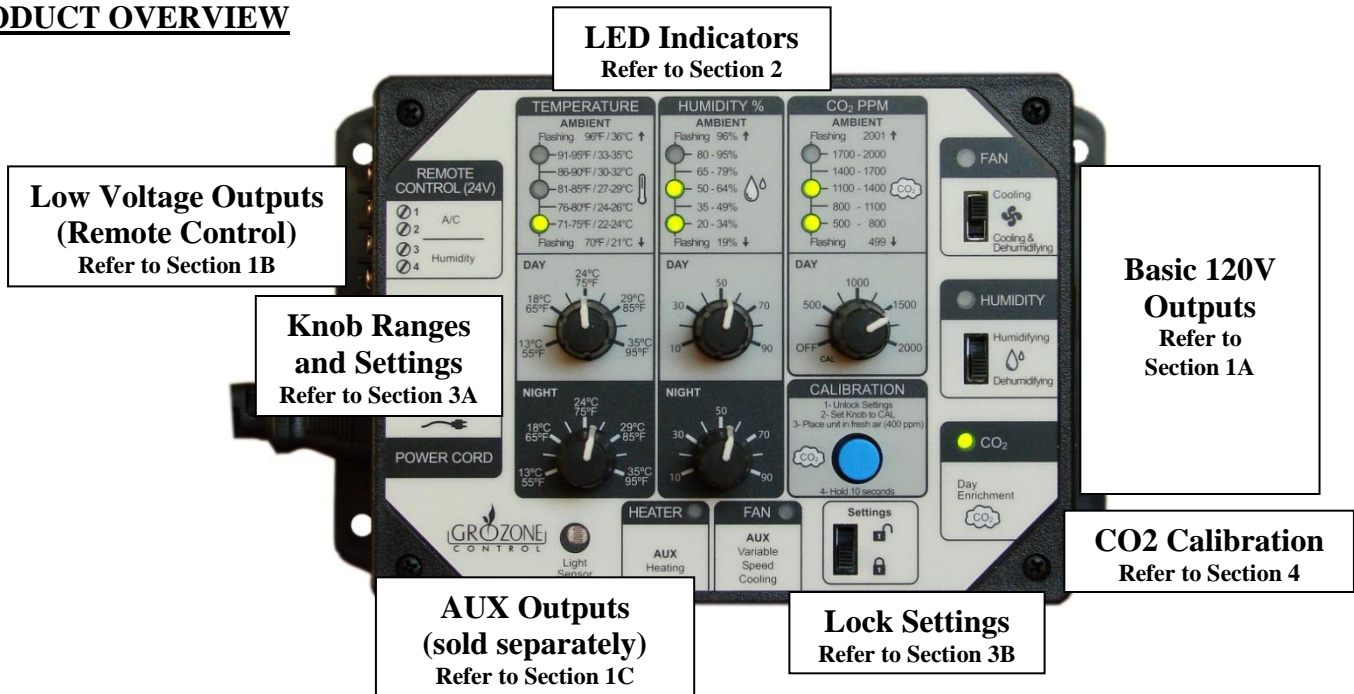


QUICK START USER GUIDE

PRODUCT OVERVIEW



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ADVANCED USER GUIDE IS AVAILAIBLE ONLINE

Detailed information can be obtained on [www.grozonecontrol.com](http://www.grozonecontrol.com)

- Detailed Information about Temperature and Humidity Control with a Fan
- Detailed Information about Humidity Control
- Detailed Information about CO2 Enrichment
- Detailed Information about Low and High Temperature limits
- CO2 Sensor Elevation Setting for Precise Reading in Altitude
- Detailed Information about Priorities and Sensor Failure Actions
- Detailed Information about the Factory Settings and Alternate Settings
- How to Change a Factory Setting to an Alternate Setting ?
- and more...


# 1- OUTPUT DESCRIPTION

## 1A- BASIC 120V OUTPUTS: MAX. 15A, TOTAL OF THE 3 OUTPUTS

	FAN	<p>For Day / Night “COOLING ONLY” or “COOLING AND DEHUMIDIFYING” as set by the Slide Switch.</p> <p>15A MAX. if used alone.</p>
	HUMIDITY EQUIPMENT	<p>For Day / Night “HUMIDIFYING” or “DEHUMIDIFYING” as set by the Slide Switch (and type of equipment used).</p> <p>15A MAX. if used alone.</p>
	CO2 GENERATOR	<p>For Day only “CO2 ENRICHMENT”, using either a tank or a burner.</p> <p>5A MAX. for inductive load, if used alone.</p>



## **1B- LOW VOLTAGE OUTPUTS (REMOTE CONTROL 24V)**

(These screw terminal interface plays the same role as Grozone LVC1 interface, visit [www.grozonecontrol.com](http://www.grozonecontrol.com) for more details on LVC1)

	AIR CONDITIONING (A/C)	<p>For Day / Night “COOLING ONLY” or “COOLING AND DEHUMIDIFYING” as set by Slide Switch.</p> <p><b>SCC1 DOES NOT SUPPLY POWER TO REMOTE A/C.</b></p> <p>SCC1 screw terminals are hooked-up to A/C screw terminal using any type of wire. Refer to A/C User Guide for proper connection.</p>
	HUMIDITY EQUIPMENT	<p>For Day / Night “HUMIDIFYING” or “DEHUMIDIFYING” as set by Slide Switch and type of equipment used.</p> <p><b>SCC1 DOES NOT SUPPLY POWER TO REMOTE HUMIDITY EQUIPMENT (HE).</b></p> <p>SCC1 screw terminals are hooked-up to HE screw terminal. Refer to HE User Guide for proper connection.</p>

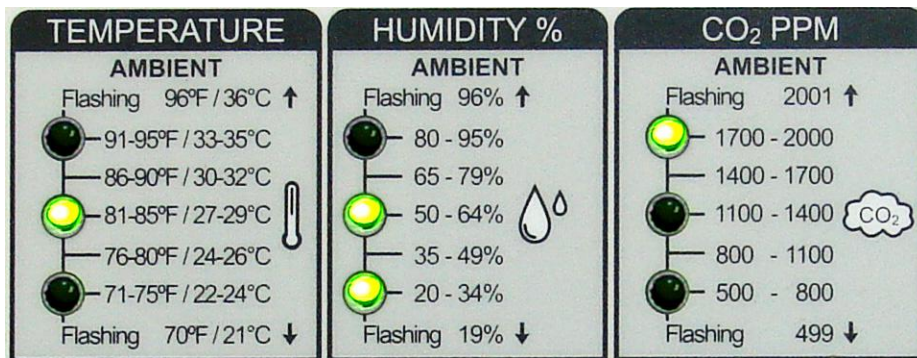
## **1C- AUX 120V OUTPUTS (SOLD SEPARATELY)**

(optional Output using remote Output Boxes – See **Advanced User Guide** for more details)

	AUX HEATER	<p>For Day / Night “HEATING”. User needs to connect an optional Remote Output Box (<b>OB2</b>) with 25-ft telephone cable.</p> <p>15A MAX for this output only, because it is connected to a different 120V outlet..</p>
	AUX FAN	<p>For Day / Night “COOLING”. User needs to connect an optional Remote Output Box (<b>OB2V</b>) with 25-ft telephone cable. OB2V works as a Remote TV1 or TV2 Grozone Variable Speed Fan Controllers. Fan speed will vary according to the amount of heat to exhaust. Limited to 6A or 750W.</p>

## 2- LED INDICATORS

### 2A- TO SHOW AMBIENT TEMPERATURE, HUMIDITY AND CO2 PPM



Example of LEDs indicating a temperature of 81 to 85°F, a humidity level of 35% to 49% and a CO2 level of 1700 to 2000 ppm.

All the LED indicator possibilities are:

<b>TEMPERATURE</b>	96°F AND MORE	91°F TO 95°F	86°F TO 90°F	81°F TO 85°F	76°F TO 80°F	71°F TO 75°F	70°F AND LESS
<b>HUMIDITY</b>	96% AND MORE	80% TO 95%	65% TO 79%	50% TO 64%	35% TO 49%	20% TO 34%	19% AND LESS
<b>CO2</b>	2001 PPM AND MORE	1700 TO 2000 PPM	1400 TO 1700 PPM	1100 TO 1400 PPM	800 TO 1100 PPM	500 TO 800 PPM	499 PPM AND LESS

### 2B- TO SHOW SENSOR WARM-UP PERIOD






	TEMPERATURE	HUMIDITY	CO2
	Not applicable Values are valid from Power ON.	Not applicable Values are valid from Power ON.	30-Sec Warm-Up Time at Power Up: CO2 Sensor needs 30-sec warm up before reading valid values.

### 2C- TO SHOW SENSOR FAILURES (TEMPERATURE, HUMIDITY OR CO2)

	TEMPERATURE	HUMIDITY	CO2
	Temperature Sensor Fail	Humidity Sensor Fail	CO2 Sensor Fail

Refer to **Advanced User Guide** for detailed information about the top priority automatic actions undertaken in case of sensor failure.

## 2D- TO SHOW OUTPUT STATES

OUTPUTS	Output Indicator OFF	Output Indicator ON	Output Indicator FLASHING
	Output relay IS NOT activated, receptacle DOES NOT supply 120V.	Output relay IS activated, receptacle DOES supply 120V	Output relay activation is pending, because at least one of these conditions is met: <ol style="list-style-type: none"> <li>1. high priority CO2 Output is ON (factory setting)</li> <li>2. 10-min. ON-DELAY is counting down after CO2 output has turned OFF.;</li> <li>3. Low Temp Limit has been reached only if Cool&amp;Dehum is set</li> </ol>
	Output relay IS NOT activated, receptacle DOES NOT supply 120V.	Output relay IS activated, receptacle DOES supply 120V	Will never flash, not implemented
	Output relay IS NOT activated, receptacle DOES NOT supply 120V.	Output relay IS activated, receptacle DOES supply 120V	Output relay activation is pending, because at least one of these conditions is met: <ol style="list-style-type: none"> <li>1. High Temp Limit has been reached;</li> <li>2. Empty Tank: High Temp Limit reached twice in a row OR 30-minute timeout elapsed WHILE CO2 level is still low.</li> <li>3. High priority FAN Output is ON (alternate setting).</li> </ol>
	Output Box OB2 is NOT connected <b>OR</b> Output Box OB2 IS NOT activated, receptacle DOES NOT supply 120V.	OB2 relay IS activated, Output Box receptacle DOES supply 120V  Note: Indicator will remain ON if OB2 is disconnected while activated. Indicator will not turn ON anymore once it turns OFF.	Will never flash, not implemented
	Output Box OB2V is NOT connected <b>OR</b> OB2V is forced to OFF during a Temperature Sensor Failure.	Normal Operation OB2V is DIMMING Fan Speed (can be fully OFF, fully ON or DIMMED as per settings)	Will never flash, not implemented

## 3- KNOB SETTINGS

### 3A- KNOB RANGES



#### DAY AND NIGHT TEMPERATURE SETTINGS:

55°F to 95°F / 13°C to 35°C

#### DAY AND NIGHT HUMIDITY SETTINGS:

10% to 90°F

#### DAY CO2 SETTING:

OFF, 400 TO 2000 PPM

(Note: all value below 400 ppm will be set to 400 ppm)

**For CALIBRATION, refer to Section 4.**

### 3B- LOCK SETTINGS

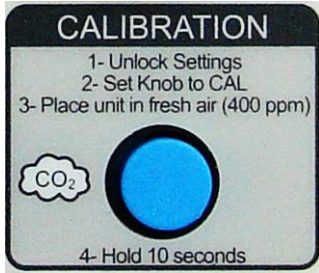


- PLACE SLIDE SWITCH TO UNLOCK (TOP POSITION) TO SET YOUR KNOB VALUES
- PLACE SLIDE SWITCH TO LOCK (BOTTOM POSITION) TO SAVE YOUR KNOB VALUES.

**IMPORTANT NOTICE:** ONCE LOCKED, VALUES WILL BE PRESERVED EVEN THOUGH KNOBS ARE ROTATED INADVERTENTLY.

**IMPORTANT NOTICE:** DO NOT FORGET TO UNLOCK BEFORE CHANGING YOUR SETPOINTS.

## 4- CO2 SENSOR CALIBRATION



### CO2 Sensor Calibration is performed in 4 easy steps.

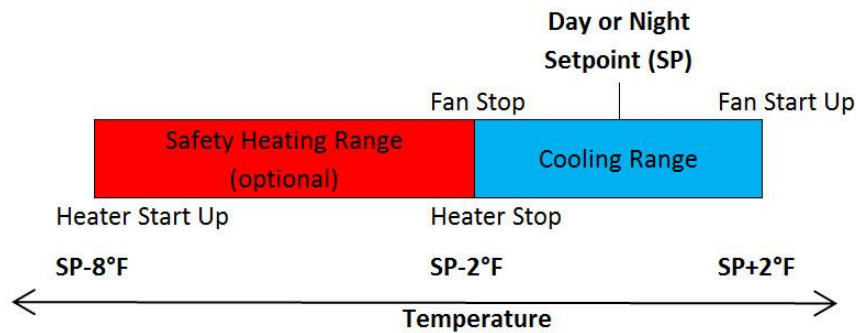
- 1- Place the LOCK/UNLOCK Slide Switch to the UNLOCK Position (Top position).
- 2- Set the CO2 Day Setpoint to the CAL position (fully counter clockwise).
- 3- In order to get a VALID CALIBRATION, the unit must be placed temporarily outdoors or in fresh air, where natural CO2 level is close to 400 ppm.
- 4- Push and hold button for 10 seconds: the 3 CO2 Ambient LED Indicators will blink every second 10 times, then the Indicators will remain LIT until you let the pushbutton go.
  - If the CALIBRATION is good, the indicators will blink 4 times
  - If the CALIBRATION is bad, the indicators will blink only once.

The unit returns to Normal Operation.

## 5- TEMPERATURE CONTROL WITH FAN (and Optional Heater)



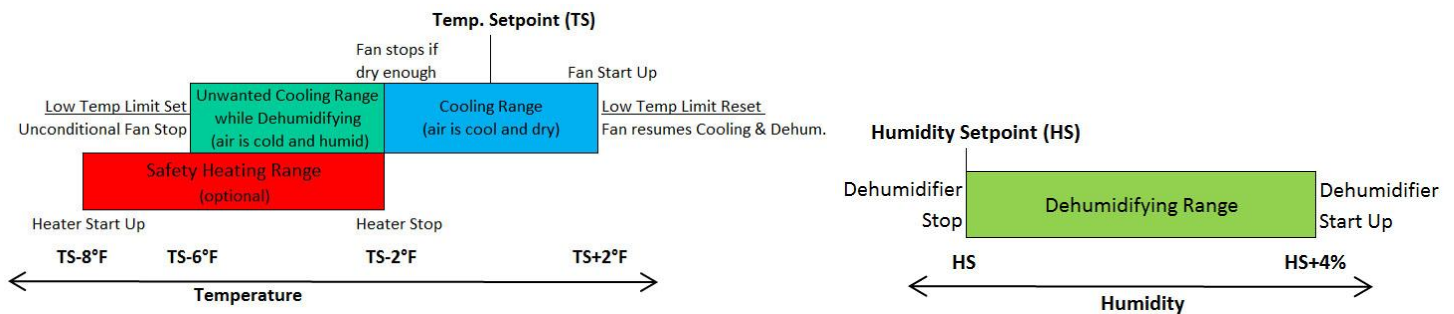
To use this mode, you connect your cooling Fan into the FAN 120V Output, set the Slide Switch to “Cooling” position.



## 6- TEMPERATURE AND HUMIDITY CONTROL WITH FAN (and Optional Heater)



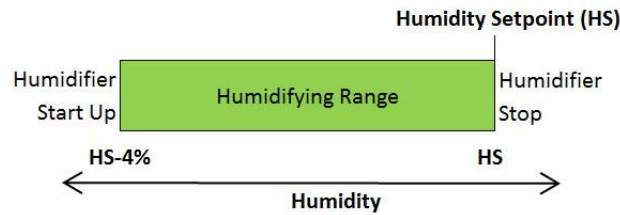
To use this mode, you connect your cooling Fan into the FAN 120V Output, set the Slide Switch to “Cooling & Dehumidifying” position.



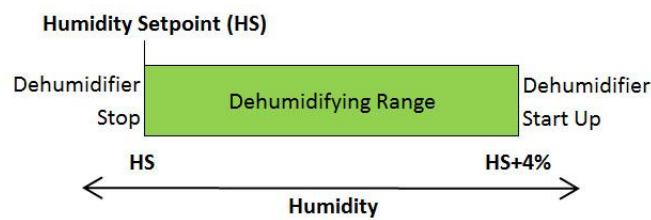
## 7- HUMIDITY CONTROL WITH A HUMIDIFIER OR DEHUMIDIFIER

To use this mode, you connect your Humidity Equipment (Humidifier or Dehumidifier) into the HUMIDITY 120V Output, set the Slide Switch to either “Humidifying” or “Dehumidifying” according to your equipment type.

### HUMIDIFYING - SLIDE SWITCH TO TOP POSITION



### DEHUMIDIFYING - SLIDE SWITCH TO BOTTOM POSITION



## 8- CO2 ENRICHMENT WITH A BURNER OR A TANK

To use this mode, you connect your CO2 Generator into the CO2 120V Output. CO2 Enrichment will work during the DAY ONLY.

