

# Day/Night Temperature Controller (BETA-4) User Manual



**BETA-4** BETA Series -Single Controller

## OVERVIEW

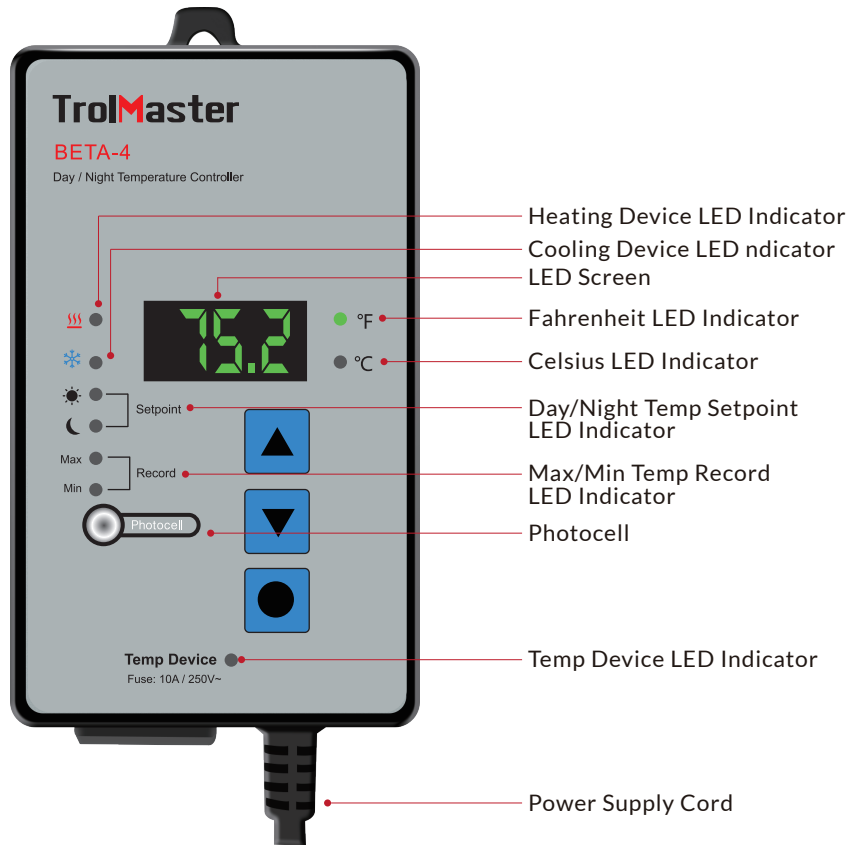
Thank you for purchasing the TrolMaster's BETA-4 Day / Night Temperature Controller.

BETA-4 offers an efficient and affordable solution to control the temperature easily. It utilizes a highly visible and intuitive LED screen to let you know current temperature level or max/min temperature recorded values.

User can choose either heating mode when connecting to the heating device, or choose cooling mode when connecting to the cooling device. Choose your desired temperature setpoint for day and night mode. When you select the heating mode and the temperature is lower than the setpoint, the controller will automatically turn on the power supply of the heater for heating purpose and its LED indicator stays on. And vice versa, when you select the cooling mode and the temperature is higher than the setpoint, the controller will automatically turn on the power supply of air conditioner or exhaust fan for cooling purpose and the corresponding LED indicator stays on.

It can also record the max and min temperature records during use.

A built-in photocell located on the controller automatically detects the day and night status, controlling the temperature in day/night mode separately. A remote temperature sensor with 16 feet long cable allows close placement to the plant canopy.



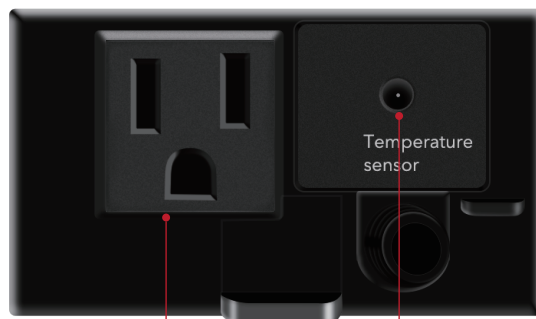
Up



Down



Home



Power Output for Temp Device

Temperature Sensor

## FEATURES

- LED Display, Easy Operation
- Built-In Photocell Detecting Day/Night Status
- Alternative Heating or Cooling Function
- Temp Sensor with 16ft Cable for Close Placement to Plant Canopy

## INSTALLATION

- Mount the Controller on the wall, place the sensor at plant height in a well - ventilated area.
- Connect the temperature sensor to Controller.
- Plug the Controller into a 120V NEMA 5-15 wall outlet.
- Plug a cooling device (air conditioner/exhaust fan) or a heating device (heater) into the power outlet of the unit.
- Ensure that the device has proper voltage (120V) and not exceed its max amperage rating(10A).

## OPERATION INSTRUCTIONS

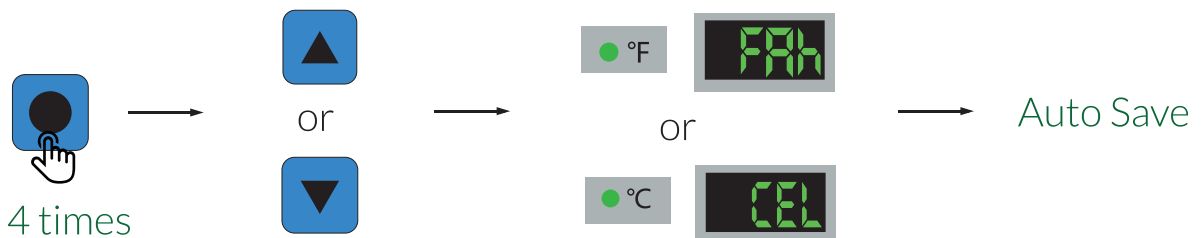
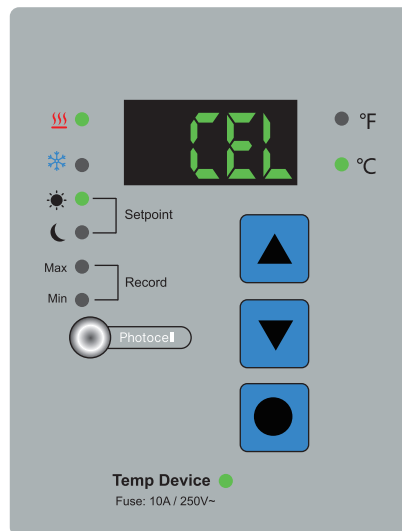
### 1. Reading Temperature

Connect the temperature sensor to the connector on the bottom. After power-on, the LED screen will display current measured temperature.








## 2. Fahrenheit & Celsius Conversion

Press the **HOME** button  for 4 times, the Fahrenheit  °F or  °C Celsius LED indicator will be flashing and the LED screen will display "FAh"  or "CEL"  respectively. Press **UP** or **DOWN** button to convert between Fahrenheit and Celsius. The unit will automatically save the change.



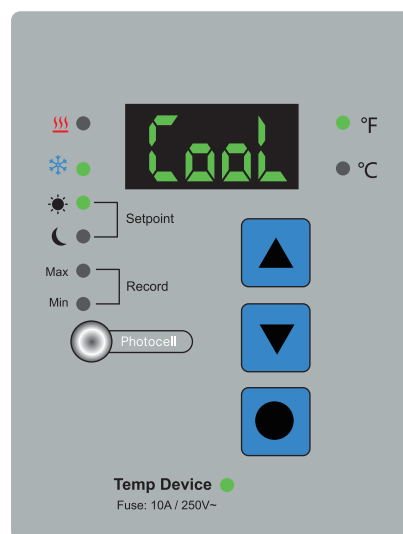
### 3. Set Cooling or Heating Mode

Press the **HOME** button  for 1 time, the Heating  or Cooling  LED indicator will be flashing and the LED screen will display corresponding "HEAT"  or "Cool"  accordingly. Press **UP** or **DOWN** button to convert between Cooling and Heating mode. The unit will automatically save the change.

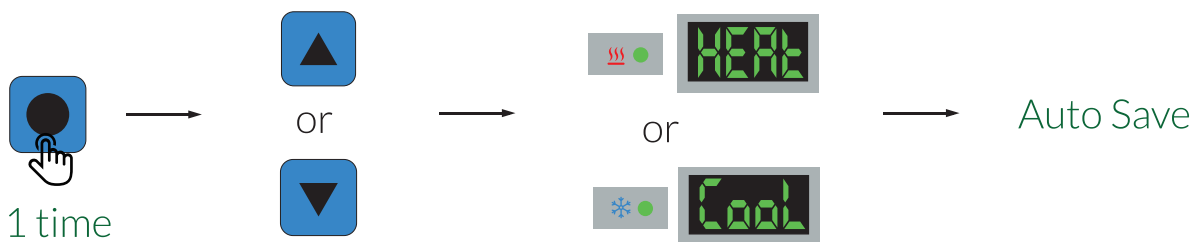
When the connected device is for cooling purpose (such as air conditioner/exhaust fan), please select the Cooling mode. When the connected device is for heating purpose (such as heater), please select the Heating mode.



Heating Mode



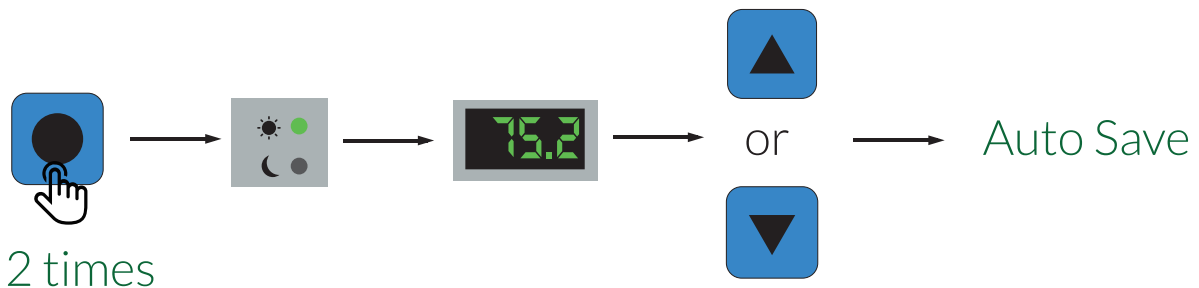
Cooling Mode



#### 4. Set Day Setpoint

Press the **HOME** button for 2 times, the Day Setpoint LED indicator will be flashing and the LED screen will display current temperature Day Setpoint. Press **UP** or **DOWN** button to change the setpoint. The unit will automatically save the change.

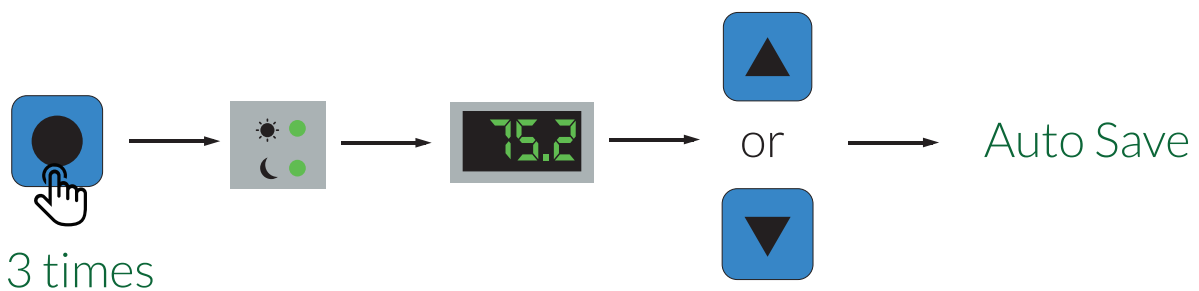
When the heating mode is selected (heating device connected) and the temperature detected is BELOW the setpoint, the BETA-4 Controller will automatically turn on the power supply of the heating device (heater) for heating purpose and its LED indicator stays on. On the contrary, when the cooling mode is selected (A/C or exhaust fan connected) and the temperature detected is ABOVE the setpoint, the BETA-4 Controller will automatically turn on the power supply of the cooling device for cooling purpose and its LED indicator stays on.



### 5. Set Night Setpoint

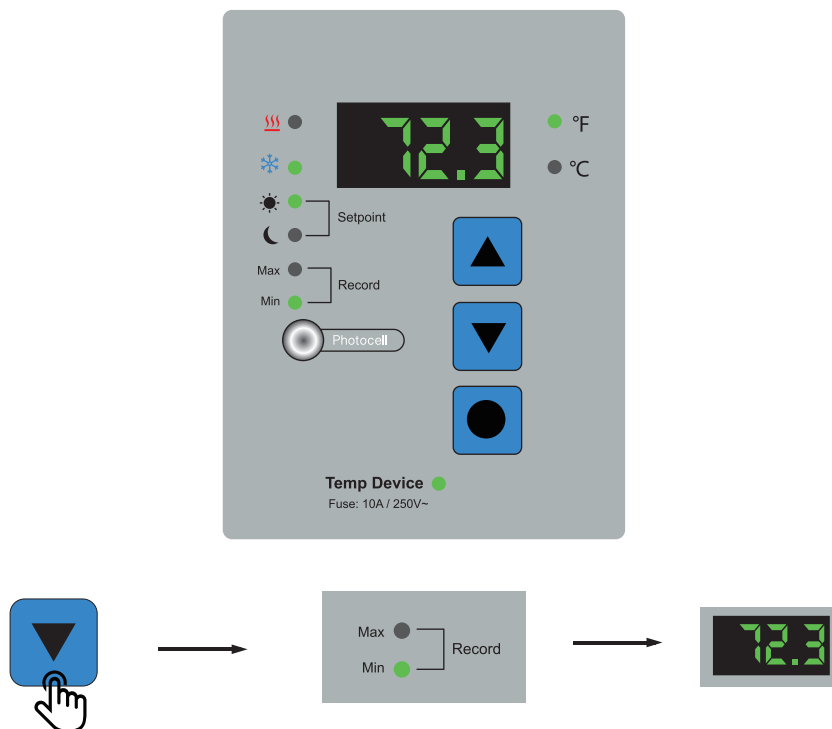
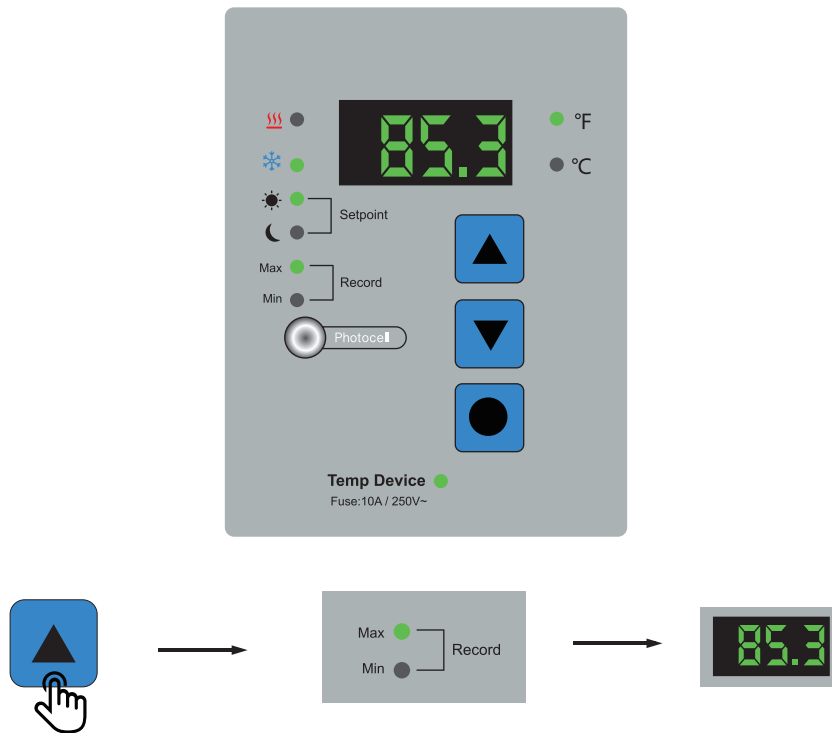
Press the **HOME** button for 3 times, the Night Setpoint LED indicator will be flashing and the LED screen will display current temperature Night Setpoint. Press **UP** or **DOWN** button to change the setpoint. The unit will automatically save the change.

When the heating mode is selected (heating device connected) and the temperature is detected BELOW the setpoint, the BETA-4 Controller will automatically turn on the power supply of the heating device (heater) for heating purpose and its LED indicator stays on. On the contrary, when the cooling mode is selected (A/C or exhaust fan connected) and the temperature is detected ABOVE the setpoint, the BETA-4 Controller will automatically turn on the power supply of the cooling device for cooling purpose and its LED indicator stays on.



### 6.Max/Min Recorded Value

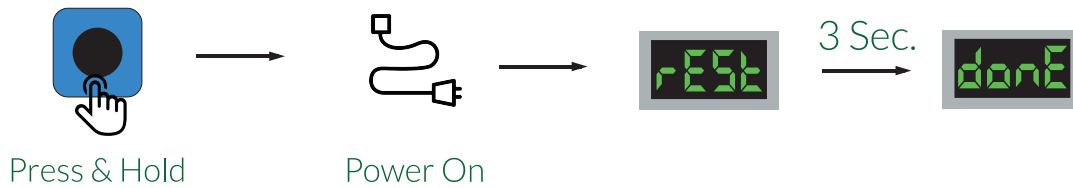
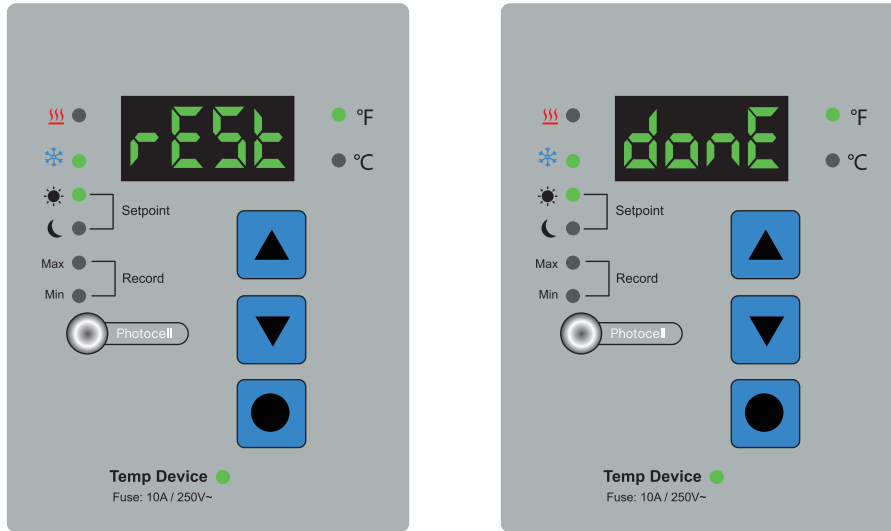
After power-on, the LED screen will display the current temperature. Press **UP** or **DOWN** button, the LED screen will display the Max or Min recorded value respectively. It will keep flashing for 1 minute and then turn back to normal measured temperature value. While the value is flashing, long press **HOME** button and the Max or Min recorded value will be deleted.





### 7. Restore the Factory Settings

To restore the factory setting, press and hold **HOME** button before plugging the Controller into wall outlet. After power-on, the LED screen will display "rEST" and then display "donE" after 3 seconds.



## FACTORY DEFAULT SETTINGS

Default Mode:	Cooling
Temperature Unit:	°F
Day Temperature Setpoint:	75°F
Night Temperature Setpoint:	70°F

## SPECIFICATIONS

Input Voltage:	120 Volts AC
Output Switch:	Relay
Fuse Rating:	10A/250V~
AC Power Cord Length:	1.8m
Temperature Control Range:	40°-100°F
Temperature Deadband:	5°F
Packaging Dimensions:	275mm(L) x 87mm(W) x 94mm(H)
Gross Weight:	0.56kgs

For any issues or concerns with our products, DO NOT return them to the store. Please contact our tech support department at [support@trolmaster.com](mailto:support@trolmaster.com) or call **877-420-9876**.

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