

OPERATION

“AC On” LED is illuminated when AC power is present.

NOTE: All models are supplied with an AC lock-out circuit, which prevents the emergency lights from illuminating when the battery is connected and no AC power is present.

NOTE: All models are supplied with a Low Voltage Disconnect circuit which prevents damage to the battery from deep discharge during prolonged emergency operation.

NOTE: Batteries are often shipped in a discharged state - this is normal. The battery will require charging. Allow 24 hours of charging before testing the unit.

Models with Spectron® Self-Testing/Self-Diagnostic Circuitry
Models equipped with the Spectron® self-testing/self-diagnostic electronics system provide:’

- **Visual indication of AC power status**
- **Visual indication of self-diagnostic test status and results**

Visual indication of any unit malfunction include

- **Battery Disconnected**
- **Battery Fault**
- **Charger Fault**
- **LED Driver Fault**
- **Lamp Fault**

Spectron® equipped signs also include:
Brown-out protection: sign will automatically transfer to emergency operation upon detection of low AC power (approximately 80% of nominal line).
Time Delay Re-Transfer: upon return of normal AC power, unit will remain in emergency mode for an additional 15 minutes to allow AC power to stabilize.

LED Status Indicator
A bicolor LED (Green/Red) is provided on the control panel of all models equipped with the Spectron® option.

Green Operating Status LED
Serves as both an AC power and self-test indicator. During normal operation, the Green Operating Status LED will be illuminated indicating the presence of AC power. During all automatic or manual self-test cycles, the Green Operating Status LED will blink twice every second.

Red Service Alert LED
Under normal operating conditions, the Red Service Alert LED indicator will remain off. If the Spectron® controller detects a malfunction, the Red Service Alert LED will blink in the pattern listed in the following table:

RED Status LED Code	Description
One Blink ON/pause	Battery Dis-connected
Two Blinks ON/pause	Battery Fault
Three Blinks ON/pause	Charger Fault
Four Blinks ON/pause	LED Driver Fault
Five Blinks ON/pause	Lamp Fault
Ten Blinks ON/pause	Load Learn Failure
Red/Green Alternating	Load Learn in Progress

Automatic Tests
The exit will automatically initiate a self-test/self-diagnostic cycle based on the following:

Testing Period	Duration of Test
Once a month	1 minute
Once every 6 months	Alternating 30 or 60 minutes

Manual Tests
Using the exit test switch, users can initiate different test cycles based on the following table:

Initiating Action	Test Cycle
Press test switch once	1 minute
Press test switch twice	90 minutes

Pressing the test switch any time after a 90 minute test cycle has begun cancels the remainder of the 90 minute test & returns the unit to normal operation.

SERVICE / MAINTENANCE

This emergency lighting sign should be tested and maintained in accordance with National Electrical Code and NFPA 101 Life Safety Code requirements. It is recommended that emergency lighting fixtures be tested for 30 seconds once a month and for 90 minutes once a year.

Taking A Unit Out Of Service
If a sign is to be deliberately taken out of service for an extended period, the battery lead connector should be disconnected from the charger circuit board so that the battery will go into storage in a fully charged condition.

Replacing The Battery

1. De-energize the AC power
2. Remove stencil face-plate from frame.
3. Disconnect the battery leads from the charger circuit board.
4. Remove the battery from the Exit frame.
5. Replace with a new battery (see model label for part number of the battery).
6. Reassemble stencil face-plate to frame.

Replacing LED Lamps
The LED lamps inside the exit are not replaceable or field serviceable.

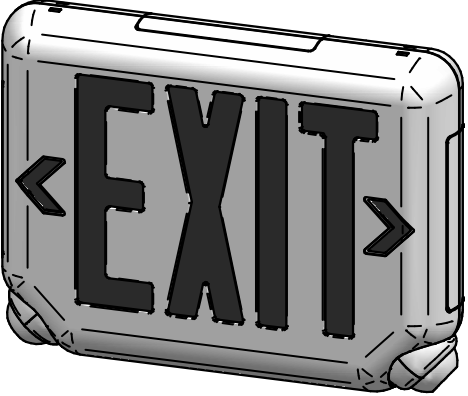
Troubleshooting
Emergency circuit does not work

- Batteries are shipped uncharged and disconnected. Connect the battery leads and charge 24 hours before testing.
- Make sure the charger board and test button/light pipe are properly seated and aligned.
- Check all wiring connections.

DUAL LITE

EVC Series

Architectural LED Combination Exit/Emergency Light
Standard, Remote, and Spectron® Equipped Models
Installation, Operation, and Service Instructions



93036965

IMPORTANT SAFEGUARDS

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors (unless suitable for damp location).
2. Do not mount near gas or electric heaters.
3. Equipment should be mounted in locations and at heights where it will not readily be subject to tampering by unauthorized personnel.
4. The use of accessory equipment not authorized by the manufacturer may cause an unsafe condition.
5. Do not use this equipment for other than its intended purpose.
6. Servicing of this equipment should be performed by qualified service personnel.
7. Test cycling: the Life Safety Code (NFPA 101) requires testing of emergency lighting units once a month for a minimum of 30 seconds, and once a year for a minimum of 90 minutes.

INSTALLER:


- SEE UNIT LABEL FOR ADDITIONAL MODEL SPECIFICATIONS
- SAVE THESE INSTRUCTIONS FOR USE BY OWNER/OCCUPANT

WARNING – This product contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm. Thoroughly wash hands after installing, handling, cleaning, or otherwise touching this product.

Emergency Lighting Equipment For Use in Damp Locations

Damp location listed exits are suitable for installation in:

1. Interior locations subject to moderate degrees of moisture, such as some basements, some barns, some cold storage warehouses, and the like.
2. Partially protected locations under canopies, marquees, roofed open porches and the like.



RECYCLING INFORMATION

All steel, aluminum and thermoplastic parts are recyclable.
NOTICE: Emergency units contain rechargeable batteries which must be recycled or disposed of properly.

Hubbell Lighting, Inc. Life Safety Products • www.dual-lite.com

Copyright© Hubbell Lighting, Inc., All Rights Reserved • Specifications subject to change without notice. • Printed in China

93031684B 9/12


93036965

93043558

93043559

93043560

93044309



Hubbell Lighting, Inc.

Ceiling, End, or Wall Mount AC Input Leads

Ceiling Mount AC Input Leads

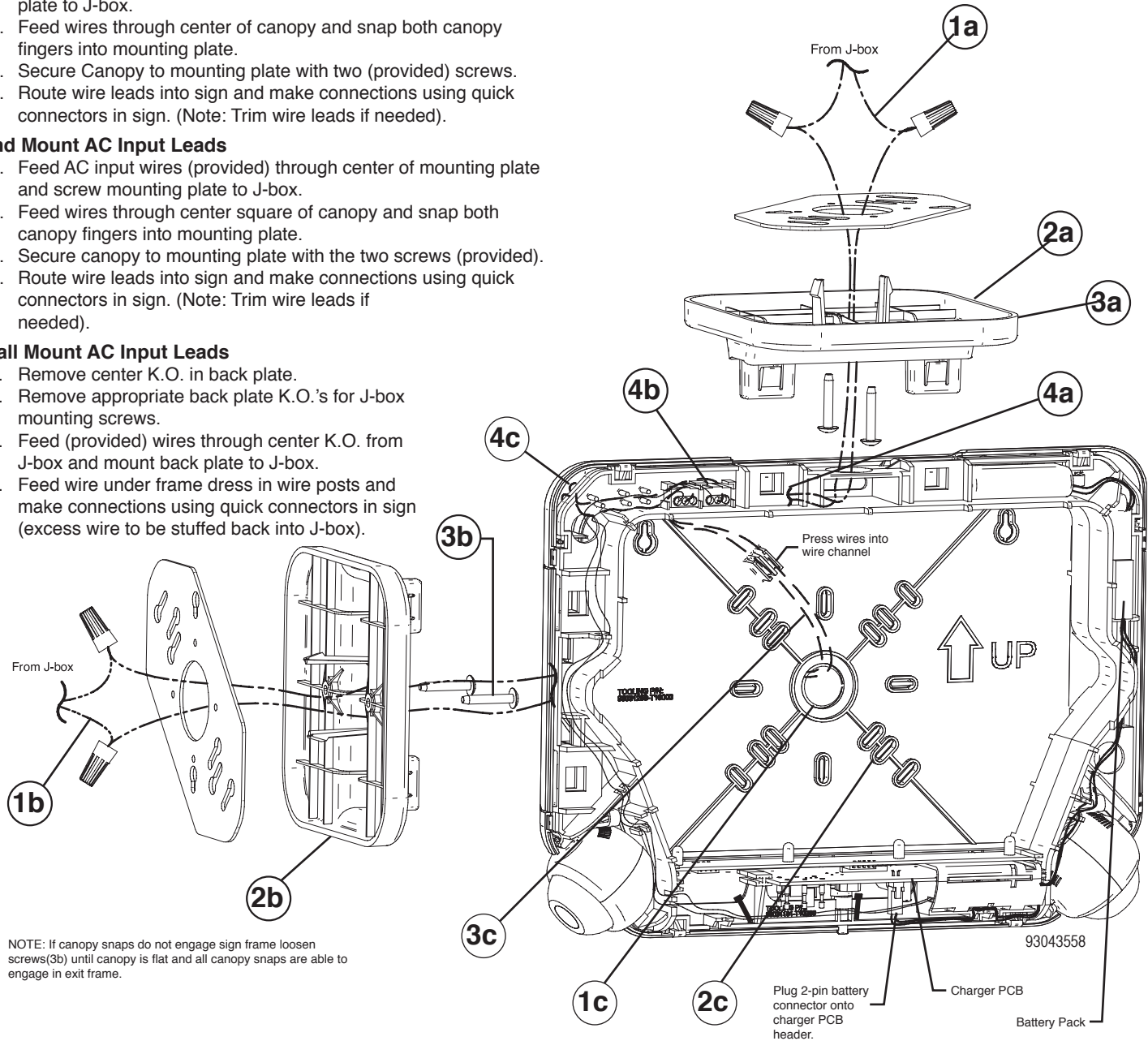
- 1a. Feed (provided) wires through center of mtg plate and screw mtg plate to J-box.
- 2a. Feed wires through center of canopy and snap both canopy fingers into mounting plate.
- 3a. Secure Canopy to mounting plate with two (provided) screws.
- 4a. Route wire leads into sign and make connections using quick connectors in sign. (Note: Trim wire leads if needed).

End Mount AC Input Leads

- 1b. Feed AC input wires (provided) through center of mounting plate and screw mounting plate to J-box.
- 2b. Feed wires through center square of canopy and snap both canopy fingers into mounting plate.
- 3b. Secure canopy to mounting plate with the two screws (provided).
- 4b. Route wire leads into sign and make connections using quick connectors in sign. (Note: Trim wire leads if needed).

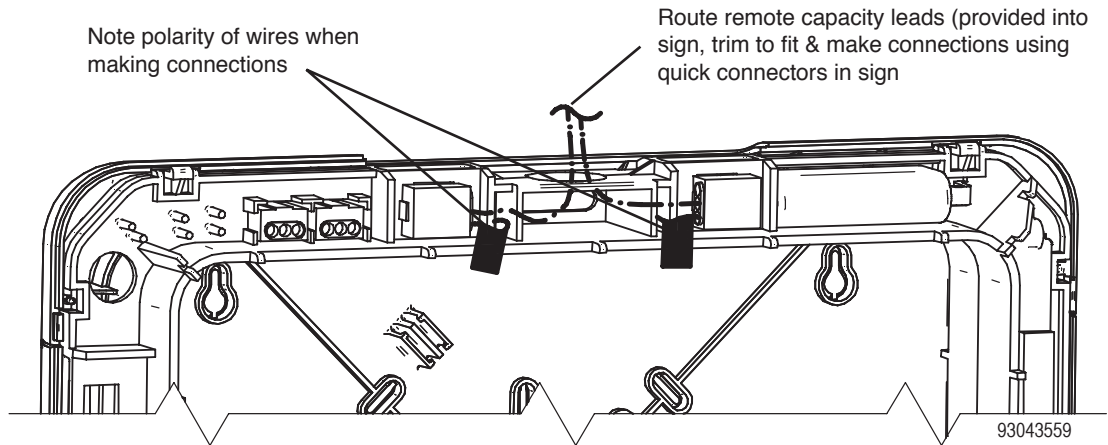
Wall Mount AC Input Leads

- 1c. Remove center K.O. in back plate.
- 2c. Remove appropriate back plate K.O.'s for J-box mounting screws.
- 3c. Feed (provided) wires through center K.O. from J-box and mount back plate to J-box.
- 4c. Feed wire under frame dress in wire posts and make connections using quick connectors in sign (excess wire to be stuffed back into J-box).

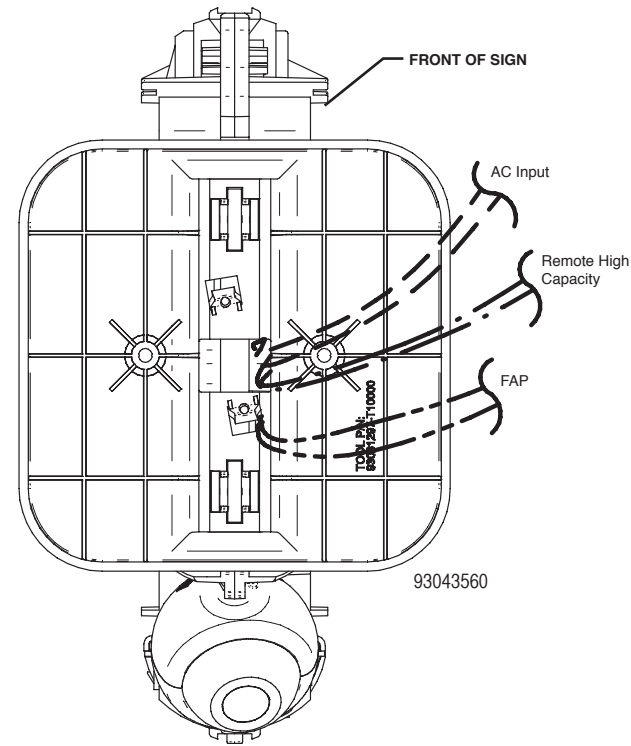


NOTE: If canopy snaps do not engage sign frame loosen screws(3b) until canopy is flat and all canopy snaps are able to engage in exit frame.

Remote Capacity Wiring Connection



Wire Routing Thru Canopy From J-Box



The EVC sign is designed to be wall, ceiling or end mounted. Provide standard and Spectron® equipped signs with single un-switched supply from a 120 or 277VAC branch circuit used for normal lighting in the area to be protected. For Spectron® remote capacity signs, provide with 120, 240, or 277VAC branch circuit as needed.

EVC signs are equipped with intelligent wiring. Connect the black wire from the sign to the HOT building wire (120 or 277VAC) and the white wire to the building neutral wire.

EXCEPTION: The models with -24K should be connected to 220 - 240VAC supplies only.

IMPORTANT: Option connection wires must be run before sign housing is attached to canopy.

FIRE ALARM PANEL (-FAP) OPTION

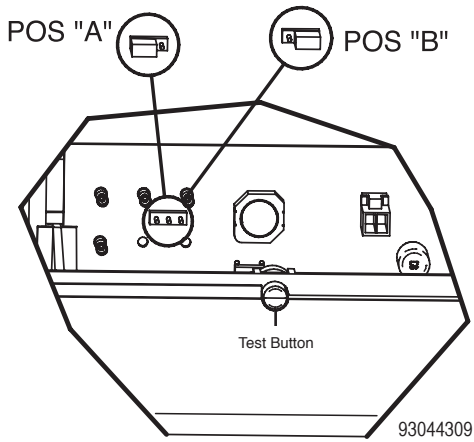
FAP option connects to 24 volt AC or DC (Violet wires). Flash Rate: .5 seconds ON, .5 seconds OFF.

FLASHER MODULE (-FM) OPTION

Emergency Mode Flash Rate: .5 seconds ON, .5 seconds OFF.

AUDIBLE/FLASHER MODULE (-AF) OPTION

Emergency Mode Beep/Flash Rate: .5 seconds ON, .5 seconds OFF.



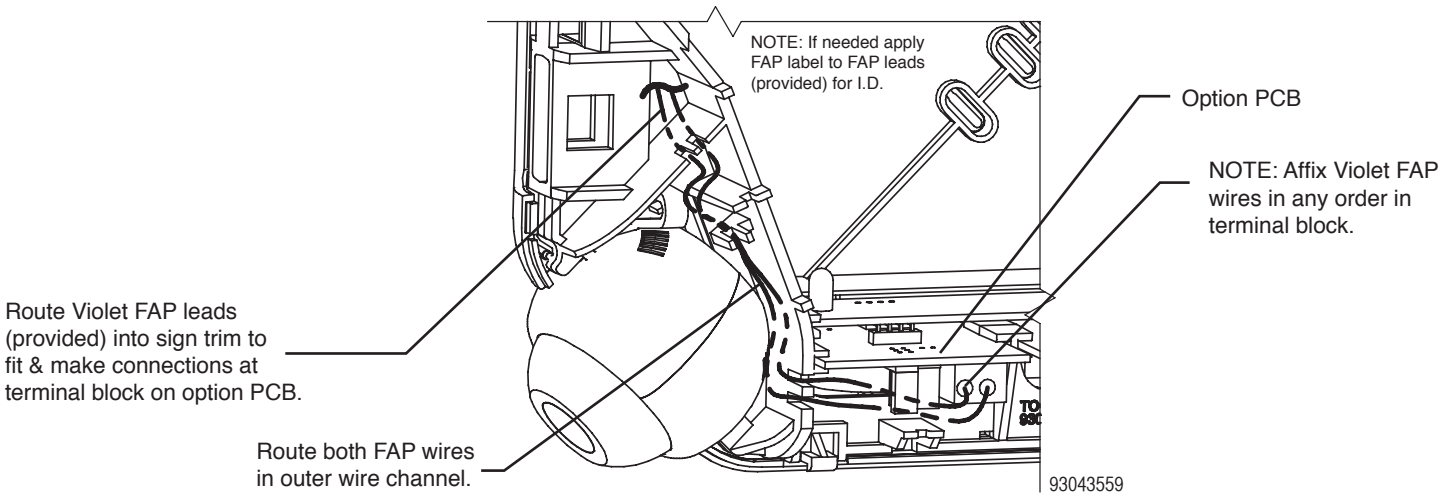
REMOTE CAPACITY MODEL NOTE

EVC-D4 & EVC-D4I Models Only

Remote capacity models provide sufficient battery capacity to operate 2 additional LED remote lighting fixtures or additional run-time. The jumper setting from the factory will be in position "B". This will provide the sign with a longer run-time in emergency mode with no added LED remote lighting fixtures. If the jumper is located to position "A", you can run 2 additional LED remote lighting fixtures.

**** Once a remote capacity model is properly installed (jumper is in position "A"), press and hold the test button for more than 5 seconds to initiate the load learn process calibrating the 2 additional LED remote fixtures.**

FAP Option Input Wiring Connection



See back page for additional option wiring information.