TROUBLESHOOTING THE SCO2 « The Simple One »

GROZONE CO₂ CONTROLLER

Procedure Name: SCO2-V2

1 – BEFORE YOU START

* IMPORTANT: READ AND FOLLOW THESE INSTRUCTIONS BEFORE STARTING THE TEST.

- CONNECT A LOAD INTO THE OUTLET ON THE LEFT SIDE OF THE CONTROLLER (lamp or fan...)
- LIGHTING CONDITION: perform this test in a room with enough light for the controller to detect a DAY condition.
- ◆ PERFORM THIS TEST IN A ROOM WHERE THE CO2 LEVEL IS LOW (UNDER 1000 PPM)

2 - TEST				
STEP	HANDLING AND TEST DESCRIPTION	EXPECTED RESULTS		
1	 Plug the controller power cord into any 120V outlet or power bar. 	The screen shows a 30-second countdown after a short introduction displaying the name of the product and the revision number. Wait until the countdown ends.		
2	 After a 30 seconds, the controller will indicate the CO2 level in your room 	An appropriate value should stand between 400 and 1000 ppm. It might be higher if your room is not ventilated enough. CALIBRATION will be verified at step 10.		
3	 Click knob once. Turn knob both ways, and set value to 4500 ppm (needed for step 5). 	The CO_2 High (ppm) light indicator lights up and the display indicates the CO2 high setpoint (the default value is 1500 ppm). This value on screen may be adjusted by rotating the knob.		
4	 Click knob three times. Wait 5 seconds. 	The SCO2 goes back to reading mode. All light indicators are off except Output On.		
5	 Click knob three times. Turn knob in both directions to change the value on screen between F13 and F14 repeatedly. 	The Output ON indicator will turn off when F14 is set, and will turn back on when F13 is set. F14 = Output OFF F13 = Output ON The load connected to the controller should turn on and off along with the Output ON light indicator. IMPORTANT: The CO2 High (ppm) has to be set at 4500 ppm to perform this step successfully		
6	 Turn the knob to set value to F11 Click knob one last time 	The first 3 light indicators will be off and the display indicates the CO2 level in the room. The Output ON indicator will turn ON.		
7	COVER the day-night detector (Light Sensor) with the palm of your hand or some black electric tape. Using only one finger will not cover the light sensor appropriately and daylight will be detected.	The Output ON light indicator and the load plugged into the outlet will turn off after 6 to 8 seconds when the night condition is detected.		
8	 UNCOVER the light sensor and wait for 6 to 8 seconds 	The Output ON indicator will turn ON when day condition is detected.		

9	*	Blow softly into the air intake (lower right corner of the module) through the air filter.	The CO2 concentration will gradually increase up to 5000 ppm and above. The Output ON indicator will turn off and the screen will show « OVER » and « 5000 » alternately.
10	* *	To verify if the CO2 sensor calibration is required, bring the controller outdoor and wait until the reading is stable (2-3 min). AVOID BREATHING NEAR THE CONTROLLER. IF REQUIRED , you will find the calibration procedure below.	The CO2 ppm value on the screen should be between 350 and 450 ppm, even up to 500 ppm in urban surroundings. In this case, your controller DOES <u>NOT NEED</u> calibration. Note: The built-in CO2 sensor is precise to +/- 75 ppm (industry standard), meaning that two or more controllers in the same room are likely to indicate different ppm values, showing variation between them of up to 150 ppm. THIS IS NORMAL and no action is required. If the variation between readings is beyond 150-200 ppm, one of them is likely to require a calibration. Be aware that a difference of 100 ppm has insignificant effect on plants.

Steps	CO2 SENSOR CALIBRATION IMPORTANT: Before beginning the calibration, bring the controller outdoor (fresh air being use as a reference)		
	and wait until the reading is stable (2-3min). If the value on the screen is around 350 to 450 ppm, YOU DO NOT NEED TO RECALIBRATE YOUR UNIT.		
1	Click knob repeatedly until "Set-Up & Cal" indicator turns ON.		
2	Press knob and keep it pressed for about 5 seconds, until " Set-Up & Cal " light indicator begins to flash and "CAL" appears on screen.		
3	Let knob go, "CO2" and "CAL" appears on the screen alternately (blinking).		
4	Click knob again, then "CAL" and "400" appears on the screen alternately (blinking).		
5	TO CALIBRATE: press knob and hold at least 5 seconds, until "CAL" shows up on the screen (not blinking), then let knob go.		
	IMPORTANT: if you "click" the knob without holding for 5 seconds, you will exit WITHOUT calibrating.		
6	The calibration process only takes a few seconds. When completed, « CAL » and « GOOD » appear on the screen alternately (blinking) for 5 seconds, then the controller returns to normal operation.		
	IMPORTANT: You MUST see « GOOD » on the screen at the end of the calibration process. If not, the calibration has FAILED. You need to go back to step 1.		