



Phone: 605.542.4444 concealite.com

Installation Instructions

Central Battery Units

Please Save These Instructions



Series:CB

Model: CB1, CB2, CB3



Important Safeguards

Read and Follow All Safety Instructions

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

NOT SELF TESTING PER ANSI/NFPA 101

- Do not use outdoors.
- Do not let power supply cords touch hot surfaces.
- Do not mount near gas or electric heaters.
- Use caution when servicing batteries. Battery acid can cause burns to skin and eyes. If acid is spilled on skin or in eyes, flush acid with fresh water and contact a physician immediately.
- Equipment should be mounted securely 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.
- CAUTION: When this equipment is furnished with a halogen cycle lamp, these additional safeguards apply:
 - a. To avoid shattering, do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating. Dispose of lamps with care.
 - b. Halogen cycle lamps operate at a high temperature. Do not store or place flammable materials near lamps.
- The AC voltage rating of this equipment is specified on the product label. Do not connect equipment to any other voltage.
- Do not use this equipment for other than its intended purpose.
- Servicing of this equipment should be performed by qualified service personnel.

CB 1

Depth 4.0" (10.16 cm) x
Width 13.5" (34.29 cm) x
Height 8.7" (22.10 cm)

CB2 & CB 3

Depth 6.75" (17.15 cm) x
Width 18" (45.72 cm) x
Height 8.7" (22.10 cm)

Index

- 1 Important Safeguards
- 2 Installation
- 3 Operation and Maintenance
- 4 Wiring Installation CB 1
- 5 Wiring Installation CB 2 & CB 3
- 6 Optional XC Remote Wiring

Limited Warranty

All Concealite fixtures are tested and are guaranteed to be free from defective materials and workmanship for a period of three years from date of shipment under normal operations and proper use. Correction of all defects shall be by replacement or repair (at our discretion) and shall constitute fulfillment of all manufacturer's obligations. We will not allow any charge for labor, materials, etc. that does not have our written approval before the work is begun. Damage incurring in handling or in transit are not covered by this guarantee. Any other warranty, expressed or implied, is hereby void. Modifications to the product or failure to follow installation instructions will void the warranty.

CENTRAL BATTERY UNIT INSTALLATION INSTRUCTIONS



WARNING: to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials.

1. Extend an unswitched, 24 hour AC supply of rated voltage to the area in which the unit will be installed. DO NOT energize the circuit at this time.
2. Remove front cover and any packing material inside the unit housing that may have been used for shipping purposes.
3. Remove the unit battery (if installed) and the appropriate mounting pattern knockouts in the unit housing to accommodate the electrical box screws. Also remove the round center wire pass knockout in the mounting pattern and the two keyhole mounting knockouts in the upper corners on the rear of the housing. If electrical box is not being used for utility connection, wire utility directly through knockout on the side of the unit housing using approved connector (installer supplied).
4. Secure housing to the mounting surface through the keyhole knockouts using mounting hardware (installer supplied) sized appropriately to hold the unit weight (see **SPECIFICATIONS**). If accessory brackets or shelves are being utilized, follow the instructions provided with those devices to assure a safe installation. Attach the unit housing to the electrical box (if used).
5. Wire unit as follows: All standard models are furnished with a dual voltage 120/277VAC field selectable input. Connect unit to utility power using approved wiring or connector (see Wiring Diagram on back of sheet). For 120V supply connect the utility hot wire to the black lead, for 277V supply, connect the utility hot wire to the orange lead. Connect neutral utility wire to the white lead. Connect green chassis ground wire provided in accordance with local codes. **DO NOT energize circuit at this time.**
CAUTION: Insulate the unused black or orange transformer lead. Failure to insulate the unused wire will cause an unsafe condition.
6. If remote fixtures are to be connected to the equipment extend the remote circuit in accordance with Article 700 and 720 of the National Electric Code (NEC) and connect to the white and blue fused output leads from the PC board. **CAUTION:** the minimum wire size required by the NEC is 12 ga. copper or equivalent. Your installation may require larger size wire to ensure that the voltage drop does not exceed 5%. Do not exceed the total output rating of the equipment including any equipment mounted heads.
NOTE: Larger capacity units are provided with a fused output circuit. Total load should not exceed the rated circuit load.
7. Re-install the unit battery and secure with mounting strap provided. Make battery connections to charger as follows:
Standard Lead Acid Battery Connection: Connect the battery (refer to **WIRING DIAGRAM**). Connect the red lead from the PC board charger assembly to the positive (+) battery terminal. Connect the black lead from the PC board charger assembly to the negative (-) battery terminal. **CAUTION:** Observe polarity. Failure to connect the battery properly will result in equipment failure and an unsafe condition. **Optional Nickel Cadmium Battery Connection:** Units provided with optional nickel cadmium batteries are supplied with polarized Molex connectors for making battery connections. Simply plug the mating Molex connectors together to make battery connection.
NOTE: The emergency lamps **WILL NOT** illuminate at this time.
8. Energize the AC supply. The **CHARGE** indicator will illuminate.
9. Re-install the front cover onto the unit.

OPERATION

1. To test the equipment, depress the TEST switch(es). The CHARGE indicators will extinguish and the emergency lamps will illuminate. [NOTE: One test switch on the CB 1; Two separate test switches on the CB 2 & CB 3].
 2. Release the TEST switch(es). The emergency lamps will extinguish and the CHARGE indicator will illuminate.
 3. The charger circuit will automatically activate and return the battery in a fully charged state.
- [NOTE: Allow the batteries to charge for a minimum of 24 hours after installation or after a power failure before conducting a 90-minute test (see TESTING)]. CAUTION: This equipment is furnished with a sophisticated transfer switch that will automatically disconnect the emergency lamps from the battery if the battery has been discharged to its low voltage limit or the output circuit is overloaded or experiences a short circuit.

MAINTENANCE

CAUTION: Always turn off AC power to the equipment before attempting any service procedure. Servicing should be performed only by a qualified technician. Use only MANUFACTURER supplied or RECOMMENDED replacement parts.

1. BATTERY: The battery supplied in this equipment requires no maintenance. However, it should be tested periodically (see TESTING) and replaced when it no longer operates the connected fixtures for the full duration of a 90 minute test. The battery supplied in this equipment will provide its full rated life expectancy when used in a temperature range of 68 to 86°F (20 to 30°C).
2. OTHER: Clean lenses and replace lamps, as required.

TESTING

1. Allow the battery to charge for 24 hours prior to performing any test. After the charging cycle, test emergency operation by either removing utility power or pressing the unit test switch. Emergency lamps will illuminate.
2. Following the return of utility power or the release of the test switch, the emergency lamps will extinguish and the unit charger will automatically return the battery to a fully charged state.

ROUTINE TEST CYCLES

Paragraph 31-1.3.7 of NFPA 101-1985, Life Safety Code requires that all emergency lighting equipment be functionally tested every 30 days for a minimum of 30 seconds and tested once a year for a full 90 minute discharge cycle. Written records of monthly and annual testing are to be kept for examination by the authority having jurisdiction.

Exception: 30 day testing and written test records are not required on units equipped with the self-diagnostic (SD) option.

TROUBLESHOOTING

1. The emergency lamps do not operate:
 - a. If the charge indicator light is off: Check that the AC supply circuit breaker is on.
 - b. If the charge indicator light is on:
 - Check the battery for proper connection.
 - If remote lighting heads are connected to equipment, turn off AC supply and disconnect output circuit wires to remote fixtures. Turn on AC supply and depress the test switch. If equipment mounted lighting heads are now on, check remote output circuit for short circuit or overload condition and correct as needed. Re-install output circuit wires and restore AC power.
 - If problem persists, Replace battery.
2. Emergency lamps are dim:
 - a. Incorrect voltage lamps installed in lighting heads.
 - b. Remote circuit wire conductor size is inadequate causing excessive voltage drop. Refer to INSTALLATION (Step 6.)

Limited Warranty

All Concealite fixtures are tested and are guaranteed to be free from defective materials and workmanship for a period of three years from date of shipment under normal operations and proper use. Correction of all defects shall be by replacement or repair (at our discretion) and shall constitute fulfillment of all manufacturer's obligations. We will not allow any charge for labor, materials, etc. that does not have our written approval before the work is begun. Damage incurring in handling or in transit are not covered by this guarantee. Any other warranty, expressed or implied, is hereby void. Modifications to the product, or failure to follow installation instructions, will void the warranty.

CENTRAL BATTERY UNIT (CB 1) WIRING INSTRUCTIONS

WARNING: to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials.

Total Remote Fixture Load (Watts)

Model #	Output Volts	Watts for 90 Min
CB1	12VDC	100

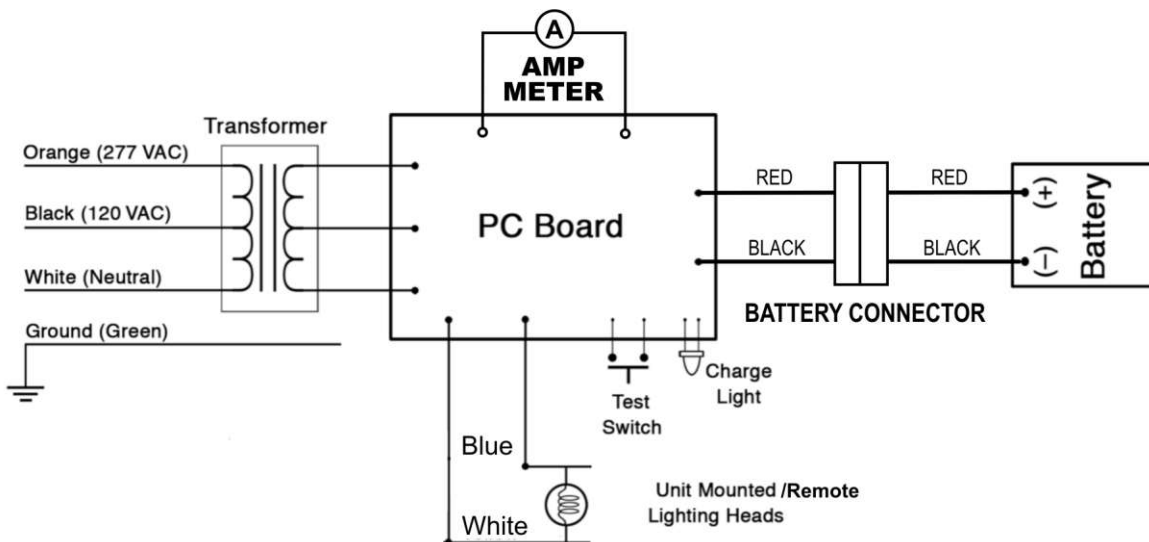
NOTE: Connections for standard single lead-acid battery shown. Refer to SPECIFICATIONS for connection of multiple batteries. Units provided with optional nickel cadmium batteries are preconfigured and supplied with mating Molex connectors between the PC Board and Battery for making connection.



RECYCLING INFORMATION

All steel, aluminum and thermoplastic parts are recyclable. **NOTICE:** Emergency units contain rechargeable batteries which must be recycled or disposed of properly.

All Central Battery Units Model CB 1 have this operating system.



CENTRAL BATTERY UNIT (CB 2 & CB 3) WIRING INSTRUCTIONS



WARNING: to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials.

Total Remote Fixture Load (Watts)

Model #	Output Volts	Watts for 90 Min
CB2	12VDC	200
CB3	12VDC	300

CAUTION: The CB 2 and CB 3 Central Battery Units have two sets of outputs for remote emergency 12V DC power. Max load per set of outputs is 100 watts for the CB 2 and 150 watts for the CB 3. **DO NOT COMBINE LOADS TOGETHER ON JUST ONE OUTPUT.**

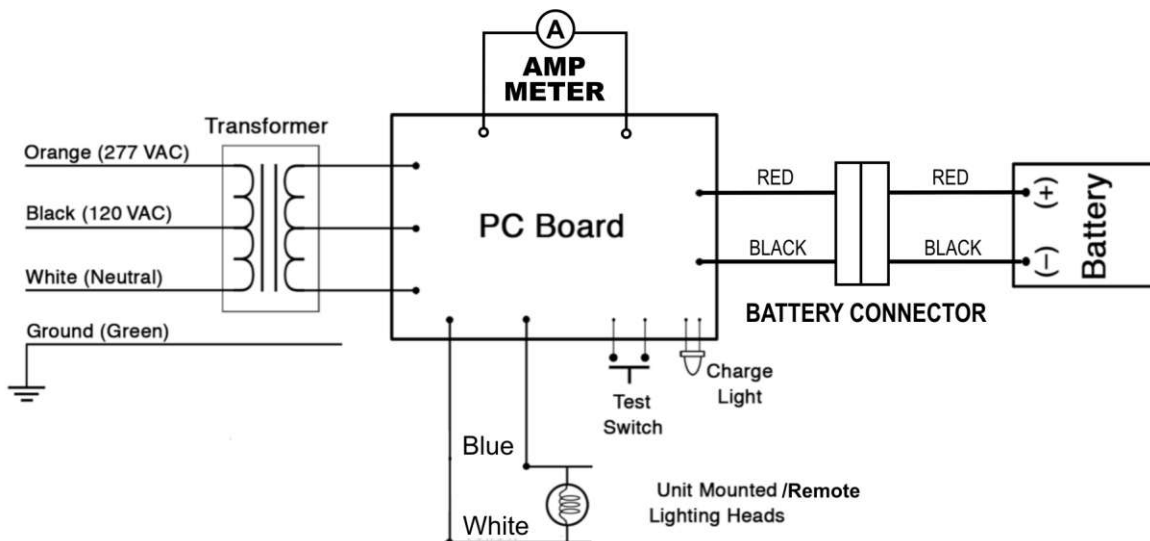
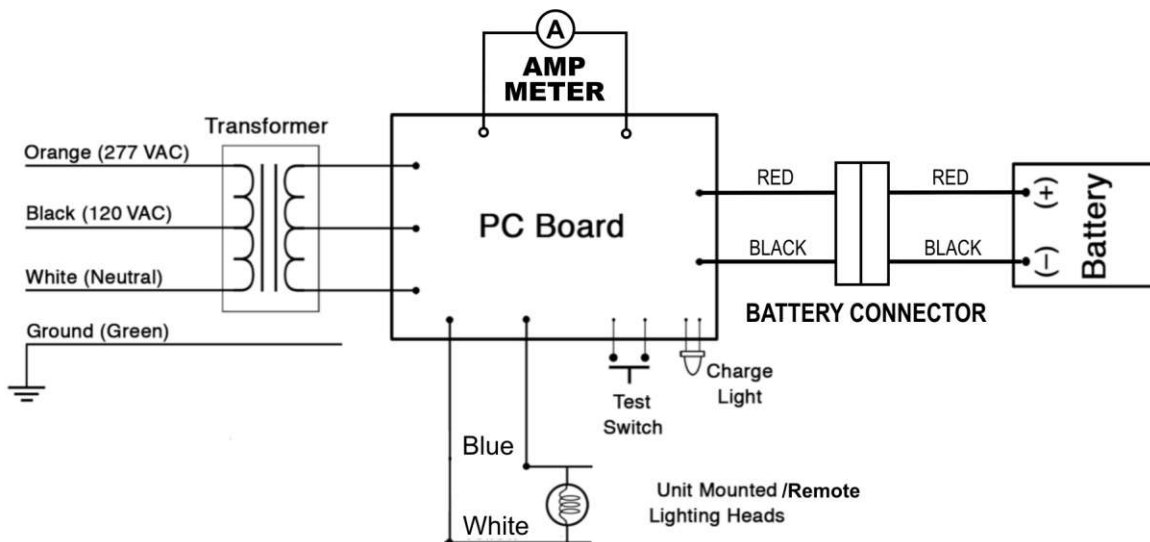
NOTE: Connections for standard single lead-acid battery shown. Refer to SPECIFICATIONS for connection of multiple batteries. Units provided with optional nickel cadmium batteries are preconfigured and supplied with mating Molex connectors between the PC Board and Battery for making connection.



RECYCLING INFORMATION

All steel, aluminum and thermoplastic parts are recyclable. **NOTICE:** Emergency units contain rechargeable batteries which must be recycled or disposed of properly.

All Central Battery Units Models CB 2 & CB 3 have two complete sets of this operating system.



CENTRAL BATTERY UNIT WIRING INSTRUCTIONS



WARNING: to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials.

Total Remote Fixture Load (Watts)

Model #	Output Volts	Watts for 90 Min
CB1	12VDC	100
CB2	12VDC	200
CB3	12VDC	300

NOTE: Connections for standard single lead-acid battery shown. Refer to SPECIFICATIONS for connection of multiple batteries. Units provided with optional nickel cadmium batteries are pre-configured and supplied with mating Molex connectors between the PC Board and Battery for making connection.



RECYCLING INFORMATION

All steel, aluminum and thermoplastic parts are recyclable. **NOTICE:** Emergency units contain rechargeable batteries which must be recycled or disposed of properly.

OPTIONAL: XC Remote Concealed Fixture 12V DC Output Motorized Door Power System

