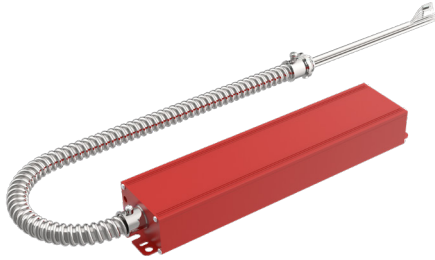


**Important: Read all instructions prior to installation.**

## Emergency Battery Backup Driver



**DEME2-25/40W-WHZ**

### Features

- UL Listed to UL924 and tested to CSA C22.2 No. 141 for Field or Factory installation
- CEC title 20 compliant
- American NFPA 101 Life Safety Code compliant
- Constant output power
- 2-in-1 LED test switch and indicator light included
- Monthly/annual self-testing
- Multiple protective functions:
  - Battery overcharge protection
  - Battery over-discharge protection
  - Output overload protection
  - Short-circuit protection
  - Open load protection
- 5-year warranty

### Specifications

Model DEME2-	9W-WHZ	25/40W-WHZ
Input Current (max)	80mA	150mA
Input Power (max)	8W	10W
Input Voltage	100–347 VAC, 50/60Hz	
Power Factor	0.6@100 VAC, 0.5@347 VAC	
Output Voltage	145 VDC	
Battery	Li-ion	
Recharge Time	24 Hrs	
Emergency Run Time	90+ min	
Ambient Operating Temperature	0 to 50°C (-32 to 122°F)	

### Safety and Notes

- **CAUTION**—This fixture provides more than one power supply output source. To reduce the risk of electrical shock, disconnect normal and emergency sources by turning off the AC branch circuit and disconnecting the unit connector.
- Unit is sealed and components are not replaceable. Replace the entire unit when necessary.
- Product should be installed and serviced by a certified electrician in accordance with applicable national, state, and local building and electrical codes. De-energize before opening.
- To reduce the risk of electric shock, ensure that the main power source and circuit breakers are switched off before performing any installation or wiring procedures.
- Intended for use with grounded LED luminaires listed to UL standards.
- The unit and AC driver must be on the same branch circuit.
- Do not mount near gas or electric heaters, heated air outlets, or hazardous locations.
- Suitable for use in damp locations and plenum spaces.
- Do not use this equipment for use other than intended.
- Ensure all mounts are securely attached and will support the weight of the unit and fixture. Manufacturer/supplier assumes no responsibility for damage or injury resulting from improper installation.
- **Ensure installation complies with all driver and fixture specifications.**

### Operational Modes

#### Normal Mode

- Fixture operates normally when power is available. Backup driver switches to emergency mode and delivers power to fixture for up to 90 minutes when outage occurs.

#### Emergency Mode

- Battery backup automatically engages after mains power failure
- Battery backup returns to charging state once mains power returns

#### Fixture Compatibility

##### DEME2-9W-WHZ

- 9-80W LED lamp with 0-10V dimming **or**
- 3-8W LED lamp without 0-10V dimming

##### DEME2-25W-WHZ

- 25-200W LED lamp with 0-10V dimming **or**
- 10-24W LED lamp without 0-10V dimming

##### DEME2-40W-WHZ

- 40-350W LED lamp with 0-10V dimming **or**
- 10-39W LED lamp without 0-10V dimming

**Important: Read all instructions prior to installation.**

### Emergency Battery Backup Driver

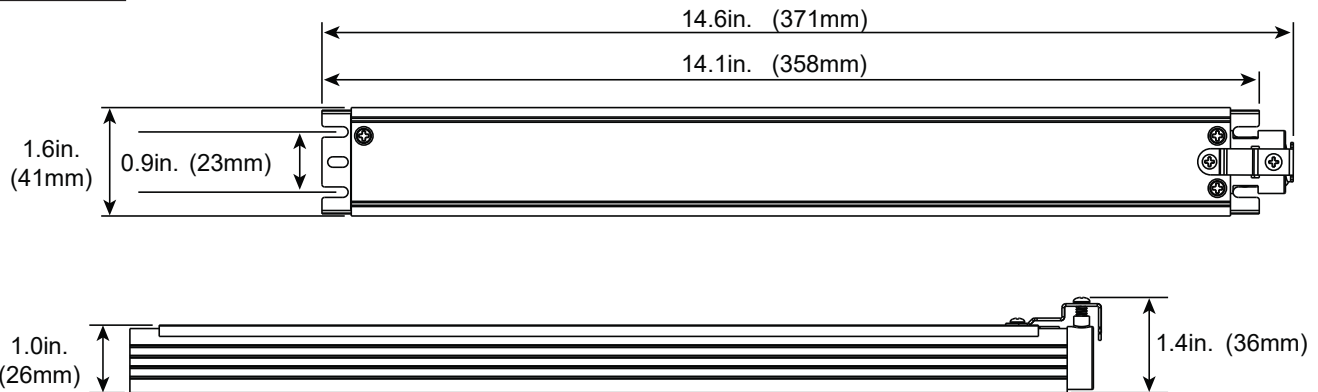
#### Installation Instructions

1. Turn off AC mains power before installation.
2. Install test switch and indicator light where it can be seen for diagnostic testing.
3. Emergency LED driver dimming wire (DIM+,DIM-) input voltage must less than 20 VDC.
4. Select a suitable location for mounting the backup driver.
5. Securely mount backup driver using appropriate fasteners for mounting surface. LED fixture installation instructions may provide guidance on mounting location.
6. Select appropriate wiring diagram to connect the emergency driver based on fixture and driver specifications.
7. Use wire nuts to cover unused wires and make all connections in accordance with applicable regulations.
8. After wiring is complete, check if the indicator light lights or not, which indicates battery charging status.
9. Battery may not be fully charged. Short-term discharge test may be conducted after emergency driver has been charging for 1 hour. Charge for 24 hours before conducting long-term discharge test.

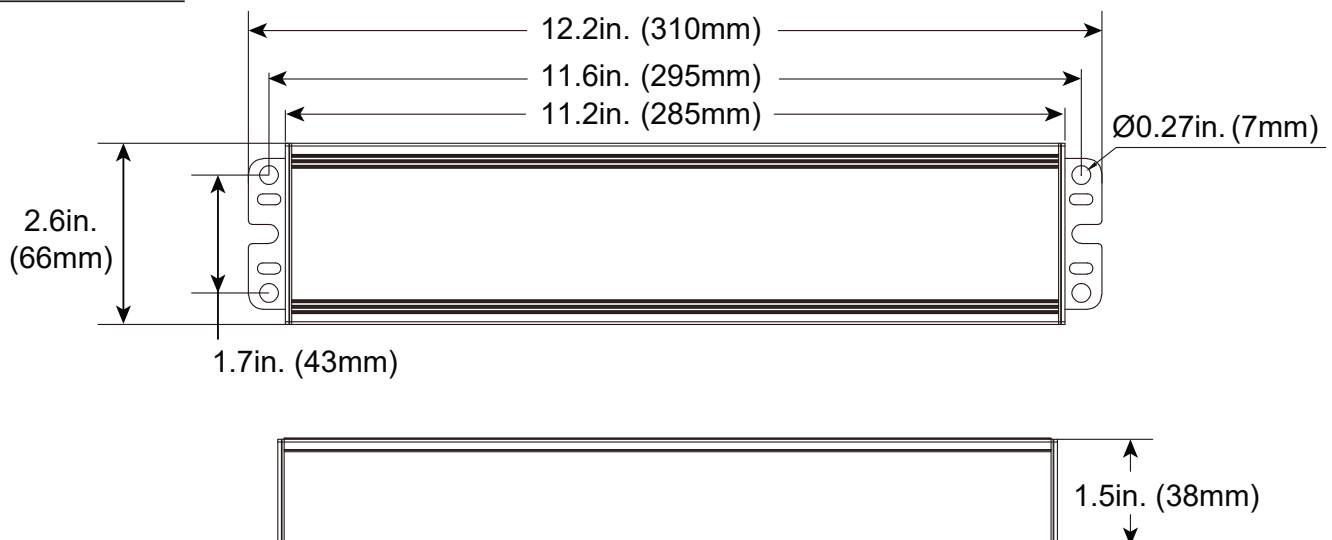
Check product label for specific electrical specifications related to installation. Improper installation will void warranty.

#### Dimensions

##### DEME2-9W-WHZ



##### DEME2-25/40W-WHZ



**Important: Read all instructions prior to installation.**

### Emergency Battery Backup Driver

#### Self-Test

##### Monthly Self-Test

- A monthly self-test is automatically performed every 30 days with a duration of 30 seconds to check whether the emergency function is normal and automatically returns to regular charging after 30 seconds of discharge.

##### Annual Self-Test

- An annual self-test is automatically performed every year (12 months) for more than 90 minutes to check whether the battery pack's capacity is standard. After being fully discharged, the battery automatically restores to regular charging. (The annual test requires the condition of a fully charged battery.)
- If the annual inspection is interrupted, it will be retested after recovery and when the test conditions are met. (Possible interruptions: sudden power failure, sudden manual test).

#### Test Button & LED Indicator

Modes	Test Button Operation	Indicator Status	Working Status
Normal	Long Press Test Button	OFF	Emergency Mode
	/	OFF	Monthly/Annual Testing
	/	ON	Charging/Fully Charged Battery
Emergency	Press Test Button 5s	OFF	Turn off battery pack
Malfunction	/	FLASHING	Disconnected or broken battery, Disconnected load, Short circuit or open circuit, or Incorrect wire connection

#### Included Accessories



15x Twist-On Wire Connectors



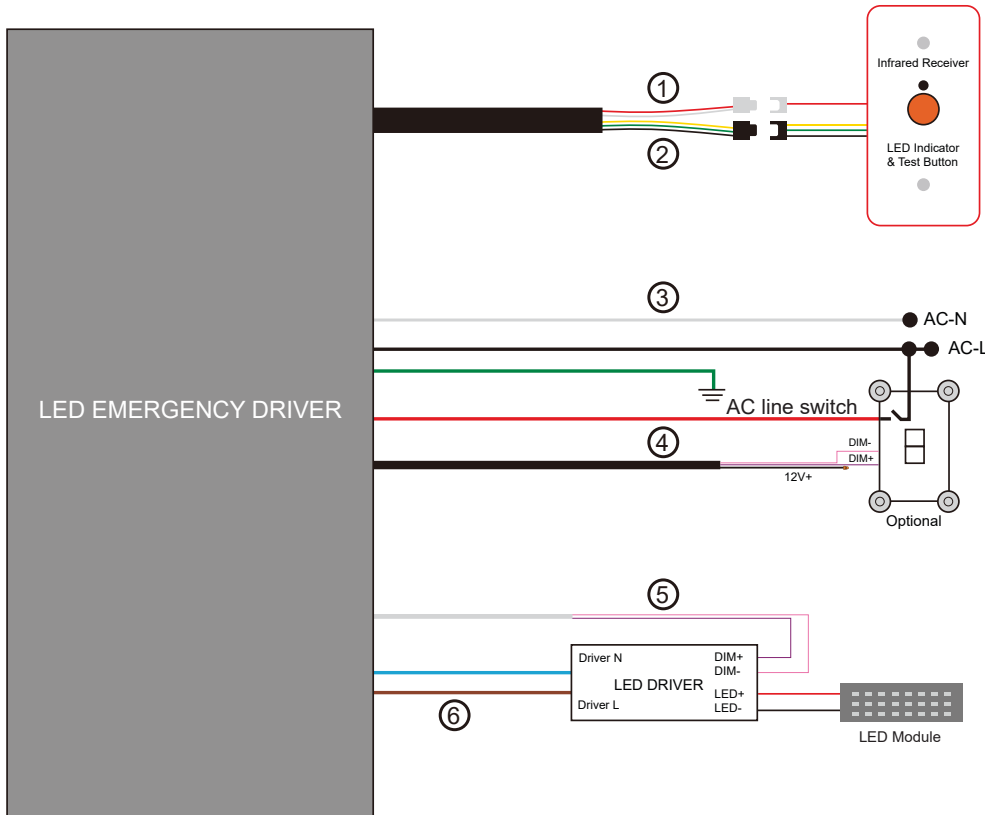
1x Test Plate

**Important: Read all instructions prior to installation.**

### Emergency Battery Backup Driver

#### Wiring Diagrams

#### 1. With Dimmer | Fixture Power ≥ Emergency Power



#### ① Infrared Receiver Wire

Wire Color	
22AWG / Red	IR VCC
22AWG / White	IR OUT

#### ② LED Indicator & Test Button Wire

Wire Color	
22AWG / Green	Ind+
22AWG / Yellow	Test Switch
22AWG / Black	IR GND, Ind-, Test Switch

#### ③ AC Input Wire

Wire Color	
18AWG / Black	AC line (24/7)
18AWG / Red	AC line switch
18AWG / White	Neutral
18AWG / Green	⊕

#### ④ Dimming Input Wire

Wire Color	
22AWG / Purple	Dim +
White 22AWG / Pink	Dim -
22AWG / Black & White	12V +

#### ⑤ Dimming Output Wire

Wire Color	
22AWG / Purple	0/1-10V +out (lamp)
White 22AWG / Pink	0/1-10V -out (lamp)

#### ⑥ AC Output Wire

Wire Color	
18AWG / Brown	AC line (lamp)
18AWG / Blue	AC neutral (lamp)

**NOTE: Emergency driver output dimming wires must be connected to LED driver input dimming wires. Sensor and Dimmer cannot be used at the same time in any wiring configuration!**

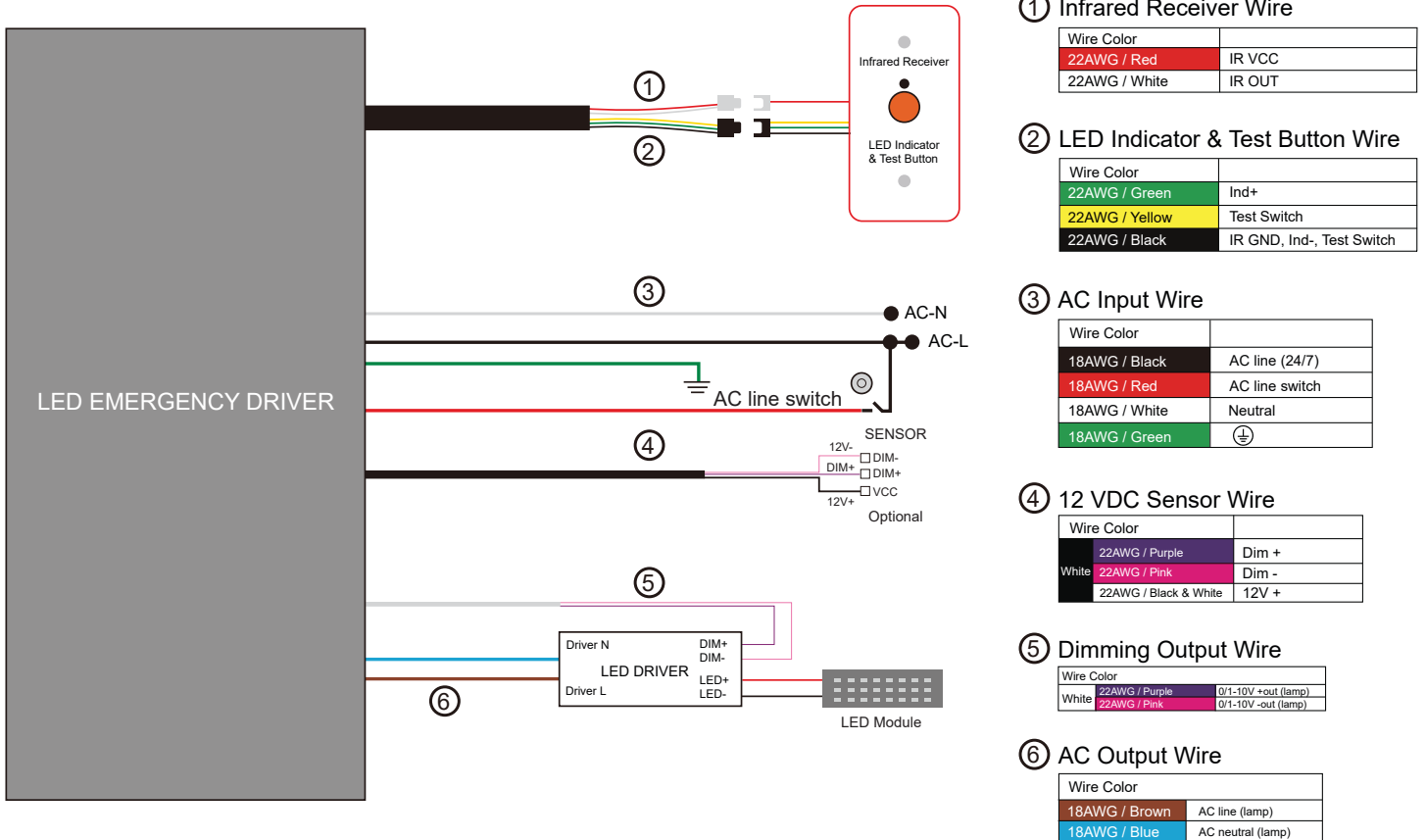
**Important: Read all instructions prior to installation.**

### Emergency Battery Backup Driver

#### Wiring Diagrams

**NOTE: Sensor and Dimmer cannot be used at the same time in any wiring configuration!**

#### 2. With Sensor | Fixture Power ≥ Emergency Power



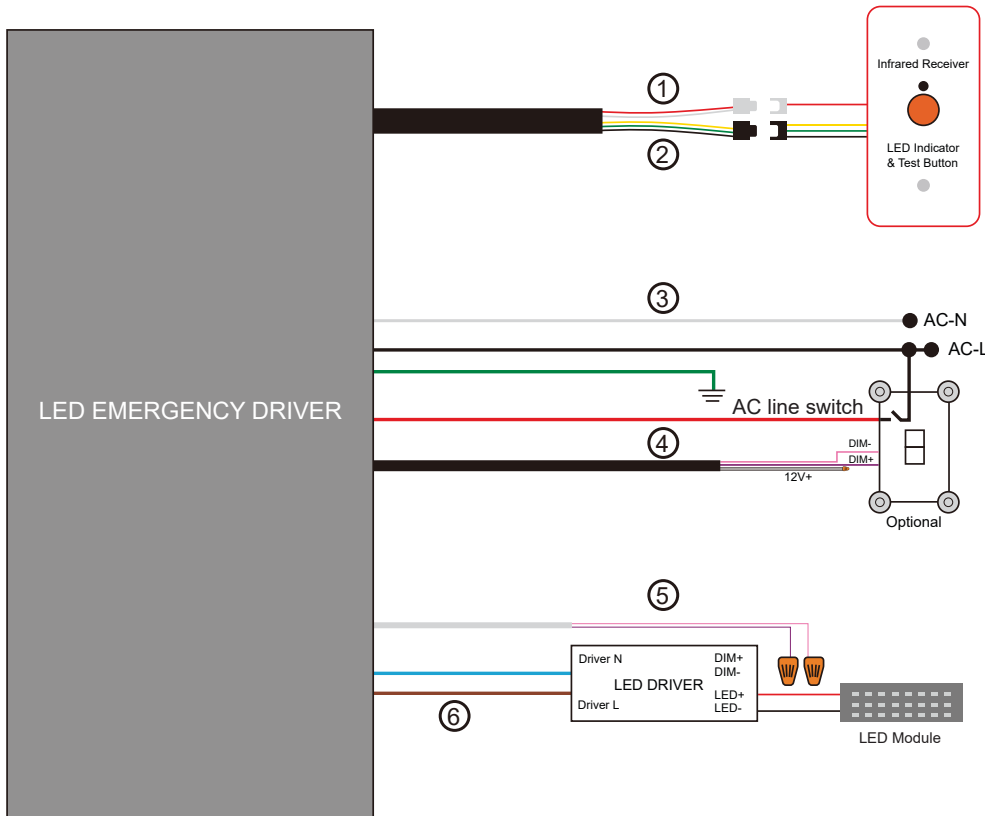
**NOTE: Emergency driver output dimming wires must be connected to LED driver input dimming wires. Sensor and Dimmer cannot be used at the same time in any wiring configuration!**

Important: Read all instructions prior to installation.

### Emergency Battery Backup Driver

#### Wiring Diagrams

#### 3. With Dimmer | Fixture Power < Emergency Power



#### ① Infrared Receiver Wire

Wire Color	
22AWG / Red	IR VCC
22AWG / White	IR OUT

#### ② LED Indicator & Test Button Wire

Wire Color	
22AWG / Green	Ind+
22AWG / Yellow	Test Switch
22AWG / Black	IR GND, Ind-, Test Switch

#### ③ AC Input Wire

Wire Color	
18AWG / Black	AC line (24/7)
18AWG / Red	AC line switch
18AWG / White	Neutral
18AWG / Green	⊕

#### ④ Dimming Input Wire

Wire Color	
22AWG / Purple	Dim +
White 22AWG / Pink	Dim -
22AWG / Black & White	12V +

#### ⑤ Dimming Output Wire

Wire Color	
22AWG / Purple	0/1-10V +out (lamp)
White 22AWG / Pink	0/1-10V -out (lamp)

#### ⑥ AC Output Wire

Wire Color	
18AWG / Brown	AC line (lamp)
18AWG / Blue	AC neutral (lamp)

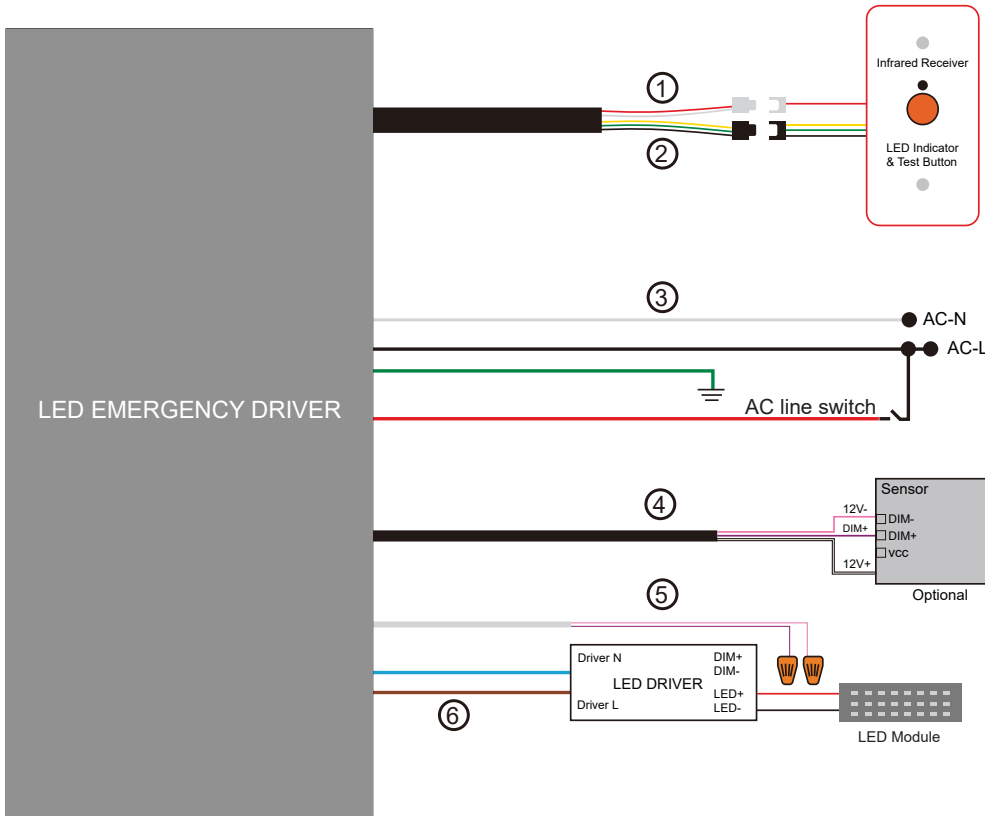
**NOTE: Emergency driver output dimming wires must be NOT be connected to LED driver input dimming wires. Sensor and Dimmer cannot be used at the same time in any wiring configuration!**

**Important: Read all instructions prior to installation.**

### Emergency Battery Backup Driver

#### Wiring Diagrams

#### 4. With Sensor | Fixture Power < Emergency Power



#### ① Infrared Receiver Wire

Wire Color	
22AWG / Red	IR VCC
22AWG / White	IR OUT

#### ② LED Indicator & Test Button Wire

Wire Color	
22AWG / Green	Ind+
22AWG / Yellow	Test Switch
22AWG / Black	IR GND, Ind-, Test Switch

#### ③ AC Input Wire

Wire Color	
18AWG / Black	AC line (24/7)
18AWG / Red	AC line switch
18AWG / White	Neutral
18AWG / Green	⊕

#### ④ 12 VDC Sensor Wire

Wire Color	
22AWG / Purple	Dim +
White 22AWG / Pink	Dim -
22AWG / Black & White	12V +

#### ⑤ Dimming Output Wire

Wire Color	
22AWG / Purple	0/1-10V +out (lamp)
White 22AWG / Pink	0/1-10V -out (lamp)

#### ⑥ AC Output Wire

Wire Color	
18AWG / Brown	AC line (lamp)
18AWG / Blue	AC neutral (lamp)

**NOTE: Emergency driver output dimming wires must be NOT be connected to LED driver input dimming wires. Sensor and Dimmer cannot be used at the same time in any wiring configuration!**