



**BigFrog Eco-Drive  
SUBMERSIBLE WATER PUMP**

**OWNER'S MANUAL**



**ATTENTION: NEVER OPERATE THIS PUMP OUT OF WATER**

This pump requires to be submerged in fresh-water only during operation.



# PLEASE READ THIS MANUAL

## SAVE FOR FUTURE REFERENCE

**THE INSTRUCTIONS AND WARNINGS HEREIN PRESUME EXISTING FAMILIARITY WITH THE DESIGN AND FUNCTION OF THESE AND SIMILAR PRODUCTS AND THEIR COMPONENTS.**

The model(s) represented in this manual may have additions and/or modifications made at any time. Pictures represent a standard unit series and an actual unit may vary slightly. This manual is based on the latest products' information available at the time of creation or last revision. It is believed to be generally accurate and reliable. Please consult our customer service representatives here at Anjon Manufacturing if detailed information is desired, or whenever there is a question about a given unit's configuration or performance specifications at **1-800-553-5605**.

## BIGFROG ECO-DRIVE SERIES SUBMERSIBLE WATER PUMP MODEL CHART

BigFrog Eco-Drive Series Model	Rated Voltage / Hertz	Rated Watts	Pump Output Diameter	Fitting Output Diameter	Recommended Hose Diameter	Max Head Height	Cord Length
<b>BFED-3000</b>	120V,60Hz	300	2"	2"	2"	20'	30'
<b>BFED-4200</b>	120V,60Hz	460	2"	2"	2"	29'	30'
<b>BFED-5500</b>	120V,60Hz	540	2"	2"	2"	32'	30'
<b>BFED-6500</b>	120V,60Hz	620	2"	2"	3"	32'	30'
<b>BFED-15000</b>	120V,60Hz	624	4"	3"	3"	15'	30' / 100' / 200'

# Introduction

**Congratulations** on your purchase of an Anjon Manufacturing's **BigFrog Eco-Drive Series**. Thank you for being a valued customer! We are grateful for the opportunity to provide you with superior products, such as a BigFrog Eco-Drive Series Water Pump that is manufactured to the highest standards using quality materials.



## Safety First

It is recommended that you thoroughly read and understand this manual prior to first startup and before you attempt to service the model to which **BigFrog Eco-Drive Series Submersible Water Pump** this applies. If you have any questions, we'll be happy to help. Please call us, at **1-800-553-5605**.

### THE FOLLOWING CAUTIONS AND WARNINGS ARE FOR YOUR OWN SAFETY!



**Attention:** This pump is not intended for use by persons, (including children) with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the pump by a person responsible for their safety.

- ⚠ This pump is designed to be submerged during operation for proper function and cooling. **Never** operate this pump without it being fully submerged in **fresh-water only**.
- ⚠ **Never** pick up pump by, remove, or put stress on the cord.
- ⚠ **Never** operate this pump connected to any voltage other than that shown on the pump.
- ⚠ **Never** place your hand, or any object, in or near the inlet opening while this equipment is operating. If pump inlet is clogged, **always** turn off the power supply first and wait until motor is completely stopped before removing any clogged material.
- ⚠ **Never** operate this pump in a swimming pool or in a marina area.
- ⚠ **Never** leave children unattended around this pump while operating.
- ⚠ The pump has a built-in thermal overload trip which prevents the pump from overheating. **Never** restart the pump before letting the pump cool down.
- ⚠ **Always** have this pump connected to properly grounded GFCI electrical outlet.
- ⚠ **Always** disconnect from electrical supply before handling pump.



### WARNING



### ELECTRICAL SHOCK HAZARD

**This product must be properly grounded!**

Do not modify the plug provided. Only plug into a GFCI electrical outlet. If you do not have a GFCI electrical outlet, we recommend you have one properly installed by a qualified electrician!

If the cord should ever need a repair or replacement, please contact Anjon Manufacturing's Customer Service Representatives for further instructions on how to have your product serviced. **NEVER** modify the cord or plug on your product!

Be sure that your source of power is correctly wired and in proper operating condition. **Never** hard-wire or permanently connect this product to a power source!

Failure to follow these instructions can result in fire, a serious injury from electrical shock, or even death!



**Attention:** Do not operate this pump under any condition other than those for which it is specified. Failure to observe these precautions can result in serious injury and will void the warranty!

# Remember, Correct Installation Is Your Responsibility!

Make sure you have the proper installation conditions. The **BigFrog Eco-Drive Series Submersible Water Pump** needs to be protected from any objects/debris during operation. Before beginning assembly or operation of product, make sure all parts are present. If any part of your **BigFrog Eco-Drive Series Submersible Water Pump** is *missing* or *damaged*, **do not** attempt to assemble, install, or operate.

## Plumbing

For maximum water flow, it is recommended that the largest tubing size for your pump is used during your installation. Selecting the correct tubing for your project is crucial for the durability of the installation.

We highly recommend using our **Freeze Flex** tubing!

**Freeze Flex** is ideal for ponds and waterfalls requiring quality high-strength flexible tubing that resists kinking and collapsing.

Refer to the **BigFrog Eco-Drive Series Submersible Water Pump Model Chart** for proper hose size recommendations depending on your model.



This pipe is ideal for ponds and waterfalls requiring high-strength flexible hose that resists kinking, collapsing, and withstands freezing without compromising structural integrity or strength of the Freeze Flex hose.



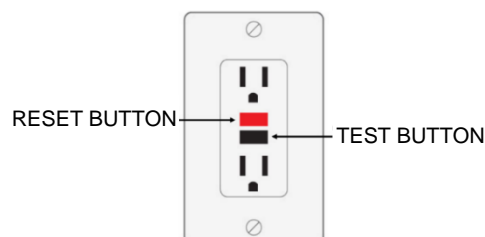
## Electrical Requirements

This pump is rated at 120 Volts 60Hz. Only use a power supply rating voltage at 120 volts and 60Hz, which complies with that listed on label on the **BigFrog Eco-Drive Series Submersible Water Pump**. The cord must be plugged into a **GFCI** outlet that is properly installed and grounded in accordance with all local codes and ordinances.

A hard-wired installation is **not** recommended and **will** result in the warranty being voided!

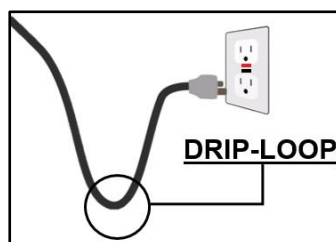
It is your responsibility to contact a qualified electrician and assure that the electrical installation is adequate and in conformance with all national and local codes and ordinances. Make sure this pump is securely installed before any operation.

### EXAMPLE OF A GFCI OUTLET (GROUNDED FAULT CIRCUIT INTERRUPT)



## Operation

- For safety as well as proper performance and lifespan, we recommend BigFrog Eco-Drive pumps be installed inside of a skimmer box, or similar filtration unit. We highly recommend **not** to place, nor operate, your **BigFrog Eco-Drive Series Submersible Water Pump** directly into your pond. The pump should not be susceptible to damage from any loose debris, mud, or rocks in the pond to prevent the filter from becoming clogged or cause serious damage to your pump, or any fish you may have in your pond.
- Submerge the pump completely in the water to make the pump body fill with water.
- The water temperature should not exceed 95°F (35°C) and **do not** let the pump freeze in the wintertime.
- The electrical connection should be secured in a water-proof place and should be at least 6 feet (2 meters) away from the water feature. Ensure that the electrical cord loops below the electrical outlet to form a "**Drip Loop**". This will prevent water from running down the cord into the electrical outlet.
- Never** operate this pump on an extension cord; doing so causes a drop in volts and will result in a voided warranty.
- A minimum water level of approximately 6 inches is required to prevent the pump from taking in air.
- The pump can be switched on by simply plugging it in and switched off by un-plugging it.
- A routine maintenance schedule is critical for proper operation of your pump and will give it a longer operational-life. For proper cleaning, refer to the maintenance section of this manual.
- If you have any issues with your pump, refer to the trouble shooting section of this manual.



- If you have any other questions about your **BigFrog Eco-Drive Series Submersible Water Pump**, please call us at **1-800-553-5605**. We will help!

## Troubleshooting

If your pump fails to start, or slows down significantly under load, regardless of water level, disconnect from power supply and check the following conditions:

- Check that the supply voltage is correct.
- Verify rotor/impeller can turn freely in the proper direction.
- Check plug and cord for damage.
- Check to see if any dirt entered the output assembly. If so, cleaning instructions are explained within the maintenance section.
- Check to see if any of your hoses or jets have become clogged. Clean them if necessary.
- Ensure the pump has sufficiently cooled down if overheating has occurred.



**Attention:** Repeating cycles of stopping and restarting will damage this pump. Do not continue operation at low water level or while the inlet is clogged with debris. It may cause noise, heavy vibration, and pump damage.

## Maintenance

It is your responsibility to upkeep on the maintenance on your **BigFrog Eco-Drive Series Submersible Water Pump**. You must conduct regular routine inspections and make necessary repairs to your pump in order to maintain proper operations.

If the pump is housed in a skimmer make sure the screens and filters in the skimmer are kept clean and free of debris. This will allow water to flow unrestricted into the pump chamber.

If the pump is operated directly in the water feature, make sure the pump intake screen is kept clean and free of debris.

Every water feature is different; learn how frequently your pump needs to be cleaned to allow unrestricted water flow.

Pumps that become damaged due to restricted water flow (running "dry") are not covered under the terms of the warranty.

**Always** follow the safety instructions and make sure that the pump is disconnected from the power supply before attempting to perform maintenance on your pump.

## Disassembling the Pump

Follow these step by step instructions if the pump requires more intensive cleaning.

- Unplug the pump and remove plumbing connections.
- Loosen and remove the 3 outer screws that mount the intake screen to the output housing.
- Loosen the 4 nuts around the pump house cover. Rotate the pump housing counter clockwise to remove the output.
- Loosen and remove the next 4 screws and remove the output assembly.
- Carefully remove the impeller and rotor from the motor housing.
- Clean all parts using water and a soft sponge.

## Assembling the Pump

- Using caution, place the impeller and rotor back into the motor housing.
- Make sure the rotor is assembled correctly and will turn freely.
- Ensure the O-ring is in the correct position on the output assembly.
- Rotate the pump housing in a clockwise direction on the pump body.
- Tighten the 4 screws uniformly.
- Place the intake cover back on to the output assembly and tighten the 3 screws..



**Attention:** We recommend that you remove the pump from the water feature and soak it for up to **36 hours** in a solution of **CLR (Calcium Lime Rust)** and water at least once a year, before pond winterization and storing your pump. Rinse thoroughly before re-installing the pump in the water feature.



# **SEE OUR FULL SELECTION**

[www.anjonmfg.com](http://www.anjonmfg.com)

## **Complete Pond & Pondless Kits**

Largest online selection of complete, everything-you-need. Choose from our standard kits, semi-custom or full custom potions.



## **Pond Liner**

Anjon Manufacturing offers the widest range of pond liner materials and sizes. Your trusted source for EPDM, PVC & HDPE liners.



## **Submersible Pond Pumps**

Complete range of energy efficient small statuary and fountain pumps to high flow 12,500+ GPH large fish pond and waterfall pumps.



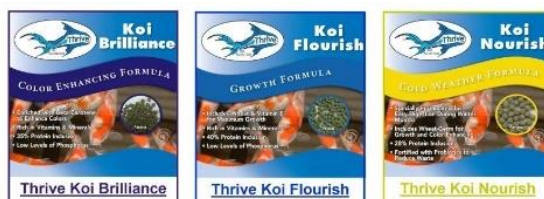
## Water Treatments

Create healthy environments for your water garden or prized koi fish.



## Fish Food

Select from growth, color enhancing, or cold weather formulations.



## Filtering Waterfalls, Skimmers & Pressure Filters

Establish and maintain pristine pond water.



## Pond & Landscape Lighting

Beautiful finishing touches that show off your pond & landscape.



## Lighted Spillways & Kits

Build striking formal falls with lighted acrylic & stainless-steel spillways.



8 DIFFERENT COLOR OPTIONS



## Seasonal Care & Maintenance

Everything you need to prepare & maintain your pond all year long.



# **LIMITED WARRANTY**

Products manufactured by ANJON are warranted to the original user only to be free of defects in material and workmanship for a period of 24 months from the date of purchase, but not more than 30 months from the date of manufacture. ANJON liability under this warranty shall be limited to repairing or replacing, at ANJON's discretion, without charge, F.O.B. ANJON will not be liable for any cost of removal, installation, transportation, or any other charges which may arise in connection with a warranty claim.

Products which are sold but not manufactured by ANJON are subject to the warranty provided by the manufacturer of said product(s) and not by ANJON's warranty. ANJON will not be liable for damage or wear to products caused by abnormal operating conditions, accident, abuse, misuse, unauthorized alteration or repair, or if the product was not installed in accordance with ANJON's printed installation and operating instructions.

To obtain service under this warranty, the defective product must be returned to the distributor or dealer of ANJON's products from which it was purchased together with proof of purchase and installation date, failure date, and supporting installation data. Unless otherwise provided, the distributor or dealer will contact ANJON or an authorized service station for instructions. Any defective product to be returned to ANJON or a service station must be sent freight prepaid: documentation supporting the warranty claim and/or a Return Merchandise Authorization (RMA) must be included if so instructed. In the absence of suitable proof of purchase date, the effective date of this warranty will be based upon the date of manufacture.

Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced. No requests for service under this warranty will be accepted if received more than 30 days after the term of the warranty. Correction of defects, in the manner and for the duration of the warranty described in this warranty, shall constitute complete fulfillment of all liabilities and responsibilities of ANJON to the user with respect to the product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, and strict liability or otherwise. Except for the obligations specifically set forth in this warranty, in no event shall ANJON be liable for direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory and whether advised of the possibility of such damages.

ANJON reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for units sold and/or shipped prior to such a change or improvement.

THERE ARE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH EXTEND BEYOND THOSE WARRANTIES DESCRIBED OR REFERRED TO ABOVE EXCEPT AS EXPRESSLY HEREIN PROVIDED THE GOODS ARE SOLD "AS IS", THE ENTIRE RISK AS TO QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, AND PERFORMANCE OF THE GOODS IS WITH THE BUYER, AND SHOULD THE GOODS PROVE DEFECTIVE FOLLOWING THEIR PURCHASE, THE BUYER AND NOT THE MANUFACTURER, DISTRIBUTOR, OR RETAILER ASSUMES THE ENTIRE RISK OF ALL NECESSARY SERVICING AND REPAIR.

Some jurisdictions do not allow the exclusions or limitation of incidental or consequential damages and some jurisdictions do not allow limitations on how long implied warranties may last or require you to pay certain expenses as set forth above. Therefore, the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from jurisdictions to jurisdiction.



Anjon Manufacturing  
1000 Liberty Industrial Drive  
O'Fallon, MO 63366  
636-300-8165  
[www.anjonmfg.com](http://www.anjonmfg.com)

