

Legacy Panel Interface for Athena

The legacy panel interface for Athena provides an interface for dimming modules, switching modules, and dimmer cards to communicate on the QS link.

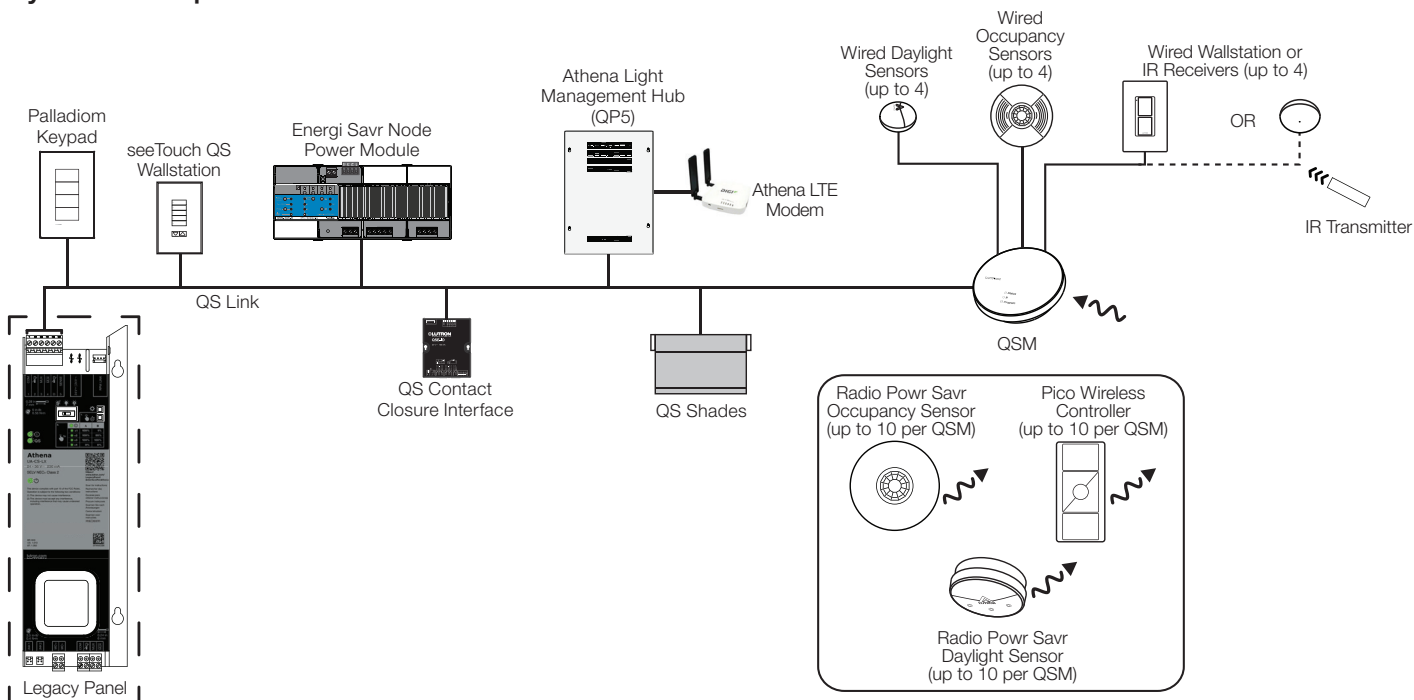
Features

- Compatible with the Athena system.
- Includes QS link for integration and control of most Lutron dimmer cards and module panels.
- One for one replacement for each circuit selector, LCP128 controller, or Softswitch 128 controller.
- Powered by existing 24 V~ transformer or 24 V==.
- LEDs display diagnostic information.
- Buttons provide local control of all non-motor switch legs.
- Supports emergency lighting applications.
- Power failure memory automatically returns the switch legs to the levels they were set to prior to a power outage.
- Enables existing LCP, XPS, GRAFIK 4000, GRAFIK 5000, GRAFIK 6000, GRAFIK 7000, and Quantum installations with legacy panels to be upgraded to Athena.^{1,2,3}
- BAA compliant



UA-CS-LX

System Example



¹ Please contact your local Lutron sales representative or system sales engineer for considerations when upgrading existing systems to Athena with the legacy panel interface.
² If present, LT-1 terminators will need to be removed from the existing wiring.
³ Contact your local Lutron sales representative or system sales engineer if an MX-RPTR is used with the existing power panels.

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Specifications

Power

- 24 V~ 50/60 Hz or 24 V==

Regulatory Approvals

- cULus Listed
- FCC Class B

Environment

- Room ambient temperature is between 32 °F and 104 °F (0 °C and 40 °C).
- Relative humidity less than 90% non-condensing.
- For indoor use only.

Terminals (Torque, wire gauge & type ratings)

- 6-pin communication terminal block: 5 in-lbs (0.6 N•m)
 - COM (“1”):
22 AWG to 12 AWG (0.25 mm² to 4.0 mm²)
 - “2” and “D” Terminals: Not connected
 - MUX (“3”) and MUX (“4”):
22 AWG to 18 AWG (0.25 mm² to 1.0 mm²)
(1 twisted, screened pair)
 - SENSE (“5”):
22 AWG to 18 AWG (0.25 mm² to 1.0 mm²)

Programming and Compatibility Requirements

- Setup and programming of the legacy panel interface is done through the Athena programming software.

QS Link Limits

- Each legacy panel interface counts as one device toward the QS link device limit, and up to 48 switch legs toward the QS link switch leg limit.
- Refer to Lutron specification submittal P/N 369821 at www.lutron.com for system rules.

Panel Compatibility

- Compatible with:
 - CCP
 - CGP
 - CXP
 - GP
 - LCP
 - LP
 - RP
 - RPT
 - XP
 - XPS

- Select panels have more than one controller and will need an equal number of legacy panel interfaces. Count the number of controllers in your panel.
 - GP panels with 36 circuits will need two legacy panel interfaces.
 - GP panels with 48 or 72 circuits will need three legacy panel interfaces.
 - GP panels with more than 72 circuits or certain custom panels will need further investigation to determine the number of legacy panel interfaces needed. Contact Lutron for assistance.
- Many other custom panel variants are also compatible. Please contact Lutron to determine if your panel is compatible.

Control Link Compatibility

- Compatible with:
 - LP-FF-RPM-4U-120
 - LP-RPM-1U-120
 - LP-RPM-2U-120
 - LP-RPM-4U-*
 - LP-RPM-4A-*
 - LP-RPM-4E-*
 - LP-RPM-4M-120
 - GRX-TVM2
 - REP-TVM2
 - GRX-PWM250
 - XP-SM-4S
 - XP2-SM-4S
 - REP-GPDIMMER
- Supports Hi-1 and Hi-2 baud rates.
- Supports RTISS capable GP Cards.

Protections

- Miswire: All terminal block inputs are over-voltage and miswire protected against wire reversals and shorts
- ESD: Meets or exceeds the IEC 61000-4-2 standard
- Surge: Meets or exceeds ANSI/IEEE C62.41 standard

* Includes voltage and CE variants.

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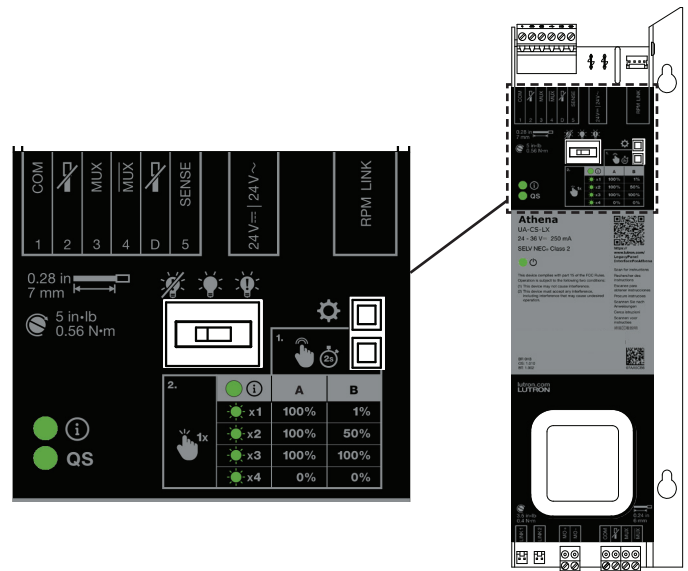
Out of Box Functionality

User Interface Operation

- The buttons on the legacy panel interface can be used with or without system connection, to:
 - Set the baud rate of the control links. The baud rate can be set to Hi-1 or Hi-2 (default).
 - Control all panel switch legs as non-dimmable switched outputs. The switch legs can be turned on or off¹.

Emergency Lighting

- Evaluated by UL® for use in emergency lighting systems in accordance with UL924 when paired with LUT-ELI-3PH (UL® file E234628).
- Inputs
 - SENSE terminal: Receives signal from LUT-ELI or a normal (non-essential) panel. The signal allows an emergency (essential) 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.
 - Switch: Configures the emergency panel type as normal (non-essential), emergency (essential), or disabled. The panel type determines how the panels will respond when normal (non-essential) power is lost. This must be set locally by the switch. It cannot be configured through the Athena programming software.
 - Left position (🔌): Configures the panel as normal (non-essential). The legacy panel interface will only operate in normal mode as a non-essential panel. The SENSE terminal will report a non-essential power outage.
 - Center position (💡): Disables emergency functionality. The legacy panel interface will only operate in normal mode. The panel will not respond to a non-essential power outage. The SENSE terminal will not report a power outage or sense a power outage.
 - Right position (⚡): Configures the panel as emergency (essential). The legacy panel interface will go to emergency mode if a non-essential power outage is detected on the SENSE terminal.



- Operating Modes:
 - Normal mode: The legacy panel interface will communicate over the control links normally and will respond to local button presses.
 - Emergency mode: All switch legs will be sent to their maximum light level (default). The legacy panel interface will not respond to local button presses or implement light level changes received on the QS Link. The switch leg light levels in emergency mode can be customized in the Athena programming software.
 - Return to normal mode from emergency mode: All switch legs will go to the most recent light level received while in emergency mode. They will return to their previous light level if no updates were received while in emergency mode. The legacy panel interface will again respond to local button presses and communications over the QS link.

Switch Position	Graphic	Configuration	Operating Mode(s)	SENSE Terminal
Left	🔌	Normal	Normal	Reports a power outage
Center	💡	Override/Disable	Normal	Disabled
Right	⚡	Emergency	Emergency or Normal	Senses a power outage

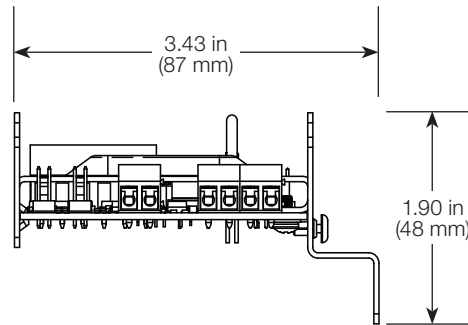
¹ Only applicable for switch legs that can be controlled as switched outputs. Excludes motor loads.

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Mounting

- Mount in a compatible Lutron panel. See **Specifications: Panel Compatibility** on page 2 for a list of compatible panels.
- Mount in front view orientation shown below.
- Mount in panel by replacing the existing circuit selector, LCP128 controller, or Softswitch 128 controller.
- Generates heat, maximum 7 BTUs/hr.
- Mount such that the room ambient temperature is between 32 °F to 104 °F (0 °C to 40 °C).

Mechanical Dimensions



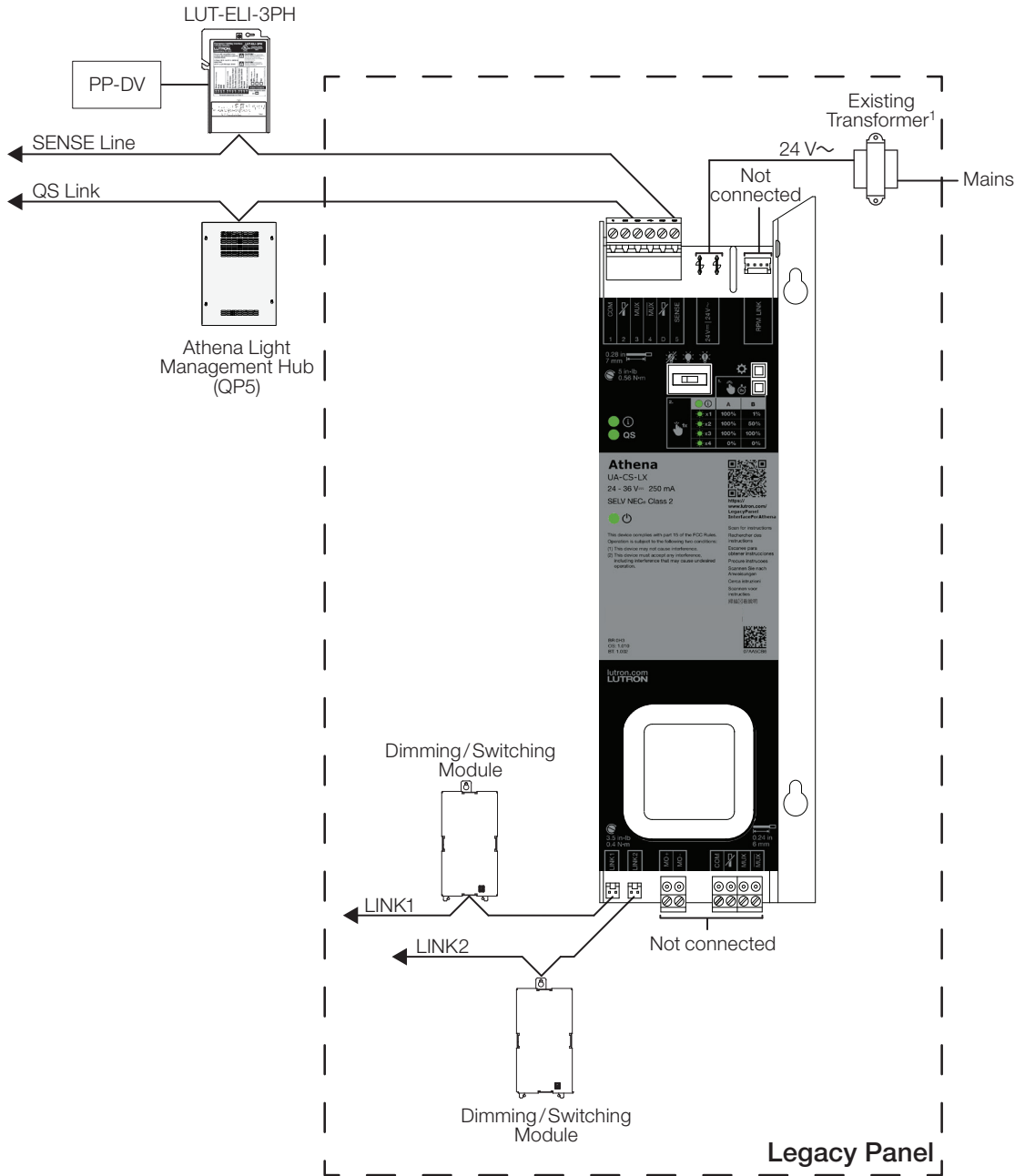
Front View

Bottom View

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Overview of Wiring

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¹ The legacy panel interface can also be powered by 24 V \sim .

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Wiring: Power

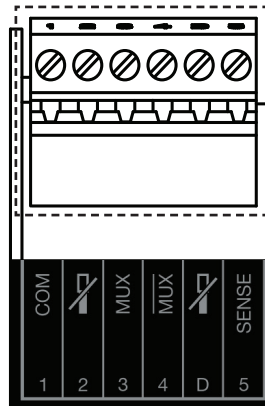
- Wiring is NEC® Class 2.
- Follow all applicable national and local codes for proper circuit use and protection.
- Input 24 V~ from existing transformer or 24 V=.



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Wiring: 6-Pin Communication Terminal Block

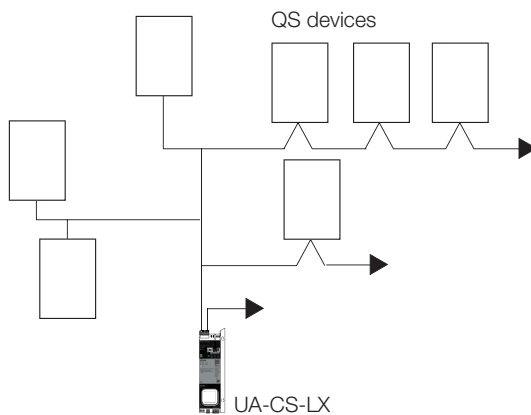
- 6-pin communication terminal block wiring is NEC® Class 2.
- Includes QS Link and Emergency Sense connections. See subsections for details.
- Each terminal can accept two 18 AWG (1.0 mm²) wires.
- Two 12 AWG (2.5 mm²) conductors will not fit.
- Wiring may be daisy-chained or T-tapped.
- Applications that use Emergency Sense require an additional 18 AWG (1.0 mm²) SENSE wire.



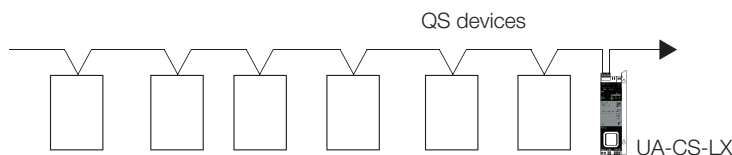
Wiring Options

Link Length	Conductors	Wire and Gauge	Available from Lutron in one cable:
Less than 500 ft (153 m)	4	Power: 1 pair 18 AWG (0.75 mm ²)	GRX-CBL-346S (non-plenum) GRX-PCBL-346S (plenum)
		Data: 1 pair 22 AWG (0.25 mm ²), twisted and screened	
500 ft (153 m) to 2000 ft (610 m)	4	Power: 1 pair 12 AWG (4.0 mm ²)	QSH-CBL-L (non-plenum) QSH-CBLP-L (plenum)
		Data: 1 pair 22 AWG (0.25 mm ²), twisted and screened	
	5	Power: 1 pair 12 AWG (4.0 mm ²)	GRX-CBL-46L (non-plenum) GRX-PCBL-46L (plenum)
		Data: 1 pair 22 AWG (0.25 mm ²), twisted and screened	
		Sense: 18 AWG (0.75 mm ²)	

T-Tap Wiring Example



Daisy-Chain Wiring Example

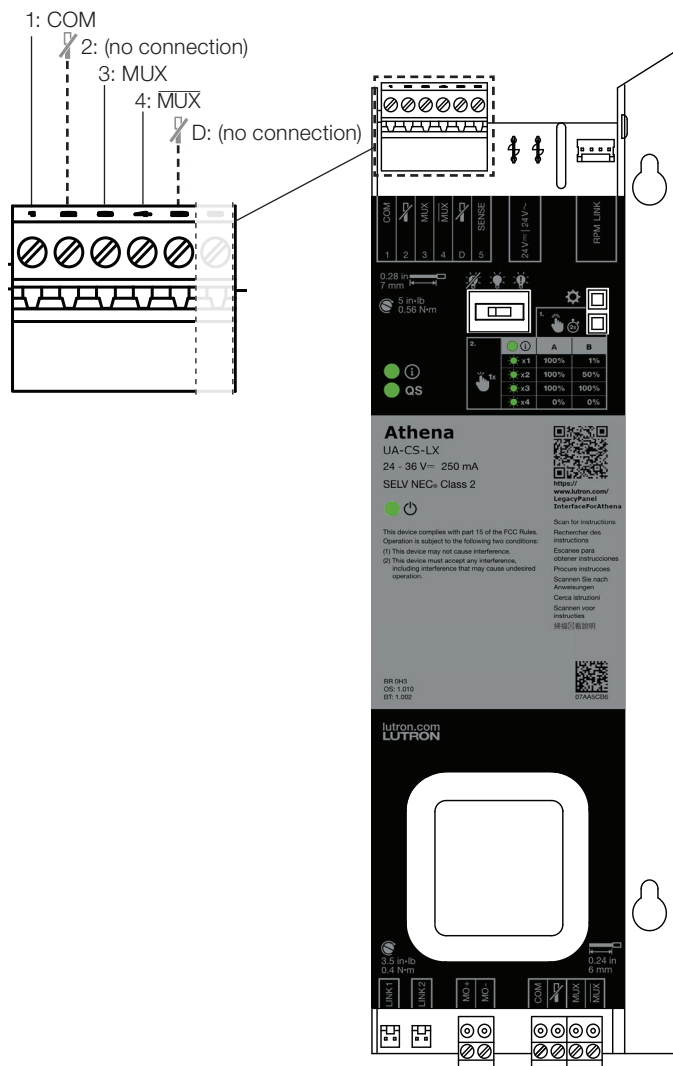


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Wiring: 6-Pin Communication Terminal Block (continued)

QS Link

- Wiring is NEC® Class 2.
- Follow all applicable national and local codes for proper circuit separation and protection.
- Cannot be powered through QS link terminal. See **Wiring: Power** section on page 6 for more details.
- Do NOT connect to “2” terminal.
- Do NOT connect to “D” terminal.
- Does not supply or consume PDUs.

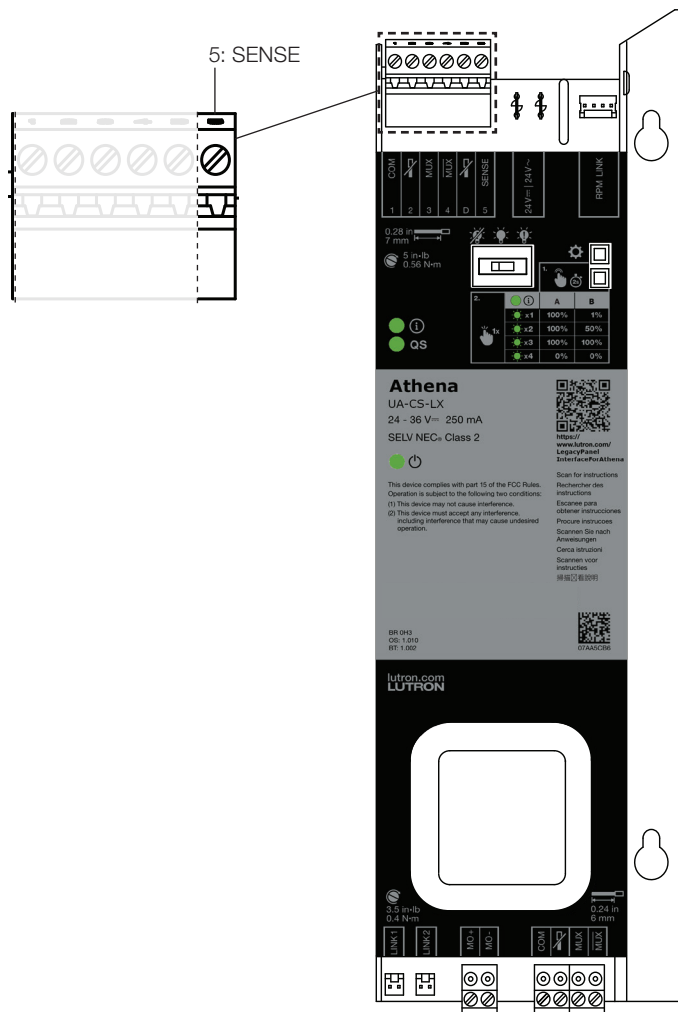


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Wiring: 6-Pin Communication Terminal Block (continued)

Emergency Sense

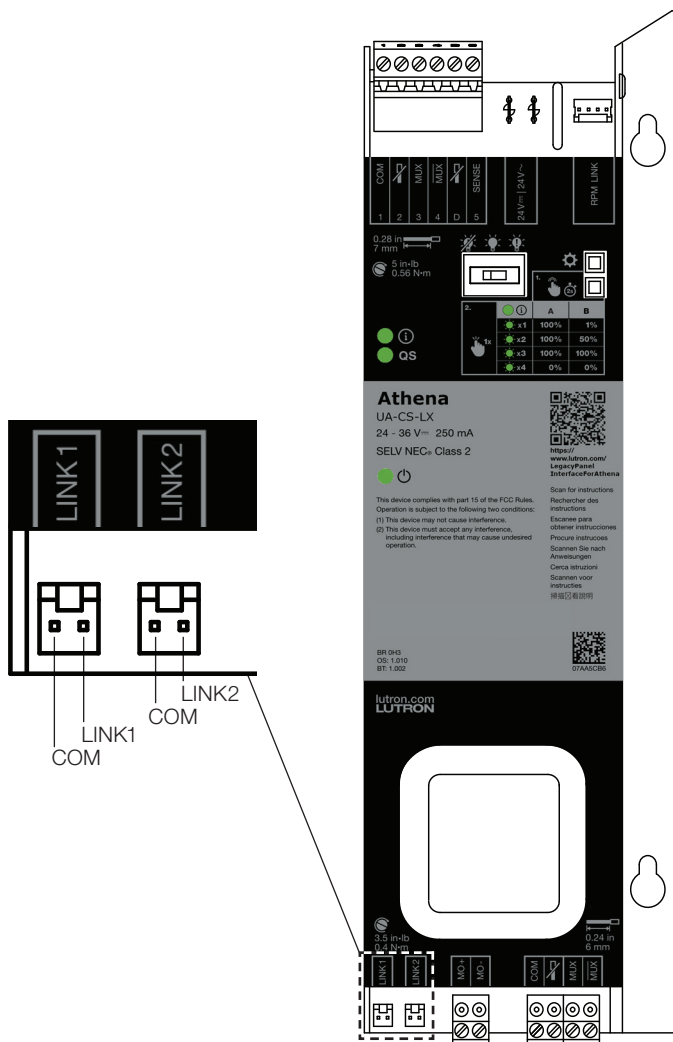
- Wiring is NEC® Class 2.
- Follow all applicable national and local codes for proper circuit separation and protection.
- Use the switch to set the desired panel emergency operation. See **Out of Box Functionality: Emergency Lighting** on page 3 for details on each configuration.
- Maximum of 32 legacy panel interfaces may be connected in parallel to one LUT-ELI.
- Refer to Lutron application note #106 (P/N 048106) at www.lutron.com for details on the use of LUT-ELI in Athena, UL924-compliant wiring, and non-UL924 wiring.



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Wiring: Control Links

- Wiring is NEC® Class 2.
- Follow all applicable national and local codes for proper circuit separation and protection.
- Each link can interface with up to 24 switch legs.
- Utilizes existing wiring harness.



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