



# Small Pond Aeration Systems

## Owner's Manual & Operations Guide

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#### Our Brands Listed Below:



**CONGRATULATIONS:** Since 1998, genAIR™ aeration systems have been successfully used throughout the United States, Canada and Mexico. These diffused aeration systems were designed specifically for the “small pond” owner in an effort to improve water quality, aquatic life and the overall small pond ecosystem. In short, you have purchased one of the most efficient, cost effective pond and lake-bottom diffused aeration systems on the market today. Your genAIR™ aeration system has been designed and manufactured with the highest quality components and materials available to deliver years of trouble free performance. Each genAIR™ pond and lake-bottom aeration system is proudly MADE IN THE USA!

**WHAT AERATION CAN DO FOR YOU:**

- Complete water column “entraining” and de-stratification
- Increase dissolved oxygen levels throughout the ecosystem
- Increases naturally occurring and added biological activity
- Releases harmful gases such as hydrogen sulfide and ammonia
- Reduces aquatic weed growth when used with anaerobic bacteria
- Eliminates or reduces potential for summer or winter fish kills
- Reduces or eliminates foul odors
- Keeps ice free areas open above diffusers in northern climates

**SAFETY CONSIDERATIONS:** Please read this section very carefully before operation your genAIR™ pond aeration system. Failure to follow these recommendations may result in personal injury or even death to you or another. It is your responsibility to read this section. Additionally, failure to follow certain procedures and safety considerations may void the system warranty agreement.



**WARNING!** This product creates a drowning danger during periods of time when ice may form on a lake or pond. It is the consumer’s responsibility to mark areas around the pond to **WARN OTHERS** of potential hazards due to thin ice. Operating this system in freezing conditions on an ice covered pond will cause large open water areas above, in proximity to and even long distances away from the diffuser location if a current is present.

## **WARNINGS!-cont**

- Always connect the compressor to a properly grounded outlet of the correct voltage. If you are in doubt, have a qualified electrician inspect the site
- Always locate the compressor in an area ABOVE THE HIGH WATER MARK and ABOVE THE LEVEL OF THE DIFFUSER so water does not back-up into the compressor
- Never use an extension cord between the compressor cord and an electrical outlet
- Do NOT allow anything to rest on any power cord
- Do NOT place the compressor in an area where people may be stepping on the power cord
- Never attempt to work on the compressor if the unit is plugged into a power supply
- Never allow children or pets to play in proximity to these units
- Never operate the system if unusual noises or odors are detected
- Never perform any maintenance while the unit is plugged in
- Always wear a Coast Guard approved life vest when working in or near water and follow all safety guidelines

**PREVENT A FISH KILL:** Upon receiving your new genAIR™ aeration system it is very important to follow some basic directions in order to prevent a fish kill in your pond or lake. Once your genAIR™ aeration system is installed we recommend that you gradually, over a period of 2 to 3 weeks, increase operating time to allow the pond time to adjust to the new system. (This is more important in older ponds rather than “new” ponds”)

- Once installed turn the system on initially for only 30 minutes on the first day then turn it off for the remainder of the day
- Restart the system on day 2 and operate for approximately 1 hour
- Again, turn the system off for the remainder of the day
- After day 2, repeat this cycle each day by doubling the operating time from the day before until you can operate your system 24/7/365. This will take about a week or so.

**TYPICAL ECOSYSTEM CHANGES:** Once your system is installed you may see some dramatic changes. It is not unusual for your pond or lake to take on some temporary discoloration. This will be a result of adding motion and current to your pond or lake thus disrupting some of the lighter particulates on the pond/lake bottom and suspending them into the water column. These particulates often settle out with a week or two. Also, you may see “Mat Algae” come to the surface as it detaches from the bottom of your pond. This may continue for some time but it is all part of the aquatic “rehab” your pond or lake must undergo. Adding aquatic dyes and anaerobic bacteria can dramatically shorten the period of time your pond or lake will take to become a healthy thriving aquatic ecosystem. See our “POND PATROL” products at our website [www.aerationsupply.com](http://www.aerationsupply.com)

**INSTALLING THE genAIR™ AERATION SYSTEM:** Follow these simple steps to correctly set-up your new genAIR™ aeration system.

- **Step 1:** Locate an area near a power source to place your compressor. The compressor is inaudible at a distance greater than approximately 5'. The area you choose should be flat and have good air-flow around the compressor.
- **Step 2:** Connect the “rubber-boot” that came with your system to the compressor. This “boot” may either be straight or “L” shaped depending on the system. You may want to use a very small amount of butter to put on the discharge of the compressor to help the boot slide over the compressor outlet easily.
- **Step 3:** Next connect one end of the aquaLINE self weighted tubing that came with your system to either the plastic or brass barbed fitting. Again use soap if you need. Be sure you have the clamp over the aquaLINE before sliding over the barbed fitting. If you purchased the XL model your “rubber-boot” will have some PVC valves attached to it. Be sure both valves are in the full-open position.
- **Step 4:** Now, connect the other end of your aquaLINE weighted tubing over the plastic barbed fitting on your diffuser. Your diffuser may either be a weighted type or non weighted type. IF you purchased a system with the self sinking ballast basin, follow the directions for that diffuser type.
- **Step 5:** Next, you can place your diffuser in the pond. The self weighted diffuser will sink by itself. The non weighted diffuser will require you to attach ropes with weights to both of the pre-drilled holes in order to keep the diffuser on the bottom of your pond.
- **Step 6:** Be absolutely sure that the compressor is at a higher elevation than the water level so water does not back-up into the compressor. Plug the unit into the correct voltage receptacle. The two photos to the right show you what typical operation should look like.



**genAIR™ POND AERATOR PERFORMANCE DATA:**

Air Flow @ Depth Ft.		0'	2'	4'	6'	8'	10'	12'
genAIR-System		Number In Red Indicates Max Diffuser Operating Depth						
genAIR-284	CFM [Cubic Feet / Minute]	2.00	1.85	1.60	1.30	1.00	0.70	0.40
genAIR-384	CFM [Cubic Feet / Minute]	3.10	2.90	2.50	2.00	1.50	1.10	0.60
genAIR-384-XL	CFM [Cubic Feet / Minute]	3.10	1.45	1.25	1.00	0.75		
genAIR-484	CFM [Cubic Feet / Minute]	3.70	3.30	3.00	2.50	2.20	1.60	1.00
genAIR-484-XL	CFM [Cubic Feet / Minute]	3.70	1.65	1.50	1.25	1.10	0.80	
genAIR-584	CFM [Cubic Feet / Minute]	5.20	4.90	4.20	3.70	2.90	2.30	1.80
genAIR-584-XL	CFM [Cubic Feet / Minute]	5.20	2.45	2.10	1.85	1.45	1.15	0.90
genAIR-884-XL	CFM [Cubic Feet / Minute]	8.50	8.00	6.90	5.80	4.70	3.50	2.40

**genAIR™ POND AERATOR OPERATING DATA:**

	Volts	Amps
genAIR-284	115v	0.8
genAIR-384	115v	1.3
genAIR-384-XL	115v	1.3
genAIR-484	115v	1.6
genAIR-484-XL	115v	1.6
genAIR-584	115v	1.8
genAIR-584-XL	115v	1.8
genAIR-884-XL	115v	2.1

**Maintenance Notes:** (Use this space to keep maintenance notes on your air compressor)

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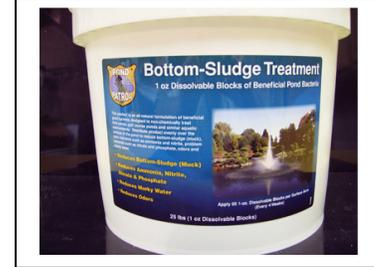


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Our special blend of lake and pond aerobic bacteria is a desirable product for pond and lake restoration for two reasons. (1) Our Pond Patrol bacteria brings nuisance algae under control naturally and effectively in your pond or lake.(2) Our Pond Patrol pond bacteria consumes the "muck" on the bottom of your pond or lake. This special blend of pond and lake aerobic bacteria removes excess nutrients, including nitrates and phosphates which cause problem algae blooms, excess weed growth, Sludge and muck build-up as well as foul odors. The Pond Patrol strain of bacteria for pond and lake restoration is not an algacide and does not actually "kill" algae or aquatic weeds. Rather, this lake and pond bacteria consumes the nutrients in your pond or lake that algae and aquatic weeds naturally thrive on. By doing so, we are essentially able to "starve" the algae and aquatic weeds in your pond or lake thereby restoring your pond or lake to its pristine natural beauty.



We are often asked how lake and pond bacteria helps reduce aquatic weed growth in ponds, lakes and water gardens and restore your pond or lake ecosystem. The answer is a little complicated but this is the basic idea. All ponds and lakes have naturally occurring living organisms called “bacteria”. These bacteria consume mass quantities of “nutrients” also found in every pond. The word “nutrients” is a generic term that actually is a combination of other compounds such as phosphates and nitrates, also found in every pond. These nutrients are introduced into the body of water by dead or decaying leaf matter, fish waste, fertilizers and similar sources. We know that all plants, including aquatic weeds need nutrients to survive and multiply. And so if we can reduce the amount of nutrients entering the pond we can reduce the aquatic weed growth and algae blooms at the same time. But it is often difficult, if not impossible to stop all nutrients from entering a pond or lake, and so the best way to control the nutrients is to assist those bacteria in consuming the nutrients for us. In other words, the more nutrients consumed by the bacteria, the fewer nutrients that are available for the aquatic weeds and algae in your pond. This is done in a two-step process. First, the more aerobic bacteria you have in your pond the greater the nutrient consumption is going to be. Therefore, it is very important to continually add more bacteria to the body of water through the course of a season, as the life span of most bacteria strains is relatively short. Second, the bacteria in your pond need large quantities of oxygen, hence the term aerobic, which is the energy they need to consume the nutrients. It is for this reason that we strongly encourage our customers to have BOTH aeration and aerobic pond bacteria, for a healthy pond or lake environment.

**Remember:** The Pond Patrol brand of aerobic bacteria are environmentally friendly are non-pathogenic and ARE NOT HARMFUL to people, fish of all species including Koi, domestic animals, wildlife or waterfowl. You may select from either our 25 pound pail of powder bacteria for nutrients and algae control in your lake or pond, or our 25 pound pail with 1oz pellets inside designed for removal of sludge and muck on the bottom of your pond or lake.



All plants need sunlight to grow, by reducing the amount of light penetration into the water; the dyes effectively reduce the growth of aquatic weeds. Early application of Pond Patrol Pond Dye is critical however; dyes should be applied as early as possible in the growing season, typically right after ice out or before growth of aquatic plants begin. To apply, simply pour Pond Patrol liquid pond dye into any pond and let it work. The dye will completely mix throughout the pond within a short time. It’s important to note that pond dyes will not necessarily stop all aquatic weed growth, but used consistently, pond dyes have proven that they can greatly reduce it!