

THERMA-FUSER™

THERMALLY POWERED VAV DIFFUSERS

ADJ-D FIELD ASSEMBLY WITH MODEL ST DIFFUSER

INSTRUCTIONS FOR FIELD ASSEMBLY OF DIGITAL WALL ADJUSTER OPTION ONTO EXISTING MODEL ST THERMA-FUSER DIFFUSERS

Models: ST-C VAV cooling only
 ST-HC VAV cooling and VAV heating

Note: The Digital Wall Adjuster uses a Master and Secondary diffuser wiring scheme. These instructions are for field assembly of the Master and Secondary diffusers. For installation and maintenance instructions please visit our website www.acutherm.com for the Digital Wall Adjuster Installation and Operating guide.

1. Unlatch the hinged appearance panel.

Note: If more space is required to drill the holes, the diffuser mechanism may be removed from the housing by unscrewing the four (4) screws.

2. Drill a 5/16" hole in the top of the housing on the same side as the thermostat (see Fig. 1 and 2).
3. Drill a 1/4" hole in the top of the scoop (see Fig. 2).
4. Position the terminal box over the 5/16" hole in the top of the housing (see Fig. 3).
5. Drill holes for screws or rivets and screw or rivet the terminal box onto the housing.
6. Insert the grommet in the 5/16" hole in the housing/terminal box.

Note: If the diffuser mechanism was removed, reassemble it to the housing using the four (4) screws. A small amount of silicon is installed on the screws to prevent movement due to vibration during shipping. This silicon does not need to be replaced unless the unit is to be shipped.

7. Adjust the cooling (and heating) thermostat set point to 76°F/24°C.

Caution: For proper operation of the Digital Wall Adjuster, the set point(s) must remain at 76°F/24°C.

8. Prepare resistance heaters following Heater Sub-Assembly Instructions (attached).

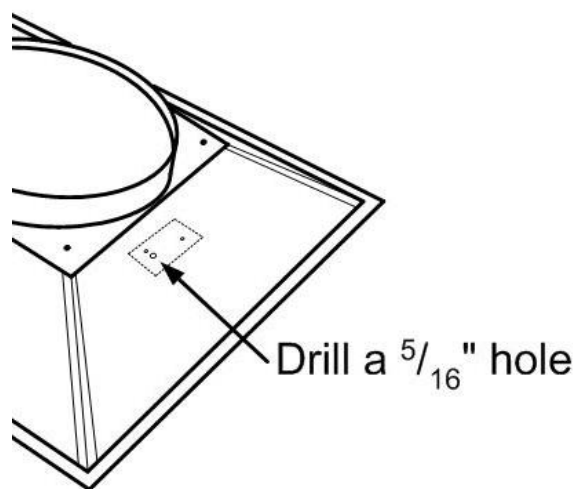


Fig. 1

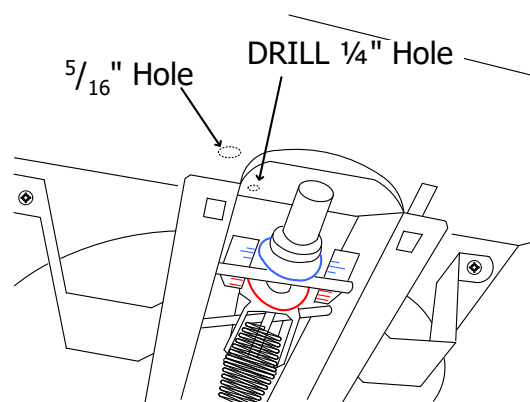


Fig. 2

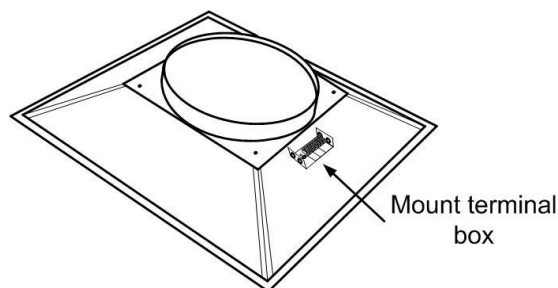


Fig. 3

9. Slip shrink band and heater over the thermostat.
 Locate the space between the ends of the heater at the bottom of the thermostat (where the heat will be applied to the shrink band). One edge should be against the hub of the thermostat. Heat the shrink band with a hair dryer until the band is tight.
10. Rout the wires through the 1/4" hole in the scoop, through the 5/16" hole in the housing and into the terminal box (see Fig. 4 & 5).
11. Connect the red wire(s) to terminal 3 and the black wire(s) to terminal 4 (see Fig. 4).

Make the connections on the side opposite the label leaving the label side open for diffuser installation.

12. Fold up and latch the appearance panel.

If wiring a Secondary diffuser or the terminal box has been factory wired with a 35ft/10.5m plenum rated cable with 10 pin quick connector see Fig. 6 and skip steps 13 and 14.

Note: The 35ft/10.5m plenum rated cable with 10 pin quick connector is ONLY required on a Master diffuser.

13. Rout the open end of the 35ft/10.5m plenum rated cable with 10 pin connector through the grommet opposite the label on the screw terminal side (see Fig. 7).

14. Connect the wires of the 35ft/10.5 plenum rated cable with 10 pin connector (see Fig. 7):

Wire	Screw Terminal
Orange	1
Brown	2
Blue	3
Green	4
Black	5
Purple	6
White	7
Yellow	Not Used
Red	Not Used
Gray	Not Used

Make the connections on the side opposite the label leaving the label side open for diffuser installation.

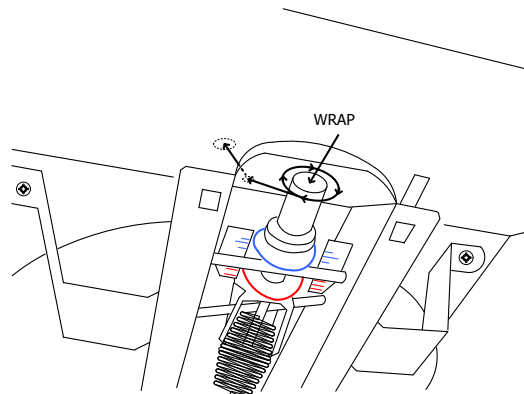


Fig. 4

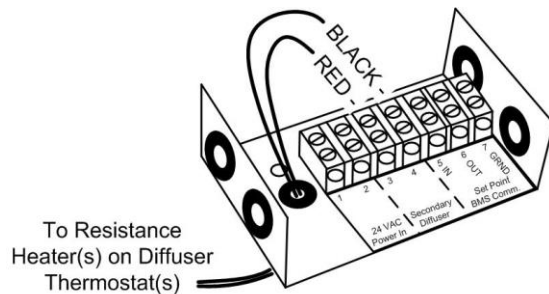


Fig. 5

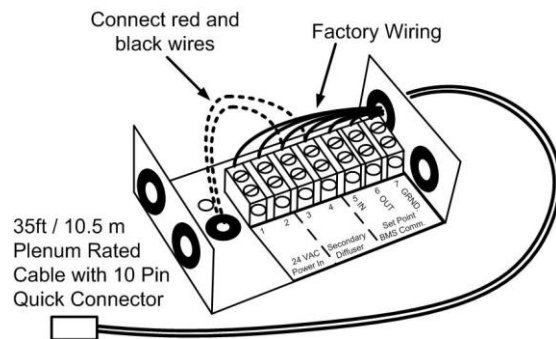
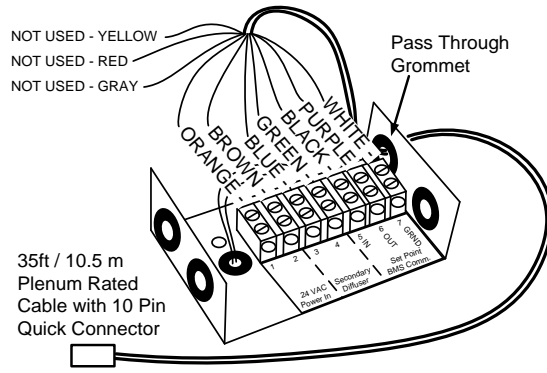


Fig. 6

ST FIELD INSTALLATION INSTRUCTIONS

- 15. Fit the cover onto the terminal box.
- 16. Diffuser is ready for installation.

For installation and maintenance instructions please visit our website www.acutherm.com for the Digital Wall Adjuster Installation and Operating guide.



Resistance Heater
Sub-Assembly Instructions

- With the flag away from you and pointing upwards
- Curl the flag toward the right.
Do not curl toward the left as it will change the resistance.
- Slip the shrink band over the curled flag.
- Slide the shrink band/flag combination over the thermostat flush with the hub of the thermostat.

