## **Preceptor Series – Remote Load Die Cast EXIT Series**

# **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 let power supply cords touch hot surfaces.
- 3. Do not mount near gas or electric heaters.
- 4. Use caution when handling batteries. Avoid possible shorting.
- 5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- 6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Caution: If optional Halogen cycle lamp(s), symbol (H—), 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.
- 8. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
- 9. Do not use this equipment for other than intended use.
- 10. All servicing should be performed by qualified service personnel.

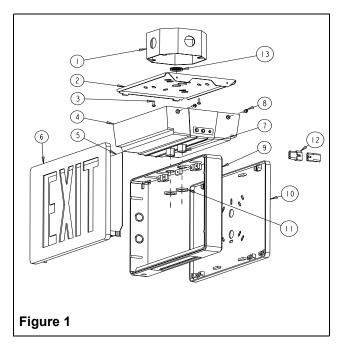
# SAVE THESE INSTRUCTIONS

## Installation Instructions

- 1. Turn off unswitched AC power.
- 2. Route unswitched AC wires into the junction box and leave 12" of wire length.
- 3. Remove canopy assembly from carton. Remove canopy backplate from canopy and retain securement screws.
- Remove proper knockouts in canopy backplate (including the center knockout) to mount to the wall. Route unswitched AC wires through center hole in canopy backplate. Mount canopy backplate to the electrical box using the existing screws.

**Note** — For wall mounted signs, make sure that the screw holes on the canopy backplate are facing down - this will ensure that the test switch and pilot light face downwards.

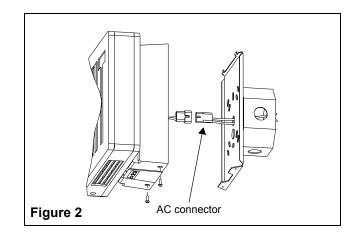
 Disconnect male half of the AC connector (located in the canopy, see fig. 2) from AC wire harness and make the proper connections. Our unit accepts an input voltage of 120 VAC or 277 VAC (see fig. 5).



#### Part List

- 1. Junction box (not supplied)
- 2. Canopy backplate
- 3. Junction box screws (not supplied)
- 4. Canopy
- Colored diffuser (one for single sided units and two for double sided units)
- 6. Exit door

- 7. Hex. nipple (2)
- 8. Securement screws (2)
- 9. Exit frame
- 10. Exit back (or second exit door for double faced units)
- 11. Hexagonal nuts (2)
- 12. AC connector
- 13. Bushing



**120 VAC** — Connect the black wire (120 VAC) and white (neutral) to the building utility. Insulate the orange wire.

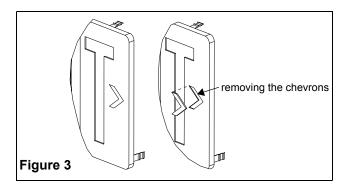
**277 VAC** — Connect the orange (277 VAC) and white (neutral) to the building utility. Insulate the black wire.

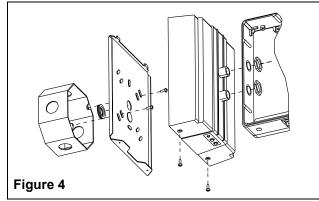
Push excess wires into junction box.

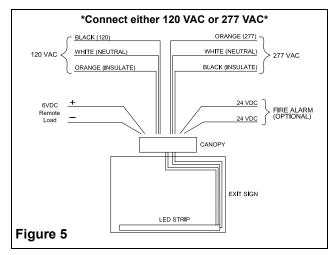
- 6. Remove exit from carton.
- 7. Remove exit door. Firmly grip top of door and pull forward. Push against side of exit door to disengage hinge tab.

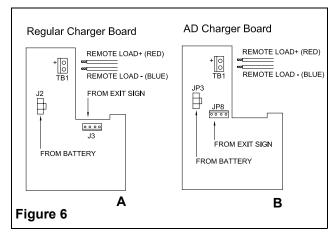
**Note** — On double-faced signs, only one side will open. Other side must be detached by removing screws from inside of sign.

- 8. To knock out chevrons (see fig. 3), remove colored lens(es) by warping center of lens and pulling out from the securement clips. Support door chevrons with two blocks of wood, strike chevron knockouts from the inside with a hammer and screwdriver. To reinstall colored lens(es), warp to slide under securement clips. Press securement clips tightly onto lens. If sign is double-faced, repeat the procedure for the second face.
- Determine which two holes in the exit frame will be used for mounting. Support area around knockouts by two blocks of wood, maximum one inch apart. Strike knockouts from the inside with a hammer and screwdriver. Clear holes of burrs to allow proper fit with hex. nipples.
- 10. Remove hexagonal nuts from hex. nipples.
- 11. Push hex. nipples, attached to canopy, through knockouts in exit frame (see fig. 4). Fasten canopy to exit frame using large hexagonal nuts. Thread nuts onto nipples and tighten.
- 12. Route the 4-pin harness from the EXIT sign into the canopy through either nipple.
- 13. For regular charger board, connect the EXIT sign harness to the J3 terminal (see fig.6 A). For AD charger board, connect the EXIT sign harness to the JP8 terminal (see fig.6 B).
- Connect the remote load wires to the TB1 terminal block. Check for correct polarity before connecting (see fig. 6). Do not exceed the rated remote power of the equipment (check catalogue for details).
- 15. Connect the battery harness to J2, for regular charger board (see fig.6 A) or to JP3, for AD charger board (see fig.6 B).
- 16. Mount EXIT sign and canopy assembly to canopy backplate by guiding the notches on the canopy backplate into the slots of the canopy. Secure with the two provided screws (see fig. 4).
- 17. Re-install exit door.
- Energize AC. EXIT sign will illuminate. The Green "AC ON" indicator will be ON continuously.









## Testing

Depending on the type of battery charger unit installed in the canopy, follow the appropriate section below.

#### Unit with regular battery charger (green & yellow LED)

The display of the regular charger includes a green LED for "AC ON" and a yellow LED for "Charger ON" (see fig. 7). In normal AC operation the green LED is on and depending on the type of battery used and the charge level of the battery, the yellow LED may light in different ways:

- Continuously ON: The battery is in full charge mode

- Flashing at a rate of one flash per second or less: Lead acid battery at the end of charge

- Flashing continuously, approximately 10 flashes per second: NiCad or NiMH battery in trickle charge.

#### 1. Manual test

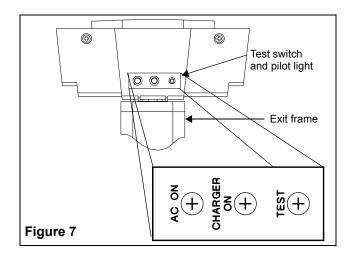
Push the test button. The "AC ON" indicator will stay ON and the "CHARGER ON" indicator will be OFF. The EXIT sign will stay illuminated (may flicker once or twice during the transfer) and the remote loads will be on. The remote loads will stay ON for "one minute" if the test button is not pushed again. The transfer test can be aborted by pushing the test button any time during the one minute. After one minute or if the test button is pushed again, the unit will automatically go back to charging mode. The remote loads will turn OFF and the "CHARGER ON" indicator will turn on.

#### 2. Automatic Unit Cycle test (optional)

For the units equipped with AUC function, the unit will automatically run a 10 minute or 30 minute emergency testing cycle once a month.

#### 3. Time Delay (optional)

For the units equipped with TD function, turn the AC power OFF and ON again, the "CHARGER ON' indicator will be OFF. The unit will stay in emergency mode with the remote loads turned on, for the length of the time delay (5,10,15, 20 or 30 minutes). Once this time has elapsed, the unit will automatically go back to charging mode.



## Unit with Advanced Diagnostic battery charger (green & red LED)

The display of the advanced diagnostic charger includes a green LED for "AC ON" and a red LED for "Service Alarm" (see fig. 8). In normal AC operation the green LED is on and the red LED is off. The "Service Alarm" turns on whenever the equipment has identified a component fault in either the charger circuitry, the battery, the emergency remote load, etc. If the "service alarm" turns on, the canopy has to be opened for troubleshooting - for details read the *Remote Canopy AD - Owner's Manual.* 

#### 1. Manual Test

Push the test button: the "AC ON" indicator will stay on, the EXIT sign and the remote lights will turn off. The one-minute test can be aborted earlier by pressing the test button another time.

#### 2. Time Delay (optional)

After a short-duration power failure, the unit equipped with the time delay option will remain in emergency mode with the remote load turned ON for the length of the time delay (5,10,15,20 minutes). Once this time has elapsed, the unit will automatically go back to stand-by.

#### 3. Advanced Diagnostic Testing

For details, see the Owner's Manual "Remote Canopy Advanced Diagnostic".

### Maintenance

None required. The regular charger unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code or local codes. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.

