



# Pulse Type Circuitry Standard

Emergency-Lite Pulse Type circuitry utilizes the latest in solid state design to provide a technically advanced charger combined with features and functions that promote long reliable battery life and excellent unit performance.

The design of the Pulse Type circuit takes into account the long periods of inactivity typical of standby emergency equipment. Batteries are kept at full capacity by a pulse charge that allows the battery to cycle continuously. This greatly reduces the problem of grid corrosion and dramatically increases battery performance.

Emergency-Lite computer-tests all active components on the circuit boards during assembly. Critical functions such as brownout, low voltage disconnect, and charge voltage are individually monitored and adjusted at the factory.

## Standard Features

### 120/277 Volt Input

Capability to operate with 120 volt or 277 volt input.

### Fused Output Circuit for Units with Remote Capacity

Emergency units up to 54 watts have a single fused output circuit. Units over 54 watts have two fused output circuits supplied standard.

### Dual Diagnostic Indicator Lights

Dual indicators, red and amber continuously monitor the condition of the battery, charge circuit and presence of AC.

### Temperature Compensation

At high ambient temperatures, batteries need less charge voltage to recharge. Cold temperatures, batteries require a higher charge to maintain full capacity. The PulsePlus charger automatically adjusts the charge voltage to precisely what the batteries require at a given temperature.

### Sealed Relay

Sealed relay protects against environmental contaminants.

### Low Voltage Battery Disconnect

The lighting load is disconnected from the battery at 87.5% of nominal battery voltage. This prevents deep discharge damage to the battery.

### Brownout Protection

Emergency lamps energized when AC voltage falls to approx. 80% of nominal voltage, the level at which most fluorescent and HID fixtures extinguish.

### Battery Lockout

This labor saving feature prevents the battery from discharging when the unit is installed to a non-energized circuit. The battery is electronically locked out until the unit is energized with AC power. Contractors do not have to return to a job site to connect batteries when the building's main power is turned on. They can install the unit and connect the battery in one convenient operation.

### Reverse Polarity Protection

A polarized plug is used to connect the battery to the circuit board, thus preventing damage from occurring to the system.

### Current Limited Output

Prolongs battery life by preventing overheating and battery gassing during recharge.

## ADVANCED WITH LED DISPLAY

By incorporating our most popular standard diagnostics features with a powerful 8-bit microcontroller, our new Advanced Diagnostics system assures unsurpassed reliability in one, totally contained system. In the event of an equipment malfunction, the advanced diagnostics system produces an audible warning in the form of an intermittent beep and the LED indicator associated with the fault will illuminate continuously. When the problem is acknowledged by depressing the alarm/silence/test button, the alarm is silenced and the LED indicator changes to a flashing mode until the problem is corrected.

- Continually monitors system parameters
- ADNA non-audible version for visual service alarms only
- Incorporates state-of-the-art microcontroller technology
- Self-testing in accordance with NFPA101, Life Safety Code
- AD includes audio and visual service alarms
- Listed to UL 924 standards

## Features

- **Battery Failure:** (Red) Illuminates if the battery is shorted or battery voltage drops below preset value. Will also detect incorrect battery (ie. 6Vdc vs. 12Vdc)
- **Battery Disconnect:** (Red) Illuminates if the battery circuit is open.
- **Charger Failure:** (Red) Illuminates when charger is not functioning properly by monitoring the charger current.
- **Lamp Failure:** (Red) Illuminates when one or more emergency lamps fail. Also monitors remote lamps.
- **Service Alarm:** (Red) Illuminates when a fault is detected that requires a qualified service technician.
- **AC ON:** (Green) Lit when line voltage is present.
- **Charger ON:** (Amber) Illuminates when charger is recharging the battery.
- **Alarm ON:** Button is used to acknowledge and silence alarms. Also functions as a manual test switch to simulate a power failure.
- **Self Testing:** Unit tests itself every thirty days for one minute, thirty minutes on the sixth month and ninety minutes annually.
- **To Order for Compatible Unit:**
  - Add suffix -AD to model number
  - Add suffix -ADNA (for non-audible circuit) to model number.
- **Factory Programmed Features: Transfer Time Delay.** When activated, this feature will keep the emergency lights on for a period of 5, 10, or 15 minutes after the AC power is restored.