

## Low Profile Explosion Proof Fluorescent Light Emergency Battery Backup - 20,000 Lumens Instruction Manual

Do not attempt installation until you are familiar with all warnings, precautions, and procedures outlined within this instruction sheet.

### INSTALLATION PRECAUTIONS

- Do not install fixture in any classified location where the marked operating temperature exceeds the ignition temperature of the hazardous atmospheres.
- Consult fixture nameplate for the suitability ambient temperature shown on the nameplate.
- Refer to fixture nameplate for minimum supply wire temperature rating.
- Verify that the supply voltage agrees with fixture rating as indicated on nameplate.
- All local and national electrical/building codes must be followed when installing this lighting fixture. For code interpretation, consult your local authority.
- Product must be used only with glass tubes intact and all cap threads fully engaged.
- Do not use if glass tubes are cracked or damaged.

**Caution:** Only use lamp size, type and /or wattage as shown on fixture nameplate.

### INSTALLATION

*We strongly recommend that only a licensed electrician install this product.*

**Warning:** Make sure that the power is disconnected before installing. This fixture is extremely heavy and must be mounted to a surface that can structurally support the load. Note: this fixture requires a minimum of 50 inches of clearance from re-lamp end for lamp replacement. An optional drop mounting kit that will allow for end to end row mounting is available, please consult factory.

**Warning:** Do not let fixture hang on one bracket at any time. Failing to comply can result in breakage of and end casting or mounting bracket allowing the fixture to fall which can cause serious injury or death.

- The mounting brackets are shipped installed on the fixture.
- Install the brackets to wall or ceiling with two 3/8" bolts (not supplied) at center measurements, or hang with rigid threaded pipe for pendant applications.
- Fixture is now ready for mounting.

It is strongly suggested to use two licensed electricians to proceed with the final mounting of the fixture to avoid any possible personnel injury or damage to the fixture as the unit weights up to 66lbs (~30.0 kg) and will be slightly awkward to hold in position and attach to brackets mounted on wall or ceiling. Depending on mounting height and scaffolding, a hydraulic man-lift or two good quality ladders should be used.

## WIRING

- Remove the upper center screw cap on the re-lamp end (field wiring compartment).
- Install approved cable connector, seal off, or conduit fitting into ½" NPT hub on field wiring compartment.
- Install a three conductor cable into the connector, allowing 3 inches of wire inside compartment for connection.
- Using approved wire connectors, splice wires as per color codes: black to black (line) white to white (common) and green to green (ground).
- Replace end-cap, making sure there are no wires protruding that maybe pinched causing a possible short circuit.

**Warning:** Fixture must be grounded as required per paragraph 410-21 and article 250 of the National Electric Code and/or rule 30-500. Failure to properly ground this fixture will create an electrical shock, which can cause serious injury or death.

## EMERGENCY BACKUP BALLAST OPERATION

During normal operation, AC power is supplied to the ballast through the backup micro inverter and the inverter charges the battery. Connecting the inverter wires (red and white) enables the emergency circuit and supplies power to the control/monitor circuit. The backup micro inverter detects AC input voltage (120-277V AC) and automatically set the output voltage during emergency operation.

When AC power fails, the backup micro inverter automatically switches to emergency mode, keeping the load illuminated for a minimum of 90 minutes. When AC power is restored, the backup micro inverter returns to charge mode to recharge the battery. The backup micro inverter consists of a low-battery voltage disconnect which is reset when AC power is restored. The unit can also detect an abnormal load condition (open or shorted load) during emergency mode operation and will protect the inverter from damage.

# 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 1-LAMP emergency operation

FIG A ONE (1) LAMP RAPID START BALLAST

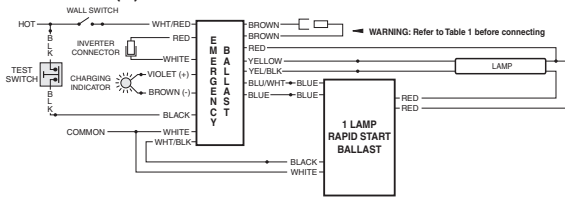


FIG B ONE (1) LAMP INSTANT START BALLAST

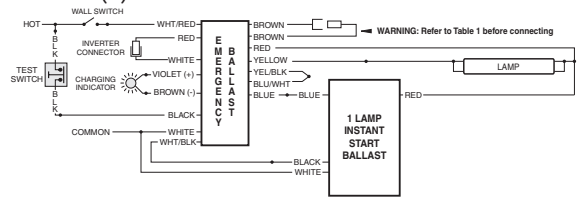


FIG C TWO (2) LAMP RAPID START BALLAST

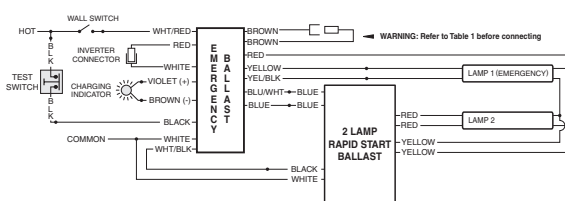


FIG D TWO (2) LAMP INSTANT START BALLAST

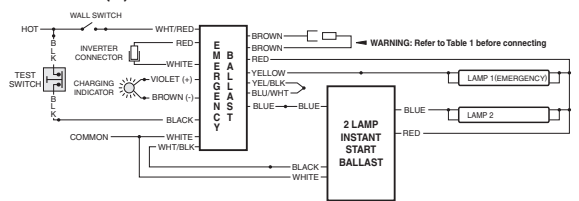


FIG E THREE (3) LAMP RAPID START BALLAST

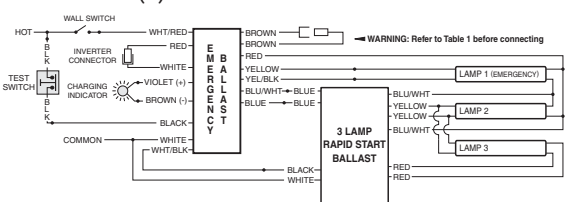


FIG F THREE (3) LAMP INSTANT START BALLAST

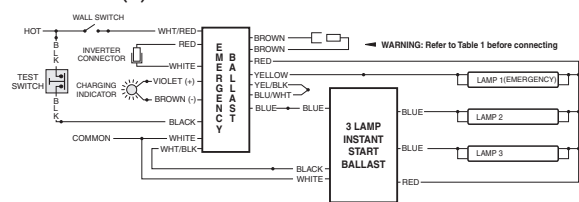


FIG G FOUR (4) LAMP RAPID START BALLAST

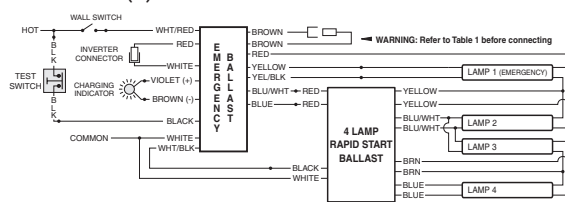


FIG H FOUR (4) LAMP INSTANT START BALLAST

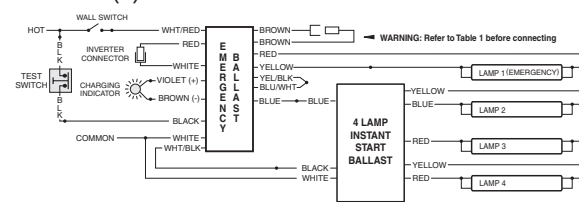


FIG I ONE (1) LAMP COMPACT RAPID START BALLAST

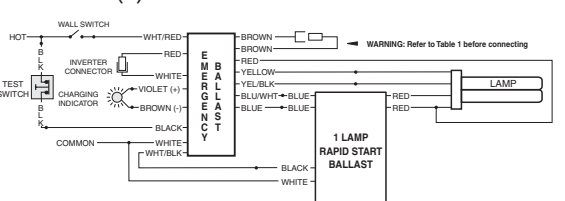


FIG J TWO (2) LAMP COMPACT RAPID START BALLAST

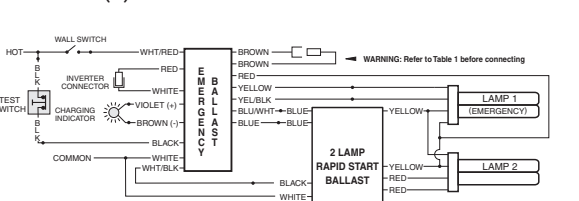
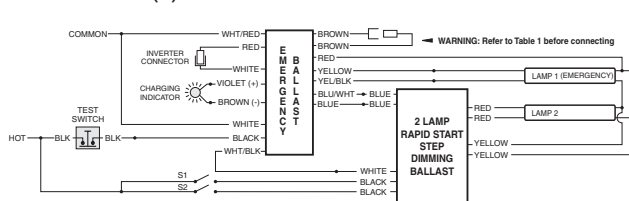


FIG K TWO (2) LAMP RAPID START STEP DIMMING BALLAST



THE WHITE/BLACK LEAD MUST CONNECT TO THE WHITE LEAD OF THE STEP-DIMMING BALLAST ASSOCIATED WITH THE EMERGENCY BALLAST ONLY. CONNECTIONS TO OTHER BALLASTS OR FIXTURES COULD RESULT IN ABNORMAL OPERATION AND CAUSE PRODUCT DAMAGE.

# WIRING DIAGRAMS FOR 2-LAMP EMERGENCY OPERATION (2 - 4', 17- 40 W LAMPS ONLY)

Two-lamp emergency operation is not possible with all ballasts.  
Consult the factory for any ballast other than those shown.

FIG L TWO (2) LAMP RAPID START BALLAST

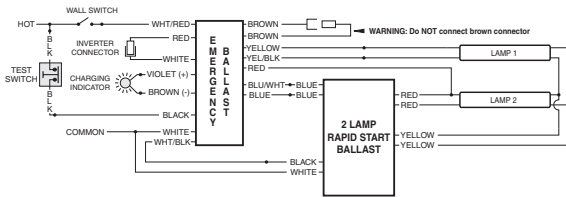


FIG M TWO (2) LAMP INSTANT START BALLAST

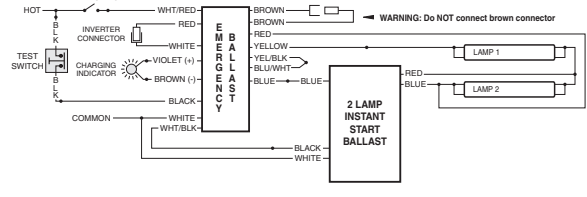


FIG N THREE (3) LAMP RAPID START BALLAST

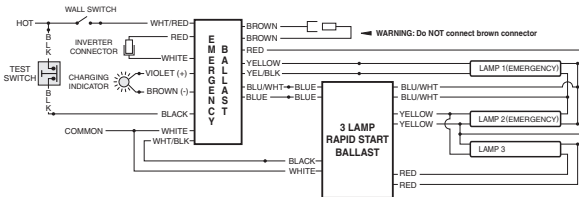


FIG O THREE (3) LAMP INSTANT START BALLAST

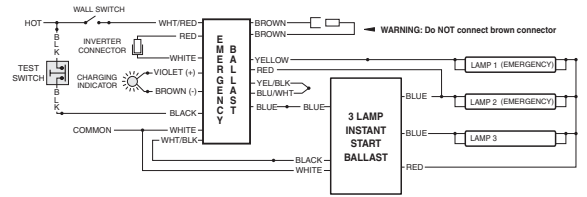


FIG P FOUR (4) LAMP RAPID START BALLAST

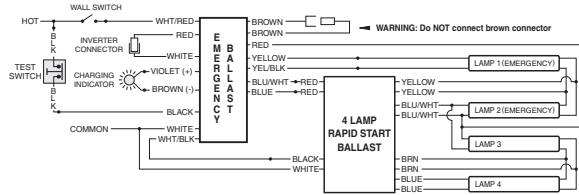


FIG Q FOUR (4) LAMP INSTANT START BALLAST

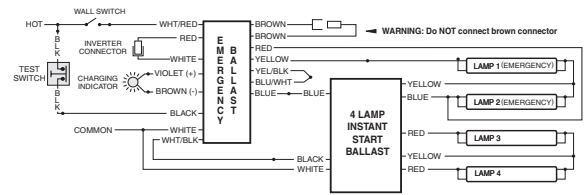
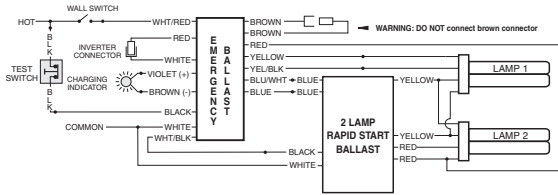


FIG R TWO (2) COMPACT LAMP RAPID START BALLAST



## WIRING DIAGRAMS for EMERGENCY-ONLY fixtures

FIG S ONE (1) LAMP WITHOUT AC BALLAST (16W-215W)

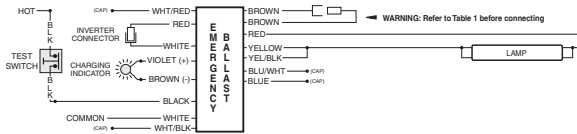


FIG T TWO (2) LAMPS WITHOUT AC BALLAST (17W-40W)

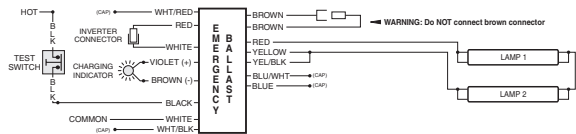


FIG U ONE (1) 4-PIN COMPACT LAMP WITHOUT AC BALLAST (16W-55W)

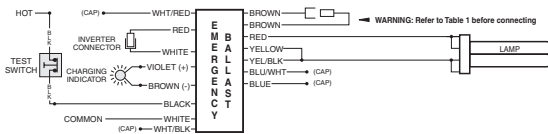


FIG V TWO (2) 4-PIN COMPACT LAMPS WITHOUT AC BALLAST (16W-39W)

