

## Installation Instruction - 0-10V Controlled Phase Dimmer 0-10V, 600W/120V, 1300W/277V



### WARNING

Lighting Fixtures must be installed by a qualified electrician.

Cooper Lighting Solutions is not responsible if its fixtures are not installed in accordance with all national and local safety standards.

### Included in box

Phase Dimming Control Module: 0-10V, 600W/120V, 1300W/277V, Installation Guide



### Additional Items - As Need

Junction Boxes

Extending Cable

Leader Cable

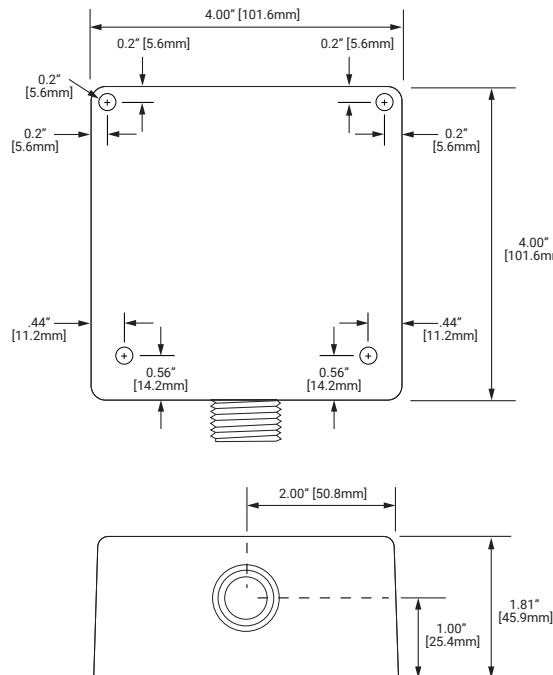
### Installation Location

The LR21F600 is rated to be installed in plenum spaces. It may also be installed in non-plenum damp location spaces that comply with NEC.

**IMPORTANT:** Read carefully before installing load controller. Retain for future reference.

### Plan the Installation

#### Verify the Electrical Plan



**Ensure power is OFF**

\*This product is provided by Cooper Lighting Solutions in partnership with Functional Devices.



**COOPER**  
Lighting Solutions

a Signify business

## Installation Instructions

### 1. Mounting the LR21F600 to a J-Box

Mount the power input/output side of the LR21F600 to the j-box containing the supply line wires and the fixture load wires. Use the supplied nut to hold the LR21F600 in place.

Note: One (1) LR21F600 Module is required per maximum length fixture run.

### 2. Connect to Power and Data

Connect the input line power to the black(live) and white(Neutral) input power wires on the LR21F600.

Connect the input load wires coming from the fixtures to the red(live) and white(neutral) output wires on the LR21F600.

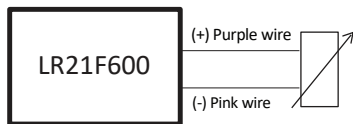
Connect the input ground building wire to the output ground going to the fixture. The LR21F600 does not need to be grounded.

Note: Set selector switch for leading or trailing edge operation.

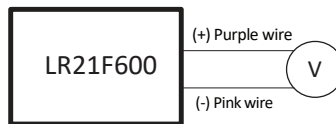
### 0-10VDC and Resistance Dimming

Connect the purple wire to the + side and the pink to the - side of the 0-10V signal.

| Parameters                                      | Minimum | Maximum |
|-------------------------------------------------|---------|---------|
| Source current out of 0-10V (+) Purple wire     | 0mA     | 1mA     |
| Absolute voltage Range on 0-10V (+) Purple wire | 0V      | 12V     |
| Sink current into 0-10V (+) Purple wire         | 0mA     | <0.1mA  |



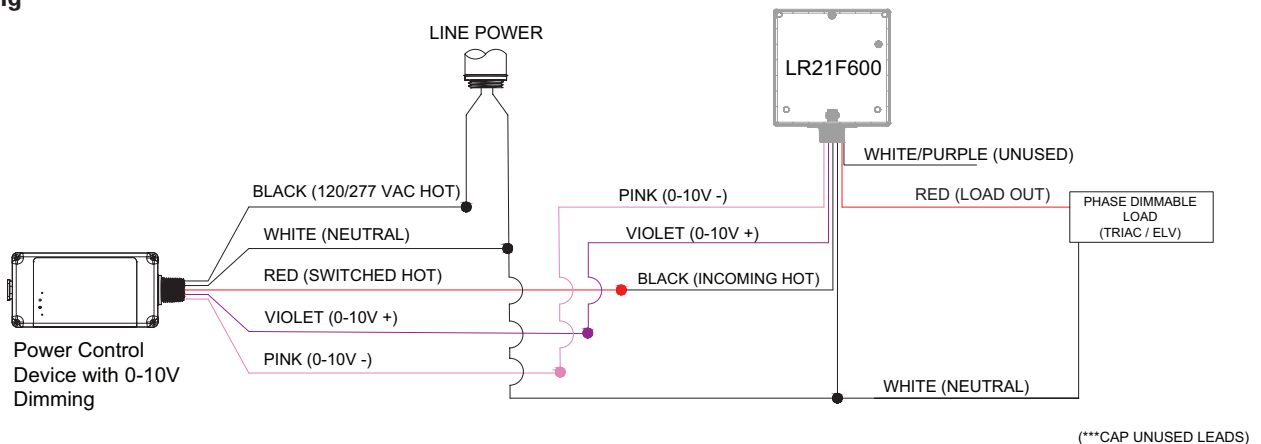
Connection of LR21F600 and resistance dimmer



Connection of LR21F600 and 0-10V analog dimming

**LR21F600 NOTE:**  
The Functional Devices LR21F600 module takes a 0-10V dimming signal and fixed line voltage input and converts it to a TRIAC or ELV dimmed output for up to 600W @120V or 1300W @ 277V.  
The LR21F600 is rated to mount directly to a junction box in the plenum space for easy installation.

## Wiring



## Installation Considerations

|                                     |                                                             |
|-------------------------------------|-------------------------------------------------------------|
| Operating Voltage/Power Consumption | 120VAC, 600W (Maximum) 60Hz & 277VAC, 1300W (Maximum) 60 Hz |
| Operating Temperature               | -30°F to 122°F (-34°C to 50°C)                              |
| Weight                              | 0.99 lbs / 0.45 kg                                          |
| Dimensions                          | 4" L x 4" W x 1.81" H<br>(101.6mm x 101.6mm x 45.9mm)       |

### WARNING

- A separate neutral should be run for each phase dimmer to avoid common neutral interaction.
- Read and understand the installation instructions before attempting to install or use the dimmer control module.
- Only use dimmer control module with voltage for which it is rated. Do not exceed the specified voltage and current input.
- Do not use dimmer control module if the housing, or power cable are damaged.
- Dimmer control module have line voltage risk of shock and no user serviceable parts. Do not attempt to open.
- Do not hot swap. Ensure that power is off before connecting or disconnecting fixtures in the series.
- Ensure that main power supply is off before installing or wiring a dimmer control module.
- The external flexible cable or cord of this luminaire cannot be replaced; if the cord is damaged, the luminaire shall be destroyed.
- Hazardous live parts shall not be accessible after installation, and it is the installer's responsibility to ensure that the installation/connections are in compliance with national and local electrical codes and regulations.
- The wire connection method shall be determined by local electrical codes and regulations, typically using either wire nuts or screw terminal blocks.
- Possibly hazardous optical radiation emitted from this product.
- This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.