

Control CO2 to observe the plants' growing environment



CO2 Controller

ZGh213 can control CO2 concentration in greenhouses, hydroponics rooms, and other places where not only plant health is important, but also the safety and comfort of the botanist who is caring for the plants are held in high regard as well.

- Dual Beam NDIR (Non-Dispersive Infrared) technology is used to measure CO2 concentration up to 10,000ppm (parts per million).
- Built-in Photo Sensor.
- Relay output (from Relay Socket) can automatically control a CO2 generator or bottled CO2 to produce CO2 in confined spaces.
- IP54 Water Proof Protection except backside when installed on the wall.

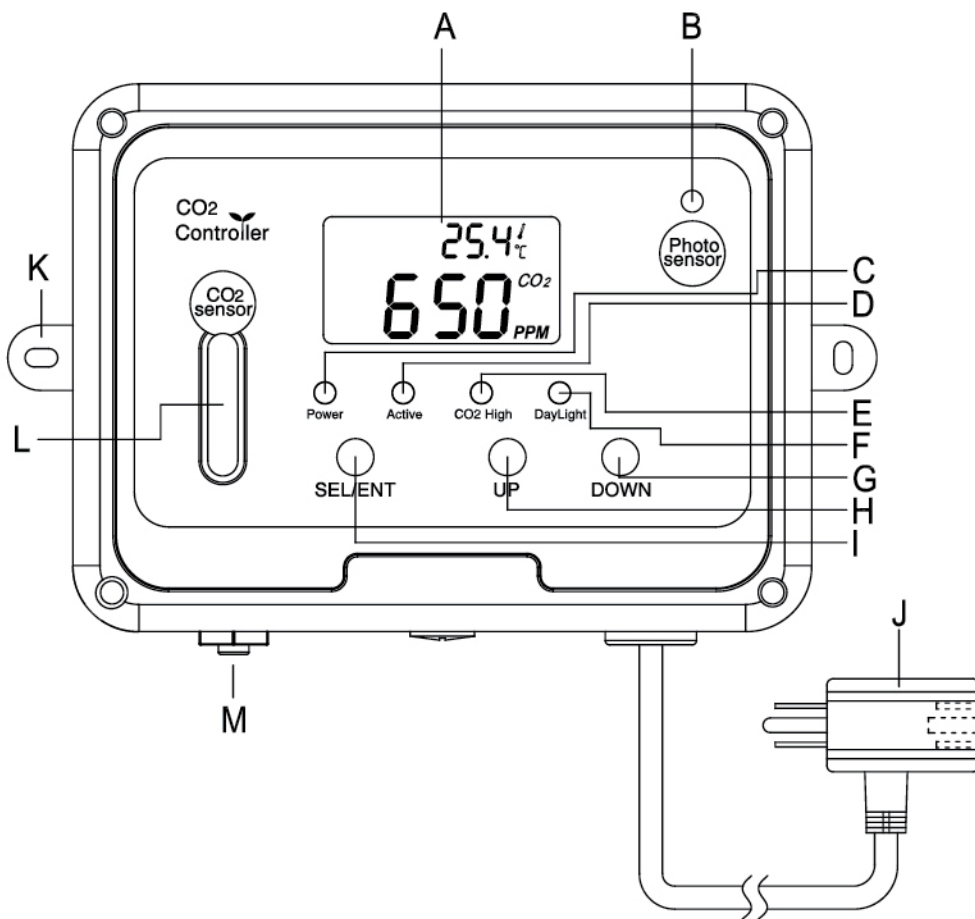


IP54
Splash Proof

CO2(ppm)	LED/ Status
1000ppm (SetPoint1, Adjustable)	When Yellow LED (DayLight) lit, automatically control CO2 generator or bottled CO2 to produce CO2.
1450ppm (SetPoint2, Adjustable)	Green LED(Active). The CO2 concentration of 1000~1450ppm(Typical) is most conducive to plant.



ZyAura
Monitor the invisible



- A. LCD display
- B. Photo Sensor(control DayLight LED)
- C. Red LED (Power indication)
- D. Green LED(Active when CO2 (concentration is <SetPoint1)
- E. Red LED(CO2 High: CO2(concentration> SetPoint2)
- F. Yellow LED (DayLight)
- G. Down Button
- H. Up Button
- I. Sel/Ent Button
- J. Piggy back style plug
- K. Panel Holder
- L. CO2 sensor
- M. Air Fitting(for professional calibration)

LCD Display Symbol

Symbol	Meaning	Description
650 ^{CO2} _{PPM}	CO2 Concentration ppm (Parts Per Million)	ambient CO2 concentration
25.4 ^{°C}	Temperature	display the current temperature
CALIBRATING	Calibration	To calibrate the CO2 sensor when the accuracy deviates from the actual CO2 concentration.

Specifications

(Specifications are subject to change without notice)

Method - Dual Beam NDIR

Display -
LCD Independent CO2, Temperature

Sample Method -
Diffusion or flow through (50 ~200 ml/min)

■ Performance - CO2 Channel

Measurement Range 0~10,000ppm

Resolution
1ppm at 0~1, 000 ppm
10ppm at > 1, 000 ppm

Accuracy
0~2,000ppm: ± 70 ppm
or ±5% of reading whichever is greater; over 2000ppm: ± 7%

Repeatability ±20 ppm @ 400ppm

Pressure Dependence 0.13% of reading per mm Hg

Response Time <120 seconds for 90% response to step change

SetPoint1 Default = 1,000ppm

SetPoint2 Default = 1,450ppm

Warm-Up Time <60 seconds at 22°C

■ Operating Conditions

Operating Temperature 0°C to 50°C (32°F to 122°F)

Humidity Range 0 ~ 95% RH non-condensing

■ Power Supply & Relay Output

Power Supply AC 110/220 VAC
(AC Input) Frequency: 50/60Hz

Relay Socket One Relay output,
Peak Current < 5A @ 250 VAC,
SPDT.