

**LUTRON**

**LU-PH3-A  
Lumaris  
Power  
Interface**



# LUTRON LU-PH3-A Lumaris Power Interface Installation Guide

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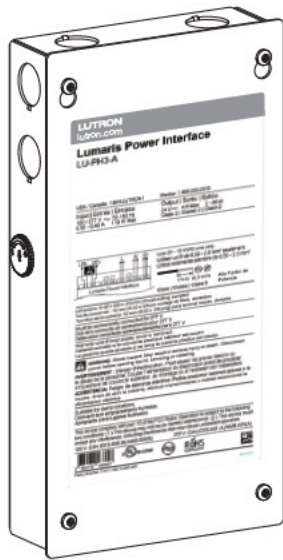
**LUTRON LU-PH3-A Lumaris Power Interface**



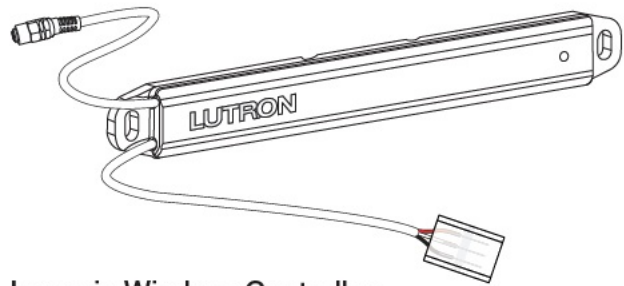
## Important Notes:

- For installation by a qualified electrician in accordance with all local and national electrical codes.
- Use copper conductors only.
- For indoor use only.
- For 277 V~ applications, a suitable barrier may be required between the non-Class 2 and Class 2 wiring, per local and national electrical wiring codes. For your convenience, the power interface includes an optional barrier.
- DO NOT install if product has any visible damage.
- If moisture or condensation is evident, allow the product to dry completely before installation.
- Operate between 32 °F (0 °C) and 104 °F (40 °C) ambient.
- 0% to 90% humidity, non-condensing.
- Four 8-32 × 3/8 in (9.5 mm), serrated lid screws provided.

## Required Components For each system, ensure that you have:



**Power Interface  
(LU-PH3-A)**



**Lumaris Wireless Controller  
(3 controllers max per power interface)  
RRL-TWCL-WH - RadioRA 3  
HWL-TWCL-WH - HomeWorks QSX**



**Barrel-to-Terminal Adapter  
(3 included)  
(LU-BP1)**

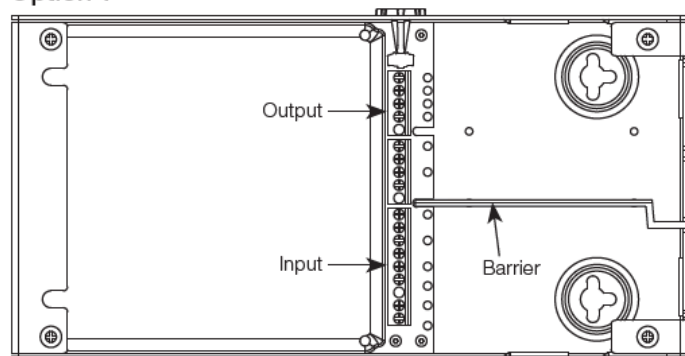
## Mount the power interface

1. Remove the top cover to access the multi-sided mounting key holes.
2. Mount the power interface per the options shown below.

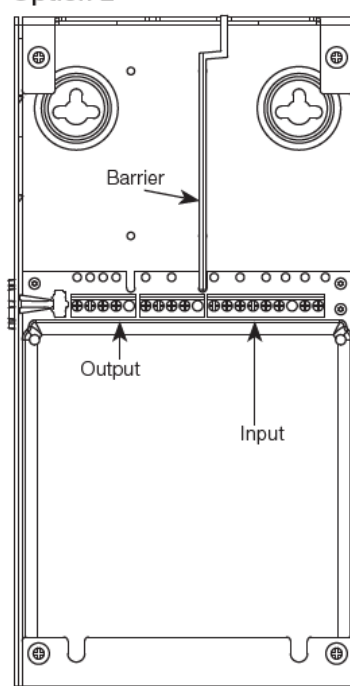
## Notes

- A minimum of 3 in (76 mm) is required between any two power interfaces.
- Mount the power interface in a position where it can be easily located and accessed if service or troubleshooting is necessary.
- Any other mounting configurations will require additional mechanical support. Improper installation may result in hazards to personnel or property.

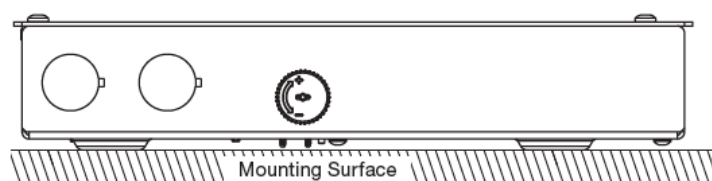
Option 1



Option 2



Option 3



A barrier (included) in the wiring compartment separates non-Class 2 and Class 2 wires. Barrier can be placed between the control and the output terminals (Option 1) or between the input and the control terminals (Option 2).

## Wiring

**WARNING:** Shock Hazard. May result in serious injury or death. Turn off power at circuit breaker before installing the unit.

1. Remove the top cover to access the terminal blocks.
2. Open the necessary knockouts to pass wires into the wiring compartment.
3. Determine the length and wire gauge from the power interface to the wireless controller using Table 1.
4. If wiring wireless controllers in a multi-zone application, wire as shown in Wiring Diagram A. If wiring wireless controllers in a single zone application, wire as shown in Wiring Diagram B.
5. Connect the necessary wires as shown in the wiring diagram and plug in the barrel-to-terminal adapter to the wireless controller. Terminals accept 12 AWG to 20 AWG (4.0 mm<sup>2</sup> to 0.50 mm<sup>2</sup>) on the power interface. Barrel-to-terminal adapter terminals accept 16 AWG to 20 AWG (1.0 mm<sup>2</sup> to 0.50 mm<sup>2</sup>). Torque to 5 in-lbs (0.5 N•m).

**Note:** If using 14 AWG (2.5 mm<sup>2</sup>) or 12 AWG (4.0 mm<sup>2</sup>) wire for LED+ and LED- wires from the power interface to the barrel-to-terminal adapter, splice a small piece of 16 AWG (1.0 mm<sup>2</sup>) wire onto a 12 AWG (4.0 mm<sup>2</sup>) or 14 AWG (2.5 mm<sup>2</sup>) wire to insert into the barrel-to-terminal adapter.

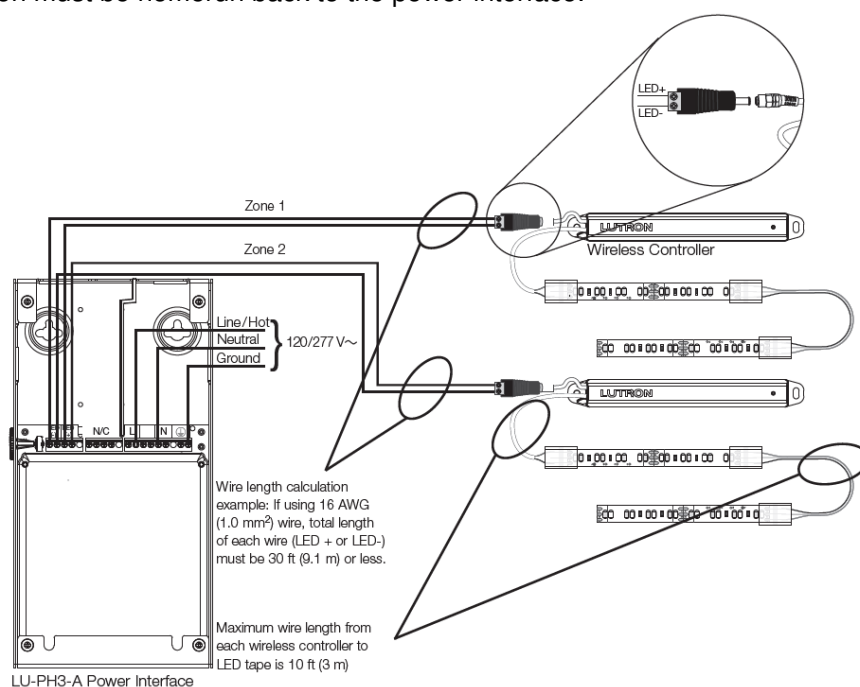
6. Optional – Add barrier between non-Class 2 and Class 2 wires.
7. Re-apply power.

**Note:** Table 1 wiring information is based on a Lumaris power interface controlling three Lumaris wireless controllers, each with 16.4 ft (5 m) of LED tape. Contact Lutron if longer wire runs are required.

Table 1: Maximum Wire Length from the Power Supply to the Wireless Controller: ft (m)				
12 AWG (4.0 mm <sup>2</sup> )	14 AWG (2.5 mm <sup>2</sup> )	16 AWG (1.0 mm <sup>2</sup> )	18 AWG (0.75 mm <sup>2</sup> )	20 AWG (0.50 mm <sup>2</sup> )
75 (22.9)	50 (15.2)	30 (9.1)	20 (6.1)	10 (3.0)

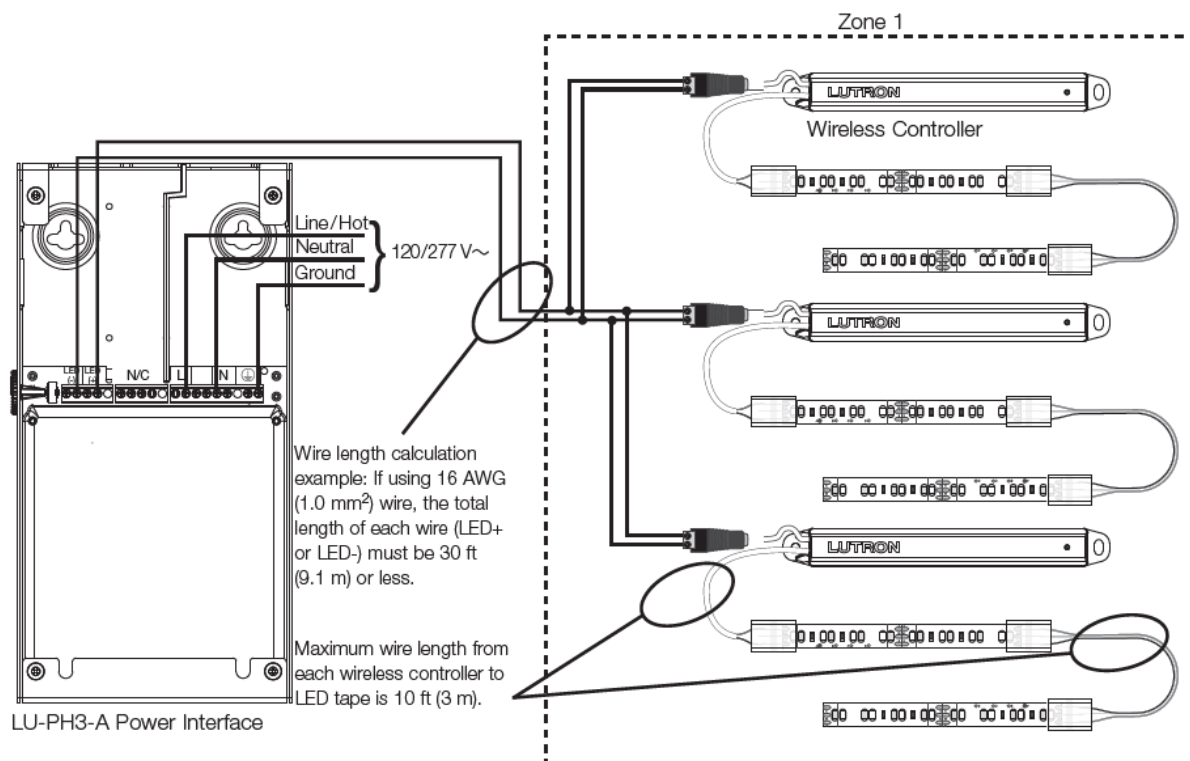
### Wiring Diagram A: Multi-zone application

**Note:** To avoid unintended interaction between LEDs, all wireless controllers that are controlled separately in a multi-zone application must be homerun back to the power interface.



### Wiring Diagram B: Single zone application

**Note:** If wiring wireless controllers in a single zone application, LED+ and LED- low-voltage wires can be T-tapped or can be homerun back to the power interface. Either wiring method is acceptable.



## Troubleshooting

Indicator LED Flash Pattern	Reason	Remedy
LED on wireless controller is off	No power to the wireless controller	Confirm that the circuit breaker is on to the power interface and that the line voltage wiring is connected to the proper terminals.
Red LED on wireless controller flashes once, then a 2 second pause.	Output short circuited	Disconnect the load from the wireless controller and check for shorts. Power cycle the wireless controller to reset.
Red LED on wireless controller flashes three times, then a 2 second pause.	Input voltage is too low	Confirm that the wireless controller is being powered by 24 V- +/- 10%. Confirm proper wire gauge and length are used from Table 1.
Red LED on wireless controller flashes four times, then a 2 second pause.	Input voltage is too high	
Green LED on wireless controller is on continuously.	Device is not commissioned	Setup the device in a system.

### Customer Assistance:

U.S.A. / Canada: 1.844.LUTRON1

Mexico: +1.888.235.2910


[www.lutron.com](http://www.lutron.com)

### Limited Warranty:

For limited warranty information, please visit <http://www.lutron.com/TechnicalDocumentLibrary/043492.pdf>

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## Documents / Resources

	<a href="#">LUTRON LU-PH3-A Lumaris Power Interface</a> [pdf] Installation Guide LU-PH3-A, RRL-TWCL-WH, HWL-TWCL-WH, LU-BP1, LU-PH3-A Lumaris Power Interface, LU-PH3-A, Lumaris Power Interface, Power Interface, Interface
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## References

- [User Manual](#)

### [Manuals+](#), [Privacy Policy](#)

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