

**LED LIGHTING EMERGENCY DRIVER INSTRUCTION MANUAL
VA-ED-LV Series**

IMPORTANT SAFEGUARDS

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. CAUTION - To avoid electrical shock, do not connect the two white cables until installation is complete and AC power is supplied to the unit, as this will energize the battery.
2. CAUTION - This fixture provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both normal and emergency sources by turning off the A.C. branch circuit and by disconnecting the white cables on the emergency driver.
3. CAUTION - This is a sealed unit. Components are not replaceable. Replace the entire unit when necessary.
4. CAUTION - Installation and servicing should be performed by qualified personnel only. Please disconnect before opening.
5. Do not use outdoors. For use with grounded, UL Listed, damp location rated, indoor fixtures. The drivers are intended for ordinary locations and for permanent installation into one or more listed luminaires. This equipment has not been investigated for use in an air-handling fixture. Do not use in heated air outlets or hazardous locations.
6. The VA-ED-LV series requires an unswitched A.C. power source of 100-277 volts. Properly cap the unused A.C. lead.
7. Do not mount near gas or electric heaters.
8. The VA-ED-LV series will supply up to 54VDC output at the individual rated specification for 90 minutes. See individual units for output specifications.
9. When the red indicator light flashes or off, the emergency power supply is abnormal.
10. For use in 0°C minimum, 50°C maximum ambient temperatures.
11. The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition.
12. Install in accordance with the National Electrical Code and local regulations.
13. Lighting fixture manufacturers, electricians, and end users need to ensure product system compatibility before final installation.
14. The driver and test switch should be mounted in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel. The indicator light should be mounted where it can be seen.
15. Use only for emergency backup applications. Do not use this equipment in ways other than its intended use.
16. The additional weight of the emergency driver should be considered before installation.
17. The emergency driver must be paired with appropriate luminaires.
DLC website: <https://www.designlights.org/search>
Energy star fixture website: <https://www.energy.gov/productfinder/productcertification/light-fixtures/results>
18. CAUTION - This emergency driver is only for use with LED fixtures. The voltage of the LED module should be 16-24V. This emergency driver pack is suitable for a fixture power rating that is higher than or equal to rating of emergency battery pack.
19. While the VA-ED-LV series meets the requirements of UL 924, it is ultimately the responsibility of the designer / specifier to assure the installed system delivers code-compliant path of egress illumination in accordance with Federal, State or local municipal requirements.

Luminaire maximum mounting height can be found as follows:

1. Log onto the DesignLights Consortium website (www.designlights.org).
2. Click on "Search the DLC Qualified Product List" button on the DLC homepage.
3. In the search by keyword, text window enter: luminaire manufacturer name and model name.
4. Click on "Search" tab to open the "Qualified Products List".
5. Determine per "Reported Date" efficacy shown in lumens per watt(lm/W)

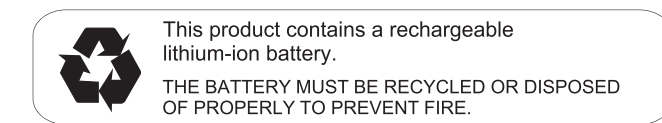
Multiply lumens per watt by emergency driver rated output.

Refer to table below for the wattage of the specific model to be used in the luminaires.

Models	Output power (Constant)
VA-ED-LV-06-XX	8Watts
VA-ED-LV-16-XX	16Watts
VA-ED-LV-25-XX	25Watts

For example: Model VA-ED-LV-16-XX, (lm/W) x 16W = Minimum emergency lumen output of the fixture

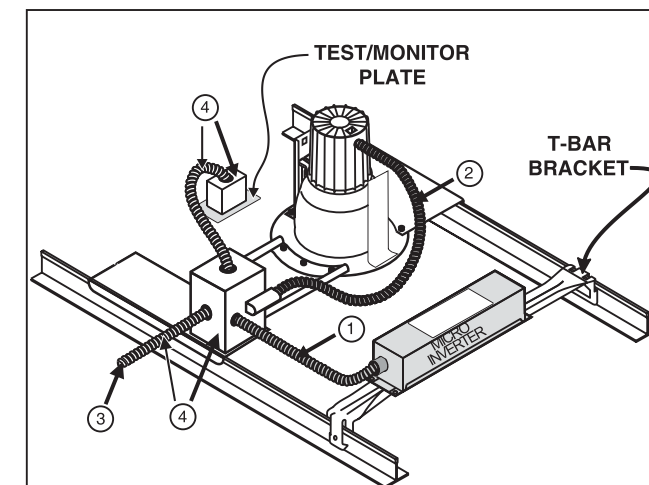
SAVE THESE INSTRUCTIONS



INSTALLATION INSTRUCTIONS

CAUTION: Before installing, make sure the A.C. power is off and that the VA-ED-LV series white cables are disconnected

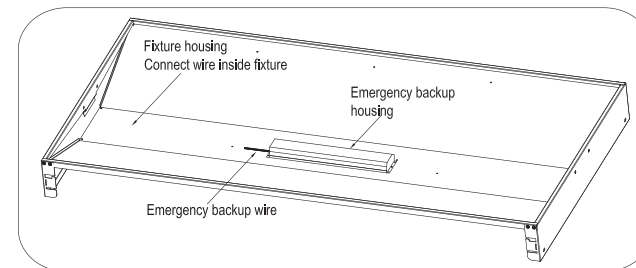
Mounting method 1: Emergency backup alongside the fixture with flexible conduit.



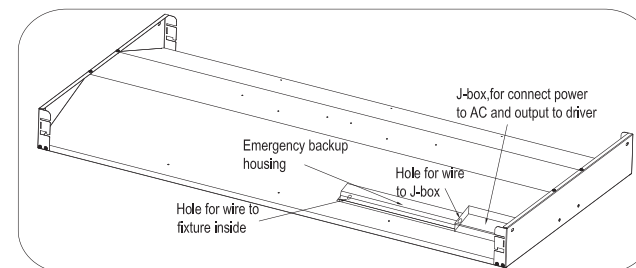
The T-Bar mounting bracket assembly (OPTIONAL) is sold separately and is available from the factory as an accessory kit (VA-TBM). Call your local distributor or the factory for complete information.

- 1) Flexible conduit (supplied) to connect AC driver wires
- 2) Existing conduit to run existing wires to lamp holder
- 3) AC line in
- 4) Conduit and junction box (not supplied)

Mounting method 2: Emergency backup inside the fixture without flexible conduit.



Mounting method 3: Emergency backup outside lighting with or without flexible conduit.



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INSTALLING THE EMERGENCY DRIVER

NOTE:

>The VA-ED-LV series will be located between the AC power source and the AC driver as shown in wiring diagram section of instructions.

- >The VA-ED-LV series may be installed in close proximity to the fixture or remote from the fixture.
- >The maximum remote distance using 16AWG wire is 50ft.
- >The AC power is fed through the VA-ED-LV series.

STEP 1: DISCONNECT AC POWER FROM FIXTURE

- >Disconnect all power sources from the lighting fixture and ensure they are locked out during installation or maintenance.
- >Disconnect power leads from the AC driver.
- >Select a suitable location for the VA-ED-LV series and install such that its output leads can connect to the output leads of the AC driver.
- >See mounting method, for typical installation and select appropriate mounting method.

STEP 2: WIRING THE VA-ED-LV SERIES

- >Use the wiring diagram for reference.
- >Connect the AC power source leads to the input of the VA-ED-LV series
- >Connect the output leads of the VA-ED-LV series to the LED module.
- >Wire the AC driver with the lamp in accordance with manufacturer installation instructions.
- >Make sure all connections are in accordance with the National Electrical Code, and any local regulations.

>In a readily visible location, attach a label "CAUTION - This Unit Has More than one power connection point. To reduce the risk of electric shock, disconnect both the branch circuit-breakers or fuses and the VA-ED-LV white connectors before servicing."

STEP 3: MOUNTING THE TEST ACCESSORY

- >Connect both the gray and red wire on the test switch / indicator light to the same colored wires on the VA-ED-LV Series
- >The indicator light and test switch can be mounted into fixture.

STEP 4: ENERGIZE THE VA-ED-LV SERIES & APPLY POWER

- >After installation is complete, join the white connectors to energize the battery and apply AC power.
- >Power should now be connected to both the AC driver and the VA-ED-LV series and the red indicator light should illuminate indicating the battery is charging.
- >A short-term discharge test may be performed after the VA-ED-LV series has been charging for 1 hour. Charge for 24 hours before conducting a long term discharge test.

OPERATION

During normal operation, AC power is supplied to the AC driver through the VA-ED-LV series and is also used to charge the battery. The VA-ED-LV series AC input is rated for 100-277V and the device will automatically test and select the appropriate output voltage during emergency mode.

When AC power fails, the VA-ED-LV series automatically switches to emergency mode, keeping the load illuminated for a minimum of 90 minutes. When AC power is restored, the VA-ED-LV series returns to charging mode. The VA-ED-LV series consists of a low-battery voltage disconnect which is reset when AC power is restored.

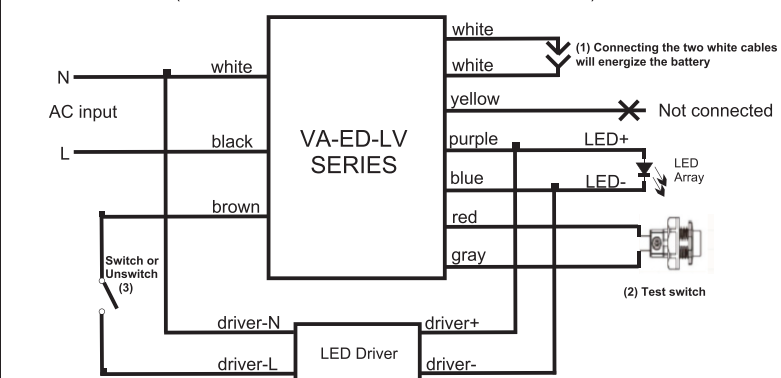
MAINTENANCE

Although no routine maintenance is required to keep the VA-ED-LV series functional, it should be checked periodically to ensure that it is working correctly. The following schedule is recommended:

1. Visually inspect the indicator light monthly. It should be illuminated.
2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds.
3. Conduct a 90-minute discharge test once a year. The lamp should operate for at least 90 minutes.
4. When the red indicator flashes or is turned off, the emergency power supply is abnormal.
5. If the emergency power supply is abnormal after initial installation, please charge for 10 minutes and then check again.

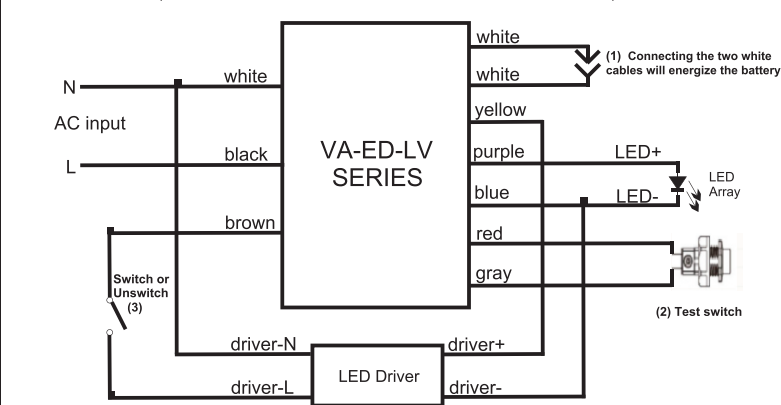
WIRING DIAGRAM 1

(When the driver of the LED luminaire is over 70W)



WIRING DIAGRAM 2

(When the driver of the LED luminaire is less than 70W)



Note: Make sure the necessary branch circuit wiring is available. An unswitched source of power is required.