



INSTALLATION INSTRUCTIONS

RETRACTED RECESSED EMERGENCY LIGHTING UNIT

IMPORTANT SAFEGUARDS

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Before wiring to power supply, disconnect power at fuse or circuit breaker.
2. Disconnect A.C. power before servicing.
3. Refer to wiring instructions sheet for proper connections.
4. Consult your local building code for approved wiring and installation.
5. Do not use outdoors.
6. Do not mount near gas or electric heaters.
7. Equipment should be mounted in locations and at heights where it will not readily be subject to tampering by unauthorized personnel.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Do not use this equipment for other than intended use.
10. Servicing of this equipment should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

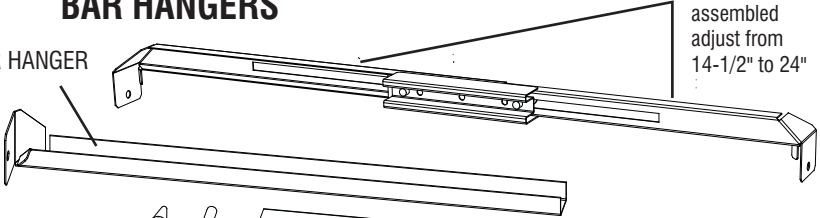
2575 Metropolitan Drive • Trevose • PA 19053 U•S•A
Telephone: (215) 244-4204 • Fax: (215) 244-4208

BACKBOX INSTALLATION

**DO NOT INSTALL SPLICE BOX COVER INTO BACKBOX
UNTIL WIRING IS COMPLETE**

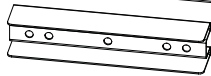
BAR HANGERS

(4) BAR HANGER



Bar Hangers telescope when assembled adjust from 14-1/2" to 24"

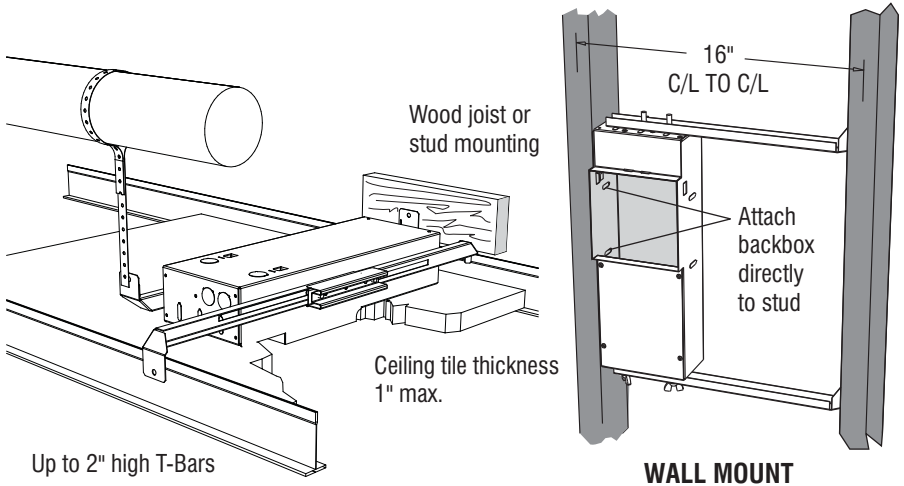
HARDWARE KIT



(2) HANGER CLAMP

ROUGH-IN CEILING AND WALL MOUNT

SUPPORTING MEMBERS MUST BE ABLE TO SUPPORT A LOAD OF AT LEAST 25 LBS.



Remove appropriate mounting knockouts on top, bottom or sides of backbox. Attach Bar Hangers to backbox using Bolts and Hanger Clamps supplied.

Using hardware supplied by others, attach to wood studs or joists with screws or nails, attach to metal studs with sheet metal screws with a minimum pullout rating of 25 lbs. Hanger bars will rest directly on drop ceiling T-Bars and can be secured by screws or wire (supplied by others). **UNIT IS APPROVED FOR TYPE IC INSTALLATION.**

Align backbox so lamphead opening is flush, or slightly behind inner surface of ceiling or wall.

CLOSE-IN CEILING AND WALL MOUNT

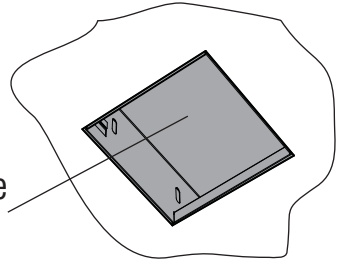
DRY WALL:

Cutout hole in ceiling material should be 5-1/4" high by 5-1/2" wide. Align backbox so lamphead opening is flush, or slightly behind inner ceiling or wall surface.

WET WALL:

Plaster flush up against lamphead opening.

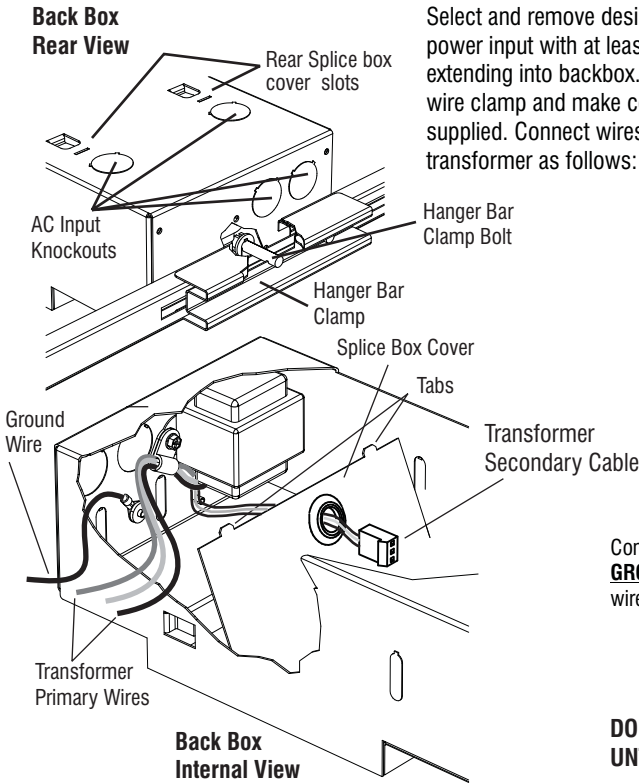
5-1/4" high
5-1/2" wide
opening



WIRING INSTRUCTIONS

DE-ENERGIZE BRANCH CIRCUIT AT BREAKER PANEL

Select and remove desired knockout(s) for AC power input with at least 6" of AC power leads extending into backbox. Secure cable with approved wire clamp and make connections using wire nuts supplied. Connect wires per local codes. Connect to transformer as follows:



BLACK Lead for **120V** or
ORANGE Lead for **277V**
(CAP UNUSED LEAD)

WHITE Lead for **Neutral**

Connect **GREEN/YELLOW** Lead for **GROUND**. Dress AC and Ground wires down to bottom of backbox.

**DO NOT REAPPLY POWER
UNTIL FINAL SETUP**

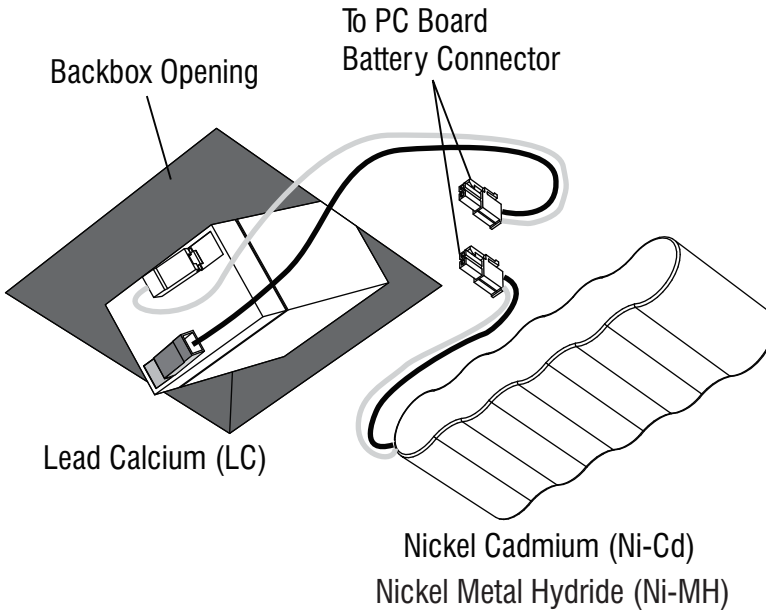
INSTALL SPLICE BOX COVER

Feed transformer secondary cable (with connector) through hole in splice box cover and insert tabs into slots on the rear of the back box. Snap front tabs into slots on the top, front flange of the backbox.

BATTERY INSTALLATION

**THIS PRODUCT IS SUPPLIED WITH A CHOICE OF 3 TYPES OF BATTERY SOURCES:
SEALED LEAD CALCIUM (LC) - NICKEL CADMIUM (Ni-Cd) - NICKEL METAL HYDRIDE (Ni-MH)**

Attach Battery Cable to LC Battery ensuring that proper polarity is observed.

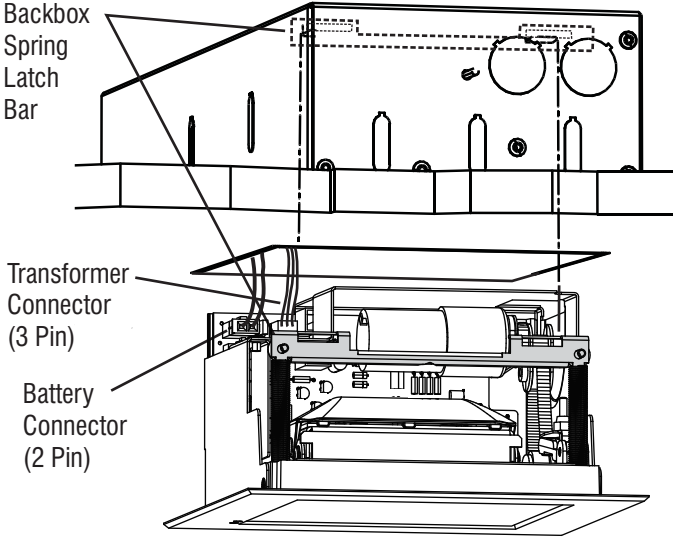


Insert Battery (**TERMINALS OR CONNECTORS FACING OUT**) through Lamphead opening. Allow Transformer Cable to extend out through Lamphead opening.

NOTE: Disconnected Battery must be recharged within 120 days.

LAMPHEAD INSTALLATION

Connect 2 pin Battery Cable first, then 3 pin Transformer Cable to matching sockets on Printed Circuit Board. **BATTERY CABLE, WITH BATTERIES CONNECTED, MUST BE ATTACHED BEFORE AC POWER IS APPLIED.**

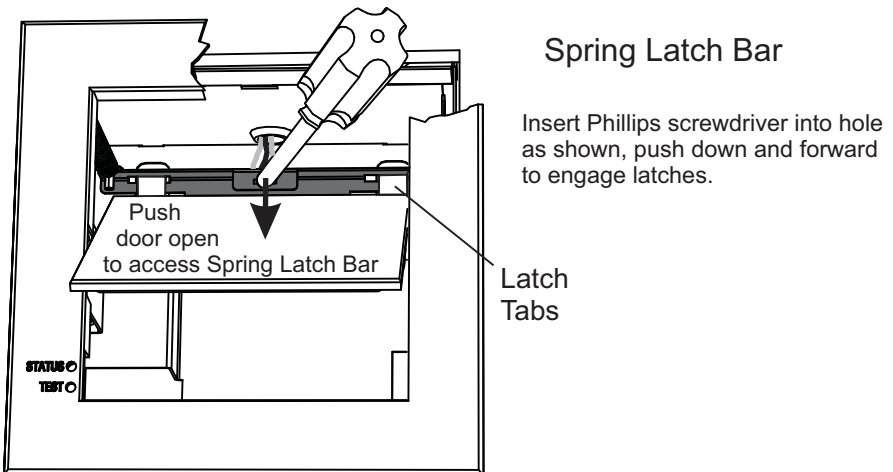


NOTE:
Once Battery is connected, unit must be energized within 30 days.

Install lamphead by first locating in place in Backbox opening.

With pivoting door held open, insert Phillips screwdriver tip into center hole in Spring Latch Bar, push down and forward to engage bar under two formed latch tabs in rear of Backbox.

Transformer secondary cable must be trapped behind Latch Bar to prevent interference with pivoting door.



LAMP ADJUSTMENT

This Fully Recessed Emergency Light has an adjustable LED assembly mounted on the moveable door. For wall mounting, the LED assembly should be aimed down towards the floor. For ceiling mounting, the LED assembly should be aimed straight out.

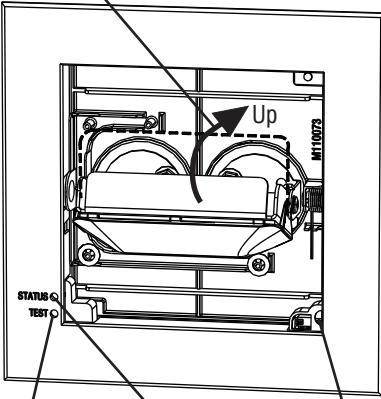
ON-SITE PAINTING

The door and frame have been factory painted. If a new finish is applied, extreme care should be taken that a seal is not formed between the door and frame, which may hinder the free operation of the door mechanism.

If the finish is sprayed on, we suggest that a thin cardboard or plastic strip be inserted between the door and frame to prevent a paint seal. The indicator light and test switch holes should also be masked.

After the new finish is applied, a sharp edge such as a single edge razor or utility knife should be inserted a maximum of 1/4 inch into the opening between the door and frame, and run around the door to ensure no seal is formed.

Adjustable LED Assembly
Down position for Wall Mounting
Up position for Ceiling Mounting



Test Switch Indicator Light IR Sensor

UNIT WITH DOOR OPEN

SETUP AND OPERATION

REAPPLY POWER AND NOTIFY THE AUTHORITY HAVING JURISDICTION.

ALLOW BATTERIES TO CHARGE FOR AT LEAST 48 HOURS BEFORE OPERATING UNIT.

STATUS - See following pages for Status indications.

TEST - The "TEST SWITCH" is used to simulate failure of AC power. It can be activated with a paper clip.

INFRA RED REMOTE TESTING - To activate TRANSMITTER, remove tab from back of device. The "IR REMOTE TESTING TRANSMITTER" can activate the unit up to 50 feet. By aiming TRANSMITTER at face of unit and pushing either "30 SECOND" or "90 MINUTE" button for 1 second, AC power failure will be simulated for the selected duration. The test can be cancelled by pushing button again.

TIME DELAY - A 15 minute time delay is available as a factory option. This option will keep the unit operating on battery backup for 15 minutes after power is restored. This feature allows HID lamps to warm up before the emergency lights are extinguished.

CCEA APPROVAL - Approval for CCEA City of Chicago Environmental Airspace is available as a factory option.

SELF-TESTING / SELF-DIAGNOSTICS

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
Lamp Fault
Door Fault

SELF-TEST

An automatic self-test and diagnostic function will be performed every 28 days. A load test will be performed for 30 seconds checking for a lamp, battery or transfer fault. On every fourth test, the load test will follow a door function test, during which the door will open for approximately 1 second and then close, without the lamps turning on. This automatic self-test and diagnostic function will be performed only if the battery is fully charged. If not, the test will automatically reschedule. The charger function is monitored continuously.

USER-TEST

A manual USER-TEST can be performed for 30 seconds or 90 minutes. By pushing the "TEST" Switch for 1 second, the door will open and the lamps will illuminate for 30 seconds. If the "STATUS" indicator shows GREEN indicating a fully charged Battery and the Switch is pushed for 4 seconds, the door will open and the lamps will illuminate for 90 minutes. If the Battery is not fully charged, the 30 second test will run.

In either mode, the USER-TEST can be cancelled by pushing and holding the "TEST" Switch for 1 second after the lamps con on.

LAMP LOAD LEARN

The self-diagnostic system "learns" the lamp load during the first test. Subsequent tests compare the measured lamp load during the test to the learned lamp load values.

CLEARING FAILURE INDICATIONS

Failure indications can be cleared by correcting the indicated fault and pushing and holding the "TEST" Switch for 1 second.

STATUS INDICATIONS

Status indications for the self-testing / self-diagnostic system are shown on the following page.

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 Adequate 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 | Door Failure | Check for Paint Seal |
| Red Five Blinks ON / Pause | Lamp Failure | Replace Lamp |

* For 90 minute User Tests, wait for full charge.
For 30 second User Tests, try again after an hour of charging.

MAINTENANCE

REMOVAL OF SPLICE BOX COVER - Splice Box Cover can be removed from backbox by prying forward the top, front flange of the backbox with a flat blade screwdriver.

BATTERY - The battery supplied in this unit requires no maintenance. It will be periodically tested by the SELF-TESTING / SELF-DIAGNOSTIC system according to the requirements of NFPA 101. If battery replacement is required, replace using the BATTERY INSTALLATION procedure. If unit was supplied with a Lead Calcium (LC) battery, replace with part number B250010 only. If unit was supplied with a Nickel Cadmium (Ni-Cd) battery, replace with part number B310014 only. If unit was supplied with Nickel Metal Hydride (Ni-MH) battery, replace with part number B350004. Do not interchange battery types.

Used batteries may not be disposed of in the municipal solid waste stream. Arrangements for recycling batteries can be made by contacting www.call2recycle.org