

## Operation

### Automatic Tests

The unit will automatically initiate a self-test/self-diagnostic cycle based on the following table:

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

**LED Status Indicator:** A bicolor LED (green/red) is provided on the control panel of all models.

**Green Operating Status:** LED: The 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" per second for the one minute test, and "once" per second for the 30/60/90 minute test.

**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 on the Spectron Status label (this page).

## Service / Maintenance

### Maintenance

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

### Taking A Unit Out Of Service

If a unit 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. Open Wall Pack.
3. Disengage the battery and heater (if provided) harness from the charger PCB harness.
4. Disconnect the battery strap and remove battery pack.
5. Replace with new battery (see unit model or battery label for correct p/n) and repeat steps above in reverse.

### Replacing LED Lamp Pack

The LED lamp pack is field replaceable. Please see Dual-Lite.com for further assistance.

### Troubleshooting

Emergency Circuit does not work

- Batteries are shipped uncharged, please charge for 24 hours before testing.
- Make sure to switch pcb and the button/light pipe is correctly seated and aligned.
- Check wiring connections.



#### RECYCLING INFORMATION

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

### Manual Tests

Using the unit test switch, users can initiate different duration test cycles based on the following table:

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

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

#### OPERATING STATUS INDICATOR:

OFF = AC OFF  
GREEN ON = AC ON  
BLINKING GREEN = TEST IN PROGRESS

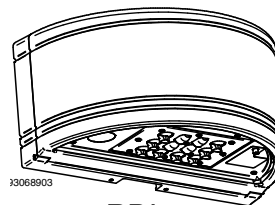
#### SERVICE ALERT CODES:

1 RED BLINK = BATTERY DISCONNECTED  
2 RED BLINKS = BATTERY FAULT  
3 RED BLINKS = CHARGER FAULT  
4 RED BLINKS = LED DRIVER FAULT  
5 RED BLINKS = LAMP FAULT  
10 RED BLINKS = LOAD LEARN FAILURE  
RED/GREEN ALTERNATING = LOAD LEARN IN PROGRESS

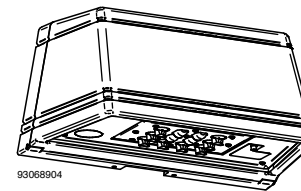


# GEOMETRIC WALL PACKS

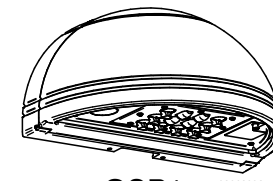
Compact LED Emergency Wall Packs  
Wet Location, Spectron Equipped Models  
Installation, Operation and Service Instructions



RD11



TRP1



QSP1

## 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 let power supply cords touch hot surfaces.
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.

### INSTALLATION

CAUTION: DISCONNECT POWER DURING INSTALLATION AND BEFORE SERVICING.  
READ ALL INSTRUCTIONS COMPLETELY BEFORE STARTING INSTALLATION.

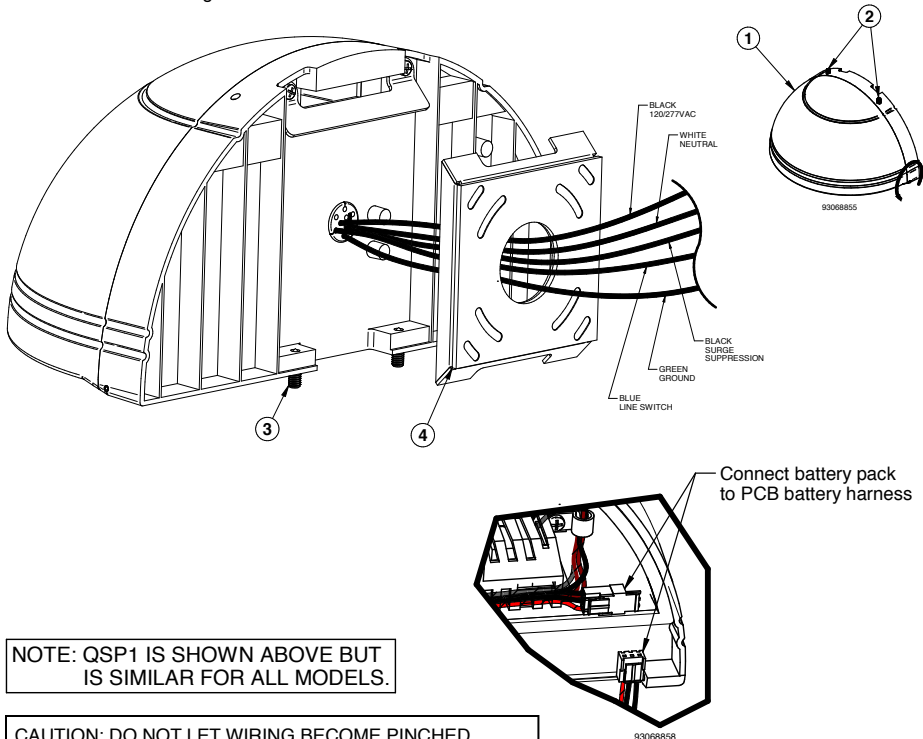
This Series is designed to be mounted on a wall in the down-light configuration only. Provide the SPECTRON self-testing/self diagnostic units with a single unswitched power supply from a 120/277VAC branch circuit used for normal lighting in the areas to be protected.

## INSTALLATION

The Geometric Wall Pack is equipped with intelligent wiring. Connect the black and blue wires from unit to building AC (120 or 277VAC) and the white wire to building (com) wire and green wire to building ground.

### Wall mounting of unit

- 1) Affix mounting plate (item 4) to J-box with screws.
- 2) Use approved connectors to connect wall pack to building supply leads, and insert all connections into J-box.
- 3) Affix Wall Pack onto Mounting Plate (item 4) and secure Wall Pack using Set screws (item 3) until unit is secure.
- 4) Loosen screws (item 2) until you can open the wall pack (item 1).
- 5) Make battery connections (as shown).
- 6) Close unit. Note: Before closing the unit, extra care must be applied to the wires not being crushed by the gasket and mating die-cast surfaces.
- 7) Extra weather proofing/sealing can be gained by application of silicon sealant between Housing and Back Plate.



NOTE: QSP1 IS SHOWN ABOVE BUT IS SIMILAR FOR ALL MODELS.

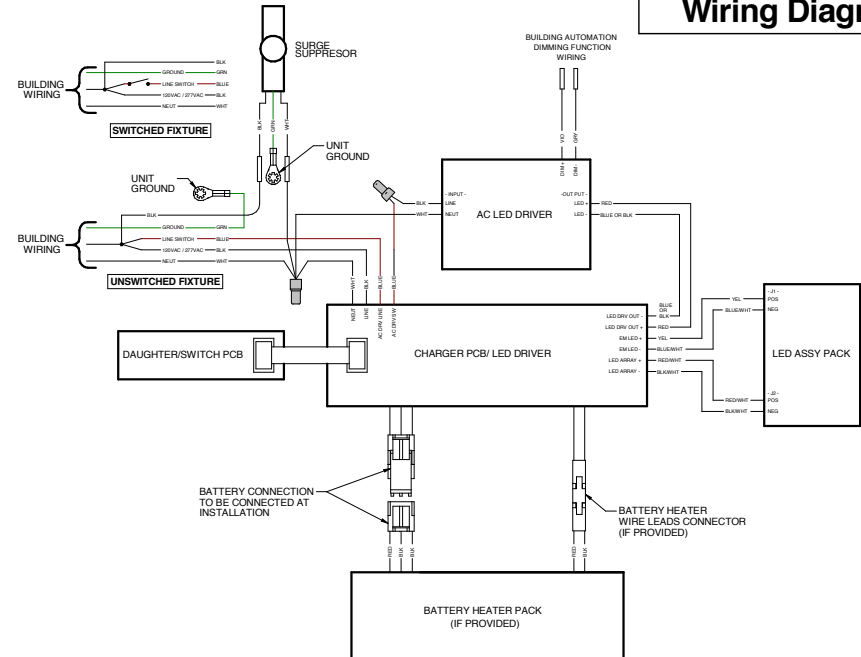
CAUTION: DO NOT LET WIRING BECOME PINCHED BETWEEN THE SEALING BACK PLATE GASKET AND THE DIE-CAST HOUSING. FAILING TO DO SO WILL RESULT IN WATER LEAKING INSIDE OF UNIT AND DAMAGING THE ELECTRONICS.

### IMPORTANT WIRING INSTRUCTIONS

- 1) An un-switched AC power source of 120/277VAC is required for charger pcb black (120/277VAC)
- 2) For a switched unit connect a switching device between building (120/277VAC) power source and blue (line switch lead). (ref. to wiring diagram)
- 3) Emergency charger and AC LED Driver must be fed from the SAME BRANCH CIRCUIT
- 4) This unit is capable of dimming, see wiring diagram and please contact Dual-Lite Inc for assistance

## INSTALLATION

### Geometric Wall Pack Wiring Diagram



### Operation

**"AC ON" LED** is illuminated when AC power is present. NOTE: All models are supplied with an AC Lockout circuit, which prevents the emergency lights from illuminating when the battery is connected and no AC is present.

**NOTE:** All models are supplied with 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.

### All Models have SPECTRON Self-Testing/Self-Diagnostic Circuitry

All Models have the SPECTRON Self-Testing/Self-Diagnostic electronics system which provides:

- Visual indication of AC power status,
- Visual indication on self-diagnostic test status and results.

### Visual indication of any unit malfunctions include-

Battery Disconnected, Battery Fault, Charger Fault, LED Driver Fault, Lamp Fault & Load Learn Failure

### The Spectron equipped units also include:

Brownout protection: unit will automatically transfer to emergency operation upon detection of low AC power (approximately 80% of nominal line).