iCeeO2
tracing the ppm

Instruction manual
CO_2 Controller
models –C30

Product may vary from picture.

- To ensure safety, please read this manual carefully before installation and follow the instructions herein.
- Store this manual in a secure place for future reference.
- WARNING: CHOKING HAZARD - Accessories contain small parts.
- This manual is Pprinted by color ink; water will smudge.
-

带格式的: 无项目符号或编号

Getting Started .....3~~2~~
Package Contents .....3~~2~~
Features at a Glance .....3~~2~~
Operating Instructions.....3~~2~~
LCD Display .....4~~3~~
Trend Chart Zoom .....5~~4~~
Max/Min.....5~~4~~
Outo Detect Day/Night.....5~~4~~
Output Control .....5~~4~~
LED Display .....6~~5~~

带格式的

带格式的: 字体: 6 磅, 不检查拼写法

带格式的: 字体: 6 磅, 不检查拼写法

Main Menu Functions..... 65
Getting Started 2
Package Contents 2
Features at a Glance 2
Operating Instructions..... 2
LCD Display 2
Trend Chart Zoom..... 3
Specifications..... 76
Max/Min..... 4
Output Control 4
LED Display 4
Main Menu Functions..... 4
Specifications..... 5

带格式的: 默认段落字体, 检查拼
语法

带格式的: 默认段落字体, 检查拼
语法

带格式的: 默认段落字体, 检查拼
语法

带格式的: 默认段落字体, 字体: (中
PMingLiU, 检查拼写和语法

带格式的: 默认段落字体, 检查拼
语法

带格式的: 默认段落字体, 检查拼
语法

带格式的: 默认段落字体, 检查拼
语法

带格式的: 默认段落字体, 检查拼
语法

带格式的: 默认段落字体, 检查拼
语法

带格式的: 默认段落字体, 检查拼
语法

带格式的: 字体: 6 磅, 不检查拼写

带格式的: 字体: 6 磅, 不检查拼写

Getting Started

Hello there! Congratulations on your new iCeeO$_2$ product! Our products are packaged and shipped with the utmost care. In the unlikely event that your item is incorrect, incomplete, or unsatisfactory, please contact us and we will see to fix it immediately. Feel free to contact us at www.iCeeO$_2$.com; service@.iCeeO$_2$.com

.

Package Contents

CO_2 Controller Unit

CO_2 Monitor Unit

User Manual

Screws

Features at a Glance

CO_2 controller; Tracer

Built-in Day/Night detect sensor

Chart with variable time Zoom Levels

2-Channel Low Drift NDIR Sensor

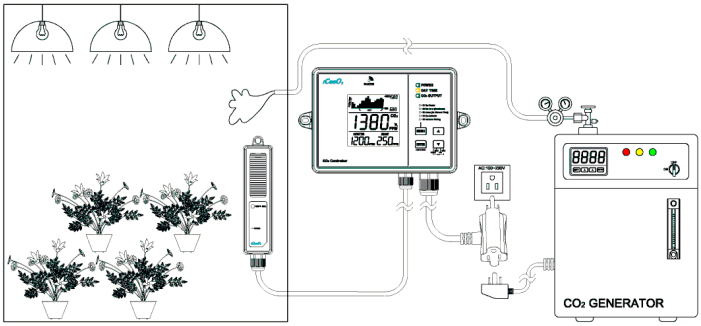
Foolproof "Hold Home" function

Operating Instructions

Initial Setup-: When first unboxing, plug the piggyback into the power socket. If successfully connected, 3 things will happen while booting up:

- Buzzer beep one time
- Chart display shows the current software version & "Warm Up"
- Main display shows a countdown from 10

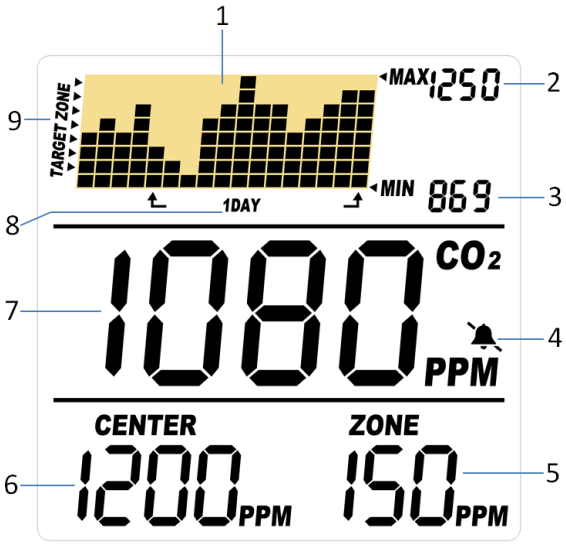
Once the countdown is complete, your product is ready to use. No initial setup or calibration is needed.



1. Controller working graphic

带格式的: 字体: (中文) 宋体, 下
带格式的: 字体: (中文) 宋体, 下
带格式的: 字体: (中文) 宋体, 下
带格式的: 字体: 6 磅, 不检查拼写法
带格式的: 字体: 6 磅, 不检查拼写法

LCD Display



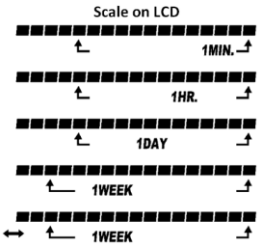
1. CO_2 Chart
2. Max Reading of Chart
3. Min Reading of Chart
4. Audible Alarm On/Off
5. CO_2 Zone value
6. CO_2 Center value
7. CO_2 Reading
8. Zoom Level of Time – indicates the chart's span of time
9. Target Zone Indicator

CO2 , Set center, Set zone Readings
The device has three built-in main parameters: ambient carbon dioxide(7), Set Center value (6), and Set Zone value(5). They are constantly displayed on screen.

Trend Chart Zoom

Below is a table that show the available Zoom Levels for all parameters CO_2~~/Temp/RH~~, as well as the duration of each division for corresponding Zoom Levels:

Zoom Level (Time Span) (~~8~~15)	**Time Per Division**~~(13)~~
1m (minute)	5sec /div
1h (hour)	5m/div
1d (day)	2h/div
1w (week)	0.5d/div
Auto Cycle Zoom	Cycle



Using DOWN will toggle the available Zoom Levels for each parameters. Note that in addition to the Zoom Levels for each parameter, there is an option that will automatically cycle between the Zoom Levels. This can be achieved just by pressing DOWN until icon(8) appears at the bottom left of the chart.

Max/Min

At the top right corner of the display, there are two numerical indicators: Max (2)and Min (3). As the Zoom Level is changed, the Max and Min values will reflect the maximum and minimum values on the chart of the selected parameter. At startup, the unit will automatically display values for 1d (day) value.

Auto Detect Day/Night

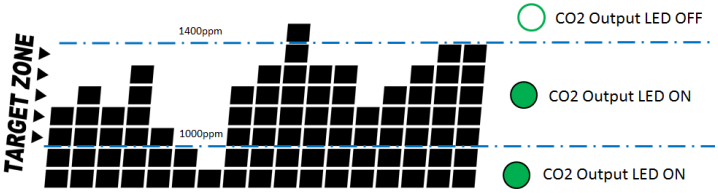
The ~~B~~built-in Photo-Cell sensor can automatically detect whether it is Day or~~and~~ Night.~~,~~ ~~i~~It can overrides the CO_2 control and shut~~s~~ off the CO_2 generator by turning off the output power during the ~~dark~~night.~~ hours,~~ ~~while~~ Conversely, if the Photo-Cell detect~~sed light time~~light~~,~~ and the CO_2 level is low, the device will start the ~~open~~ CO_2 generator by turning on output power.

Output Control

Output power is on~~on~~ when CO_2 concentration is over Set Center+(1/2) Set zone, and off when CO_2 concentration is below Set Center-(1/2) Set zone.~~,~~ ~~f~~For example, if the Set Center is 1200ppm, and the Set zone is 400ppm, the output power will shut off when CO_2 over 1200+(1/2)*(400)=1400ppm, and power on when CO_2 below 1200-(1/2)*(400)=1000ppm.

带格式的: 字体: (中文) PMingLi
带格式的: 下标
带格式的: 下标
带格式的: 下标
带格式的: 下标
带格式的: 字体: 6 磅, 不检查拼法
带格式的: 字体: 6 磅, 不检查拼法

LED Display



Main Menu Functions

The Main Menu functions can be toggled through by using MENU. If the main menu is not selected, the menu LED will remain off, leaving the UP buttons to toggle Zoom Levels, respectively.

- **S1 Set Center**
- **S2 Set Zone (Deadband)**
- **S3 Home (for General Plant)**
- **S4 Re-Calibrate**
- **S5 Advance Setting**

Pressing MENU once will bring up the menu LED, with flashing before the current choice.

To select the function, press ENTER when menu selection LED flashing. Note that after 1 minute if nothing is pressed, the Main Menu LED will off and the device will revert to the normal state.

HOLD HOME

To revert to start up settings at any point, hold ENTER for 3 sec until an audible beep. The device will revert to Home Setting, as if the power was reset, displaying "Back Home done." Note that this is not the same as Restore to factory settings.

Below is a table showing what main menu selection is made by pressing MENU multiple times as well as their functions. Note that the device will display "Done," followed by the confirmed selection if selected correctly.

Function	Directions
S1 Set Center	By default , the Set Center value is 1200ppm for general plant, Once Set Center is selected (by pressing ENTER), use either UP or DOWN to toggle the center value. Press ENTER one more time to confirm.
S2 Set Zone(Deadband)	This function allows the user to setting Zone(Deadband). Once selected, Use UP and DOWN to toggle to the set zone value. Press ENTER to confirm. Note that the default value of set zone is 400ppm.
	This function for Home plant(General plant), Once selected, the Set

带格式的: 字体: 6 磅, 不检查拼写
带格式的: 字体: 6 磅, 不检查拼写

S3 Home(For General Plant)	Center value is fixed 1200ppm, and Set Zone value is fixed 400ppm.
S4 Re-Calibrate	Use this function to calibrate your device with outside atmospheric CO_2 level ~ 400ppm. Select this mode, hold ENTER for 3 seconds until a beep and the chart will read "Calibrating", then place the device outside for 20min. To escape, press MENU. Make sure the device is far from a source of CO_2, not in direct sunlight, and not exposed to water.
S5 Advance Setting	This function toggles between 3 things when selected: changing the alarm function for buzzer beep or Altitude setting or Restore factory setting. Restore factory setting will reset the device to factory settings and erase all stored data in the chart. To use Restore mode, hold ENTER for 3 seconds until an audible beep.

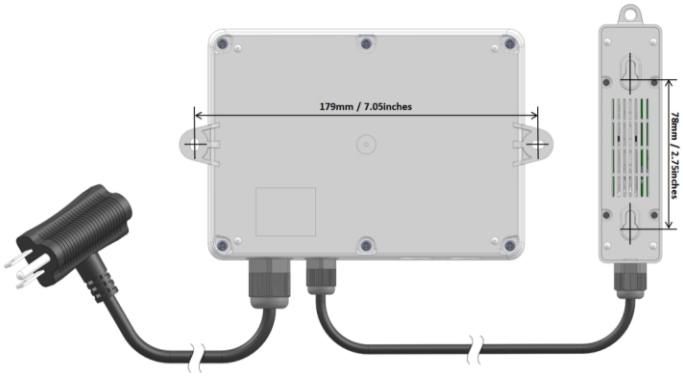
Specifications

Typical test conditions, unless otherwise specified: Ambient Temp =23+/-3°C, RH=50%-70%, Altitude=0~100 meter

Measurement	Spec
Operating Temperature	32°F to 122°F (0°C to 50°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Operating & Storage RH	0-95%, non-condensing
CO_2 Measurement	
Accuracy at 0~3000ppm	±50ppm or ±5% of reading, whichever is greater
Accuracy over 3000ppm	±7%
Repeatability	20ppm at 400ppm (standard dev. of 10 readings in 1 minute)
Measurement Range	0-5000ppm
Display Resolution	1ppm (0-1000); 5ppm (1000-2000); 10ppm (>2000)
Temp Dependence	±0.2% of reading per °C or ±2ppm per °C, whichever is greater, referenced to 25°C
Pressure Dependence	0.13% of reading per mmHg (corrected by user's altitude input)
Response Time	<2min for 63% of step change or <4.6min for 90% step change
Warm-up Time	<30 sec
Power input	AC 100 ~ 240 VAC
Dimension	Sensor Unit: 153*33*27mm (6.0*1.3*1.1inch) Control Unit: 195*145*44mm195 (7.7*5.7*1.7inch)
Weight	700g (24.7oz)

带格式的: 字体: (中文) 宋体, 下
带格式的: 字体: (中文) 宋体, 下
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式表格
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 字体: (默认) Gisha, 小
带格式的: 字体颜色: 自动设置
带格式的: 字体: (中文) PMingLi
体颜色: 自动设置
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 两端对齐, 段落间距段
磅, 行距: 单倍行距
带格式的: 字体: (中文) PMingLi
体颜色: 自动设置
带格式的: 字体: 6 磅, 不检查拼
法
带格式的: 字体: 6 磅, 不检查拼
法

Rear View:



Disclaimers:

This device is not intended for workplace hazard CO_2 monitoring, nor intended as a definitive monitor for human or animal health institutions, life sustenance, or any medical-related situation.

$iCeeO_2$ and the manufacturer assumes no responsibility for any damage or loss suffered by the user or any third party arising through the use of this product or its malfunction.

$iCeeO_2$ reserve the right to change the specifications without notice.

~~Note:~~

~~Recommended Battery capacity: larger or equal to 4000mAh (3000mAh still will works, with reduced battery life)~~

~~Recommend battery size: smaller than 101x60x22mm / 4.0x2.4x0.87inch, A larger battery still will works, but will not easy to fit in.~~

*　　*　　*　　*

带格式的: 字体: 小五, 下标

带格式的: 字体: 6 磅, 不检查拼写

带格式的: 字体: 6 磅, 不检查拼写