



Intelligent Controller

WWW.CRZSNAIL.COM



Intelligent Controller

The CRZ series intelligent controller is an exclusive design for the indoor garden and hydroponics industry. This all-in-one climate and lighting controller includes a 24-hour programmable mechanical timer, an environmental controller with a wireless remotesensor, along with a lighting controller that can power your HID, LED, T5, or DE lamp Ballasts. This CRZ user friendly controller gives you the power to manage your indoor garden's lighting and environment remotely using an android or iphone app that is FREE to download.



1. SYSTEM SPECIAL FEATURES

All in one controller	1. Embedded lighting controller (includes a 24-hour programmable mechanical timer) Controls HID, LED, T5 or Double Ended Lamp Ballasts 2. Climate controller Controls CO2, Temperature, and Humidity wirelessly using a remote sensor
Wireless control	Local network and internet control, support WIFI (2.4G, 802.11 b/g/n)
Breaker protection	Staggered ignition delay feature eliminates circuit inrush overload and protects lamp
Precise sensor control	Place sensors around your grow room at desired locations to wirelessly send data to main controller
CRZ wireless phone APP features:	Alerts you of any power outages or equipment failures Check status and reconfigure lighting and/or environmental settings using our proprietary interface
Cloud Technology	CRZ's proprietary interface allows you to check or control device settings anywhere with wifi or via cloud technology.
Overheat protection	This allows you to configure the settings to automatically shut down all 240V sockets (lighting ballasts) past a set temperature.

2. MAIN CONTROLLER SPECIFICATIONS

Size in inches:	(L) 18.19 (W) 17.13 (H) 4.5	
Weight:	19.84 LBS	
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	



3. POWER & WIRING REQUIREMENTS

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

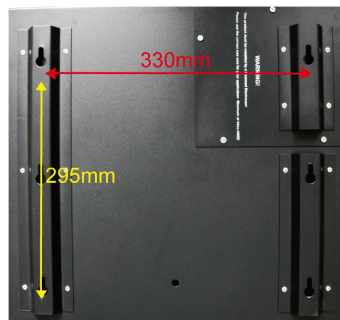
- 1) The main 240 volt / 80 amp power must be supplied to the CRZ-8X8/12X4/16X0 using #4 AWG Cables.
NOTE: Please check local codes for wire sizing requirements.
- 2) You must provide over current protection for the CRZ-8X8/12X4/16X0 using an 80 amp double pole circuit breaker at the Main Panel.
- 3) 80 amps of power require a wire size of at least 4 AWG.
- 4) Make certain that your ballasts are wired for 240 volt.



Intelligent Controller

4. CONNECTING THE MAIN 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 ballasts are disconnected from the sockets on the front of the CRZ-8X8/12X4/16X0. Make sure that all of the circuit breakers on the CRZ-8X8/12X4/16X0 are OFF.
- 3) Unmount CRZ-8X8/12X4/16X0
- 4) Remove the back terminal cover of the CRZ-8X8/12X4/16X0 by unscrewing the five screws on the back upper left corner of the unit.
NOTE: Do NOT rest front side of CRZ controller face down. This can damage the circuit breaker knobs and mechanical timer.
- 5) Carefully strip the four wires (2 power wires, 1 ground, and 1 neutral) approximately 1". Pass all of the wires through the strain relief connector on the upper left side of the CRZ-8X8/12X4/16X0. Please use the correct size wire for your application. Minimum of 4 AWG.
NOTE: Please check local codes for wire sizing requirements.
- 6) Connect the 2 power wires to the lugs on the breaker panel plate labeled "L" and tighten them using an allen wrench. Make sure that you strip the wire enough so that you do not have any insulation under the nut. Tighten again with an allen wrench.
- 7) Connect the 1 neutral wire to the aluminum lug labeled "N". Tighten securely using an allen wrench. Make sure that you strip the wire enough so that you do not have any insulation under the nut. Tighten again with an allen wrench.
- 8) Connect the 1 ground wire to the aluminum lug labeled "GND". Tighten securely using an allen wrench. Make sure that you strip the wire enough so that you do not have any insulation under the nut. Tighten again with an allen wrench.
CAUTION: Tighten all of your connections. Loose connections will cause extreme heat buildup in the wires followed by arcing. Arcing is NOT covered by the warranty! Tighten your Connections! Tighten them again!
- 7) Resecure the cover on the CRZ-8X8/12X4/16X0 by putting the 5 screws back into the front cover.
- 8) Remount CRZ-8X8/12X4/16X0. Connect ballast to 240V sockets, connect environmental equipment to 120V sockets. Turn on circuit breakers and controller is ready to use.



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5. SENSOR SPECIFICATIONS



Name:	Sensor Controller
Size:	105(L)X60(W)X24(H) mm
Work Voltage:	5 volts DC
Maximum Amperage:	1 amps
Wireless 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

6. HOW TO USE

1. Turn on the circuit breaker
2. Turn power switch ON. The intelligent controller is ready to use when the green reset indicator light stops flashing.
3. Three modes can be selected:

Intelligent mode: (Download CRZ APP for Android/iPhone)

1. Press and hold the intelligent mode button until the indicator light quickly flashes
2. Intelligent mode configuration is ready.
 - Using Android/iPhone*: CRZ APP SET UP –
 - a) Download and open APP
 - b) Click the "Add Device" button.
 - c) Enter your WIFI connection password.*
 - d) Press "START" button to connect to intelligent controller. The green intelligent mode indicator light will slowly flash
 - e) When green intelligent mode indicator light stops flashing, the intelligent controller icon will appear in the APP interface indicating that APP is successfully connected with the intelligent controller.
 - f) Click "LOG-IN" on the controller icon*
 - g) If you do NOT have internet access. You can control your devices wirelessly, within 300 ft of intelligent controller, using wireless router that is included.
 - h) If you have internet access. You can control your devices using the CRZ APP on your Android/iPhone from anywhere in the world.
 - i) Sensors are only applicable under the intelligent mode

Note: Sensors must maintain a distance of less than 200 ft from the intelligent controller. It's recommended that the Sensors and the intelligent controller is placed in the same room for maximum efficiency.

Analog timer Mode:

1. All sockets are NOT controlled by the CRZ APP.
2. All 120V sockets are automatically powered on and is NOT controlled by analog timer.
3. All 240V sockets are controlled by analog timer.

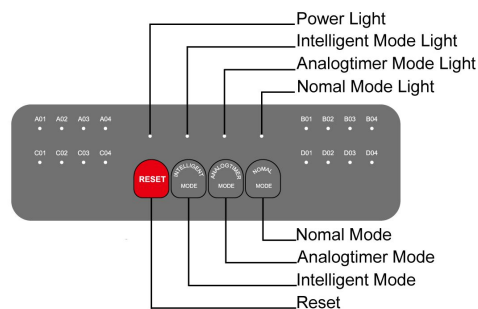
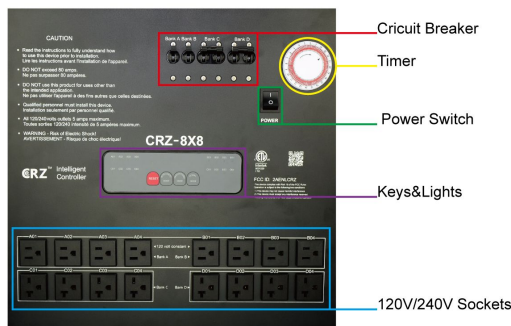
Normal Mode:

1. All sockets are not controlled by the CRZ APP
2. All 120V and 240V sockets are automatically powered on
3. Analog timer is disabled.

Reset Button: (Restore factory settings)

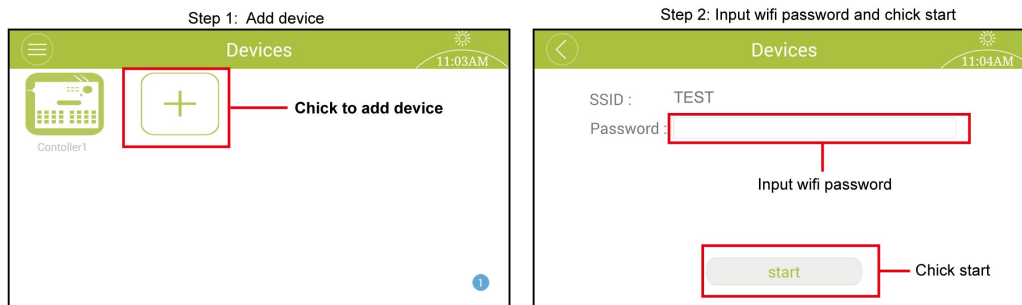
Press and hold the reset button until all four indicator lights quickly flashes. (This activates the intelligent controller into recovery mode). Unhold the reset button and the reset indication light will start flashing. When the reset indication light stops flashing, the recovery mode is complete.

***Refer to pg 7. (APP set up) for more information**



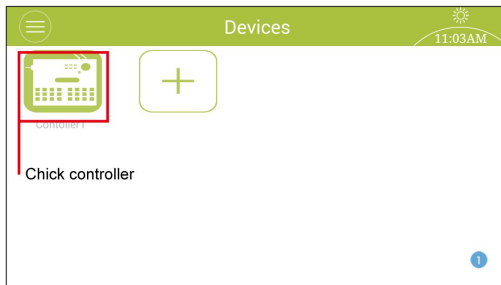
7. APP set up

1. Config with WIFI

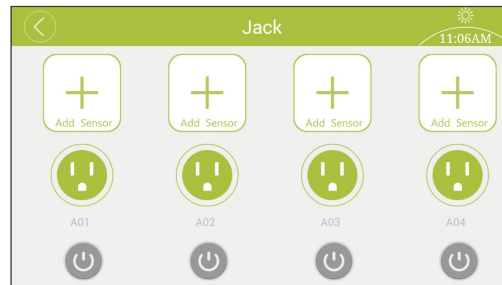


2. Log-in controller

Step 1

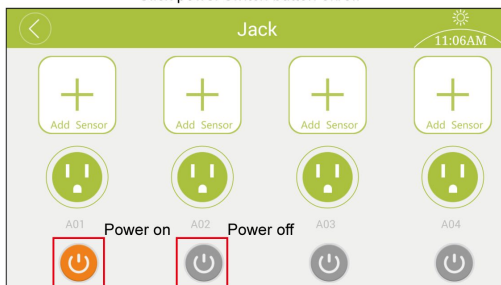


Step 2



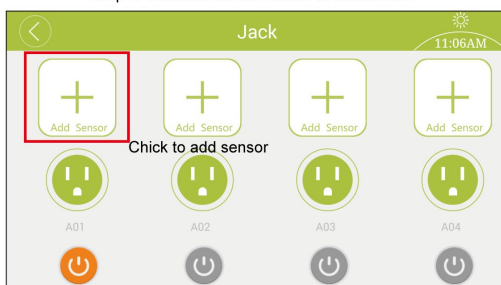
3. Power on/Power off

Click power switch button on/off

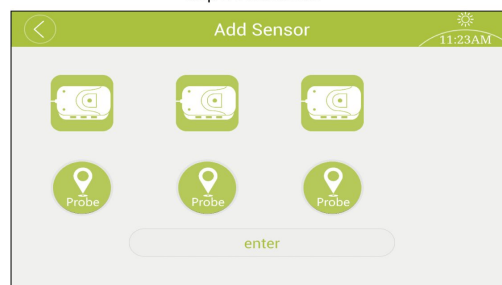


4. Add sensor

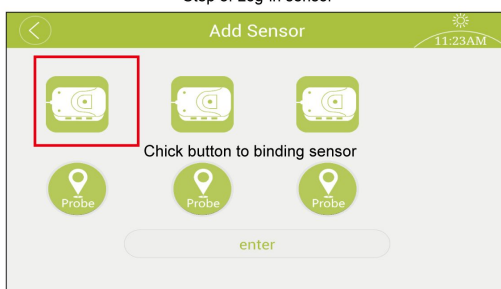
Step 1: Click add sensor button to add sensor



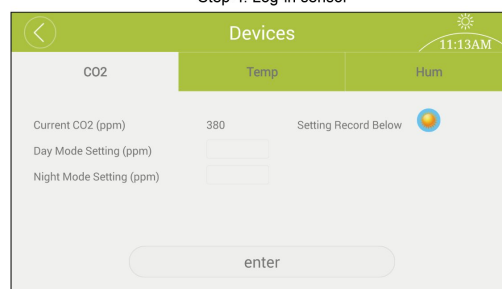
Step 2: Find sensor



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

6. Timer set up

Step 1

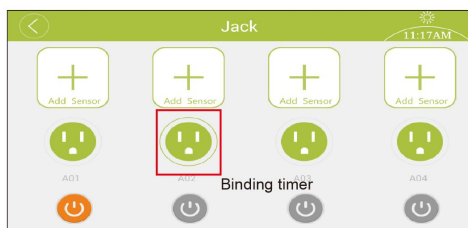
Step 2

- Step 3: Set up timer i. Click the check button to select jack
ii. You can select one or more jacks one time
iii. Click Add or Cancel button to add or cancel timer task

Alarm Clock List - A02				
Jackname	Power on	Power off	Cycle	Check
A01	00 : 00	00 : 00	0	☒
A02	00 : 00	00 : 00	0	☒
A03	00 : 00	00 : 00	0	☒
A04	00 : 00	00 : 00	0	☒
B01	00 : 00	00 : 00	0	☒
B02	00 : 00	00 : 00	0	☒
B03	00 : 00	00 : 00	0	☒
B04	00 : 00	00 : 00	0	☒
Add Cancel				

Step 4 add timer task

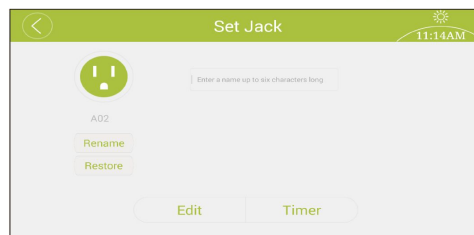
When timer task is set, a green outer circle will appear



6.Change icon and jack rename

i.Click EDIT to change jack icon

ii.Input JACK new name and click rename button to change the jack name



8.ICON indicate

ICON	STATUS
	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.

Avertissement de la FCC

Ce dispositif est conforme à l'article 15 des règles de la FCC. Le fonctionnement est soumis aux conditions suivantes: (1) Cet engin ne peut causer d'interférences nuisibles envers autres et (2) ce dispositif doit accepter toute interférence reçue, y compris ceux qui peuvent provoquer un fonctionnement inadéquat de l'appareil.

Tous les changements ou modifications non approuvés par le parti responsable de la conformité peut entraîner l'annulation du droit d'utilisation de l'appareil par l'utilisateur en question.

Note: Cet équipement a été testé et jugé conforme aux limites d'un dispositif numérique de classe B, conformément l'article 15 des règles de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences dans le cas d'une installation résidentielle. L'équipement en question produit des ondes de fréquence radio et, lorsque installé ou utilisé dans une manière pas conforme aux instructions, peut causer des interférences nuisibles aux communications radios. Toutefois, il n'y a pas de garantie que l'interférence ne soit pas produite dans des cas spéciaux. Si l'équipement produit de l'interférence avec la radio ou la télévision, l'utilisateur est encouragé d'essayer une des solutions suivantes :

- Déplacer l'antenne de réception
- Distancier l'équipement de la réception
- Connecter l'équipement à une prise d'alimentation différente ou un circuit différent du récepteur
- Consulter un technicien ou le concessionnaire pour plus d'aide

*RF warning for Mobile device:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.



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