

# Omni TED



CONTAINS FCC ID: 2AG4N WIM2480

**lumos**  
CONTROLS  
A WISILICA BRAND

## INSTALLATION AND QUICK START SHEET

### WARNING AND GUIDELINES!!!

Read and follow all safety instructions!!

**DO NOT INSTALL DAMAGED PRODUCT!** This product has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.

**WARNING : TURN THE POWER OFF AT THE CIRCUIT BREAKER BEFORE WIRING**

#### WARNING: Risk of Product Damage

- Electrostatic Discharge (ESD): ESD can damage product(s). Personal grounding equipment should be worn during all installation or servicing of the unit
- Do not stretch or use cable sets that are too short or are of insufficient length
- Do not modify the product
- Do not mount near gas or electric heater
- Do not change or alter internal wiring or installation circuitry
- Do not use product for anything other than its intended use

#### WARNING - Risk of Electric Shock

- Verify that supply voltage is correct by comparing it with the product information
- Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements
- All wiring connections should be capped with UL approved recognized wire connectors
- All unused wiring must be capped

## PRODUCT OVERVIEW

Omni TED is a BLE5.2 controllable, trailing edge dimmer. It operates on 90-277VAC input voltage range and can work with single LED loads and has output to connect a switch.

The device is a part of the Lumos Controls ecosystem, including controllers, sensors, switches, modules, drivers, gateways, and analytical dashboards. It can be easily commissioned, configured and controlled from any mobile device and can be connected to Lumos Controls cloud for data analytics and configuration management. The ecosystem is listed by the Design Lights Consortium (DLC), qualifying it for energy conservation incentive programs and rebates by utility companies.



## REQUIRED TOOLS & SUPPLIES



Screwdriver



Screws

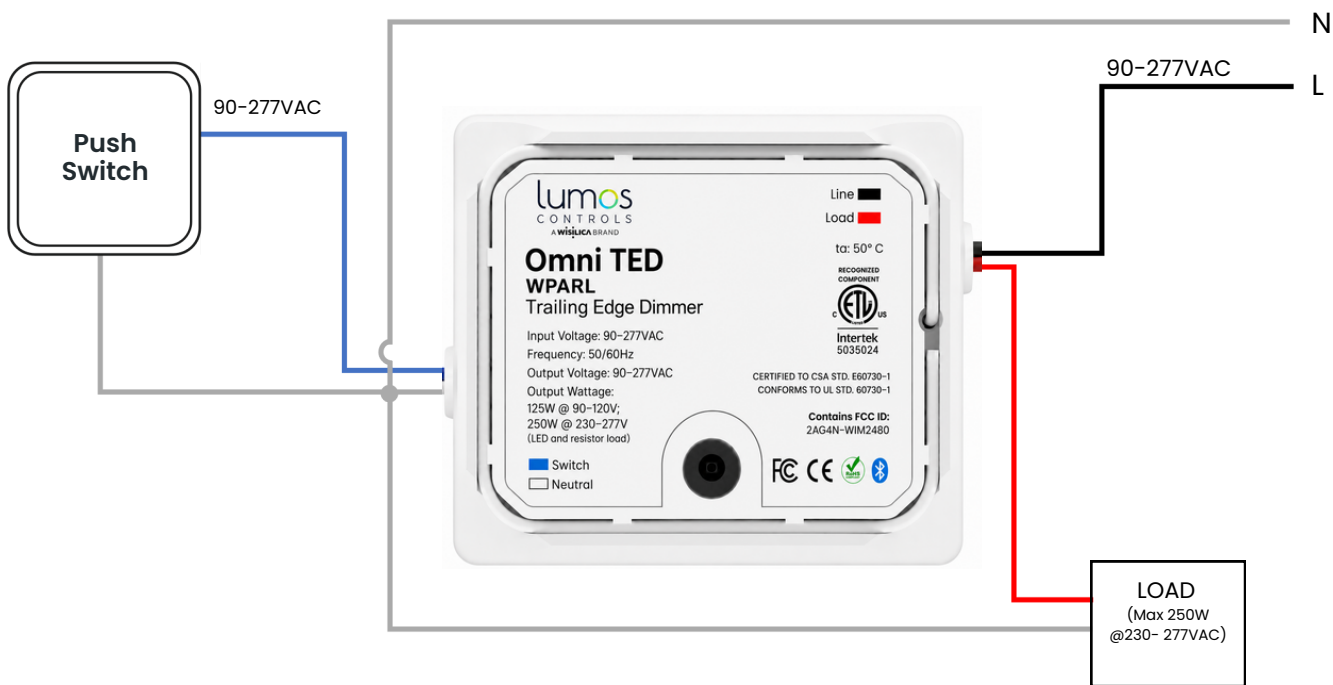
## INSTALLATION INSTRUCTIONS

- Turn OFF the power before wiring and installing the device.
- The phase dimmer with a compact formfactor can be installed anywhere within the light fixtures, or within junction boxes. The screw hole available on the phase dimmer can be used to fix it firmly.
- To power the phase dimmer, connect the AC line and neutral wires from the mains supply to the line (black color), and neutral (white color) of the device.
- To control TRIAC drivers, connect the load (red color) and neutral (white color) wires of the phase dimmer to the line and neutral of the driver.
- To power a dimmer switch, connect the switch (blue) and neutral (white) wires of the phase dimmer to the line and neutral of the switch.

| Do's                                                                        | Don'ts                                       |
|-----------------------------------------------------------------------------|----------------------------------------------|
| Installation should be performed by a qualified electrician                 | Don't use outdoors                           |
| Installation shall be in accordance with all applicable local and NEC codes | Avoid input voltage exceeding maximum rating |
| Turn the power OFF at circuit breakers before wiring                        | Don't disassemble the products               |
| Observe the correct polarity of output terminal                             | -                                            |

| Specifications                                 | Value                                  | Remarks                                       |
|------------------------------------------------|----------------------------------------|-----------------------------------------------|
| Input voltage                                  | 90-277VAC                              | Rated Input voltage                           |
| Supply frequency                               | 50-60Hz                                | -                                             |
| Inrush current protection                      | 75A                                    | -                                             |
| Surge transient protection                     | 1kV                                    | L-N, Bi wave                                  |
| Dimming operation mode                         | Trailing edge                          | Supports resistive and capacitive loads       |
| Max output power                               | 250W                                   | 250W @230-277VAC;<br>125W @90-120VAC          |
| Min power requirement                          | None                                   | Active power                                  |
| Frequency range                                | 2402-2483MHz                           | -                                             |
| Tx power                                       | 8dBm                                   | With 150mm external wire antenna              |
| Rx sensitivity                                 | -95dBm                                 | -                                             |
| Connection distance (Device to device by mesh) | 45m(147.6ft)                           | In an open office environment (Line of Sight) |
| Operating temperature                          | -20 to 50°C(-4 to 122°F)               | -                                             |
| Storage temperature                            | -40 to 80 °C (-40 to 176°F)            | -                                             |
| Relative humidity                              | 85%                                    | -                                             |
| Dimensions                                     | 43 x 35 x 20mm (1.69 x 1.38 x 0.79 in) | L x W x H                                     |
| Weight                                         | 120g(4.23oz)                           | -                                             |
| Case material                                  | ABS Plastic                            | -                                             |
| Flammability rating                            | UL 94 V-0                              | -                                             |

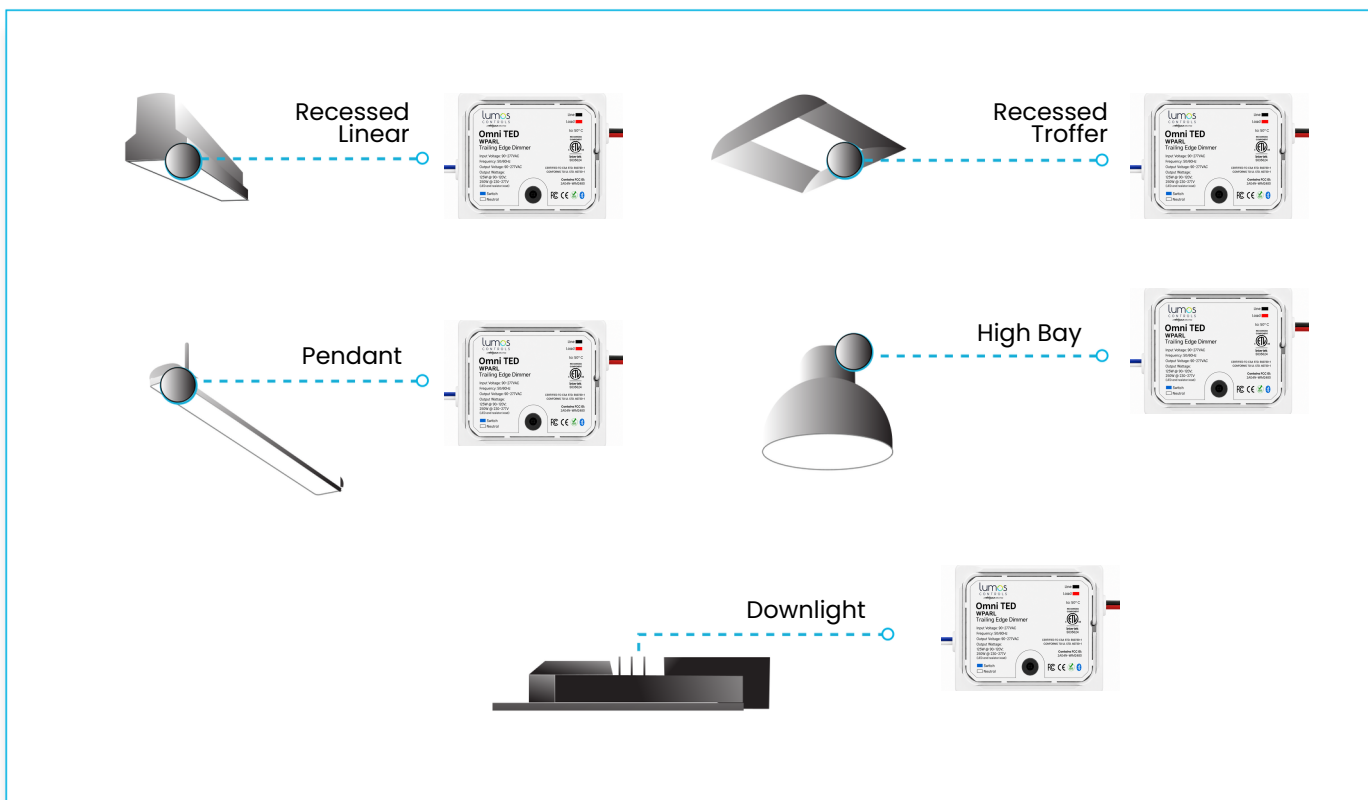
## WIRING



## INSTALLATION INSTRUCTIONS

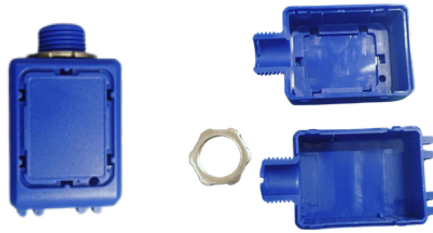
### 1. On the extrusion or on top of the fixture

Device can be integrated directly into the fixtures as shown below



## 2. Install the Omni TED device in the electrical box as per the local, state & national electrical codes and requirements

A dedicated mounting enclosure will be provided. Use the enclosure to securely install the phase dimmer to the junction box.



### 1. Safety First

- Turn the power OFF at circuit breaker and ensure the power is OFF before wiring
- Use electrical screw driver to remove the Knock Out (KO) from the junction box

### 2. Open the Enclosure

- Remove the locknut from the chase nipple of the provided enclosure
- Open the case

### 3. Prepare the enclosure

- Place the Omni TED device securely inside.



### 4. Re-route Omni TED Wires

- Identify the black (Line) and red (Load) wires on the right side of the device.
- Carefully bend and route these wires to the left side of the device, as shown in the reference image.

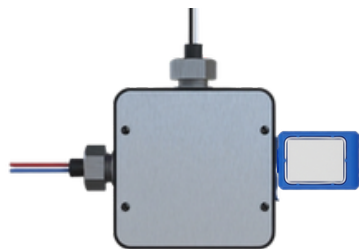
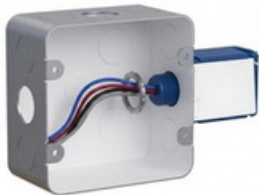


### 6. Close Enclosure

- Close the enclosure
- Wrap the antenna around the space provided in the enclosure
- Ensure that there is no excessive stress on the wires

### 5. Re-route the Antenna

- Take out the antenna of the Omni TED device, from the hole in the case as shown in the image



### 7. Arrange the wires through the KO holes of the Junction box

- Take in the wires and chase nipple of the case through knock out(KO) hole.
- Install the washer and locknut on to the chase nipple.
- Use a plier to additionally tighten and fix the device firmly with the junction box.

### 8. Bring in the Connections

- Take the AC line and neutral mains wires through another KO hole of junction box.
- Connect the line(black) and neutral wires(white) of the phase dimmer with the line and neutral wires from mains
- To power the driver, connect the Load (Red color) of Omni TED with Input Line of driver. Common neutral (White color) with input neutral of driver.

### 9. Secure and Close

- Close the electrical box with cover plate
- Restore power to the circuit breaker

## APPLICATION



## TROUBLESHOOTING

|                                                   |                                                                                       |
|---------------------------------------------------|---------------------------------------------------------------------------------------|
| Device doesn't operate immediately after power ON | Check whether the wiring is proper                                                    |
| Lights flickering                                 | The connection is not appropriate<br>The wires are not secured firmly with connectors |
| Lights did not turn ON                            | Circuit breaker tripped<br>Fuse has blown<br>Inappropriate wiring                     |

## COMMISSIONING

Once powered up, the device will be ready to be commissioned via the Lumos Controls mobile app, available for free download on [iOS](#) and [Android](#). To begin commissioning, click the '+' icon from the top of the 'Devices' tab. The app allows you to preset certain configurations which will be loaded after the device is added. The pre-configurations made using 'Commissioning Settings' will be sent to the devices being commissioned. Once commissioned, the device will be displayed in the 'Devices' tab and you can perform individual operations like ON/OFF/dimming from this tab.



Please visit [Help center](#) for more details

## WARRANTY

5-year limited warranty  
Please find warranty [terms and conditions](#)  
Note: Specifications may change without notice  
Actual performance can vary due to end-user environment and application

## LUMOS CONTROLS APPLICATION

Download the 'Lumos Controls' application from Play Store or App Store  
OR  
Scan the QR codes to download the 'Lumos Controls' application



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