

Notes:

1 Square = 1 Foot



TITAN[®]
CONTROLS

ATLAS 4[™]

Dual Zone CO2 Controller Instruction Manual

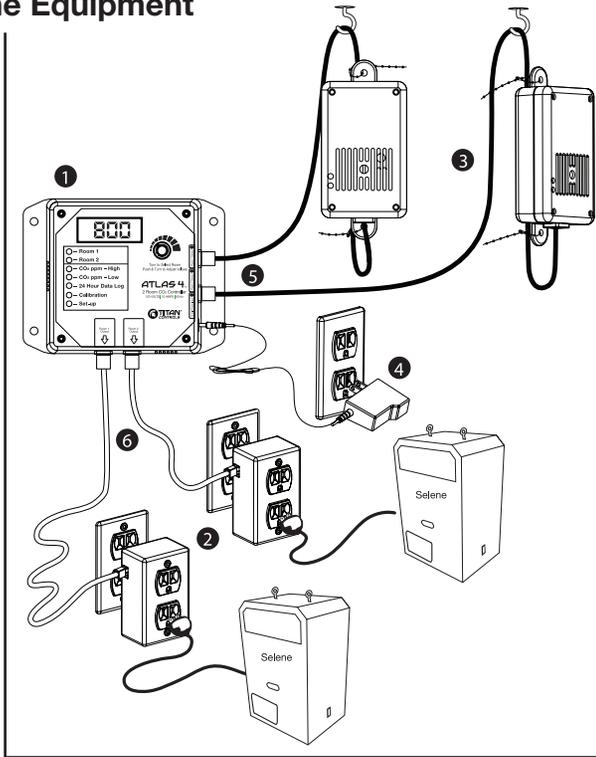


Step 1: Connecting the Equipment

Place the Controller on a wall in the most convenient location. Locate one sensor in each growing room, in a place presenting the average plant conditions and protecting the enclosure from light bulbs, heat sources, spray and condensation. Sensor must be hung from the ceiling with the included cable, tied to the enclosure flanges as shown : it is important to direct the sensor connector toward the floor.

Note : The sensors have light detectors on both sides, allowing them to be placed along the walls.

1. Controller
2. Output box
3. Sensor
4. Power supply
5. Network cable
6. Telephone cable



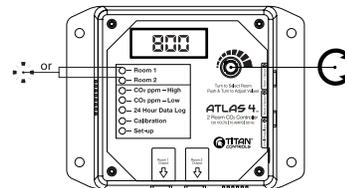
Step 2: Time Setting

New units will require the user to enter the time. See Time Setting on page 4 and begin at Step 5.



Step 3: Zone Selection

Turn knob only (do not press) to select zone #1 or #2 or to view the time. The indicator for the selected zone remains lit at all times, except when the time is displayed.



WARRANTY SERVICE: Please read warranty information first

If after reviewing the troubleshooting tips the unit will still not work, you should return it to the Dealer where you purchased the controller. They will be able to further evaluate the unit and test its various components and quite possibly will be able to identify and/or fix any problems. If the Dealer is unable to fix the unit, they will return it to us for factory repair.

If there are no Dealers in your area, you may contact us directly for technical support. If we cannot help you resolve the problem over the phone, we will issue you a RMA # (return merchandise authorization) authorizing you to return the unit to us for factory reconditioning (if the unit is under warranty). Contact the number below for a RMA and shipping address. Complete the form below and include it with your unit. Also please write the RMA # on the outside of the box.

Please package the unit in its original packaging. If it is damaged in shipment we cannot be responsible.

Once we receive the unit back, we will repair or replace the controller within 48 hours (business) and return it to you freight prepaid via FedEx or UPS ground shipment.

Include the following if returning directly to Titan Controls

- Proof of purchase
- This completed form
- RMA # on the outside of the box

Return Merchandise Authorization Number (Required)

Company Name: _____

Contact Name: _____

Address: _____

Phone #: _____

Email address: _____

What is the nature of the problem? _____

Send to your nearest location – shipping address will be given when the RMA # is issued:



www.titancontrols.net

For technical assistance call us at 1-888-80-Titan or 1-888-808-4826.

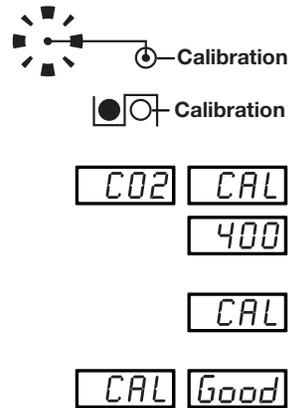
Appendix 2

Calibration of CO2 sensor

Important Notice : This step is not required for a new unit (factory calibrated). Verify CO2 sensor precision by exposing your unit to outdoor air every 6 months (correct value stands between 300 and 500 ppm). If you need to calibrate the sensor, please follow these instructions. At any time before the last step, the calibration procedure can be cancelled, causing the controller to return to normal operation.

WARNING EACH ZONE SENSOR MUST BE CALIBRATED SEPARATELY

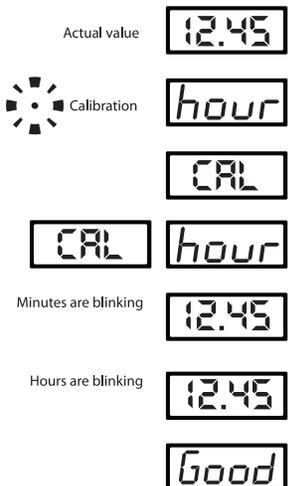
1. IS CALIBRATION NEEDED? First select zone #1 or #2, then expose the corresponding remote sensor to outdoor air for a minimum of 5 minutes, fresh air being used as a reference. If the value on screen is around 350 to 450 ppm, YOU DO NOT NEED TO RECALIBRATE THE SENSOR OF THIS ZONE.
2. CALIBRATION IS NEEDED : Click knob repeatedly until "Calibration" indicator turns ON.
3. Press knob and keep it pressed for about 5 seconds, until light indicator begins to flash and "CAL" appears on screen.
4. Let button go, "CO2 CAL" appears on screen, click knob again, then 400 will appear on screen to remind you that you need to place the unit in fresh air before starting the calibration. If your controller is not in fresh air condition, just click knob to abort calibration.
5. STARTING CALIBRATION : press knob and keep it pressed for at least 5 seconds, until "CAL" shows up on screen, then let button go.
6. Automatic calibration will take a few seconds to complete: "CAL good" will appear on screen for 5 seconds, and controller will return to normal operation automatically.



Time setting

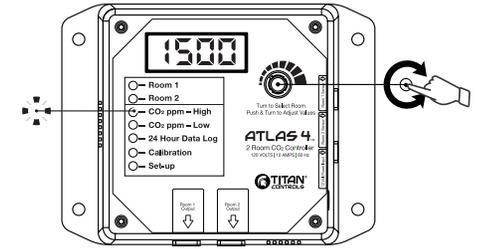
Follow these instructions

1. View current time by turning knob fully clockwise
2. Click knob until << CALIBRATION >> indicator turns on
3. Press knob for 5 seconds until CAL appears on screen
4. Let knob go, you now enter the time setting mode
5. Click knob to display current time. You must turn knob to set minutes before going to step 6
6. Click knob and turn to set hours. Click knob to toggle between hours and minutes
7. Press knob for 5 seconds until GOOD appears on screen
8. Let knob go to return to normal operation



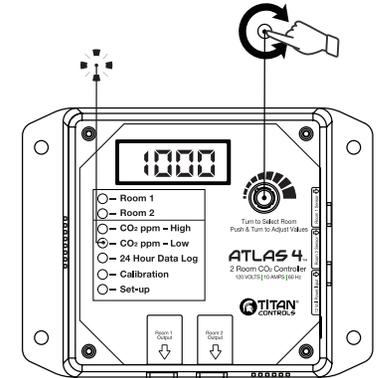
Step 4: Setting high value

Click knob and turn to set high ppm value of selected zone. This is the maximum CO2 level the generator will allow. In fact, the generator will usually stop before reaching this level in order to avoid overshoots.



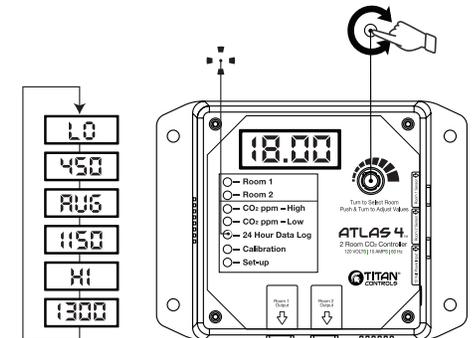
Step 5: Setting low value

Click knob and turn to set low ppm value of selected zone. This is the minimum CO2 level the generator will allow. In fact, the generator will usually turn on before reaching this level in order to avoid undershoots.



Step 6: 24 hour log

Click knob and turn to select log time among last 24 hours; controller displays the min., average and max. ppm readings observed during the selected hour, for each zone separately.



Sensor calibration and hour setting

WARNING

Sensor calibration is not required for a new unit (factory calibrated).

Verify CO2 sensor precision by exposing your unit to outdoor air every 6 months (correct value stands between 350 and 450 ppm). To calibrate your sensor, refer to Appendix 2. Hour can be set at all times; also refer to Appendix 2.

Step 7: Setting operating mode

Click knob and turn to select your Control Mode for each zone.

For set-up using two burners

F11: CO2 enrichment – day only

F12: CO2 enrichment – night only

F13: CO2 enrichment – day & night

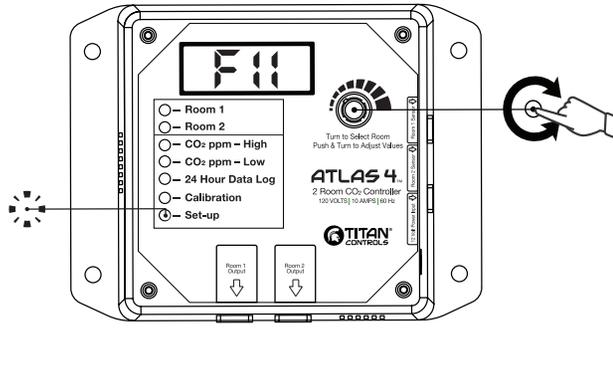
F14: CO2 exhausting – day only

F15: CO2 exhausting – night only

F16: CO2 exhausting – day & night

For set-up using one burner (see Appendix 1)

F17: CO2 enrichment, day only,



Click knob to return to CO2 display

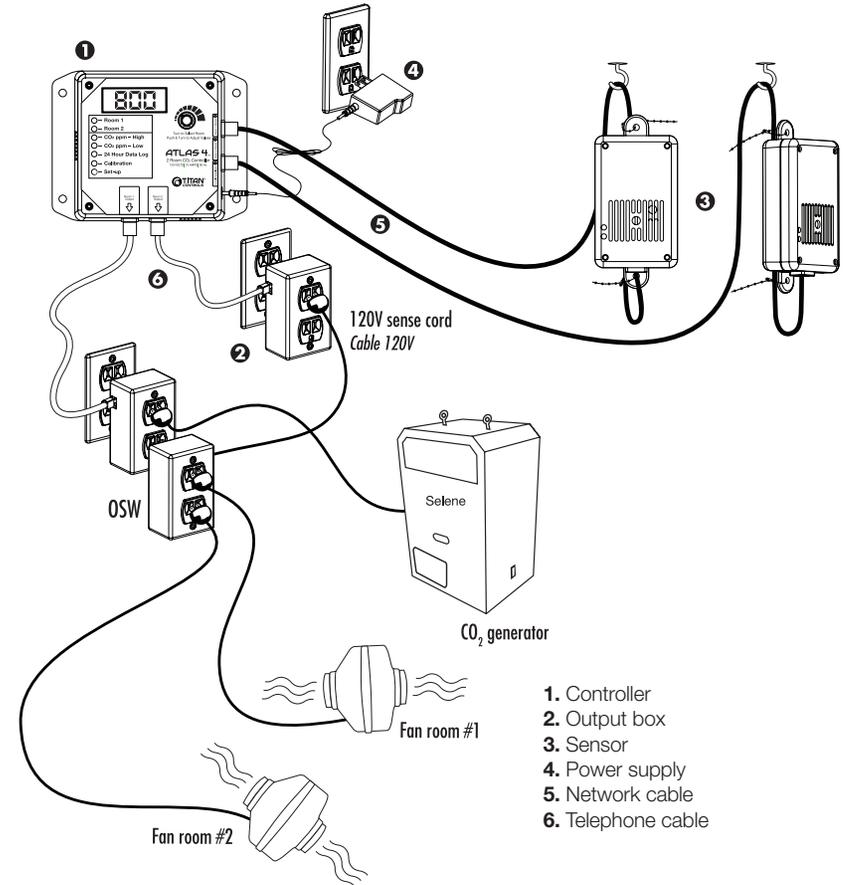
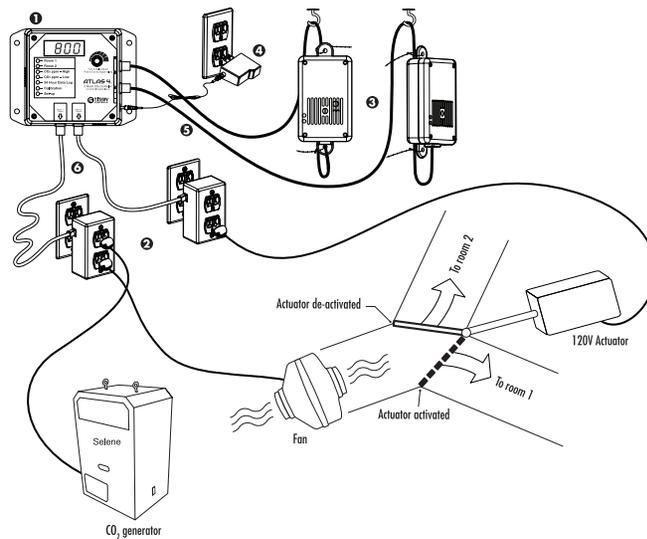
PARAMETER SETTING IS NOW COMPLETE, YOUR CONTROLLER IS READY TO USE

Appendix 1

Set-up Mode F17, using a damper with actuator

Plug the CO2 generator and fan into Output Box #1 and the flap switch into the Output Box #2. Make sure the airflow is directed toward Room #1 when the flap switch is de-activated.

1. Controller
2. Output box
3. Sensor / Sensor
4. Power supply
5. Network cable
6. Telephone cable



1. Controller
2. Output box
3. Sensor
4. Power supply
5. Network cable
6. Telephone cable

Set-up Mode F17, using ventilation fans and an ON-OFF Switcher (OSW – sold separately)

- Plug the CO2 generator into the upper outlet of Output Box #1.
- Plug the ON-OFF switcher (OSW) into the lower outlet of Output Box #1.
- Plug the Room #1 Fan into the ON output (OSW upper outlet) .
- Plug the Room #2 Fan into the OFF output (OSW lower outlet).
- Finally, plug the OSW sense cord into the Output Box #2.