



Instruction Manual

Thank you for choosing the Dynamite® Power Pulse Speed Control. Your satisfaction is our number one priority. With this in mind, we have produced this product to be of the highest quality, performance, and reliability at a “value-packed” price. We hope it provides you with hours of enjoyment in your next R/C project.

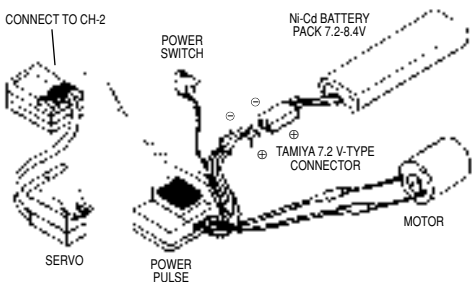
Features

- High power F.E.T. control with proportional forward, proportional reverse, and B.T.S.™ adjustable braking system
- Thermal overload protection — prevents damage due to over-current conditions
- Fuse protected (40 amps) — protects against short-outs
- Prewired, ready-to-install with Tamiya battery plug, bullet motor plug, and universal receiver plug that fit JR, Futaba J and HiTec radios
- High-current capability that handles even the hottest modified motors (up to 13 turns)
- Power boost BEC™ circuitry that gives full steering control even when the battery is nearly depleted

Specifications

Operation:	Proportional forward, proportional reverse with one-second delay, proportional brakes activated during reverse delay
Input Voltage:	6-cell (7.2 volts) through 7-cell (8.4 volts)
Peak Current:	740 amps forward/370 amps reverse
Continuous Current:	180 amps forward/92 amps reverse
Full-On Resistance:	.005 ohms x 2 (forward)
Size:	41mm x 45mm x 27mm (including heatsink)
Weight:	2.6 oz

Diagram



Mounting the Control

Using double-sided servo tape, mount the Power Pulse Speed Control in the position shown in the instruction manual for your particular vehicle. Be sure to mount the control so that the motor, battery and receiver wires reach. Mount the switch using the screws and switchplate (included), or use double-sided servo tape on the side of the switch to mount it to the chassis or shock tower.

Hooking Up the Receiver

A universal receiver connector is pre-wired to the controller (see diagram). Insert the receiver connector into the throttle channel (2) of the

receiver. This connector is compatible with JR, Futaba, and Hi-Tec receivers. Other types of receivers may not be compatible. Be sure to route the receiver connector wire neatly and out of the way of moving components.
Note: If your electronic speed control fails to operate after following the above steps, unplug the receiver connector and rotate 180°.

Hooking Up the Motor

The Dynamite Power Pulse is a high power FET control that will handle up to a 13-turn modified motor. Female bullet connectors are provided for convenient hook up with motors that are pre-wired. The yellow wire on the speed control connects to the positive (+) motor lead; the green wire connects to the negative (-) connector on the motor.

Capacitor Installation

- Three capacitors come with the Dynamite Power Pulse. When properly installed, these capacitors reduce radio interference caused by your motor.
1. Take a small metal file and file a small area on the motor can. With some motors, you may need to use a hobby knife to cut away the label.
 2. Locate the two small monolithic (light blue) capacitors. Take one capacitor and solder one end to the positive motor tab. Then solder one end of the second capacitor to the negative motor tab.
 3. Bend the free ends of each capacitor so they lay flat against the motor can.
 4. Solder the free ends of the capacitors to the area that you filed in Step 1. Use plenty of heat to make sure the solder flows well and adheres to the can. Clip off the excess wire outside the solder joints.



Step 1

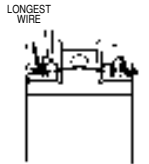


Step 2



Steps 3-4

5. Turn the motor over. Locate the other capacitor supplied with the controller.
6. Solder one capacitor wire to the motor tab and the other end to the opposite motor tab.



Steps 5-6

7. Clip off the excess wires outside the solder joints on the motor tabs. Your motor should now look like the diagram at the right.



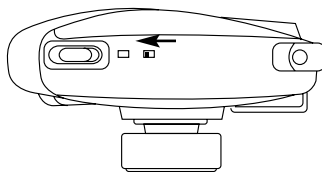
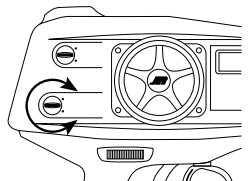
Step 7

Hooking Up the Battery

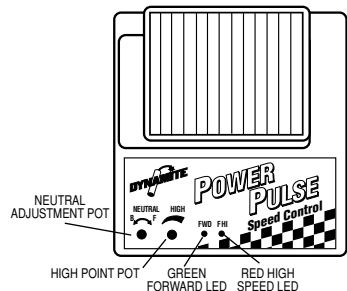
The Power Pulse comes prewired with a Tamiya style battery connector that's compatible with connectors found on most battery packs. You can use either a 6-cell or 7-cell battery pack (7.2 or 8.4 volt).

1. Be sure the On/Off switch is in the “off” position.
 2. Properly set up the transmitter.
 3. Connect a fully charged battery to the battery connector on the speed control.
- On the JR® Python, move the throttle reversing switch to the left position and the throttle trim to the mid position as shown on the diagram below.

Adjusting the Transmitter



Note: For other types of transmitters, set the throttle trim in the middle position and set the reversing switch so that when the throttle is pulled slightly, the green forward LED light turns on. When you press the throttle in reverse, the red reverse LED should light.



Adjusting the Speed Control

1. Disconnect one of the motor connectors to keep the motor from running.
2. With the transmitter and speed control on and the throttle trigger in the neutral position, adjust the neutral adjustment pot on the control until both LED lights go out.
3. Pull the trigger to full throttle and adjust the high point pot clockwise until the red LED just turns on.
4. Push the throttle trigger in the reverse position and note the red LED light — it indicates the speed control is operating in reverse.
5. Plug in your motor connector. Holding the wheels of your vehicle off the ground, squeeze the throttle and check that the rear wheels turn in the correct direction. If they rotate in reverse, alternate the wires leading to the motor.

Important: Do not reverse the transmitter's reversing switch to obtain the correct motor direction. Instead, reverse the motor leads. The forward circuitry is designed to handle the greater current used in forward motion. The reverse circuitry, because it's not used as often, is designed to handle less current. Also, the brakes and reverse delay won't properly operate if the transmitter's reversing switch is in the wrong position.

Fuse Replacement

The Dynamite Power Pulse Speed Control is fuse protected with a 40 amp spade type fuse. This protects the speed controller circuitry from damage due to over-current conditions. If the control is subject to current over 40 amps, the fuse will blow, protecting the control and causing it to stop functioning.

1. Using a small Phillips screwdriver, remove the two screws from the back of the case. Then, gently separate the case, exposing the fuse.
2. Replace the fuse with a new 40 amp spade fuse and reassemble.

Note: Use only a fuse rated at 40 amps. Never substitute a fuse of another value.

Warranty Information

Power Pulse 120 Day Limited Warranty

Dynamite warranties this product to be free from defects in materials and workmanship for a period of 120 days from the original date of purchase. This warranty is limited to the original purchaser of this electronic speed control and is not transferable. This warranty will not cover units which have been modified, misused or serviced by an unauthorized service center.

Your warranty may be voided if:

1. Reverse voltage is applied to your Power Pulse Speed Control, e.g., connecting battery pack backward, plugging battery into the motor connector wires, etc.
2. Alteration or removal of the battery plugs or connectors.
3. Allowing your wires to become frayed or shorted.
4. Use of less than 6 cell (7.2 volts) or more than 7 cell (8.4 volts) battery pack.

5. Tampering of any of the electronic components other than the fuse.

6. Allowing water, moisture or foreign material (e.g., dirt, dust, etc.) into the electronic speed control unit.

7. Excessive force in adjusting the neutral and high speed adjusting pot screws.

Under no circumstances will the buyer be entitled to consequential or incidental damages. This limited warranty gives you specific legal rights; you also have other rights which may vary from state to state.

If your electronic speed control is in need of repair, please ship it freight prepaid to:

Horizon Service Center
ATTN: Dynamite Service
4105 Fieldstone Road
Champaign, Illinois 61822

Phone: (217) 355-9511

Include complete name and address information inside the carton, as well as clearly writing it on the label return address area. Include a brief summary of the difficulty. Date your correspondence and be sure your name and address appear on this enclosure. Also, include a phone number where you can be reached during the business day.

Warranty Repairs

To receive warranty service, your original dated sales receipt must be included to verify your proof-of-purchase date. Providing warranty conditions have been met, your electronic speed control will be repaired or replaced free of charge.

Non-Warranty Repairs

Should your repair cost exceed 50% of the retail purchase price, you will be provided with an estimate advising you of your options.

Any return freight for non-warranty repairs will be billed to the consumer.

For non-warranty repairs, please state which credit card you prefer to use. The Horizon Service Center accepts either VISA or Mastercard. Include your card number and expiration date. The Horizon Service Center also accepts money order.

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