

# Robust-Aire Systems 1,2&3

Robust-Aire System	Pond Size* (surface acres)	# Diffuser assemblies	Amps 120v/240v	CFM at 10 psi	Sure Sink Weighted 3/8 tubing	Maximum Depth
RA1	1.5	1	2.5/1.2	3.2	100 feet	50 feet
RA2	3	2	2.5/1.2	3.2	200 feet	50 feet
RA3	4.5	3	3.5/1.6	4.8	300 feet	50 feet

<sup>\*</sup>Based on a depth of 8 feet and a desired minimum turnover rate of 1 turn of complete volume per 48 hours. Sizing assistance is available.

# The Robust-Aire RA1 system:

- One KM-60 model ¼ HP Teich-Aire compressor
- One, 100 foot roll of 3/8 inch Sure Sink weighted tubing
- Robust Aire diffuser assembly

# The Robust-Aire RA2 system:

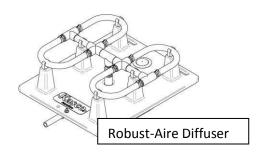
- One KM-60 model ¼ HP Teich-Aire compressor
- Dual port aluminum manifold with valves
- Two, 100 foot rolls of 3/8 inch Sure Sink weighted tubing
- Two Robust Aire diffuser assemblies

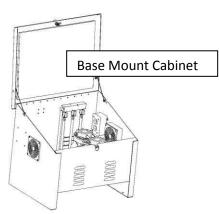
## The Robust-Aire RA3 system:

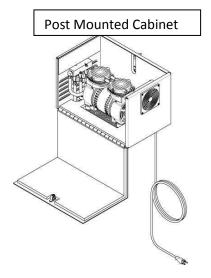
- One KM-120 model ½ HP Teich-Aire compressor
- Triple port aluminum manifold with valves
- Three, 100 foot rolls of 3/8 inch Sure Sink weighted tubing
- Three Robust-Aire diffuser assemblies

### **Robust-Aire Diffusers**

Robust-Aire diffusers are the most efficient on the market and create more water flow to aerate your pond. Diffusers are designed to provide a fine air bubble with the least amount of pressure. The base is made of thick HDPE plastic and a locking fill plug allows you to fill it with pea gravel or other weighted substrate. It has a raised design that keeps the diffusers performing at an optimal level above the pond bottom. A durable, bolted, strain relief attachment ensures that the weighted tubing will not become detached during installation or maintenance. A check valve with Viton seals keeps water from entering the tubing when the system is not operating.







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RA3-NC (No Cabinet)

**Enclosures**: Each of the above systems is available with three options for enclosures: **A large base mount cabinet** is included as the default method for the system.

- Dimensions are 24" x 18" x 20"H
- 120 volt receptacle or a 240 volt junction box
- A single cooling fan provides 110 CFM ventilation
- Compressor is mounted at the factory in the cabinet which is provided with acoustical foam and a keyed cabinet lock.

**Post mounted cabinet (PM)**: Mountable on an exterior wall or wooden post.

- Dimensions 19" x 12" x 12"H.
- 120 volt receptacle or a 240 volt junction box.
- A single cooling fan provides 110 CFM ventilation.
- Compressor is mounted at the factory in the cabinet which is provided with acoustical foam and a keyed cabinet lock.

**No Cabinet (NC):** This is desired when installing the compressor system in your own structure. A galvanized mounting bracket system is included with each compressor to allow mounting to a floor, wall, or pedestal. Rubber mounting feet and all hardware are included as well. Remote manifold is easily mounted via wood screws. Included with this system is a compact cooling fan and bracket that attaches to the mounting bracket supplies direct ventilation of the compressor.

Sure Sink weighted tubing is available in easy to handle 100 foot coils. RA systems 1-3 include 100 feet

of 3/8 tubing for each diffuser. Each coil is boxed and includes our full packet of barbed connectors and adapter fittings, and tubing clamps. You will be prepared to make any connection necessary with the tubing kit. Additional 3/8 or 5/8 Sure Sink weighted tubing is available when additional length is needed.

All tubing is also available in 500 foot reels. Reels do not include fittings.

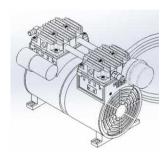
### **Teich-Aire rocking piston compressors**

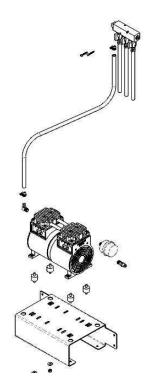
- Provide efficient, continuous-duty operation with minimal maintenance and quiet operation. Units are extremely quiet.
- Included pressure relief valve, air filter with replaceable cartridge, brass barbed elbow, and rubber mounting feet.
- Sound level is less than: 70 dB without cabinet (Window air conditioner), 65 dB with cabinet and acoustic sound proofing (Normal conversation)
- Safely starts under pressure. Maximum operating depth 40 feet.

**Warranty:** Two year complete warranty on all parts.

RA1-NC with fan

KM-120, 1/2 HP Compressor







# Robust-Aire Systems 4,5,&6

Robust-Aire System	Pond Size* (surface acres)	# Diffuser assemblies	Amps 120v/240v	CFM at 10 psi	Sure Sink Weighted 3/8 tubing	Maximum Depth
RA4	8	4	5.1/2.6	6.4	400 feet	50 feet
RA5	10	5	6.2/2.9	8	500 feet	50 feet
RA6	11	6	7/3.5	9.6	600 feet	50 feet

<sup>\*</sup>Based on a depth of 15 feet and a desired minimum turnover rate of 1 turn of complete volume per 48 hours. Sizing assistance is available.

# The Robust-Aire RA4 system includes:

- Two KM-60 model ¼ HP Teich-Aire compressors
- Two dual-port aluminum manifolds with valves
- Four, 100 foot rolls of 3/8 inch Sure Sink weighted tubing
- Four Robust Aire diffuser assemblies

## The Robust-Aire RA5 system includes:

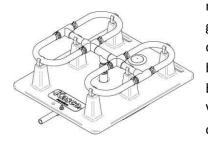
- One KM-60 model ¼ HP Teich-Aire compressor & one KM-120 model ½ HP Teich-Aire compressor
- Two valved aluminum manifolds: 1 dual-port, 1 triple-port
- Five, 100 foot rolls of 3/8 inch Sure Sink weighted tubing
- Five Robust Aire diffuser assemblies

#### The Robust-Aire RA6 system includes:

- Two KM-120 model ½ HP Teich-Aire compressor
- Two triple-port aluminum manifolds
- Six, 100 foot rolls of 3/8 inch Sure Sink weighted tubing
- Six Robust-Aire diffuser assemblies

#### **Robust-Aire Diffusers**

Robust-Aire diffusers are the most efficient on the market and create more water flow to aerate your pond. Diffusers are designed to provide a fine air bubble with the least amount of pressure. The base is

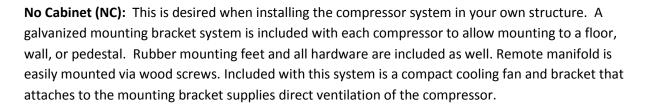


made of thick HDPE plastic and a locking fill plug allows you to fill it with pea gravel or other weighted substrate. It has a raised design that keeps the diffusers performing at an optimal level above the pond bottom. A durable, bolted, strain relief attachment ensures that the weighted tubing will not become detached during installation or maintenance. A check valve with Viton seals keeps water from entering the tubing when the system is not operating.

**Enclosures**: Each of the above systems is available with two options for enclosures:

A large base mount cabinet is included as the default method for the system.

- Dimensions are 24" x 18" x 20"H
- 120 volt receptacle or a 240 volt junction box.
- Two cooling fans provide 220 CFM ventilation and are paired with the compressors.
- Compressor is mounted at the factory in the cabinet which is provided with acoustical foam and a keyed cabinet lock.



**Sure Sink weighted tubing** is available in easy to handle 100 foot coils. RA systems 4-6 include 100 feet of 3/8 tubing for each diffuser. Each coil is boxed and includes our full packet of barbed connectors and adapter fittings, and tubing clamps. You will be prepared to make any connection necessary with the tubing kit. Additional 3/8 or 5/8 Sure Sink weighted tubing is available when additional length is needed.

All tubing is also available in 500 foot reels. Reels do not include fittings.

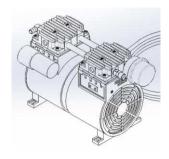
## **Teich-Aire rocking piston compressors**

- Provide efficient, continuous-duty operation with minimal maintenance and quiet operation. Units are extremely quiet.
- Included pressure relief valve, air filter with replaceable cartridge, brass barbed elbow, and rubber mounting feet.
- Sound level is less than: 70 dB without cabinet (Window air conditioner), 65 dB with cabinet and acoustic sound proofing (Normal conversation)
- Safely starts under pressure. Maximum operating depth 40 feet.

#### Warranty:

Two year complete warranty on all parts.

KM-120, ½ HP Compressor



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# Other Robust-Aire System Options: DP, XL, & RM

# **DP Systems**

These systems are the same as the standard systems but use the KM-120, 1/2 HP double piston compressors instead of the KM-60, 1/4 HP single piston compressors for additional air flow to each diffuser.

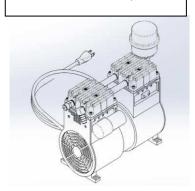
System	Enclosures	Amps 120v/240v	Air Flow
RA2 DP	Base Mount , Post-	3.5/1.6	Two diffusers @ 2.4 CFM
	Mount(PM), No Cabinet (NC)		
RA4 DP	Base Mount , No	7/3.5	Four diffusers @ 2.4
	Cabinet (NC)		
RA5DP	Base Mount , No	7/3.5	Two diffusers @ 2.4 CFM, and three diffusers @ 1.6
	Cabinet (NC)		CFM

# **XL Systems**

These systems are the same as the standard systems but use the KM 200, 3/4 HP double piston compressors instead of 1/4 or 1/2 HP compressors for additional air flow to each diffuser. These systems also come standard with 5/8" tubing instead of 3/8" tubing.

<u>Enclosures:</u> All XL systems are available in either standard Base Mount, or in No Cabinet (NC) options.

KM-200, ¾ HP Compressor



System	Air Flow	Amps 120v/240v	Sure Sink Weighted 5/8 tubing
RA2-XL	Two diffusers @ 3.4 CFM	6.1/3.4	200 feet
RA3-XL	Three diffusers @ 2.3	6.1/3.4	300 feet
RA4-XL	Four diffusers @ 3.4 CFM	6.1/6.8	400 feet
RA5-XL	Two diffusers @ 3.4 CFM, and three diffusers @ 2.3 CFM		
RA6-XL	Six diffusers @ 2.3 CFM	12.2/6.8	600 feet

# **Remote Manifold Systems**

These systems are the same as the standard systems, but are built to include a remote manifold system. Systems have the standard manifold, normally adjacent to the compressor, removed and replaced with a supply line that adapts to ¾-inch PVC. It also includes a remote manifold system which accepts the ¾-inch PVC. End user/installer provides ¾ inch PVC lines (one for each compressor) to deliver the air from the compressor to the remote manifold at the edge of the pond/lake.

\*The remote manifold option (RM) can be added to the standard Robust-Aire systems, DP systems, or XL systems.

System	# Remote	Valve Manifolds	
	Manifold Boxes		
RA1-RM	0		
RA2-RM	1	Two valves	
RA3-RM	1	Three valves	
RA4-RM	2	Two manifolds, Two valves each	
RA5-RM	2	Two manifolds, A: Three valves, and B: Two valves	
RA6-RM	2	Two manifolds, each with Three valves	

