



MP10wES/MP10ES
VorTech Propeller Pump

Congratulations on your purchase of a VorTech MP10 Propeller Pump!

Please read this entire Quick Start Guide before using your pump

Your MP10

- A. Power Adapter & Power Cord
- B. Velcro strips (x2)
- C. Zip Ties (x4) DrySide
- D. Mounting Tabs (x4)
- E. Foam Guard
- F. Driver
- G. Dry Side
- H. Wet Side
- I. Rubber Spacer



Wave Motion Warning

The generation of waves within the aquarium places additional stress on the aquarium glass and joints. Not all aquariums are designed to withstand this stress, and failure of the glass and/or joints could result. Before generating waves, it is recommended that you consult with your aquarium manufacturer to determine if the tank construction is adequate to withstand the additional stress. You are also encouraged to assure that your aquarium stand or furniture is adequately stable to withstand this stress.

Ecotech Marine DISCLAIMS AND WILL NOT BE LIABLE FOR damage to aquariums or their surroundings, water damage, or any other consequential damages resulting from wave generation. MAKE WAVES AT YOUR OWN RISK.
Please see additional warnings on page 10.

First Steps

Step 1: Choose Pump Location:

- Where the pump output is unobstructed
- High enough above the sand bed so sand is not disturbed
- Sufficiently below the surface so air is not sucked into a vortex

Step 2: Prepare the Aquarium

- Use an aquarium scraper to clean the inside surface of the aquarium and a damp cloth to clean the outside. Use caution when handling an aquarium scraper.
- **The included Rubber Spacer must be used between the Dry Side and the wall for thicknesses of 1/8" (3mm) and 3/16" (5mm). The Rubber Spacer is not needed for thicknesses of 1/4" (6mm) or 3/8" (10mm). Failure to use the Rubber Spacer can damage the pump, which WILL NOT be covered under warranty.**



Watch the video:
ecotech.ch/mp10setup

Step 3: Attach Mounting Tab

- Peel backing off of adhesive
- Place tab 2-3 inches above desired mounting location (Figure A)

Step 4: Place Dry Side on Aquarium

- If the Rubber Spacer is required, place it directly on the wall of the aquarium at the desired mounting location (Figure B)
- Position Dry Side so the cord points straight up in the 12 o'clock position (Figure C)
- Tie cord to Mounting Tab using a Zip Tie. Trim excess end of Zip Tie (Figure D)

Step 5: Attach Wet Side

- Place Wet Side into aquarium and allow ALL air to escape from the propeller housing
- Carefully align the Wet- and Dry- Sides through the glass (Figure E)



A



B



C



D



E

Getting to Know EcoSmart Driver



Beginning Operation

1. Mount the Driver where it will not get wet using the included velcro strips. **The Driver is NOT water proof, and water damage will NOT be covered under warranty.**
2. Plug power adapter into the Driver, and then plug Power Cord into outlet. Driver will turn on and be in Constant Speed Mode by default (green Control Dial).
3. Observe that the Control Dial is illuminated green, indicating that the pump is powered and operational. Note: If the Control Dial is not green, check the Power Cable connections.
4. Align pump

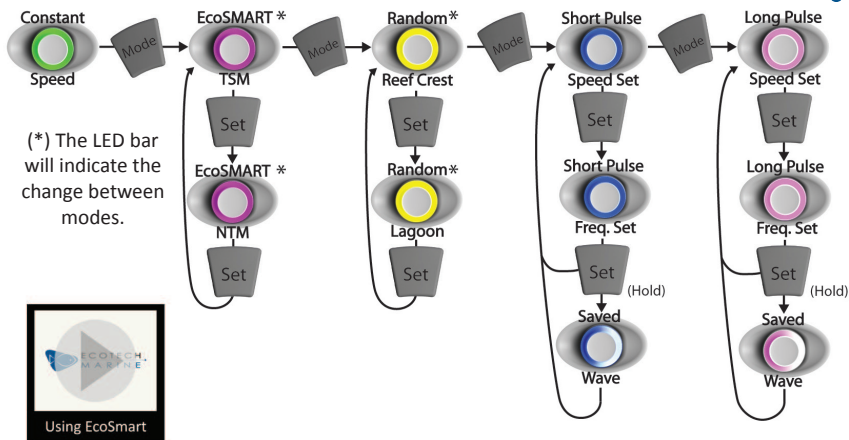


Align Pump

1. Plug the Power Supply into the Driver. If the pump is not already in Constant Speed Mode, press the MODE button until the Control Dial is green.
2. If there is vibration or excessive noise, carefully adjust the propeller housing (Wet Side) by moving it VERY SLIGHTLY left, right, up, or down, until the noise/vibration is eliminated or minimized.
3. Rotate the Control Dial clockwise and set to the maximum speed, indicated by the blue LEDs.
4. Press the MODE button to select the mode of your choice and then turn the Control Dial to the desired flow rate.



EcoSmart Driver Operational Modes



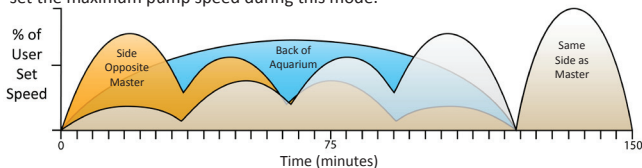
Watch the video:
ecote.ch/ecosmartmodes

EcoSmart Modes

EcoSmart TSM (Tidal Swell Mode)



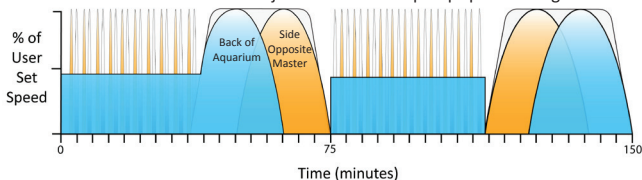
Tidal Swell Mode creates a harmonic balance reminiscent of the changing flow conditions found in nature. Over the course of several hours, the flow pattern will go from very chaotic to calm, followed by a detritus-clearing surge at the very end of the cycle. The flow direction will change direction every cycle. The Control Dial is used to set the maximum pump speed during this mode.



EcoSmart NTM (Nutrient Transport Mode)



Nutrient Transport Mode creates circulation in a two phase program. The first phase uses wave motion to stir up detritus. The second phase follows with a surging motion to move the detritus into the overflow and out of the aquarium. This mode promotes maximum health, nutrient export, and increased growth for sensitive corals such as SPS. The Control Dial is used to adjust the maximum pump speed during this mode.



Master/Slave Relationship

Multiple VorTech Pumps can be setup to run together. The colors in the diagrams above represent the flow pattern and placement of multiple pumps running together in a Master/Slave relationship. Master/Slave relationships are only available with wireless enabled versions of the VorTech pump. For more information and instruction, visit our support community at community.ecotechmarine.com.



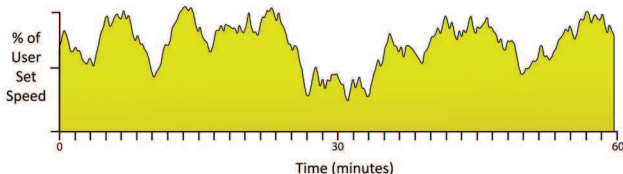
Watch the video:
ecote.ch/masterslave

Random Modes

Reef Crest



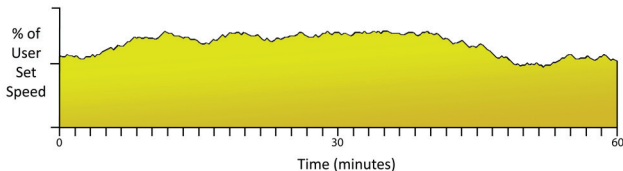
Reef Crest Mode simulates a high energy reef environment. It is indicated by both a yellow Control Dial and the first two blue LEDs illuminated. The Control Dial is used to set the maximum pump speed during this Mode. The pump will change speed frequently and drastically to simulate crashing waves and surging tide.



Lagoonal



Lagoonal Mode simulates a low energy lagoon environment. It is indicated by a yellow Control Dial and the third and fourth LEDs illuminated. The Control Dial is used to set the maximum speed of this Mode. The speed of the pump is changed slowly to recreate the gentle currents of a lagoon.



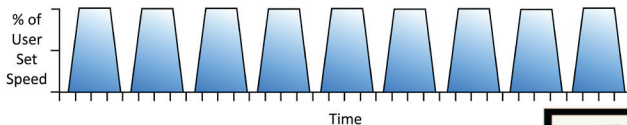
More information can be found at community.ecotechmarine.com

Pulse Modes

Short Pulse



When first entering Short Pulse Mode, set the maximum pump speed with the Control Dial and press the SET button to lock it. The LEDs will begin to ramp, indicating the pulsing frequency between 0.2 seconds and 2 seconds. Next, use the Control Dial to adjust the pulse frequency. Press and hold SET until the Control Dial flashes and then breathes blue, indicating the wave is saved. This saved wave will also be used in EcoSmart NTM Mode.



Watch the video:
ecote.ch/makewave

Auto Tune

Auto Tune allows you to create a wave within your tank. To create a wave using Auto Tune, Hold SET and Option until LEDs move back and forth slowly. Press SET when you see a desired wave. To fine tune the wave, press MODE to speed up the wave and Option to slow it down. Press SET to save the wave.

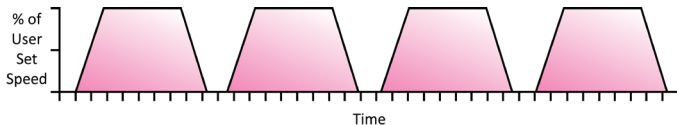


Watch the video:
ecote.ch/autotune

Long Pulse (Gyre Functionality)



When first entering Long Pulse Mode, set the maximum pump speed with the Control Dial and press the SET button to lock it. The LEDs will begin to ramp, indicating the pulsing frequency between 2 seconds and 2 hours. Next, use the Control Dial to adjust the pulse frequency. The first six LEDs represent 2 seconds to 2 minutes. The seventh through twelfth LEDs represent 5, 10, 20, 60, 90, and 120 minutes, respectively. Press and hold SET until the Control Dial flashes and then breathes pink, indicating the wave is saved.



Additional Modes



Feed Mode

Press and hold the MODE button for 3 seconds to enter Feed Mode. The Control Dial will blink white and the pump will spin very slowly for 10 minutes (default setting) and then resume its set mode.



Battery Backup Mode

When a Battery Backup accessory is added to the VorTech Pump, the pump will automatically switch to Battery Backup Mode during a power outage. The pump will run at the minimum speed to maximize run time during this critical period.

Night Mode

To enter Night Mode, press and hold the MODE & SET buttons and then press and hold the MODE & SET buttons again. The Control Dial will breathe white and spin at 50% power for 10 hours (default setting) and then resume its set mode.

Note: All of the modes are set to default duration, speed, or percentage of speed. Please refer to the full manual for details on how to customize these modes.

Support

In the event of a problem:

1. Check that the pump is plugged in and there is power
 2. Unplug the pump and check the Wet Side for damage or obstructions
 3. Reconnect power and reset the driver (ecotech.ch/resetdriver)
 4. If pump still does not function properly, use one of the following support methods:
- Watch our extensive collection of How To Videos. These videos are available at <http://ecotechmarine.com/media-gallery/video/>
 - Visit our support community to ask questions and learn more about your VorTech Propeller Pump at community.ecotechmarine.com.
 - If you are still experiencing problems, call or email our industry-leading customer service at service@ecotechmarine.com or 1-800-785-0338 Option 2.



EcoTech Marine Community

EcoTech Marine Community is another tool for users to troubleshoot and learn about our products. For additional information about your VorTech Propeller Pump, please visit us at community.ecotechmarine.com.



Warranty

EcoTech Marine warrants to the original purchaser only that the VorTech Propeller Pump 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 VorTech Propeller Pump consists of a wet side operating unit that will be fully submerged in the aquarium and a motor and driver that must not be exposed to water at any time. EcoTech Marine's warranty shall not apply: (i) to any damaged VorTech Propeller Pump 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 VorTech Propeller Pump where the motor and/or driver have been exposed to water or (iii) to cosmetic problems or defects that result from normal 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 VorTech Propeller Pump, 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 VorTech Propeller Pump without charge, provided that the VorTech Propeller Pump is returned during the warranty period.

The VorTech Propeller Pump operates at high temperatures and produces forces within the aquarium that can cause extreme loading and fatigue. Due to this, caution must be used when installing this device on any aquarium. Because the construction of aquariums varies from each manufacturer and the operating conditions of each individual aquarist is different, there is a possibility that the VorTech Propeller Pump may cause damage to your aquarium. Please contact your aquarium manufacturer to determine if your aquarium is properly built and recommended for VorTech Propeller Pump. If you notice any damage to your aquarium, including but not limited to crazing, cracking, bending, scratching, etc, immediately discontinue the use of the VorTech Propeller Pump. EcoTech Marine will not be liable for any damage caused to your aquarium resulting from the use of the VorTech Propeller Pump.

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 VORECH PROPELLER 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 BREACH 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 VORTECH PROPELLER PUMP.

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.





FCC and CE Warnings

- This product carries 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 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 (non-immersible equipment only).
- Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
- The pump's motor housing and Driver are NOT WATERPROOF; water can permanently damage them. 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 cord of this appliance cannot be replaced: If the cord is damaged, the appliance should be discarded. Never cut the cord. DO NOT DROP. The VorTech Pump is fragile, and a fall onto a hard surface can result in permanent damage. Damage may include cracking of the ceramic axle within the Wet Side or a loud Dry Side. 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

RF Module Important Information:

The product you have purchased contains the EcoTech Marine RF Module, part number 10169. This module gives your product the ability to communicate wirelessly to other EcoTech Marine products as well as certain other manufacturer's products that were designed in compliance with the specifications for our RF Module. Use of this module in products not consented by EcoTech Marine is prohibited. This product is for indoor usage only.

FCC Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation. Any changes or modifications not expressly approved by EcoTech Marine could void the user's authority to operate the RF module, and/or the product that incorporates the RF Module. The user is cautioned to maintain a 20cm (8 inch) spacing from the product to ensure compliance with FCC regulations.

European Union - Disposal Information:

This symbol means that according to local laws and regulations your product should be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Some collection points accept products for free. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

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 outlet and battery backup when not in use, before putting on or taking off parts, and before cleaning.
- 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.
- 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.
- This appliance utilizes extremely powerful magnets that can cause severe personal injury.
- NEVER place either half of this device near magnetically attractive surfaces or sensitive electronics.
- The motor and driver can become HOT. Be cautious around these surfaces.
- DO NOT stick fingers or anything else into the propeller. NEVER connect the two halves of this device without using the proper spacer.

CE Declaration of Conformity

The equipment complies with the RF exposure Requirement 1999/5/EEC, Council Recommendation on the limitation of exposure of the general public to electro-magnetic fields (0-300 GHz). This equipment meets the following conformance standards:

EN 300 328, EN 301 489-17

This device contains:
EcoTech Marine's RF Module
Part Number: 10169
FCC ID: VKB271829
IC: 7349A-271829

For France:

Français: Cet équipement est prévu uniquement pour un usage à l'intérieur des bâtiments

English: This device is intended for indoor use only.



VorTech Pump can be used in the following countries:



AT	BG	BE	CY	CZ	DK
EE	FI	FR	DE	GR	HU
IE	IT	LV	LT	LU	MT
NL	PL	PT	RO	SK	SL
ES	SE	GB	IS	LI	NO
CH					



Customer Support

United States & Canada

Contact manufacturer directly for all warranty service and returns
www.ecotechmarine.com/support

International

Contact your local distributor directly for all warranty service and returns
www.ecotechmarine.com/find-retailers/international-distributors/

Contact Us

(610) 954-8480

Toll Free - (800) 785-0338

service@ecotechmarine.com

