

The Ray Allen Company Inc.

2525-8 Pioneer Avenue, Vista, CA 92081 USA Phone 760 599 4720 FAX 760 599 4383

www.rayallencompany.com

SPD-1 SERVO SPEED CONTROL



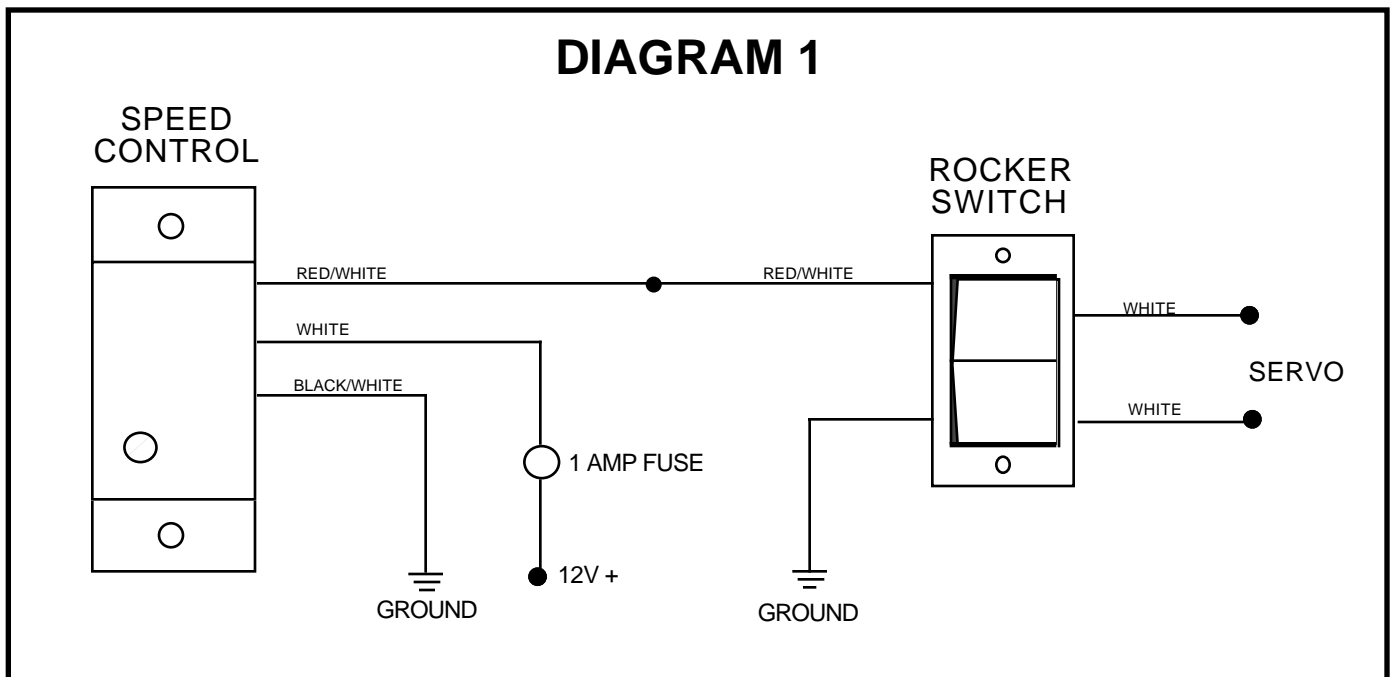
The SPD-1 speed control functions as a variable voltage control. To adjust the servo speed, carefully adjust the screw pot on top of the speed control using a small #1 flat screwdriver. The RAC speed control can handle 2 RAC trim servo power requirements.

The servo motor will proportionally lose power the slower you adjust the speed control. However, the servo will remain powerful enough for most trim tab applications until the output voltage drops below 9 volts. At 9 volts, an unloaded T3-12A servo (as used for example in the RV-4/6/7/8/9/10 elevator trim) will increase the time to travel end to end from 19 seconds to 31 seconds. If you increase the load, travel time increases.

INSTALLATION INSTRUCTIONS

Install the speed control at any convenient location preferably near the trim switch. Secure to the airframe with two screws or simply tie onto a wire bundle using nylon straps, etc. It is not necessary to ground the case of this unit.

Wire according to **Diagram 1** if you are using a RAC rocker switch or **Diagram 2** if you are using a 4-way switch and relay deck combination. Refer to **Diagrams 3 and 4** for other switching methods. Use appropriate wire connectors or solder all connections and use a heat-shrinkable tubing for insulation. Fuses and circuit breakers are not included, but are highly recommended for all installations.



Warning: Installation and use of Ray Allen Company products is the responsibility of the aircraft designer and builder. Use of Ray Allen products in any application which will exceed their capability can cause failure leading to injury or death.

DIAGRAM 2 ROS-4 4-WAY SWITCH (OR G2/3 SERIES GRIP) WITH RELAY DECK

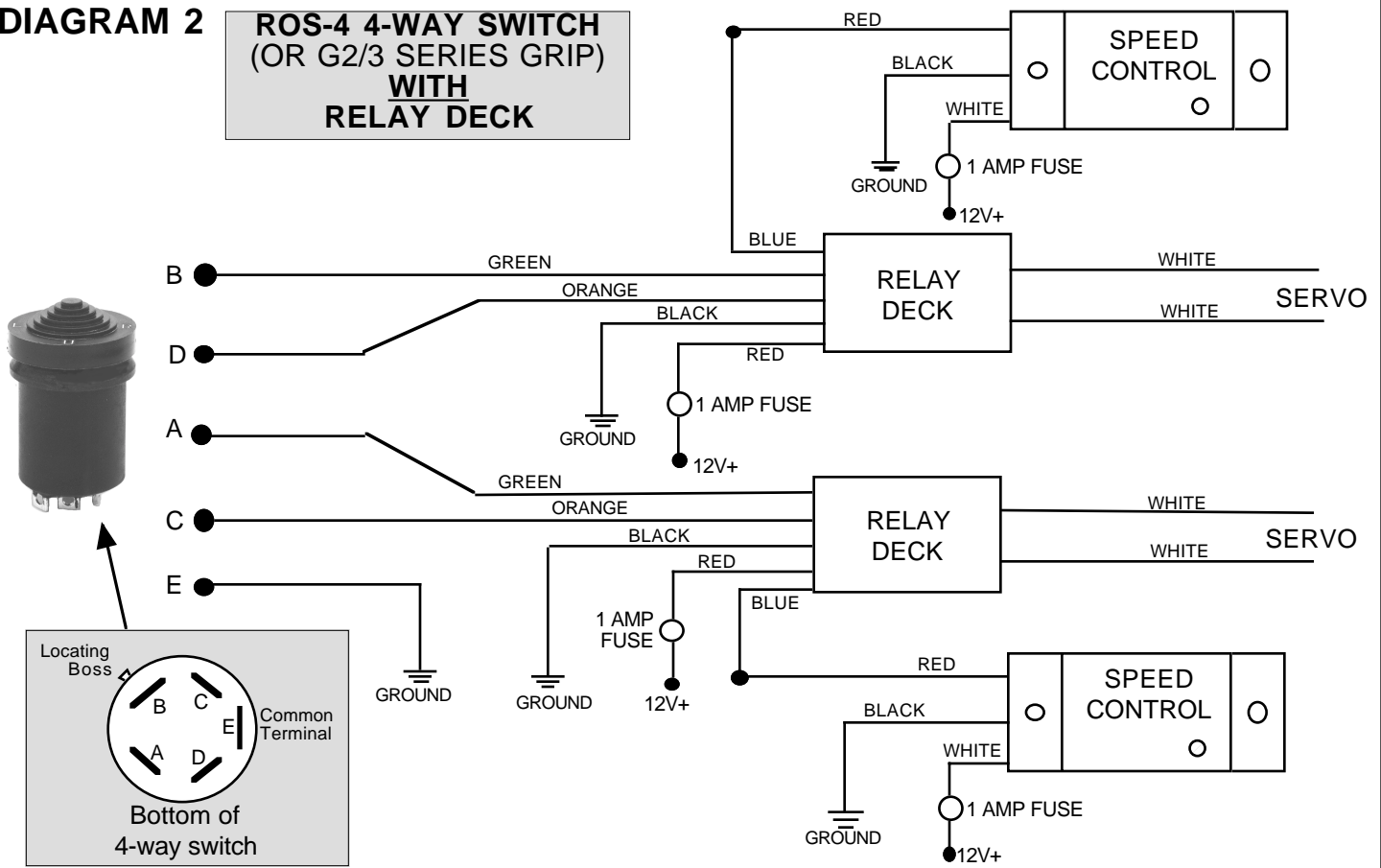
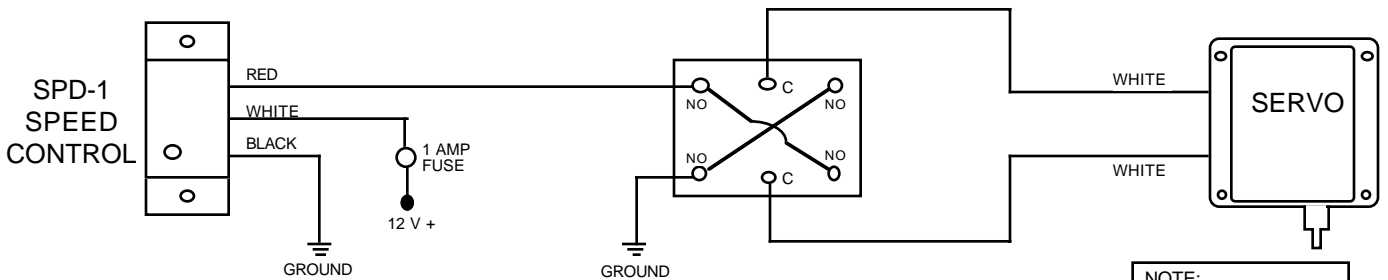


DIAGRAM 3 DPDT SWITCH



NOTE:
 NO = Normally Open
 NC = Normally Closed
 C = Common

DIAGRAM 4 RAC STICK GRIP WITHOUT RELAYS (OR FOUR SPDT PUSHBUTTON SWITCHES)

