

INSTRUCTION MANUAL



LINEAR AIR PUMPS



EcoPlus Pro™
100
#728378

EcoPlus Pro™
60
#728376

EcoPlus Pro™
40
#728374

EcoPlus Pro™
20
#728372



Thank you for purchasing an EcoPlus Pro™ Series Air Pump!

To get the most out of your air pump and enjoy safe, reliable operation,
please thoroughly read and understand this Instruction Manual.

PLEASE SAVE THESE INSTRUCTIONS

Safety Information

Caution: To reduce the risk of electric shock, pull plug before servicing this pump

Warning: Risk of electrical shock, this pump has not been investigated for use in swimming pool areas. This pump is supplied with a grounded plug. To reduce the risk of electric shock: connect only to properly grounded receptacles which is serviced by a ground fault interrupter (GFI).

1. Do not place pump where it might fall into water
2. Do not place pump in direct sunshine
3. Do not place pump near flammable or other dangerous materials or objects
4. Use only to pump air
5. Place horizontally and make sure pump is about height of the water surface to prevent water siphoning.

Important Safety Instructions:

Warning – To guard against injury, basic safety precautions should be observed, including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations:

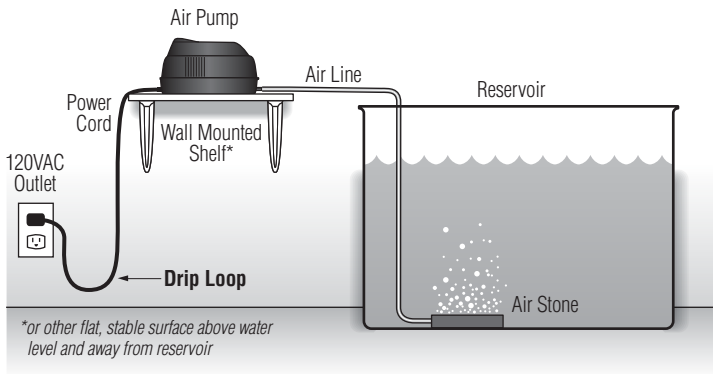
1. If the appliance falls into the water, don't reach for it! First unplug it and then retrieve it. If electrical components of the appliance get wet, unplug the appliance immediately.
2. Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
3. Do not operate an appliance plug or receptacle getting wet, position reservoir or aquarium to one side of the wall-mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip loop" should be arranged by the user for each cord connecting a reservoir or aquarium appliance to a receptacle. The drip loop is that part of the cord below the level of the receptacle, or the connector if an extension cord is used, to prevent water traveling along the cord and coming in contact with the receptacle. If the plug or receptacle does get wet, DON'T unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the appliance. Then, unplug and examine for presence of water in the receptacle.
4. Close supervision is necessary when any appliance is used by or near children.
5. To avoid injury, do not contact moving parts.
6. Always unplug an appliance from an outlet when not in use, before putting on or taking off parts,

Safety Information *(continued)*

and before cleaning. Never yank cord to pull plug from outlet. Grasp the plug and pull to disconnect.

7. Do not use an appliance for other than intended use. The use of attachments not recommended or sold by the appliance manufacture may cause an unsafe condition.
8. Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.
9. If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less amperes or watts than the appliance rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.

CORRECT CONFIGURATION OF A “DRIP LOOP”



Features & Specifications

EcoPlus Pro™ Series Linear Air Pumps are an ideal solution for aeration in hydroponic systems. Paired with single or multiple air stones (or other air output options), they can deliver many years of reliable service in your system. Some of the many product features include:

- High quality, professional construction using the finest materials.
- Ideal for use in hydroponic and indoor gardening applications.
- Dual oscillating pump chambers with special diaphragms move large volumes of air at strong and stable pressures.
- High quality aluminum alloy components for strength and durability.
- Double damping noise absorption system for quiet operation.
- Highly water resistant housing helps keep moisture out.
- Unique structure provides excellent heat dissipation.
- Non-oil lubricated pump design adds no odors or chemicals to air output.

SPECIFICATIONS

MODEL	EcoPlus Pro™ 20	EcoPlus Pro™ 40	EcoPlus Pro™ 60	EcoPlus Pro™ 100
Power	17 Watts	35 Watts	50 Watts	100 Watts
Volts/Frequency	120 V / 60 Hz	120 V / 60 Hz	120 V / 60 Hz	120 V / 60 Hz
Current	0.32 Amp	0.84 Amp	1.5 Amp	1.5 Amp
Max. Air Pressure	0.028 MPa	0.030 MPa	0.037 MPa	0.042 MPa
Air Output (CFM)	.78 (22L)	1.77 (50L)	2.47 (70L)	4.94 (140L)
Max. Water Depth	7 feet	9 feet	11 feet	13 feet
Air Outlet Size*	3/8"	5/8"	5/8"	5/8"

**With Metal Outlet Adapter installed.*

Installation & Operation

WARNING – THIS AIR PUMP IS NOT SUBMERSIBLE!

- **DO NOT** install this pump in a location where there is even a chance it could fall or be pulled into water.
- **DO NOT** install this pump on a floor or anywhere below water level in the reservoir. Water could backflow down the air line and into the pump.

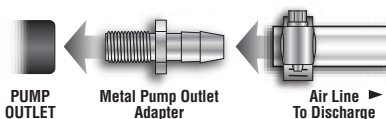
STEP 1 – Connect Air Outlet Manifold

Connect Multiple Outlet Air Manifold to pump as shown on diagram at right, using hardware provided.

You also have the option of connecting a single larger air line directly to the pump outlet using only the metal pump outlet adapter as shown in the diagram below. Save the manifold, tubing and clamps for later use.

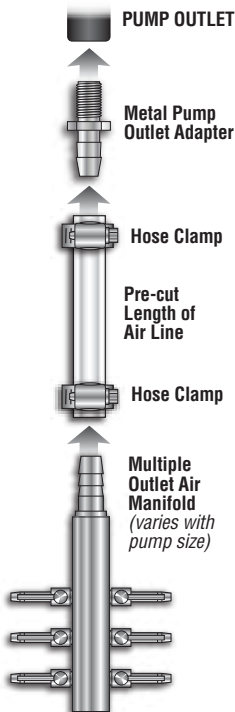
NOT USING THE MULTIPLE-OUTLET MANIFOLD?

Here's how to hook up a single air line.



STEP 2 – Connect Air Discharges

Connect one or more air stones or other submersible air discharge units to air outlet(s) on outlet manifold using appropriate lengths of 3/16" tubing (see diagram next page). Place air discharges no deeper into a reservoir than shown on "SPECIFICATIONS" chart for your model or the pump may overheat. Before plugging the air pump into an electrical outlet, make sure air flow is not impeded at any point by kinks, clogs or other obstructions in tubing or air discharge circuits. Make

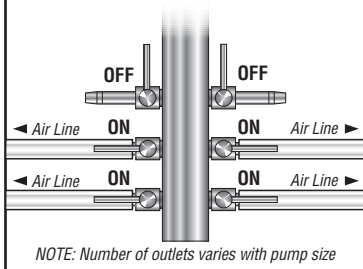


Installation & Operation *(continued)*

sure all air lines are secured in place so no kinks can develop that could block air flow. The pump must be able to discharge sufficient air at all times while in operation or it will overheat and sustain damage. Make sure pump is installed above the water level in the reservoir to avoid any backflow of water into the pump and a "Drip Loop" (see Safety Information) is set up on the power cord (see diagram below). It must also be installed on a flat, clean, dry and stable surface where there is no chance that it could be accidentally knocked or pulled into water. DO NOT operate or store pump in a dirty/dusty location or at temperatures below freezing or above 104°F (40°C). Do not use outdoors.

HOOKING UP MULTIPLE AIR LINES TO THE OUTLET MANIFOLD

Connect multiple air lines to outlet manifold using 3/16" tubing. Use shut-off valves to turn air feed on and off (unused outlets should be in the OFF position).



Cleaning & Maintenance

WARNING: Unplug or switch off all appliances connected to the reservoir before carrying out cleaning and maintenance.

Check air inlet frequently to make sure dust or debris has not accumulated and is restricting air flow into the pump. To clean the intake filter, remove inlet cover, gasket and filter located in back of pump by power cord on models 20 and 40 (secured with a single Phillips screw) and under top cover on models 60 (pry off/snap-on cover) and 100 (thumbwheel secured cover). Rinse thoroughly under running lukewarm water. If filter is heavily soiled, you can use a mild detergent to wash and thoroughly rinse. If filter is torn or has any holes it must be replaced. Make sure gasket, filter and inlet cover are completely dry before reinstalling. Unit housing can be kept clean with a soft, dry cloth. Check system frequently for any kinks, blockages, clogged air stone(s) or other obstructions that could restrict air flow and cause the pump to overheat.

Replacement Parts

EcoPlus Pro™ 20 #728372		EcoPlus Pro™ 40 #728374	
Outlet Adapter Fitting 3/8"	#728401	Outlet Adapter Fitting 5/8"	#728402
Air Filter	#728403	Air Filter	#728404
Diaphragm Replacement Kit	#728408	Diaphragm Replacement Kit	#728409
Air Chamber Replacement Kit	#728412	Air Chamber Replacement Kit	#728413
EcoPlus Pro™ 60 #728376		EcoPlus Pro™ 100 #728378	
Outlet Adapter Fitting 5/8"	#728402	Outlet Adapter Fitting 5/8"	#728402
Air Filter	#728406	Air Filter	#728407
Diaphragm Replacement Kit	#728409	Diaphragm Replacement Kit	#728411
Air Chamber Replacement Kit	#728413	Air Chamber Replacement Kit	#728414

Limited Warranty

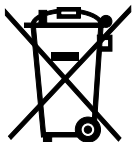
One-Year Limited Warranty: EcoPlus Pro™ Series Linear Air Pumps are warranted under normal use for one year after purchase date. Any part determined defective in material or workmanship can be returned to an authorized retail location. It will be repaired or replaced at the option of EcoPlus®.

Limitation of Liability: To the extent allowable under applicable law, EcoPlus's liability for consequential and incidental damages is expressly disclaimed. EcoPlus's liability in all events is limited to and shall not exceed the purchase price paid.

Warranty Disclaimer: EcoPlus® provides product information in this literature for the sole purpose of identification, and does state or imply that the products are merchantable or fit for a particular purpose, or that the products will conform to the descriptions.

Product Suitability: Many jurisdictions have codes and regulations governing sales, construction, installation and/or use of products for certain purposes, which may vary from those in neighboring areas. While EcoPlus® attempts to assure that its products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

PLEASE DISPOSE OF RESPONSIBLY



DO NOT dispose of this product in the trash, on the landscape or into any unsorted waste stream! It may contain hazardous substances that can leach into groundwater and find their way into the food chain. This unit contains **VALUABLE RESOURCES** that can be recycled and re-used. Services available may include:

- A. Municipal Collection Systems:** Most cities and towns have recycling programs where electronic waste can be turned in for recycling free of charge.
- B. Retailer Return:** When buying a new product, many retailers will take back an old product free of charge.
- C. Scrap Dealers:** Many scrap dealers will buy old electronics or take them free of charge.

EcoPlus® also offers a wide variety of air and water management products including:

- Air Manifolds
- Air Stones
- Air Diffusers
- EcoAir SUPREME Air Pumps
- Commercial Air Pumps
- Water Pumps
- Water Chillers



www.ecoplususa.com

Exclusively distributed by:



Sunlight Supply, Inc.

SunlightSupply.com