

## Why Would I Need an ILR-10K?

This load resistor is a solution for your LED fixtures and bulbs having issues turning off completely and flickering at certain dim levels. We have found that by installing a small load resistor (ILR-10K) in parallel with the LED load it frequently eliminates these problems.

### **FUNCTION**

The load resistor will dissipate only 1.4W at 100% brightness settings and less at any lower settings. This heat generation is low enough that the load resistor can be installed behind the dimmer switch or at the load/fixture location.

#### **INSTALLATION**

**Note:** Installation must be carried out by a qualified electrician only. The circuit breaker or WS1DL must be turned off during installation. Installation must be carried out in accordance with all applicable codes and requirements, including, but not limited to, the National Electrical Code (NEC).

- 1. Turn off the power at the main breaker panel.
- 2. Locate the load (red) and neutral (white) wire. Behind dimmer location or LED light location.
- Install the ILR-10K between the two wires (Figure 1).
  The ILR-10K may be wired in either direction of the leads but it has to be **PARALLEL** with the LED light.
- Use appropriate wire nuts to make a solid electrical connection. Secure the wires and placement of the ILR-10K.

## **WIRING DIAGRAM**

The load resistor has high resistance (10K ohm) and is designed to be directly wired across 120VAC.

Please see diagram below.

#### LOAD RESISTOR WIRING TO WALL SWITCH

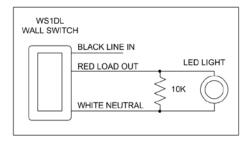


Figure 1: The 2 leads of the ILR-10K must be wired parallel with the LED light (between LOAD and NEUTRAL)

# **NOTATION**

Please note the load resistor is installed in **PARALLEL** with the LED. This means the load resistor is wired between the switch load wire (RED) and neutral (WHITE). If the load resistor is incorrectly installed in SERIES with the load, the LED will stay off. This will not hurt the load resistor or the switch or the LED, but the LED will never go on.

#### **OPERATION**

Once the ILR-10K is properly installed, power up the WS1DL and test for LED light's complete turn-off state and different dimming states. Both issues should be resolved.



