

# INSTRUCTION MANUAL

SERIES:

**ECN, ENN, E12CN, E12NN**

## IMPORTANT SAFEGUARDS

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED INCLUDING THE FOLLOWING:

### 1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS

2. INSTALL IN ACCORDANCE WITH THE REQUIREMENT OF THE CLASSIFICATION.
3. DO NOT MOUNT NEAR GAS OR ELECTRIC HEATERS.
4. EQUIPMENT SHOULD BE MOUNTED IN LOCATIONS AND AT HEIGHTS WHERE IT WILL NOT READILY BE SUBJECTED TO TAMPERING BY UNAUTHORIZED PERSONNEL.
5. THE USE OF ACCESSORY EQUIPMENT NOT RECOMMENDED BY THE MANUFACTURER MAY CAUSE AN UNSAFE CONDITION.
6. DO NOT USE THIS EQUIPMENT FOR OTHER THAN INTENDED USE.
7. WHEN THIS EQUIPMENT IS FURNISHED WITH THE FOLLOWING OPTIONAL SUFFIXES, THESE ADDITIONAL SAFEGUARDS APPLY. (H7551, 784 TO 790, LHM, LHK OR LHL).

A. **CAUTION:** HALOGEN CYCLE LAMPS ARE USED IN THIS EQUIPMENT. TO AVOID SHATTERING: DO NOT OPERATE LAMPS IN EXCESS OF RATED VOLTAGE, PROTECT LAMP AGAINST ABRASION AND SCRATCHES AND AGAINST LIQUIDS WHEN LAMP IS OPERATING. DISPOSE OF LAMP WITH CARE.

B. HALOGEN LAMPS OPERATE AT HIGH TEMPERATURE. DO NOT STORE OR PLACE FLAMMABLE MATERIALS NEAR LAMP.

**•THIS EQUIPMENT, FACTORY TESTED FOR PROPER FIELD OPERATION•**

## SAVE THESE INSTRUCTIONS



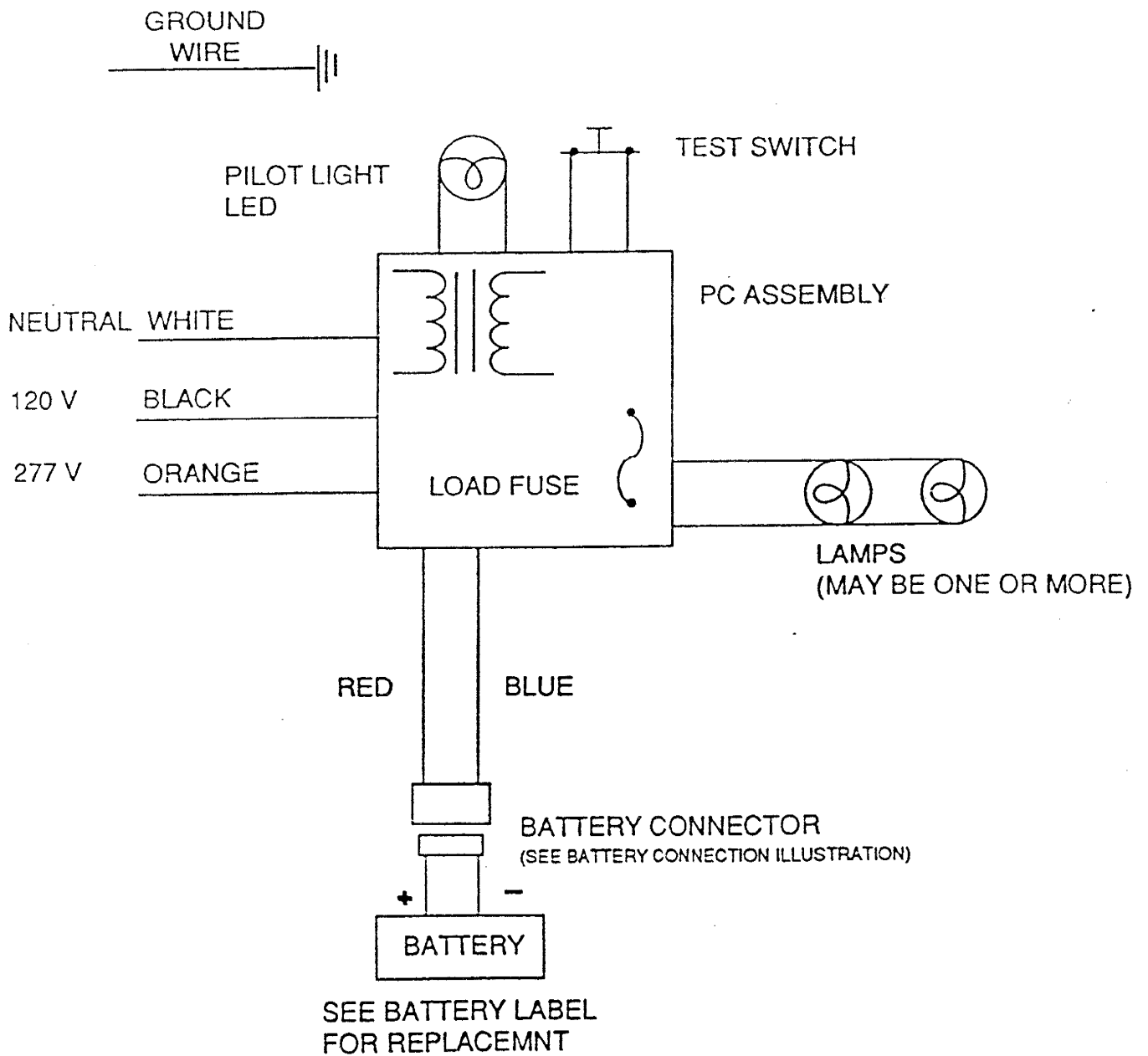
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[www.lightalarms.com](http://www.lightalarms.com)

11/03 750.0472 Rev. A

# SCHEMATIC DIAGRAM



# INSTALLATION INSTRUCTIONS

1. Open unit and install mounting feet to cabinet.
2. Mount unit securely in place.
3. Extend conduit through entry provided on side or bottom of enclosure.
4. Extend 24 hour AC supply of rated voltage to the equipment. For 277 volt, connector AC line to Orange lead. For 120 volt, connect AC lead wire to Black lead. Connect Neutral wire to WHITE leads. Connect ground to (Green) ground lead in accordance with local codes. Do not energize circuit at this time.
5. If remote fixtures are to be connected, extend DC wiring to unit in accordance with Articles 700 & 720 of the NEC and the classification of the equipment. Connect to terminals provided on the PC Board. **CAUTION: DO NOT EXCEED OUTPUT RATING OF THE EQUIPMENT.**  
NOTE: The minimum wire gage permitted is #12 copper or equivalent. Your installation may require a larger size wire. Consult voltage table in our general catalog, to choose proper wire size.
6. For battery connection see illustration.
7. Energize AC supply. Pilot light will illuminate.
8. Close Unit.

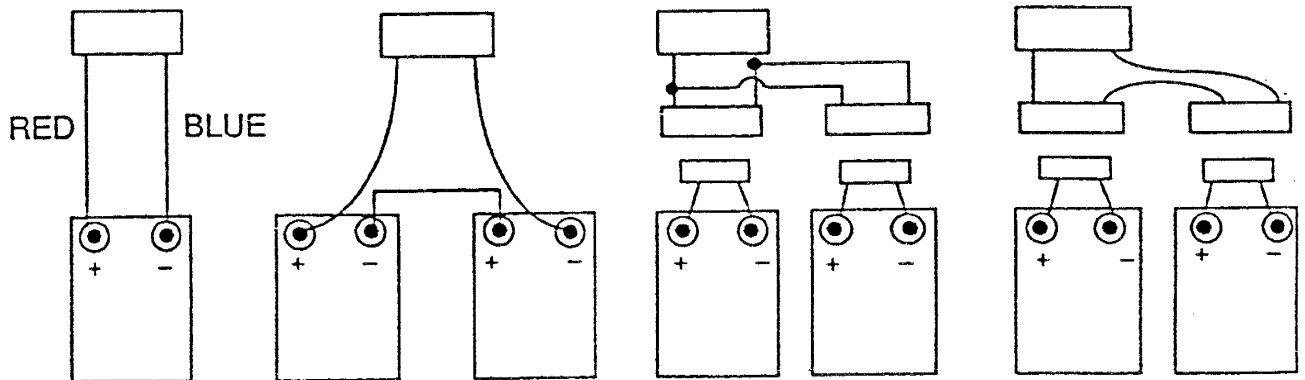
## BATTERY CONNECTION ILLUSTRATION

ECN50\*, ENN100\*, ENN25

E12CN100\*\*

ENN50

E12CN50, E12N50



### NOTE:

\* Install connector to battery observe polarity, connect **RED** lead to positive (**RED**) battery terminal, connect **BLUE** lead to negative (**BLACK**) battery terminal.

\*\* Install connector & jumper to battery observe polarity, connect **RED** lead to positive (**RED**) battery terminal of one battery. Connector **BLUE** lead to negative (**BLACK**) battery terminal of other battery. Connect **JUMPER** between 2 open ends of batteries.

◦ FOR REPLACEMENT PARTS CONTACT THE FACTORY ◦

## OPERATION

1. TO TEST, Operate test switch. Pilot lamp will go out and emergency lamps will illuminate.
2. Release test switch. Emergency lamps will go out and charge monitor light will illuminate.

NOTE: Charge monitor light will be bright on high charge and dim on float. Charge monitor will pulse (bright, dim) during transition from high charge to float.

3. Automatic charger will return battery to full charge and maintain battery fully charged.

NOTE: This equipment is supplied with a "state of the art", low 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. Allow a minimum of 24 hour charge time after installation on long duration power failure before attempting full load test.

## MAINTENANCE

The battery supplied with this equipment requires no maintenance. However, the unit should be tested in accordance with 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

1. Servicing of this equipment should be performed only by qualified service personnel.
2. Use only Lightalarms supplied replacement parts.
3. Replace lamps only with equal wattage lamps supplied with heads. Smaller wattage lamps will not meet the requirements of Life Safety Code and larger wattage lamps may cause an equipment failure.

## 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.

**•THIS EQUIPMENT•FACTORY TESTED FOR PROPER FIELD OPERATION•**

**•FOR REPLACEMENT PARTS CONTACT THE FACTORY•**