

# DUAL LITE

## UFO-7W

### INSTALLATION INSTRUCTIONS

#### **! IMPORTANT SAFEGUARDS !**

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

#### **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**

1. To prevent high voltage from being present on red & 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 2" through 8" (17 W - 215 W) T5, T8, T9, T10 and T12 single pin or bipin fluorescent lamps, including energy saving, circline, U-shaped and rapid-start (4-pin) long compact fluorescent lamps.
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 emergency ballast is for factory or field installation.
6. This product is suitable for damp locations where the ambient temperature is +5°C minimum, +50°C maximum. Not suitable for heated air outlets and wet or hazardous locations.
7. An unswitched AC power source is required (120 or 277 VAC, 60 Hz).
8. Do not install near gas or electric heaters.
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.

**CAUTION:** Verify that all replacement lamp types marked on the installed luminaire are also identified as suitable for use with this inverter/charger pack.

#### **SAVE THESE INSTRUCTIONS**



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



Hubbell Lighting, Inc.

**WARNING** – This product contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm. Thoroughly wash hands after installing, handling, cleaning, or otherwise touching this product.

12/10/13

©

# INSTALLATION

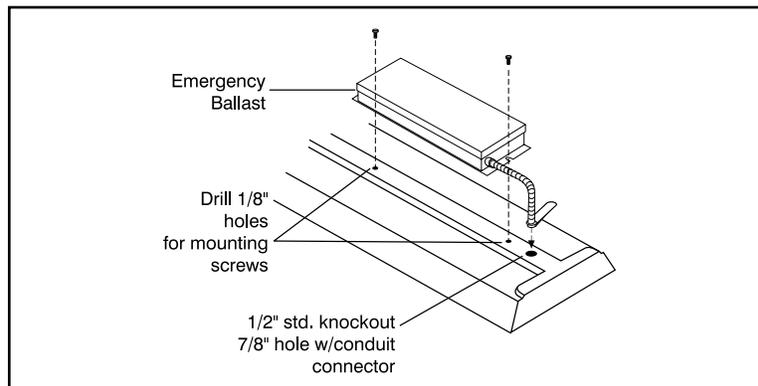


**WARNING: TO PREVENT HIGH VOLTAGE FROM BEING PRESENT ON RED AND YELLOW OUTPUT LEADS PRIOR TO INSTALLATION, INVERTER CONNECTOR MUST BE OPEN. DO NOT JOIN INVERTER CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE EMERGENCY BALLAST.**

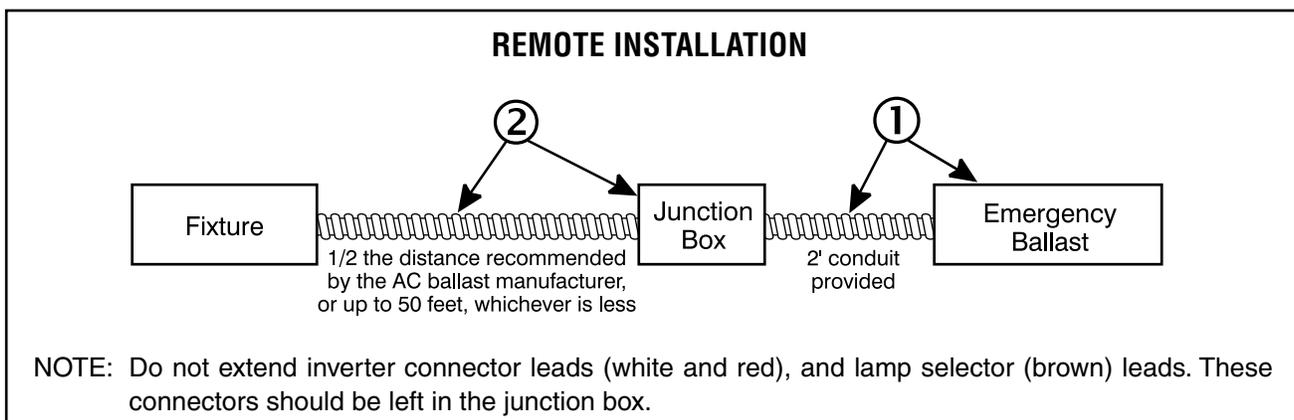
NOTE: Before installing the emergency ballast, make sure that the necessary branch circuit wiring is available. An unswitched source of power is required. The emergency ballast must be fed from the same branch circuit as the AC ballast.

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 2).
2. Select 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/indicator light through the ballast channel cover of a troffer or through the side of a strip fixture. Drill a 3/8" hole and install the test switch/indicator light as shown (see Illustration 3). Wire the test switch so that it removes AC power from both the emergency ballast and the AC ballast at the same time (see wiring diagrams).
4. In a readily visible location on the fixture, 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 Fuses And Emergency Power Supplies Before Servicing."

## ILLUSTRATION 1

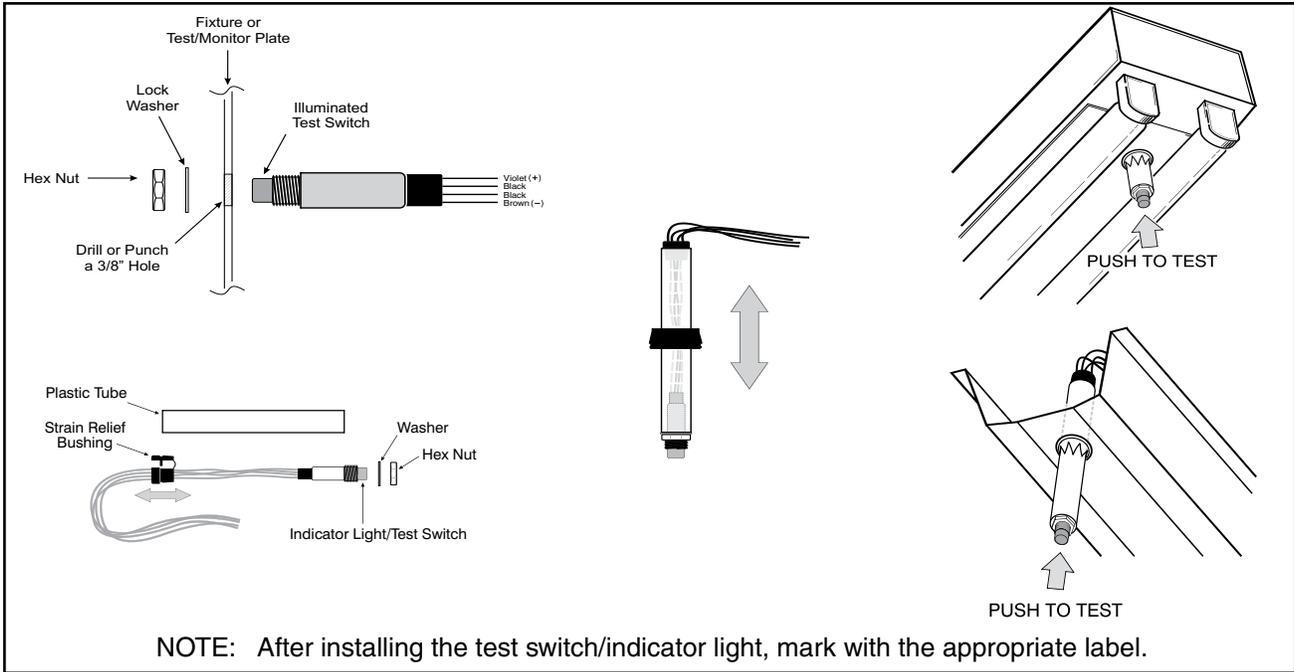


## ILLUSTRATION 2



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

## ILLUSTRATION 3



5. After installation is complete, supply AC power to the emergency ballast and join the inverter connector.
6. 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. When AC power is restored, the emergency ballast returns to the charging mode and delays AC ballast operation for approximately three seconds to prevent false-tripping of AC ballast (end-of-lamp-life shutdown circuits).

## MAINTENANCE

Although no routine 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 test 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.

**REFER ANY SERVICING INDICATED BY THESE CHECKS TO QUALIFIED PERSONNEL.**

# WIRING DIAGRAMS

**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.

Table 1 - Lamp Compatibility

LAMP DIAMETER (T8, T9, T10, T12)	BASE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY)	BROWN CONNECTOR
1", 1¼", 1½"	Single or Bipin	17 - 40 W (2' - 4')	1	CLOSED
		40 - 215 W (5' - 8')	2	OPEN
Long Compact	4-PIN (2G11)	18 - 39 W	1	CLOSED
		40 - 55 W	2	OPEN
			1	OPEN
Twin/Quad Twin-Tube Compact	4-PIN (G24q, GX24q)	18 - 42 W	1	CLOSED
			2	OPEN
2D	4-PIN (GR10q)	16 - 38 W	1	CLOSED
			2	OPEN
		55 W	1	OPEN
T5 Circline	4-PIN (2Gx13)	22 - 55 W	1	CLOSED
T5 (5/8")	Bipin	21 - 54 W (2' - 4')	1	CLOSED

**Important: Refer to Table 1 before  
connecting the brown connector.**

## WIRING DIAGRAMS for 1-LAMP emergency operation

FIG A ONE (1) LAMP RAPID START BALLAST

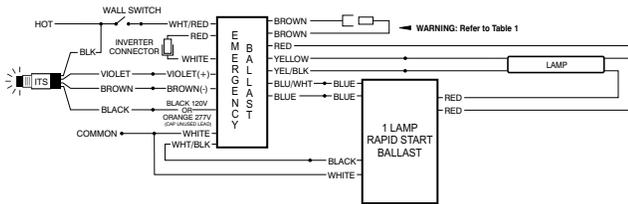


FIG B ONE (1) LAMP INSTANT START BALLAST

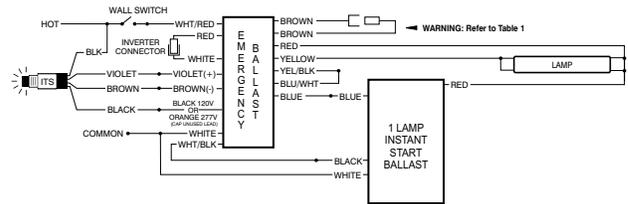


FIG C TWO (2) LAMP RAPID START BALLAST

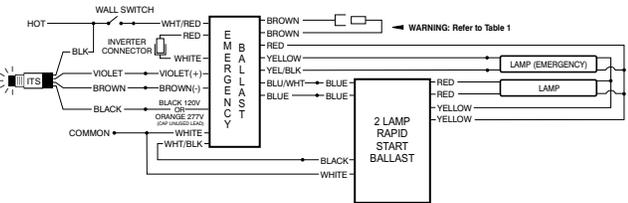


FIG D TWO (2) LAMP INSTANT START BALLAST

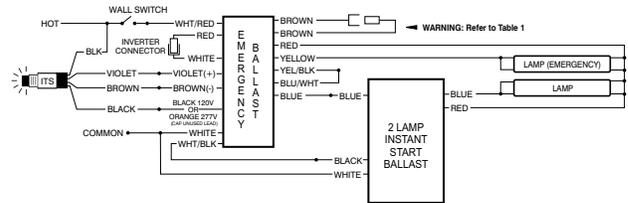


FIG C THREE (3) LAMP RAPID START BALLAST

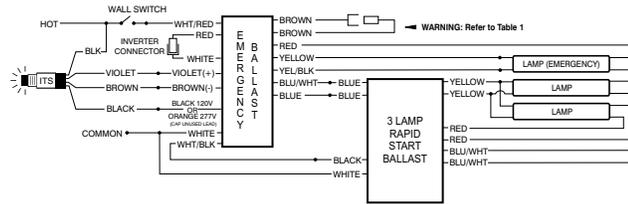


FIG D THREE (3) LAMP INSTANT START BALLAST

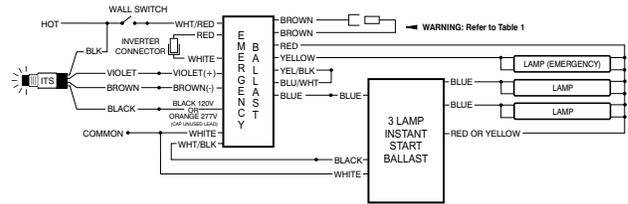


FIG E FOUR (4) LAMP RAPID START BALLAST

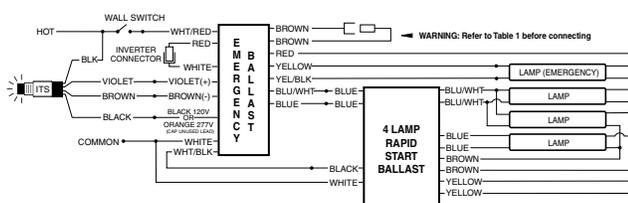
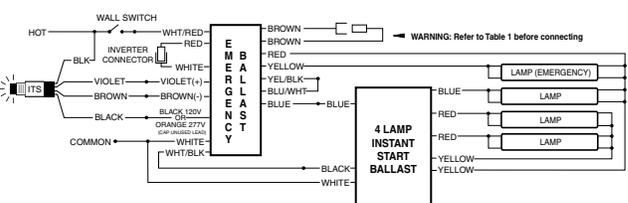


FIG F FOUR (4) LAMP INSTANT START BALLAST



# WIRING DIAGRAMS for 1-LAMP emergency operation

FIG G TWO (2) 4-PIN COMPACT LAMP RAPID START BALLAST

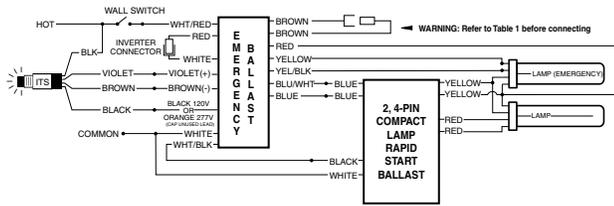
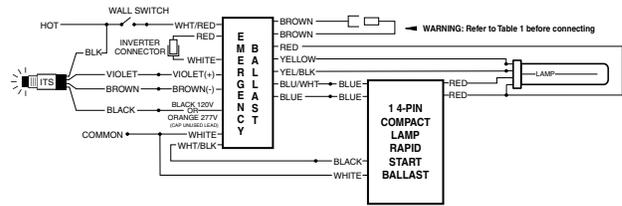


FIG H ONE (1) 4-PIN COMPACT LAMP RAPID START BALLAST



# WIRING DIAGRAMS for 2-LAMP emergency operation (2'-4', 17-40 W lamps only)

FIG I TWO (2) LAMP RAPID START BALLAST

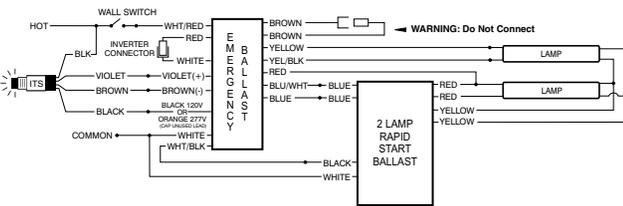


FIG J TWO (2) LAMP INSTANT START BALLAST

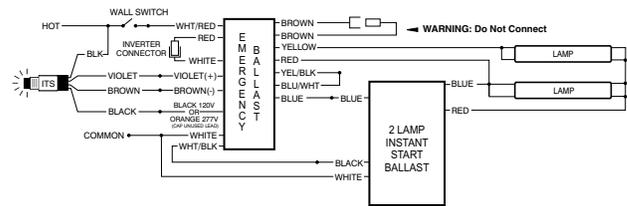


FIG K FOUR (4) LAMP RAPID START BALLAST

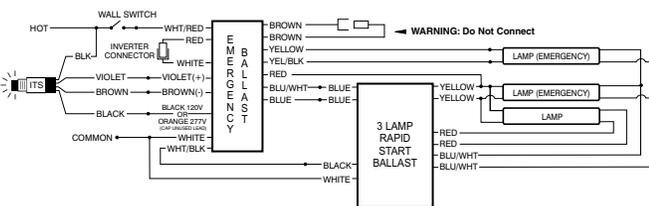


FIG L THREE (3) LAMP INSTANT START BALLAST

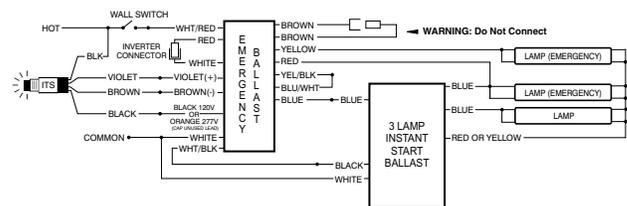


FIG M FOUR (4) LAMP RAPID START BALLAST

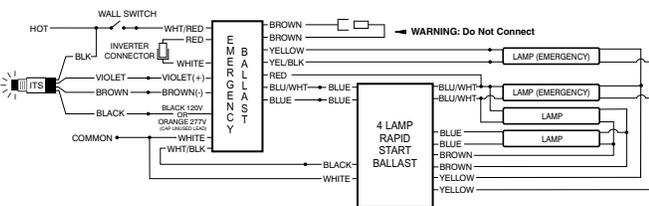


FIG N FOUR (4) LAMP INSTANT START BALLAST

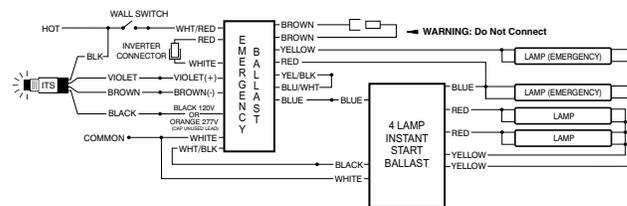
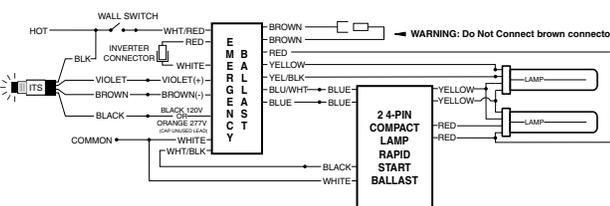


FIG O TWO (2) 4-PIN COMPACT LAMP RAPID START BALLAST



**NOTE: The emergency ballast must interrupt the switched or unswitched hot lead feeding the AC ballast. Before beginning installation, consult these wiring diagrams.**

# WIRING DIAGRAMS for Emergency-Only fixtures

FIG P ONE (1) 17-215 W LAMP WITHOUT AC BALLAST

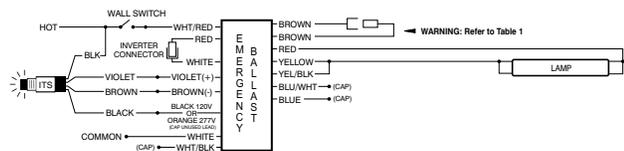


FIG Q TWO (2) T8 OR T12 17-40 W LAMPS WITHOUT AC BALLAST

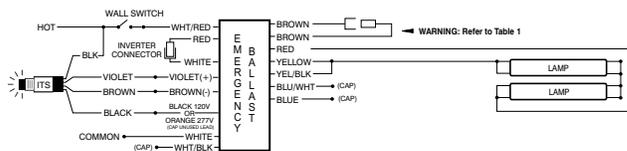


FIG R ONE (1) 4-PIN COMPACT LAMP WITHOUT AC BALLAST (16-55W)

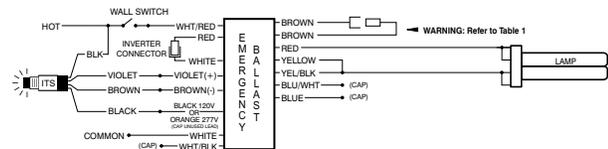


FIG S TWO (2) 4-PIN COMPACT LAMPS WITHOUT AC BALLAST (16-42W)

