VEX-WPC Series

Installation Instructions

IMPORTANT SAFEGUARDS
READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

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

- **DISCONNECT AC POWER SUPPLY BEFORE SERVICING.**
- Installation and servicing of this equipment should be performed by qualified service personnel only.
- Ensure that the electrical wiring conforms to the National Electrical Code NEC® and local regulations, if applicable.
- Do not mount near gas or electrical heaters.
- Do not let power cords touch hot surfaces.
- Equipment should be mounted 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.
- Any modification or use of non-original components will void the warranty and product liability.
- Do not use this equipment for other than intended use.

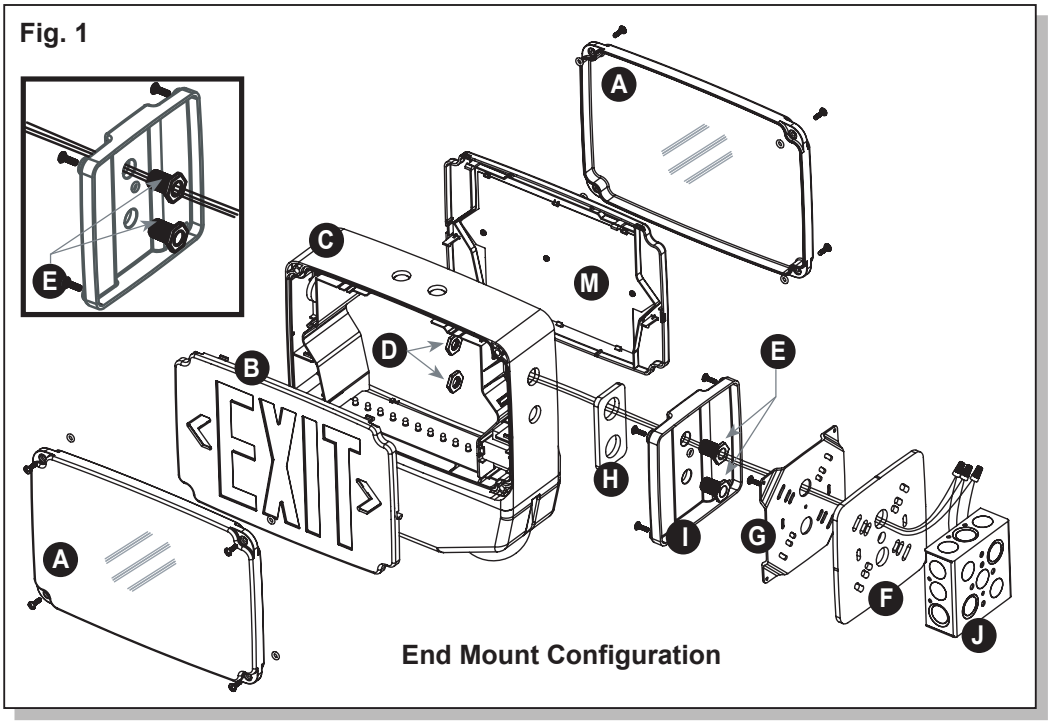
SAVE THESE INSTRUCTIONS!

Technical Support ■ (623) 580-8943 ■ technicalsupport@barronltg.com

Wall Mount (Single Face Only)

1. Remove both lenses (A) by loosening the screws and set aside.
2. Remove the EXIT stencil (B) from the frame (C) and set aside.
3. Punch out from the backplate (M) the center knockout and any desired knockouts for mounting to the J-box (J).
4. Remove the protective backing from the self-adhesive J-box gasket (F) and adhere to the backplate (M).
5. Route wires through the center hole of the backplate (M).
6. Make electrical connections; see **Electrical Connections** section.
7. Secure the backplate (M) to the J-box (J) using appropriate hardware provided by others.
8. Connect the battery to the PCB (see wiring diagrams in the **Electrical Connections** section).
9. Remove proper chevron(s) from the faceplate (B), as required. When removing chevrons, it may be helpful to remove the color diffuser panel to allow easier access to the chevrons. If removing color diffuser panel, it is important to remember to reinstall the diffuser panel once chevron(s) have been removed.
10. Resecure the faceplate (B) onto the fixture.
11. Resecure the lens (A) onto the fixture.
12. Apply continuous AC power. The fixture can be tested by holding the magnet (provided) near the LED indicator (where it is marked as “Magnetic Test Switch”).
13. The magnet needs to be retained by the building owner (or maintenance personnel) to perform monthly/annual inspections.

Fig. 1



End Mount Configuration

Ceiling or End Mount

1. Remove the lens (A) by loosening the screws and set aside.
2. Remove the EXIT stencil (B) from the frame (C) and set aside.
3. Drill 3/4” holes through the desired (2) knockouts located on the top or sides of the frame (C) for ceiling or end mounting, respectively.
4. Remove the protective backing from the self-adhesive canopy gasket (H) and adhere to the canopy (I), as shown.
5. Insert the (2) threaded bushings (E) into the holes in the canopy (I), as shown.
6. Route wires out through a nut (D), the hole in the frame (C), and through the threaded bushing (E) in the canopy (I).
7. Guide the threaded bushings (E) into the two holes in the frame (C) and secure using the nuts (D).
8. Remove the protective backing from the self-adhesive J-box gasket (F) and adhere to the J-box mounting plate (G) in the orientation shown.
9. Secure the J-box mounting plate (G) to the J-box (J) such that the J-box gasket (F) is in between.
10. Make electrical connections; see **Electrical Connections** section.
11. Secure the canopy (I) to the J-box mounting plate (G), ensuring that the canopy makes a proper seal against the J-box gasket (F).
12. Connect the battery to the PCB.
13. Remove proper chevron(s) from the faceplate(s) (B), as required. When removing chevrons, it may be helpful to remove the color diffuser panel to allow easier access to the chevrons. If removing color diffuser panel, it is important to remember to reinstall the diffuser panel once chevron(s) have been removed.
14. Resecure the faceplate (B) onto the fixture.
15. Resecure the lenses (A) onto the fixture.
16. Apply continuous AC power. The fixture can be tested by holding the magnet (provided) near the LED indicator (where it is marked as “Magnetic Test Switch”).
17. The magnet needs to be retained by the building owner (or maintenance personnel) to perform monthly/annual inspections.

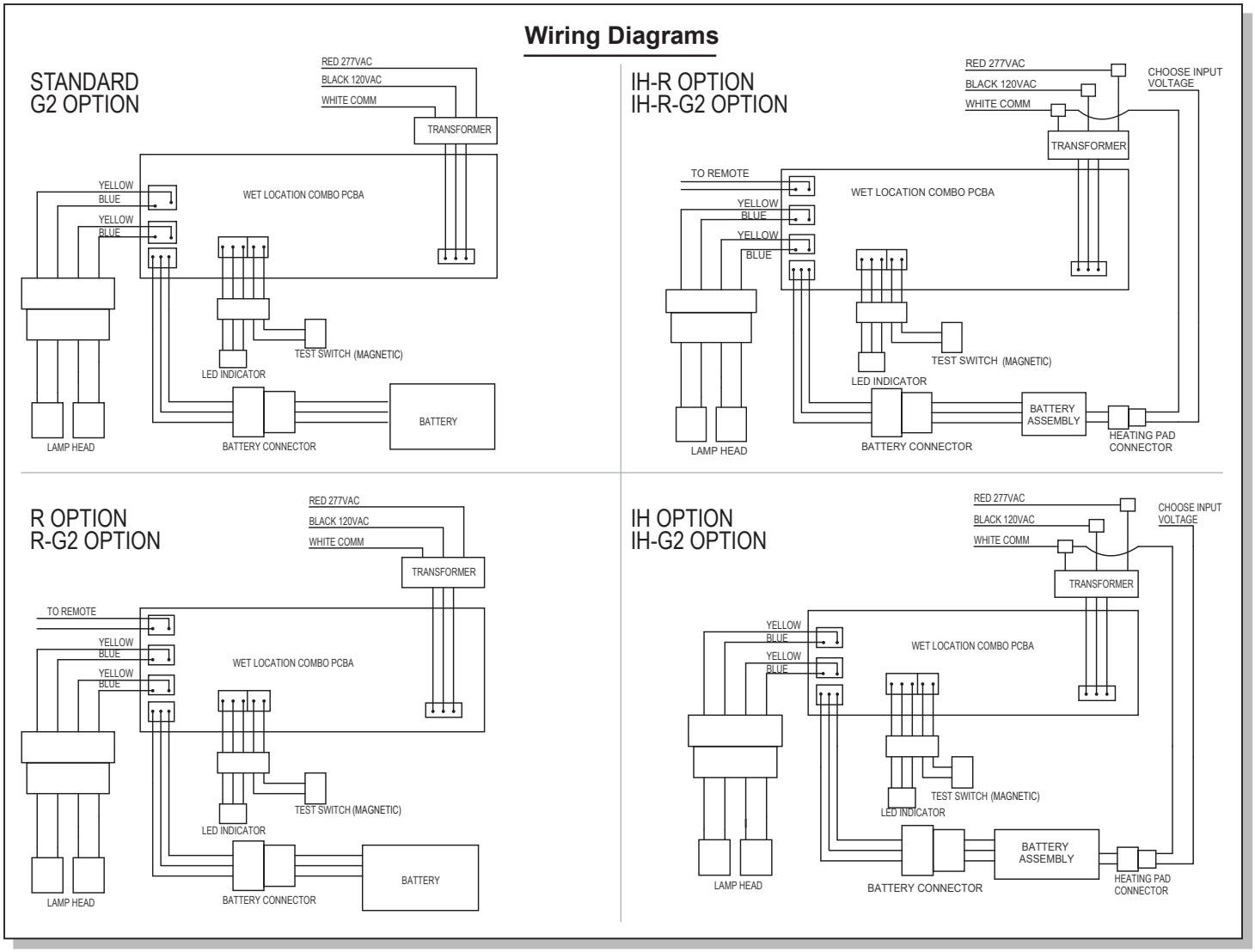
Electrical Connections

All electrical connections should be made inside the J-box. Make electrical connections as follows:

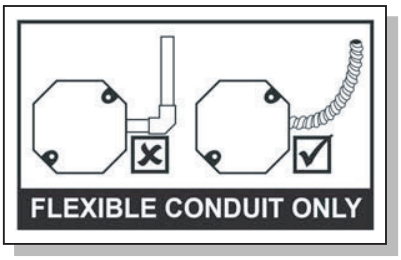
120VAC	277VAC
White - Common	White - Common
Black - 120VAC	Red - 277VAC

Note: Cap unused leads to prevent shorting.
Keep all wires out of the way of the EXIT faceplate(s) to prevent shadowing.

Wiring Diagrams



Conduit Entry



1. Drill a 3/4” hole through the desired conduit entry knock out located on the top or side of the frame of the sign.

2. Route the AC input conduit into the fixture.

3. All conduit connections must use UL LISTED and SUITABLE FOR WET LOCATION parts.

4. To finish installation of the fixture, reference the **Wall Mount** or **Ceiling or End Mount** sections.

Operation

1. Apply AC power to the unit. The LED indicator will be green.

2. After the battery has been left to charge for 2 hours, test the unit using the magnetic test switch. The LED indicator turns OFF, the LED board stays ON and the lamp heads should turn ON at this time.

3. When the magnet is removed, the LED indicator turns back to green, the LED board stays ON and the lamp heads should turn OFF at this time.

Maintenance

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

BATTERY: The battery supplied requires no maintenance. However, it should be tested periodically and replaced when it no longer operates the connected sign for the duration of a 30 second or 90 minute test. The battery supplied in this sign has a life expectancy of 5 years when used in a normal ambient temperature of 72°F.

NFPA 101 (Life Safety Code) requires that all emergency lighting equipment be functionally tested every 30 days for a minimum of 30 seconds and tested annually for a full 90 minute duration. Written records of the testing are to be kept for examination by the authority having jurisdiction.

Self-Test/Self-Diagnostics (G2)

Operation

The purpose of this option is to provide Self-testing and Self-diagnostic capabilities to the emergency unit. At predetermined intervals, the emergency unit will automatically switch into battery mode. Refer to the **Self-Test Feature** section below for timing details. The emergency unit will also perform various Self-diagnostic tests to determine if there are any faults. Visual signaling will alert maintenance personnel to a fault of the emergency unit electronics, battery, and/or battery charger. The circuitry continuously monitors the operating condition of the emergency unit and battery charging circuit/battery supply voltage. Refer to the **LED Indicator** section below for fault reporting details.

Self-Test Feature

- The emergency unit will automatically switch to battery mode every 30 days for a period of 30 seconds.
- The emergency unit will automatically switch to battery mode every 180 days for a period of 30 minutes.
- The emergency unit will automatically switch to battery mode every 365 days for a period of 90 minutes.

LED Indicator

Once the unit is properly installed according to the installation instruction sheet and AC power is supplied, the unit will turn on and the Self-diagnostic test function will initiate. After this, the bi-color LED will indicate the status of the unit.

- A steady green LED indicates that normal AC power is being supplied to the emergency unit and the battery is charged.
- A blinking green LED indicates that the unit is in battery mode. Refer to the **Test Button Feature** section below for manual test details.
- A blinking red/green LED indicates that the battery is charging.
- A red LED indicates whenever the Self-diagnostic system has detected a fault condition. Refer to the chart below to determine the fault condition:

Red LED Indication	Unit Fault	Corrective Action
Steady	Battery is Disconnected	Check Battery Connection
Blinking 1 Time	Battery Recharge Failure	Check Battery Then Consult Factory
Blinking 2 Times	Battery Failure	Check Battery Then Consult Factory
Blinking 3 Times	LED Failure	Check Battery Then Consult Factory
Blinking 4 Times	Lamp Failure	Check Battery Then Consult Factory
Blinking 5 Times	Remote Lamp Failure	Check Battery Then Consult Factory

Test Button Feature

MANUAL TEST – Pressing the test button will switch the unit into battery mode for a set amount of time. The desired length of the test is determined by the number of times the test button is pressed.

- Pressing the test button once will switch the unit into battery mode for a period of 30 seconds. The LED indicator will continuously blink green 1 time.
- Pressing the test button 2 times within 2 seconds will switch the unit into battery mode for a period of 30 minutes. The LED indicator will continuously blink green 2 times.
- Pressing the test button 3 times within 2 seconds will switch the unit into battery mode for a period of 90 minutes. The LED indicator will continuously blink green 3 times.

Note: The magnet, after touching the unit, needs to be pulled at least 3cm away from the unit for the switch to activate.

RESET – Pressing and holding the test button for 3-5 seconds will cancel a test. Pressing and holding the test button for 6 seconds will reset the LED to a steady green. If multiple faults are present, it may be necessary to repeat this procedure for each remaining fault indicated by the blinking red LED.

Use in accordance with local building codes.