INSTRUCTION MANUAL

MeltSmart™ LED Traffic Signal Modules – Demo Unit

Read these instructions completely and carefully before you begin.

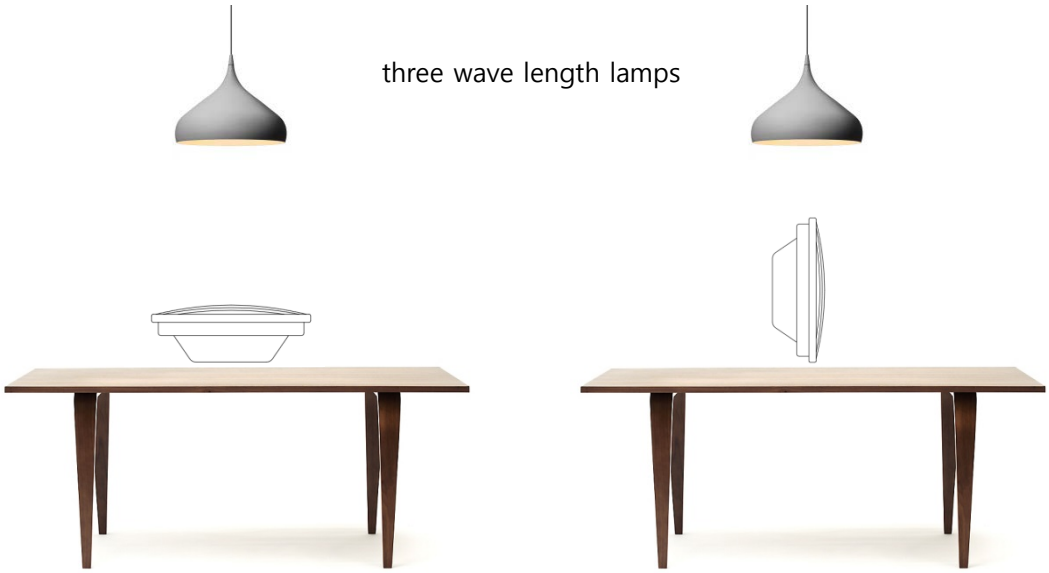
The Demo Unit of MeltSmart™ is designed to show following characteristics of the product.

- **MeltSmart™**: Multiple intelligent sensors embedded in the module detect the snow accumulated on the surface of the lens and automatically power the heating element to melt and prevent ice formation on lamp.
- Innovation: The MeltSmart™ system is triggered only when it is needed and uses the power very efficiently.

1. The demo unit is intended solely **for the demonstration sessions**. It should not be used for other purpose.
   - The module cannot be installed into the traffic signal housings.
   - The demo unit cannot be connected to controllers for testing or any other purpose.
2. **Verify input voltage** is within specified range on the back of the LED signal module before conducting demo sessions.
3. For optimal demonstrations, it is recommended to use the **white cloth** provided with the product. The cloth is designed by the manufacturer to substitute snow in demo sessions, with similar transmissivity/reflectivity. Please notify the manufacturer if the cloth was not provided.
4. For effective demo sessions, temperature adjustment feature* of the MeltSmart™ thermal sensor is turned off in the demo unit.
   - So the demo session CAN be conducted in indoor settings as well as outdoors. Explanation may be added that normally, the heating element of regular MeltSmart™ units wouldn't be triggered to power in room temperature.
   - **CAUTION**: If the sensors of the demo unit is covered with the white cloth for a prolonged time, the surface temperature will keep increasing and exceed 210°F, different from the regular MeltSmart™ modules*. So use the demo unit with caution.

***Temperature Adjustment Feature**: The power of MeltSmart™ heating element is controlled by ambient temperature measured by sensors. When turned on, triggered by the snow coverage, the wattage of the heater ranges from 20W to 60W depending on the outside temperature. The lower the temperature is, the higher the power is required for heater to ensure to melt the snow completely and not to create ice tunnels on the lenses. Also, if ambient temperature increases beyond certain level, the heating element stops working to avoid overheating and waste of energy, upon sensing the temperature change.

5. It is recommended to use wattage meter and/or thermal imaging camera (to be purchased separately) for effective demo sessions, to show the MeltSmart™ features.
6. Three wavelength lamps often disturb photo sensors embedded in the MeltSmart™ modules. So if placed directly under the three wavelength lamps, sensors may not properly trigger the heating element in motion. (This does not happen in outdoors. So the regular MeltSmart™ modules to be installed outdoors are not affected.)
   - Try not to place the demo unit directly under the three wavelength lamps when conducting demonstration.
   - If it cannot be avoided (e.g. The room is lit with only three wavelength lamps. Or the demonstration has to be done on the table, which is directly under the lamps.), the demo unit can be held upright during the demonstration session, like they usually are installed outside, to minimize the disturbance.



(X) Not recommended (O) Better

Operating Specifications

Operating Voltage Range:	80 to 135 V (60Hz AC)
Operating Temperature Range:	-40 to 165°F (-40 to +74 °C)
Lens & Shell Material:	UV Stabilized Polycarbonate
Nominal AC Voltage:	120V – 60Hz