Installation Instructions





# IMPORTANT SAFEGUARDS READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

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

- DISCONNECT AC POWER SUPPLY BEFORE SERVICING.
- Installation and servicing of this equipment should be performed by qualified service personnel only.
- Ensure that the electrical wiring conforms to the National Electrical Code NEC® and local regulations if applicable.
- Do not mount near gas or electrical heaters.
- Do not use outdoors.
- Equipment should be mounted in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- · Any modification or use of non-original components will void the warranty and product liability.
- Do not use this equipment for other than intended use.

## SAVE THESE INSTRUCTIONS!

**Technical Support** ■ (623) 580-8943 ■ technical support@barronltg.com



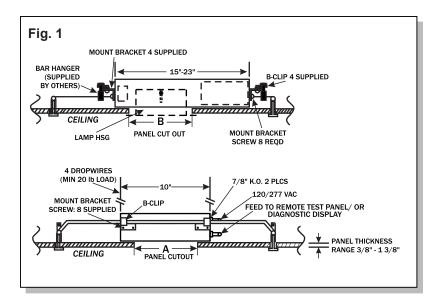
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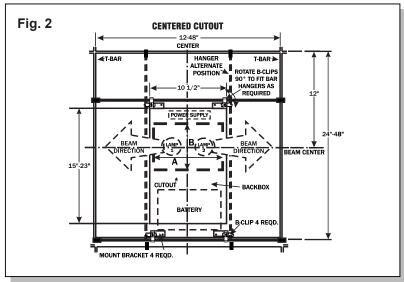


#### **TOP MOUNT**

- For T-Bar installations, rotate side bracket clips as required to fit T-Bar hangers. For masonry ceilings, attach side brackets to beam. (Fig. 1 and 2)
- 2. Make cutout in ceiling panel. Refer to Table 1.

Note: Backbox must be flush with top (inside) surface. In masonry ceilings, support with dropwires and framing required.





BACKBOX LENGTH 15 1/2"	Α	В
	7.	В
15 1/2"		
	9"	6"
23"	9"	6 5/8"



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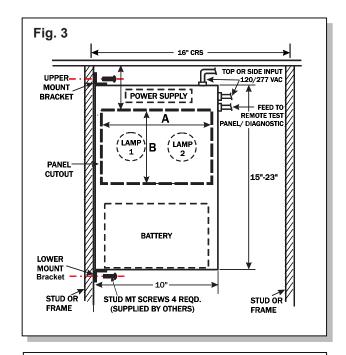
#### **WALL MOUNT**

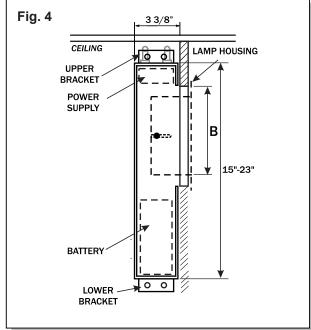
- 1. Backbox can mount to stud on either left or right side. Select side to mount and attach upper and lower mount brackets with (4) #6-32 sheet metal screws provided.
- 2. Refer to Table 1 to determine panel cutout size required. Place backbox into position with face flush or just below stud face. Mark mount bracket hole locations.

Note: Upper bracket holes should be a minimum of 3" from upper joist or ceiling panel.

3. Drill pilot holes in stud at marked locations, and mount backbox in position with (4) mount screws installed firmly (supplied by others).

Note: Both upper and lower mount brackets must be used. Fixture weight may be up to 50 lbs.









#### BATTERY & CONTROL BOARD ASSEMBLY: WALL OR CEILING MOUNT

- 1. Knock out the appropriate conduit locations and secure to backbox.
- 2. Electrical connections should be made in wireway box.

#### 120-277VAC

White - Common

Black - 120-277VAC

Green - Ground

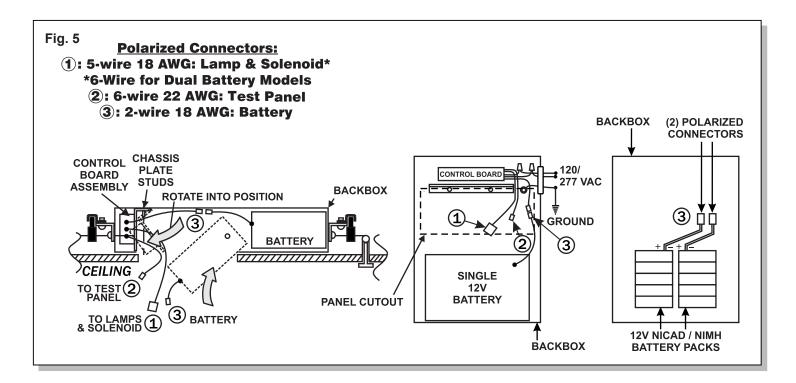
Position AC leads and wire nuts at side of control board clear of the output DC wiring.

Note: This device contains a microprocessor to control emergency lighting. Operation can be disrupted by EMI (electro-magnetic interference) emitted by certain types of lighting or other electrical equipment. Do not connect in the same circuit or share neutral wiring with frequency-changing dimming equipment used with HID fixtures.

3. For REMOTE TEST PANEL INSTALLATION, see Fig. 7. Install standard vertical 2" x 3" switchbox in location for remote test panel display. Refer to Fig 7 wiring table and note maximum lengths for wiring 24-18 AWG. Run five wires and match color-codes RED, GREEN, YELLOW, BROWN & BLACK, from fixture to Test Panel.

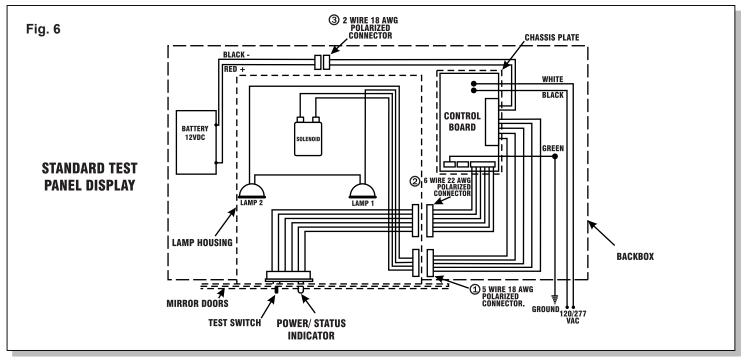
Note: Remote test panel wiring transmits digital data signals. In environments with possible EMI/RMI, this may require shielded cable such as Alpha Wire P/N 28-14/6. If the remote test panel wiring is not installed, disconnect the remote test wiring plug on the control board.

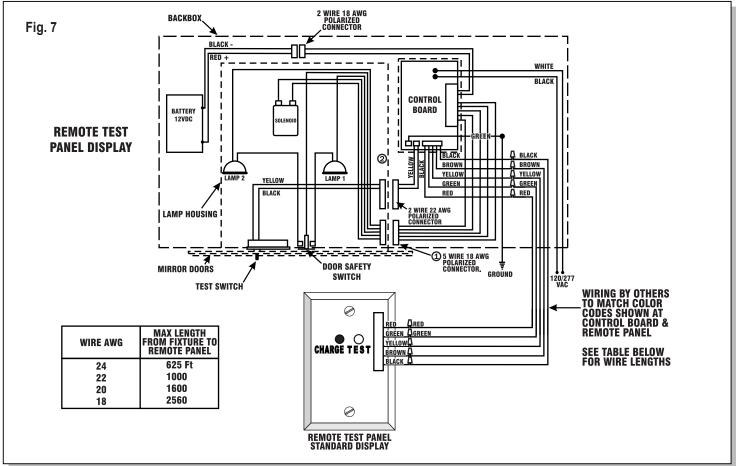
4. Install single or double battery into back box as shown. (Fig. 5)











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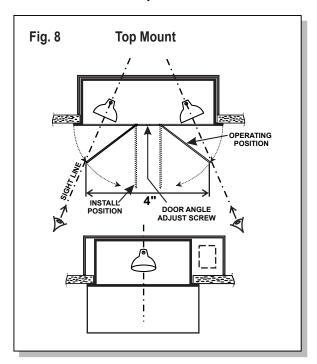


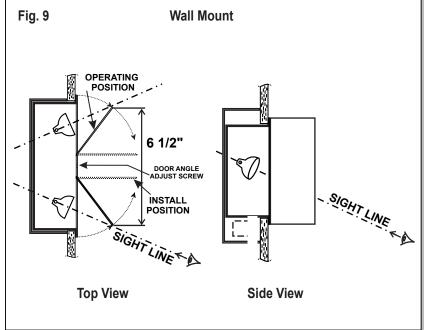
#### LAMP HOUSING ASSEMBLY

- 1. Open doors on lamp housing. Remove lamp boxes from inside enclosure.
- 2. Plug male connectors from control board assembly into female connectors in lamp housing. Check nylon spacers are in place on two #8-32 studs in back box. Remove two #8-32 flange nuts, then slide lamp housing over studs until flange is flat against ceiling or wall finishing panel. Press housing flange firmly on to panel surface and tighten two #8-32 flange nuts supplied on studs.
- 3. Insert MR16 lamps.
- 4. Strip off plastic protector film on mirror doors before use.
- 5. For correct light distribution & door operation, set door angle by adjusting stop screw using allen key supplied, rotate counter clockwise as follows:

Dimension between door edges when fully open: Wall Mount - 6 1/2" Ceiling Mounting - 3 7/8"

6. With AC power connected, operate test switch, holding switch down until lamps illuminate, then release. Doors will close after about 10 second cool-down delay.





#### **INITIAL BATTERY CHARGE PROCEDURE**

- 7. When AC power is ON the GREEN AC power indicator light should be ON indicating battery charging.
- 8. Press and hold the EMERGENCY TEST SWITCH. After a delay of up to 3 seconds, the lamps with illuminate and doors will open. Release the test button. A timer circuit will energize and after a delay of 5-10 seconds, the door will close.
- 9. Allow the battery to charge at least 12 hours prior to lamp setup procedure. Full charge will be reached after 24 hours. CAUTION: IF BATTERY IS CONNECTED TO CHARGER BOARD FOR A PROLONGED PERIOD WITHOUT AC POWER SUPPLIED DAMAGE TO THE BATTERY CAN OCCUR AND WARRANTY WILL BE VOIDED.





#### **TROUBLESHOOTING**

FAULT	CORRECTION	
GREEN AC Power Light OFF when AC power connected	Check AC power supply connections & circuit breaker.	
Lamps fail to operate when Test Switch depressed or AC power is off	Allow minimum of 12 hrs battery charge, then repeat. If fault remains, check lamps are fully inserted in sockets. If still unlit, check battery voltage at connector 3. If voltage is below 10V, replace battery.	
Doors fail to operate when Test Switch depressed or AC power is off	Manually open doors and confirm movement is free with no resistance. If movement is not free, check alignment of doors and hinges. Bent or buckled doors will require factory replacement. If movement is free, check terminal connectors on solenoid coil are in position and firm.	
Doors do not stay closed when manually operated	Close doors electrically by depressing Test Switch for 2-3 seconds. After normal delay, doors will close fully.	
Doors OPEN when AC power is ON	Check wire polarity connections to solenoid terminals as marked on frame: RED: POSITIVE, BLACK: NEGATIVE.	
Doors OPEN and lamps turn ON at random when AC power is ON	(1) Verify branch circuit GROUND connection is certified to local codes. (2) Check for EMI (Electromagnetic Interference) or RMI (Radio Magnetic Interference that may be generated near the fixtures or the branch circuit supply. See Page 4. If EMI/RMI is suspected, review the types of loads that may be included on the same branch circuit supplying the fixtures. Any devices emitting high EMI (such as dimmin controls) may require a separate branch circuit. If problem continues, contact factory for EMI filtering options.	
Doors fail to close after extended emergency operation	LAMP COOL DOWN: Following extended periods of emergency operation, particularly in ceiling installations where high ambient temperatures may exist, Halogen lamps may require a cool down period prior to doors closing. If doors do not close automatically after return of normal power, wait 15 minutes then momentarily de-energize and re-energize AC building power to reset and close the doors. This can be done by operating the fixture Push to Test Switch, or by cycling the branch AC circuit breaker.	





#### SELF-TEST/SELF-DIAGNOSTICS (G2)

#### **Operations**

When the unit is functioning correctly, with AC power supplied, the diagnostic status indicatorwill be GREEN.

#### **Self-Test Feature**

In accordance with National Fire Protection Association Life Safety Code 101 (NFPA 101), emergency lighting systems should be tested at least monthly to determine all components are operational and the equipment should comply with UL Standard 924. In addition, the Code requires that every 12 months the unit must be tested in full rated emergency condition (minimum 1 ½ hrs battery operation). The self-diagnostics and self-testing system installed in this product will automatically perform tests to satisfy these requirements.

After the battery and AC supply are connected, the system begins operation in the diagnostics mode. Every 60 seconds the following functions are automatically tested:

- · Battery connection
- Lamp connection
- · Charger transfer switch

#### **LED Indicator**

Every 28 days, the battery discharge rate is analyzed. Reduced battery capacity will be displayed (see table below).

Every 12 months, the system will automatically operate under full emergency operation for 90 minutes (or longer if battery capacity as specified). Any reduced battery capacity or other faults will be displayed (see table below).

Note: Life safety codes require that each annual test is recorded at the site in writing; record date of annual test and update every 12 months.

LED DISPLAY	STATUS
Green On	Normal Full Charge
Orange On	Normal Fast Recharge
Red Double Flash	Failed Battery
Green Flash	Failed Lamp (1 & 2)
Orange Flash	Failed Transfer
Red Flash	Failed Charger
Red/Green Flash	Annual Test Pass

#### **MANUAL TEST**

A manual test can be performed at any time by pressing the TEST SWITCH. The doors will open and the lamps will illuminate as long as the test switch is held down. Any reduction in battery capacity will be detected and the status indicator will indicate BATTERY FAILURE. After the Test Switch is released, the lamps will turn off and after a cool- down delay of about 5-10 seconds, the doors will close.

