

The Korlite logo is displayed on a blue, wavy banner. The word "Korlite" is written in a white, sans-serif font, with a green swoosh underline that starts under the 'K' and ends under the 'e'.

High Output Voltage  
**170 Vdc**

# EMAXFY SERIES

## Emergency Backup Battery



Suitable for Linear High Bay Light / Troffer Light

# EMAXFY SERIES

## Emergency Backup Battery

### KEY FEATURES

- Listed to UL924 and CSA C22.2
- Listed to CEC Title20 Compliance
- Self-test and Malfunction Indication Function
- Over Temperature / Charge / Discharge Protection for Battery
- Constant Output Power
- IP44 Rating



### PRODUCT DESCRIPTION

|                 |                                     |                |           |
|-----------------|-------------------------------------|----------------|-----------|
| ✓ Driver Type   | Constant Emergency Power LED Driver | ✓ Service Life | 800 Times |
| ✓ Safe Standard | UL 924 and CSA C22.2                | ✓ Output Power | 25W / 40W |
| ✓ Warranty      | 5 Years                             |                |           |

### SELF-TEST

The integrated self-diagnostic circuitry will automatically implement monthly 30-second and annual 90-minute tests to verify proper emergency capability complying per life safety code requirements. NFPA 101, life safety code outlines the schedule below:

- Monthly Test: During AC mode, the system conducts a 30-second self-discharge test of the emergency LED driver every 30 days and automatically restore normal charge after 30-second discharge.
- Annual Test: During AC mode, the system conducts a 90-minute self-discharge test of the emergency LED driver every 365 days and automatically restore normal charge after full discharge.

\* EMA15FY/EMA25FY-170 for LED fixture less than or equal to 320W

(If the fixture power dimmed to the minimum, its power must be less than the output power of emergency backup battery.)

# ELECTRICAL SPECIFICATIONS

## Input

**Input Voltage:** 100-347Vac

**Frequency:** 50/60Hz

**Power Factor:** > 0.9, @120~277Vac Input

**Max. Power:** 12W

**Inrush Current:** 3A

**Max input current:** 50mA @120V, 35mA @240V, and 30mA @277V

## Output

**Output current:**

| 25W                         | 40W                         |
|-----------------------------|-----------------------------|
| 1250mA @20Vdc, 431mA @58Vdc | 2000mA @20Vdc, 690mA @58Vdc |

**Output voltage:** 170Vdc

**Output power:** 25W (Constant) / 40W (Constant)

**Over Voltage Protection:** YES

**Over Power Protection:** YES

**Turn-on Delay Time:** < 4S

**Overshoot:** <10%

**Ripple & Noise (pk-pk):** <10%

**Withstand Voltage:** L to N-3kV

**Leakage Current:** Sample: Maximum 0.5mA at 277Vac, 60Hz Input

## Battery

**Emergency Operation Time:** 90 Minutes

**Turn-on Delay Time:** < 2s

**Recharge Time:** 24Hrs

**Battery Charging Current:** 200mA Max

**Capacity:**

| 25W           | 40W         |
|---------------|-------------|
| 14.4V/5000mAh | 18V/5000mAh |

**Material:** Li-ion

# ENVIRONMENTAL SPECIFICATIONS

**Operating Temperature:** 32°F to 132°F

**Storage Temperature:** - 4°F to 131°F

**Humidity:** ≤65%

**Maximum Case Temperature:** 167°F for LED Driver



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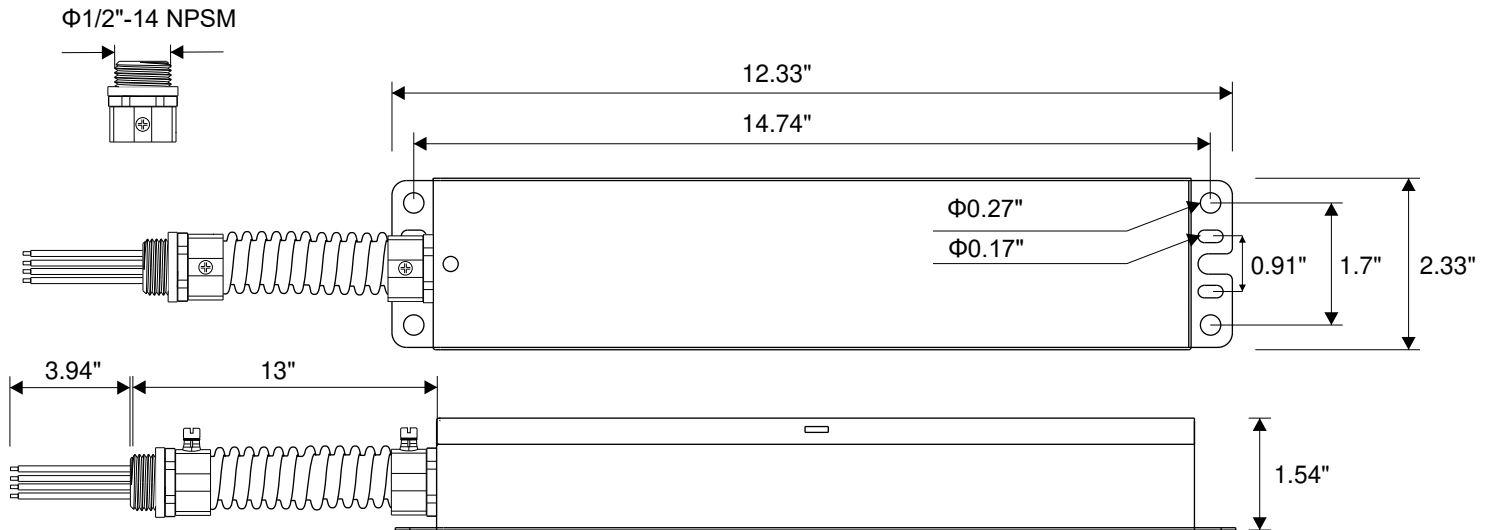
Address: 1520 Broadmoor Blvd, Suite B, Buford, GA 30518 Toll Free: 877-718-0808 Fax: 770-817-0127 Web: [www.revolveled.com](http://www.revolveled.com)

# DIMENSIONS

## 25/40W Battery

12.33"L X 2.33"W X 1.54"H

Net Weight: Max 2.65 lb.



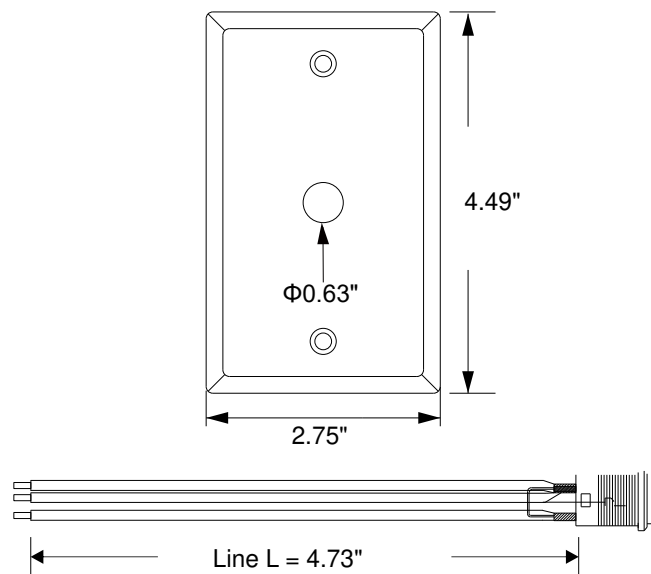
CONDUIT LENGTH: 13"

EXPOSED OUTPUT WIRE LENGTH: 3.94"

CONNECTOR INSTALLATION HOLE SIZE:  $\Phi 1/2"$ , CONNECTOR THREAD: 14 NPSM

## Plastic Test Button with Built-in Indicator Light

### MOUNTING FACEPLATE



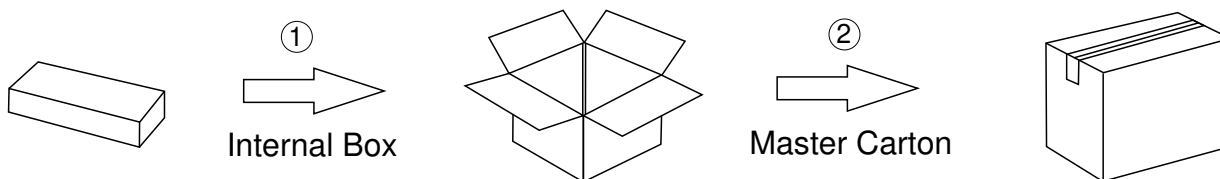
$\Phi 0.63"$  TEST SWITCH

INSTALLATION HOLE SIZE:  $\Phi 0.63"$

## OPERATION

| Mode                                                                                                                       | Test Button Operation                                                                                                              | Indication                                                                                                                         | Explanations                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Charging Mode(1)                                                                                                           | Not Press                                                                                                                          | ON (No Flashing)                                                                                                                   | Emergency led driver is charging.                                                                                                            |
| Charging Mode(2)                                                                                                           | Press Once                                                                                                                         | 2s ON and 2s OFF (Slow Flashing)                                                                                                   | Emergency LED driver is conducting a 30s short-term emergency test. After 30 seconds, it will automatically restore to normal charging mode. |
| Charging Mode(3)                                                                                                           | Press Twice (2s) in sequence                                                                                                       | 2s ON and 2s OFF (Slow Flashing)                                                                                                   | Emergency LED driver is conducting a long-term emergency test, until battery is fully discharged.                                            |
| Emergency Mode                                                                                                             | Not Press                                                                                                                          | 2s ON and 2s OFF (Slow Flashing)                                                                                                   | Emergency LED driver is discharging in a emergency until battery fully discharged.                                                           |
| Malfunction                                                                                                                | When flashing is (50ms)ON and (50ms) OFF fast, the emergency backup battery is abnormal. Please contact the manufacturer for help. |                                                                                                                                    |                                                                                                                                              |
| <b>WARNING</b><br>Risk of Electric Shock  |                                                                                                                                    | Note: Please press once test button to make sure the battery is turned off, before installation, maintenance, storage or shipping. |                                                                                                                                              |

## PACKAGE



| Model | Dimensions                  | G.W.(lb.) | N.W.(lb.) | QTY(pcs) |
|-------|-----------------------------|-----------|-----------|----------|
| 25W   | 16.23"L X 11.26"W X 10.24"H | 28.70     | 24.25     | 10       |
| 40W   | 16.23"L X 11.26"W X 10.24"H | 30.90     | 26.50     | 10       |

## APPLICATIONS

\* EMBXXYY-ZZZ is compatible with the following products. If used in other products, please consult the manufacturer.

|                 |                                                                                     |                                  |
|-----------------|-------------------------------------------------------------------------------------|----------------------------------|
| 25W<br>/<br>40W |  | Konlite Linear<br>High Bay Light |
|                 |  | Troffer Light                    |



# EMAXXFY SERIES INSTALLATION GUIDE MANUAL

## READ AND FOLLOW THESE SAFETY INSTRUCTIONS!



1. **CAUTION**-This emergency driver provides more than one power supply output. To reduce the risk of electrical shock, turn off the AC branch circuit and disconnect the battery on/off connector.
2. **CAUTION**-Servicing of this product should be performed by a qualified personnel only.
3. **CAUTION**-Do not attempt to maintain the battery. A sealed, no-maintenance battery is used that is not field replaceable. Replace the entire unit when necessary.
4. **CAUTION**-The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition, void warranty and result in non-compliance with UL requirements.
5. **CAUTION**-Connect the emergency backup battery to the fixture before applying AC Power.
6. **CAUTION**-The emergency driver requires an un-switched AC power of 100-347VAC, 50/60Hz. Verify the corresponding electrical rating at the LED fixture before installing. The emergency backup battery will supply power under an output voltage of 170VDC in the emergency mode for at least 90 minutes.
7. **CAUTION**-Emergency backup battery should be charged for 24 hours every 6 months during storage.
8. **CAUTION**-Press test switch once again to turn off before shipping.
9. Battery in this unit may not be fully charged. After the emergency backup battery is connected to the fixture for at least 24 hours, then normal operation of this unit will take effect.
10. Operating ambient temperature: 32~122°F. Suitable for use in damp locations and plenum spaces.
11. The product should be mounted in locations and heights where it not be subjected to tamper by unauthorized personnel.
12. For LED fixture power should be higher than or equal to the rating of the backup battery.
13. Do not use this equipment for other anything than its intended use.  
This equipment only used for LED Lighting.
14. Do not mount near gas or electric heaters. Do not let power supply cords touch hot surfaces.
15. Do not make or leave any other open holes in the wiring enclosure or electrical component enclosure during installation.
16. This product is used for grounded, UL Listed, damp location rated, indoor fixture.  
Don't use in heated air outlets or hazardous locations.
17. Maximum installation height: 28.5 feet.
18. Do not use outdoors.
19. The battery exists in the junction box, forbidden for insulation voltage(I/P-O/P) test.

## LUMEN OUTPUT DURING EMERGENCY OPERATION

The luminaire rated data and maximum mounting height can be found as follows:

1. Determine the fixture efficacy under normal AC operation, based on fixture manufacturer published data in lumens per watt(LM/W).
2. Refer to DLC QPL ([www.designlights.org](http://www.designlights.org)) and Energy Star QPL ([www.energystar.gov](http://www.energystar.gov)) for rated data on fixture efficacy. If a fixture is not found on DLC or Energy Star Qualified Product List, contact the manufacturer.
3. Multiple fixture luminous flux by rated output power of emergency backup battery  
Example: Model-EMA25FY-170 is 25W x 100 LM/W = 2500 Lumens







**CAUTION: BEFORE INSTALLATION, MAKE SURE THE AC POWER IS OFF !**

### STEP1: INSTALLING THE EMERGENCY BACKUP BATTERY

Turn off the AC power before installing. Test switch (indicator light) shall be installed where can be seen depending on the application. Determine appropriate location for emergency driver on the fixture. If necessary, use brackets to fix. The installation instruction of LED luminaire may provide installation guide on mounting location.

### STEP2: FINISH ELECTRICAL WIRING

Select the appropriate wiring diagram to finish wiring. For other not offered diagrams, consult the manufacturer. Using wire nuts to cover un-used wires and make sure all connections are in accordance with the NEC and any local regulaions.

### STEP3: TESTING

After wiring is complete, check whether the indicator light lights or not , which will indicate the battery charging situation.

**The battery in this unit may not be fully charged.** A short-term discharge test may be conducted after the emergency driver has been charging for 1 hour. Charge for 24 hours before conducting a long-term discharge test.

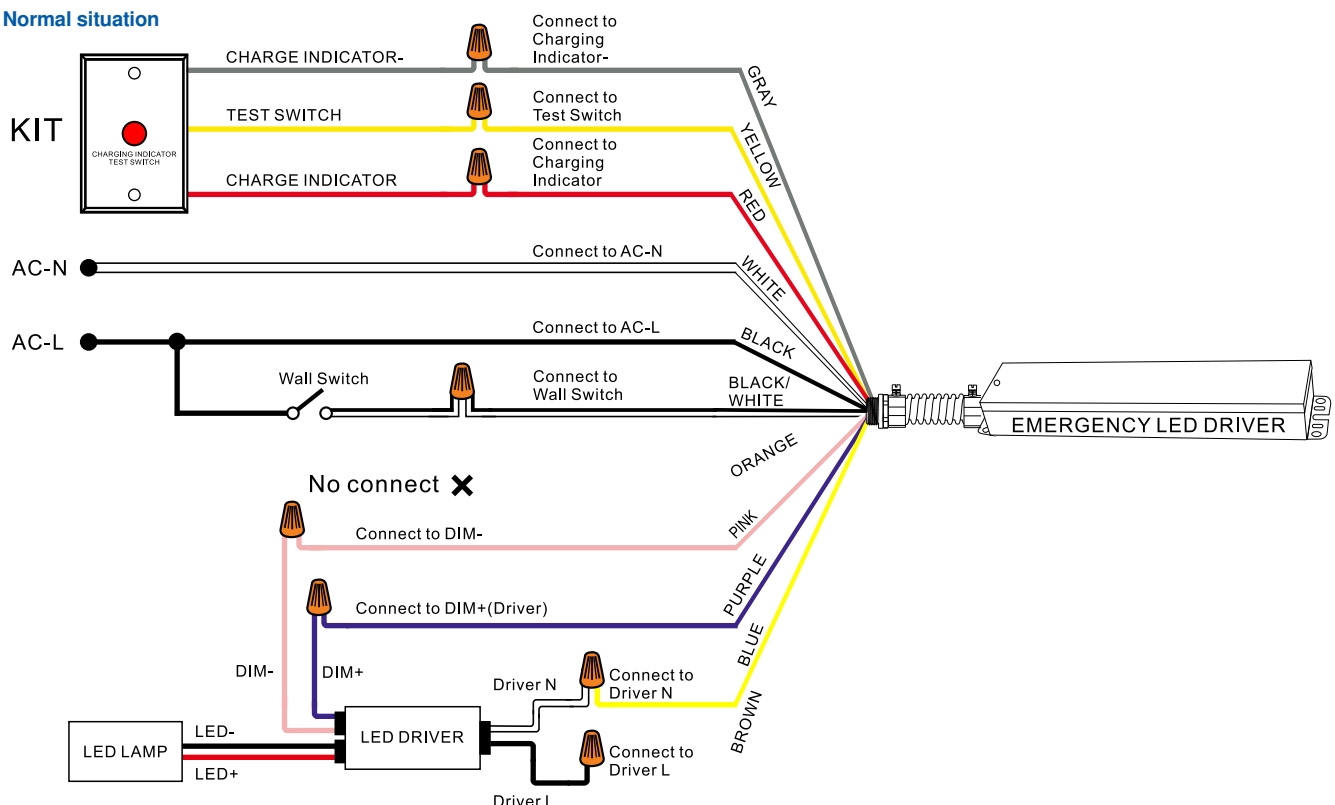
## WIRING DIAGRAM



**The LED fixture must have a intearted 0/1-10V dimming driver, when the power of LED fxture is more than the power of emergency battery backup.**

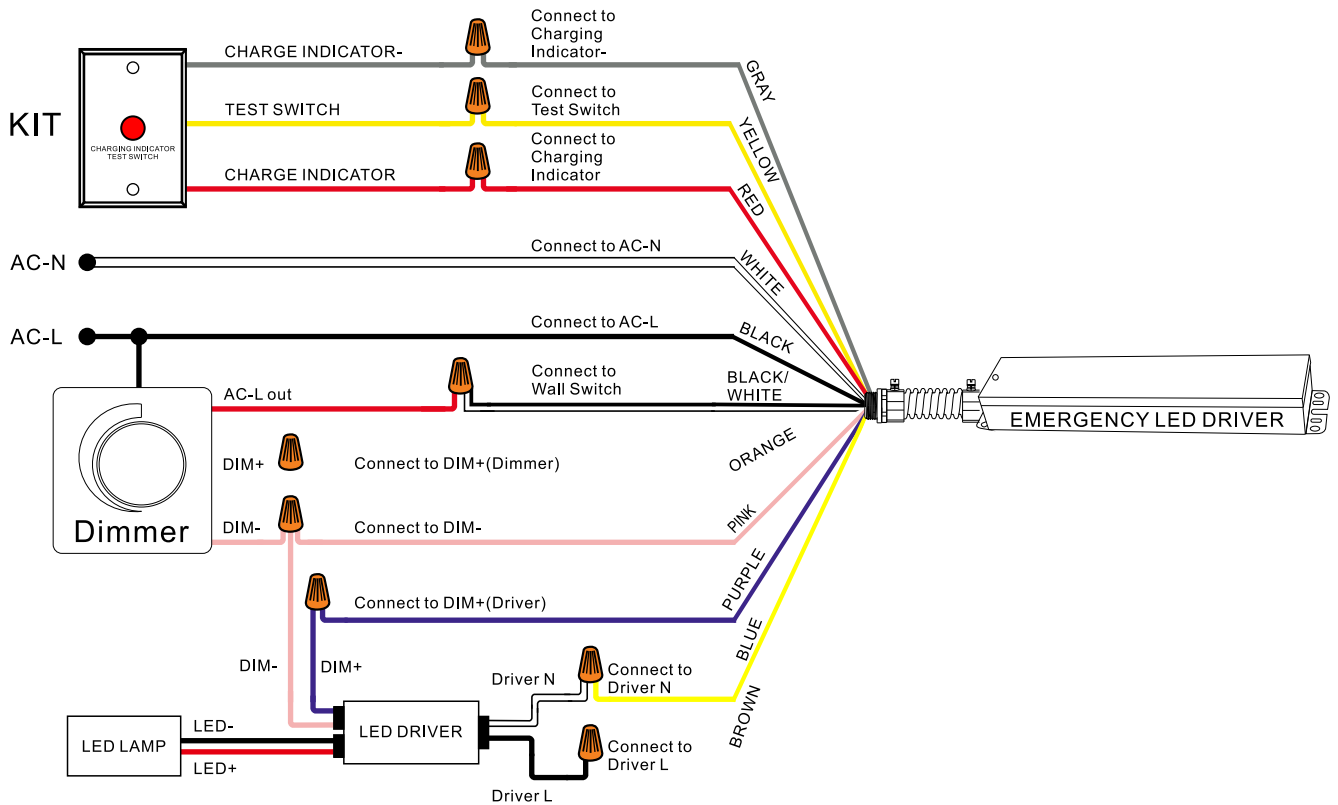
FOR LED FIXTURE POWER  $\geq$  EMERGENCY BATTERY DRIVER POWER

FIG A. Normal situation



FOR LED FIXTURE POWER  $\geq$  EMERGENCY BATTERY DRIVER POWER

FIG B. With a dimmer



FOR LED FIXTURE POWER  $\geq$  EMERGENCY BATTERY DRIVER POWER

FIG C. With a DC sensor

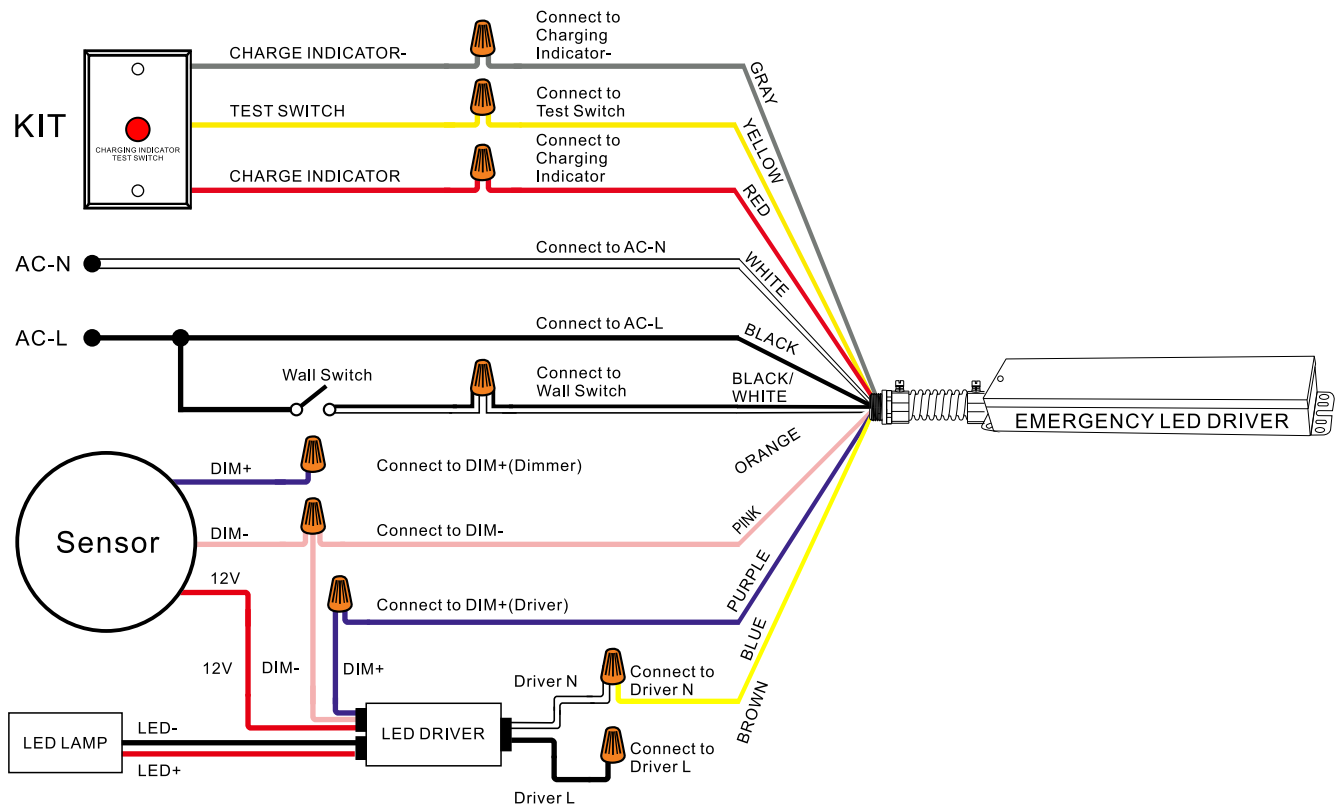




FIG D. With a AC sensor

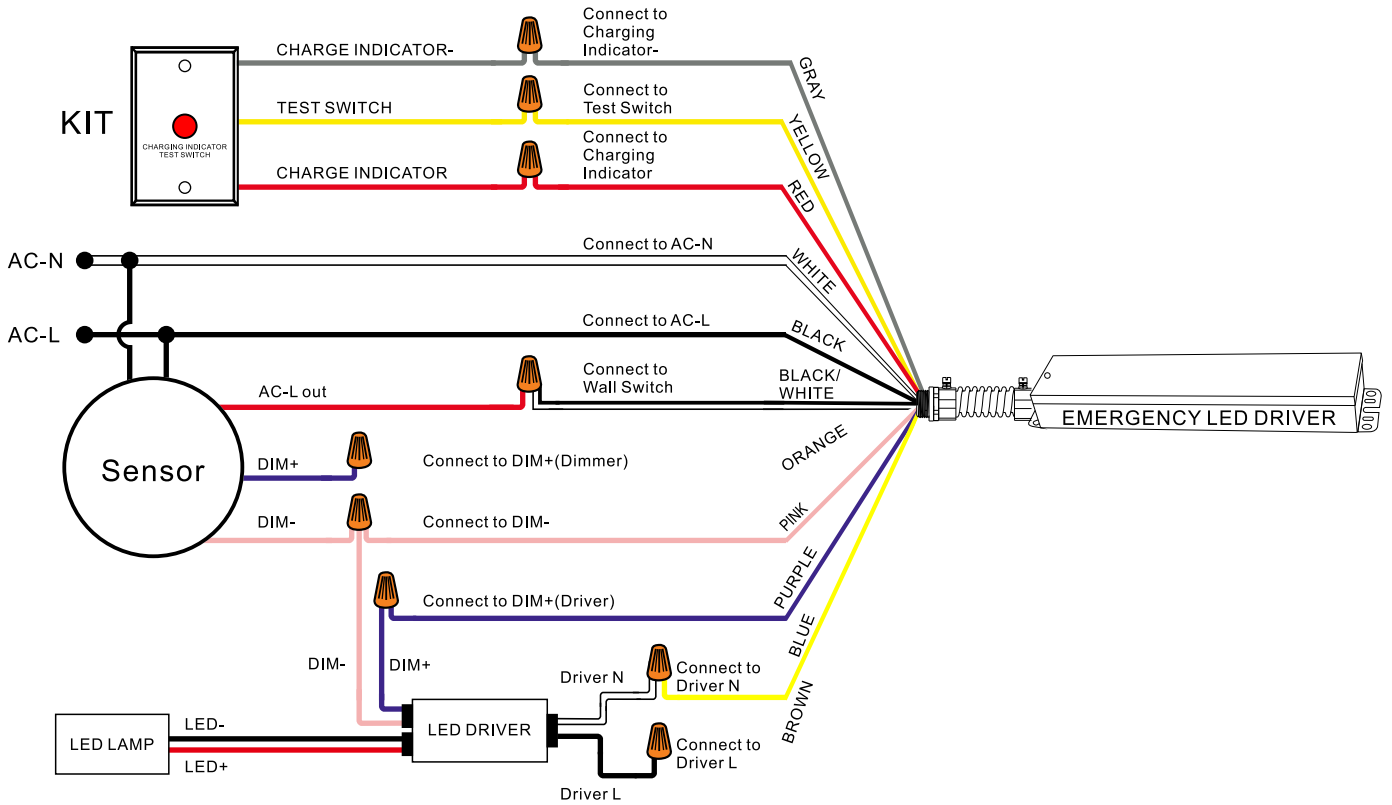


FIG E. For LED fixture without 0/1-10V dimmable function

