



Application Guide: Controlling phase-dimmable loads with the Area Lighting Controller (TAC-001)

Overview:

Toggled iQ Area Lighting Controllers (TAC-001) are intended for controlling non-dimmable or 0-10V dimmable lighting loads (120-347VAC).

By using a third-party 0-10V controlled phase angle dimmer, the TAC-001 can be adapted to also control compatible 120V phase-dimmable loads.

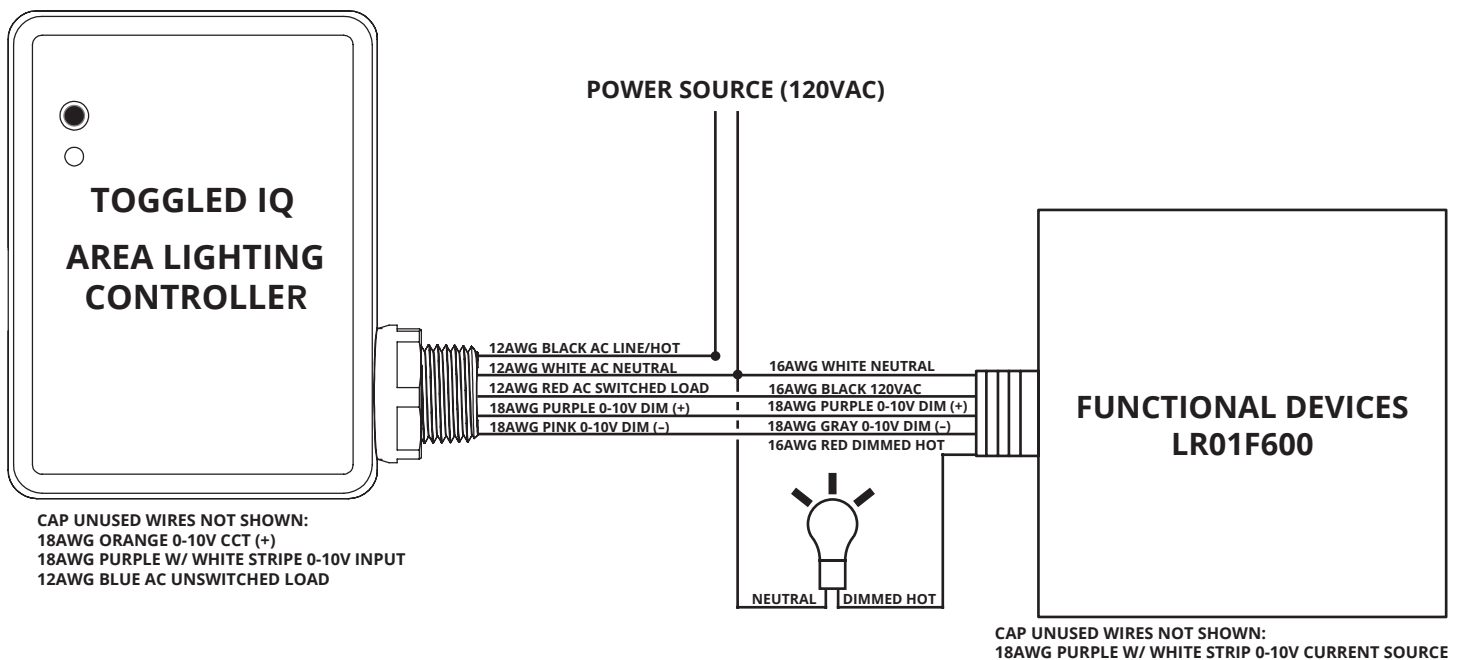
The phase dimmer (model LR01F600), manufactured by Functional Devices, Inc., is capable of leading-edge and trailing-edge dimming up to 600W for incandescent/halogen loads or 300W for other dimming loads.

Required devices:

- Area Lighting Controller (model: TAC-001)
- 0-10V controlled phase angle dimmer (model: LR01F600)

Wiring Example:

Before wiring devices, consult the full installation instructions provided with the Toggled iQ Area Lighting Controller (TAC-001) and phase dimmer (LR01F600).



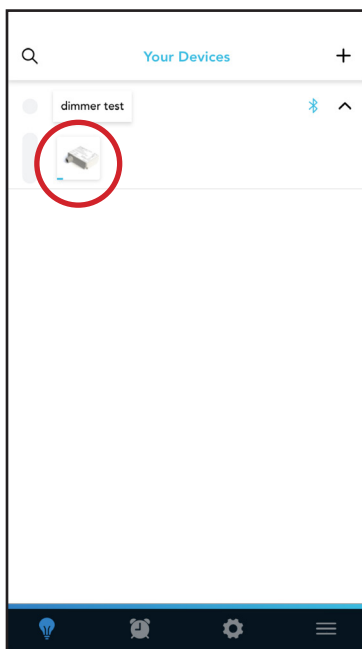
Device Configuration:

Once the Toggled iQ Area Lighting Controller and Functional Devices phase dimmer module are installed, some configuration of the Area Lighting Controller is recommended to reduce dead-zones in the dimming curve on the phase dimmer.

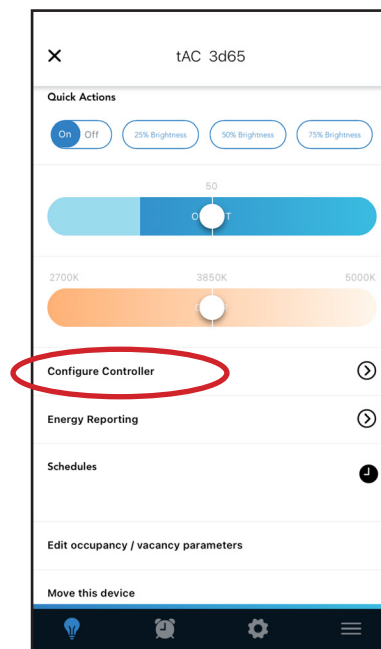
The phase dimmer output turns off below approximately 2.5V on the 0-10 V input. It also is at the maximum output above approximately 7.0V on the 0-10V input.

Reference the screenshots below to set the lower and upper limits of the 0-10V dim output of the Area Lighting Controller to 2.5V and 7.0V respectively.

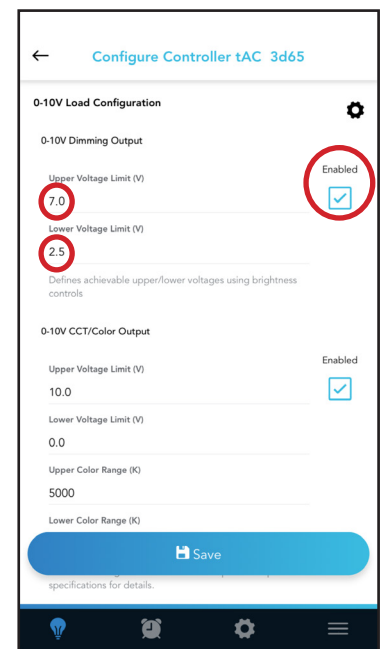
This will make the TAC-001 output 2.5V at minimum brightness and 7.0V at maximum brightness. Brightness values in between will be interpolated between these two new limits, making the light bulbs or luminaires attached to the phase dimmer more responsive.



1. Select the TAC-001 attached to the phase dimmer in your network.



2. Select "Configure Controller".



3. Enable the 0-10V Dimming Output limits and set the "Lower Voltage Limit" to 2.5V and the "Upper Voltage Limit" to 7.0V then select "Save" when finished.