# Sure-Lites FBP3500 INSTALLATION INSTRUCTIONS

# ! IMPORTANT SAFEGUARDS!

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

## READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- To prevent high voltage from being present on red and yellow output leads prior to installation, inverter connector must be open. Do not join inverter connector until installation is complete and AC power is supplied to the emergency ballast.
- 2. This product is for use with most 17 W through 215 W single pin or bipin fluorescent lamps, including standard, energy saving, HO, VHO, PG17, circline, U-shaped, and 4-pin compact lamps without integral starters.
- 3. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
- 4. To reduce the risk of electric shock, disconnect both normal and emergency power supplies and inverter connector of the emergency ballast before servicing.
- 5. This product is for use with indoor fixtures except air handling heated air outlets, and wet, damp, or hazardous location fixtures.
- 6. An unswitched AC power source is required. (120 or 277 VAC)
- 7. Do not install near gas or electric heaters.
- 8. The battery is field replaceable. Contact manufacturer for information on replacements. Use caution when replacing battery. Dispose of battery properly. Do not incinerate.
- 9. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- 10. Do not use this product for other than intended use.
- 11. Servicing should be performed by qualified service personnel.

# **SAVE THESE INSTRUCTIONS**



CONTAINS NICKEL-CADMIUM RECHARGEABLE BATTERY.
MUST BE RECYCLED OR
DISPOSED OF PROPERLY.
Ni - Cd

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049-167

## INSTALLATION

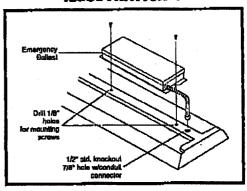


WARNING: TO PREVENT HIGH VOLTAGE FROM BEING PRESENT ON RED AND YELLOW OUTPUT LEADS PRIOR TO INSTALLATION, INVERTER CONNECTOR MUST BE OPEN. DO NOT JOIN INVERTER CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE EMERGENCY BALLAST.

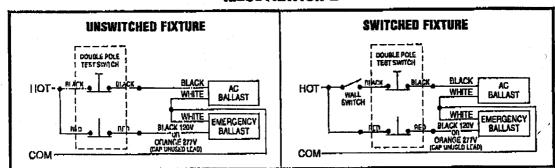
NOTE: Before installing the emergency ballast, make sure that the necessary branch circuit wiring is available. An unswitched source of power is required. The emergency ballast must be fed from the same branch circuit as the AC ballast.

- 1. Disconnect AC power from the fixture. Install the emergency ballast either on top of the fixture (see Illustration 1) or remote from the fixture up to 1/2 the distance the AC ballast manufacturer recommends remoting the AC ballast from the lamp, or up to 50 feet, whichever is less (see Illustration 3).
- 2. Seloct the appropriate wiring diagram to connect the emergency ballast to the AC ballast and lamp. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
- 3. Install the test switch through the ballast channel cover of a troffer or through the side of a strip fixture. Drill a 1/2" hole and install the switch as shown (see Illustration 4). Wire the test switch so that it removes AC power from both the emergency ballast and the AC ballast at the same time (see Illustration 2).
- Refer to Illustration 4 and install the charging indicator light. Connect charging indicator light to emergency ballast by matching violet and brown leads.
- 5. In a readily visible location, attach the label "CAUTION-This Unit Has More Than One Power Connection Point. To Reduce The Risk Of Electric Shock, Disconnect Both The Branch Circuit-Breakers Or Fusos And Emergency Power Supplies Before Servicing."

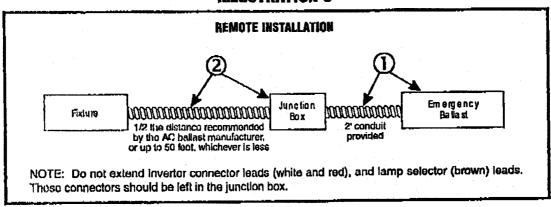
## **ILLUSTRATION 1**



## **ILLUSTRATION 2**



## **ILLUSTRATION 3**



- 1 Ernergency ballast with flexible conduit.
- ② Conduit and junction box (not supplied), but necessary for remote installation.

# **WIRING DIAGRAMS**

The following diagrams are typical schematics only. May be used with other ballasts. Consult the factory for other wiring diagrams. Emergency Ballast and AC Ballast must be fed from the SAME BRANCH CIRCUIT.

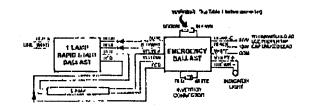
TABLE 1				
LAMP (DIAMETER)	Base Type	WATTAGE (LENGTH)	NO. OF LAMPS (EMERGENCY MODE)	BROWN CONNECTOR
T8, T9, T10, T12 (1", 1-1/4", 1-1/2")	SINGLE OR BIPIN	17 - 40 W (2' - 4')	1	CLOSED
			2	OPEN
		40 - 215 W (5' - 8')	1	OPEN
LONG COMPACT	4-PIN (2G11)	18 - 39 W	1	CLOSED
			2	OPEN
		40 - 55 W	1	OPEN
TWINVOUAD/ TRIPLE TWIN/ QUADRUPLE TWIN-TUBE COMPACT	4-PIN (G24q, GX24q)	18 - 42 W	1	CLOSED
			2	OPEN
20	4-PIN (GR10q)	16 - 38 W	1	CLOSED
			2	OPEN
		55 W	1	OPEN

# — WIRING DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION —

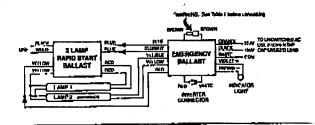
## EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

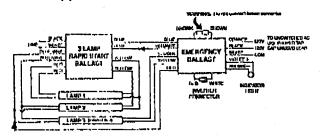
#### A. ONE (1) LAMP RAPID START BALLAST



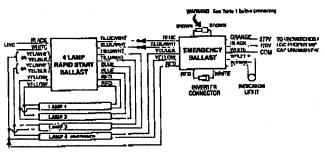
## B. TWO (2) LAMP RAPID START BALLAST



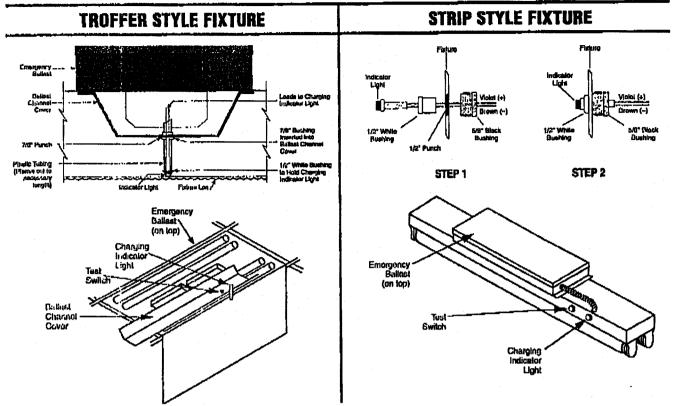
#### C. THREE (3) LAMP RAPID START BALLAST



### D. FOUR (4) LAMP RAPID START BALLAST



## **ILLUSTRATION 4**



NOTE: After installing the charging indicator light and test switch, mark each with the appropriate label.

- 6. After installation is complete, supply AC power to the emergency ballast and join the inverter connector.
- 7. A short-term discharge test may be conducted after the emergency ballast has been charging for one hour. Charge for 24 hours before conducting a long-term discharge test. Refer to OPERATION.

## **OPERATION**

When AC power is applied, the charging indicator light is illuminated, indicating that the battery is being charged. When power fails, the emergency ballast automatically switches to emergency power, operating either one or two lamps for at least 90 minutes.

## MAINTENANCE

Although no routino maintenance is required to keep the emergency ballast functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

- 1. Visually inspect the charging indicator light monthly. It should be illuminated.
- 2. Test the emergency operation of the fixture at 30—day intervals for a minimum of 30 seconds. Either one or two lamps should operate for the duration of the test.
- 3. Conduct a 90-minute discharge tost once a year. Either one or two lamps should operate for at least 90 minutes.
- 4. The life expectancy of the battery is 7 to 10 years. If the battery fails to provide 90 minutes of illumination, it should be replaced.

CAUTION: To replace battery, disconnect inverter connector and both switched and unswitched AC power from the fixture. Remove two screws (located on each end of lid), remove lid, and unplug and remove old battery. Plug in new battery, place inside ballast case, then replace lid and two screws. Supply AC power to fixture and reconnect inverter connector. Charging Indicator light should be illuminated. Contact manufacturer for battery replacement.

Refer any servicing indicated by these checks to qualified personnel.