

# INSTALLATION INSTRUCTIONS FOR NSCEU Combo Series



## IMPORTANT SAFEGUARDS:

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

## IMPORTANT:

The battery in this unit may not be fully charged. After electricity is connected to the unit for at least 24 hours, then normal operation of this unit should take effect. To check, press the “TEST” button. The EXIT sign should stay illuminated and the LED lamps on the unit should turn on.

In accordance with NFPA 101, your emergency lighting system must be tested monthly for a minimum of 30 seconds and annually for 90 minutes. Refer to your local codes for any additional requirements that may apply.

When re-lamping, use only LED lamps specified in the fixture. Using other lamp types may result in damage or unsafe conditions.

## READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Equipment should be mounted in locations and at heights where it will not be subject to tampering by unauthorized personnel.
3. Do not mount near gas or electric heaters.
4. Cap unused wires with enclosed wire nuts or other approved method.
5. Do not use this equipment for anything other than its intended use.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Disconnect AC power before servicing and installation.
8. Consult local building code for approved wiring and installation.
9. Use caution when servicing batteries.
10. Any service on this equipment should be performed by qualified personnel only.
11. Make sure wire terminations are secure and leads are properly tucked in appropriate wire channels.

## Wall Mount Installation

1. De-energize the circuit at the junction box where the exit sign is to be installed.
2. Remove the exit sign stencil and set aside. Remove the hardware and LED Lamp heads and set aside. Remove and discard the plastic canopy and mounting plate.
3. Drill out the appropriate mounting pattern and the wire pass hole in the EXIT back plate to fit the junction box being used.
4. Feed the red, black and white wires through the center.
5. Remove side mounting hole plug on right side. Knockout lamp head mounting hole on left side with flathead screwdriver.
6. Feed blue and yellow lamp head wire through side lamp head mounting hole(Fig 1). Attach first lamp head to housing by aligning tabs on lamp head assembly to lamp head mounting slots on frame of housing(Fig 2). Gently push lamp head down toward bottom of housing to lock into place. An audible click should be heard. Repeat to install remaining lamp head.
7. Feed lamp head wires in appropriate wire channel and connect lamp head leads to the exit sign lamp board.
8. Reference wiring diagram and make proper electrical connections at the junction box in the metal housing.
9. Fasten back plate to junction box cover.
10. Connect battery only after continuous AC power can be provided to the unit.
11. Remove proper Chevron(s) as required.
12. Secure face plate to housing.

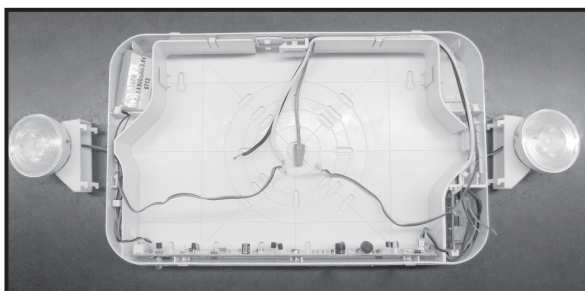


Figure 1

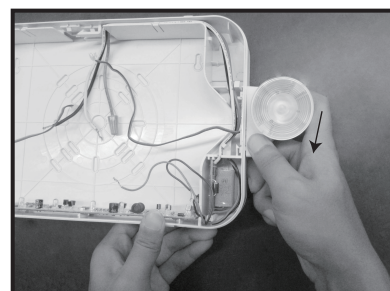


Figure 2

**SAVE THESE INSTALLATION INSTRUCTIONS**

## Ceiling Mount Installation

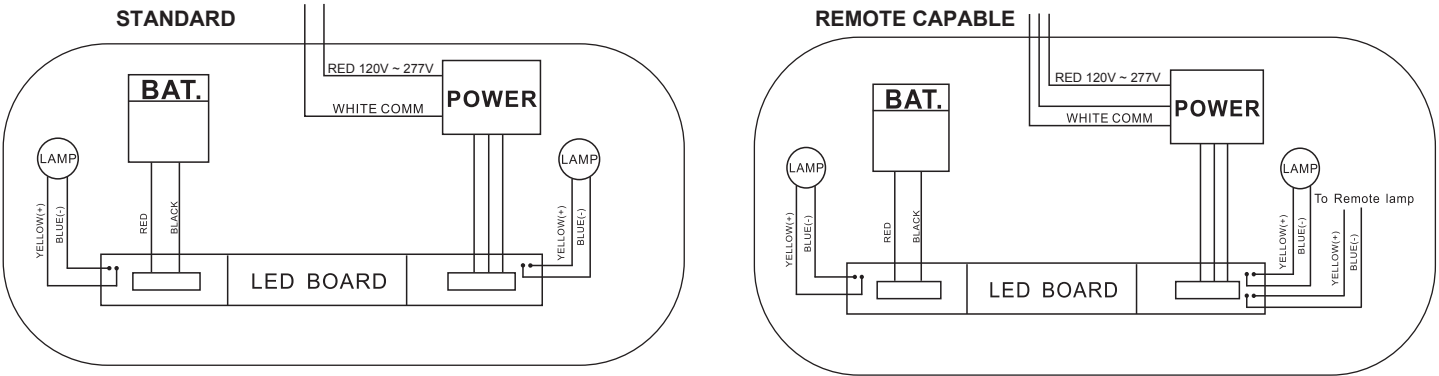
1. De-energize the circuit at the junction box where the exit sign is to be installed.
2. Remove the exit sign stencil and set aside.
3. Remove the canopy kit, hardware pack, mounting plate and LED lamp heads from inside the EXIT and set aside.
4. Remove the mounting hole plug on the top of the frame.
5. Place the canopy nose through the mounting hole until the side of the frame touches the canopy. Lock the frame onto the canopy by sliding the frame in a direction parallel to the canopy length toward the narrow end of the mounting hole. Slide the frame until both snaps engage the canopy nose preventing any motion back out of the hole.
6. Feed the red, black and white wires through center of mounting canopy hole.
7. Remove side mounting hole on right side. Knockout lamp head mounting hole on left side with flathead screwdriver.
8. Feed blue and yellow lamp head wire through side lamp head mounting hole(Fig 1). Attach first lamp head to housing by aligning tabs on lamp head assembly to lamp head mounting slots on frame of housing(Fig 2). Gently push lamp head down toward bottom of housing to lock into place. An audible click should be heard. Repeat to install remaining lamp head.
9. Feed lamp head wires in appropriate wire channel and connect lamp head leads to the exit sign lamp board.
10. Reference wiring diagram and make proper electrical connections at the junction box in the metal housing.
11. Secure the EXIT canopy to the steel mounting plate using the screws provided and fasten to junction box.
12. Connect battery only after continuous AC power can be provided to the unit.
13. Remove proper Chevron(s) as required.
14. Secure face plate(s) to housing.

## End Mount Installation

1. De-energize the circuit at the junction box where the exit sign is to be installed.
2. Remove the exit sign stencil and set aside.
3. Remove the canopy kit, hardware pack, mounting plate and LED lamp heads from inside the EXIT and set aside.
4. Remove the mounting hole plug on the right side of the frame.
5. Place the canopy nose through the mounting hole until the side of the frame touches the canopy. Lock the frame onto the canopy by sliding the frame in a direction parallel to the canopy length toward the narrow end of the mounting hole. Slide the frame until both snaps engage the canopy nose preventing any motion back out of the hole.
6. Feed the red, black and white wires through the center of mounting canopy hole.
7. Knockout lamp head mounting hole on left side with flathead screwdriver.  
Note: For single face, left side end mount, remove and switch back plate and face plate before installing the side mounted LED lamp head.
8. Feed blue and yellow lamp head wire through side lamp head mounting hole(Fig 1). Attach lamp head to housing by aligning tabs on lamp head assembly to lamp head mounting slots on frame of housing(Fig 2). Gently push lamp head down toward bottom of housing to lock into place. An audible click should be heard.
9. Feed lamp head wires in appropriate wire channel and connect lamp head leads to the exit sign lamp board.
10. Reference wiring diagram and make proper electrical connections at the junction box in the metal housing.
11. Secure the EXIT canopy to the steel mounting plate using the screws provided and fasten to junction box.
12. Connect battery only after continuous AC power can be provided to the unit.
13. Remove proper Chevron(s) as required.
14. Secure face plate(s) to housing.

## Wiring Diagrams

**NOTE:** Unused input lead must be properly insulated with wire nut or other approved method.



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# INSTALLATION INSTRUCTIONS

## INSTRUCTIONS FOR SELF-DIAGNOSTIC TEST:

Once the unit is properly installed according to the installation instruction sheet and AC power supplied, the dual color LED indicator will come ON and the self-diagnostic test function will automatically initiate. Unit will switch into a load calibrating mode for 5-10 seconds to record the connected load. Connected lampheads and EXIT sign (when applicable) will turn ON during this step. After the load calibration has been completed, the LED indicator will show either a RED/GREEN flashing (battery hi-charge mode) OR STEADY GREEN (battery trickle charge mode) status. FLASHING GREEN indicates that the unit is in manual or self-test mode. RED (steady or flashing) indicates a service alert. Refer to the SERVICE INDICATION chart below for more details. The LED indicator would be OFF when the unit is in emergency mode.

During a manually-initiated test OR monthly/annual self-diagnostic test, if the calibrated load is not detected, then the LED indicator will flash THREE or FOUR times, indicating a load failure error. This error code can be reset by pressing and holding the test switch for at least (6) seconds, allowing the unit to calibrate the load again.

## SELF-DIAGNOSTIC SERVICE

The self-diagnostic function is factory preset and performs the following:

- Monitoring of battery, charger, LED board (when applicable) and lamp heads (when applicable).
- Self-testing and a 30-second or longer discharge once every 30 days, after AC power has been supplied for a minimum of 24 hours.
- Self-testing and a 30-minute or longer discharge once every 180 days, after AC power has been supplied for a minimum of 24 hours.
- Self-testing and a 90-minute or longer discharge once every 365 days, after AC power has been supplied for a minimum of 24 hours.

## SERVICE INDICATION

LED Indicator	Status
One Flash Red	Replace Electronics
Two Flash Red	Replace Battery
Three Flash Red	Replace LED board (when applicable)
Four Flash Red	Replace lamp head (when applicable)
Five Flash Red	Replace Remote lamp (when applicable)
Steady Red	Connect Battery
Solid Green	Trickle Charge mode
Flashing Green	In test mode
Red/Green Flashing	High Charge mode

## MANUAL TESTING

The unit also provides for manual testing by pressing the test button in a specific pattern

Action	Reaction & LED Indication
Push test button thrice (within 2 secs)	90-minute discharge test; FLASHING Green
Push test button twice (within 2 secs)	30-minute discharge test; FLASHING Green twice
Push test button once (within 2 secs)	30-second discharge test; FLASHING Green thrice
Push test button and hold for 3 seconds (in test mode)	Self-discharge test is canceled; If this is done, then a manual test of the same duration is recommended to be done to ensure compliance
Push test button and hold for 6 seconds (in error mode)	System is reset; Unit will recalibrate the load connected

## WARNING:

- Ensure that power is OFF before making any electrical connections
- Unused wires must be capped off using enclosed wire nuts