

# The Ray Allen Company Inc.

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## RS2 ROCKER SWITCH\*

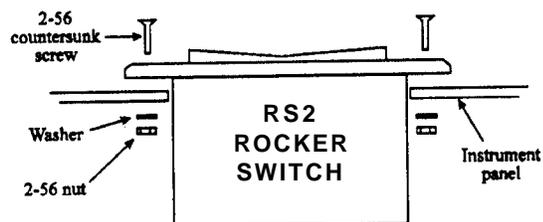
The RS2 rocker switch is designed to electrically short the actuator motor to ground (-) when released. This stops the actuator motor without any coasting, allowing precise positioning of the actuator.

**\*NOTE:** If your RS2 is to be used with our REL-2 relay deck, rewiring with diodes **or** the internal wiring of the RS2 must be modified. The following 2 pages illustrate ways to do this.

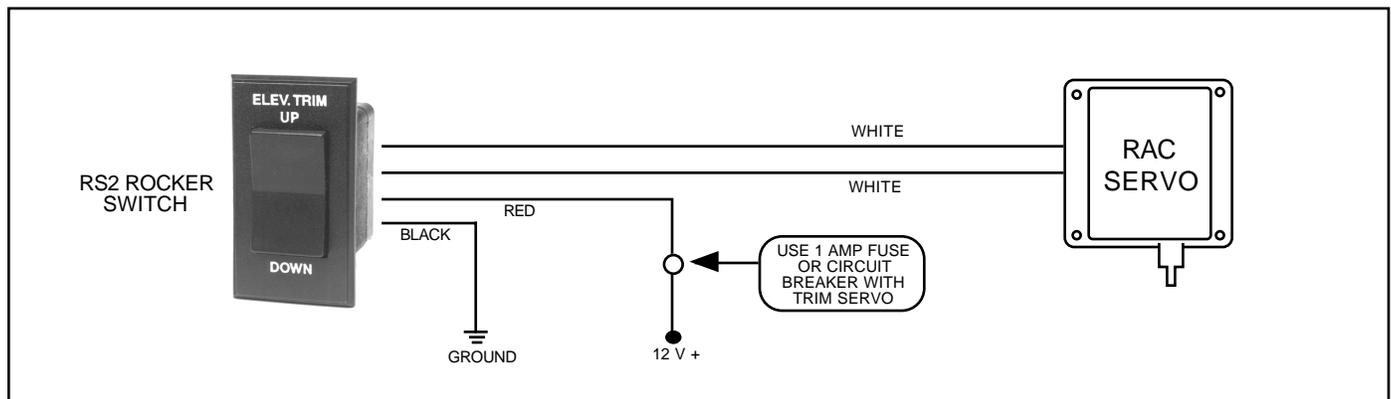
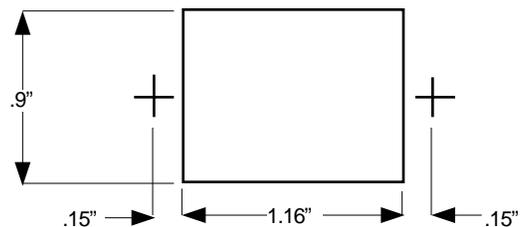
### INSTALLING THE RS2 ROCKER SWITCH

Use the dimensions shown below to cut the mounting hole for the rocker switch. The rocker switch can be mounted in any position using the two, 2-56 countersunk screws and nut provided. Although the switches inside the RS2 rocker switch are rated at 15 amps, the 26 gage wiring used in the RS2 must be protected by a one amp fuse or circuit breaker.

Wiring connectors are not included. Use any type desired or simply solder all connections and insulate with heat shrinkable sleeving.



### RS2 ROCKER SWITCH PANEL CUT-OUT

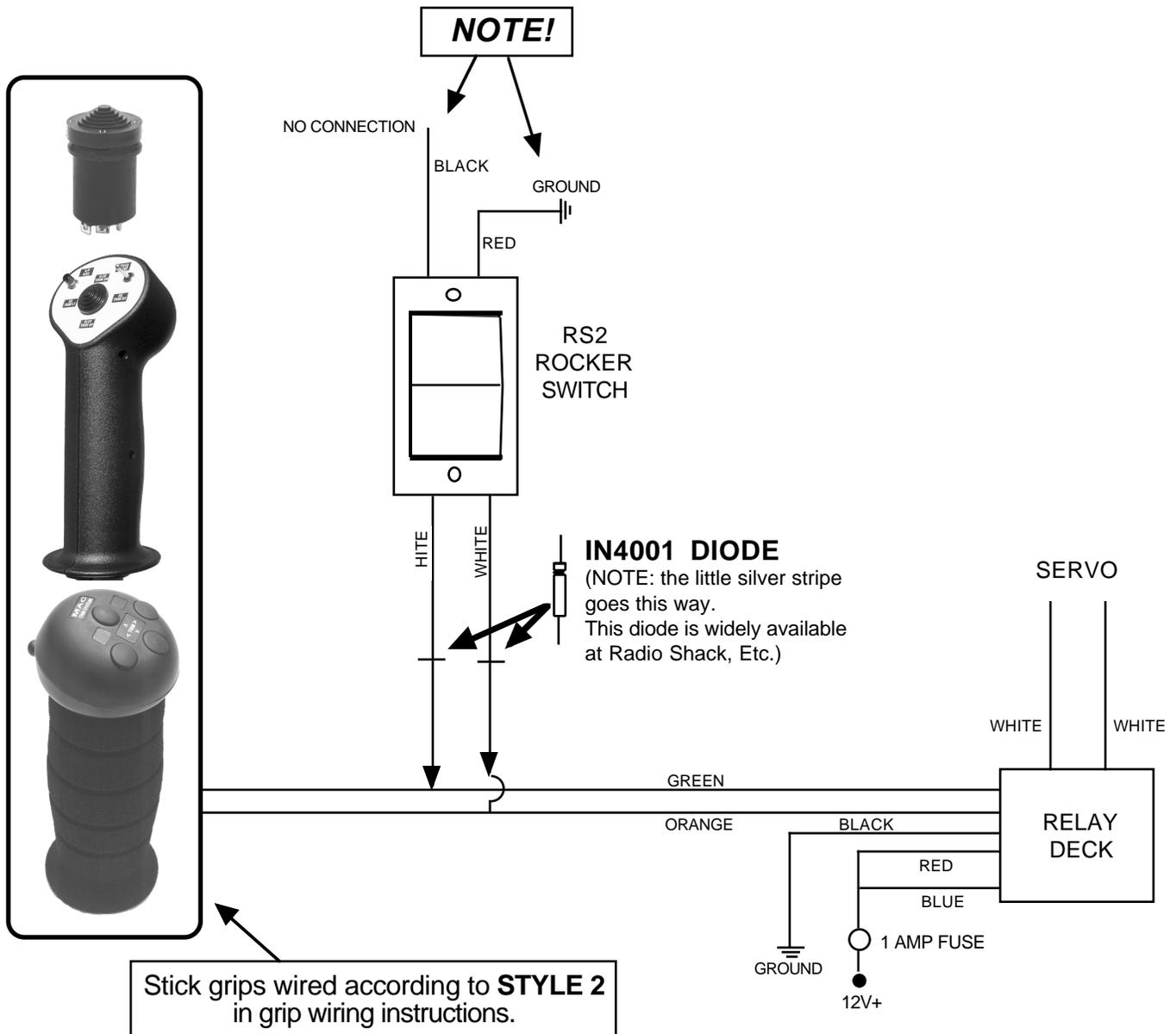


**Warning:** Installation and use of Ray Allen Company products is the responsibility of the aircraft designer and builder. Use of Ray Allen products in any application which will exceed their capability can cause failure leading to injury or death.

Wiring diagram for using a  
**RS2 Rocker Switch**  
 and a  
**RAC Stick Grip OR ROS-4 4-WAY SWITCH**

What you are doing with this method of wiring is making the RS2 rocker switch perform like two single pole, single throw (SPST) switches.

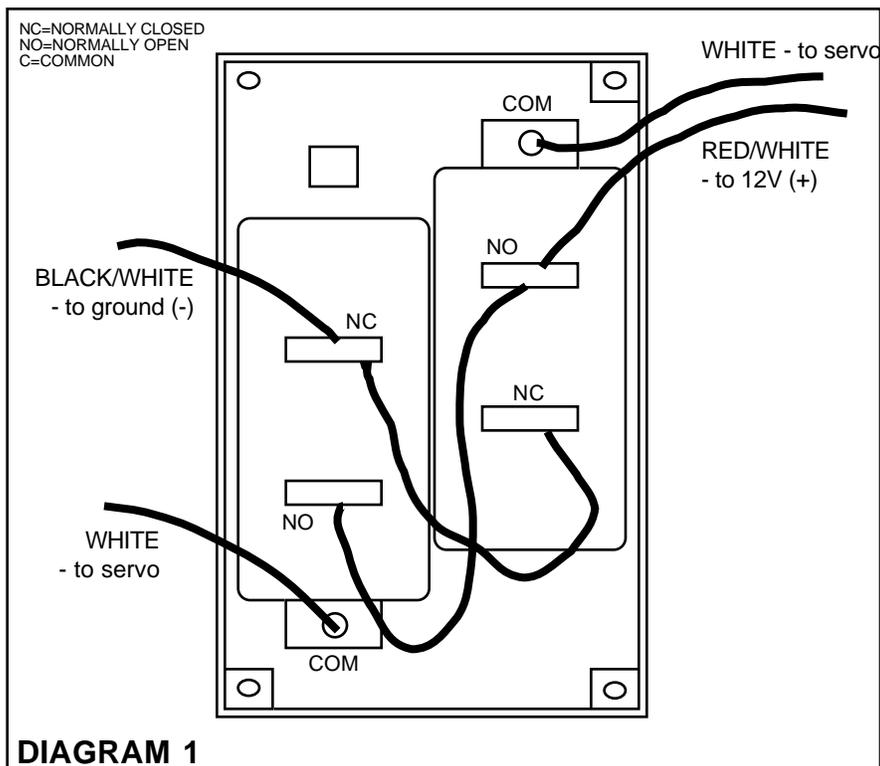
The modified RS2 rocker switch then sends only a ground signal to the relay deck when activated.  
 The relay controls the servo.



# REWIRING THE RS2 ROCKER SWITCH TO WORK WITH A REL-2 RELAY DECK

OR

## HOW TO MAKE A RS2 ROCKER SWITCH INTO A MOM. CONTACT SPDT SWITCH.



What the REL-2 Relay Deck needs from the RS2 Rocker Switch (or any switch for that matter), is a ground input on either the orange or green wires to activate the small relays inside.

The RS2 Rocker Switch is designed to electrically short the actuator motor to ground (-) when at rest. This electric motor braking technique stops the output shaft without any coasting allowing precise positioning of the servo. This also means the RS2 will NOT work with a REL-2 Relay Deck without rewiring it into a single pole, double throw, center off switch.

To rewire the RS2 into a switch compatible with the REL-2, carefully remove the 4 screws of the back plate. **DIAGRAM 1** shows the what the wiring inside the RS2 will look like when you undo these screws.

**DIAGRAM 2** shows what the wiring should look like before reinstalling the back plate. You can reuse the same wires, but the wire leads coming out might be a little shorter.

The RS2 Rocker Switch now behaves like a momentary contact, center off, single pole, double throw (SPDT) switch. This gives the REL-2 Relay Deck a ground input when the rocker is depressed.

