



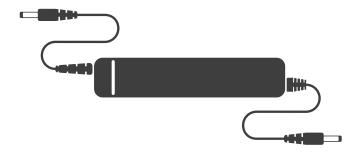
ECOTECH MARINE SUPPORT

EcoTech Marine Support is another tool for users to ask questions, troubleshoot and learn about EcoTech products. For additional information about your Battery Backup Booster, please visit us at support.ecotechmarine.com







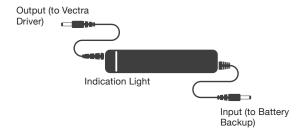


Battery Backup Booster FOR ECOTECH MARINE VECTRA PUMPS

Battery Backup Booster

▲ Only compatible with Vectra Pumps, DO NOT attempt to use with other products. (This is a supplemental guide to be used with the Battery Backup instructions.)

The Battery Backup Booster accessory allows the EcoTech Battery Backup to be used with the Vectra series return pumps.



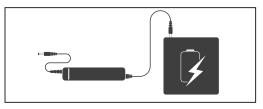
Backup Operation Time

When using the EcoTech battery backup, Vectra run time is dependent on a number of factors including, settings, head pressure and system dimensions. To maximize operational run time, choose the lowest speed setting and the longest interval time. Important: test your battery backup mode in a controlled setting to ensure that your program settings will perform correctly in your system.

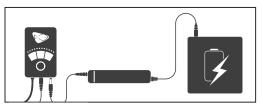
Basic Setup



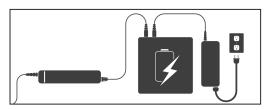
Connect the input of the booster into the battery backup



Connect the output of the booster to the Vectra driver. (Vectra will still need to run off of it's own power supply.)



Plug the Battery Backup into electrical outlet.



Operational Modes

A Only accessible when running on Battery Backup via the Battery Backup Booster. To access the operational modes you must un-plug the wall power from the Vectra driver and only be receiving power from the Battery Backup with Booster.

NOTE: If the Vectra being used was manufactured before April 2016 to be able to operate with the Battery Backup Booster the firmware must be upgraded through ESL or by contacting EcoTech Marine customer service.

Flow Adjustment

The default speed of the Vectra when operating on the Battery Backup Booster is just above the calibrated minimum flow of the pump. To adjust the default flow manually follow the steps below. Setting the pump at a lower speed will increase the run time of the battery charge.

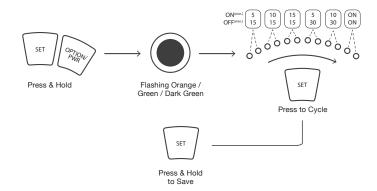


- Press+hold the SET button. This will open the Flow Adjustment Mode causing the control dial to cycle the colors Green / Dark Green / White Pulse.
- Use the dial to set the default flow rate of the Vectra.
- Once the desired flow is reached press hold SET to save

NOTE: If you attempt to use the Vectra without the Battery Backup Booster the motor will still run, but it will not receive enough power to create any beneficial or usable flow.

Auto On/Off

Auto On/Off will let you choose between six different intervals of time on and time off (in minutes), The six choices are illustrated in the steps below. 5min on 30min off will give you the longest run time for the battery charge where as ON/ON would give you the shortest as the pump would be constantly running. To configure follow the steps below.



- Press+hold the SET and OPTION buttons, this will open the Auto On/Off mode causing the control dial to cycle the colors Green / Dark Green / White Pulse.
- Select the (on off) timer configuration by tapping the SET button to cycle through the
 different settings which correspond to the illustration above. (Each individual setting
 is indicated by six sets of two LEDs on the indicator bar.
- When you have chosen the appropriate setting press+hold SET to save.

Warnings and Warranty

EcoTech Marine warrants to the original purchaser only that the Battery Backup Booster will be free from defects in material and workmanship under normal use for a period of (1) year from the date of original purchase if the product is installed and used properly and consistent with the User Manual. The Battery Backup Booster must not be exposed to water at any time. EcoTech Marine's warranty shall not apply: (i) to any damaged Battery Backup Booster that has been subjected to accident, misuse, neglect, alteration, acts of God, improper handling, improper transport, improper storage, improper use or application, improper installation, improper testing or unauthorized repair, (ii) to any Battery Backup Booster that has been exposed to water or (iii) to cosmetic problems or defects that result from rormal wear and tear under ordinary use, and do not affect the performance or use of the product. EcoTech Marine's warranty applies only to a product that is manufactured by or for EcoTech Marine and identified by the EcoTech Marine trademark, trade name or product identification logo affixed to the product. If you notice a problem with your Battery Backup Booster, do not attempt to repair it yourself. Any attempts at self repair shall void this limited warranty. EcoTech Marine shall not be held liable for damage to any aquarium, aquarium life forms, or other personal objects due to improper use of the device. If the product develops a covered defect within the one-year period, EcoTech Marine will, at its option, either repair or replace the Battery Backup Booster without charge, provided that the Battery Backup Booster is returned during the warranty period.

The Battery Backup Booster can operate at high temperatures. Due to this, caution must be used

The Battery Backup Booster can operate at high temperatures. Due to this, caution must be used when installing this device. EcoTech Marine will not be liable for any damage caused to your aquarium resulting from the use of the Battery Backup Booster.

To obtain warranty service or technical support, please contact EcoTech Marine's customer service department at 610-954-8480. You will receive instructions on how to return the product for repair or replacement. To take advantage of this Limited Warranty you will be required to supply an original point of purchase receipt.

ECOTECH MARINE DISCLAIMS ALL OTHER WARRANTIES WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED, TO THE FULLEST EXTENT ALLOWED BY APPLICABLE LAW. NO IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY SHALL APPLY EXCEPT AS REQUIRED BY APPLICABLE LAW. ECOTECH MARINE DOES NOT AUTHORIZE ANY PERSON OR BUSINESS ENTITY, INCLUDING ITS AUTHORIZED DEALERS, TO CREATE FOR IT ANY OBLIGATIONS, LIABILITIES, OR OTHER WARRANTIES IN CONNECTION WITH THIS PRODUCT. ALL WARRANTIES ARE VOID IF THERE IS DAMAGE TO THE VECTRA CENTRIFUGAL PUMP

ALL WARRANTIES ARE VOID IF THERE IS DAMAGE TO THE VECTRA CENTRIFUGAL PUMP THAT IS NOT A RESULT OF A DEFECT IN THE MATERIALS OR WORKMANSHIP. THE SOLE AND EXCLUSIVE REMEDY FOR ALL CLAIMS THAT YOU MAY HAVE ARISING OUT OF OR IN CONNECTION WITH YOUR USE OF THIS PRODUCT, WHETHER MADE OR SUFFERED BY YOU OR ANOTHER PERSON AND WHETHER BASED IN CONTRACT OR TORT, SHALL BE REPAIR OR REPLACEMENT OF THE PRODUCT. IN NO EVENT WILL ECOTECH MARINE BE LIABLE TO YOU OR ANY OTHER PARTY FOR ANY DIRECT, INDIRECT, GENERAL, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR OTHER DAMAGES ARISING OUT OF THE USE OR INABILITY OF TO USE THE PRODUCT (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF INFORMATION OR ANY OTHER PECUNIARY LOSS, DAMAGE TO YOUR AQUARIUM OR ANY AQUARIUM INHABITANTS), OR FROM ANY BERACH OF WARRANTY, EVEN IF ECOTECH MARINE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO CASE SHALL ECOTECH MARINE'S LIABILITY EXCEED THE AMOUNT YOU PAID FOR THE PRODUCT. IF YOU DISAGREE WITH THESE TERMS AND CONDITIONS DO NOT USE THE BATTERY BACKUP BOOSTER.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions may not apply to you. EcoTech Marine's warranty is governed by the laws of the Commonwealth of Pennsylvania, excluding its conflict of laws principles and excluding the provisions of the United Nations Convention on Contracts for the International Sale of Goods. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

- \bullet Non-immersible parts carry an ingress protection rating of IPX0 and must not be immersed in water.
- Danger: To avoid possible electrical shock, special care should be taken since water is employed in the use
 of aquarium equipment.
- DO NOT attempt repairs yourself; return the appliance to the manufacturer for service or discard.
- DO NOT immerse in water. If the unit falls into the water, DON'T reach for it! First unplug it and then retrieve it. If any electrical components get wet, unplug the appliance immediately.
- Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
- This device is NOT WATERPROOF; water can permanently damage it. This damage IS NOT covered under warranty. Protect these components from splashes, drips, or other contact with water.
- Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or if it is dropped or damaged in any manner. The power cords of this appliance cannot be replaced: If the cords are damaged, the appliance should be discarded. Never cut the cord. DO NOT DROP. The Battery Backup Booster is fragile, and a fall onto a hard surface can result in permanent damage. Damage from dropping IS NOT covered under warranty.
- Position the aquarium stand and tank to one side of a wall-mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip-loop" should be employed for each cord connecting an aquarium appliance to a receptacle. A "drip-loop" is the part of the cord below the level of the receptacle (or the connector if an extension cord), to prevent water from travelling 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.
- Close supervision is necessary when an appliance is used by or near children. Keep out of reach of young children.
- To avoid injury, do not contact moving or hot parts such as heaters, reflectors, lamp bulbs, and the like.
- Always unplug appliance from driver and battery backup when not in use.
- Never yank cord to pull plug from outlet. Grasp the plug and pull to disconnect.
- Do not use appliance for other than intended use. The use of attachments not recommended or sold by the manufacturer may cause an unsafe condition.
- Do not install or store the appliance where it will be exposed to weather or to temperatures below freezing.
- Make sure appliance is securely installed before operating it. Read and observe all the important notices on the appliance.
- The booster can become HOT. Be cautious around these surfaces.

