

# Universal CO<sub>2</sub> MONITOR

## OPERATION MANUAL

IMPORTANT SAFETY INFORMATION • DO NOT DISCARD

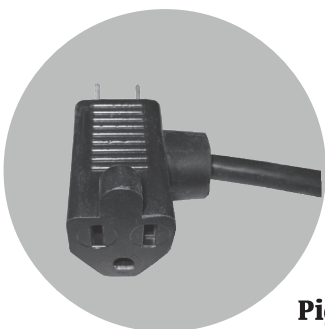
[www.hydroinnovations.com](http://www.hydroinnovations.com)

### PRODUCT OVERVIEW

Hydro Innovations is now offering a high quality yet extremely affordable CO<sub>2</sub> monitor. The product features a maintenance-free SenseAir® brand gas detector, which after extensive testing we have found to be the most accurate sensor available. The cost savings are not as a result of cutting corners on the accuracy or function of the unit, it is because our unit is simplified and lacks a lot of the frequently unused bells and whistles that other monitors have. Our monitor is not adjustable and comes preset to turn on at 1300 PPM and off at 1500 PPM. Simple indicator lights show the current CO<sub>2</sub> levels instead of a digital screen. Our monitor comes with a piggyback plug, allowing it to be used with any brand generator. We also supply our easy-mount wall bracket to make installation as easy as it can be. The simplicity of our monitor makes it the most user-friendly CO<sub>2</sub> monitor available.



**CO<sub>2</sub> Monitor Unit**



**Piggyback Plug**

### FEATURES

- ✦ Simply all you need to regulate CO<sub>2</sub>.
- ✦ Programmed to turn on at 1300 ppm and off at 1500 ppm.
- ✦ Indicator lights to show CO<sub>2</sub> levels.
- ✦ Easy to install with our wall mount bracket.
- ✦ 120 volt switched piggyback cord.
- ✦ Quality SenseAir® brand CO<sub>2</sub> detector.
- ✦ Self calibrated and maintenance free.

### WARNING

**PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING**

For the best accuracy do not place the monitor in direct lighting from HID lamps. Direct light interferes with the infrared sensor's ability to read properly. Don't shake or hit the CO<sub>2</sub> indicator/controller excessively in shipment or in mounting to protect the internal infrared CO<sub>2</sub> sensor and receiver from damage or misalignment. Do not place the CO<sub>2</sub> monitor in outdoor conditions and never expose directly to moisture. Avoid using the monitor in extremely high humidity levels especially for long periods of time. This is a sensitive electronic device and needs to be treated as such to maintain accuracy. Make sure that the wires for the piggyback plug are seated in the grooved cord grip on the back of the mounting bracket before installation. Do not pull on the piggyback cord wires, this could cause damage to the monitor and cause it not to work properly.

- 1** Mount CO<sub>2</sub> monitor inside the garden approximately 48" off the floor and out of direct lighting from HID lamps. Use the supplied wall mount bracket and supplied screws.  
  
Make sure that the wires for the piggyback plug are in the groove on the back so that they do not interfere with mounting. The wall bracket does not need to be removed from the monitor for installation.
- 2** Once the monitor is mounted, plug the power adapter in to a 120v plug receptacle and then plug the DC male end of the cord in to the female DC jack of the CO<sub>2</sub> monitor. This power adaptor supplies power to the monitor. Once plugged in the monitor should come on, taking a few minutes to stabilize.
- 3** Place the monitor in an area that has natural CO<sub>2</sub> levels (less than 500 ppm) and allow it acclimate for 48hrs for the best accuracy. Please note that CO<sub>2</sub> levels inside your home are usually higher than natural CO<sub>2</sub> levels especially if gas appliances are present. Typically a garage a room with an open window is fine, but never put the monitors in the outdoor elements. The monitor should stabilize to 500 ppm (the first light on the monitor) for at least 24hrs before using.
- 4** Plug the piggyback cord in to a constant 120v outlet.



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## SPECIFICATIONS

<b>Power supply</b>	24VAC/24VDC ± 10%
<b>Consumption</b>	1.0 W Max
<b>Gas sensor</b>	Carbon Dioxide: Non-Dispersive Infrared Detector (NDIR) ABC Logic Self Calibration (default: ineffective)
<b>CO<sub>2</sub> measuring range</b>	0~2,000ppm
<b>Accuracy</b> @25 (77) 2000ppme	± 40ppm + 3% reading
<b>Stability</b>	< 2% of FS over life of sensor
<b>Non linearity</b>	< 1% of FS
<b>Response time</b>	< 2 minutes for 90% step change Warm up time for each turning-on 48 hours (first time) 10 minutes (operation)
<b>Dry contact output</b>	< 120VAC/30VDC 6A switching current (resistance load), Four CO <sub>2</sub> values selectable to control the relay by jumpers
<b>6 LED lights</b>	#1 blue light on when CO <sub>2</sub> is less than 700 ppm #2 blue light on between 700 ppm and 900 ppm #3 blue light on between 900 ppm and 1100 ppm #4 blue light on between 1100 ppm and 1300 ppm #5 blue light on between 1300 ppm and 1500 ppm #6 blue light on for 1500ppm or higher
<b>Storage conditions</b>	Storage conditions -40°F to 150°F
<b>Operation conditions</b>	32°F to 122°F with less than 95% humidity 110g/100mm(H) × 80mm(W) × 24mm(D)

**If you have any additional questions or concerns regarding this, or any HYDRO INNOVATIONS product, please contact us through our website [www.hydroinnovations.com](http://www.hydroinnovations.com) or call: 512-285-6413**

