

The RG-80 Series

120/277 Volts AC 60 Hz. 7.8 VA
Output: 6 Volts 12 Watts DC, for 90 minutes

Instructions

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**
2. Do not use outdoors
3. Do not let power cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Use caution when serving batteries. Battery acid can cause burns to skin and eyes. If acid is spilled on skin or eyes, flush acid with fresh water and contact a physician immediately.
6. Equipment should be mounted in locations and at heights where unauthorized personnel will not readily subject it to tampering.
7. The use of accessory equipment not recommended by manufacturer, may cause an unsafe condition, and will void the unit's warranty.
8. Do not use this equipment for other than its intended purpose.
9. Servicing of this equipment should be performed by qualified service personnel.
10. **CAUTION:** Halogen lamps may be used in this equipment. Dispose of lamp with care.
To avoid shattering: Do not use lamp in excess of rated voltage, protect lamp against abrasion, scratches and against liquids when lamp is operating. Halogen lamps operate at high temperatures: Do not store or place flammable materials near lamp.
11. **SAVE THESE INSTRUCTIONS!**

INSTALLATION

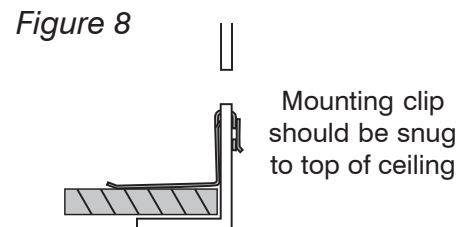
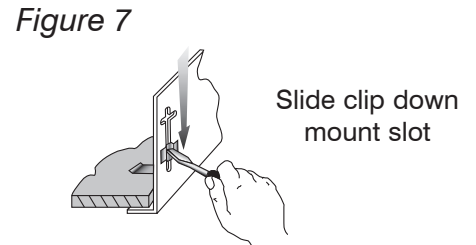
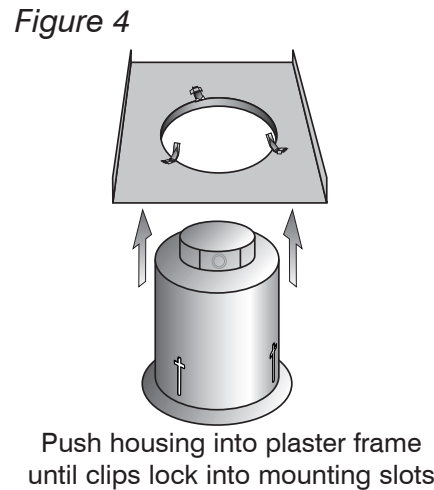
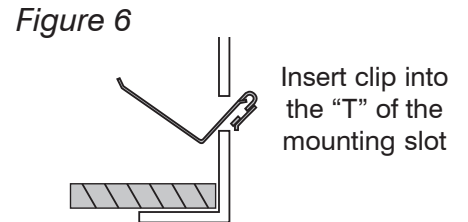
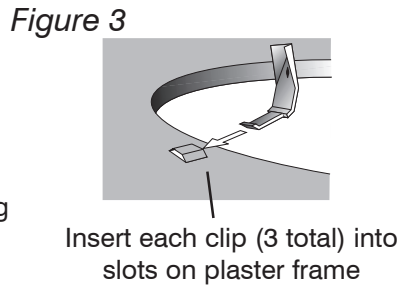
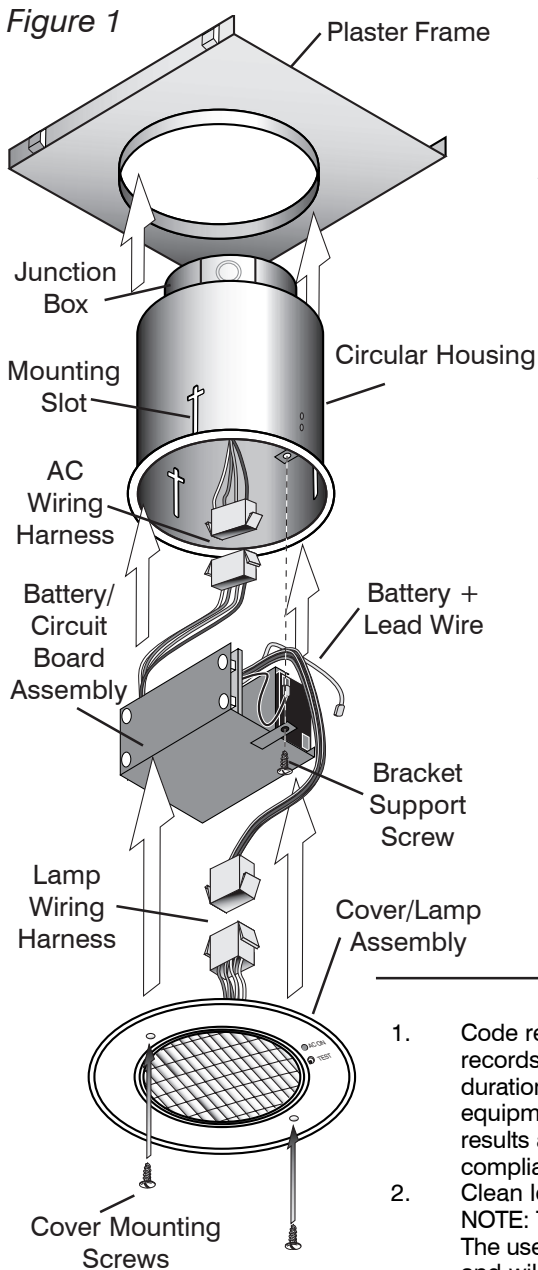
1. Carefully unpack the unit from the box. Remove the battery/circuit board assembly from the housing by first unscrewing the internal bracket support screw. Firmly pull apart the AC wiring harness and remove the battery/circuit assembly (*Figure 1*).
2. Determine mounting location, type of ceiling and installation.
New Drywall/Plaster: The plaster frame must be mounted into place above the ceiling before the ceiling is installed. Slots are provided for hanger bars (not supplied) or the frame may be secured with appropriately sized fasteners.
IMPORTANT! - Install the three (3) tension spring clips into plaster frame **BEFORE** mounting the frame into place! (*Figure 2 & 3*)
Cut a hole in the ceiling that aligns and matches to the hole in the previously installed plaster frame. Complete wiring (Steps 3 to 7 below) then insert the housing into the plaster frame until snug to ceiling (*Figure 4*). The housing may have to be rotated to lock the tension spring clips into the mounting slots. Complete Steps 8 to 10 described below.
Existing Drywall/Plaster: Cut a hole exactly the size of the circular housing in the ceiling. **DO NOT OVERSIZE THE HOLE!**
Once all wiring is complete (Steps 3 to 7 below) insert the housing into the hole. Insert the each of the three (3) mounting clips into a mounting slot (*Figure 5 & 6*). Using a screwdriver, slide each clip down its slot until it is firmly resting against the top of the ceiling (*Figure 7 & 8*). Complete Steps 8 to 10 described below.
T-Bar/Suspension: Use the plaster frame ring to cut a hole in the ceiling tile and mount the frame into over the hole. Slots are provided for T-bar hanger bars (not supplied) or the frame may rest on the ceiling tile during installation however, the unit must then be secured to a solid mounting using appropriately sized chain or cable. Install the three (3) tension spring clips into plaster frame (*Figure 2 & 3*). Complete wiring (Steps 3 to 7 below) then insert the housing into the plaster frame until snug to ceiling (*Figure 4*). The housing may have to be rotated to lock the tension spring clips into the mounting slots. Complete Steps 8 to 10 described below.
3. Extend unswitched 24 hour AC supply of rated voltage to a nearby junction box (supplied by others) installed in accordance with all applicable codes and standards. Extend wiring from the junction box to the location where the unit will be installed. Leave at least 8 inches of slack wire at the end of the circuit. This circuit should **NOT** be energized/live at this time.
4. Remove the coverplate from the junction box installed on the top of the unit. Remove an appropriate knockout in the junction box for the AC wiring. Attach the AC circuit wires into an approved connector (not supplied) and insert into the removed knockout in the unit's junction box.
5. Make proper wiring connections between the AC supply and the unit's transformer: **ORANGE** - Line 277 Volts; **BLACK** - Line 120 Volts; **WHITE** - Neutral. **BROWN** is provided in place of **ORANGE** for special voltages (*Figure 3*). **Insulate unused wire!** Connect ground to supplied green ground wire in accordance with local codes. Reassemble all wire connections and connectors. **CAUTION! - Failure to insulate unused wire may result in a shock hazard or unsafe condition as well as equipment failure.**
6. Replace the unit junction box cover and secure cover screws.
7. Secure the housing in place according to the type of mounting be used (described above).
8. On the battery/circuit board assembly, connect the Red wire lead from the circuit board to the Positive battery terminal (+). Reconnect the AC wiring harness and reinstall the battery/circuit assembly. Secure with the internal bracket support screw.
9. Connect the cover/lamp assembly wiring harness together with the battery/circuit assembly. Mount in place and secure with the two (2) supplied cover plate screws.
10. Turn on AC line voltage supply and position lamp to provide best lighting distribution.

CAUTION

This equipment is furnished with a sophisticated low voltage battery dropout circuit to protect the battery from over-discharge after it's useful output has been used. Allow 24 hours recharge time after installation or power failure for full-load testing.

OPERATION

1. To Test, depress the TEST Switch. Charge indicator will go out and the DC lamp will come on.
2. Release the TEST Switch. DC lamp will be extinguished, and the charge indicator will come on.
3. A bright charge indicator indicates a high charge rate. After the battery has reached full charge, the indicator light will go out. Under normal operation the high charge indicator will turn off and on intermittently while the unit is in standby mode (regular/mains AC present) since the charge rate will vary in order to maintain an optimal battery charge.



MAINTENANCE

- Code requires that the equipment be tested every 30 days for 30 seconds, and that written records be maintained. Further, the equipment is to be tested once a year for the required duration as per Code. The battery is to be replaced or the equipment repaired whenever the equipment fails to operate as intended during the duration test. Written records of test results and any repairs made must be maintained. Manufacturer strongly recommends compliance with all Code requirements.
 - Clean lenses on a regular basis.
- NOTE: The servicing of any parts should be performed by qualified service personnel only. The use of replacement parts not furnished by manufacturer, may cause equipment failure and will void the warranty.

TROUBLE SHOOTING HINTS

EMERGENCY LAMP DOES NOT COME ON AT ALL

Pilot Light is out before test...

- Check AC supply - be sure unit has 24 hour AC supply (unswitched).
- AC supply is OK, and indicator light is out, replace PC Board Assembly.

Pilot Light is on before test...

- Either the output is shorted or overloaded, or the battery is not connected.
- Battery is severely discharged. Allow 24 hours for recharge and then retest. NOTE: This could be the result of a switched AC supply to the unit (which has been turned off at some point), a battery with a shorted cell, an old battery or a battery which has been discharged due to a long power outage and is not yet fully recharged.

EMERGENCY LAMP COMES ON DIM WHEN TEST BUTTON IS PRESSED

- Battery discharged - permit unit to charge for 24 hours and then retest. If lamps are still dim, check charger for proper function. If charger functions correctly, replace battery.

EMERGENCY LAMP COMES ON WHEN BATTERY IS FIRST CONNECTED

- Battery may be connected in reverse polarity. Check connections. Connect Positive lead to Positive battery terminal and Negative lead to Negative battery terminal. The lamps should then turn off and the charge indicator should light when AC power is applied.

EMERGENCY LAMP COMES ON DIM WHEN AC POWER IS ON

- Check supply voltage and AC connections. This emergency light is provided with brownout protection. The AC supply must be at least 80% of nominal (96V on a 120V line) for equipment to function normally. At lower voltages the emergency lamps will begin to glow dimly until the source voltage drops below the full "turn-on" point. NOTE: This condition may also be caused by incorrectly connecting a 120 Volt supply line to the 277-Volt transformer lead.

SAVE THESE INSTRUCTIONS