



## Intelligent Controller System

CRZ series intelligent controller is special design for hydroponics market. The products embed lighting controller, environment controller, wireless sensor and analog timer. We keep a high standard quality just by using the only best materials and our long experience. A brand-new friendly user interface, which is easier to use.



### 1. SYSTEM SPECIAL FEATURES

All in one controller	1.Embed lighting controller 2.Environment controller 3.CO2,TEMP,HUM SENSOR Wireless sensor inside.
Wireless control	Local network and internet control, support WIFI(2.4G,802.11 b/g/n), 2G/3G/4G.
Breaker protection	Socket One by one power on
Emergency protection	Breaker down warning
Exact sensor control	1.Multipoint access 2.Flexible config Wireless communication
Long distance warning	Anywhere can reach you
Cloud support	Anywhere can check or control device
Overheat protection	AUTO shut down heat device power

### 2. MAIN CONTROLLER SPECIFICATIONS

Size:	462(L)X435(W)X115(H) mm	
Weight:	9KG	
Main Voltage:	120/240 volts	
Maximum Amperage:	80 amps	
Minimum Feeder Cable Size:	#4cu AWG *Please check local codes for sizing requirements.	
Maximum Wattage:	CRZ-8X8	8X1000 watts at 240 volts and 8X500 watts at 120 volts.
	CRZ-12X4	12X1000 watts at 240 volts and 4X500 watts at 120 volts.
	CRZ-16X0	16X1000 watts at 240 volts.
Receptacle Type:	CRZ-8X8	8 NEMA 6-20R 240v plugs and 8 NEMA 5-15R 120v plugs.
	CRZ-12X4	12 NEMA 6-20R 240v plugs and 4 NEMA 5-15R 120v plugs.
	CRZ-16X0	16 NEMA 6-20R 240v plugs.
Operating Temperature Range:	32-120 °F	
Operating Humidity Range	0-99% RH	
Certification:	ETL Certified, FCC, RoHS	



FCC ID: 2AENLCRZ



### 3. MAIN CONTROLLER POWER & WIRING REQUIREMENTS

**WARNING: This product must be installed by a Licensed Electrician!**  
**Avertissement: le produit doit être certifiée électrique monté!**

- 1) 1. The main 120/240 volt / 80 amp service cable must be supplied to the CRZ 8X8/12X4/16X0, using #4cu AWG cables. The incoming service will need four wires, (2)-#4cu AWG colored for hot lines, (1)-#4cu AWG white for neutral) along with (1)-#4cu AWG green or bare copper, for the ground.

NOTE: Please check local codes for wire sizing requirements.

- 2) You must provide over current protection for the CRZ 8X8 using an 80 amp double pole circuit breaker at the Main Panel.

- 3) 80 amps of power require a wire size of at least 4 AWG.

#4cu AWG \*Please check local codes for sizing requirements.



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#### 4.MAIN CONTROLLER CONNECTING THE MAIN 120/240 VOLT 80 AMP POWER

1)Secure the CRZ-8X8/12X4/16X0 to the wall using appropriate hardware. Keyholes for screws are provided on the back for easy mounting.

2)Make sure that all of the circuit breakers on the CRZ-8X8/12X4/16X0 are OFF.

3)Carefully turn CRZ-8X8/12X4/16X0, through five screws under the back connection hole (see picture), open the terminal cover.

Note: when turning the CRZ-8X8/12X4/16X0, can not have the heavy pressure on CRZ-8X8/12X4/16X0, so as to avoid damage to the front cover of the circuitbreaker and timer.

4) The power line carefully through the line card, according to the CRZ-8X8/12X4/16X0 connection marked careful alignment, one one corresp-onding connection! Ensure that the distributor and tighten the screws on the good contact! Power line using the correct size, a minimum of 4 AWG.

Note: please check the local code requirements of wire diameter.

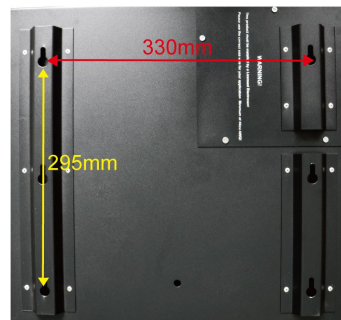
5) To tighten the line card device, so that the power line is fixed, so as not to cause bad contact power supply power line shaking.

**Warning: the card to dead fixed power line, or short circuit of electric shock risk!**  
**Avertissement: Le présent de carte à fixe mort de lignes de puissance,dangereux de court-circuit ou un choc électrique!**

6) Using 5 screws to tighten the connection cover installed.

7) Turn CRZ CRZ-8X8/12X4/16X0.

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#### 5. SENSOR SPECIFICATIONS



Name:	Sensor Controller
Size:	105(L)X60(W)X24(H) mm
Work Voltage:	5 vlots DC
Maximum Amperage:	1 amps
Wrieless Frequency:	Zigbee : 2.4G
Operating Temperature Range:	32-120°F
Operating Humidity Range:	0-95%RH



Name:	Temperature and Humidity Sensor
Size:	113(L)X66(W)X37(H) mm
Temperature Control Range:	14-185°F
Temperature Accuracy:	+/-2°F
Humidity Control Range:	5%-95% RH
Humidity Accuracy:	+/-3% RH
Operating Temperature Range:	32-120°F
Operating Humidity Range:	0-95%RH



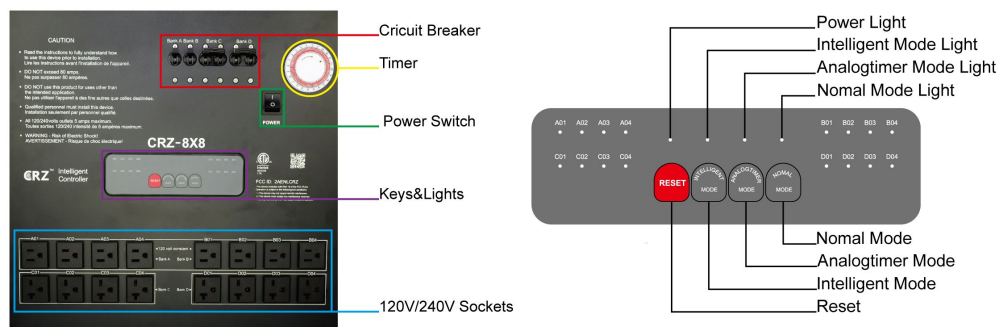
Name:	CO2 Sensor
Size:	113(L)X66(W)X37(H) mm
CO2 Control Range:	380-5000 PPM
CO2 Accuracy:	+/-50 PPM
Operating Temperature Range:	32-120°F
Operating Humidity Range:	0-95%RH





## Intelligent Controller System

### 5. HOW TO USE



1, Turn on the circuit breaker.

2, Turn on the power switch. When the power and reset indicator light , the intelligent controller is ready.

3, 3 models can be selection :

—Intelligent mode:

Intelligent mode, need CRZ APP support.

1.Long press the intelligent mode key until the indicator light quickly flash.

2.Intelligent mode config is ready.

2-1.APP SET UP(reference APP manual)

a)Open APP.

b)Click the Add Device button.

c)Enter your mobile device connection WIFI password.

d)Press start button to connect intelligent controller.

e)When the intelligent mode indicator light slowly flash, that APP is connecting with the intelligent controller.

f)When the Intelligent mode indicator light keeps on, and adds the intelligent controller icon in the APP interface, indicating that APP successfully connected with the intelligent controller.

g)Click the controller icon log-in(reference APP manual).

h)You can controller your devices from local and internet.

i)Sensor parts is only applicable under the intelligent mode.

Note: Sensor control must maintain 60 meters distance from the intelligent controller, and the distance with now all, magnetic field and metal barrier, so as not to affect the wireless transmission between the controller and the sensor controlling.

—Anlogtimer mode:

1.All of the sockets are not controlled by APP.

2.All of the 120V sockets are not controlled by the timer, all of the 240V sockets are controlled by analog timer.

3.All of the 120V sockets power on.

—Normal mode:

All of the sockets are not controlled by the APP and the timer control.

—Reset :

1.Reset will let the controller restore factory settings.

2.Long press the reset button until all the indicator lights quickly flash ,the Intelligent controller into recovery mode.

3.When the reset indication light keep on, the recover processing is finished.

4.Pls set up the controller again.

5.The default into the intelligent mode intelligent controller.

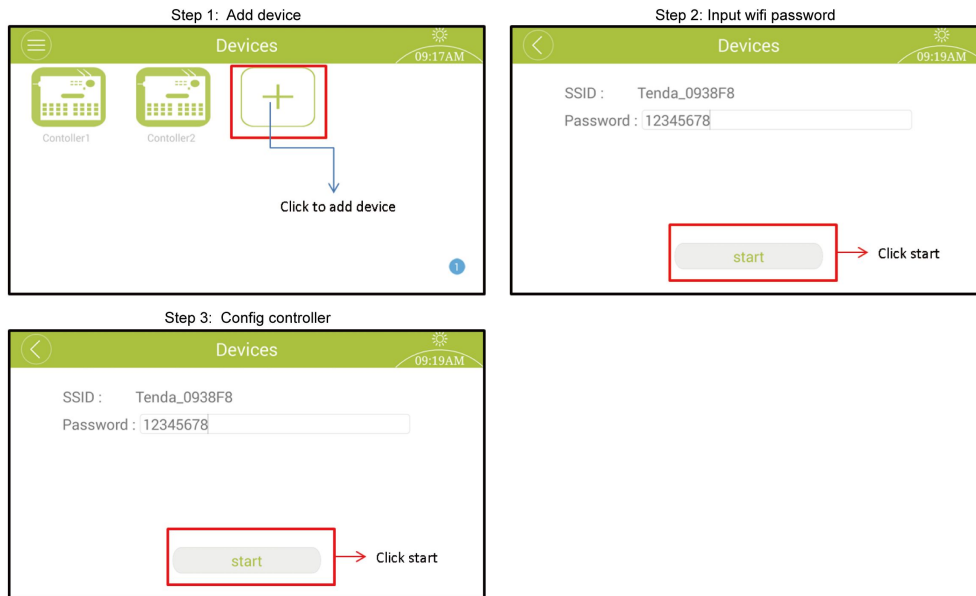
### 6.APP Download



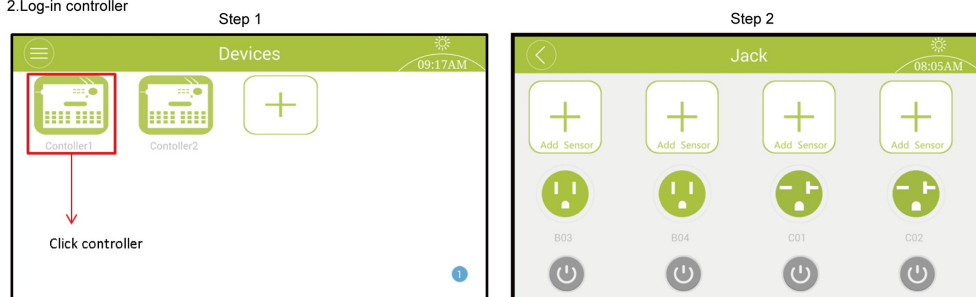
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## 7. APP set up

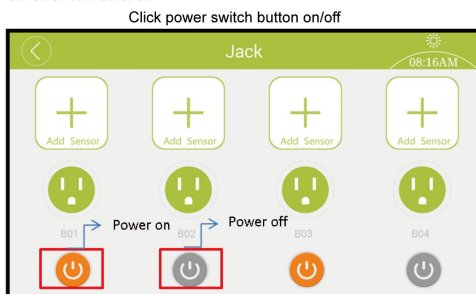
### 1. Config with WIFI



### 2. Log-in controller

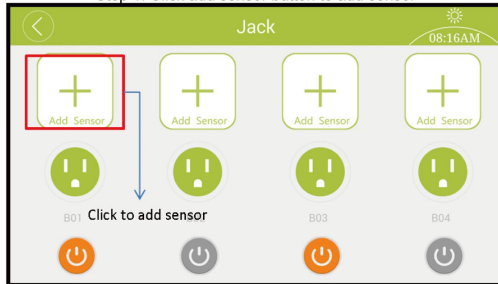


### 3. Power on/Power off

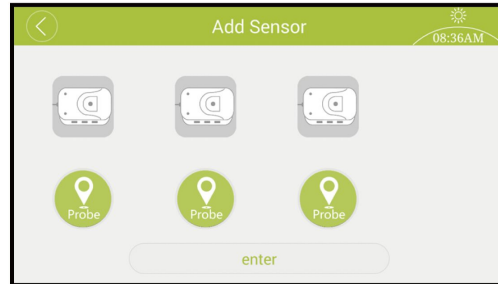


4. Add sensor

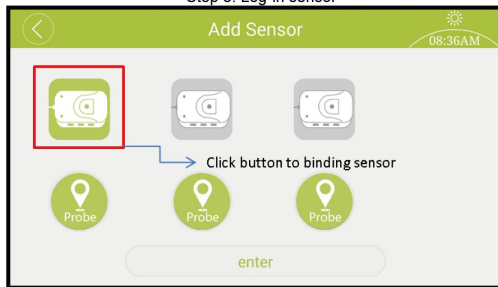
Step 1: Click add sensor button to add sensor



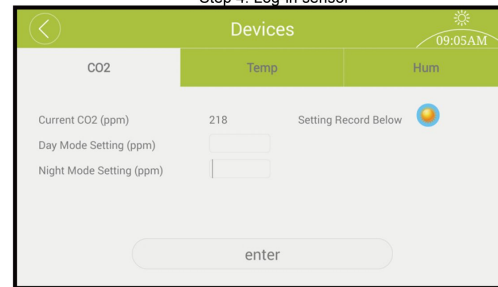
Step 2: Find sensor



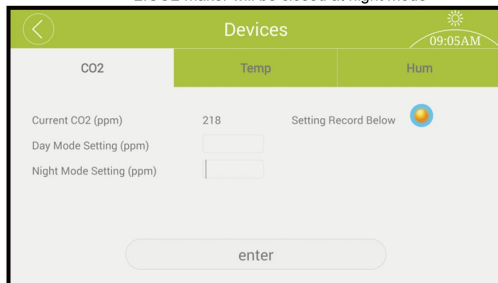
Step 3: Log-in sensor



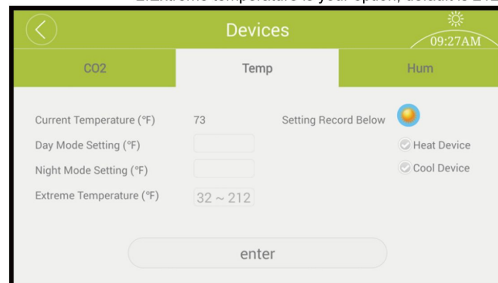
Step 4: Log-in sensor



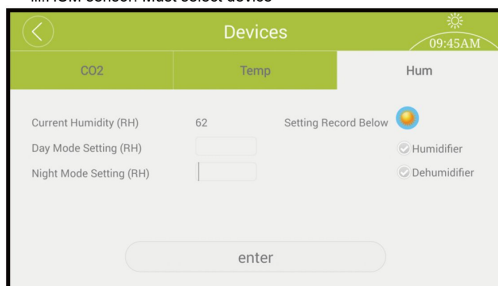
Step 5: Set up sensor Notification: Day/night mode AUTO changed  
i. Co2 sensor 1. Range of value: 0PPM-9999PPM  
2. CO2 maker will be closed at night mode



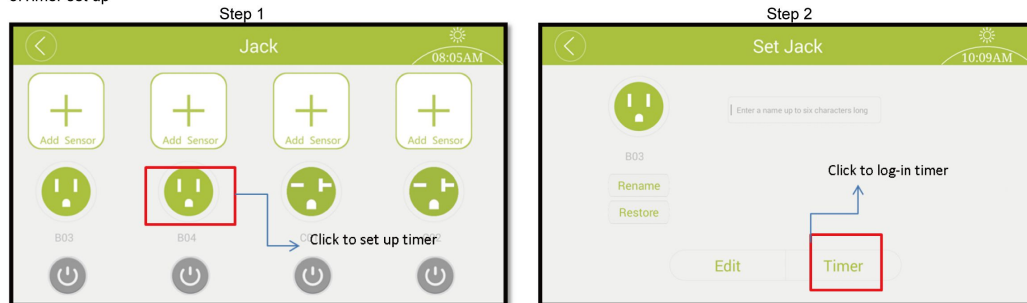
ii. Temp sensor 1. Must select device  
2. Extreme temperature is your option; default is 212



iii. HUM sensor: Must select device

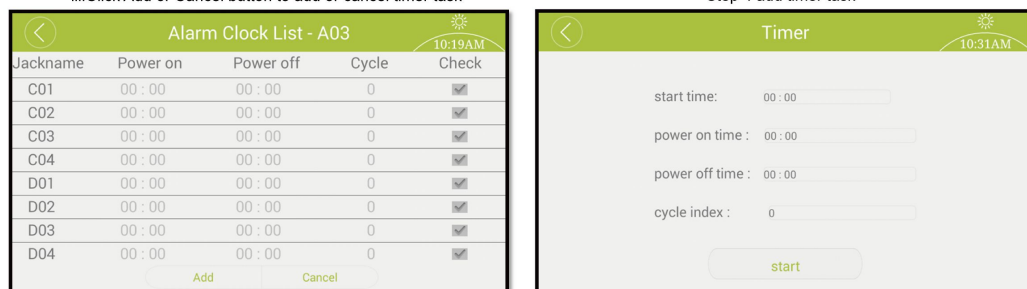


# 5.Timer set up

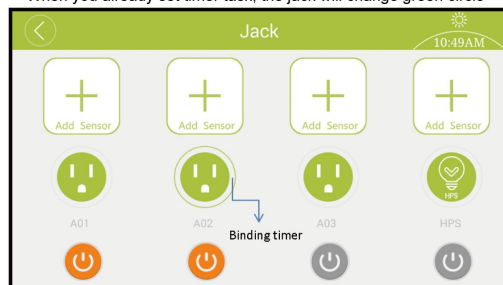


## Step 3: Set up timer

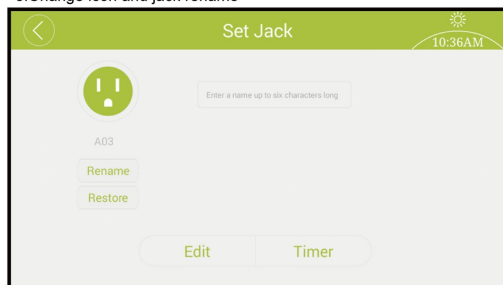
- Click the check button to select jack
- You can select one or more jacks one time
- Click Add or Cancel button to add or cancel timer task



When you already set timer task, the jack will change green circle




## 6.Change icon and jack rename



- Click EDIT to change jack icon
- Input JACK new name and click rename button to change the jack name



## 8.ICON indicate

ICON	STATUS	REMARK
	Controller	
	Breaker down	
	Jack binding timer task	
	Power on	
	Power off	
	Selection sensor	
	Find sensor	
	Sensor off line	
	One kind of sensor off line	
	Position sensor!	
	Nighttime mode	
	Daytime mode	

### FCC Caution.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

