NeptuneHydroponics®

Advance Setup (V.S8_301)

Please read carefully below parameters before set anyone of them.
Hold down switch button for 10 seconds, the interface enters "advanced setup" interface –XX will appear as a sign, hold down switch button for 10 seconds, the interface goes back to normal state, it will also go back to normal state after power failure.
Press switch button to select parameter and set up its value by pressing or

LCD	Parametro	Modalità di programmazione	Per impostazione predefinita
1	-------------------	-------------------	-------------------
2	-------------------	-------------------	-------------------
3	CO2 modification	±200 ppm	0
4	-------------------	-------------------	-------------------
5	Relay control mode	0- Increase CO2 (connect to a generator) 1- Decrease CO2 (connect to a ventilator)	0
6	Banklit setting	0- ON when relay is ON 1- ON when press any button 2- Always ON	0
7	State of the controller after being put on power or after power failure 0- Turn off 1-Turn on 2- Keep on previous state before power failure		2
8	Invalid for this model	-------------------	1
9	Invalid for this model	-------------------	19200
10	Invalid for this model	-------------------	1
11	Warming-up time	1- 600	30
12	The maximum limit of CO2 measurement	1- 10000 ppm	5000
13	CO2 sensor self-calibration	1-allowed; 2-not-allowed	1
14	The altitude level for using	0-5000 feet	0
15	CO2 single point (400ppm) calibration.	To calibrate the CO2 at 400ppm, "1" means start calibration, "----" will appear during calibration process; "0" means calibration is finished. WARNING: you need to put the controller in a standard CO2 gas environment of 400ppm for the calibration, and the previous CO2 sensor state will NOT be restored after calibration, so please be very cautious to use this function.	0
The items below are for testing before leaving factory, do not change them.			
16	Invalid for this model		0
17	Invalid for this model		1
18	Invalid for this model		150

Reset: Hold down switch for about 60 seconds until the controller powers off, wait for a while the controller will turn on and go into advance setup, then it will go back to factory default setting.
Notice: There are 2 jumpers on the PCB boards, which are invalid for this controller.

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CO2 CONTROLLER FOR GREENHOUSE
WITH PLUG-PLAY
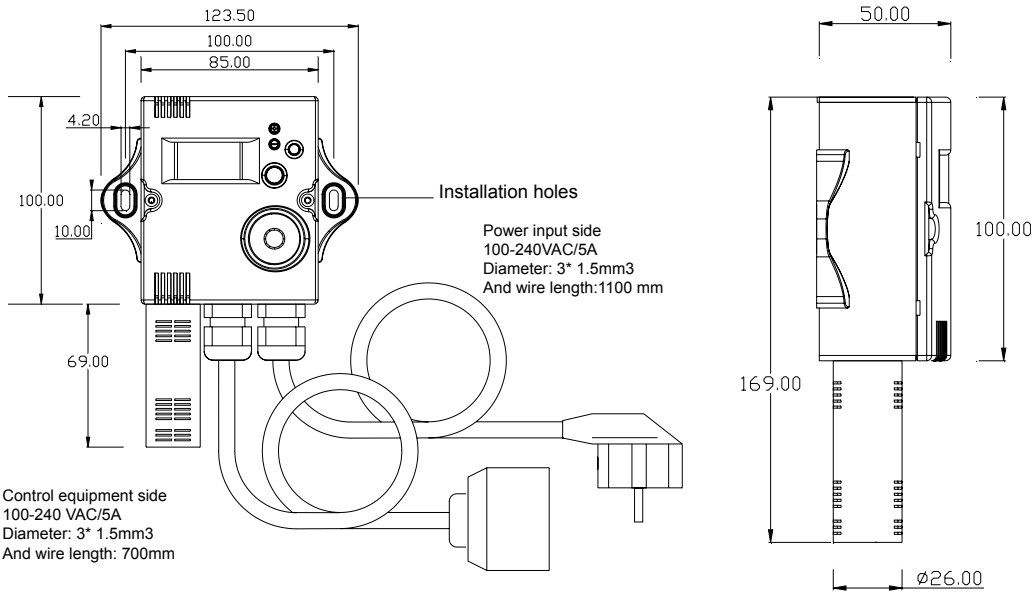USER MANUAL

Specifications

|	
CO2 Sensor	Non-Dispersive Infrared Detector (NDIR)
Measurement Range	0 2.000ppm (default)
Accuracy	±40ppm + 3% of reading @22ºC (72ºF)
Stability	<2% of the full scale over the life of the sensor
Calibration	Self-calibration system
Response Time	<5 minutes for 90% step change at low duct speed
Warm up time	30 seconds (operation)
General items	
Power supply	100 VAC-240VAC
Consumption	1.8 W max. : 1.0W avg.
LCD display	Display CO2 measurement
Dry contact output	1xdry contact output for CO2 5A (100VAC-250VAC) rated switch contact Default CO2 high point setting:820ppm Default CO2 low point setting: 780ppm
Operation conditions	0ºC-50ºC 0-99%RH, non condensing
Storage conditions	10-50ºC/10-70%RH
IP Class/ Net weight;	IP30/900 g
Standard Approval	CE Approval
Version	VS8-SHT11_301

Mounting and Connection.

• Notice the supply power voltage of the controller. 100VAC-240VAC.
• Place the controller at a desired location and use screws to fix the controller on the wall through the installation holes:
• Power input side connects to power supply while Control equipment side connects to controlled device (Fig. 1).

Installation holes

Power input side
100-240VAC/5A
Diameter: 3* 1.5mm3
And wire length:1100 mm

Control equipment side
100-240 VAC/5A
Diameter: 3* 1.5mm3
And wire length: 700mm

Wall mounting with plug&play type
Probe Length 69.00mm
Probe Diameter ⌀26.00mm
Installation Holes 10.00mm
Power cable 1100.00mm
Cable to device 700.00mm

Fig.2

1 ▲(UP)
2 ▼(DOWN)
3 SWITCH
4 POWER

Instructions
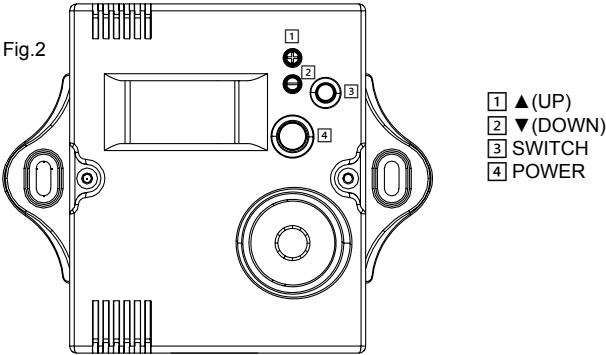
Fig.3-a   LCD DISPLAY   Fig.3-b
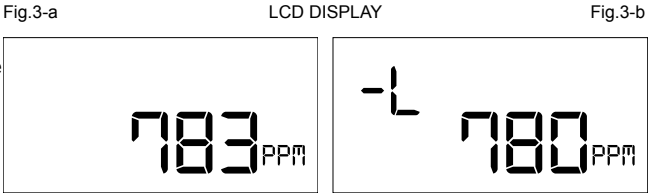
1. Important attention: always cut off the power before open and clean the controller.

2. For button indication, please check Fig. 2

3. Please see Fig. 3 for LCD screen display. Fig. 3-a is LCD display in normal operation state, while fig. 3-b is LCD display in the state of relay control point setting.

4. Press Power for about 2 seconds, the controller turns on. After the controller is on, it will count down 30 seconds before it shows CO_2 measurement on the LCD like Fig. 3-a.

5. When the controller is in operation state, press switch button to switch between low point setting and high point setting with –H or –L icon appearing on the upper line respectively like fig. 3-b. As –H appearing the high CO_2 point can be set and the setting value will flash during setting. Press or button over 2 seconds, the setting value will adjust quickly. After setting, wait for 10 seconds the flash value will stop blinking and the setting value is confirmed.
Default low point setting of CO_2 is 760ppm.
Default high point setting of CO_2 is 820ppm.

6. The day/night work mode:
When it's daytime.
The item -5 is set as 0 in advance setup, then if CO1 measurement <low point setting, relay ON
If CO_2 measurement >high point setting, relay OFF.
When it's nighttime, the relay OFF