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CONCEALED EMERGENCY LIGHTING, R4000 SERIES

Model R4

Remote Fixtures

INSTALLATION INSTRUCTIONS

Product Features

AC Supply Voltage	120VAC or 277VAC (+/- 10%)
Power Consumption	Maximum 16w
Transfer Means:	Transfer circuit energizes lamps on loss of AC.
Lighting Head:	358-degree universal swivel rotation. 180-degree tilt position adjustment.





Important Safeguards

Read and Follow All Safety Instructions

- ✓ Do not use outdoors.
- ✓ Do not let power cords touch hot surfaces. Do not mount units where they will be exposed to direct sunlight, radiators, gas or electric heaters.
- ✓ Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- ✓ **CAUTION:** LED lamps are used in this equipment. To avoid shattering, do not operate lamp in excess of rated voltage, protect lamp against abrasion, scratches and liquids when lamp is operating. Dispose of lamp with care.
- ✓ LED lamps operate at high temperatures. Do not store or place flammable materials near lamps.
- ✓ The use of accessory equipment not recommended by the manufacturer may cause unsafe conditions and void all warranties.
- ✓ Do not use this equipment for other than intended use.
- ✓ Qualified service personnel should perform servicing of this equipment.

Failure to follow published installation instructions or any modifications to the product may damage the unit and will void the warranty.

Power Requirements for the R4000 Series

Method #1: One Circuit – Emergency Generator Power Only

Provide one emergency power circuit that is energized only during the operation of the generator. This can be sourced from the emergency panel circuit breakers, typically located on the generator itself. Dedicated circuit breakers must be called out as part of the generator specifications. The emergency circuit voltage must be specified and can be either 120VAC or 277VAC.

Examples:

R4 Wattage 120E/Generator Leads Only **or** R4 Wattage 277E/Generator Leads Only

Method #2: Two Circuits – Normal Power (Monitoring) and Emergency Power

The R4000 Series emergency light fixture LED lamps only need to be powered during emergency mode. The R4000 automatically returns to the closed position when the normal power (monitoring) circuit is restored.

Part 1

Provide one emergency power circuit from a building emergency panel. This is, typically, a panel that is constantly supplied by normal power and backed up by emergency power via an automatic transfer switch from a generator. This emergency circuit would basically serve the R4000 with a constant hot emergency source, so we need to notify the R4000 when an actual emergency condition is occurring.

Part 2

Provide one normal power (monitoring) circuit from a building normal power panel that is not backed up by an emergency source. This circuit would power a relay in the R4000 that would sense the loss of normal power and close the contact on the emergency circuit serving the R4000 during emergency mode.

The emergency and the normal branch circuit voltages must be specified and can be any combination of 120VAC or 277VAC.

Examples:

R4 Wattage 120N/120E **or** R4 Wattage 277N/277E **or**

R4 Wattage 120N/277E **or** R4 Wattage 277N/120E



WARNING! To avoid fire, shock/electrocution, or injury ... **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials.

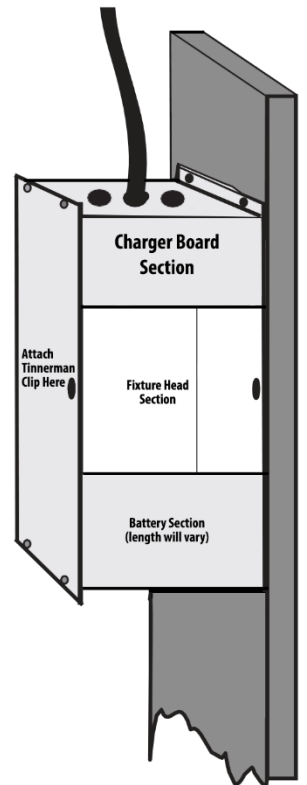
Begin Installation

This unit is designed for recessed mounting into gypsum board, or plaster, walls and/or ceilings. (Surface mounted is designated with suffix SM). Locate unit within area to best maximize lighted area under anticipated conditions if using the trimless. FMS (Frameless Mounting System) option STOP RIGHT HERE AND REVIEW FMS INSTRUCTIONS!

Step #1: Back Box Installation

The recessed back box is standard. If your installation requires the Surface Mount or Retrofit back box, please refer to the separate instructions for back box installation. Back box is designed for recessed mounting in gypsum board, or plaster, walls and/or ceilings. The mounting contact area of the wall or ceiling must be straight, without deformity. When used in plaster wall or ceiling, install plaster trim option. (See plaster trim instructions). **Note:** Plaster trim is used only on plaster and is not needed for gypsum board installation.

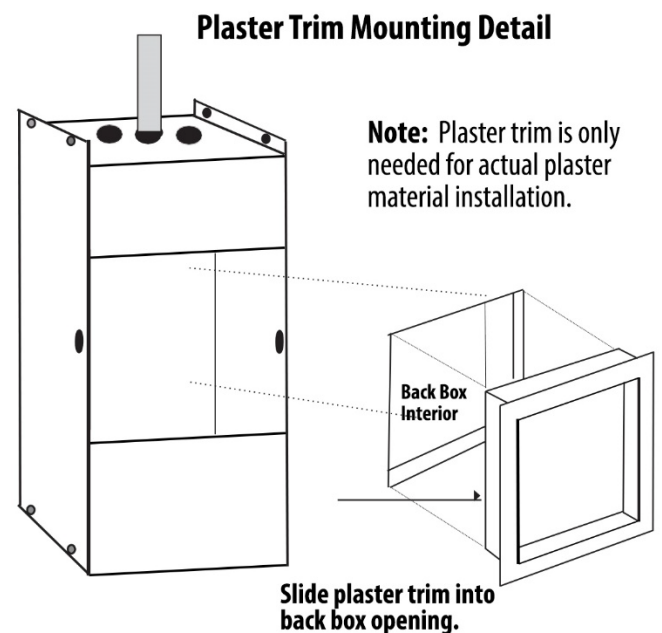
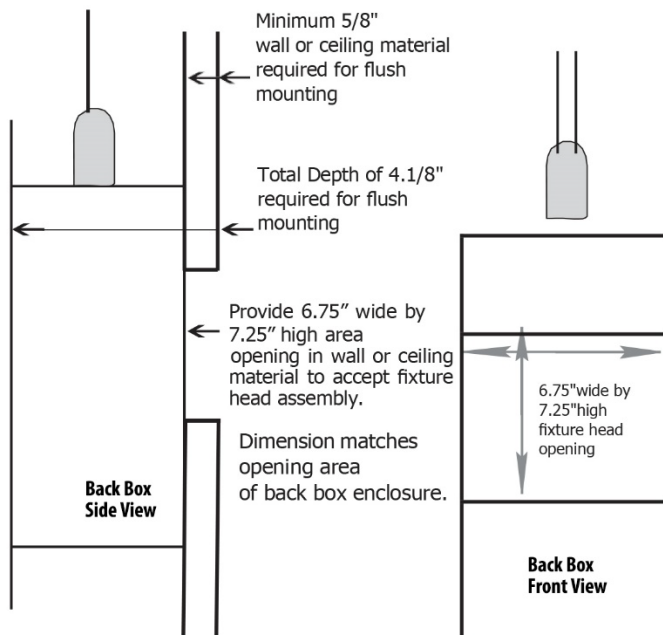
1. Securely fasten back box to stud, joist or blocking material using tabs at top and bottom of back box with screws (not furnished).
2. **Wall Mounting:** Mount with knockouts at top end.
3. **Ceiling Mounting:** Mount with opening of back box downwards. When mounting in grid ceiling, see T-Bar installation instructions.
4. Route branch circuiting in metallic raceway. Securely terminate into enclosure by KO's provided.
5. Install gypsum board, plaster, wall, or ceiling material.
6. Provide a 6.75" wide by 7.25" high opening in wall or ceiling material to accept fixture head assembly. Dimension matches opening area of back box enclosure.



Step #1: Back Box Installation [continued]

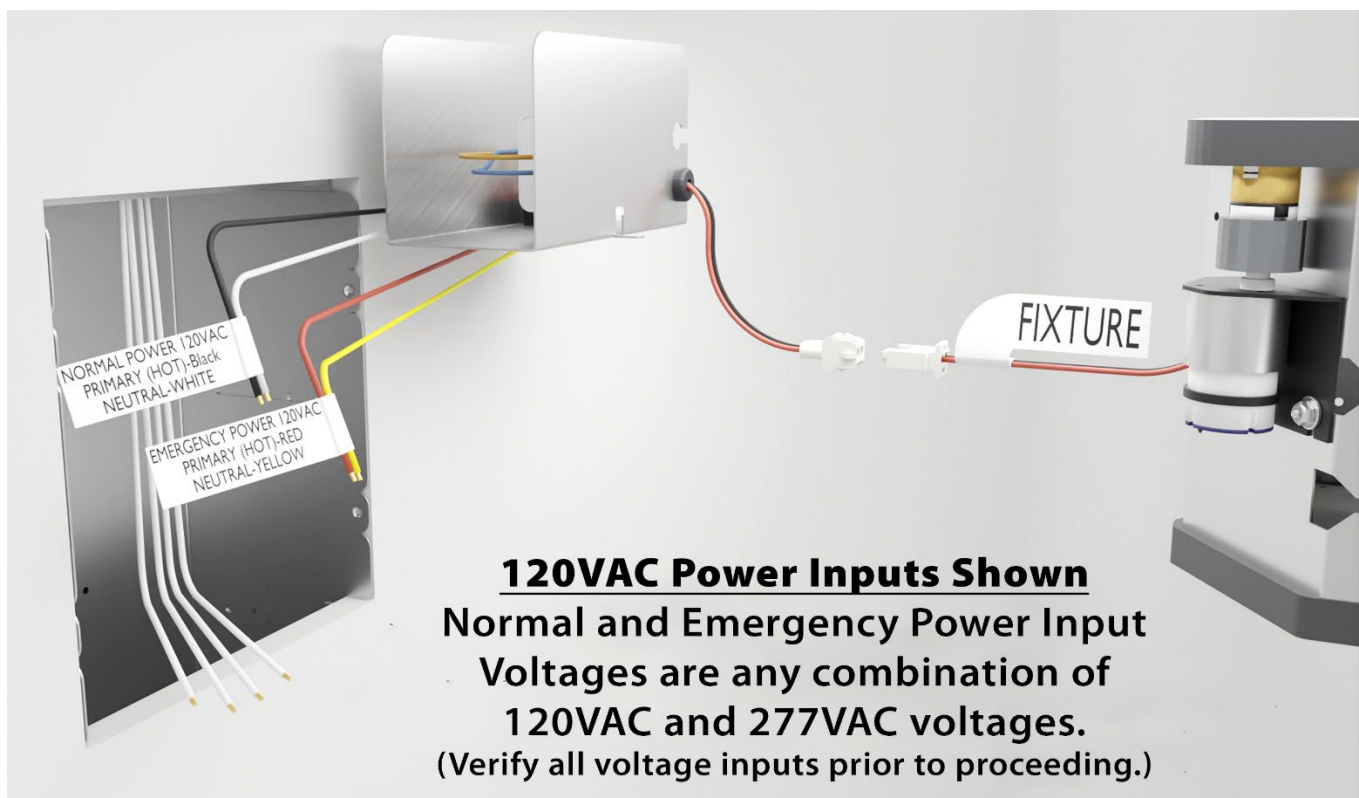


Step #2: Branch Circuit Installation



Step #2: Branch Circuit Installation [continued]

1. Determine the fixture type, normal and emergency power input, and voltages.
2. Provide power input(s) to each unit. Wiring should be a permanent installation using metal enclosed wiring raceway. A 13/16" diameter knockout is provided on the top of the recessed or retrofit back box.
3. Verify all connections and voltage ratings.



Step #3: Fixture Head Mounting Brackets

Adjust the two (2) side mounting brackets for 5/8" or 1-1/4" thickness of gypsum board wall, or ceiling materials, securing them into position with the four (4) #8-32 locking nuts provided.

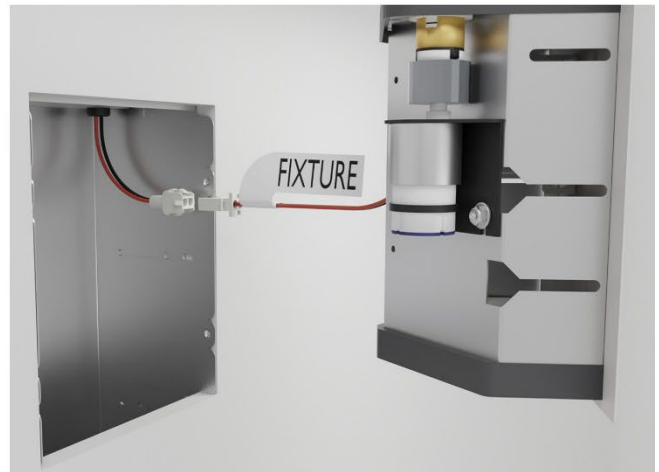
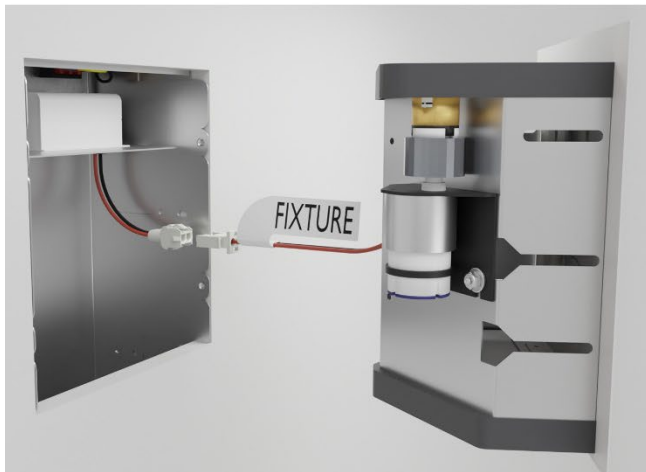
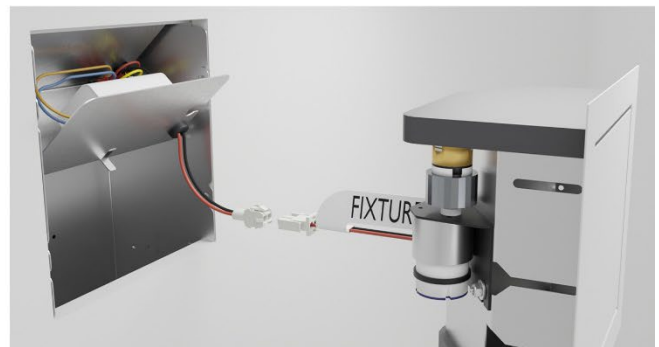
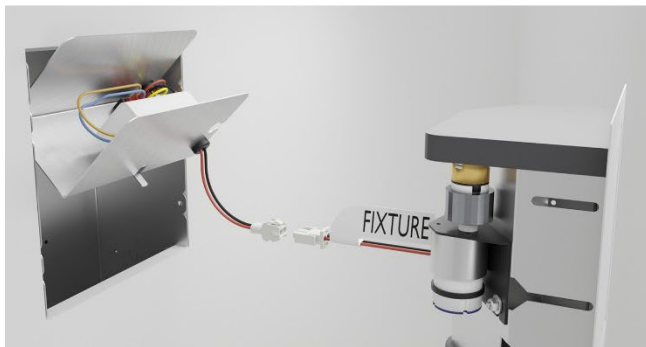
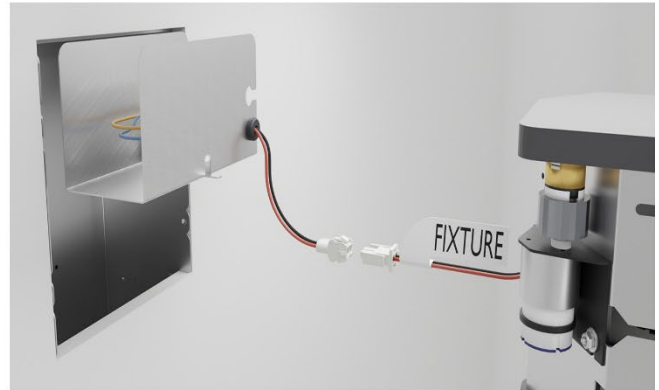
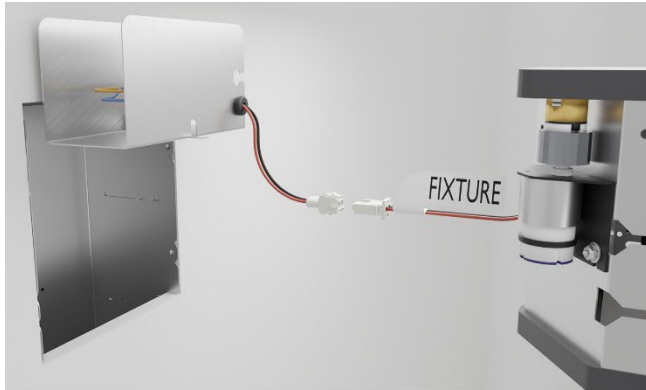


Step #4: Power Supply Board Installation

Carefully slide the power supply board into the top of the back box. Place tab in back box lance.

See Illustrations Next Page

Step #4: Power Supply Board Installation [continued]

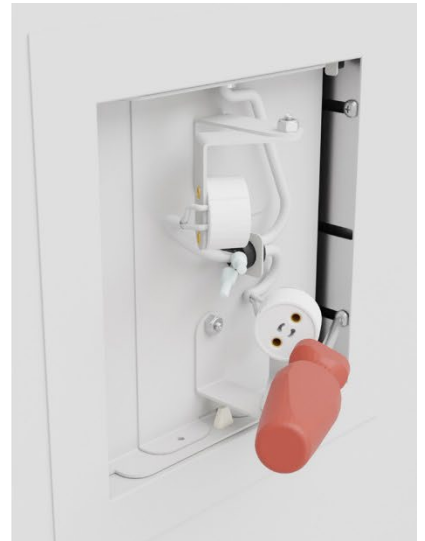


Step #5: Fixture Head Installation

Connect the 2-pin Molex connector from the charger board to the connector on the fixture head.

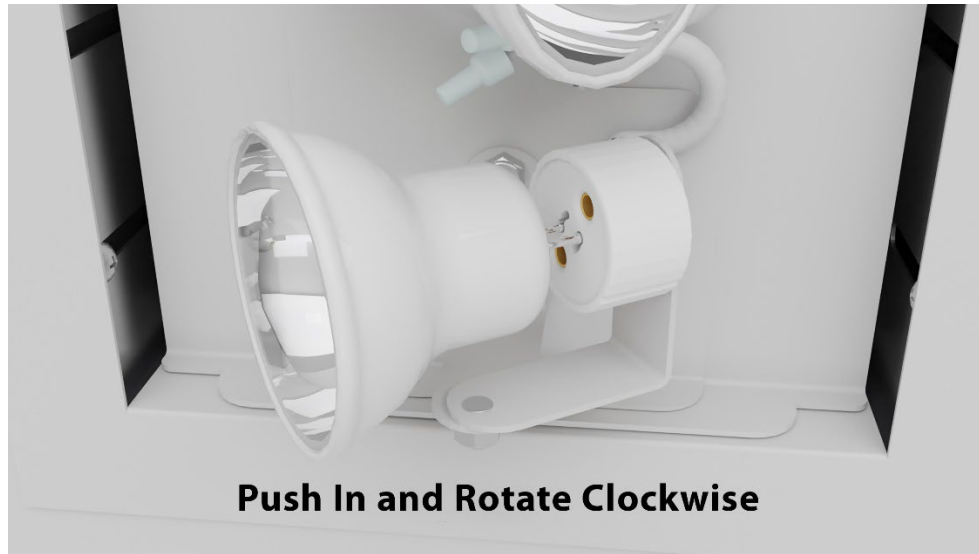
Step #6: Fixture Head Mounting

1. Insert two (2) of the four (4) side mounting bolts into the adjustment brackets, into the staggered positions, as shown in illustration.
2. Insert the fixture head into the recessed back box opening while aligning the first two (2) mounting bolts into the fixture head guide slots until it reaches the final flush mounted position.
3. Manually rotate the rotating door to the open position. Locate and securely fasten the first two (2) fixture head mounting bolts.
4. Insert the remaining two (2) of the four (4) fixture head mounting bolts into the fixture head assembly and securely fasten.
5. Release the door to allow it to rotate to the closed position.



Step #7: Lamp Installation

Insert the locking bi-pin lamps by inserting the lamp into the lamp socket and rotate clockwise until it locks into place. Verify lamps are properly turned into sockets.



Step #8: Energize

Energize the normal power and emergency power branch circuits.

Troubleshooting: Symptoms and Possible Corrective Measures

Unit does not operate when power is lost, or test switch is depressed.

- 1) Verify that the AC power is energized to the unit for both normal and emergency power inputs.

On-Site Painting Instructions

1. The door and frame of the unit have been treated with a factory powder-coated paint with a hard finish. This finish should be roughened with a coarse steel wool or sandpaper before a new finish is applied to ensure the paint adheres to the factory finish.
2. When the new finish is applied, extreme care should be taken that a seal is not formed between the door and the frame ... which would prevent the door from opening. Also, assure that the paint is not so heavy that it runs into the gearing mechanism. This damage will void the warranty on the unit.
3. If the finish is sprayed on, we suggest that a thin cardboard or plastic strip be inserted between the door and the frame to prevent a paint seal from being formed.
4. After the new finish is applied, a sharp edge such as a single edge razor or utility knife may be inserted in the opening between the door and frame and run around the circumference of the unit to ensure that no seal has been formed. The finish should be completely dry before this step is performed.
5. If the unit is being covered with material (wallpaper, cloth, laminate, etc.), allow the mastic used to apply the covering to completely set up. Use a sharp edge such as single edge razor or a utility knife held at a 20 to 30-degree angle against the frame and run the blade around the frame. Repeat this procedure holding the edge against the door. This will provide a beveled edge that will prevent the material from fraying as the unit operates. Assure that the mastic adhesive does not run or be allowed to coat between door and frame, or this will void the warranty.

Warranty

All Concealite fixtures are tested and are guaranteed to be free from defective materials and workmanship for a period of three years (3) from date of shipment, under normal operations and proper use. Correction of all defects shall be by replacement or repair (at our discretion) and shall constitute fulfillment of all manufacturer's obligations. We will not allow any charge for labor, materials, etc. that does not have our written approval before the work has begun. Damage incurred in handling or in transit is not covered. Any other warranty, expressed or implied, is hereby void. Modifications to the product or failure to follow these installation instructions will void the warranty.

Save These Instructions