



Installation Instructions

HCM Unit Installation Instructions



This product should be installed by a licensed electrician using the following instructions. When installing this product, make sure that input power is disconnected to prevent electric shock.

Product Specifications:

- WiFi smart thermal switch
- Input Voltage: 100-240VAC 50/60Hz
- Output Voltage: 100-240VAC 50/60Hz
- Max Load: 15Amp
- WiFi: 2.4GHz b/g/n

Before Beginning, Ensure These Tools & Resources Are Available:

- 1. Smartphone or tablet with access to APP Store or Google Play
- 2. Access to a 2.4GHz WiFi and Internet connection. Unit is not compatible with 5GHz signals.
- 3. Phillips Screwdriver
- 4. ¼" Bit Holding Screwdriver, T10 Torx driver provided
- 5. 14 AWG three (3) Conductor 120VAC pigtail
- 6. Small Hammer
- 7. Teflon Tape (Option if extension cord used)
- 8. Power Source:
 - \circ $\,$ 14/2 Romex with $\ensuremath{\rlap/}{2}''$ plastic conduit, Not intended for rigid metallic conduit
 - \circ 14 AWG three (3) conductor outdoor extension cord
- 9. Ensure you have the correct WiFi password.
- 10. Ensure that your router is MAC-open
- 1. Install the "eWeLink" APP.



- 2. Register an eWeLink account.
- 3. Locate a suitable location for mounting the unit and sensor, e.g. beneath housing eve, out of direct sunlight, away from accumulating water, ice & snow and with a strong WiFi signal. Heat tape runs should not exceed 100 feet, unless they are daisy chained in series and turned on in sequence beginning at the controller and not exceeding 15Amp total line load.
- 4. For permanent installations, run a power line from a 15Amp GFCI circuit breaker with ½" conduit outdoors to cover the Romex 14/2 in accordance to NEC to the desired location of the unit. Ensure the conduit is supported sufficiently with clamps.
- 5. For temporary installations, purchase a 14AWG three (3) conductor extension cord that is rated for outdoor use and ensure there is sufficient length from an outdoor GFCI outlet to the desired mounting location. Replace conduit connector on the unit with the provided extension cord connector utilizing approximately six (6) full wraps of Teflon tape. Do not over tighten connector.

- 6. When pairing unit it is best to isolate the 2.4GHz signal from the 5GHz on your WiFi router. Then using your smart phone linked to the 2.4GHz signal begin the pairing process. Instructions on how to split the 2.4GHz and 5GHz signal with Comcast/Xfinity can be found at: <u>www.HCM-Systems.com</u>
- 7. Pair the unit in a dry and safe location near the router. Attach the 120VAC three (3) conductor pigtail to the input side of the unit between the terminal block nut and housing. Terminal screws are colored according to NEC.



1. Plug in the unit near the WiFi router, then press and hold the pairing button for seven (7) seconds until the WiFi LED blinks three (3) times then on repeatedly.



- 2. Using the smart phone tap 👽 on eWeLink App.
- 3. Follow instructions for pairing the device.
- 4. Input your WiFi SSID & Password when prompted.
- 5. Name your device to complete. If installing several units select a name according to location, e.g. North Side, South Side.
- 6. When the WiFi LED is on and no longer blinking, the device is paired and ready for use. Unplug the unit and remove the temporary pigtail power cable.
- 7. Attach the unit to the conduit and then to the building structure utilizing the standoffs and hardware provided.
- 8. Ensuring that the power source is off, attach the 14/2 Romex power to the unit according to NEC, utilizing the colored input terminals for neutral, load and ground. Secure the wire using provided cable clamp which also covers terminal block for safety.
- 9. Attach waterproof thermocouple to the building utilizing the provided cable clips. The thermocouple should be located in the area where the highest accumulating snow & ice conditions exist, such as the leading edge of the roof/gutter. Ensure however that the thermocouple is in an area directly influenced by the heat tape so that when melting is complete the thermocouple can effectively communicate to the unit to turn off.
- 10. Create a service loop of heat tape prior to entering the unit on the output side. Attach the heat tape buzz wires to the unit utilizing the screw terminal blocks on the output side of the unit; the heat tape shielding can be

secured to the ground terminal. Secure the heat tape wire using the provided cable clamp which also covers terminal block for safety.



- 11. Ensure all cable glands are hand tight to prevent water from leaking into the unit.
- 12. Turn on the source power and ensure that the LED's indicate proper operation.
- 13. Attach cover with the inner boss covering the LED's. Note the unit is symmetric with exception of this inner boss so positioning is critical. Secure the cover utilizing the hardware provided. The cover outer perimeter will become flush with the base when gasket is sufficiently compressed. Do not overtighten.

Using with unit with sensors:

Auto Mode: Parameters can be set so that the unit will switch on/off based upon temperature or humidity ranges as well as programmed scheduling.

Manual Mode: Temperature and humidity can also be monitored real-time from the unit and switched on/off from your smart phone remotely.

Miscellaneous Information:

The device requires one minute for connecting to WiFi and the internet. If the unit is offline for a significant time, ensure the units WiFi LED indicates that it is operable. WiFi LED quickly blinks one time every second. If WiFi LED blinks twice every second, it has failed to connect to the WiFi server, double check network connection. The unit is compatible with Amazon Echo, Google Home and Google Nest. Scan the user guide for more information.

