Atlantic TWVSC – 73933 Variable Speed Controller Instruction Manual

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Atlantic
VARIABLE SPEED CONTROLLER

Contents

Introduction

Thank you for purchasing the TidalWave Variable Speed Controller (VSC), which turns any of the eight Atlantic TT-Series Pumps, from the TT1500 to the TT9000, into a Bluetooth® controlled Variable Speed Pump. The TidalWave VSC allows the user turn the pump on and off, pause the pump for a pre-set interval, set automatic operation times and control the output of the pump down to 30% of the total flow, in 10 levels of adjustment. Pump operation is controlled by the Atlantic Control application, available for Apple and Android platforms. To avoid damage to the TWVSC and/or the attached pump, do not use the TidalWave VSC with any other pumps than the ones it was designed for, in any way other than as described in this manual. Please note the manufacturer is not be responsible for damage arising from abuse or misuse of this product.

Prior to Operation and Installation

Before the VSC is installed, perform the following checks:

- Check for any damage to VSC control box and power cable that may have occurred during shipment.
- Check the model number to make sure it is the product that was ordered and verify the voltage and frequency are correct.

Caution

- DO NOT operate this product under any conditions other than those for which it is specified. Failure to observe these precautions can lead to electrical shock, product failure or other problems.
- Follow all aspects of electrical codes when installing the TidalWave VSC.
- Power supply must be within 110-120 volt range and 60 Hz.
- This product is equipped with overload protection, <150 percent of the full load current rating.
- Never use an extension cord with this product. The VSC must be plugged directly into an electrical outlet and the pump must be directly plugged into the VSC.

- This product should be installed and/or stored in an area that is protected from weather exposure. It must be mounted off the ground close to the power source. Failure to do so will void the warranty.
- The TidalWave VSC is intended for use with TidalWave TT-Series asynchronous pumps.

CAUTION: THIS TIDALWAVE VSC IS TO BE USED IN A CIRCUIT PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER.

CAUTION: THIS PRODUCT HAS BEEN EVALUATED FOR USE WITH ASYNCHRONOUS WET ROTOR PUMPS ONLY. DO NOT USE WITH MAGNETIC INDUCTION OR DIRECT DRIVE PUMPS.

WARNING: RISK OF ELECTRIC SHOCK – THIS PRODUCT IS SUPPLIED WITH A GROUNDING CONDUCTOR AND GROUNDING-TYPE ATTACHMENT PLUG. TO REDUCE THE RISK OF ELECTRIC SHOCK, BE CERTAIN THAT IT IS CONNECTED ONLY TO A PROPERLY GROUNDED RECEPTACLE PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER (GFCI).

Electrical Safety

- Electrical wiring should be installed by a qualified electrician in accordance with all applicable safety regulations. Incorrect wiring can cause VSC failure, pump malfunction, electrical shock or fire.
- All TidalWave pumps and TidalWave VSC should operate on a designated, 110/120 volt circuit.
- TidalWave VSC must be protected by a ground fault circuit interrupter (GFCI).
- TidalWave VSC must be plugged into a standard, properly grounded, three pronged outlet.

Safety Instructions

- Do not lift, lower or handle the VSC by pulling on the electrical cord. Make sure the electrical cable does not become excessively bent or twisted and does not rub against a structure in a way that might damage it.
- Always turn off power or unplug the pump powered by the VSC prior to performing any maintenance or placing your hands into the water.

⚠ ATTENTION

The Tidal Wave VSC is not a safety device. It will not protect against pump damage cause by overheating due to low water operation.

Installation

Ensure that the VSC is within reach of a properly grounded GFCI outlet, and the electrical cord of the pump that will be used. Mount the TidalWave VSC in the desired location using two weather-resistant screws in the mounting slots located on the back of the controller. The slots allow the VSC to be easily removed from the mounting screws to access the pump connection for servicing. The VSC should be mounted above the ground on a wall or post away from direct sunlight and protected from weather exposure. Place a piece of tape over the two keyhole slots on the back of the Variable Speed Control, then make two holes in the round part of the keyhole with a pen or screw. Remove the tape and place it, with the holes level and centered, on the wall or post. Set each screw in the center of each hole and drive them almost all the way in, leaving about an eighth inch space between the screw head and the post.

Before setting the unit on the screws, open the weatherproof output port on the bottom to reveal the pump connection outlet. A cord lock feature has been incorporated into the VSC to secure the pump cord and prevent it

from being accidentally removed from the power outlet. Remove the cord retention clip and plug the pump into the output port (**Fig. 2).** Replace the cord retention clip to secure the pump cord, then replace the door to keep out weather and insects. **(Fig. 3)** Slip the unit over the screws and pull it down to snug it into place. Plug the VSC into a standard 120V electrical outlet to finish the installation.

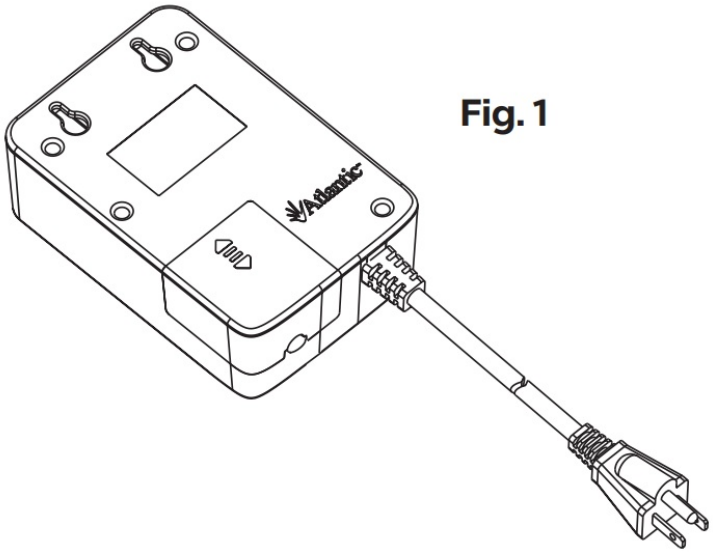

Fig. 1

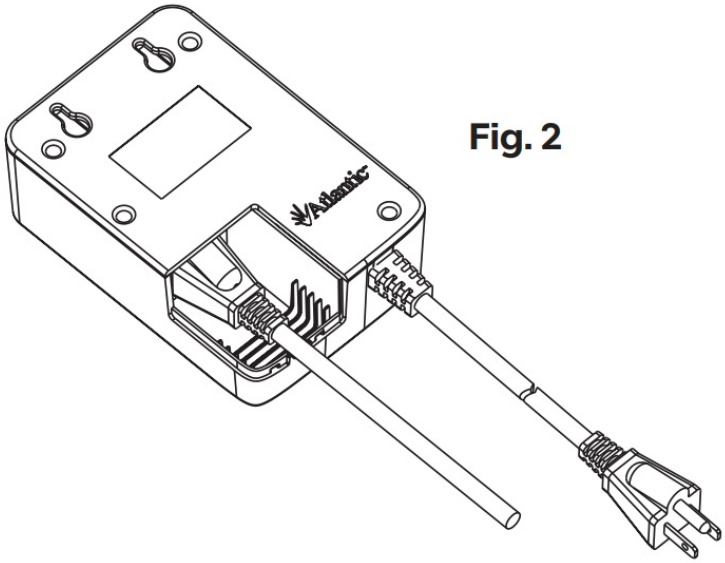

Fig. 2

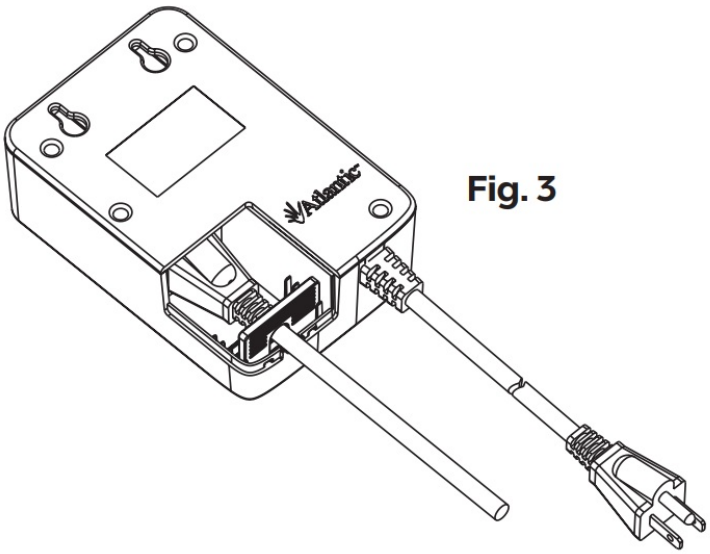

Fig. 3

Operation

The sealed module has an LED light in front to indicate when the unit is on Standby or in Operation. The indicator light shines blue when the unit is plugged in and on Standby, verifying a powered connection. It turns green when

the unit is actively controlling a pump.

Connecting the VSC

The VSC is controlled by the Atlantic Control app. Download the application from the appropriate store, then open it and allow Bluetooth access. Search for the device and choose the “TidalWave VSC”. Log in the first time with the default numerical password “12345678”; you won’t need to log in with the password again unless you change it.

Setting the Name & Password

To change the password, or to rename the particular VSC, click the 3 dots at top right, go to “Login Settings”, put in your new Name and/or Password up to 8 numerical digits, then click the “Save” button. You can set a unique name and password for any number of VSCs, to individually control multiple water features.

Adjusting Pump Flow

To adjust pump output, use the up and down arrows to adjust the flow in ten increments, 1 to 10, with 100% flow at “10” and the flow reduced to 30% at the lowest setting of 1.

Setting the Timer

To set the Timer to program up to three periods in 24 hours, select the green power button for each timed start and stop. Use the “plus” and “minus” buttons to set the level from 1 to 10. Set the timer selections, then click on the “Save” button at the bottom of the screen. For a seamless transition between power levels, match the end time of one period to the start time of the next period to change the power level without shutting off the pump. For example, match the “OFF” time of 5:00 pm at Level 10 of one period to the “ON” time of 5pm at Level 2 of the next period, and the power level will jump from 10 to 2 at 5pm without the pump turning off.

Pause Function

To pause the pump temporarily, to feed fish or service the skimmer, use the customizable “Pause” button, between the up and down arrows. Press the button and select a time between 5 and 30 minutes. Click on “Ok” to pause the pump. The pump will resume the last flow level after the custom pause time has elapsed. If the pause happens to overlap a pre-set start time, then that “Start” will be skipped and the pump will require a manual start.

Maintenance and Inspection

Regular maintenance and inspections are recommended to determine that everything is operating properly. If any abnormal conditions are noticed, refer to the section on Troubleshooting and take corrective measures immediately.

Winterization

The TidalWave Variable Speed Controller should be removed and stored inside to protect it during the winter. Please refer the specific winterization instructions for the pump installed with the TidalWave VSC

Warranty

The TidalWave Variable Speed Controller carries a three-year limited warranty. This limited warranty is extended solely to the original purchaser commencing from the date of original purchase receipt and is void if any of the following apply:

- The VSC was used in conjunction with a magnetic induction or direct drive pump.
- The VSC was not run on a dedicated circuit.
- The cord has been cut or altered.
- The VSC has been misused or abused.
- The VSC has been disassembled in any way.
- Serial number tag has been removed.

Warranty Claims

In case of warranty claims, return the VSC to the place of purchase, accompanied by the original receipt.

Troubleshooting Guide

Always turn off power to the VSC before inspecting the pump. Failure to observe this precaution can result in damage or injury. Before ordering repairs, carefully read through this instruction booklet. If the problem persists, contact your dealer.

Problem	Possible Cause	Possible Solution
VSC will not turn on	Power is of	Turn power on/Test or reset GFCI o utlet
	Power failure	Check power supply or contact loca l power company
	Power cord is not connected	Connect power cord
VSC cannot connect to Atlantic Control App	Reset password	Factory reset VSC – Plug and unplu g 5 times, and then leave the VSC u nplugged for a minute
	VSC is out of range	VSC is out of range, move closer
Diminished pump flow rate or no/int ermittent water flow	Flow level is set too low	Raise the flow level on the VSC
	Incorrect timer settings	Verify timer is set correctly
	Low water level	Stop operation/Raise water level
	Pump requires service/ maintenanc e	Follow manufacturer recommendati ons for pump service and maintenance

Customer Support

www.atlantic-oase.com

Documents / Resources

	Atlantic TWVSC - 73933 Variable Speed Controller [pdf] Instruction Manual TT1500, TT9000, TWVSC - 73933 Variable Speed Controller, TWVSC - 73933, Variable Speed Controller, Speed Controller, Controller

References

- User Manual