



Nautica Forward-Only Electronic Speed Control

Covers Part #3010X

Thank you for purchasing the Nautica waterproof electronic speed control. The Nautica offers smooth digital-proportional control over your forward speed. It also allows full control of the model when the main battery voltage is extremely low. This page contains the instructions you will need to set up and operate your new speed control. Look over these instructions and examine the speed control carefully before using it. If for some reason you think this speed control is not what you wanted, then do not continue any further. Your hobby dealer absolutely cannot accept a speed control for return or exchange after it has been used. If you have any questions about your new speed control, call Traxxas' toll-free technical support line at 1-888-TRAXXAS (U.S. residents only; outside the U.S., call +1-972-549-3000). Technical support is available Monday through Friday from 8:30am to 9:00pm central time. Technical assistance is also available at www.Traxxas.com. You may also e-mail customer support with your question at support@Traxxas.com. Join thousands of registered members in our online community at Traxxas.com. We hope that you will enjoy the performance and features of your new Nautica electronic speed control. Please read the following instructions carefully to ensure long-lasting performance from your Nautica.

Installation

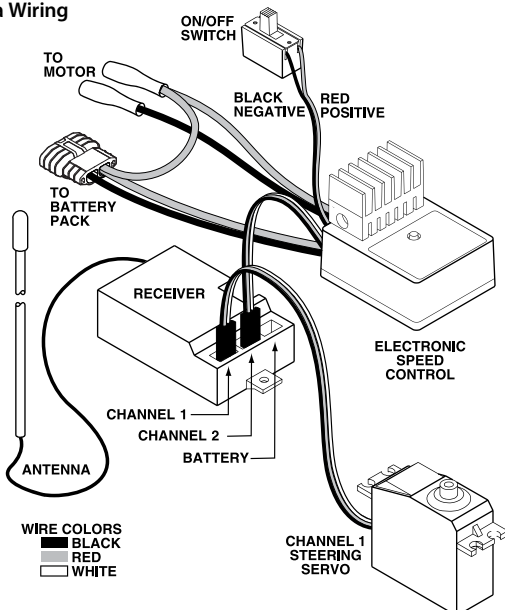
Install the Nautica speed control in a location where cooling air can pass over the heat sink. Mount the speed control to a flat surface using double-sided servo tape.

Connections

The Nautica speed control can be used with a 6-cell battery pack (7.2 volts). The red, black, and white cable coming from the Nautica connects to the channel-2 receptacle on the receiver. The Nautica speed control is compatible with all Traxxas transmitters.

Power for the radio system comes from the electronic speed control when it is connected to the main battery. The on/off switch on the speed control turns the entire radio system in the model on or off. The Nautica has a B.E.C. (Battery Eliminator Circuit) and does not need a separate 4-cell battery pack. There is no need to connect anything to the "BATT" (battery) terminal on the receiver except

Nautica Wiring

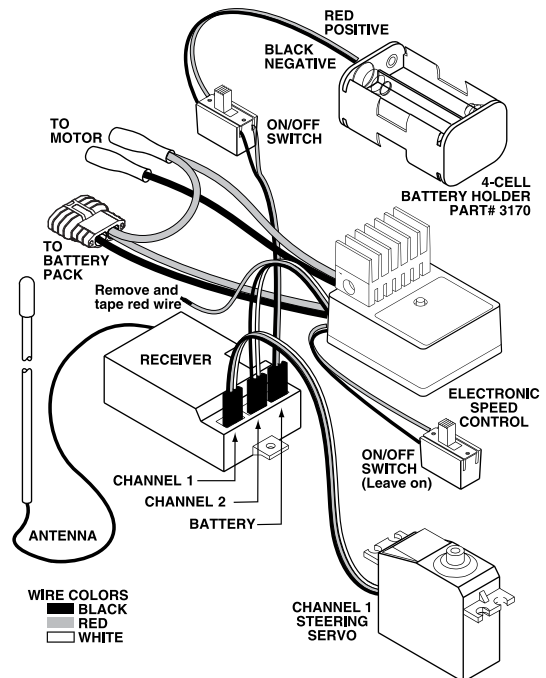


under very special circumstances described in the next section. The following wiring diagram shows typical wiring connections.

Using a 4-cell Battery Pack

In some applications, such as marine or airplane use, a 4-cell battery pack can be used in conjunction with the Nautica speed control. Normally, when the main battery pack begins to lose voltage, the steering servo(s) become sluggish, though still under your control. You should stop at this time and replace the battery pack with a freshly charged one. By using a 4-cell battery pack, you retain full-speed operation of the remaining servo(s), even when the main battery pack is almost completely discharged. The disadvantage is the extra weight and space penalty of the 4-cell battery pack. Before connecting the servo cable to the channel-2 receptacle, the red (positive) wire in the ESC servo cable must be removed from the plug and taped to prevent short circuits. Plug the 4-cell battery pack into the "battery" receptacle. Leave the speed control on/off switch in the "on" position. Use the battery holder on/off switch to turn the radio system on and off. The diagram below shows the wiring connections.

Nautica 4-cell Battery Pack Wiring



Electronic Speed Control Adjustment

The Nautica is a fully-proportional, forward only unit. The Nautica speed control requires no adjustment. All adjustments can be made on the transmitter.

Adjusting the neutral control from the transmitter

If the model's motor starts running when the battery is plugged in and the Nautica is turned on, adjust the throttle trim on the transmitter until the motor stops running and the LED on the Nautica is off (neither red nor green).

Important: Always turn the transmitter on first, before you connect the battery pack in your electric model. If you do not, the model will operate erratically and appear to malfunction. (Remember, the transmitter is on first and off last.)

Precautions

- The radio system is not waterproof. Avoid driving through puddles, wet grass, or mud. For marine applications, protect the speed control from submersion or standing water inside the boat. If water gets into the electronics, it could damage them.
- Do not continue to operate the model with low batteries, or you could lose control of it. Indications of low battery power include: slow operation, sluggish servos, and, for Traxxas transmitters, a flashing red light. When using rechargeable batteries, be especially alert for signs of weak batteries. Stop immediately at the first sign of weak batteries.
- Do not use modified motors with fewer than 18-turns of wire with the Nautica speed control. More powerful motors increase current flow through the electronics and could damage them. When using high-performance motors, make sure that cooling air can pass over the heat sinks.
- Allow the speed control to cool down between battery packs to ensure correct operation and long life.

Troubleshooting Guide

This guide describes possible speed control problems, causes, and simple solutions. Check these items before contacting Traxxas.

Motor and steering servo do not work:

- Check the wires, radio system, crystals, battery and motor connectors, and the battery packs.
- Possible internal damage. Return the Nautica to Traxxas for service.

Motor runs backwards:

- Motor wired backwards: check the wiring and correct.
- Backwards motor timing: reverse the motor end bells.

Receiver glitches/throttle stutters during acceleration:

- Motor capacitors broken or missing: check and replace the capacitors.
- The receiver or antenna is too close to power wires or batteries.
- Bad connections: check the wiring and connectors.
- Motor worn: replace the motor.
- Excessive current to the motor: use a milder motor or a smaller pinion gear.

Model runs slowly / slow acceleration:

- Check the motor and battery connectors.
- Bad battery or motor: check the operation with known good batteries (freshly charged) and motor.
- Check the drive train for binding or restrictions.

Nautica overheats and shuts down:

- Overloading the motor.
- Motor may exceed maximum specification. Use no fewer than 18-turn motors.
- Check the drivetrain for restrictions (weeds or fishing line in the drivetrain or propellers).

Nautica Warranty Information

Traxxas warrants your Traxxas electronic component to be free from defects in materials or workmanship for a period of thirty (30) days from the date of purchase. Before returning any product for warranty service, please contact our service department (1-888-TRAXXAS) to discuss the problem you are having with the product. After contacting Traxxas, send the defective unit along with your proof of purchase indicating the date purchased, your return address, e-mail, a daytime phone number, and a brief description of the problem to:

Traxxas
6250 Traxxas Way
McKinney, TX 75070

If the component is found to be defective, it will be repaired or replaced at no charge. The warranty does not cover damage caused by the following:

- Using other than 6-cells (7.2 volts DC) input voltage.
- Removing the stock battery connectors.
- Using the same gender connectors on the speed control's motor and battery connections.
- Cross-connection of the battery/motor(s).
- Reverse voltage application.
- Using motor(s) with fewer than 18-turns.
- Incorrect installation or wiring.
- Components worn by use.
- Short-circuiting the heat sinks.
- Use without the heat sinks.
- Removing the capacitors from the stock motor.
- Not installing capacitors on new motors (recommended: three 0.1µF [50V]).
- Splices to the input wire harness.
- Disassembling the case.
- Tampering with moisture seals.
- Tampering with the internal electronics.
- Incorrect wiring of an FET servo.
- Allowing exposed wiring to short-circuit.
- Any damage caused by crash, flooding, or act of God.

In no case shall our liability exceed the product's original cost. We reserve the right to modify warranty provisions without notice. All warranty claims will be handled by Traxxas. Because Traxxas has no control over the use and future installations of the Nautica, no liability may be assumed nor will be accepted for damage resulting from the use of this product. Every ESC is thoroughly tested and cycled before leaving the Traxxas facility and is, therefore, considered operational. By the act of operating/connecting speed control, the user accepts all resulting liability. Traxxas makes no other warranties expressed or implied. This warranty gives you specific legal rights which vary from state to state. After the expiration of the standard 30-day warranty, use the Traxxas Lifetime Electronics Warranty to cover service and repairs.

Traxxas Lifetime Electronics Warranty

After the expiration date of the warranty period, Traxxas will repair electronic components for a flat rate of \$15.00 U.S. plus \$5.00 U.S. for shipping and handling. Other mechanical repairs will be estimated separately. The covered repairs are limited to non-mechanical components that have NOT been subjected to abuse, misuse, or neglect. Electronic speed controls that have been damaged by intentional abuse, misuse, water damage, or neglect, may be subject to charges in addition to the \$15 warranty charge. The maximum additional charge will be automatically assessed when an electronic speed controls has been rewired with non-factory connectors. The factory connectors must be in place in order to connect the speed controls to factory test equipment.

Before returning any product for extended warranty service, please contact our service department (1-888-TRAXXAS) to discuss the problem you are having with the product.

If you have questions or need technical assistance, call Traxxas at

1-888-TRAXXAS

(1-888-872-9927) (U.S. residents only)