CREE LIGHTING

0-10V Zone Controller

SmartCast[®] Wireless 0-10V Zone Controller

Includes: CSC-ZC-10V-CWC

INSTALLATION INSTRUCTIONS INSTRUCTIONS D'INSTALLATION

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- 1. **DANGER-** Risk of shock- Disconnect power before installation. **DANGER** – Risque de choc – Couper l'alimentation avant l'installation.
- This luminaire must be installed in accordance with the NEC or your local electrical code. If you are not familiar with these codes and requirements, consult a qualified electrician. *Ce produit doit être installé conformément à NEC ou votre code électrique local. Si vous n'êtes pas familier avec ces codes et ces exigences, veuillez contacter un électricien qualifié.*
- 3. Indoor use only and Suitable for Damp Locations. Pour usage interieur seulement et convient aux emplacements humides..
- 4. Any changes or modifications to these devices not explicitly approved by manufacturer could void your authority to operate this equipment.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE





1	PIR Motion Sensor Coverage				
		Mounting	Motion Sensor Coverage Diameter – D (Feet)		
		Height – H (Feet)	Sensitivity - High (Default)	Sensitivity - Medium	Sensitivity - Low
	н	10	20	10	8
		12	26	14	12
		14	28	15	13
		20	38	18	14
	<> D>				

UNIT DESCRIPTION

The Smartcast[®] Wireless 0-10V Zone Controller can be used to control one or more luminaires that do not have built in Cree Smartcast[®] Technology. The Smartcast[®] Wireless 0-10V Zone Controller provides on, off, and 0-10V dimming control.

- Voltage: 120-347V, 60Hz.
- Load Type: Maximum 520W/120V, 910W/277V, 900W/347V
- Load Inrush Current: Per NEMA410, for maximum switched output

LOAD TYPES

0-10V dimmable loads (IEC60929)

INSTALLATION CONSIDERATIONS

Install the sensor module 4 feet from potential sources of nuisance sensing and interference like vibration prone zones, air vents and other electronic devices (Ex. WiFi access points). See **Figure 1 for PIR motion sensor coverage**.

NOTE: Use solid conduit for AC power feed to the 0-10V relay box enclosure.

NOTE: Please review the wiring diagram and ensure you have planned for the placement of different components.

NOTE: Motion Sensor performance may not be optimal if it is installed on a sloped ceiling

INSTALLATION

NOTE: MINIMUM REQUIRED ENCLOSURE FOR 0-10V RELAY BOX: 6" x 6"x 4" JUNCTION BOX (NOT INCLUDED). LARGER SIZE OR DIFFERENT STYLE CAN BE USED.

STEP 1:

Disconnect power to circuit by turning circuit breaker OFF before installation.

STEP 2:

Remove customer supplied Junction Box cover.









STEP 3:

Remove junction box knockout(s) and install 0-10V relay box into Junction Box using (2) customer supplied sheet metal screws. See **Figure 2.**

STEP 4:

Drill a 2.125" / 2 1/8" diameter circular hole into the mounting surface (wood panel, drywall or a ceiling tile) for the senor and control module.

STEP 5:

Place the control module assembly through the drilled hole. See **Figure 3**.

STEP 6:

Remove the facia cover plate by inserting a flat head screwdriver into the side grove of the cover plate and gently snapping the cover plate out. Set the facia cover plate aside to reinstall later. See **Figure 4**.

STEP 7:

Secure the control module using the front two Phillips screws, turning the screws clockwise to adjust the fit to the mounting surface thickness. As the screws are tightened the module's wings move outward to snug the module up to the mounting surface. Do NOT over tighten the screws. See **Figure 4 and 5. NOTE:** Be careful with the screw driver as it could slip and damage the exposed sensors (with out the facia cover).

STEP 8:

Make wiring connection per the **Electrical Connection** section.

STEP 9:

Reinstall the front facia cover plate that was removed in Step 6 by gently snapping it into place.

STEP 10:

Switch the circuit breaker ON.

STEP 11:

Make sure the WIM blue LED has a double blink pattern. If not, please proceed to Troubleshooting section. Otherwise, you can proceed to commission the zone controller. Please refer to the Smartcast[®] documentation for details. See **Figure 4.**

RESET

STEP 1:

Press and hold Test/Reset button until the LED flashes fast (approximately 5 seconds).

STEP 2:

Release the Test/Reset button for 1 second (Fast flashing continues). Press and hold Test/ Reset for 1 second until fast flashing stops. If the blue LED does not respond with the two-blink sequence, please repeat the RESET procedure.

TROUBLESHOOTING:

Out of the box, if the LOAD does not turn on when power is applied:

- Check Wiring with power off.
- If wired correctly, check to see if Blue LED has a double blink pattern. If not, please proceed to RESET procedure.
- If Blue LED is on solid or off, call Cree Lighting Customer Service at 1-800-236-6800.
- If you have done a RESET, and the LOAD is still off, call Cree Customer Service.

If LOAD is unresponsive use Cree Configuration Tool to verify configuration.

FCC NOTICE

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 device.

This device has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the device is operated in a commercial environment. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this device in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

In addition, this device complies with ICES-005 of the Industry Canada (IC) Regulations.

INDUSTRY CANADA STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. In addition, this device complies with ICES-005 of the Industry Canada (IC) Regulations.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : [1] l'appareil ne doit pas produire de brouillage, et [2] l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

ELECTRICAL CONNECTIONS

STEP 1:

Make the following Electrical Connections:

- a. Connect the black 0-10V relay box lead to the voltage supply position.
- b. Connect the white 0-10V relay box lead to the neutral supply position.
- c. Connect the red 0-10V relay box lead to the load supply position.
- d. Ground the 0-10V relay box case.

For Dimming make the following connections to the customer supplied load:

- e. Connect the violet 0-10V relay box lead to the +10V dimming wire of the load.
- f. Connect the gray 0-10V relay box lead to the dimming common wire of the load.

For sensor & control module, make the following connections to the relay box:

- g. Connect the violet/white 0-10V relay box lead to the violet lead on the control module.
- h. Connect the gray/white 0-10V relay box lead to the gray lead on the control module.

SENSOR & CONTROL MODULE VIOLET GRAY POWER FEED (LINE) VIOLET/WHITE DALI TO 0-10V GRAY/WHITE RELAY BOX Case Must WHITE /IOLET (0-10V+) (NEUTRAL) be -GROUNDED GRAY (0-10V-) RED (SWITCHED HOT) L LUMINAIRE

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