# FLUORESCENT EMERGENCY BALLAST 650 Lumens 2-pin INSTALLATION INSTRUCTIONS

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

- 1. Prior to installation, battery connector must be open to prevent high voltage from being present on out put leads (red & yellow). It must be connected only after installation is complete and A.C. power is supplied to the unit.
- 2. This unit can operate commonly used linear and compact fluorescent lamps. Please refer to the "lamps list" label on the ballast for specific lamp information.
- 3. Please ensure the electricity connections conform to the National Electrical Code and local regulations if applicable.
- 4. To avoid electric shock, please disconnect normal and emergency power supplies, and battery connector of the emergency ballast before servicing.
- 5. This device is designed for factory or field installation in either the ballast channel, or on top of indoor fixtures, except air handling, heated air outlets, sealed and gasketed fixtures, wet or hazardous locations. Do not install this device near gas or electric heaters.
- 6. AC power source of 120VAC or 277VAC is required.
- 7. The battery is sealed, no-maintenance and is not replaceable in the field. Please contact manufacturer for information on service. Do not attempt to service the battery.
- 8. 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.
- 9. Do not use the product for other than it's intended purpose.
- CAUTION: Verify that all replacement lamp types marked on the installed luminaire are also identified as suitable for use with this inverter/charger pack.

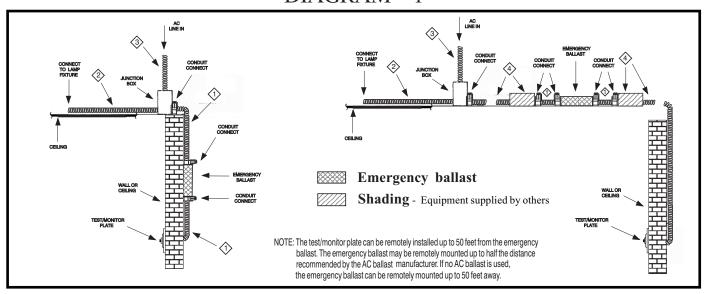
# INSTALL INSTRUCTION

- **NOTE:** All the branch circuit wiring has to be ready as well as an unswitched source of power before the fixture is installed. Confirm that the same branch circuit would be used for both the AC and Emergency Ballasts.
- **CAUTION:** Inverter connector has to be left open for preventing high voltage on output leads (Red and Yellow). Wait until all the installation process is completed and AC power is being supplied to the emergency ballast; then join the inverter connector.
- 1. AC power has to be OFF before installation.
- 2. Choose the right wiring diagram to connect the emergency ballast to the AC ballast and lamp(s).
- 3. The emergency ballast can be used with one, two, three and four lamp fixtures and operates no more than 1 lamp in emergency mode. Study the wiring schematics carefully.
- 4. Follow diagram 1 to connect the emergency ballast and test plate. Please ensure that the electrical connections conform to the National Electrical Code and local regulations if applicable. Install the test plate close to the fixture or at a remote location within 50ft (recommended). The emergency ballast should either be installed at half the distance recommended by the AC ballast manufacturer (to install the AC ballast away from the lamps) or at a distance within 50ft, whichever is small. If there is no AC ballast then the emergency ballast needs to be mounted at a distance within 50ft.
- 5. The emergency ballast has to be connected to an unswitched 120VAC or 277VAC power source with no exception. Other voltages are not accepted. As mentioned before do not join the inverter connector until the fixture is completey installed and AC power is supplied continuously to the emergency ballast.
- 6. An additional unswitched hot wire(120VAC or 277VAC) has to be run to the junction box and connected to the emergency ballast in case of switched fixtures.
- 7. The battery needs to be charged for a minimum of two hours in order to do a short-term test of the emergency function. A full 24 hr charge is needed for a long-term emergency function testing.
- 8. Stick the additional CAUTION label that comes with the accessories' pack in a readily visible location. The label reads"CAUTION: This unit has more than one power supply connection point. To reduce risk of Electric shock, disconnect both the branch circuit breakers or fuses and emergency power supplies before servicing".

# **OPERATION:**

- 1. The charging indicator light would be ON to indicate that the battery is being charged when the AC power is supplied.
- 2. This Emergency ballast would function and operate one lamp at reduced illumination when the AC power supply is interrupted for a minimum of 90 minutes.

# DIAGRAM 1



- Flexible conduit (supplied) to connect ballast wire.
- Existing conduit to run existing wire to lamp holder (AC ballast on junction box). If AC ballast is on reflector, run yellow, and blue wires from emergency ballast through this conduit.
- **3** AC line in.
- Conduit and junction box (not supplied), necessary for remote installation.

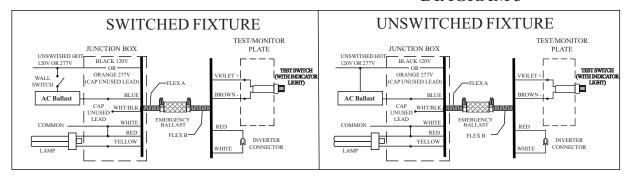
### **MAINTENANCE:**

**NOTE:** Services should only be performed by qualified personnel. The emergency ballast should be checked periodically to confirm proper functionality and the following schedule is recommended by the manufacturer.

- 1. Inspect the charging indicator every month and confirm that it's illuminated.
- 2. Push the test switch for 30 seconds to ensure that the emergency ballast is functioning. Recommended to perform this testing once in every 30 days. Perform a long-term test (90-minute battery discharge) once in every 12 months and ensure that the lamp(s) are ON for a minimum of 90 minutes.

# DIAGRAM 2

# **DIAGRAM 3**



For 120V, connect unswitched hot to black emergency ballast lead and cap unused orange wire. For 277V, connect unswitched hot to orange emergency ballast lead and cap unused black wire.

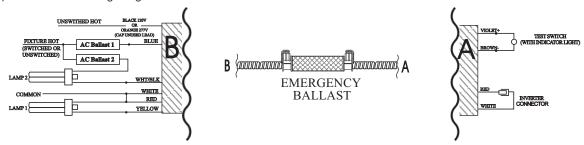
# WIRE DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

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

A. TWO-LAMP FIXTURE, TWO SIMPLE REACTOR AC BALLASTS (Lamp 1 operates in emergency mode)

1.B) FLEX Conduit Wiring Diagram:

2.A) FLEX Conduit Wiring Diagram:



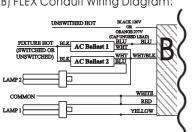
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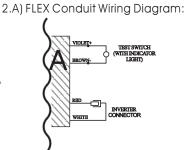
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# B. TWO-LAMP FIXTURE, TWO AUTOTRANSFORMER AC BALLASTS (Lamp 1 operates in emergency mode)

1.B) FLEX Conduit Wiring Diagram:

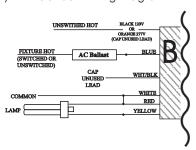


B A EMERGENCY BALLAST

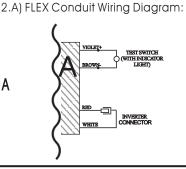


### C. ONE-LAMP FIXTURE, ONE SIMPLE REACTOR AC BALLAST

1.B) FLEX Conduit Wiring Diagram:



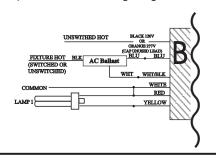




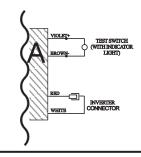
# D. ONE-LAMP FIXTURE, ONE AUTOTRANSFORMER AC BALLAST

1.B) FLEX Conduit Wiring Diagram:

2.A) FLEX Conduit Wiring Diagram:



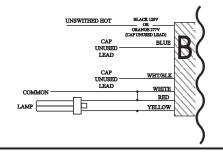




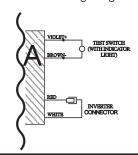
### E. ONE-LAMP FIXTURE WITHOUT AC BALLAST

1.B) FLEX Conduit Wiring Diagram:

2.A) FLEX Conduit Wiring Diagram:

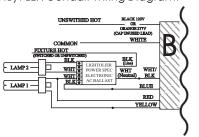




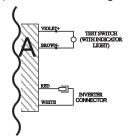


# F. TWO-LAMP FIXTURE, TWO LAMP LIGHTOLIER POWER SPEC ELECTRONIC AC BALLAST (Lamp 1 operates in emergency mode)

1.B) FLEX Conduit Wiring Diagram:







2.A) FLEX Conduit Wiring Diagram: