

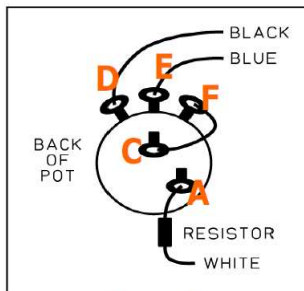
SPT Single Circuit Dimmer Wiring Instructions

Superior Panel Technology

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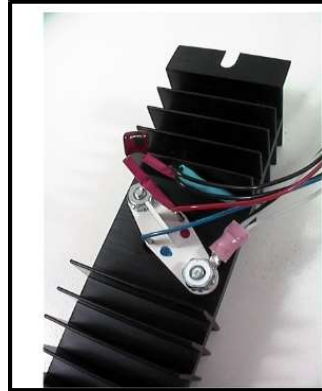
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Picture 1



Picture 2



Picture 3

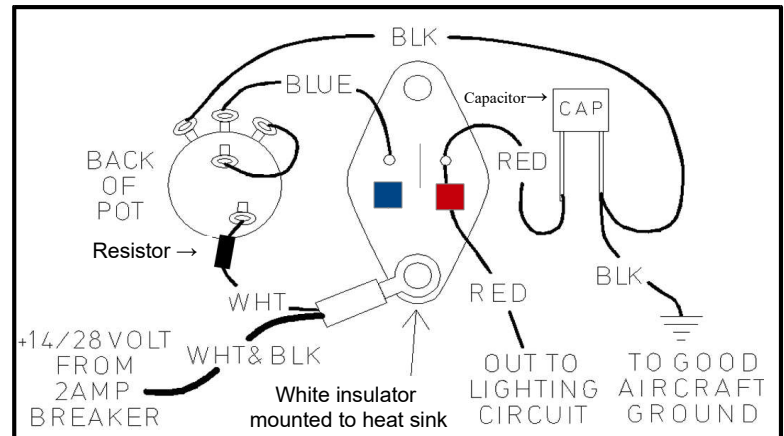


Diagram 1 (underside of heat sink , showing only white insulator)

NOTE: SEE PICTURES 1 AND 2 AND DIAGRAM 1 ABOVE FOR ASSEMBLING, ALONG WITH INSTRUCTIONS. It is recommended that heat shrink tubing be used on all connections.

1. Remove the pink terminal connector from the heat sink. Take the white wire and the white/black striped wire and crimp them both to the pink terminal connector. (Picture 3) Reinstall the connector on either one of the two transistor mounting screws and retighten the self-locking nut.
2. Solder two black wires to one capacitor leg (see CAP in Diagram 1) and cover with heat shrink tubing. There is no polarity on this type of capacitor therefore it can be installed either way. The purpose of the capacitor is to help suppress noise that may exist in your aircraft system that would otherwise be amplified.
3. Solder the remaining capacitor leg AND the red wire to the transistor solder lug marked with a red dot. For ease, you may need to solder the wire to the upper part of the capacitor leg first and cover with heat shrink and then solder the capacitor leg to the solder lug. Or use wire as shown in Diagram 1. The red wire is the variable power output that goes to the lights that you are dimming.
4. Solder one end of the blue wire to the transistor solder lug marked with a blue dot.
5. Measure length of wire needed between your mounted locations of the heat sink (**mount the heat sink in an open area to allow for air circulation and do not let the transistor touch any aircraft ground, see warning below**) and the potentiometer. Cut the blue, white, and **ONE** of the black wires from the heat sink to this length. These 3 wires will be soldered to the potentiometer. (Picture 2)
6. Solder one end of the resistor supplied to tab A on back of the potentiometer. Solder the white wire from the heat sink to the other end of the resistor.
7. Solder a 2 1/2" wire to tabs C and F. This acts as a jumper wire. (Picture 1 and 2)
8. Solder the blue wire coming from the heat sink to center tab on the potentiometer (the one marked E in the above picture 1)
9. Solder the measured and cut black wire from the heat sink to tab D. (Picture 1 and 2)
10. Connect the remaining black/white wire to a 2 amp fuse or breaker. This is your power in, and will be connected to your 12 or 28V supply source. (**Total load on the dimmer should not exceed 2 amps**).
11. Attach the remaining black wire to a good aircraft ground.

Check out our web site at www.sptpanel.com for information about other Superior Panel Technology products: FiberLites (our fiber optic instrument lighting system), EZ Nuts (nut ring that eliminates the use of cage type aircraft instruments nuts), Glow Strips (our electroluminescent glare shield lighting system) and the SPT Inflatable Back Support.

"WARNING: The power transistor case is + voltage and could short if contacting ground! Use caution to insure heat sinks are mounted properly and that the transistors are shielded during installation!"

4 Year Limited Warranty

SPT will repair or replace, at its expense and at its option, any Single Circuit Dimmer manufactured by SPT which in the normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to SPT along with proof of purchase of the product within 4 years and provides SPT with reasonable opportunity to verify the alleged defect by inspection. SPT will not be responsible for any asserted defect which has resulted from misuse, abuse or over stressing above published specifications. SPT will under no circumstances be liable for incidental or consequential damages resulting from the defective products. This warranty is SPT's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by SPT.