

# INSTRUCTION MANUAL

## SERIES: TBR

### 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 MOUNT NEAR GAS OR ELECTRIC HEATERS.
4. EQUIPMENT SHOULD BE MOUNTED IN LOCATIONS AT HEIGHTS WHERE IT WILL NOT READILY BE SUBJECTED TO TAMPERING BY UNAUTHORIZED PERSONNEL.
5. THE USE OF ACCESSORY EQUIPMENT OR REPLACEMENT PARTS NOT RECOMMENDED BY LIGHTALARMS MAY CAUSE AN UNSAFE CONDITION.
6. DO NOT USE THIS EQUIPMENT FOR OTHER THAN ITS INTENDED USE.
7. DO NOT USE THIS EQUIPMENT IN OTHER THAN T-BAR CEILINGS.
8. WHEN THIS EQUIPMENT IS FURNISHED WITH HALOGEN CYCLE LAMPS THESE ADDITIONAL SAFEGUARDS APPLY. \*INDICATED BY SUFFIXES H AND LH.
  - A. **CAUTION:** TO AVOID SHATTERING DO NOT OPERATE LAMPS IN EXCESS OF RATED VOLTAGE. PROTECT LAMP AGAINST ABRASION AND SCRATCHES AND AGAINST MOISTURE WHEN LAMP IS OPERATING. DISPOSE OF LAMP WITH CARE.
  - B. HALOGEN CYCLE LAMPS OPERATE AT HIGH TEMPERATURE. DO NOT STORE OR PLACE FLAMMABLE MATERIALS NEAR LAMP.

## SAVE THESE INSTRUCTIONS



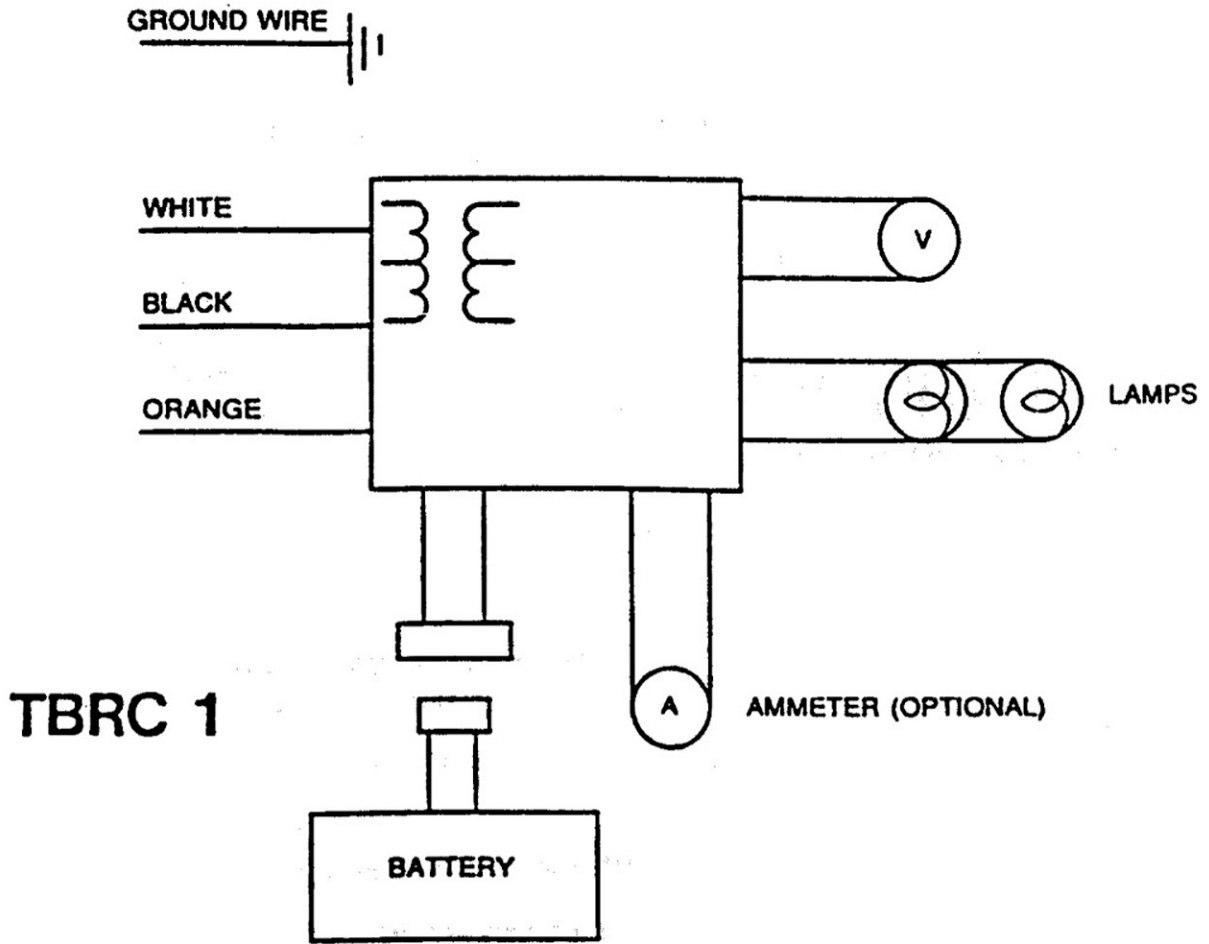
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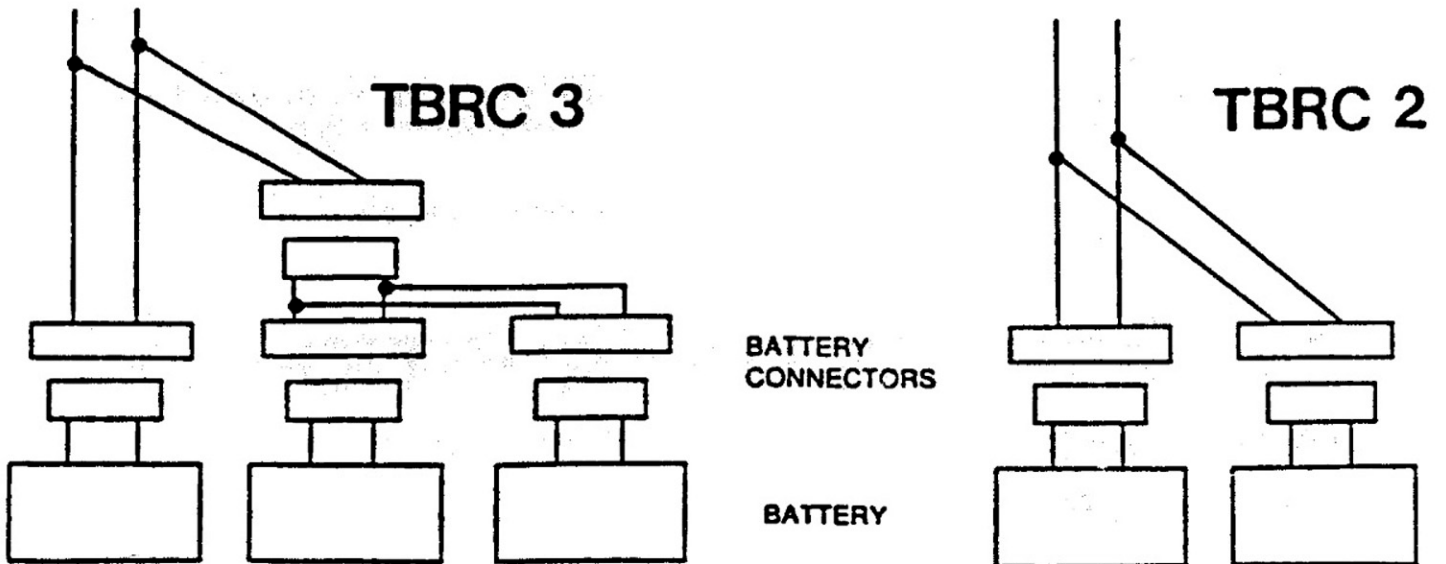
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# SCHEMATIC DIAGRAM



## BATTERY CONNECTIONS



# INSTALLATION INSTRUCTIONS

1. REMOVE COVER FROM UNIT BY REMOVING TWO SCREWS ON SIDE.
2. REMOVE CEILING TILE AT LOCATION DESIRED. CUT ONE TILE TO THE DIMENSION REQUIRED. UNIT MOUNTS ON TO THE TWO FOOT WIDTH OF THE T-BAR. LOCK IN PLACE BY USING APPROPRIATE CEILING CLIPS ( BY OTHERS ) . NOTE: ADDITIONAL SUPPORT ( SUCH AS FIXTURE CHAIN ) MAY BE REQUIRED BY LOCAL CODE.
3. EXTEND UNSWITCHED 24 HOUR AC SUPPLY OF RATED VOLTAGE TO EQUIPMENT. FOR 120 VOLT, CONNECT AC LEAD WIRE TO BLACK LEAD, OR FOR 277 VOLT, CONNECT AC LEAD WIRE TO ORANGE LEAD. CONNECT NEUTRAL WIRE TO WHITE LEAD. CONNECT GROUND TO GREEN. DO NOT ENERGIZE CIRCUIT AT THIS TIME.

**CAUTION:** CAP UNUSED WIRE - BLACK OR ORANGE. FAILURE TO CAP UNUSED WIRE WILL RESULT IN A UNSAFE CONDITION AND MAY CAUSE EQUIPMENT FAILURE.

NOTE: ROUTE GROUND WIRE AWAY FROM PRINTED CIRCUIT ASSEMBLY. FAILURE TO DO SO MAY CAUSE A SHORT ACROSS THE OUTPUT TERMINALS.

4. IF REMOTE FIXTURES ARE TO BE CONNECTED TO THIS EQUIPMENT, EXTEND CIRCUIT PER ARTICLES 700 AND 720 OF THE NEC.  
NOTE: THE MINIMUM WIRE GAUGE PERMITTED IS #12 COPPER OR EQUIVALENT. YOUR INSTALLATION MAY REQUIRE A LARGER SIZE WIRE. CONSULT VOLTAGE TABLES IN OUR GENERAL CATALOG TO CHOOSE PROPER WIRE SIZE.
5. CONNECT BATTERY BY PLUGGING IN CONNECTOR(S). LAMPS WILL NOT LIGHT AT THIS TIME.
6. REPLACE COVER.
7. ENERGIZE AC SUPPLY, CHARGE MONITOR LIGHT WILL ILLUMINATE.
8. OPERATE TEST SWITCH. EMERGENCY LAMPS WILL ILLUMINATE AND CHARGE INDICATOR WILL GO OUT. RELEASE TEST SWITCH. EMERGENCY LAMPS WILL GO OUT AND CHARGE INDICATOR WILL ILLUMINATE BRIGHTLY.
9. CUT OTHER CEILING TILE TO FIT AND REPLACE.

## OPERATION

1. To test, depress test switch, pilot light will go out and emergency lamps will illuminate.
2. Release test switch. Emergency lamps will go out and pilot light will be illuminated.
3. Automatic charge returns battery to a fully charge state.
4. Multi function charge monitor.  
The charge monitor pilot light serves these functions:
  - A. A bright light indicates that either the equipment is in high charge or that the battery is disconnected. If pilot light remains bright for more than 72 hours, check unit to be sure that battery is connected. If battery is connected, then the battery is either too old to accept a proper charge or defective or the charge is defective. If the battery terminal voltage is higher than 6.90 T - .05 volts then the charger is not functioning properly, battery or charger replacement is necessary.
  - B. At end of high charge pilot light will dim and blink rapidly indicating that the battery is reaching full charge.
  - C. At float (fully charged) the pilot light will be dim with an occasional blink.

## MAINTENANCE

The battery supplied with this equipment requires no maintenance. However, the unit should be tested in accordance with the Life Safety Code. Replace the battery whenever the connected lamps will not light up for 90 minutes. The battery supplied has a life expectancy of 5 to 7 years when installed in an ambient of 72° F. Clean lenses and replace lamps as required.

## CAUTION

This equipment is supplied with a "state of the art", low end battery voltage disconnect circuit to prevent over discharge of the battery. When the battery voltage reaches a preset low level, the lamps will automatically be disconnected from the battery. The emergency lamps may not light up when pressing the test switch immediately after installation or after a long duration power failure. Allow a minimum of 24 hrs. charge time before expecting a full 90 minute lighting of the emergency lamp(s).

## TESTING

Periodic Testing of Emergency Lighting Equipment. A functional test shall be conducted on every required emergency lighting system at 30-day intervals for a minimum of 30 seconds. An annual test shall be conducted for the 1 1/2 hour duration. Equipment shall be fully operational for the duration of the test. Written records of testing shall be kept by the owner for inspection by the authority having jurisdiction.

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