

Cooper APEL

Cooper APEL LED Emergency Light User Manual

Model: APEL

1. INTRODUCTION

1.1 Product Overview

The Cooper APEL LED Emergency Light is designed to provide reliable illumination during power outages. Featuring two long-lasting, fully adjustable LED heads, this unit ensures essential lighting in commercial and industrial environments. It includes a Ni-Cad battery for backup power, dual voltage compatibility (120/277V), and is suitable for wall or ceiling mounting in damp locations.

1.2 Safety Information

- **WARNING:** Risk of electric shock. Disconnect power before installation or servicing.
- Installation must be performed by a qualified electrician in accordance with national and local electrical codes.
- Do not use outdoors unless specifically rated for outdoor use. This product is listed for damp locations.
- Do not mount near gas or electric heaters.
- Ensure all connections are secure and properly insulated.
- Do not allow power supply cords to be pinched or damaged.
- The battery is a sealed Ni-Cad type. Do not attempt to open or dispose of in fire. Recycle or dispose of properly.

2. COMPONENTS

The Cooper APEL LED Emergency Light package includes the following:

- APEL LED Emergency Light Unit (with two adjustable LED heads)
- Ni-Cad Battery (pre-installed or separate for connection)
- Mounting Hardware (screws, anchors)
- Installation Instructions (this manual)



Figure 2.1: Front view of the Cooper APEL LED Emergency Light. The unit is white with two circular LED light heads protruding from the bottom left and right sides, each containing multiple small LED bulbs. The main housing is rectangular.

3. SETUP AND INSTALLATION

3.1 Pre-Installation

1. Ensure power to the circuit where the emergency light will be installed is turned OFF at the circuit breaker.
2. Unpack the unit and inspect for any damage.
3. Identify the mounting location (wall or ceiling) and ensure it is suitable for the unit's dimensions and weight. The unit is designed for universal J-box mounting.

3.2 Mounting Instructions

1. Remove the front cover of the emergency light unit to access the mounting holes and wiring compartment.
2. Position the unit against the mounting surface, aligning with the J-box or marking the drill points.
3. Drill pilot holes if necessary and secure the unit's backplate to the wall or ceiling using the provided mounting hardware.

3.3 Wiring

The APEL unit supports dual voltage 120V or 277V AC input.

1. Connect the AC supply wires to the appropriate terminals inside the unit. Refer to the wiring diagram located inside the unit's housing.
2. Connect the black wire to the 120V AC line, or the red wire to the 277V AC line. Connect the white wire to the neutral. Connect the green wire to ground.
3. Ensure all wire connections are tight and secure.

3.4 Battery Connection and Initial Charge

1. Connect the Ni-Cad battery pack to the circuit board connector. Ensure the polarity is correct.
2. Replace the front cover of the unit.
3. Restore AC power to the circuit. The CHARGE indicator light (usually a small LED on the unit's housing) should illuminate, indicating the battery is charging.
4. Allow the battery to charge for a minimum of 24 hours before performing the first test. This ensures the battery reaches its full capacity.

4. OPERATING INSTRUCTIONS

4.1 Automatic Operation

The Cooper APEL LED Emergency Light is designed for automatic operation. When AC power is present, the unit's battery charger maintains the battery at full charge. Upon an interruption of AC power, the unit automatically switches to battery backup mode, illuminating the LED heads. When AC power is restored, the unit automatically switches back to AC power, and the battery begins recharging.

4.2 Test Button

A test button is located on the unit's housing. Pressing and holding this button simulates a power failure, causing the LED heads to illuminate (if the battery is charged). Release the button to return to normal operation. This button is used for routine testing.

4.3 Adjusting LED Heads

The two LED heads are fully adjustable. Gently pivot and rotate each head to direct the light beam to the desired area for optimal emergency illumination.

5. MAINTENANCE

5.1 Routine Testing

Regular testing is crucial to ensure the emergency light functions correctly during a power outage. Follow these guidelines:

- **Monthly:** Press the test button for at least 30 seconds. The LED heads should illuminate.
- **Annually:** Disconnect AC power to the unit for 90 minutes. The LED heads should remain illuminated for the entire duration. Reconnect AC power after the test.

5.2 Battery Care and Replacement

The Ni-Cad battery is designed for long life. If the unit fails to operate for the required duration during a test, the battery may need replacement. Contact a qualified technician for battery replacement. Use only genuine Cooper replacement batteries.

5.3 Cleaning

Clean the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the unit is disconnected from power before cleaning.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
LED heads do not illuminate during power outage or test.	No AC power to unit; Battery not connected; Battery discharged or faulty; Unit malfunction.	Check circuit breaker; Ensure battery is connected; Allow 24-hour initial charge; Replace battery if necessary; Contact qualified technician.
LED heads are dim or do not stay on for required duration.	Battery not fully charged; Battery nearing end of life.	Allow full 24-hour charge; Replace battery.

Problem	Possible Cause	Solution
Charge indicator light is off.	No AC power; Faulty charging circuit.	Check AC power supply; Contact qualified technician.

7. SPECIFICATIONS

Feature	Detail
Brand	Cooper
Model	APEL
Light Source Type	LED
Number of Light Sources	8 (per unit, total 16 LEDs for 2 heads)
Voltage	120/277 Volts AC (Dual Voltage)
Wattage	5.4 watts
Battery Type	3.6V Ni-Cad (Nickel-Cadmium)
Battery Recharge Time	24 Hours
Housing Material	Thermoplastic (White)
Mounting Type	Wall or Ceiling (Surface Mount, Universal J-Box)
Dimensions (H x W x D)	Approx. 4.5" H x 9" W x 2.3" D
Indoor/Outdoor Usage	Listed for Damp Locations
Certifications	ETL Rated, UL949 NFP 101 Compliant
Item Weight	Approx. 2.4 lbs (19.2 lbs for 8 units)
Brightness	450 lumen

Note: Item weight of 19.2 pounds refers to the total weight for a quantity of 8 units. Individual unit weight is approximate.

8. WARRANTY AND SUPPORT

8.1 Warranty Information

Cooper products are manufactured to high standards and are backed by a limited warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Cooper website. Keep your purchase receipt as proof of purchase.

8.2 Customer Support

For technical assistance, troubleshooting, or replacement parts, please contact Cooper customer support. You can typically find contact information on the product packaging, the official Cooper website, or through your point of purchase.

Online resources may include FAQs, additional manuals, and product registration.

Note: Always provide the model number (APEL) and purchase date when contacting support.