

## INSTRUCTION MANUAL

### IMPORTANT SAFEGUARDS

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

#### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. **CAUTION** — To prevent electrical shock, do not mate unit connector until installation is complete and A.C. Power is supplied to the unit.
2. **CAUTION** — This fixture provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both normal and emergency sources by turning off the A.C. mains supply and by disconnecting the unit connector before service.
3. **CAUTION** — This is a sealed unit. The integral, high temperature Ni-Cad battery is not replaceable. Replace the entire unit when necessary.
4. **DO NOT USE OUTDOORS.** The 184000 is used for grounded, UL Listed indoor fixtures.
5. The 184000 requires an unswitched A.C. power source of either 120 or 277 volts. Properly cap the unused A.C. Lead.
6. Do not mount near gas or electric heaters or heated air outlets or hazardous locations.
7. The 184000 should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The 184000 will cold strike and operate one T8 17W/32W fluorescent lamp instant start, for 90 minutes at reduced light output.
9. The 184000 is compatible with all A.C. magnetic and electronic ballasts including multiple lamp ballasts with one lamp operating in the emergency mode.
10. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
11. Do not use this equipment for other than intended use.
12. Install in accordance with the national electrical code and local regulations.
13. Installation and servicing should be performed by qualified personnel.
14. Lighting fixture manufacturers, electricians, and end-users need to ensure product system compatibility before final installation.
15. 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.

### SAVE THESE INSTRUCTIONS



# INSTALLATION INSTRUCTIONS

**CAUTION:** Before installing, make certain the A.C. power is off and the 184000 unit connector is disconnected.

## 1. LAMPS OPERATED

The 184000 can be used with fluorescent lamps. Refer to the chart below for type of lamp(s) and number of lamps to be operated in emergency mode.

OPTION	LAMP TYPE	EMERGENCY OPERATION
1	T8(17W, 32W) Single, Bipin	One Lamp

## 2. MOUNTING THE 184000

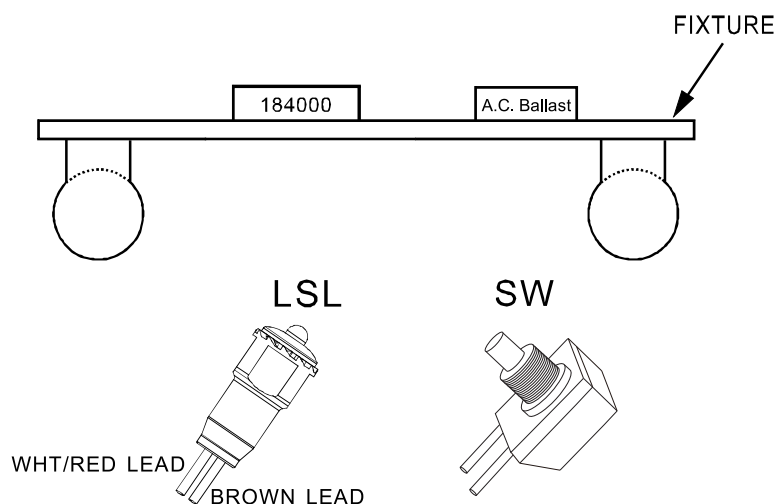
Remove the ballast channel cover. Mount the 184000 on the gear tray at least  $\frac{1}{2}$ " away from the AC ballast (s).

When battery packs are remote mounted, the remote distance can not exceed  $\frac{1}{2}$  of the distance from ballast to lamp specified by the A.C. ballast manufacturer. For example, if the A.C. ballast manufacturer recommends no more than 25' remote distance, then the battery pack should not exceed 12' $\frac{1}{2}$ '. Under no circumstances should the battery pack exceed a distance of 50' from the lamp.

## 3. WIRING

Refer to the wiring diagram on the back page for the appropriate wiring of lamp(s) and ballast. Install in accordance with the National Electrical Code and local regulations. For additional wiring diagrams consult Customer Service.

Illustration 1



184000 EMERGENCY LIGHTING EQUIPMENT

## 4. INSTALLING THE LED SIGNAL LAMP (LSL) AND SWITCH (SW)

**Strip fixture** – Select a convenient location on the gear tray so the LSL and SW can be seen after installation. Allow for proper clearance inside the fixture and drill/punch a 10mm hole for SW, a 12.7mm for LSL.

**Installation of LSL** – Push the LSL into the gear tray and screw the LSL housing. Connect the wire from the LSL to the 184000( Brown to brown, white/red to white/red).

**Installation of SW** – Push the SW into the gear tray and screw the SW housing. Connect one wire from the SW to the black wire from the 184000 and the other wire from the SW to the black wire from the mains supply.

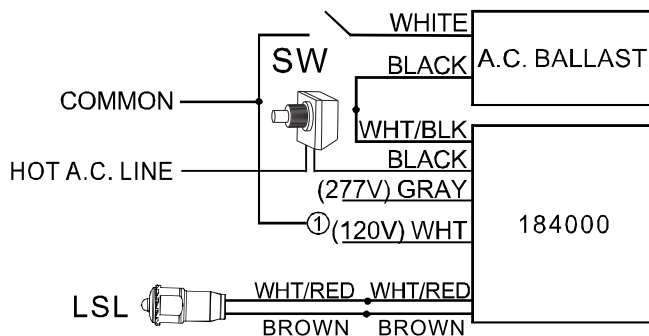
## 5. WIRING THE A.C. INPUT

- A. The 184000 and A.C. ballast must be on the same branch circuit.
- B. The 184000 requires an unswitched A.C. power source of either 120 or 277 volts. Select the proper voltage lead and cap the unused lead.
- C. When the 184000 is used with a switched fixture, the A.C. input to the 184000 must be connected ahead of the switched fixture. Refer to illustration 2 for switched and unswitched fixture wiring diagrams.

## 6. BALLAST WIRING BLOCK DIAGRAM

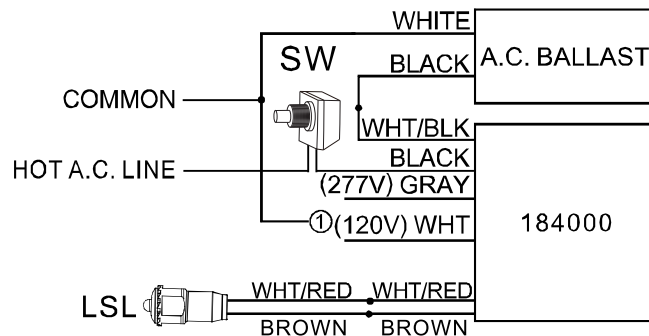
Illustration 2

Switched Fixture



① Select proper voltage lead. Cap unused lead.

Unswitched Fixture



① Select proper voltage lead. Cap unused lead.

## 7. LABELS

The labels must be on the fixture in a readily visible location to anyone attempting to service the fixture.

## 8. COMPLETING INSTALLATION

When the installation is complete, switch the A.C. power on and join the 184000 unit connector.

## OPERATION

**Normal** – A.C. power is present. The A.C. ballast operates the fluorescent lamp(s) as intended. The 184000 is in the standby charging mode. The LSL will be lit providing a visual indication that the battery is being charged.

**Emergency Mode** – The A.C. power fails. The 184000 senses the A.C. power failure and automatically switches to the Emergency Mode. One lamp is illuminated, at reduced output, for a minimum of 90 minutes. When the A.C. power is restored, 184000 switches the system back to the Normal Mode and resumes battery charging. See page 1 of the Instruction Manual.

## TESTING & MAINTENANCE

Press the red button on the SW to interrupt the power to the designated AC ballast and to force the unit into emergency mode. The emergency lamp is now being lit by the 184000 unit (the LSL will turn off in emergency mode). After releasing the SW, the fixture returns to normal operation after a momentary delay. To simulate a BLACK OUT use the wall switch or circuit breaker to turn off A.C. power.

**Initial Testing** – Allow the unit to charge approximately 1 hour, then press the SW to conduct a short discharge test. Allow a 24-hour charge before conducting a one hour test.

The 184000 is maintenance free unit, however, periodic inspection and testing is required.

**Monthly** – Conduct a 30 second discharge test by pressing the SW (LSL turns off). One lamp should operate at reduced output.

**Annually** – Conduct a full 1 hour discharge test. The unit should operate as intended for the duration of the test.

Written records of testing shall be kept by the owner or by the authority having jurisdiction for inspection.

**SERVICING SHOULD BE PERFORMED BY QUALIFIED PERSONNEL.**

**Consult customer service for current warranty information.**

# WIRING DIAGRAMS

## TWO LAMP INSTANT START BALLAST

