

## Retrofit GP Dimming Card

- The Retrofit GP Dimming Card is intended to be used by customers who are currently using a GP dimming panel to dim screw-in incandescent lamps but wish to retrofit their system with more energy efficient screw-in replacement LED lamps.
- Certified for use in North America and will control up to 300 W of forward-phase controlled 120 V~ LED lamps. Although it is capable of operating other load types (see Specifications on page 2) it is intended to operate LED lamps only.
- Offers a solution for driving compatible LED lamps that are affected by the slow rise time or voltage ring-up caused by the large GP inductor.
- Uses the switched-hot terminal to bypass the existing inductor without removing or replacing the wiring harness.
- Functions as a drop in replacement for the existing dimming card; requires a simple relocation of the dimmed-hot load wire to the switched-hot terminal.
- Provides better low-end dimming performance and more stability for a greater number of LED lamps than does the existing panel. For recommended LED lamps, refer to Application Note #507 at [www.lutron.com/TechnicalDocumentLibrary/048507.pdf](http://www.lutron.com/TechnicalDocumentLibrary/048507.pdf)



### Retrofit GP Dimming Card works with GP Dimming Panels 120/277 V~

- GP 3/4 mini panels
- GP 8–24 standard-size panels
- GP 36–144 large-size panels

### Model and Capacity

| Input Power                             | Load Circuit Capacity   | Number of Circuits | Model Number |
|---|-------------------------|--------------------|--------------|
| 100–277 V~ 50/60 Hz<br>Phase to Neutral | 300 W LED load, maximum | 1                  | RET-GPDIMMER |

### Key Design Features

- Lightning strike protection: Meets ANSI/IEEE standard 62.41-1980. Can withstand voltage surges of up to 6000 V~ and current surges of up to 3000 A.
- Holds light levels if data is interrupted; goes to full conduction if power is restored without data present.
- RTISS® filter circuit technology: Compensates for incoming line voltage variations.
- Arcless-relay, air-gap OFF switch (one per load circuit): Ensures open load circuits when OFF function is selected; eliminates arcing at mechanical contacts when loads are switched.

### LUTRON® SPECIFICATION SUBMITTAL

|                    |                       |
|--------------------|-----------------------|
| <b>Job Name:</b>   | <b>Model Numbers:</b> |
| <b>Job Number:</b> |                       |

## Specifications

### Sources/Load Types

Operates these sources with smooth, continuous dimming or in a full-conduction, non-dim state:

- LED (forward-phase controlled, 120 V~ only)
- Incandescent (Tungsten)/Halogen (will have faster rise time – 50µs – than the current GP dimming card)
- HID (operates in full conduction, non-dim state only)
- 0-10V, DSI, PWM (requires an additional module)

### Regulatory Approval

- UL Listed
- CSA certified

### Diagnostic LED status for RET-GPDIMMER

| LED Display                             | Dimming Card Status                        | Possible Cause   |
|---|--|--|
| Off                                     | Not operating                              | No power;<br>defective card                                  |
| 1 blink per second<br>("heartbeat")     | Normal operation                           | —  |
|   | No output                                  | Load wire not<br>moved from<br>dimmed-hot to<br>switched-hot |
|   | No longer dimming (on<br>full)             | Missing triac<br>screw                                       |
| 1 blink per 7 seconds<br>("lighthouse") | Not communicating<br>with circuit selector | Control harness<br>not connected                             |

### Mounting and Wiring

- Uses existing harness inside the panel.
- Requires a simple relocation of the dimmed-hot load wire to the switched-hot terminal.  
Refer to the Installation Guide at [www.lutron.com/TechnicalDocumentLibrary/041442.pdf](http://www.lutron.com/TechnicalDocumentLibrary/041442.pdf)

### Environmental/Heat Dissipation

- Panel ambient requirement: 32 °F to 104 °F (0 °C to 40 °C); relative humidity less than 90%, non-condensing.

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