## 120VAC OR 277VAC EMERGENCY OPERATION

# IMPORTANT SAFEGUARDS

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

# READ AND FOLLOW ALL SAFETY INSTRUCTIONS

All servicing should be performed by qualified personnel only.

Equipment should be mounted in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.

The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.

Do not use this equipment for other than intended use.

Do not let supply cords touch hot surfaces.

Do not mount near gas or electric heaters.

Caution: Halogen cycle lamp(s) are used in this equipment. To avoid shattering: Do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.

Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.



# INSTALLATION AND OPERATING INSTRUCTIONS

Use caution when servicing batteries. Battery acid can cause burns to skin and eyes. If acid is spilled on skin or eyes, flush acid with fresh water and contact a physician immediately.

CAUTION: To avoid electrical overload, total connected lamp load (factory and field installed) should not exceed output rating.

WARNING – Shut off AC power to branch circuits to which units will be connected. All wiring should be per N.E.C. Articles 501-4(b) and local codes.

To maintain warranty, equipment with batteries must be installed or placed on charge within prescribed period after shipment.

## SAVE THESE INSTRUCTIONS

## GENERAL INSTRUCTION



## STEP 1

Remove cover assembly by pulling straight off of housing assembly (there are two spring clips that hold them together). Set cover assembly aside.



### **STEP 2**

For surface mounting, a knockout pattern is supplied for 3-1/2" octagonal or single gang junction boxes. Remove desired mounting knockouts and the rectangular knockout found in the lower center area of the housing. The rectangular knockout will allow for AC supply entry. (The LED's may be seen to flash while striking the knockouts for removal. The battery may be temporarily disconnected to eliminate this if desired).

For recessed mounting, the packaging insert also functions as a template for cutting the correct size and shape opening in the mounting surface. A bar hanger kit is supplied. The bar hangers may be mounted to the housing assembly in either orientation shown depending upon desired mounting. A round conduit entry knockout is provided in the upper center or side of the housing.



## **STEP 3**

Make AC supply connections. There are two inputs required.

- 1) The connector assembly marked with "unswitched" labels and bearing a red wire must be connected to an unswitched (always hot) input. Cap off unused 120VAC or 277VAC wire to prevent shorting. This input will charge the batteries. Loss of this input will cause the unit to enter emergency operation mode.
- 2) The second input, bearing a blue wire, may be connected to either switched or unswitched AC service. Cap off unused 120VAC or 277VAC wire to prevent shorting. This input controls the operation of the lamps in non-emergency conditions and may be connected to a wall switch, photocell, etc.

Caution: At power up, if red and green LED indicators continuously toggle on and off in an alternating pattern, immediately turn off AC power and check AC wiring per the above diagram. Fast flashing indicates high line voltage and slow <u>flashing indicates</u> low line voltage.



## **Self Diagnostic System Operation**

### Normal Power Up Sequence

At power up the red and green LED indicators will alternately flash for one to two seconds. Next the product will execute a "Power Up Quick Test" causing the green LED indicator to flash rapidly. If any faults are detected during the "Power Up Quick Test" these will be evident by a flashing red LED indicator. If the audible diagnostic option has been ordered, the flashing red LED will be accompanied by a simultaneous beeping tone. (Note: A continuous rapid alternating Red/Green flash with rapid beeping tone indicates 277V applied to 120V input lead. TURN OFF POWER IMMEDIATELY!)

### **Emergency Operation**

Emergency operation occurs when AC power fails. The product remains in emergency operation until AC power is restored or battery capacity is depleted. During emergency operation both red and green LED indicators are disabled.

### User Interface

### **Green LED indicator**

- Slow Flash/Continuous ON = AC power present; normal operating condition
- Rapid Flash = product performing an automatic or manually initiated diagnostic test

### **Red LED indicator**

- Single Flash = battery fault
- Two Flashes = lamp failure (light bar failure EXIT signs)
- Three Flashes = charger fault
- Four Flashes = transfer fault

(If more than one fault condition is present simultaneously, the red LED will flash the indication pattern for each fault independently then repeat the cycle.)

### **Pushbutton Test Switch**

- Long Press (longer than 0.5sec) transfers product to emergency operation during time the button is pressed.
- Short Press initiates self diagnostic activities as follows:
  - > One Press cancels diagnostic test presently running.
  - > Two Presses starts a one minute diagnostic test.
  - > Three Presses starts a 90 minute diagnostic test.
  - > Four Presses conducts a lamp load calibration (emergency light products only).
  - Seven Presses initiates a system reset.

(Note: the microprocessor will allow up to seven, one minute diagnostic tests within the first 24 hours of operation. Allow 24 hours of charging before performing any long duration testing.)

**Buzzer** (optional)– Sounds in unison with the flashing red LED if a fault condition is present. Buzzer may be silenced for up to 196 hours by a short press of either the test switch or the optional IR remote control device "silence" button. Correcting fault condition will cancel fault notification. Lamp failure indication requires a manually activated diagnostic test after lamp replacement to cancel notification.