Section 3. Trouble-Shooting And Technical Support

3.1 MAINTENANCE

Clean the surface of the sensor before the start of each heating season with a brush or other means to remove dirt, grime, leaves, or debris that obstructs contact with snow or ice. Perform the system function check before the start of each heating season.

3.2 SYSTEM FUNCTION TEST

L1 LED light:

- When blinking indicates system readiness.
- When not blinking and L2 is lit indicates a wet RG sensor.

L2 LED Light:

- When lit indicates that the outdoor ambient temperature is below setpoint.
- When unlit indicates that the outdoor ambient temperature is above setpoint. To verify that power is wired correctly and timing sequence is working:

1. Check that power is connected to the MPS control panel.
2. Disconnect the red sensor wire from the terminal strip and verify that the L2 LED light is lit.
3. Pour water on the RG sensor face to close the normally open contacts of the output relay on the internal circuit board and verify that the L1 LED light has stopped blinking.
4. Dry the RG sensor and verify that the L1 LED light has restarted continuously blinking.
5. To reset the output relay, remove power to the MPS.
6. Reconnect the red sensor wire.
7. Reapply power to the MPS.

3.3 TROUBLE-SHOOTING AND TECHNICAL SUPPORT

1. Verify there is 120 VAC across the red #10 AWG lead wire and the white #14 AWG lead wire inside of the MPS.
2. If switching 208 VAC or 240 VAC ensure a white neutral wire is pulled to the MPS

   NOTE: For 208 VAC and 240 VAC the controller only switches one power leg, the other power leg (phase leg) passes through the device.

   NOTE: Do not connect the white #14 AWG lead wire to any voltage, it is to be connected to neutral only.
3. Verify the color code of the RG sensor matches the terminal color code. Do the same if installing the optional RID device.
4. Verify all RG sensor and RID wiring is intact and ensure no open splices or damage to wire and cable.
5. Verify that the small plastic jumper on the main board is in the left position when installed for roof de-icing control and in the right position when installed for snow melting control (attached to left two pins/right two pins).

   NOTE: If the jumper is not attached or present, the MPS will not turn off.
6. Remove the red sensor wire and apply moisture to the “U” shaped clips on the moisture sensor, verify the relay in the MPS energizes and switches power to the heating cable or contactor.
7. If the relay does not energize return the MPS to Delta-Therm. If the relay does energize, the system is functional.

For additional Trouble-Shooting Procedures, please contact Delta-Therm Technical Support for MPS Trouble-Shooting Manual.

If you have any questions or comments about these instructions, or your installation please call Delta-Therm between the hours of 8:00 a.m. - 5:30 p.m. CST, Monday through Friday at 1-800-526-7887.