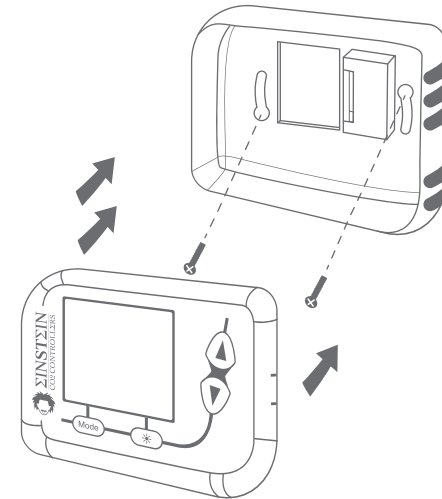
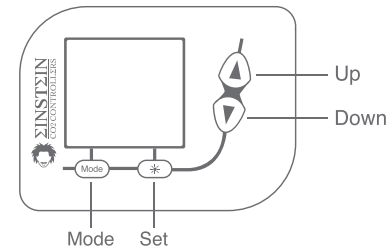


## MOUNTING

The controller should be mounted to an **inner wall of the grow space**, roughly 5 feet above the floor and preferably with good air circulation. Ensure that the surface is level, then pre-drill two (2) holes just large enough for the wall anchors. **Insert** the two (2) wall anchors and fasten the controller's base to the wall with the two (2) long screws provided.



## BASIC KEY AND OPERATION

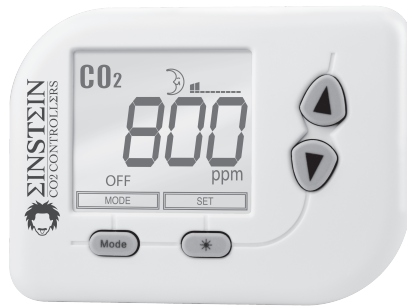


### OPERATION

KEYS	FUNCTION
Up	Set Value Increase
Down	Set Value Decrease
Mode	Switch ON / OFF
Set	Internal Setting

## NORMAL DISPLAY MODE

When powered on, CO<sub>2</sub> measurements will start, and the CO<sub>2</sub> value will be displayed.



## CO<sub>2</sub> CONTROLLER INSTRUCTION MANUAL

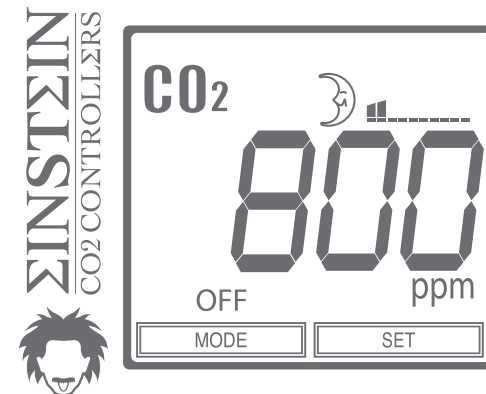
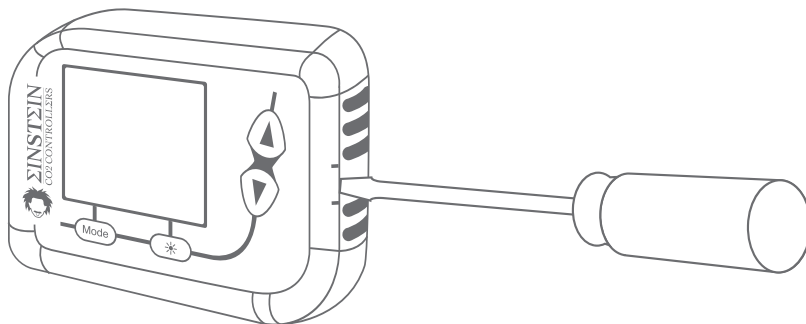
**CAUTION** Self Installation Required

## SPECIFICATIONS

CO <sub>2</sub> Measurement:	400 - 5000 ppm
CO <sub>2</sub> Controllable Range:	500 - 2000 ppm
CO <sub>2</sub> Resolution:	1 ppm
CO <sub>2</sub> Accuracy:	±70ppm ±5% of measured value
Operation Voltage:	120V + / - 20%
Output Rating:	3A (Max)
Cord Diameter:	2mm
Operating Temperature:	0 - 40°C (32 - 104°F)
Storage Temperature:	-5 - 50°C (23 - 122°F)

## OPENING THE COVER

Shown in the figure below, simply **press** on the spot with a screwdriver in order to detach the front shell from it's base.

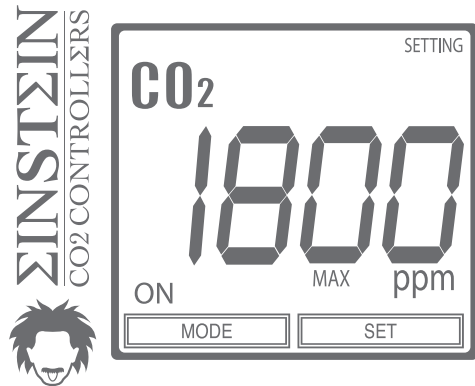


## ON / OFF MODE

Press the “**MODE**” key to switch from **OFF** Mode to **ON** Mode. When the controller is in **ON** Mode, it will control the plug according to the user’s configuration. When the controller is in **OFF** Mode, it will simply monitor the CO2 levels.

## CO<sub>2</sub> MAXIMUM / MINIMUM SET POINT

In **ON** Mode press “**UP**” or “**DOWN**” key once to enter configuration mode. Once in configuration mode the CO2 read out will blink.



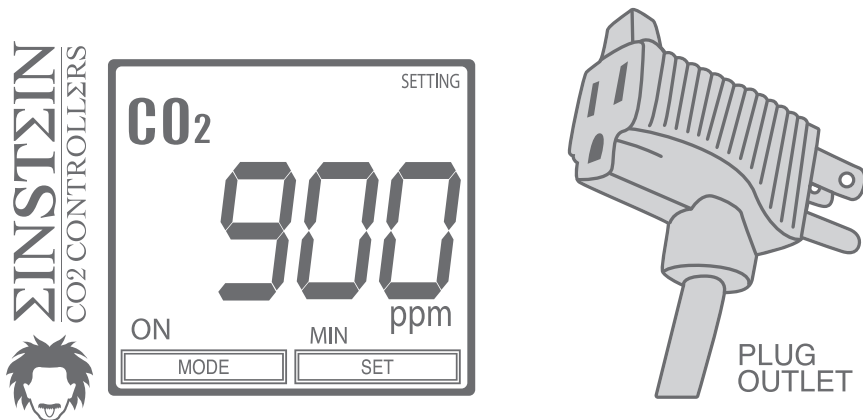
Use the “**SET**” button to switch between the **Minimum Set Point** and the **Maximum Set Point**. Once both values are set to users preference the unit will blink for roughly **10 seconds** and the new values will be saved.

EXAMPLE

Press “**UP**” or “**DOWN**” key to change the **CO<sub>2</sub> Maximum set point**.

Press the “**SET**” key while the set point is flashing.

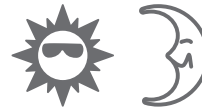
Press “**UP**” or “**DOWN**” key to change the **CO<sub>2</sub> Minimum set point**.





When the CO<sub>2</sub> levels are **below** the users set Minimum the controller will turn **ON** the Plug Outlet. When the CO<sub>2</sub> levels are **above** the users set Maximum the controller will turn **OFF** the Plug Outlet.

When the measured CO<sub>2</sub> Value is **below the minimum** set point, the Plug Outlet will be **ON** with **OUTPUT** displayed on the screen. When the CO<sub>2</sub> value is **above the maximum** set point, the Plug Outlet will be **OFF** and **OUTPUT** will disappear from the screen.

## BRIGHTNESS DETECTION AND CONTROL



There is a photo sensor inside the controller to detect lighting cycles. This photo sensor can disable CO<sub>2</sub> enrichment during the night period.

The  will be displayed on the LCD when light intensity is below user set level. The  will be displayed on the LCD when light intensity is above user set level. The **Active Level** or “**AL**” can be adjusted by pressing the “**SET**” button two (2) times.

The Active Level ranges from L0-L9. L0 is the **lowest** setting, when L0 is selected the unit will **always** be active no matter how dark. With each increase of the Active Level it will take **more** light to activate the unit.

## LIGHT DETECTION AND COMPENSATION (INTERNAL SETTING)

Press “**SET**” key to enter to the internal setting manual.

Active level “**AL**” will be displayed on the screen.

Press the “**SET**” key again to start the setting.

Press “**UP**” or “**DOWN**” to adjust the **Active Level** from L9 to L0.

Press “**MODE**” key to exit the setting.

## CO<sub>2</sub> CALIBRATION

**STEP 1:** Hold both “**MODE**” and “**SET**” keys for two seconds.

“**CAL**” will appear on the screen, press “**»**” Key to enter

**STEP 2:** Press “**UP**” or “**DOWN**” key to select command (Select “**CS**” for manual, or “**AS**” for auto)

When **Auto Calibration** “**AS**” is chosen, the controller will self-calibrate the CO<sub>2</sub> Value for two days. After that is complete, it will self-calibrate once a week.

When **Manual Calibration** “**CS**” is chosen, unit will not auto-calibrate and it is recommended to calibrate once every six months\* to ensure accuracy.

**STEP 3:** Press “**SET**” key again for confirmation. The controller will go back to a normal screen and you will see “**CCCC**” as acknowledgment to represent that the command has been received successfully.

**After 10 minutes, the unit will calibrate to 400ppm\*.** Hold “**MODE**” and “**SET**” keys for two seconds, and choose **Calibration End** “**CE**”. Press “**SET**” key again for confirmation. And you also will see “**CCCC**” again. The calibration process is now complete.

*\*Calibrate outdoors in a natural CO<sub>2</sub> environment of ~400ppm every 6 months.*

