

Please Read

LUTRON® Dimming Panels

Installation Guide
GRAFIK Systems™ (DCI)

English

Español

Français



DCI3-1202M-20 shown

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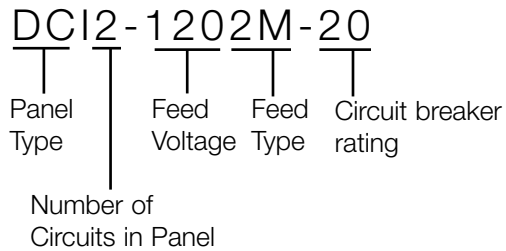
Overview

Use this guide to successfully install a dimming panel. This guide describes panel installation, wiring, and load activation.

Panel Model Number Guide

Feed-Through Model Numbers

Example



Panel Type

DCI for DCI panel

Number of Circuits in Panel

Indicates number of dimming modules in the panel:

1, 2, or 3

Feed Voltage

120 for 120 V~

Feed Type

2M for 1 phase 2 wire main breaker

One breaker per module; input feed terminates at terminal blocks

Branch Circuit Breaker Rating

20 for 20 A circuit breakers

Frequency - All Model Numbers and Voltages

50/60 Hz

Output Voltages

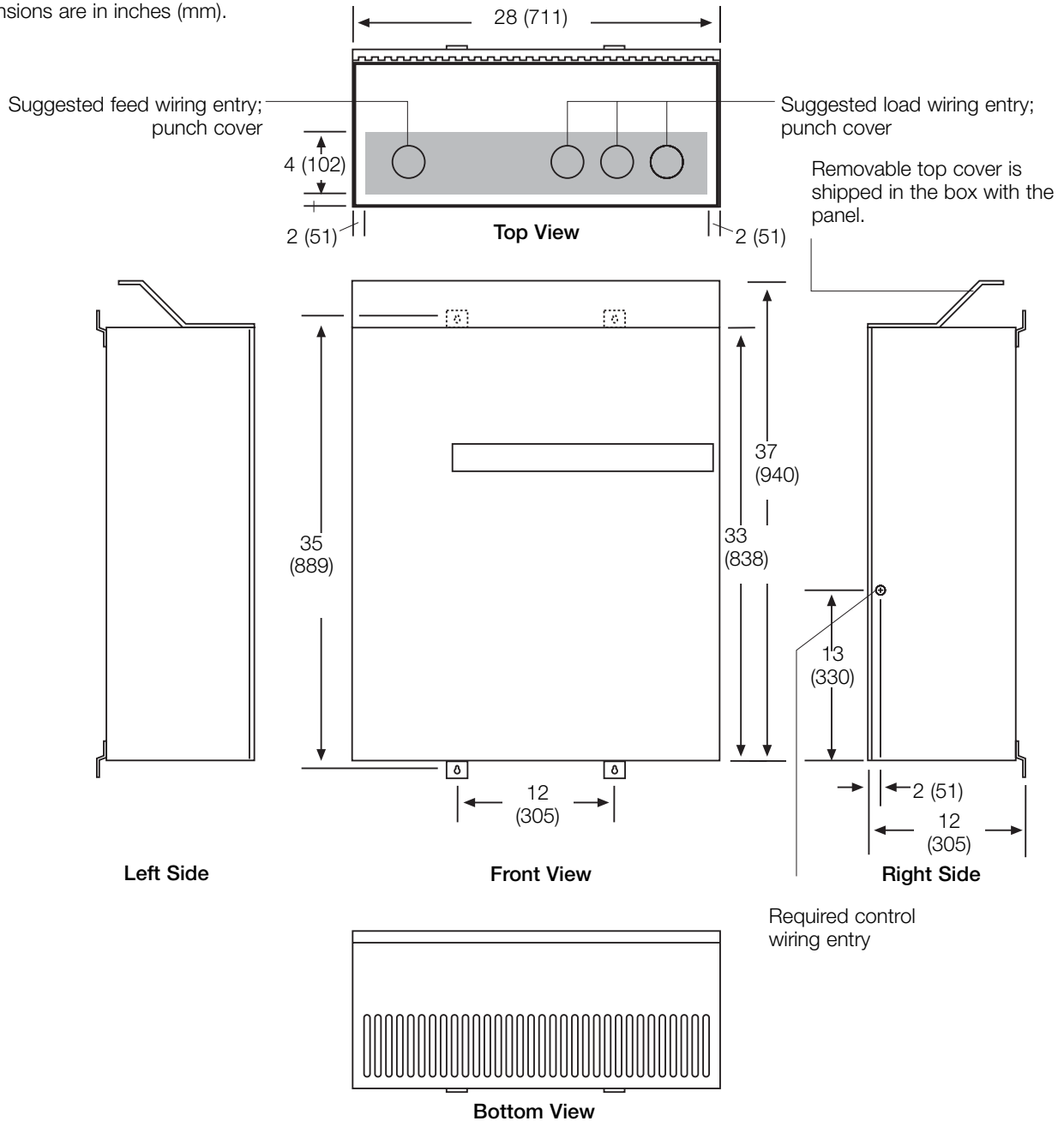
120 V~ or 277 V~

0-110 V==

Panel Dimensions

Standard Panel: DCI1-3

Dimensions are in inches (mm).



Notes

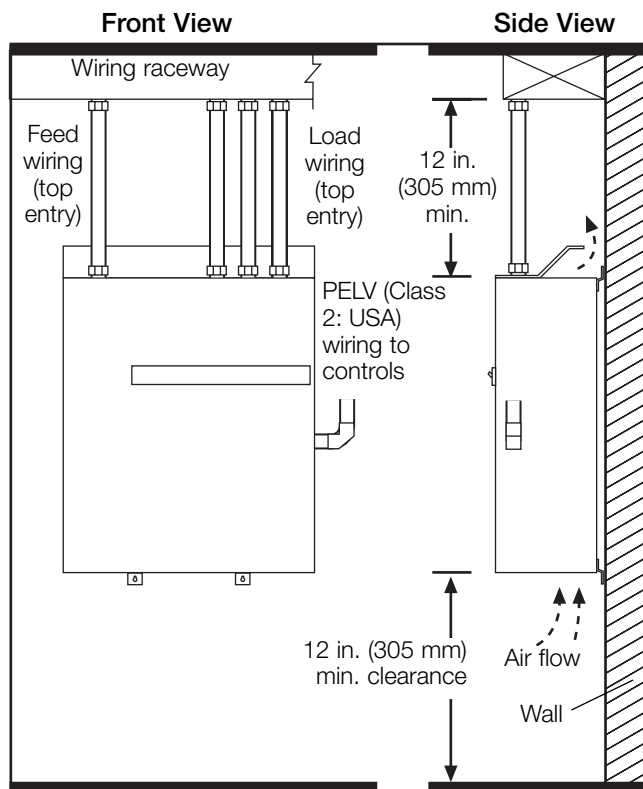
- Keyhole accepts a maximum 5/16 in. (8 mm) mounting bolt (1/4 in./m8 recommended).
- PELV (Class 2: USA) entry knockout is 7/8 in. dia. (22 mm).



Caution! This equipment is air-cooled. Vents must not be blocked or you will void the warranty.

Panel Mounting

Standard Panel



Mounting Guidelines

- For Indoor Use Only! NEMA, Type 1 enclosure, IP20.
- Panel generates heat. Mount where ambient temperature is 32-104 °F (0-40 °C).
- Relative humidity must be <90% non-condensing.
- Reinforce wall structure for panel weight and local codes; see table.
- Mount panel where audible noise is acceptable (internal relays click).
- Mount panel so line (mains) voltage wiring is at least 6 ft. (1.8 m) from audio or electronic equipment and associated wiring.
- Mount within 7° of true vertical.
- Panel clearances are 12 in. (305 mm) above and below and 0 in. to each side. Allow room for PELV (Class 2: USA) clearance.

Panel	Max. Heat BTUs (Kcal) per Hour	Max. Weight w/o Packaging* pounds (kg)
DCI1	260 (65.56)	130 (59)
DCI2	515 (129.86)	170 (77)
DCI3	770 (194.17)	210 (95)

*Packaging weight adds 50 lbs (23 kg).

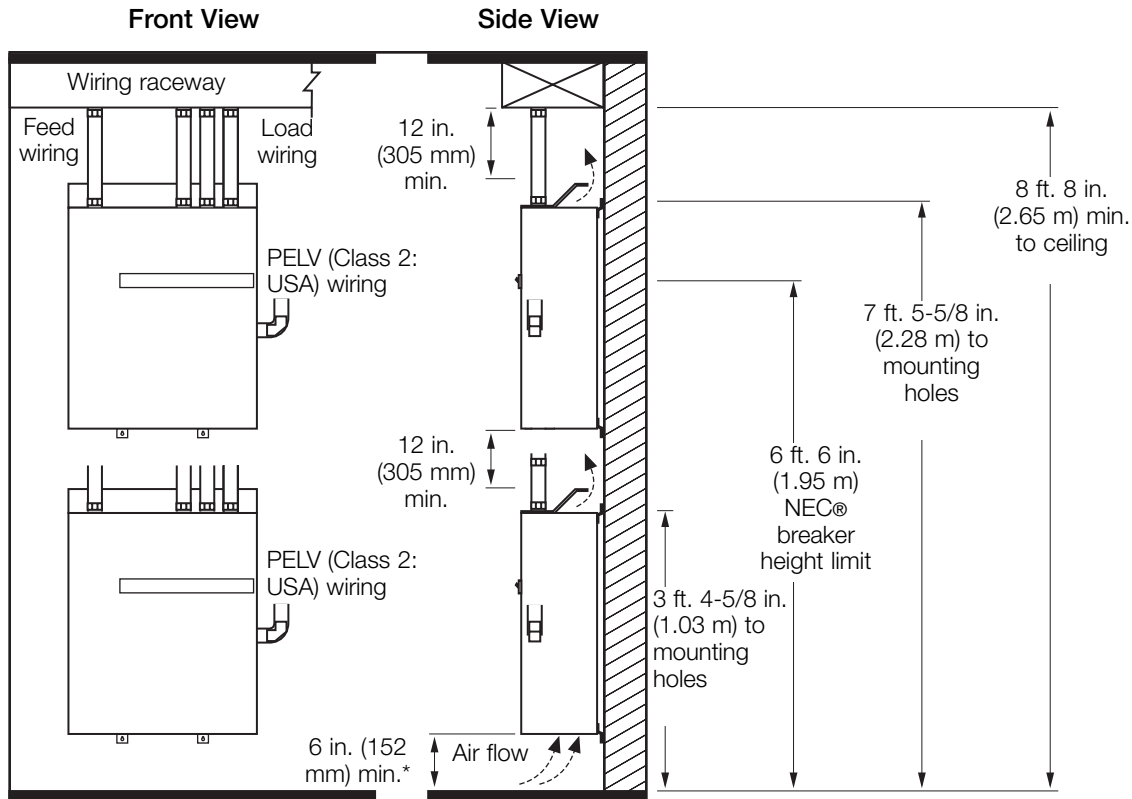


Caution! This equipment is air-cooled. Vents must not be blocked or you will void the warranty.

Panel Mounting (continued)

Mounting One Panel above Another

At least 8 ft. 8 in. (2.74 m) between floor and suspended ceiling is required for this layout.



*6 in. (152 mm) approved for this layout only.



Warning! Water damages panels. Install where they will not get wet.

Panel Wiring Overview

DCI1-DCI3

Feed Wiring

Connect to terminal blocks.
#14-10 AWG (2.0-4.0 mm²)

Two Feed Options:

A) If standard (not dimming-specific) facility filters are used on the load side then isolation transformers must be used to feed the DCI Panel

B) If custom dimming-specific facility filters are used (see page 8) then isolation transformers are not needed.

Load Circuit Wiring

Connect to fuse blocks.
#16-4 AWG (1.5-25 mm²)

Control Wiring

Connect to circuit selector.
See PELV (Class 2: USA) wiring section.

Power and control wires must be run in separate raceways to ensure proper operation of controls.

Notes

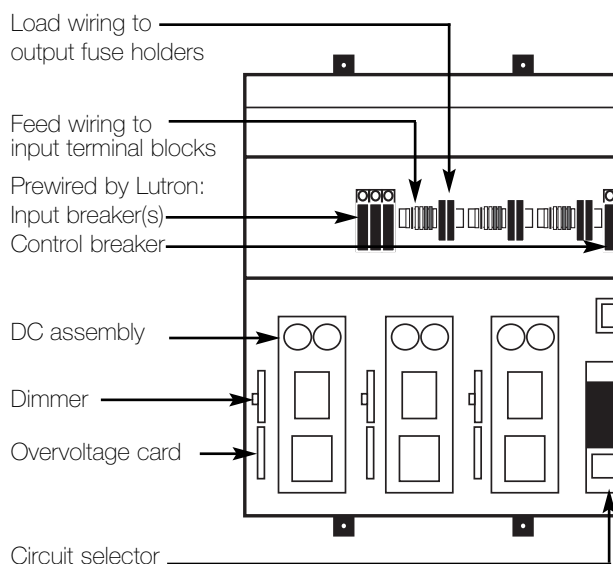
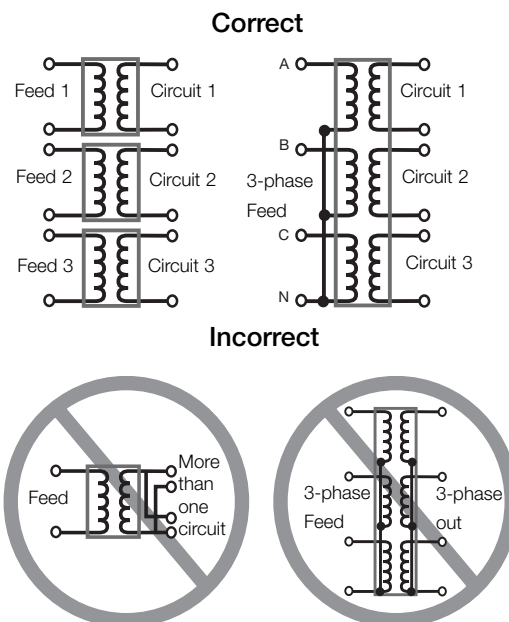
- Run feed and load wiring; no other wiring or assembly required.
- Common neutrals are not permitted; run separate neutrals for each load circuit.

To provide temporary lighting:

- Wire all loads.
- Use circuit breakers to switch lights on and off. Leave control breaker off.

Note on Isolation Transformers

Keep each DCI Circuit Feed separate from each other.



Note: Panels are not designed for side or bottom entry of feed or load wires.

Wire Sizes

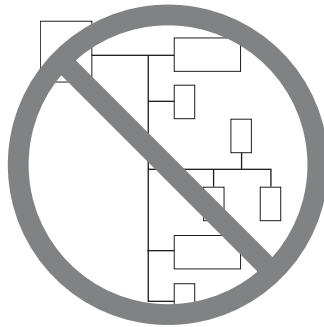
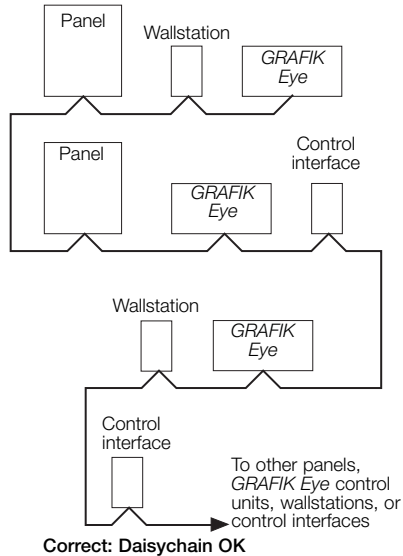
Panel/ Voltage	Power Feed	Neutral Feed	DC+/ DC-
DCI1-DCI3 120 V~	#14-#10 AWG (2.5-4.0 mm ²)	#14-#10 AWG (2.5-4.0 mm ²)	#16-#4 AWG (1.5-25 mm ²)

System Wiring Overview

Review the options below for information on wiring your panel correctly into your specific system.

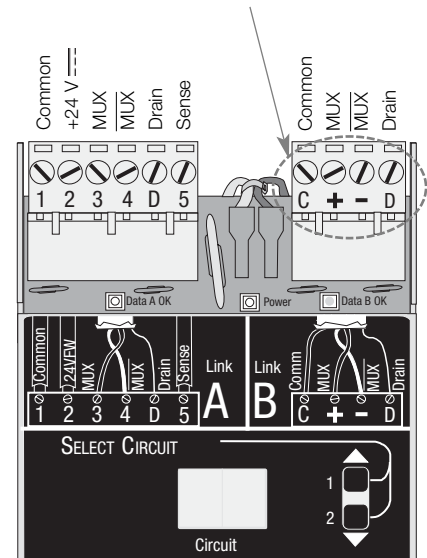
A. DCI panel as a part of a GRAFIK Eye® 4000 lighting system:

Refer to the *GRAFIK Eye® 4000 Series Installers Guide* and the system overview pictured here for detailed wiring information.



Incorrect: Branch, T-tap, or home run not acceptable

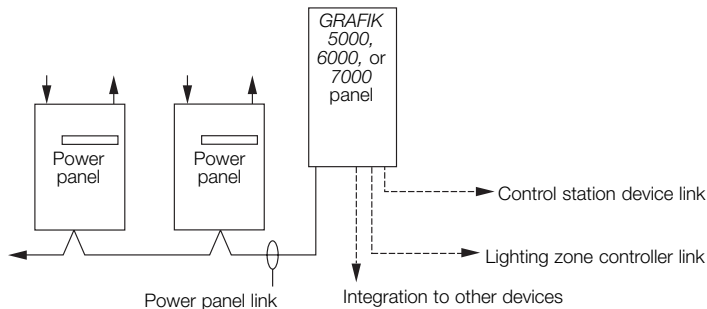
Note: Single-link circuit selectors will not have Link B connector.



Circuit Selector Terminals

B. DCI panel as a part of a GRAFIK7000™ lighting system:

Refer to the *GRAFIK7000 Installation, and Maintenance Guide* and the system overview pictured here for detailed wiring information.



Load Wiring

MRI Facility Filters



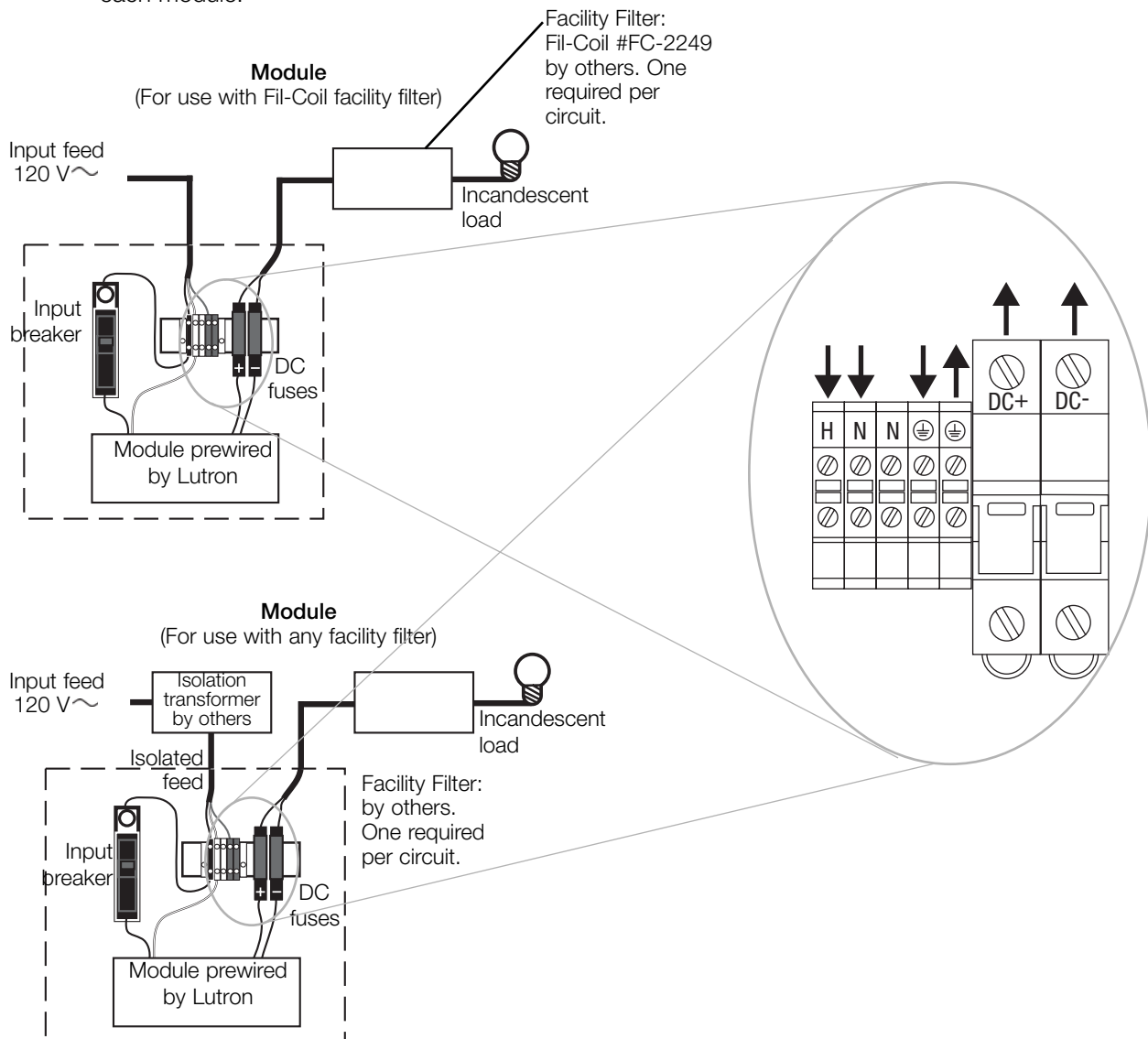
All voltage supplies into MRI room must be fed through facility filters. Lutron recommends the following UL listed filter: FIL-COIL CORP., P/N FC-2249



All controls and dimming panels must be mounted outside the MRI room away from the influence of large magnetic fields.

Please contact the above manufacturer to ensure a proper installation. Standard filters are not permitted unless each dimming module is supplied by an isolation transformer.

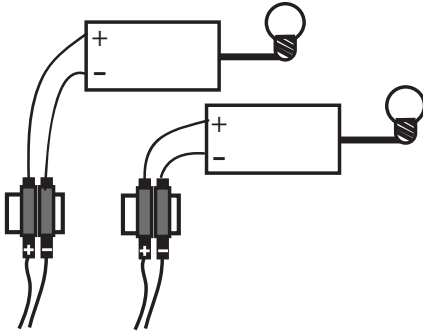
Isolation transformer must be 120:120, 3.0 KVA. One unique transformer required for each module.



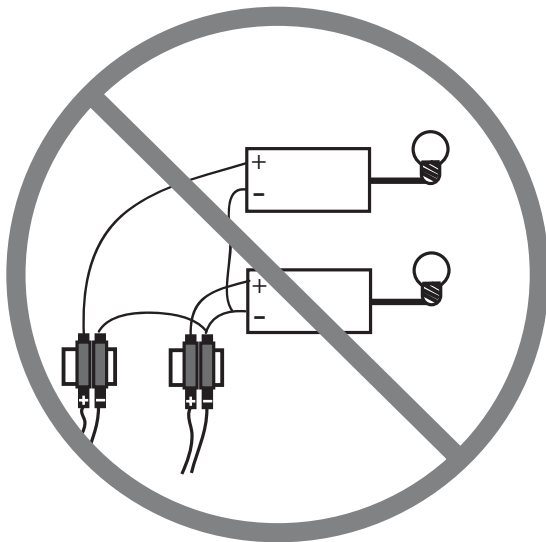
Load Wiring (continued)

Each circuit must wire to a unique +/- set of terminals in the panel. The “-” return must not be shared between circuits.

Correct



Incorrect



Complete Installation

You have completed your panel installation.

For Onsite Factory Commissioning, call Lutron Technical Support and select Startup to schedule a field service visit. Allow for 10 working days between day of call and scheduled visit.

In the U.S., Canada, and the Caribbean: 1.800.523.9466

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In Asia: +65.6220.4666

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Notes

Warranty

Lutron Electronics Co., Inc. One Year Limited Warranty

For a period of one year from the date of purchase, and subject to the exclusions and restrictions described below, Lutron warrants each new unit to be free from manufacturing defects. Lutron will, at its option, either repair the defective unit or issue a credit equal to the purchase price of the defective unit to the Customer against the purchase price of comparable replacement part purchased from Lutron. Replacements for the unit provided by Lutron or, at its sole discretion, an approved vendor may be new, used, repaired, reconditioned, and/or made by a different manufacturer.

If the unit is commissioned by Lutron or a Lutron approved third party as part of a Lutron commissioned lighting control system, the term of this warranty will be extended, and any credits against the cost of replacement parts will be prorated, in accordance with the warranty issued with the commissioned system, except that the term of the unit's warranty term will be measured from the date of its commissioning.

EXCLUSIONS AND RESTRICTIONS

This Warranty does not cover, and Lutron and its suppliers are not responsible for:

1. Damage, malfunction or inoperability diagnosed by Lutron or a Lutron approved third party as caused by normal wear and tear, abuse, misuse, incorrect installation, neglect, accident, interference or environmental factors, such as (a) use of incorrect line voltages, fuses or circuit breakers; (b) failure to install, maintain and operate the unit pursuant to the operating instructions provided by Lutron and the applicable provisions of the National Electrical Code and of the Safety Standards of Underwriter's Laboratories; (c) use of incompatible devices or accessories; (d) improper or insufficient ventilation; (e) unauthorized repairs or adjustments; (f) vandalism; or (g) an act of God, such as fire, lightning, flooding, tornado, earthquake, hurricane or other problems beyond Lutron's control.
2. On-site labor costs to diagnose issues with, and to remove, repair, replace, adjust, reinstall and/or reprogram the unit or any of its components.
3. Equipment and parts external to the unit, including those sold or supplied by Lutron (which may be covered by a separate warranty).
4. The cost of repairing or replacing other property that is damaged when the unit does not work properly, even if the damage was caused by the unit.

EXCEPT AS EXPRESSLY PROVIDED IN THIS WARRANTY, THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF ANY TYPE, INCLUDING ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. LUTRON DOES NOT WARRANT THAT THE UNIT WILL OPERATE WITHOUT INTERRUPTION OR BE ERROR FREE.

NO LUTRON AGENT, EMPLOYEE OR REPRESENTATIVE HAS ANY AUTHORITY TO BIND LUTRON TO ANY AFFIRMATION, REPRESENTATION OR WARRANTY CONCERNING THE UNIT. UNLESS AN AFFIRMATION, REPRESENTATION OR WARRANTY MADE BY AN AGENT, EMPLOYEE OR REPRESENTATIVE IS SPECIFICALLY INCLUDED HEREIN, OR IN STANDARD PRINTED MATERIALS PROVIDED BY LUTRON, IT DOES NOT FORM A PART OF THE BASIS OF ANY BARGAIN BETWEEN LUTRON AND CUSTOMER AND WILL NOT IN ANY WAY BE ENFORCEABLE BY CUSTOMER.

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TO MAKE A WARRANTY CLAIM

To make a warranty claim, promptly notify Lutron within the warranty period described above by calling the Lutron Technical Support Center at (800) 523-9466. Lutron, in its sole discretion, will determine what action, if any, is required under this warranty. To better enable Lutron to address a warranty claim, have the unit's serial and model numbers available when making the call. If Lutron, in its sole discretion, determines that an on-site visit or other remedial action is necessary, Lutron may send a Lutron Services Co. representative or coordinate the dispatch of a representative from a Lutron approved vendor to Customer's site, and/or coordinate a warranty service call between Customer and a Lutron approved vendor.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

These products may be covered under one or more of the following U.S. patents: 6,046,550; 6,091,205; 6,380,692; and corresponding foreign patents.

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