, diaphragms and air filters are considered wear items and are not covered by this warranty. Abuse or misuse of this product voids all warranty. Any sign of water damage inside the unit voids all warranty. For warranty claims, product must be returned to the original place of purchase with original receipt.

### **THANK YOU FOR CHOOSING:**

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