

# Instructions for Installing PM-DP

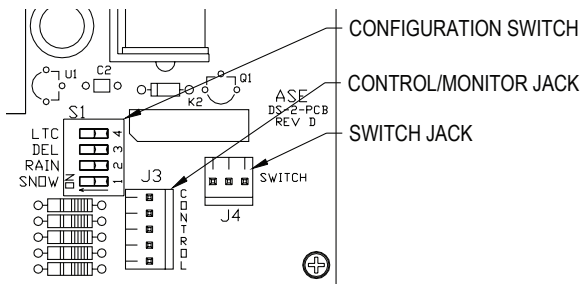
## Remote control for PM-2B Snowmelt Sensor

The PM-DP provides direct remote operation for the PM-2B snow sensor. Users can monitor both the operating mode and the activation state of the sensor. Additional control features include setting automatic, manual, or standby operation.

### Installation

Install the PM-DP remote switch in a single gang box. The PM-DP may be installed in a conventional single or multi-gang electrical enclosure. If installed in a multi-gang enclosure next to high voltage equipment, the PM-DP and its interconnecting cable must be isolated from high voltage wires and devices. Consult local electrical codes to determine the isolation method(s) required. The PM-DP can be installed up to 800 feet away from the PM-2B snow sensor.

Plug the CS-1 Pigtail into the jack labeled J3 on the PM-2B circuit board. Cut the required length of 5- or 6-conductor minimum 22 AWG shielded cable. Prepare both ends of the conductor cable by removing 2 inches of outer jacket and shield, then strip 1/4" of the insulation from the conductors. Attach one end of the conductor cable to the free end of the



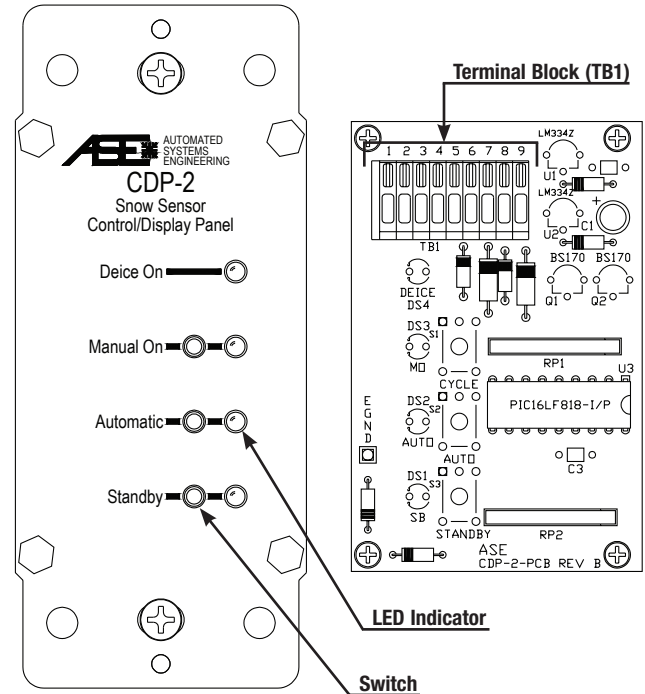
PM-2B terminal locations.

CS-1 Pigtail, noting any color code change in the table. Following this table, attach the other end of this cable to the terminal block labeled TB1 on the PM-DP, making sure to connect the noted color to the proper terminal. To secure the wire, press the clamp button on the terminal block, insert the bare wire end, then release. Lightly tug on the wire to ensure it is connected.

Use terminals 1-4 on TB1 when connecting to a Home Automation System (HAS). Closure of terminals 1-2 (Trigger) and 3-4 (Enable) will start one snowmelting cycle. Once the cycle is completed the sensor will revert to Automatic mode.

Connect a toggle switch to the Enable terminals to allow manual enabling and disabling of the HAS. If a secondary toggle switch is not used, jumper terminals 3-4 to all the HAS to enable the system as needed.

| CS-1 Color | Function      | Field Color | PM-DP Terminal |
|------------|---------------|-------------|----------------|
| Black      | Manual On     |             | 5              |
| White      | Return        |             | 6              |
| Green      | Standby/Reset |             | 7              |
| Orange     | Deice On      |             | 8              |
| Red        | Deice On      |             | 9              |

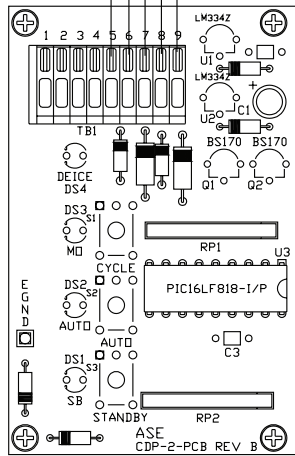
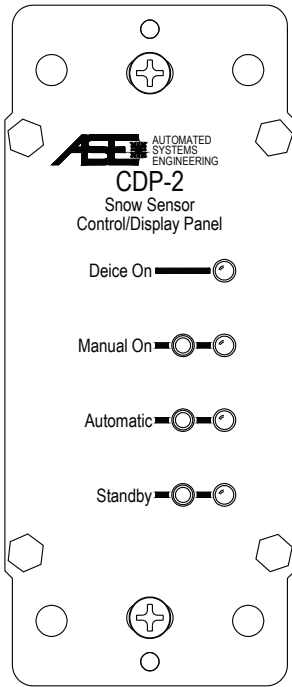


**PM-DP fits directly into a single gang box and can be fitted with a standard "modular" electrical cover plate. A CS-1 pigtail is included with the PM-DP.**

### Operation

The Deice On indicator shows whether or not the attached snow sensor has been activated and the snow melting system is operating. It may illuminate either from automatic activation of the sensor or by the user pressing the Manual On toggle.

The PM-DP will show the current setting of the manual override switch for the attached snow sensor. The sensor's override switch will always take precedence over the PM-DP setting. For example, the PM-DP has placed the sensor into Stand-by mode and the sensor switch is moved to Manual On, the PM-DP will show a change to Manual On mode. Whenever the sensor's switch overrides the PM-DP's setting, then is returned to Automatic Mode, the PM-DP will revert to the Automatic Mode as well.



- WARNING: General Safety Instructions**
1. THIS UNIT SHOULD BE INSTALLED ONLY BY QUALIFIED PERSONNEL!
  2. Disconnect all power from the control before opening the front cover plate.

PM-DP wired to a PM-2B with the use of a CS-1 jumper.

|                             |                                       |
|-----------------------------|---------------------------------------|
| Supply Voltage              | Class 2<br>(Derived from Snow Sensor) |
| Compatible Sensors          | PM-2B<br>PM-224<br>PM-824             |
| Operating Temperature Range | (-40°F) to 185°F                      |
| Modes                       | Automatic<br>Manual<br>Standby        |
| Dry Cycle Time              | Based on Sensor Setting               |
| Location Used               | Indoor                                |
| Wiring Type                 | 22 AWG (minimum)<br>5 or 6 Conductor  |
| Maximum Distance            | 800 ft.                               |

**Limited Warranty:** Watts Radiant (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

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