

# **CO2METER RAD-0502 Controller and Sensor for Grow Rooms Instruction Manual**

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RAD-0502
Controller and Sensor for Grow Rooms
Operating Manual Instructions

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#### **Product Overview**



Thank you for selecting the **RAD-0502 CO2 Controller for Grow Rooms**, which is designed to regulate CO2 levels and allows growers to set high/low targets to maximize plant yields and profitability.

The CO2 Controller for Grow Rooms uses a dual beam NDIR technology to accurately measure CO2 concentrations up to 3,000ppm. With a built-in temperature measurement and photo sensor, the controller can

turn off relays during dark periods to save Carbon Dioxide (during greenhouse mode). Furthermore, the CO2 grow controller is an ideal solution for many growers who utilize the device across indoor greenhouses, cultivation centers, hydroponic rooms, or anywhere regulated CO2 levels are important for plant growth.

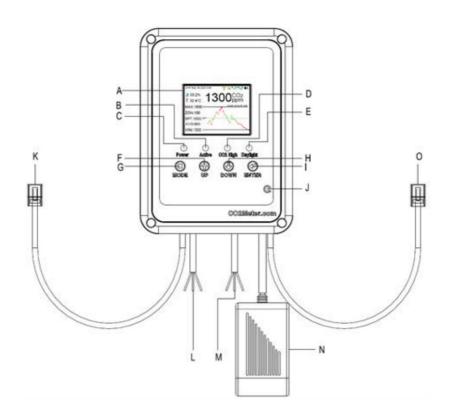
- · Accurate CO2 control for small to large-sized indoor grow facilities
- · Control 2 zones with 2 sensors
- Customizable CO2 set points for high and low target levels
- Dual-beam NDIR technology accurately measures CO2 concentrations 0-3,000ppm
- · Built-in temperature, humidity, and light
- The relay output can automatically control the CO2 generator or compressed CO2 tanks
- Versatile modes for greenhouse or HVAC

#### **Package Content and Unit Layout**

The RAD-0502 package comprises the following parts:

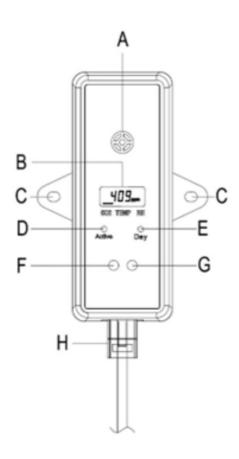
- (1) Indoor CO2 Controller
- (2) Remote CO2 Sensors
- (2) Relay Cables
- (1) Wall Plug Safety Strap
- (2) Mounting Brackets
- (6 pieces) Screws
- (1) Power Supply
- (3 pieces) International Power Adapters

#### **Indoor CO2 Grow Controller Main Unit**



- **B.** Green LED (lights when relay activate)
- **C.** Green LED (power on indicator)
- **D.** Green LED (lights when CO2 concentration is the above-set point)
- **E.** Green LED (lights when daytime)
- F. UP button
- G. MODE Button
- H. DOWN Button
- I. ENTER Button
- J. RESET Button
- K. Communication Cable to the sensor unit
- L. Relay Cable (configurable)
- M. Relay Cable (configurable)
- N. Power Plug

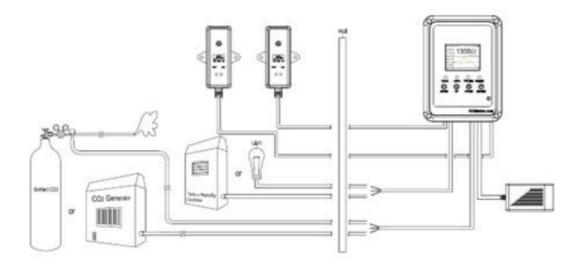
#### **Indoor CO2 Grow Controller CO2 Sensor Unit**



- A. CO2 Entry
- B. LCD Display
- C. Panel Holders
- **D.** Green LED (lights when relays activate)
- **E.** Green LED (lights when daytime)
- F. TEMP/HR Sensor
- **G.** Photo Sensor (monitors light or darkness)
- H. Communication Cable to Main Unit

#### **Connection Diagram**

Please Note: The CO2 Controller is designed for indoor greenhouse applications, or for ventilation



## **LCD Display Symbols**

Symbol	Meaning	Description
<b>1300</b> Co <sub>2</sub> ppm	CO2 levels	CO2 concentrations are shown in ppm (parts per million)
<b>50</b> RH%	Humidity	The display shows the current humidity. Can be changed by pressing the "MODE" key
<b>24</b> TENP <sup>9</sup> C	Temperature	Displays current temperature. The unit can be switched by pr essing the "MODE" key.
0.2 LIGHT IX	Light	Displays current light. The unit can be switched by pressing t he "MODE" key
MAX:	Maximum	Displays the maximum value in the selected time
MIN:	Minimum	Displays the minimum value in the selected time
AVG:	Average	Displays the average value in the selected time

Symbol	Meaning	Description
SPT:	Setpoint	Displays the user's set point
ZON:	Zone	Displays the user's set zone
INT:	Interval	Displays the time interval represented by each column of the table
EXP:	Expect	Displays the duration of the desired light intensity and selected time range
SP'T-	Set point indicator lines	Displays the set point line in the chart
SPT <min SPT&gt;MAX</min 	Set points out of table ra	When set points are out of range, indicator lines do not appe ar within the chart.
= 5	Values of each line	Displays the value of each row in the table
	3 states of temperature	Shows the temperature status
۵.	3 states of humidity	Shows the humidity status
<b>☀ €</b>	2 states of light	Shows the light status
• •	2 states of CO2	Shows the CO2 status in HVAC Mode
YT	2 states of CO2 in "gree nhouse" mode	Shows the CO2 status in Greenhouse Mode
1 0	2 states of CO2 relay	Shows the CO2 relay status
P. A	2 states of TEMP relay	Shows the TEMP relay status
1. 4	2 states of RH relay	Shows the RH relay status
1 4	2 states of light relay	Shows the light relay status

Symbol	Meaning	Description
<u>a</u>	Atmospheric Pressure	Displays the current atmospheric pressure values
<b>4</b> )) <b>4</b>	2 states of buzzer	Shows the buzzer status

#### **Operating the RAD-0502**

The **first power LED** will appear green when the power is supplied to the grow controller

The **second power LED** will appear green when the CO2 concentrations are lower than the set point 1 (configurable)

The **third power LED** will appear green and turn on when the CO2 concentrations reach above-set point 2 The **fourth power LED** will appear lit when the photo sensor is active, and the photo sensor is used to detect the presence or absence of light

## **Safety Precautions**

At CO2Meter, your safety is very important to us. To ensure the correct and safe use of the RAD-0502 controller for grow rooms, please read this entire user manual before operation. Otherwise, the protection provided by the equipment manufacturer may be impaired. Please adhere to the warnings below that highlight important safety information and should be observed at all times.

- Please handle the device carefully, do NOT subject the unit to impact or shock, otherwise, this may decrease the sensor's overall accuracy and precision.
- Do NOT place the unit or the power plug near a heat source, as heat can distort the unit and may result in fire
  or injury.
- Do NOT open the CO2 Grow Controller or touch any of the exposed electronic circuitry, under any circumstances. Should you touch any exposed wiring, this can result in electric shock.
- Only connect devices to the RAD-0502 CO2 Grow Controller that use grounded plugs.
- Our replacement sensor can NOT be used to monitor additional grow spaces, this device can ONLY monitor CO2 concentrations in up to (2) grow zones.
- Please Note: the RAD-0502 may NOT be used for CO2 safety per OSHA guidelines as it does not meet the need to measure and operate at OSHA's Short-Term Exposure Limit of 30,000 ppm.

#### 6. Product Care

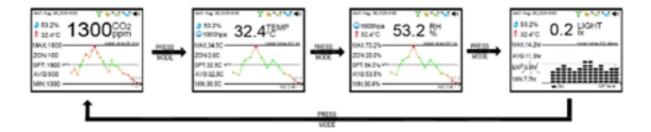
Co2Meter wants you to get the most out of your product or sensor technology. In order to do so, please observe the following care instructions.

- Repair Do NOT attempt to repair the product or modify the circuitry by yourself.
- Cleaning Please disconnect the power before cleaning. Use a damp cloth and do NOT use liquid cleaning agents such as Benzene, Thinner, or Aerosols. Using these agents will critically damage the device.

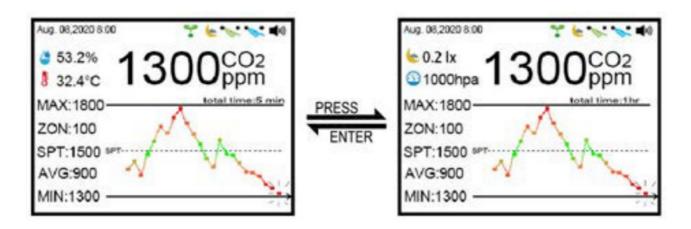
#### **Installation Instructions**

- 1. Choose a suitable location at the plant level to install the CO2 Sensor unit.
- 2. Choose a suitable location at eye level to mount the CO2 Grow Controller unit.
- 3. Next, connect a CO2 generator or bottled CO2 control regulator to the desired relays (please note the CO2 Grow Controller has 2 relay outputs. The relays can control a CO2 generator or a bottled CO2 regulator to produce CO2)
- 4. The **first relay** will then be triggered, and the power will be supplied when the CO2 concentration is out of the desired set point range.
- 5. The **second relay** will then be triggered allowing temperature, humidity, and light capabilities dependent upon the user preference.

#### **Main Display Content Switching**



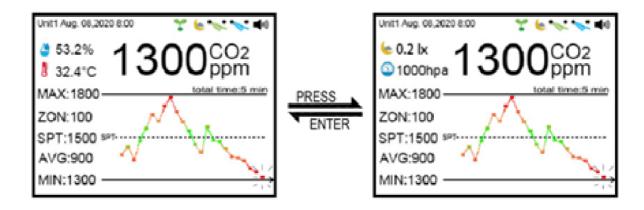
- 6. Press the "MODE" key to switch the main display contents across CO2, RH, TEMP, and LIGHT
- 9. Display Switching Content Attached



**7.** Press enter to attach the display and then it will switch between temperature and humidity, or Carbon Dioxide and light.

#### **Change Table Time Range**

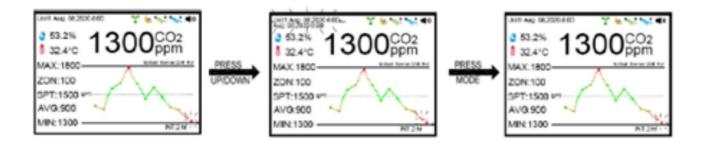
**8.** On the main CO2 Grow Controller, press the enter key for 5 seconds to switch the time range from CO2 TEMP and RH tables. The time range of each column in the table can be respectively 5 minutes without CO2. 2 hours, 14 hours, 56 hours, and 14 days. (Co2 has a 5-minute trend)



- 9. Press enter for 3 seconds to switch the table time range to the main display mode
- 10. Press enter to enter calibration mode
- 11. Press enter to enter into the CO2 calibration mode or press mode to return back to the settings screen.
- **12.** Press the **up or down keys** to set the value to be corrected or press the **mode** key to exit the setting screen.
- 13. Press and hold the enter key to start the calibration or press the mode key to exit the settings screen
- **14.** Wait for 3 minutes for the calibration to finalize and press the **mode** key to exit the calibration
- 15. After calibration, if the correction is successful press up or down to save or not save
- **16.** If the calibration has failed, press the up or down key to set the value to be corrected and then press **enter** to start the calibration again or press **mode** to exit the setting

#### **Historical Query**

Press the up or down key to query the historical record in the table and then the time of the record will be displayed in the upper left-hand corner. (This function is not available in the CO2 5-minute trend table)



- 17. Press the **up or down** button to query the history in the current table
- 18. Press the **mode** key to return to the current value display when querying the history

#### 12. Product Help

The CO2 Grow Controller can further explain the icons and acronyms in the help options menu



- 19. Press and hold the mode key for 3 seconds in order to enter the setting screen
- **20.** Press the **enter** key to enter into the help settings screen or hold and press the **mode** key to return to the main menu
- 21. Press the up or down key to find the correct setting for information that is needed

#### **CO2 Settings**

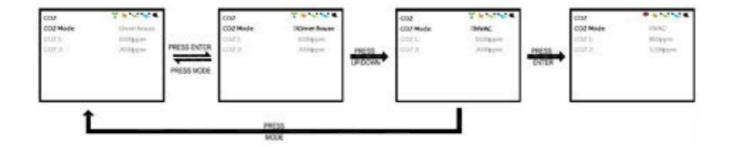


- 22. Press and hold the mode key for 3 seconds to enter into the settings screen
- **23.** Press the **up or down** key to select CO2 or press and hold the mode key for 3 seconds to return to the main display screen
- 24. Press enter to enter the CO2 setting or press and hold the mode key to return to the main menu
- **25.** Press the **mode** key to return to the settings screen or press and hold the **mode** key for 3 seconds to return to the main menu

#### 14. CO2 Mode Settings

There are 2 modes for CO2: GH and HVAC

The following operation is based on the configuration in section 15



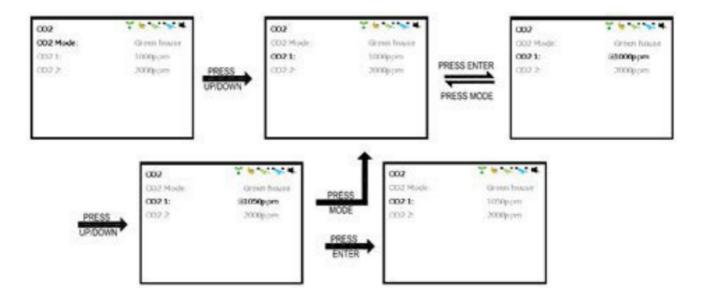
- 1. Press enter to enter into the CO2 Mode setting screen
- 2. Press the **up or down** keys to select the CO2 **mode** or press the **mode** key to exit the selection
- 3. Press enter to confirm the selection or mode in order to cancel the setting

#### 15. CO2 Concentration and Control Range Setting

The values of CO2 1 and CO2 2 can be set in both GH and HVAC mode to control the CO2 concentrations.

The following operation is an example below of CO2 and GH mode.

The following operation below is also based on the display table after "section 15"



- 4. Press the up or down keys to select CO2 1
- 5. Press enter to enter into the CO2 1 settings screen
- **6.** Press the **up or down** keys to set the desired value or press the **mode** key to exit the settings screen
- 7. Press **enter** to confirm the setting or press **mode** to cancel the setting

#### 16. CO2 Calibration



\*Sensors must be calibrated individually, using sensor port 1\*

- 1. Press and hold the **mode** key for 3 seconds to enter into the settings screen
- 2. Press the **up or down** key to select calibration or press and hold the **mode** key for 3 seconds to return to the main display menu
- 3. Press enter to enter into the calibration mode
- 4. Press enter to enter the CO2 calibration mode or press mode to return to the settings screen
- 5. Press the up or down key to set the value you wish to be corrected or press the mode key to exit the setting
- 6. Press and hold the enter key to start the calibration or press the mode key to exit the setting
- 7. Wait for 3 minutes for the calibration process to finish or press the mode key to exit
- 8. After correction, if the calibration is successful, press the up or down keys to save or not save the data
- 9. If the calibration has failed, press the **up or down** keys to set the value to the correct placement and press **enter** to start the calibration again. Press **mode** to exit the setting.

#### **Temperature Unit and Setting**



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting mode
- 2. Press the **up or down** key to select **TEMP** or press and hold the mode key for 3 seconds to return to the main display mode
- 3. Press enter to enter into the setting screen of TEMP
- 4. Press the **up or down** keys to select the temperature unit setting
- 5. Press **enter** to enter the temperature unit setting screen or press **mode** to return
- 6. Press the **up or down** keys to select the temperature unit or press **mode** to return
- 7. Press **enter** to confirm your setting or press the **mode** key to cancel the setting

#### 18. The Range Setting of Temperature and Humidity

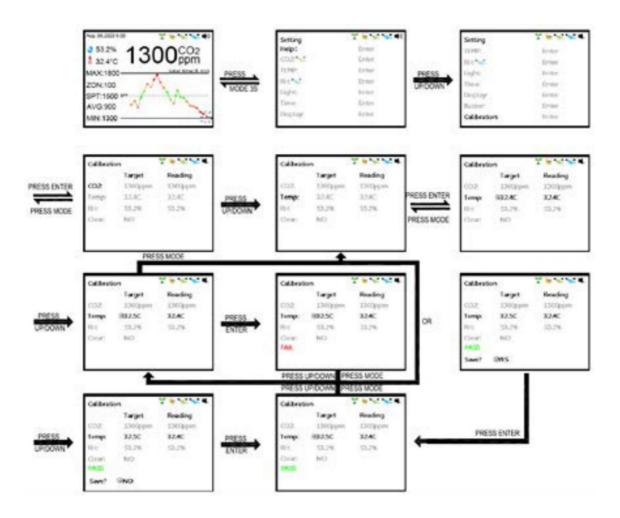


This RAD-0502 CO2 Grow Controller can determine a required temperature and humidity range by setting the upper and lower limits of temperature and humidity. This device can also record the effective light time by setting the value point of light intensity and avoiding frequent turnoff of the relays by setting a buffer of light intensity. The following display example above shows the lower limit in TEMP.

- 1. Press and hold the **mode** key for 3 seconds to enter into the setting screen
- 2. Press the **up or down** keys to select TEMP or press and hold the **mode** key for 3 seconds to return to the main display mode
- 3. Press enter to enter into the settings screen for TEMP
- 4. Press the **up or down** keys to select TEMP 1 or press the **mode** key to return back to the menu
- 5. Press the **enter** key to enter into the TEMP 1 setting
- 6. Press the **up or down** key to set the desired value or press the **mode** key to return
- 7. Press **enter** to confirm this setting or press the **mode** key to cancel the setting

#### 19. Temperature and Humidity Calibration

The RAD-0502 CO2 Grow Controller can also calibrate the temperature and humidity of the device. The following display example below illustrates temperature calibration.



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting mode
- 2. Press the **up or down** key to select calibration or press and hold the mode key for 3 seconds to return to the main display mode
- 3. Press enter in order to enter into the calibration mode
- 4. Press the **up or down** keys to select TEMP or press the mode key to return
- 5. Press enter to enter into the temperature calibration mode
- 6. Press the up or down key to set the value or press the mode key to exit the setting
- 7. Press and hold the **enter** key for 1 second to start the calibration or press the mode key to exit the setting
- 8. After calibration, if the calibration is successful, the upper left corner will display a green "pass" sign.
- 9. If the calibration fails, the upper left corner will display a red "fail" sign.
- 10. Press enter to confirm the calibration and return to the main screen or press mode to cancel the calibration.

#### 20. Relay Selection for Temperature, Humidity, and Light

The RAD-0501 CO2 Grow Controller can be selected to turn on one of the relays for temperature, humidity, and light. The following display below is an illustration of how to turn on the temperature relays.



- 1. Press and hold the **mode** key for 3 seconds to enter into the settings screen
- 2. Press the **up or down** key to select TEMP or press and hold the **mode** key for 3 seconds to return back to the main display screen.
- 3. Press enter to enter into the settings screen for TEMP
- 4. Press enter to enter the relay output setting or press mode to return
- 5. Press the **up or down** key to select whether to turn on the relays or press the **mode** key to return
- 6. Press the **enter** key to confirm your selection or press the **mode** key to cancel

#### 21. Relay Control of Temperature and Humidity

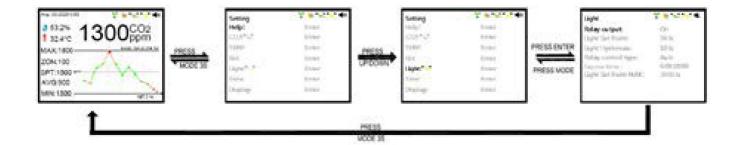
When the temperature or humidity relay is on, the product can choose whether the relay is closed or when the value is too low or too high. Take the temperature as an example. When "> TEMP 2, ON" is selected for relay control, it means that the temperature is too high, the relay will close and the equipment used to reduce the temperature will be opened in order to reduce the temperature.

The following illustration below is an example of how to choose the TEMP relay control type.



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting mode
- 2. Press the **up or down** key to select TEMP or press and hold the **mode** key for 3 seconds to return to the main display screen
- 3. Press enter to enter into the setting screen for TEMP
- 4. Press the **up or down** keys to select temp relay control, or press the **mode** key to return
- 5. Press **enter** to enter the setting screen for temp relay control, or press the **mode** key to return
- 6. Press the **up or down** key to select the temp relay control type, or press the **mode** key to return
- 7. Press **enter** to confirm or press the mode key to cancel

#### **Light Setting**



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting screen
- 2. Press the **up or down** keys to select LIGHT or press and hold the mode key for 3 seconds to return to the main display screen
- 3. Press enter to enter into the light setting, or press and hold the mode key to return to the main menu
- 4. Press the **mode** key to return to the setting screen or press and hold the **mode** key for 3 seconds to return to the main menu

#### 23. Light Set Point Setting

The light set point is used to distinguish whether the current light intensity meets the limit of crop photosynthesis. The following illustration below shows the operation after section 23, "Light Set Point Setting".



- 1. Press the **up or down** key to select the light set point setting
- 2. Press enter to enter into the light set point setting
- 3. Press the **up or down** keys to set the desired value or press **mode** to return
- 4. Press enter to confirm or press the mode key to cancel

#### 24. Light Hysteresis Setting

In greenhouse mode when the light intensity decreases, it is lower than the light set point minus the light hysteresis. This means the CO2 relay will always be turned off. When the light intensity increases higher than the light set point, the CO2 relay will determine whether to open or close according to the current CO2 concentration.



- 1. Press the **up or down** key to select the light hysteresis setting
- 2. Press the enter button to enter into the light set point setting
- 3. Press the **up or down** keys to set the desired value or press the mode key to return
- 4. Press the enter key to confirm or press the mode key to cancel

#### 25. Light Relay Control Type Setting

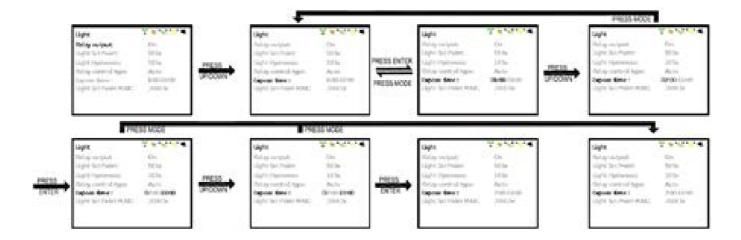
There are 2 modes for the lighting relay control: **Manual Mode & Automatic Mode**. When the device is in manual mode, the relay is always closed in the set time area, and it is always open during the rest time. When in the automatic mode, the relay will determine whether to close or open according to light intensity in the set time area, and it will always be open at other time sets. The following illustration below showcases the operation after "section 23 Light Setting".



- 1. Press the **up or down** keys to select the light hysteresis setting
- 2. Press the **enter** key to enter light relay control type settings
- 3. Press the **up or down** keys to select automatic or manual **mode**, or press mode to return
- 4. Press enter to confirm or press the mode key to cancel

#### 26. Light Expose Time Setting

The RAD-0502 CO2 Grow Controller can set the automatic or manual time interval of the relay control. The following illustration below is an example of setting a time interval in automatic mode.



- 1. Press the up or down keys to select the light hysteresis setting
- 2. Press the enter key to enter into the light expose start time setting
- 3. Press the **up or down** keys to set the start time or press the **mode** key to return back to the setting menu
- 4. Press enter to confirm the start time and enter light expose and time setting
- 5. Press the **up or down** key to set the end time or press the mode key to return
- 6. Press enter to confirm the end time or press the mode key to cancel

#### 27. Light Set Point MAX Setting

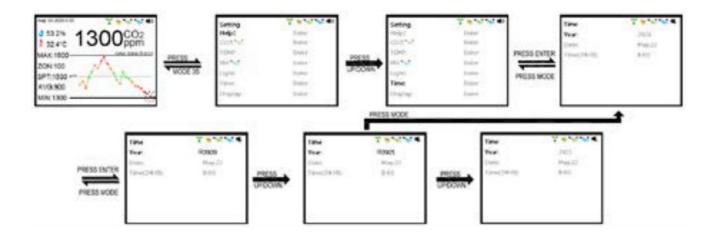
In the automatic mode, the relay can be switched off by setting the **light set point MAX**. When the light intensity is lower than the light set point, the relay is closed as well as when the light intensity is higher than the **light set point MAX**. The illustration below is based on an operation after "23. Light Setting"



- 1. Press the up or down keys to select the light set point MAX setting
- 2. Press the enter key to enter into the light set point MAX setting
- 3. Press the **up or down** key to set the desired value or press the **mode** key to return
- 4. Press the **enter** key to confirm or press the **mode** key to cancel

#### **Time Setting**

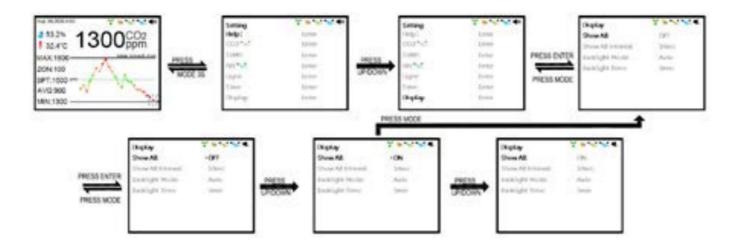
The RAD-0502 CO2 Grow Controller can set the year, month, day, hour, and minute of the current time. The following illustration below is an example of the **year** setting.



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting mode
- 2. Press the **up or down** key to select the time or press and hold the mode key for 3 seconds to return to the main display mode
- 3. Press enter to enter into the setting screen for the time
- 4. Press **enter** to enter the year setting or press the **mode** key to return
- 5. Press the **up or down** keys to set the desired value or press the **mode** key to return
- 6. Press the **enter** key to confirm this setting or press the **mode** key to cancel the setting.

#### Cycle Display and Back-light Sleep Settings

The RAD-0502 CO2 Grow Controller can choose to turn on or off the cyclic display and back-light sleep. You can select "ON" when the cyclic display needs to be turned on and select "OFF" when the cyclic display needs to be turned off. You can select "AUTO" when the backlight needs to be turned on and select "ON" when the backlight does not need to be turned on.



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting mode
- 2. Press the **up or down** keys to select display or press and hold the **mode** key for 3 seconds to return to the main display screen
- 3. Press the **enter** key to enter into the setting screen of the display
- 4. Press the **enter** key to show all or press the **mode** key to return
- 5. Press the **up or down** key to select on or off, or press the **mode** key to return
- 6. Press the **enter** key to confirm the setting or press the **mode** key to cancel the setting

#### 30. Cycle Display and Back-light Sleep Time Setting

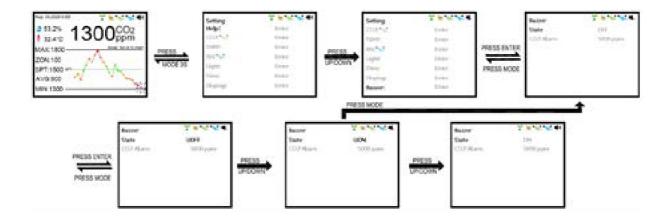
The RAD-0502 CO2 Grow Controller can set cycle display and back-light sleep time. The following illustration below is an example of cycle display time settings.



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting mode
- 2. Press the **up or down** key to select display or press and hold the **mode** key for 3 seconds to return to the main display mode
- 3. Press the enter key to enter into the setting screen of the display
- 4. Press the up or down keys to select "show all intervals" or press mode to return
- 5. Press the **enter** key to enter into "show all intervals"
- 6. Press the **up or down** keys to set the desired value or press the **mode** key to return
- 7. Press the **enter** key to confirm the setting or the **mode** key to cancel the setting

#### **Buzzer Setting**

The RAD-0502 CO2 Grow Controller can choose to turn ON or OFF the buzzer alarm.



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting mode
- 2. Press the **up or down** keys to select time or press and hold the **mode** key for 3 seconds to return to the main buzzer mode
- 3. Press the **enter** key to enter into the setting screen of the buzzer
- 4. Press the **enter** key to enter the state setting or press the **mode** key to return
- 5. Press the **up or down** key to select whether to turn ON the buzzer alarm
- 6. Press the **enter** key to confirm the setting or the **mode** key to cancel the setting

#### 32. The Buzzer Alarm Setting

The RAD-0502 CO2 Grow Controller can set the buzzer alarm when the concentration of CO2 exceeds the

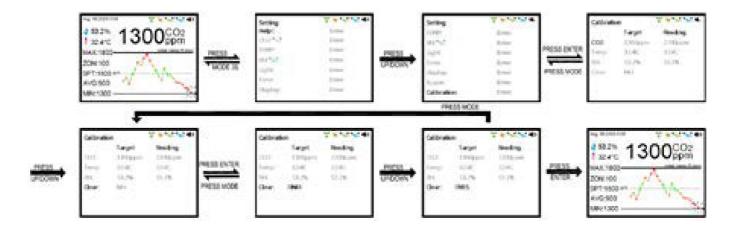
threshold.



- 1. Press and hold the **mode** key for 3 seconds to enter the setting mode
- 2. Press the **up or down** key to select Buzzer or press and hold the **mode** key for 3 seconds to return to the main display mode
- 3. Press the enter key to enter into the setting screen for the buzzer
- 4. Press the **up or down** keys to select the CO2 alarm or press the **mode** key to return
- 5. Press the enter key to enter into the CO2 alarm
- 6. Press the **up or down** key to set the desired value or press the **mode** key to return
- 7. Press the enter key to confirm the setting or the mode key to cancel

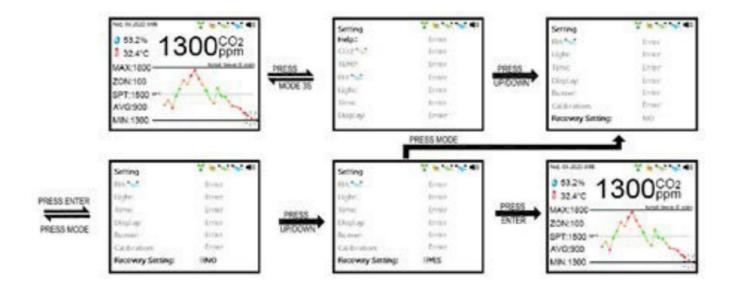
#### Calibration "Clear" Setting

The RAD-0502 CO2 Grow Controller can clear the calibration data for CO2, TEMP, and RH.



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting mode
- 2. Press the **up or down** keys to select calibration or press and hold the mode key for 3 seconds to return to the main display
- 3. Press enter to enter into the calibration set
- 4. Press the **up or down** key to select clear or press the **mode** key to return
- 5. Press the **enter** key to enter into the clear setting
- 6. Press the **up or down** keys to select "yes" or press the **mode** key to return
- 7. Press the enter key to confirm the setting or the mode key to cancel the setting

#### **Recovery Setting**



- 1. Press and hold the **mode** key for 3 seconds to enter into the setting mode
- 2. Press the **up or down** keys to select the recovery setting or press and hold the **mode** key for 3 seconds to return to the main display mode
- 3. Press the enter key to enter into recovery settings
- 4. Press the up or down key to select "yes" or press the mode key to return
- 5. Press the enter key to confirm the setting or the mode key to cancel the setting

## **Technical Specifications**

CO2 Sensing Method	Non-Dispersive Infrared (NDIR)
CO2 Measurement Range	0-3,000ppm
CO2 Accuracy	0~2,000ppm: ± 70ppm or ± 5% of the reading whichever is greater
Display Resolution	1ppm at 0~1,000ppm, 10ppm above 1,000ppm
Repeatability	± 20ppm @ 400ppm
Pressure Dependence	0.13% of reading per mm Hg
Temperature	32°F to 122°F (0°C to 50°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Humidity	0~95% RH Non-condensing
Response Time	< 2 minutes for 63% response to step change
Warm-up Time	< 60 seconds at 71.6°F (22°C)
Splash Rating	IP54

#### **Power Supply & Relay Output**

Power Supply	AC Adapter	110/220 VAC
AC Input	Voltage	100~240 VAC
	Frequency	50/60 Hz
	Power Requirement	1 W Maximum @ 115VAC 60 Hz, 2 W Maximum @ 230VAC 50 Hz
AC Output	12.0V	
Relay Socket	1 Relay Output, peak current < 5A @ 250 VAC, SPST. Normally open	

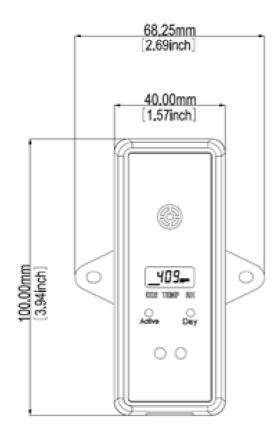
## **Dimensions**

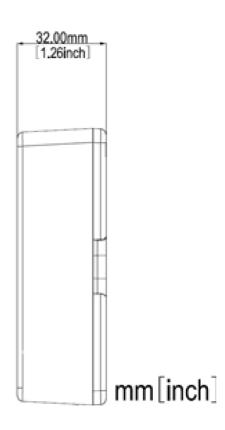
## **Main Indoor CO2 Grow Controller Unit**





**Indoor CO2 Grow Control Sensor** 





## **Fault Codes and Troubleshooting**

This section includes a list of Frequently Asked Questions for problems you may encounter with the RAD-0502 CO2 Indoor controller for grow rooms.

No	LCD Fa ult Icon D	Description of the faul t	Suggested Action EU
1	Er3	Ambient temperature ex ceeded the temperature range of 0° C to 50°C (3 2°F to 122°F)	This error will disappear when the temperature returns to the range between 0°C and 50°C (32°F to 122°F)
2	Er4	Inaccurate Measurement or the sensor has exceeded its expected life	Please unplug the AC adapter and reconnect it. If the "Er4" is alway s appearing, contact CO2Meter.
3	Er5 Er6	EEPROM System Probl em	Please unplug the AC adapter and reconnect it. If the "Er5, Er6" still appear, please contact CO2Meter.
4	Er8	The accuracy of the CO 2 Sensor may deviate fr om the actual concentration	<ol> <li>Please unplug the AC adapter and reconnect. If the "Er8" still appears, please contact CO2Meter.</li> <li>Please calibrate the unit. After calibration, if "Er8" still appears, please contact the local dealer.</li> </ol>
5	Erg	Calibration failure is cau sed by the large differen ce between the calibrati on value and ambient v alue. (Usually done by mistake)	Please set the correct calibration value before doing the calibration

#### **Support and Warranty**

#### Contact Us, We Are Here to Help!

If the troubleshooting guide above doesn't help you solve your problem or for more information, please contact us using the information below:



## Support@CO2Meter.com

(386) 256-4910 (M-F 9:00am-5:00pm EST)

www.CO2Meter.com

See CO2Meter, Inc. Terms & Conditions at: <a href="https://www.CO2Meter.com/pages/terms-conditions">www.CO2Meter.com/pages/terms-conditions</a>

#### **Documents / Resources**



<u>CO2METER RAD-0502 Controller and Sensor for Grow Rooms</u> [pdf] Instruction Manual RAD-0502, Controller and Sensor for Grow Rooms, Controller for Grow Rooms, Sensor for Grow Rooms, RAD-0502, Grow Rooms

#### References

- SCO2 Meters, CO2 Sensors, CO2 Monitors | CO2Meter.com
- \$\frac{\pi}{Terms & Conditions | CO2Meter.com}\$

Manuals+, home privacy