LP Dimming Panels

LP dimming panels are ideal for projects with many small loads. Each panel provides power and dimming for up to 32 dimming legs.

Features
- Works directly with incandescent, magnetic low-voltage, and neon/cold cathode lighting, as well as Lutron® TuWire® fluorescent dimming ballasts.
- Works with electronic low-voltage lighting via power interfaces.
- Works with 3-wire AC motors through motor modules.
- Panels are prewired—just bring in feed and load wiring.
- Surface or recess mount between 16 in (40 cm) center-to-center studs.

Models available with:
- 120 V~, 220–240 V~ (non CE), or 230 V~ (CE) input power.
- 1–8 dimming modules for 4–32 dimming legs.
- Different feed types and breakers.

LP Dimming Panels work with:
- GRX-4000 control units.
- GRAFIK 5000™, GRAFIK 6000®, and GRAFIK 7000™ systems.
- GP dimming panels and XP switching panels.
- DMX512 dimming systems via the 2Link™ option.
- Quantum® systems.

<table>
<thead>
<tr>
<th>Job Name:</th>
<th>Model Numbers:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job Number:</th>
<th></th>
</tr>
</thead>
</table>
Specifications

Standards (120 V~ panels only)
- UL Listed (Reference: UL File 42071).
- Complies with CSA, NOM, or CE (where appropriate.
  Contact Lutron for listing details on custom panels).
- Certified panels can be provided upon
  request. Contact Lutron for details.

Power
- Input power: 120 V~. 220–240 V~ (non CE), and
  230 V~ (CE). All voltages 50/60 Hz, phase-to-neutral.
- Branch circuit breakers (AIC ratings):
  - 120 V~ 10,000 A
  - 220–240 V~ 6000 A
  - 230 V~ (CE) 6000 A
- Lighting 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.
- 10-year power failure memory: Automatically restores
  lighting to scene selected prior to power interruption.

Short-Circuit Current Ratings (other ratings available)

<table>
<thead>
<tr>
<th>Panel Type</th>
<th>Voltage</th>
<th>Standard SCCR Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP Main Lug Panels (all sizes)</td>
<td>120 V~</td>
<td>25,000 A</td>
</tr>
</tbody>
</table>

Sources/Light Types
Operates these sources with a smooth, continuous
Square Law dimming curve or in a full-conduction,
non-dim state:
- Incandescent (Tungsten)/Halogen.
- Magnetic Low-Voltage transformer.
- Lutron® Tu-Wire® electronic fluorescent dimming
  ballasts.
- Neon/Cold Cathode.

Operates these sources via power interfaces:
- Electronic Low-Voltage transformer via dedicated
  internal dimming modules or external power
  interfaces.
- Lutron® electronic fluorescent dimming ballasts via
  external power interfaces.
- Operates HID sources in a full conduction, non-dim
  state.

Dimming Modules*
- Each dimming module can handle a fully loaded
  electrical circuit, up to four dimming legs per module.

Maximum Ratings

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Capacity per Dimming Module</th>
<th>Capacity per Dimming Leg</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 V~</td>
<td>16 A</td>
<td>16 A</td>
</tr>
<tr>
<td>220–240 V~</td>
<td>16 A</td>
<td>16 A</td>
</tr>
<tr>
<td>230 V~ (CE)</td>
<td>13 A</td>
<td>10 A</td>
</tr>
</tbody>
</table>

- RTISS™ filter circuit technology compensates for
  incoming line voltage variations: No visible flicker with
  +/-2% change in RMS voltage/cycle and +/-2% Hz
  change in frequency/second.

Wiring
- Internal: Prewired by Lutron.
- System communications: Low-Voltage
  IEC PELV/ NEC® Class 2 wiring connects dimming
  panels to other components.
- Line (mains) voltage: Feed and load wiring only. No
  other wiring or assembly required.

Setup
Circuit selector electronically assigns dimming legs to
zones and sources; permits reassignment of zones
and sources without rewiring.

Physical Design
- Enclosure: NEMA-Type 1, IP-20 protection; 16 U.S.
  gauge steel. Indoor use only.
- Weight: 27 lb (13 kg) for Mini LP, 63 lb (29 kg) for
  Standard-Size LP.
- Seismic Certification Limits: SDS = 2.5 g, z/h = 1.0,
  IP = 1.5. Contact Lutron for details.

Mounting
- Surface mount or recess mount between 16 in (40 cm)
  studs.
- Allow space for ventilating.

Environment
32–104 °F (0–40 °C). Relative humidity less than 90%,
non-condensing.

* For more information on load ratings, please refer to Application Note
# How to Build an LP Dimming Panel Model Number

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number of Dimming Modules</th>
<th>Number of Dimming Legs</th>
<th>Voltage</th>
<th>Feed Type</th>
<th>Panel Feed</th>
<th>Branch Circuit Breaker Rating</th>
<th>Custom Panel Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP</td>
<td>7</td>
<td>2</td>
<td>120</td>
<td>ML</td>
<td>_</td>
<td>_</td>
<td>CGP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>230</td>
<td>Mxx</td>
<td>_</td>
<td>_</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>240</td>
<td>IS</td>
<td>_</td>
<td>_</td>
<td></td>
</tr>
</tbody>
</table>

**Prefix**
- LP: Dimming Panel

**Number of Dimming Modules**
- Indicates number of dimming modules in the panel. Also indicates number of full load circuits.

**Number of Dimming Legs**
- Indicates number of dimming legs in the panel. Each module has four dimming legs.

**Voltage**
- **120**: 120 V～
- **230**: 230 V～ (CE)
- **240**: 220–240 V～ (non-CE)

**Feed Type**
- **2**: 1-phase 2-wire
- **3**: 1-phase 3-wire (split-phase)
- **4**: 3-phase 4-wire

**Panel Feed**
- **ML**: Main Lugs only
- **Mxx**: Main Breaker with xx = breaker size in Amps (custom panel option)
- **IS**: Isolation Switch (CE/non-CE only)

**Branch Circuit Breaker Rating**
- **20**: 20 A branch circuit breakers (120 V～ only)
- **15**: 15 A branch circuit breakers (120 V～ only)
- **13**: 13 A branch circuit breakers (230 V～ CE only)
- **16**: 16 A branch circuit breakers (240 V～ non-CE only)

**Custom Panel Suffix**
- CGP number indicates specific characteristics of a customized panel.
**Models**

Only standard panels listed. Consult Lutron for further options.

**Mini LP Dimming Panels**

### 120 V~ Power

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of Dimming Modules</th>
<th>Number of Dimming Legs</th>
<th>Feed Type</th>
<th>Maximum Feed</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>4</td>
<td>1Ø 2W</td>
<td>20 A</td>
<td></td>
</tr>
<tr>
<td>LP2</td>
<td>8</td>
<td>1Ø 2W 1Ø 3W</td>
<td>40 A 20 A</td>
<td></td>
</tr>
<tr>
<td>LP3</td>
<td>12</td>
<td>1Ø 2W 1Ø 3W 3Ø 4W</td>
<td>40 A 40 A 20 A</td>
<td></td>
</tr>
</tbody>
</table>

15 A or 20 A branch circuit breakers

### 220–240 V~ (non-CE) Power

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of Dimming Modules</th>
<th>Number of Dimming Legs</th>
<th>Feed Type</th>
<th>Maximum Feed</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>4</td>
<td>1Ø 2W</td>
<td>16 A</td>
<td></td>
</tr>
<tr>
<td>LP2</td>
<td>8</td>
<td>1Ø 2W</td>
<td>32 A</td>
<td></td>
</tr>
<tr>
<td>LP3</td>
<td>12</td>
<td>1Ø 2W 3Ø 4W</td>
<td>48 A 16 A</td>
<td></td>
</tr>
</tbody>
</table>

16 A branch circuit breakers

### 230 V~ (CE) Power

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of Dimming Modules</th>
<th>Number of Dimming Legs</th>
<th>Feed Type</th>
<th>Maximum Feed</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>4</td>
<td>1Ø 2W</td>
<td>13 A</td>
<td></td>
</tr>
<tr>
<td>LP2</td>
<td>8</td>
<td>1Ø 2W</td>
<td>26 A</td>
<td></td>
</tr>
<tr>
<td>LP3</td>
<td>12</td>
<td>1Ø 2W 3Ø 4W</td>
<td>39 A 13 A</td>
<td></td>
</tr>
</tbody>
</table>

13 A branch circuit breakers

**Wire Sizes**

**Feed Wiring**

- Power (Hot/Live) connects directly to branch circuit breakers:
  - 120 V~: 14 AWG to 10 AWG (2.0 mm² to 4.0 mm²)
  - 220–240 V~ (non-CE): 18 AWG to 4 AWG (1.0 mm² to 25 mm²)
  - 230 V~ (CE): 18 AWG to 4 AWG (1.0 mm² to 25 mm²)

  Neutral connects to neutral lug:
  - 120 V~: 14 AWG to 2/0 AWG (2.0 mm² to 70 mm²)
  - 220–240 V~: 14 AWG to 8 AWG (2.0 mm² to 6.0 mm²)
  - 230 V~ (CE): 14 AWG to 8 AWG (2.0 mm² to 6.0 mm²)

**Load Wiring**

- All Models: 14 AWG to 10 AWG (2.0 mm² to 4.0 mm²)
Models (continued)

Only standard panels listed. Consult Lutron for further options.

Standard-size LP Dimming Panels

120 V～ Power

<table>
<thead>
<tr>
<th>Number Of Dimming Modules</th>
<th>Number Of Dimming Legs</th>
<th>Feed Type</th>
<th>Maximum Feed</th>
<th>Panel Feed</th>
<th>Branch Circuit Breakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP4</td>
<td>16</td>
<td>3Ø 4W</td>
<td>175 A</td>
<td>Main lugs only</td>
<td>15 A or 20 A¹</td>
</tr>
<tr>
<td>LP5</td>
<td>20</td>
<td>3Ø 4W</td>
<td>175 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP6</td>
<td>24</td>
<td>3Ø 4W</td>
<td>175 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP7</td>
<td>28</td>
<td>3Ø 4W</td>
<td>175 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP8</td>
<td>32</td>
<td>3Ø 4W</td>
<td>175 A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ 20/16A, 15/12A continuous load rating.

220–240 V～ (non-CE) Power

<table>
<thead>
<tr>
<th>Number Of Dimming Modules</th>
<th>Number Of Dimming Legs</th>
<th>Feed Type</th>
<th>Maximum Feed</th>
<th>Panel Feed</th>
<th>Branch Circuit Breakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP4</td>
<td>16</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td>Isolation switch only</td>
<td>16 A</td>
</tr>
<tr>
<td>LP5</td>
<td>20</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP6</td>
<td>24</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP7</td>
<td>28</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP8</td>
<td>32</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

230 V～ (CE) Power

<table>
<thead>
<tr>
<th>Number Of Dimming Modules</th>
<th>Number Of Dimming Legs</th>
<th>Feed Type</th>
<th>Maximum Feed</th>
<th>Panel Feed</th>
<th>Branch Circuit Breakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP4</td>
<td>16</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td>Isolation switch only</td>
<td>13 A</td>
</tr>
<tr>
<td>LP5</td>
<td>20</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP6</td>
<td>24</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP7</td>
<td>28</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP8</td>
<td>32</td>
<td>3Ø 4W</td>
<td>125 A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wire Sizes

Feed Wiring to Main Lugs (120 V～ Only):
- Power (Hot/Live): (3) 14 AWG to 2/0 AWG (2.0 mm² to 70 mm²)
- Neutral: (1) 14 AWG to 2/0 AWG (2.0 mm² to 70 mm²)

Feed Wiring to Isolation Switch (CE/non-CE only):
- Power (Hot/Live): (3) 2.5 mm² to 35 mm²
- Neutral: (1) 2.5 mm² to 35 mm²

Load Wiring
- All Models: 14 AWG to 10 AWG (2.0 mm² to 4.0 mm²)
Dimensions

All dimensions shown as: in (mm)

Mini LP Dimming Panels
Dimensions (continued)

All dimensions shown as: in (mm)

Standard-size LP Dimming Panels

Top View
- 14.375 (365.13)

Front View
- 15.875 (403.23)
- 8.00 (203.20)

Right Side View
- 4.21 (106.93)
- 0.15 (3.81)

Left Side View
- 59.50 (1511.30)

Bottom View
- 2.69 (68.25)
Mounting

Mini LP Dimming Panels
• Surface- or recess-mount indoors.
• Consult Dimensions page for dimensions and conduit knockout locations.
• Panel generates heat. Mount only where ambient temperature is 32–104 °F (0–40 °C).
• This equipment is air-cooled. Do not block vents or warranty will be void.
• Mount Panels where audible noise is acceptable. (Panels hum slightly and internal relays click.)
• Mount Panels so line (mains) voltage wiring is at least 6 ft (1.8 m) from sound or electronic equipment and wiring.
• Mount Panel within 7° of true vertical.

Surface Mounting
• Surface mounting keyholes accept 1/4 in (6 mm) mounting bolts. This size is recommended.

Recess Mounting
• Mount to wall stud by screwing through slots in corners of panel.
• Mount panel between flush and 1/8 in (3 mm) below finished wall surface.

<table>
<thead>
<tr>
<th>Panel</th>
<th>Maximum BTUs/hour</th>
<th>Weight Without Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>90</td>
<td>33 lb (15kg)</td>
</tr>
<tr>
<td>LP2</td>
<td>170</td>
<td>35 lb (16kg)</td>
</tr>
<tr>
<td>LP3</td>
<td>250</td>
<td>37 lb (17kg)</td>
</tr>
</tbody>
</table>

Maximum Feed and Wire Sizes
Consult Wiring page.
Mounting (continued)

Standard-size LP Dimming Panels
- Surface- or recess-mount indoors.
- Consult Dimensions page for dimensions and conduit knockout locations.
- Panel generates heat. Mount only where ambient temperature is 32–104 °F (0–40 °C).
- This equipment is air-cooled. Do not block vents or warranty will be void.
- Reinforce wall structure for weight and local codes.
- Mount Panels where audible noise is acceptable. (Panels hum slightly and internal relays click.)
- Mount Panels so line (mains) voltage wiring is at least 6 ft (1.8 m) from sound or electronic equipment and wiring.
- Mount Panel within 7° of true vertical.

Surface Mounting
- Surface mounting keyholes accept 1/4 in (6 mm) mounting bolts. This size is recommended.

<table>
<thead>
<tr>
<th>Panel</th>
<th>Maximum BTUs/hour</th>
<th>Weight Without Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP4</td>
<td>330</td>
<td>55 lb (25kg)</td>
</tr>
<tr>
<td>LP5</td>
<td>410</td>
<td>57 lb (26kg)</td>
</tr>
<tr>
<td>LP6</td>
<td>490</td>
<td>59 lb (27kg)</td>
</tr>
<tr>
<td>LP7</td>
<td>570</td>
<td>61 lb (28kg)</td>
</tr>
<tr>
<td>LP8</td>
<td>650</td>
<td>63 lb (29kg)</td>
</tr>
</tbody>
</table>

Maximum Feed and Wire Sizes
Consult Wiring page.

Recess Mounting
- Mount to wall stud by screwing through slots in corners of panel.
- Mount panel between flush and 1/8 in (3 mm) below finished wall surface.
Wiring

Mini LP Dimming Panels

Wire the Mini LP panel similarly to a lighting distribution panel:

- Run feed and load wiring; no other wiring or assembly is required.
- Run separate neutrals for each module (no common neutrals across phases).

The Mini LP panel can provide temporary lighting:

- Wire all loads.
- Do not remove the bypass jumpers that protect the dimming modules.
- Use branch circuit breakers to switch lights on and off.

<table>
<thead>
<tr>
<th>Power (Hot/Live) Wiring</th>
<th>Neutral Wiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 V~ 14–10 AWG (2.0–4.0 mm²)</td>
<td>120 V~ 14–2/0 AWG (2.0–70 mm²)</td>
</tr>
<tr>
<td>220–240 V~ 18–4 AWG (1.0–25 mm²)</td>
<td>220–240 V~ 14–8 AWG (2.0–6.0 mm²)</td>
</tr>
<tr>
<td>230 V~ (CE)</td>
<td>230 V~ (CE)</td>
</tr>
</tbody>
</table>
Wiring (continued)

Standard-size LP Dimming Panels
Wire the LP panel similarly to a lighting distribution panel:
- Run feed and load wiring; no other wiring or assembly is required.
- Run separate neutrals for each module (no common neutrals across phases).

The LP panel can provide temporary lighting:
- Wire all loads.
- Do not remove the bypass jumpers that protect the dimming modules.
- Use branch circuit breakers to switch lights on and off.

**Power (Hot/Live) Wiring**
(3) 14–2/0 AWG (2.0–70 mm²)

**Neutral Wiring**
(1) 14–2/0 AWG (2.0–70 mm²)
Typical Dimming Legs for 120 V~

All Load Types except:
- Lutron® Hi-lume® or Eco-10® (ECO-Series) Fluorescent Dimming Ballasts
- Electronic Low-Voltage

![Diagram of typical dimming legs for 120 V~]

Lutron® Hi-lume® or Eco-10® (ECO-Series) Fluorescent Dimming Ballasts
- Use Lutron® FDBI Fluorescent Dimming Ballast Interface.

![Diagram of Lutron® Hi-lume® or Eco-10® (ECO-Series) Fluorescent Dimming Ballasts]

Electronic Low-Voltage
- Use Lutron® ELVI Electronic Low-Voltage Interface.
- Consult ELVI Specification Submittal for more details.

![Diagram of electronic low-voltage setup]

---

**Job Name:**

**Model Numbers:**

**Job Number:**
Typical Dimming Legs for 220 to 240 V~ (non CE)

All Load Types except:
- Lutron Hi-lume or Eco-10 (ECO-Series) Fluorescent Dimming Ballasts
- Electronic Low-Voltage

Lutron Hi-lume or Eco-10 (ECO-Series) Fluorescent Dimming Ballasts
- Use Lutron FDBI Fluorescent Dimming Ballast Interface.

Electronic Low-Voltage
- Use Lutron ELVI Electronic Low-Voltage Interface.
- Consult ELVI Specification Submittal for more details.
Typical Dimming Legs for 230 V~ (CE)

All Load Types except:
• Lutron® Hi-lume® or Eco-10® (ECO-Series) fluorescent dimming ballasts
• Electronic Low-Voltage

Electronic Low-Voltage
• Use Lutron® ELVI Electronic Low-Voltage Interface.
Low-Voltage IEC PELV/NEC® Class 2 Wiring (All Models)

- System communications uses low-voltage IEC PELV/NEC® Class 2 wiring.
- Wiring must be daisy-chained.
- Wiring must run separately from line (mains) voltage.

GRAFIK Eye® 4000 System

IEC PELV/NEC® Class 2 wiring link requires:

- Two 12 AWG (2.5 mm²) conductors for control power.
- One twisted, shielded pair of 18 AWG (1.0 mm²) for data link.
- One 18 AWG (1.0 mm²) conductor for emergency (essential) sense line, from panel to panel.

Total length of control link may be no more than 2000 ft (610 m).

Approved low-voltage cable is available from Lutron, Belden, and Liberty. These are approved with 22 AWG (0.625 mm²) data link wires.

GRAFIK 5000™/6000™/7000™ System

IEC PELV/NEC® Class 2 wiring link requires:

- Two 12 AWG (2.5 mm²) conductors for control power.
- One twisted, shielded pair of 18 AWG (1.0 mm²) for data link.
- One 18 AWG (1.0 mm²) conductor for emergency (essential) sense line, from panel to panel.

Total length of control link may be no more than 2000 ft (600 m).

If MUX-RPTR interface and GRX-CBL-46L cable¹ is used, length may be up to 4000 ft (1200 m).

¹ GRX-CBL-46L IEC PELV/NEC® Class 2 wiring cable is available from Lutron and contains:
Two 12 AWG (2.5 mm²) conductors for control power.
One twisted, shielded pair of 22 AWG (0.625 mm²) for data link.
One 18 AWG (1.0 mm²) conductor for emergency (essential) sense line.
IEC PELV/NEC® Class 2 Panel-to-Panel Wiring (All Models)

- Control Wiring
  (2) 12 AWG (2.5 mm²)
  1: Common
  2: 24 VFW

- Data Link
  (1) shielded, twisted pair 18 AWG (1.0 mm²)
  3: MUX
  4: MUX

- (1) 18 AWG (1.0 mm²)
  5: Sense Line†

Notes
* Emergency power: The additional 18 AWG (1.0 mm²) wire is a “sense” line from terminal 5 of another panel. This sense line allows an emergency (essential) lighting panel to “sense” when normal (non-essential) power is lost. If more than one emergency lighting panel needs to sense from a specific normal panel, a dedicated wire between each pair of normal (non-essential) and emergency (essential) panels may be required.
† Shield/Drain: Connect shielding as shown. Do not connect to ground (earth) or circuit board of circuit selector. Connect the bare drain wires and cut off the outside shield.

IEC PELV/NEC® Class 2 Terminal Connections

Each Low-Voltage IEC PELV/NEC® Class 2 terminal can accept only two 18 AWG (1.0 mm²) wires. Two 12 AWG (2.5 mm²) conductors won’t fit. Connect as shown, using appropriate wire connectors.
Options

Consult Lutron for ordering information and model numbers. Dimensions and wiring may change based on options chosen.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Lug Sets</td>
<td>Allows multiple Panels to be fed from the same feed.</td>
<td>A single feed and multiple LP Dimming Panels are required.</td>
</tr>
<tr>
<td>Branch Circuit Protection</td>
<td>Branch Circuit Breakers with higher AIC ratings than those on standard Panels. Panels can also have Branch Circuit Breakers with special ratings such as: GFI (Ground Fault Interrupt), ELB (Earth Leakage Breaker), RCD (Residual Circuit Device).</td>
<td>—</td>
</tr>
<tr>
<td>Lutron® Ten-Volt Module (TVM)</td>
<td>Allows Panels to operate fluorescent ballasts that meet IEC 929 standards for 0–10 V control including: Lutron® TVE ballasts, 0–10 V neon, PWM fluorescent, Tridonic® DSI (Digital Serial Interface). The TVM can sink or source 50 mA (typically 25–50 ballasts) on each circuit.</td>
<td>Jobs with fluorescent ballasts that require 0–10 V, PWM, or DSI control.</td>
</tr>
<tr>
<td>2Link™</td>
<td>Allows a DMX512 theatrical console to operate Dimming Panels’ load circuits.</td>
<td>Control of architectural lighting from a DMX512 theatrical console is required.</td>
</tr>
<tr>
<td></td>
<td>Allows a GRAFIK Eye+ 4000 Series to handle 128 zones (2 links of 64 zones). The 2 links are independent and do not communicate. Contact Lutron for further details.</td>
<td>A mix of architectural and theatrical lighting exists on the job.</td>
</tr>
</tbody>
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