



## **PG SERIES**

### **CHICAGO APPROVED EDGE-LIT EXIT SIGN**

# **INSTALLATION AND OPERATING INSTRUCTIONS**

## **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.
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 recommended by the manufacturer may cause an unsafe condition.
5. Do not use this equipment for other than intended use.
6. Supply connections must be made either inside the junction box for surface mount or the splice box in the recessed mount backbox.
7. Install using recommended junction box only.
8. Servicing of this equipment should be performed by qualified service personnel.

## **SAVE THESE INSTRUCTIONS**

**31 Waterloo Avenue - Berwyn - PA 19312 U.S.A.  
Telephone: (610) 647-8200 • Fax: (610) 296-8952**

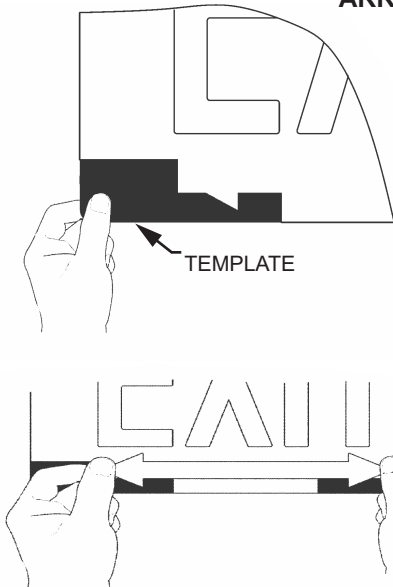
**e<sup>3</sup> LIGHTING** [energy efficient emergency lighting]

## LEGEND PANELS

Legend Panels are ordered as Single Face or Double Face, and are available as either EXIT or STAIRS legends, both with and without Arrows. Legend Panels with Arrow Directions are identified by Legend Code Numbers as shown in the Ordering Guide.

Field Installed Universal Arrow Kits are available for either Single Face or Double Face Legend Panels supplied with no arrows. Appropriate Arrow type and direction should be selected and applied as shown, using the template supplied in the Kit. Arrows should be applied to the Legend Panel prior to installing the Panel into the exit sign housing.

## ARROW APPLICATION



**ALIGN AND AFFIX PLASTIC SIDE OF TEMPLATE TO LOWER OUTER CORNERS OF LEGEND PANEL. DO NOT PEEL THE PLASTIC FROM THE BACKING OF THE TEMPLATE.**

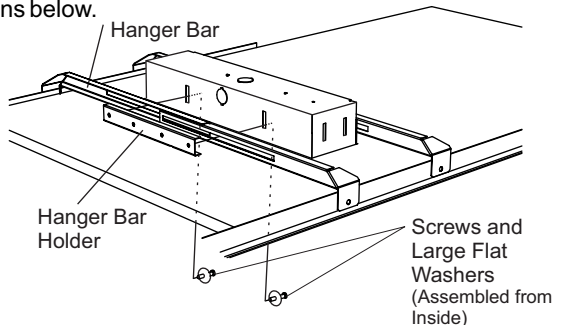
Remove the protective liner from the arrow adhesive starting with the slit provided. Align the Arrow to the templates affixed to the lower outer corners of the Legend Panel, holding the Arrow tips with both hands, ensuring that no wrinkles nor bubbles are trapped. Press the Arrow firmly to the Legend Panel.

## “CCEA” RECESSED CEILING MOUNT

### INSTALLATION OF ROUGH-IN SECTION

The standard Back Box has been approved for installation in accordance with “CCEA” (City of Chicago Environmental Air). Hanger bars are adjustable from 13 1/4" to 22" and may be mounted on either the long sides or the ends of the Back Box. Remove appropriate slot knockouts, and attach with #8 screws from inside, through washers, slots and into hanger bar holder. Remove Splice Box Cover, select and remove desired knockout for AC power input. Refer to wiring instructions below.

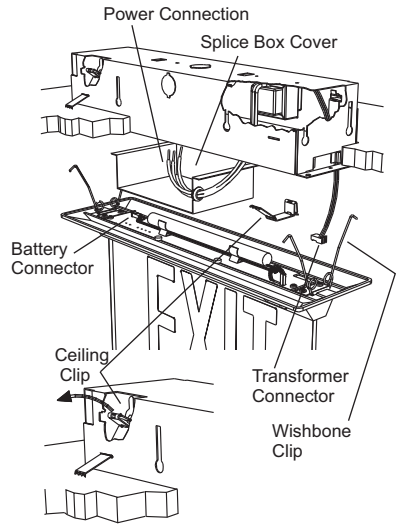
Cut 3 5/8" x 14 1/2" hole in ceiling. Position Back Box with open edges flush with outer surface of ceiling. Fasten hanger bar assembly to either ends or sides of Back Box by tightening four mounting screws through washers and into hanger bar holders.



## OLD WORK (OW) RECESSED CEILING MOUNT

“NON-CCEA” Back Box includes ceiling clips for mounting in old work “OW”.

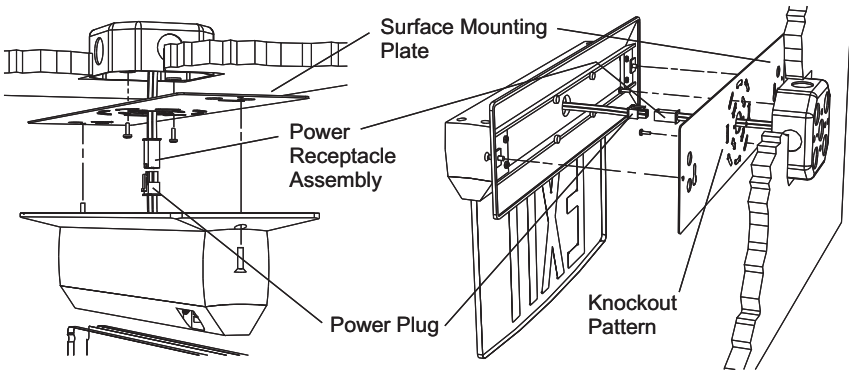
SUSPENDED CEILING - Snap ends of hanger bars over T-bar rails and fasten with screw. To secure Back Box to ceiling material, insert four ceiling clips into slots provided in sides of Back Box.



### INSTALLATION OF FIXTURE INTO ROUGH-IN SECTION

Position fixture with desired orientation. Squeeze spring wires of one “Wishbone” clip and insert into formed legs at one end of Back Box. For Battery Back-up (Self Powered) sign, plug battery connector and transformer connector into plugs on Printed Circuit Board. Attach Power Plug into power receptacle assembly wired as per wiring instructions below. Insert second “Wishbone” clip into remaining formed legs in Back Box and push fixture flush with ceiling.

## SURFACE CEILING / WALL MOUNT



### INSTALLATION OF SURFACE MOUNTING PLATE

Wire power receptacle assembly to AC supply as per wiring instructions below. Remove two keyhole knockouts from Surface Mounting Plate. Locate, align and mount Surface Mounting Plate to junction box and secure to wall with screws through keyhole slots into suitable wall fastening devices.

### INSTALLATION OF FIXTURE TO SURFACE MOUNTING PLATE

Attach Power Plug to receptacle and push back into fixture. Fasten fixture to surface mounting plate with a screws supplied.

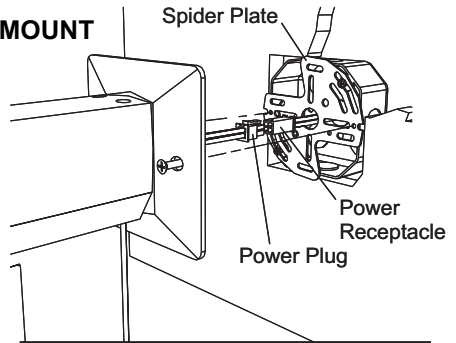
## SURFACE END MOUNT

### INSTALLATION OF JUNCTION BOX and SPIDER PLATE

Surface End Mount requires a 4" Octagon Junction Box to be securely mounted in the wall. The box should be rigidly supported to the wall framework with either brackets or studs. Wire power receptacle assembly to AC supply as per wiring instructions below. Securely fasten spider plate to junction box with the two 8-32 tapped holes parallel to the floor.

### INSTALLATION OF FIXTURE TO SPIDER PLATE

Attach Power Plug to power receptacle and push back into fixture. Fasten fixture to spider plate with countersunk screws supplied.



### WIRING

Connect Power Receptacle to AC supply per local codes.

**Black Lead for 120V or Orange Lead for 277V** CAP UNUSED LEAD

**White Lead for Neutral**

**Green/Yellow Lead for Ground**

## SWIVEL PENDANT MOUNT ASSEMBLY

Thread tapped half-ball on one end of pendant tube. Lock in place with one square nut provided.

Insert other end of pendant tube through cross bar bracket with half-ball inside hat section.

Insert same end of pendant tube through center hole of canopy / cover so that cross bar bracket is on inside of canopy / cover.

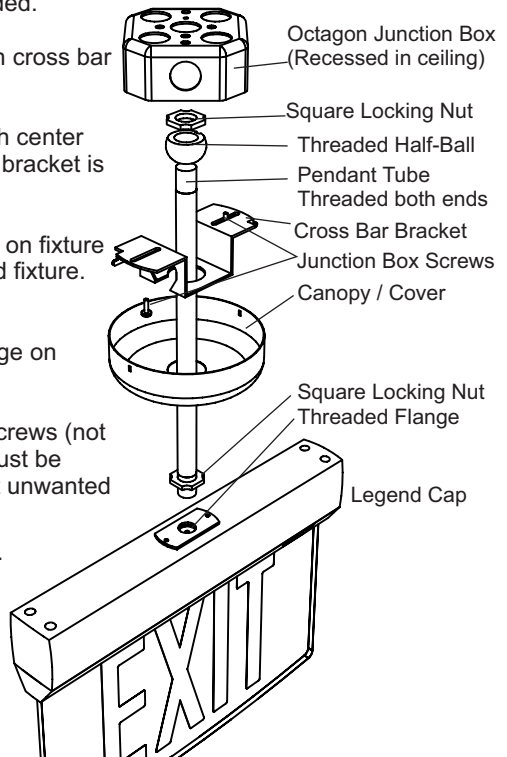
Thread one provided square locking nut on fixture end of pendant tube with flat side toward fixture. Snake wires up through pendant tube.

Screw pendant tube on to threaded flange on legend cap. Do not tighten lock nut yet.

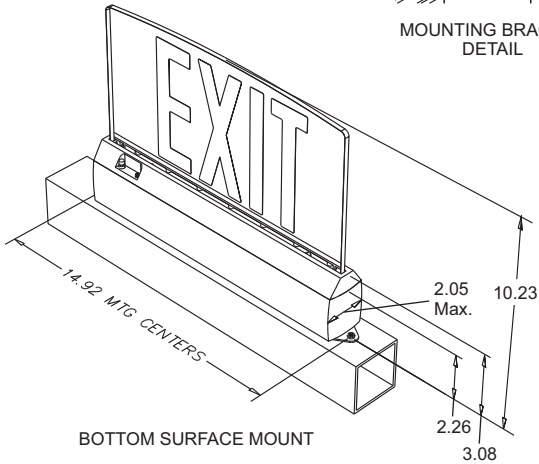
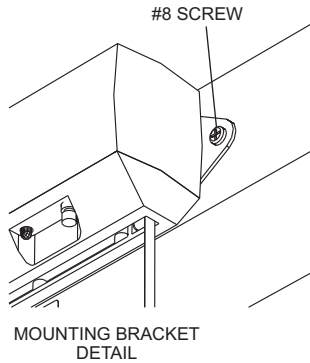
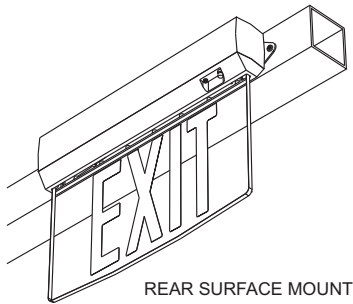
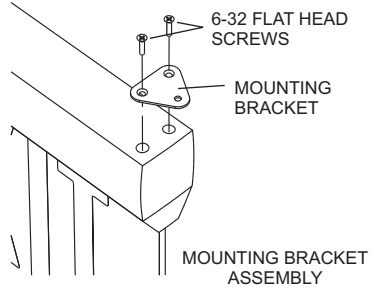
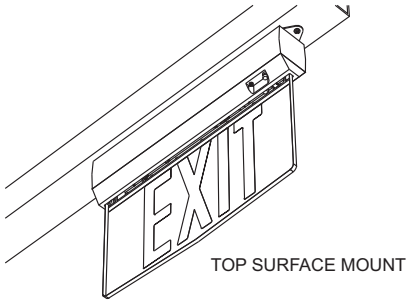
Attach cross bar bracket to J-box with screws (not provided). Threaded half-ball groove must be registered on tab in cross bar to prevent unwanted rotation of pendant tube assembly.

Connect wires according to local codes.

Position canopy cover over cross bar and snap in place by aligning slots in cover over protruding tabs on cross bar bracket. Adjust direction of exit sign and tighten lock nut.



# MOUNTING BRACKET ASSEMBLY FOR MULLION INSTALLATION



### **TWO CIRCUIT INPUT OPTION (AC VERSIONS ONLY)**

For AC versions with two circuit input, connect power to both the **Main** input and the **Backup** input. Note that both the main and backup voltage must be as specified for the particular TWO CIRCUIT OPTION as ordered. Connect to the **Black leads** for 120V or **Orange leads** for 277V, and **White** lead for Neutral.

For connection to a single source of supply such that all lamps are simultaneously illuminated.

### **FLASHER / FIRE ALARM / BUZZER OPTIONS**

Battery Backup Signs equipped with FLASH IN EMERGENCY MODE OPTION or BUZZER IN EMERGENCY MODE option will automatically flash/beep in emergency mode but not flash/beep on AC operation. AC Only signs equipped with the flash or buzzer options will flash/beep continuously while power is supplied.

AC Only and Battery Backup signs equipped with the FIRE ALARM SIGNAL MODE FLASH or BUZZER options will automatically flash/beep in both AC and emergency modes upon application of a fire alarm signal to the YELLOW 18 AWG leads. The fire alarm signal can be either AC or DC of either polarity, and range from 12 to 24 volts. The current draw from the fire alarm signal is less than 10 milliamps.

Units that include one of the above options, are intended for installation in locations where such features are permitted by local codes. Flash Rate: 60/min Duty Cycle: 50%

**REAPPLY POWER AND NOTIFY THE AUTHORITY HAVING JURISDICTION**

## **TEST FOR BATTERY BACKUP WITHOUT SELF-TEST / SELF-DIAGNOSTICS**

To test (EM) Battery backup units, use test switch to simulate AC power outage. The indicator light will go out, and the sign will remain lit, indicating transfer to emergency mode; and remain lit on battery power until switch is released. Release of switch will automatically restore AC/battery charge mode, with indicator light on. Testing for longer periods is best accomplished by turning off AC circuit power. Signs should be tested in accordance with National Electric Code and NFPA 101 Life Safety Code requirements which specify monthly testing for 30 seconds and yearly testing for 90 minutes. Note that the batteries will take some time to reach full charge after a prolonged test, and that the unit cannot provide full duration operation should a real power outage occur before the batteries have had an opportunity to reach full charge. It is recommended that long duration tests be limited to once yearly, and be conducted when the area will be unoccupied afterwards.

## **SELF-TESTING / SELF DIAGNOSTIC OPERATING INSTRUCTIONS**

This unit meets the requirements of NFPA 101 for Periodic Testing of Emergency Lighting Equipment. It provides visual indication of unit malfunctions including Battery Fault, Charger Fault, Transfer Fault and Lamp Fault.

### **STATUS INDICATIONS SHOWN ON FOLLOWING PAGE**

#### **SELF-TEST**

The unit will perform a self-test and diagnostic function at least once every 28 days. The self-test will disable the charger and turn on the LEDs for 5 minutes to check the lamp load and battery. The test will be performed only if the battery is fully charged. If not, the test will automatically reschedule. Charger function is monitored continuously.

#### **USER-TEST**

A User-Test may be performed at any time the status display is continuous green. On initial power-up, it could take up to 72 hours for the status display to reach continuous green.

With a fully charged battery, pressing the test switch momentarily will initiate a 30 second test. Pressing the test switch continuously for 4 seconds and releasing it will initiate a 90 minute test.

Either test can be cancelled by pressing the test switch again for 1 second.

#### **REMOTE EXIT OPERATION**

The self-diagnostic system “learns” the exit load when the unit reaches its first full charge. It is therefore necessary to have any remote exits already connected when first applying AC power. Subsequent self-tests and user-tests will compare the actual exit load to the “learned” value.

If the remote exit load is changed once it has been learned, it is necessary to disconnect AC power at the circuit breaker panel and unplug the internal battery. Once these are reconnected, the unit will “learn” the new exit load.

#### **INFRA RED REMOTE TESTING**

To activate TRANSMITTER, remove tab from back of device.

The USER-TEST can be performed up to 20 feet away using the optional “INFRA RED REMOTE TESTING TRANSMITTER”. By aiming the TRANSMITTER at the legend face, and pushing either the “30 SECOND” or “90 MINUTE” button for 1 second, all the “TEST SWITCH” functions can be performed.

## SELF-TESTING / SELF-DIAGNOSTIC STATUS INDICATIONS

STATUS DISPLAY	FUNCTION	ACTION
Continuous Green	Battery in Float/Trickle Charge	None
Continuous Red	Battery High Charging	Wait for Green Status
Flashing Green	In Test Mode	Wait for Test to Complete
Alternate Red and Green	Insufficient Charge for User Test	Wait for Full Charge
Red One Blink ON / Pause	Transfer System Failure	Factory Service
Red Two Blinks ON / Pause	Battery Failure	Check Connections Replace Battery
Red Three Blinks ON / Pause	Charger Failure	Factory Service
Red Four Blinks ON / Pause	Lamp Failure	Check Remote Connection / Factory Service

### BATTERY REPLACEMENT

To replace battery, disconnect branch circuit, detach unit from junction box, and open lamphead to access battery. Unplug battery connector from Printed Circuit assembly. Replace battery only with part number B310011.

This product contains Ni-Cd batteries. Used Ni-Cd batteries may not be disposed of in the municipal solid waste stream. Ni-Cd batteries must be recycled or disposed of properly. For information on local recycling drop-off points, phone toll free 1-800-BATTERY.