

IMPORTANT SAFEGUARDS

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

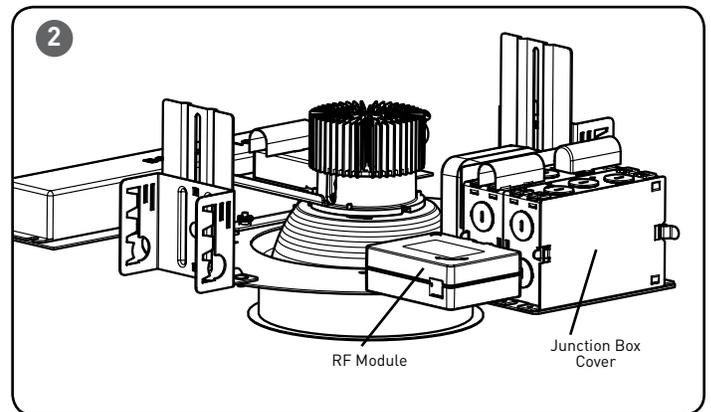
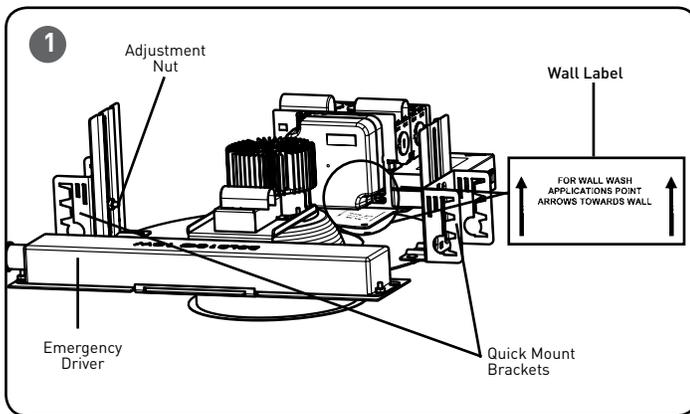
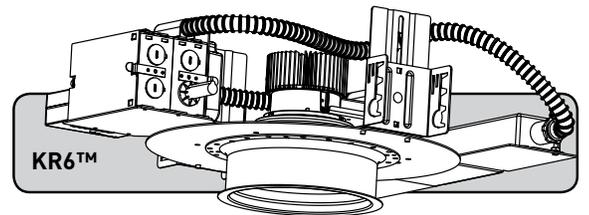
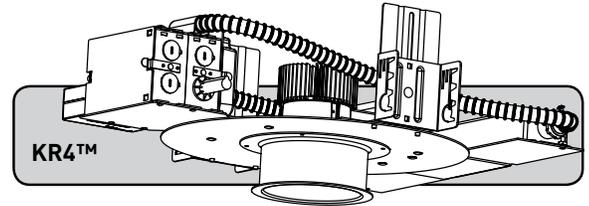
READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. To reduce the risk of electrical shock, turn off power supply before installation or servicing.
2. 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.
3. This luminaire must be supported by main runners or other building structure that is capable of supporting fixture weight.
4. To reduce the risk of electric shock, disconnect both standard and emergency power supplies and converter connector of the emergency driver before servicing.
5. This luminaire is thermally protected. Do not install insulation within 3 inches (76 mm) of luminaire sides or junction box nor above luminaire in such a manner as to entrap heat.
6. Blinking LED may indicate fixture is too close to insulation.
7. DO NOT mount near gas or electric heaters.
8. Any changes or modifications to these devices not explicitly approved by manufacture could void your authority to operate this equipment.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

TO INSTALL:

INSTALLATION INSTRUCTIONS



LUMINAIRE INSTALLATION

NOTE: An Illuminated Test Switch (ITS) with a testplate is shipped in a separate packaging within the same box as the luminaire to be installed by customer, see **Electrical Connections** section for wiring. This hardware is intended to be mounted separately from the luminaire in accordance with the NEC or your local electrical code. Wire and other necessary hardware must be supplied by customer.

STEP 1:

Mark the intended location of the luminaire and cut appropriate opening in the ceiling using the chart below:

KR SERIES	CUTOUT DIMENSIONS
KR4	4.75 in (12 cm)
KR6	6.5 in (16.5 cm)

STEP 2:

Thread rigid conduit, bar stock, wire or C-channel (supplied by others) through quick-mount brackets at the sides of the fixture. See **Figure 1**.

NOTE: For Wall Wash application orientate luminaire as indicated on Wall Label. See **Figure 1**.

STEP 3:

Attach mounting means to structure capable of supporting the luminaire's weight.

STEP 4:

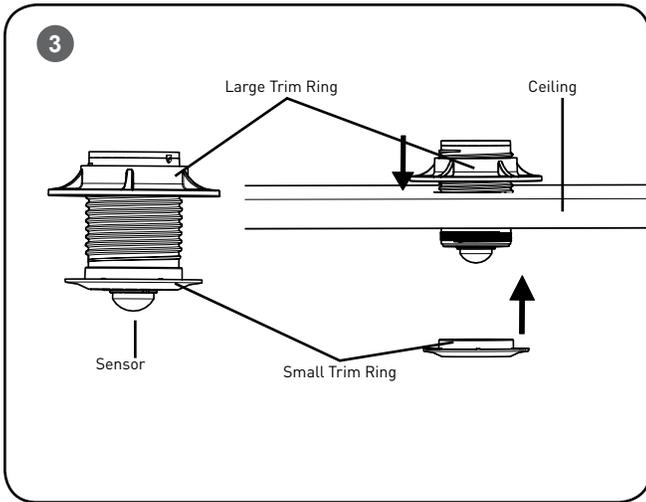
Adjust mounting height by loosening adjustment nut, see **Figure 1**, and then position bracket so that the bottom of the plaster ring is flush with the bottom of the opening of the finished ceiling.

STEP 5:

Tighten adjustment nut.

STEP 6:

Remove one of the junction box covers and bring in appropriate power supply to the junction box using one of the knock-outs. See **Figure 2**.



STEP 7:

Wire luminaire per “**Electrical Connections**” section and refer to trim installation sheet to install trim.

NOTE: Luminaire comes with (1) red and (2) yellow/red leads that are capped off and not used.

STEP 8:

Once electrical connections have been made reinstall junction box cover that was removed in Step 6.

STEP 9:

Install sensor into ceiling by drilling a 2” hole into the ceiling.

Step 10:

Unscrew the small trim ring near the sensor and place sensor assembly through the ceiling. See **Figure 3**.

Step 11:

Secure the sensor assembly by screwing the small trim ring removed in Step 10 back onto the sensor assembly. Tighten the larger trim ring above the ceiling until it is tight against the ceiling. See **Figure 3**.

STEP 12:

Switch the circuit breaker ON.

STEP 13:

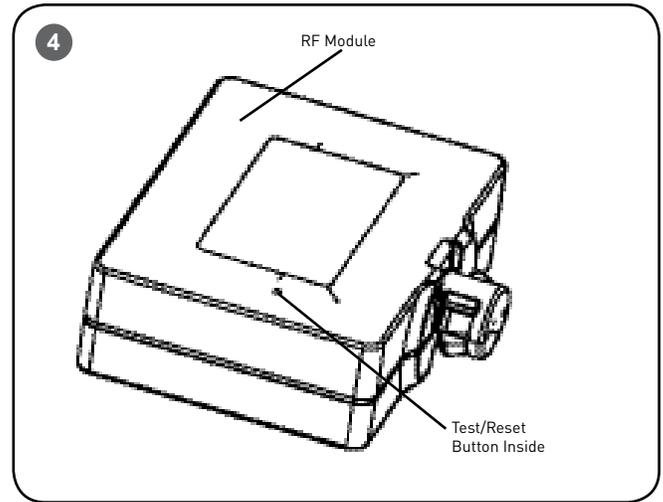
The blue LED should repeat a two blink sequence. If the blue LED does not respond with the two-blink sequence, please follow the RESET instructions to return the 0-10V Interface to factory defaults.

STEP 14:

Verify the LOAD wiring with the following TEST instructions:

- Press and hold the Test/Reset button for 5 sec then release. The blue LED should respond with a five-blink sequence. Once test mode has been entered, LOAD enters State 1. See **Table below**.
- Press and hold Test/Reset button for 1 sec then release to transition to the next state. The sequence repeats after State 3. Please refer to the load table below for your load type.
- To exit test mode at any time, press and hold the Test/Reset button for 5 sec then release. The five-blink sequence ends when test mode is exited.

	Dimmable	Non-Dimmable
State 1	Off	Off
State 2	Max light output [10V]	On
State 3	Min light output [1V]	On



EMERGENCY DRIVER CHECK

NOTE: For short-term testing of the emergency function, the battery must be charged for at least one hour. The emergency driver must be charged for at least 24 hours before conducting a long-term test.

STEP 1:

When AC power is applied, the charging indicator light is illuminated, indicating the battery is being charged. When power fails, the emergency driver automatically switches to emergency power, operating the LED array. When AC power is restored, the emergency driver returns to the charging mode.

STEP 2:

Although no routine maintenance is required to keep the emergency driver functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

- Visually inspect the charging indicator light monthly. It should be illuminated.
- Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds. When the test switch is depressed, the LED array should operate.
- Conduct a 90-minute discharge test once a year. The LED array should operate for at least 90 minutes.

If the luminaire fails any of these checks, consult service personnel.

REFER ANY SERVICING INDICATED BY THESE CHECKS TO QUALIFIED PERSONNEL
EMERGENCY DRIVER AND AC DRIVER MUST BE FED FROM THE SAME BRANCH CIRCUIT.

RESET RF MODULE

NOTE: The Blue LED is located behind the CREE logo on the RF Module. The CREE logo will illuminate blue when the Blue LED is active.

STEP 1:

Activate RESET button through the access hole. Push and hold until LED on RF Module begins blinking rapidly (approximately 6-7 seconds). See **Figure 2 and 4**.

STEP 2:

Release for 1 sec.

STEP 3:

Press/hold RESET button for 0.5 sec. Light will turn off for a few seconds then go to full bright and the Blue LED on the RF Module should begin a 2 blink sequence. See **Figure 2 and 4**.

TROUBLESHOOTING:

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

Perform TEST mode to verify proper functionality of the load type

- If TEST mode fails, check Wiring with power off.
- If wired correctly, check to see if Blue LED is blinking.
- If Blue LED is blinking, then perform a RESET (See RESET section).
- If Blue LED is on solid or off, call Cree Customer Service.
- 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-003 of the Industry Canada (IC) Regulations.

ELECTRICAL CONNECTIONS- 850 AND 1250 LUMEN WITH 120V/277V DRIVER WITH CREE SMARTCAST™ TECHNOLOGY (0-10V) OR 2000 AND 3000 LUMEN WITH 120/277V DRIVER WITH CREE SMARTCAST™ TECHNOLOGY (0-10V)

NOTE: Luminaire is intended to be wired to a specific voltage. Make sure that supply voltage matches voltage on electrical label next to the junction box. Connecting luminaire to voltage other than that specified on the label may result in luminaire damage and/or improper luminaire operation. The emergency driver must be fed from the same branch as the AC Driver.

STEP 1:

Supply connections can be brought to the junction box using customer supplied conduit.

STEP 2:

Using customer supplied 90°C minimum rated wire connectors, make the following electrical connections within the junction box.

- Connect supply ground lead to luminaire ground, bare/tinned wire.
- Connect the white/red luminaire lead to the supply switched hot.
- Connect supply line conductor to luminaire hot (black).
- Connect supply neutral conductor to luminaire neutral (white).

STEP 3:

Once ITS is installed make the following electrical connections within the junction box:

- Connect ITS violet lead to luminaire's violet + lead.
- Connect ITS brown lead to luminaire's brown - lead.

STEP 4:

Locate the two red leads coming off of the Emergency Driver and connect them using supplied connector. See **Figure 1** on page 1.

