

INSTALLATION INSTRUCTIONS

FPDL/U

EMERGILITE BRAND

**When using this lighting device
the safety precautions should be followed at all time
PLEASE READ CAREFULLY AND FOLLOW ALL
INSTRUCTIONS FOR YOUR OWN SAFETY**

1. This device is designed for indoor use. Do not use outdoors.
2. Prior to installation, battery connector must be open to prevent high voltage from being present on output leads (red & yellow).
3. This product is for use with 14 W through 54W(2'-4')T5 and T8 single pin or bipin for one lamp, Instant Start and Rapid Start, 14W through 39W(2'-4')T5 and T8 single pin or bipin for two lamp, Instant Start and Rapid Start, 18 W through 50 W (4-pin) long compact Rapid Start, or 32 W (4-pin) compact, 24W through 32W U-Bend FBT8 fluorescent lamps from Philips, Osram and GE or equivalent manufacture.
4. Please ensure the electrical connections conform to the National Electrical Code and local regulations if applicable.
5. To avoid electric shock, please disconnect normal and emergency power supplies, and battery connector of the emergency ballast before servicing.
6. This device is designed for factory or field installation in either the ballast channel, or on top of the indoor fixture, except air handling heated air outlets, wet or hazardous location fixtures. Do not install this device near gas or electric heaters.
7. AC power source of 120VAC or 277VAC is required.
8. The battery is sealed, non-maintenance, and is not replaceable in the field. Please contact manufacturer for information on service. Do not attempt to service the battery please.
9. Do not use accessory equipment that is not recommended by manufacturer. Failure to do so may cause unsafe conditions. Servicing should only be performed by qualified service personnel.
10. Do not use the product for other purpose that the product is NOT designed for.

PLEASE SAVE THESE INSTRUCTIONS

INSTALL INSTRUCTION

NOTE: All the branch circuit wiring has to be ready as well as an unswitched source of power before the fixture is installed. Both AC and Emergency Ballasts must be Fed From the same branch circuit.

CAUTION Battery connector has to be opened to prevent high voltage on output leads (Red and Yellow). Wait until all the installation process is completed and AC is supplying power to the emergency ballast before joining the battery connector.

1. AC power has to be off before installation.
2. Choose the right wiring diagram to connect the emergency ballast to AC ballast and lamp.
3. Please ensure the electrical connections conform to the National Electrical Code and local regulations if applicable.
4. Follow the diagram 1&2 to install the emergency ballast in the ballast channel.
5. Wall switch has to be connected properly (Check diagram 3), Match the violet and brown leads to connect the **TBIL** to the emergency ballast (Check diagram 4). The **TBIL** would be on after the fixture is installed properly.
6. Please search in readily visible location and stick the label with “CAUTION: This Unit Has More Than One Power Supply Connection Point. To Reduce The Risk Of Electric Shock, Disconnect Both The Branch Circuit-Breakers Or Fuses And Emergency Power Supplies Before Servicing.”
7. Do not join the inverter connector until the fixture is completely installed and AC power is supplied to the emergency ballast.
8. The battery needs to be charged for one hour in order to have short-term testing on the emergency function. Before having a long-term emergency function testing, the battery in emergency ballast has to be charged for 24 hours.

DIAGRAM 1

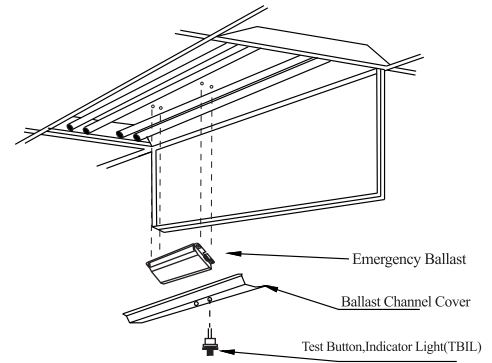


DIAGRAM 2

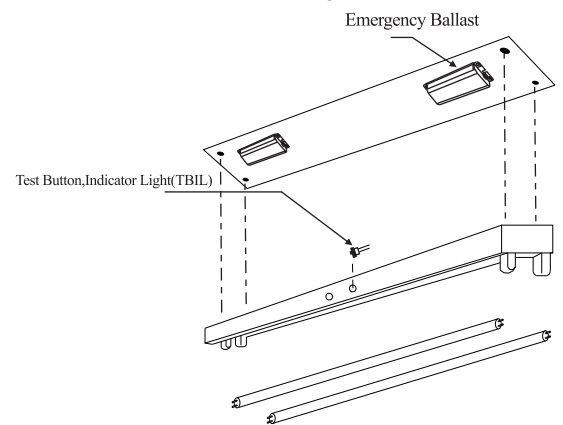
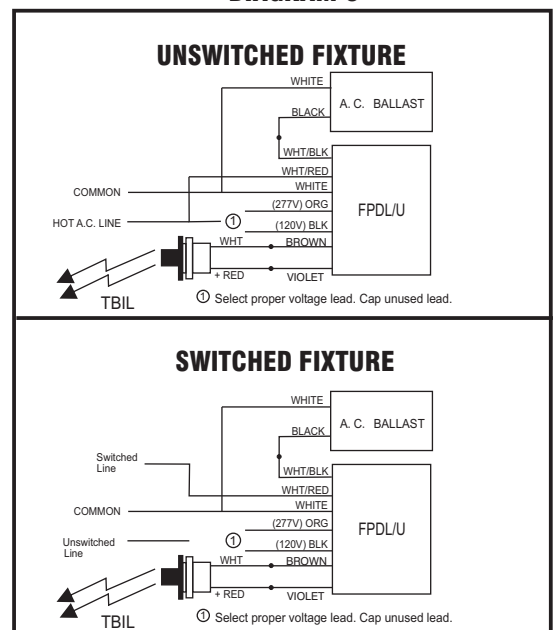


DIAGRAM 3



NOTE: MARK AN APPROPRIATE LABEL ON INDICATOR LIGHT AND TEST SWITCH AFTER INSTALLATION.

OPERATION

THE CHARGING INDICATOR LIGHT WOULD BE ON TO INDICATE THE BATTERY IS BEING CHARGED WHEN AC POWER IS APPLIED.

THIS EMERGENCY BALLAST WOULD FUNCTION AND OPERATE ONE OR TWO LAMPS AT LEAST 90 MINUTES WHEN THE AC POWER IS FAILED.

THE EMERGENCY BALLAST WILL OPERATE 14WATT TO 54WATT LAMPS AT LEAST 90MINUTES.

MAINTENANCE

NOTE: SERVICES SHOULD ONLY PERFORMED BY QUALIFIED PERSONNEL.

THE EMERGENCY BALLAST SHOULD BE CHECKED PERIODICALLY TO CONFIRM FUNCTIONING AND THE FOLLOWING SCHEDULE IS RECOMMENDED.

- 1) INSPECT THE CHARGING INDICATOR EVERY MONTH AND CONFIRM THAT IS ILLUMINATED.
- 2) PUSH THE TEST SWITCH FOR 30 SECONDS TO ENSURE THE EMERGENCY BALLAST IS FUNCTIONING. PERFORM THIS TEST EVERY 30 DAYS.
- 3) PERFORMING A LONG-TERM TEST (90 MINUTE BATTERY DISCHARGE) ONCE IN EVERY YEAR. ONE OR TWO LAMPS SHOULD BE OPERATED FOR NO LESS THAN 90 MINUTES.

TABLE 1 (FOR BROWN CONNETOR)

LAMP DIAMETER	T5 ,T8		LONG COMPACT				COMPACT	U-Bend FBT8	
BASE TYPE	SINGLE OR BIPIN		4 PIN(2G11)				4-PIN	4 PIN	
POWER (LENGTH)	14W-39W		40W-54W	18W-39W		40W-50W	32W	24-32W	
NUMBER OF LAMPS EMER.	1	2	1	1	2	1	1	1	2
BROWN CONNECTOR	CLOSE	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	CLOSE	OPEN

Illustration 1

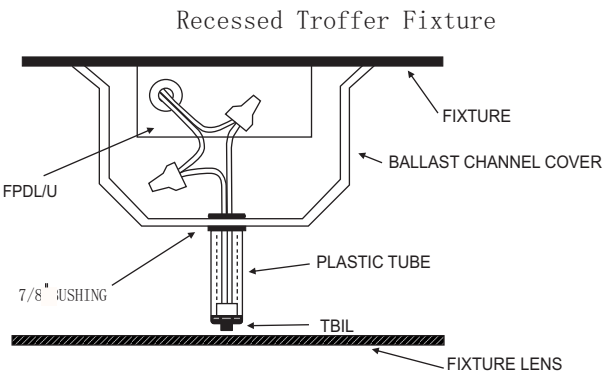
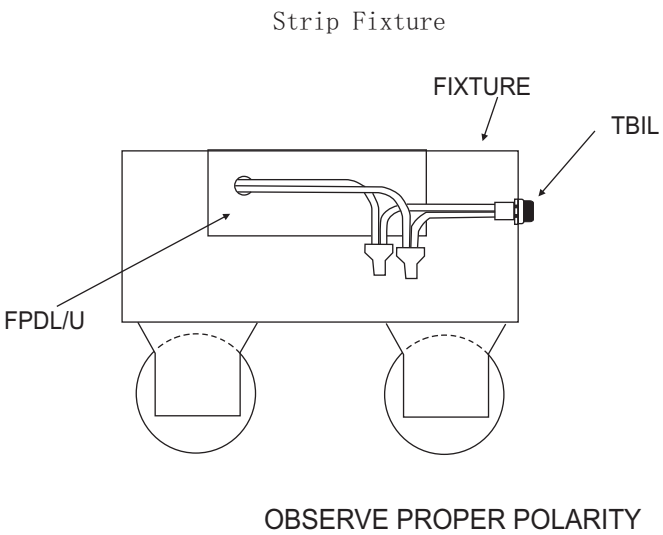


Illustration 2



NOTE: MARK AN APPROPRIATE LABEL ON INDICATOR LIGHT AND TEST SWITCH AFTER INSTALLATION.

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

For One Lamp Emergency Operation(14-54W)

Refer to Table 1 before connecting

WARNING

AC BALLAST

WHITE
BLACK
BLUE
BROWN
BLUE/WHITE
YELLOW/BLACK
YELLOW
VIOLET (+)
BROWN (-)

RED

LAMP 1

EMERGENCY BALLAST

WHT/BLK
WHITE
ORANGE 277V
BLACK 120V
WHT/RED
WHITE
RED
RED

SWITCHED OR UNSWITCHED LINE

TO UNSWITCHED AC USE PROPER TAP CAP (UNUSED LEAD Refer to Diagram 8 before connecting)

BATTERY CONNECTOR

Diagram illustrating the wiring for a 12V Emergency Ballast. The diagram shows the connections for the AC BALLAST, EMERGENCY BALLAST, and BATTERY CONNECTOR.

AC BALLAST: Connected to RED and RED lines.

EMERGENCY BALLAST: Connected to the AC BALLAST and the BATTERY CONNECTOR. The EMERGENCY BALLAST has terminals for WHITE, BLACK, BROWN, BLUE, WHITE, YELLOW, and BROWN. The BATTERY CONNECTOR has terminals for RED, RED, and RED.

Wiring Details:

- AC BALLAST: RED, RED
- EMERGENCY BALLAST: WHITE, BLACK, BROWN, BLUE, WHITE, YELLOW, BROWN
- BATTERY CONNECTOR: RED, RED, RED

Notes:

- Refer to Table 1 before connecting.
- SWITCHED OR UNSWITCHED LINE: 277V or 120V
- DO NOT CONNECT TO UNSWITCHED AC LINE. USE PROPER TAP CAP. UNLEAD LEAD. Refer to Diagram 1 before connecting.

Diagram 3: Emergency Ballast Wiring

This diagram illustrates the wiring connections for the Emergency Ballast, AC Ballast, and Battery Connector. The connections are as follows:

- AC BALLAST:**
 - WHITE: Connected to the top terminal of the Emergency Ballast.
 - BLACK: Connected to the top terminal of the Emergency Ballast.
 - BLUE: Connected to the top terminal of the Emergency Ballast.
 - BLUE: Connected to the top terminal of the Emergency Ballast.
- EMERGENCY BALLAST:**
 - WHT/BLK: Connected to the top terminal of the Emergency Ballast.
 - WHITE: Connected to the top terminal of the Emergency Ballast.
 - ORANGE: 277V
 - BLACK: 120V
 - WHT/RED: Connected to the top terminal of the Emergency Ballast.
 - WHITE: Connected to the top terminal of the Emergency Ballast.
 - RED: Connected to the top terminal of the Emergency Ballast.
 - RED: Connected to the top terminal of the Emergency Ballast.
- BATTERY CONNECTOR:**
 - COM: Connected to the top terminal of the Emergency Ballast.
 - SWITCHED OR UNSWITCHED LINE: Connected to the top terminal of the Emergency Ballast.
 - BATTERY CONNECTOR: Connected to the top terminal of the Emergency Ballast.

Notes:

- Refer to Table 1 before connecting
- DO NOT
- Refer to Diagram 3 before connecting

The diagram illustrates the electrical connections between an AC Ballast, an Emergency Ballast, and various components. The AC Ballast is connected to Yellow, Yellow, White, Black, Blue, Brown, Blue/White, Yellow, Red, and Red lines. The Emergency Ballast is connected to White/Black, Orange (277V), Black (120V), White/Red, White, Red, and Red lines. The Emergency Ballast also has a COM terminal. The diagram shows connections to a Battery Connector, LAMP 1, and LAMP 2 (Emergency). A note refers to Table 1 for ballast connections and another refers to Diagram 3 for emergency connections.

[illegible]

The diagram illustrates the electrical connections between the AC Ballast, the Emergency Ballast, and the lamps. The AC Ballast is connected to LAMP 1 and LAMP 2 (EMERGENCY). The Emergency Ballast is connected to a BATTERY CONNECTOR. The diagram includes color-coded wires (WHITE, BLACK, BLUE, BROWN, YELLOW, RED) and a note to refer to Diagram 3 before connecting.

Refer to Table 1 before connecting

WARNING

AC BALLAST

WHITE
BLACK
BLUE
BLUE
RED
RED

YELLOW
YELLOW

LAMP 1
LAMP 2
LAMP 3
LAMP 4 (EMERGENCY)

EMERGENCY BALLAST

WHITE/BLK
WHITE
ORANGE ~ 27V
BLACK 120V
WHT/RED
WHITE
RED
RED

Refer to Diagram 3 before connecting

SWITCHED OR UNSWITCHED LINE
COM
TO UNSWITCHED AC USE PROPER TAP CAP INSURED LEAD
BATTERY CONNECTOR

Refer to Table 1 before connecting

SWITCHED OR UNSWITCHED LINE

AC BALLAST

EMERGENCY BALLAST

BATTERY CONNECTOR

WHITE
BROWN
BLUE
BLUE
BLUE
YELLOW
YELLOW
RED

WHITE
ORANGE
BLACK
WHITE
WHITE
RED
RED

BLUE/WHITE
RED
BLUE
WHITE
BLUE
YELLOW
YELLOW
RED

LAMP 1
LAMP 2
LAMP 3(EMERGENCY)

TO UNSWITCHED AC
USE PROPER TAP
CAP UNUSED LEAD

Refer to Chapter 3 before connecting

Diagram 8: AC Ballast and Emergency Ballast wiring. The diagram shows the AC Ballast connected to the Emergency Ballast and four lamps (LAMP 1, LAMP 2, LAMP 3, LAMP 4 (EMERGENCY)). The AC Ballast has terminals for WHITE, BLACK, RED, BLUE, BLUE/WHITE, BLUE, and BLUE. The Emergency Ballast has terminals for WHITE/BLUE, WHITE, ORANGE, BLACK, WHITE/RED, WHITE, RED, and RED. A switch controls the Emergency Ballast, which is connected to a battery connector. A note refers to Diagram 8 before connecting.

NOTE: Use the proper input voltage lead, cap unused lead

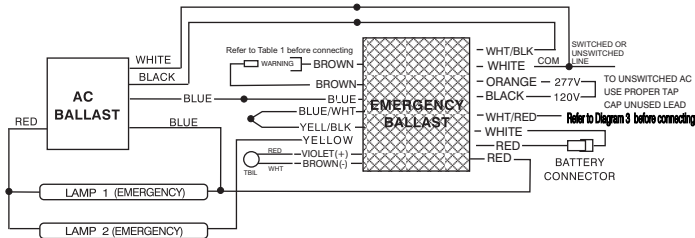
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

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

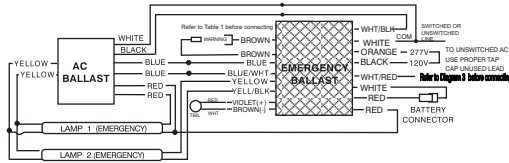
WIRING DIAGRAM

For Two Lamps Emergency Operation (14-54W)

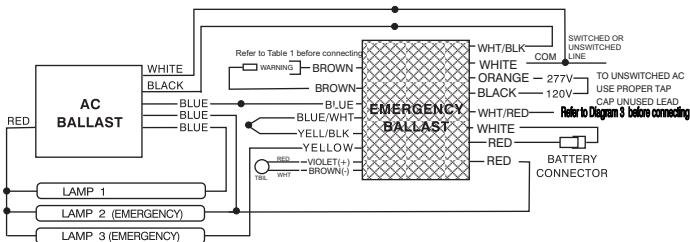
A. TWO (2) LAMP INSTANT START BALLAST



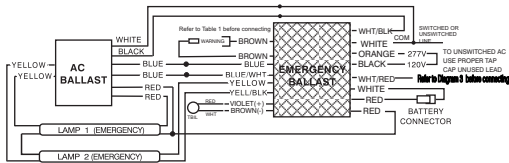
D. TWO (2) LAMP RAPID START BALLAST



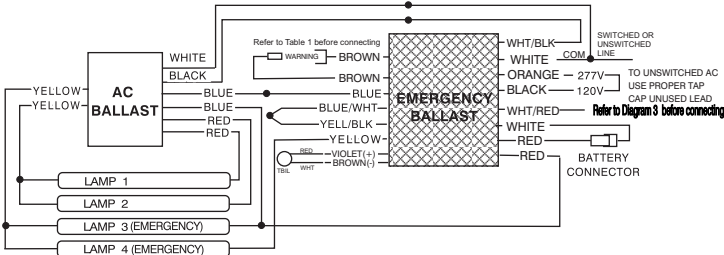
B. THREE (3) LAMP INSTANT START BALLAST



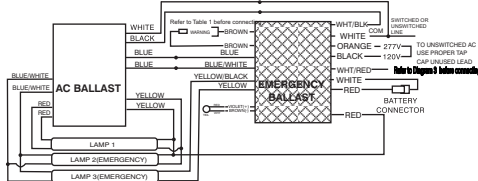
E. TWO (2) LAMP RAPID START BALLAST



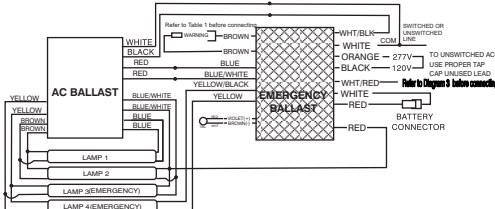
C. FOUR (4) LAMP INSTANT START BALLAST



F. THREE (3) LAMP RAPID START BALLAST

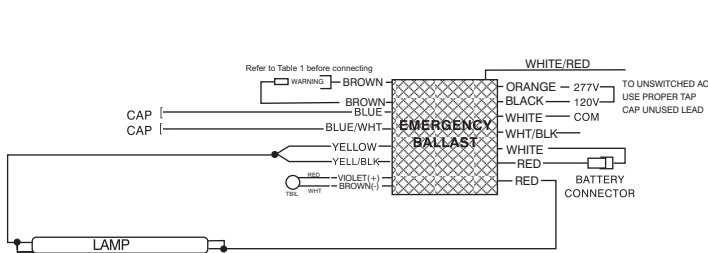


G. FOUR (4) LAMP RAPID START BALLAST



Emergency only Operation

A. ONE (1) LAMP WITHOUT AC BALLAST (14-54W)



B. TWO (2) LAMP WITHOUT BALLAST (14-54W)

