

STEP 1 LOCATE AND CONNECT THE SENSOR, APPLY POWER TO THE CONTROLLER

- 1) Before connecting the remote sensor to the plug-in controller box with the 25-ft telephone cable, **MAKE SURE TO APPLY WHITE GREASE** (included, Loctite 36780, 1 cc pouch) on both ends of cable, and then plug both cable ends into the sensor and controller telephone-type connectors.
- 2) Connect your controller into a **120V POWER OUTLET**. The display start-up sequence is as follows: bottom bar lights up, then goes up to top bar and back down to bottom bar. Controller is then ready to work.
- 3) **IT IS VERY IMPORTANT TO PLACE THE SENSOR CONNECTOR DIRECTED TOWARD THE FLOOR**, forming a 180° loop with the 25-ft cable already tied to the sensor top tab (with included beaded tie).
- 4) To **VIEW THE AMBIENT HUMIDITY** level, rotate the knob counter clockwise. Either DAY or NIGHT indicator will blink on left side of knob to indicate actual light sensor status.
- 5) To **VIEW THE AMBIENT TEMPERATURE** level, rotate the knob clockwise. Either DAY or NIGHT indicator will blink on right side of knob to indicate actual light sensor status.



TO VIEW THE AMBIENT TEMPERATURE:

Rotate The Knob Clockwise

TO VIEW THE AMBIENT HUMIDITY:

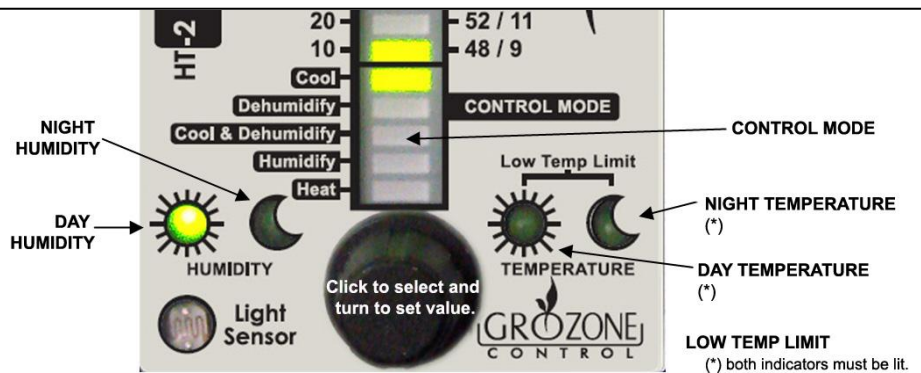
Rotate The Knob Counter Clockwise

STEP 2 SET VALUES

HOW DOES THE BAR DISPLAY WORK?

UPPER 15 BARS SHOW EITHER TEMPERATURE or HUMIDITY VALUES. The Humidity Scale is located on the left side of the display, the Temperature Scale on the right side.

LOWER 5 BARS SHOW THE SELECTED CONTROL MODE.



- **CONNECT YOUR CONTROLLER AND CLICK KNOB TO ENTER THE 6-STEP PROGRAMMING SEQUENCE:** Once you enter the Programming Sequence, LEDs are steady lit. LEDs are blinking when you return to normal operation.

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	EXIT
DAY HUMIDITY	NIGHT HUMIDITY	DAY TEMPERATURE	NIGHT TEMPERATURE	LOW TEMP LIMIT	CONTROL MODE (Note 1)	Return To Control

Note 1: only one bar lit among lower 5 bars.

- **SETTINGS FOR EACH CONTROL MODE:**

➡ These SETTINGS will ensure proper operation.

Operating Modes	DAY HUMIDITY	NIGHT HUMIDITY	DAY TEMPERATURE	NIGHT TEMPERATURE	LOW TEMP LIMIT (Note 2)
COOL	Setting not used	Setting not used	Day Setpoint: 52°F to 100°F (right scale)	Night Setpoint: 52°F to 100°F (right scale)	Setting not used
DEHUMIDIFY	Day Setpoint: 15% to 95% (left scale)	Night Setpoint: 15% to 95% (left scale)	Set value to 50°F or above (Note 2)	Set value to 50°F or above (Note 2)	Set value to 48°F or above (Note 2)
COOL & DEHUM.	Day Setpoint: 15% to 95% (left scale)	Night Setpoint: 15% to 95% (left scale)	Day Setpoint: 52°F to 100°F (right scale)	Night Setpoint: 52°F to 100°F (right scale)	Set value to 48°F or above.
HUMIDIFY	Day Setpoint: 15% to 95% (left scale)	Night Setpoint: 15% to 95% (left scale)	Setting not used	Setting not used	Setting not used
HEAT	Setting not used	Setting not used	Day Setpoint: 52°F to 100°F (right scale)	Night Setpoint: 52°F to 100°F (right scale)	Setting not used

Note 2: The Low Temperature Limit will stop your dehumidifying equipment if the temperature in the room cools down below this setting to avoid damaging your plants. This limit is active ONLY when "DEHUMIDIFY" or "COOL & DEHUMIDIFY" CONTROL MODE is selected. Always set your DAY and NIGHT temperature settings NOT MORE THAN 2°F above the Low Temp Limit.

STEP 3 CONNECT YOUR EQUIPMENT (120V 15Amps MAX)

Connect your equipment into the 120V outlet on the front of your controller, set your values and control mode, then you're set!

- FAN (to COOL, COOL & DEHUMIDIFY or DEHUMIDIFY)
- HUMIDIFIER (to HUMIDIFY)
- DEHUMIDIFIER (to DEHUMIDIFY)
- HEATER (to HEAT), 1000W heater recommended to maximize product service life.

DURING THE NORMAL OPERATION, LED or BAR INDICATORS WILL BLINK IN THESE SPECIAL CONDITIONS:**BLINKING INDICATORS (only one blinking at a time):**

The blinking indicator tells you which of temperature or humidity is currently shown and which of day or night period is being detected by the light sensor.

E.g. A Blinking Humidity Sun Icon stands for "Display currently shows Humidity value" and "The controller currently works during a Day Period".

BLINKING TEMPERATURE OR HUMIDITY BARS:

The temperature or humidity values are indicated by the upper 15 bars of display.

- **Temperature reading:** TOP BAR is blinking when temperature is above 104°F / 40°C. BOTTOM BAR (of 15) is blinking when temperature is below 48°F / 9°C. Otherwise, temperature is within these 2 limits.
- **Humidity reading:** BOTTOM BAR is blinking when humidity is below 10%. Humidity above 100% is impossible, TOP BAR will never blink.
- **Temp sensor failure:** both TEMPERATURE TOP and BOTTOM BARS are blinking when the temp sensor reading is invalid. The Output will be held OFF if the control mode is using this sensor. Unit may need to be repaired.
- **Humidity sensor failure:** both HUMIDITY TOP and BOTTOM BARS are blinking when the humidity sensor reading is invalid. The Output will be held OFF if the control mode is using this sensor. Unit may need to be repaired.

BLINKING CONTROL MODE BAR:

The selected CONTROL MODE is indicated by one of the lower 5 bars of display.

- **Output is OFF (no voltage on output):** Control Mode bar is STEADY LIT, not blinking.
- **Output is ON (120V on output):** Control Mode bar IS BLINKING.

Example 1

DAY Humidity Indicator is blinking.

Display bar "20" is lit (left scale).

DEHUMIDIFY Bar is lit, but not blinking.

Day Humidity Setpoint is 40%.

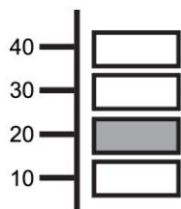
Example 2

NIGHT Temperature Indicator is

Display bars "68" and "72" are lit (right scale).

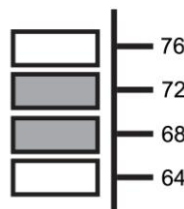
HEAT Bar is blinking.

Night Temperature setpoint is 75°C.



The bargraph display shows a HUMIDITY level of 20%.

DAY is detected and the Output is currently NOT ACTIVATED (120V) because humidity level is at 20%.



The bargraph display shows a TEMPERATURE level of 70°F.

NIGHT is detected and the Output is ACTIVATED because the temperature level is only 70°C.

DAY AND NIGHT DETECTION

☾ The light sensor detects a NIGHT condition when it senses darkness for a minimum period of 8 seconds.

☀ The light sensor detects a DAY condition when it senses light for a minimum period of 8 seconds.

ELECTRONIC BALLAST IN THE SURROUNDINGS

Electronic ballasts are generating electronic noises (EMI) that are likely to be picked up by the sensor cable and alter the reading of the temperature and humidity values. The HT-2 incorporates built-in filters that reduce the effect of EMI, however, we recommend:

- 1- to place the sensor and cable as far as possible of the ballast, the bulb and the cable between them,
- 2- to connect the controller on a different 120V outlet / circuit than the one used for the ballast.