

MicroDim Single P/N 9100-001-I

Installation and Operating Instructions

PARTS SUPPLIED 9100-001-I :

- 1 ea MicroDim Control P/N 9100-001-I, Installation manual
- 3 ea Fully Insulated Blue Female #6 Crimp on Ring Lug Connectors for 14-16 AWG Wire.
- 3 ea 6-32 X 1/4 Button Head Socket SS screws including #6 SS Internal Lock Washer
- 1 ea 1/16 in Long Handle Key Allen Wrench
- 1 ea 5/64 in Long Handle Key Allen Wrench
- 2 ea Reference Sticky Back Panel Label , black background and clear.
- 1 ea Knob, drill guide for bushing/anti-rotation pin, mounting hardware

CAUTION- REVERSE WIRING OF POWER TO DEVICE WILL DAMAGE IT.

NEW INSTALLATION:

1. Locate a convenient place for the MicroDim Control. Drill a 9MM hole at the location where the center of the MicroDim is desired.
2. Determine the current that the circuit will be required to carry.
3. Test Position of MicroDim Control and determine if any additional wire is required.
4. Remove the MicroDim Control and proceed with the installation. From the **WIRE SIZE-CURRENT CAPACITY TABLE**, select the wire size required. If the installation is in an Aircraft, use only MIL-W-16878E/4 Type E, Teflon insulated, Silver-Plated Copper Wire or equivalent.
5. Find the location of the power source.
6. Install a breaker of 'Calculated Size', see Wiring Diagram for sizing.
7. Run a wire from the Breaker to the MicroDim controller positive (POS) terminal, then Select and crimp Blue Female Solderless Ring Lug Connector on the end of the wire. Attach the ring connector onto the positive connector on the MicroDim controller using a washer and a SS screw .
8. Using the same technique that was used in section #7, run a wire from the GND ring terminal on the MicroDim to system ground. The common (Gnd) Wire is simply a signal wire used by the unit. It does not carry heavy currents during operation. Use a Blue Female Solderless Ring Lug Connector for this wire.
9. Again using the same technique that was used in section #7, run a wire from the output CKT on the dimming circuit. Select and crimp on a Blue Crimp on ring Connector the end of the wire. Attach the ring connector onto the connection the MicroDim controller using a washer and a Button Head Socket SS screw.
10. Having installed the label over the 9MM drilled hole using the label installation instructions, then insert the MicroDim Control from the rear into the drilled hole and install a washer and the nut to hold the MicroDim control in place and tighten the nut.
11. Install the knob using the Long Handle Key Allen Wrench provided.

EXISTING/REPLACEMENT INSTALLATION:

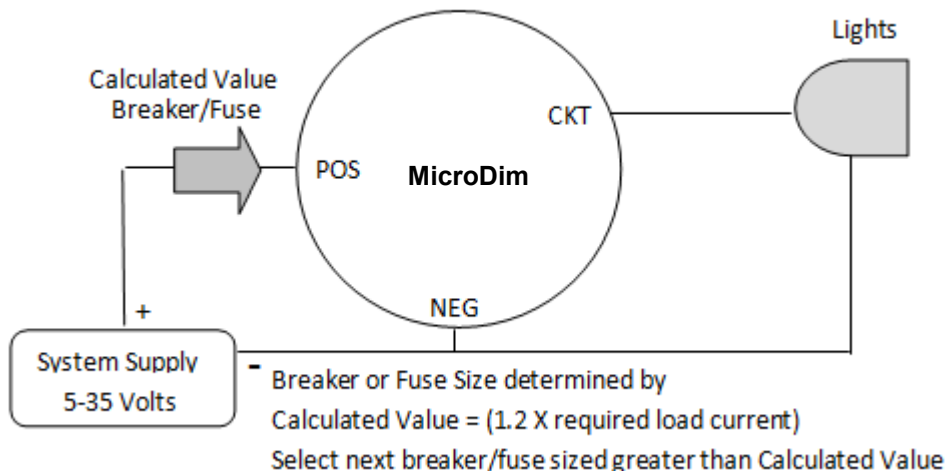
1. Locate a convenient place for the MicroDim Control. Drill a 9MM hole at the location where the center of the MicroDim is desired. Determine the Positive supply, MicroDim circuit, and negative ground wiring.

2. Test Position the MicroDim Control and determine if any additional wire is required for the installation.
3. Insure that a breaker for the MicroDim Controller power source is installed in series with power source and sized to 'Calculated Value' as defined on the wiring diagram.
4. Remove the MicroDim Control and proceed with the installation. From the wire size-current capacity table, select the wire size required if additional wire is required. If the installation is in an Aircraft, use only MIL-W-16878E/4 Type E, Teflon insulated, or equivalent Silver-Plated Copper Wire.
5. Run a wire from the Breaker to the MicroDim controller positive (POS) terminal, then Select and install a Blue Female Solderless Ring Lug Connector on the end of the wire. Attach this to the POS connector on the MicroDim controller.
6. Using the same technique that was used in #5, run a wire from the male connector terminal on the MicroDim to system ground. The common (Gnd) wire is simply a signal wire used by the unit. It does not carry heavy currents during operation. Use a Blue Solderless Ring Lug Connector for this wire. Connect to GND connector of device.
7. Again using the same technique that was used in #5, run wire from output CKT for the dimming circuit. Select and install a Blue Solderless Ring Lug Connector on the end of the wire and connect it onto the male connector on the MaxDim Controller.
8. With the MicroDim Control inserted from the rear into the 9MM drilled hole and with the reference label placed over the threads on the MaxDim Micro Control, install a washer and a nut to hold the MicroDim Control in place.
9. Install the knob using the 1/16" long handle key Allen wrench provided.

FUNCTIONAL TEST:

1. Turn the knob fully counter clockwise and apply power to the system.
2. Slowly rotate the knob clockwise. The Lamp MicroDim Circuit will activate and with a continued clockwise rotation the lamps will increase in intensity.
3. Fully Clockwise rotation applies the full voltage to the Lamp MicroDim Circuit.
4. Fully Counterclockwise removes the voltage from the Lamp MicroDim Circuit.
5. The Lamp MicroDim Circuit voltage is continuously variable from off to full on.

Wiring Diagram 9100-001-I MicroDim



—SPECIFICATIONS—

Voltage Range: 5 to 35VDC

Max Current: 7.5 A

Controlled Output: 0 to 5/35 VDC

0 to 7.5A

Capacity:

- 38 Watts @ 5 VDC
- 90Watts @12 VDC
- 180 Watts @ 24 VDC
- 210 Watts @ 28 VDC

Operating Temperature range: -30°C to +65°C

Internal Temperature Protect: +85°C

Storage Temperature: -40°C to +100°C

Maximum Internal Temperature: @ 7.5A
+5 °C above Ambient.

Enclosure Material: Avantra 8731

Meets UL 94-0 @ .062"/1.5mm min.

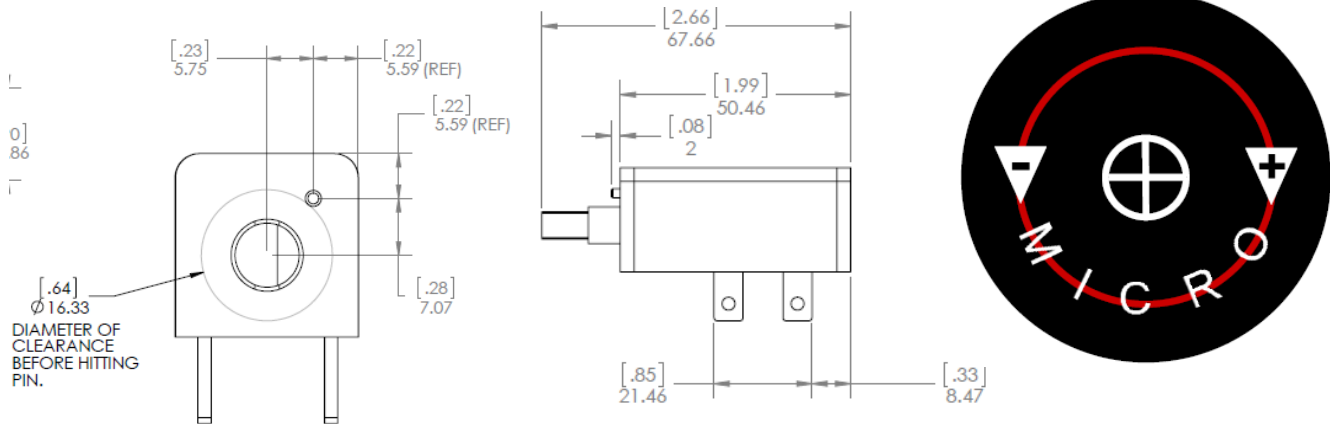
Approvals: DO-160E:RFE Qualified



Order P/N 9100-001-I

Potentiometer Rotation: 270 Deg.

Rotational Life: 500KTurns



ONE YEAR LIMITED WARRANTY

MPMD will repair or replace, at its expense and at its option any device manufactured by MPMD which in the normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to MPMD along with proof of purchase of the product within one year and provides MPMD with reasonable opportunity to verify the alleged defect by inspection. MPMD will not be responsible for any asserted defect which has resulted from misuse, abuse or over stressing above the published specifications. MPMD will under no circumstances be liable for incidental or consequential damages resulting from the defective products. This warranty is MPMD'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 MPMD.

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