



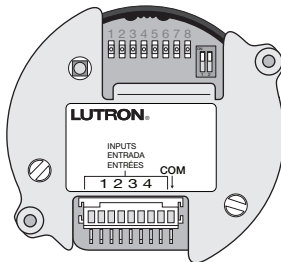
Installation Instructions

Please Read Before Installing

Aviena Closure Interface:
HW-QS-ACI
 SELV/PELV/NEC[®] Class 2
 24–36 V_{DC} 20 mA

Important Notes

The HW-QS-ACI is designed to work exclusively with Lutron Aviena Keypads (ships separately). This device will neither work by itself nor with other contact closure switches. It is ONLY compatible with Lutron HomeWorks QSX series processors.

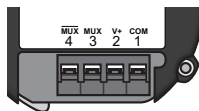


Codes: Install in accordance with all local and national electrical codes.

Environment: Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0 to 90% relative humidity, non-condensing. Designed for indoor use only.

Backbox: To select the proper backbox, you need to know the size/configuration of the Aviena keypad being installed.

Mounting: Requires European-style, square/rectangular backboxes:
 1-Gang: 2.95 in H x 2.95 in W (75 mm H x 75 mm W)
 2-Gang: 2.95 in H x 5.31 in W (75 mm H x 135 mm W)
 Recommended backbox depth is 2.36 in (60mm)



QS Link Limits: The HW-QS-ACI consumes 1 Power Draw Unit (PDU). For more information on PDUs, see “Power Draw Units on the QS Link”, Lutron PN 369405, at https://assets.lutron.com/a/documents/369405_submittal.pdf

Terminals: Accept up to two 18 AWG (1.0 mm²) wires, one twisted shielded pair 22 AWG (0.5 mm²) wire or one 12 AWG (4.0 mm²) wire typical. For wiring limits, see the chart below:

Wiring Length	Wire Gauge	Lutron Cable Part Number
Less than 500 ft (153 m)	Power (terminals 1 and 2): 1 pair 18 AWG (1.0 mm ²)	QS-CBL-LSZH (low-smoke zero halogen)
	Data (terminals 3 and 4): 1 twisted, shielded pair 22 AWG (0.5 mm ²)	GRX-CBL-346S (non-plenum) GRX-PCBL-346S (plenum)
500 ft to 2000 ft (153 m to 610 m)	Power (terminals 1 and 2): 1 pair 12 AWG (4.0 mm ²)	GRX-CBL-46L (non-plenum)
	Data (terminals 3 and 4): 1 twisted, shielded pair 22 AWG (0.5 mm ²)	GRX-PCBL-46L (plenum)

Customer Assistance:

U.S.A./Canada: 1.844.LUTRON1
 Mexico: +1.888.235.2910
 Brazil: +55.11.3257.6745
 United Kingdom:
 +44.(0)20.7680.4481
 India: +91.124.471.1900

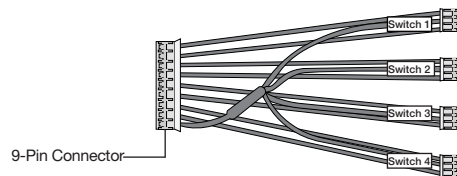
United Arab Emirates:
 +971.4.299.1224
 China: 10.800.120.1536
 Singapore: 800.120.4491
 Other Countries:
 +1.610.282.3800

Wiring

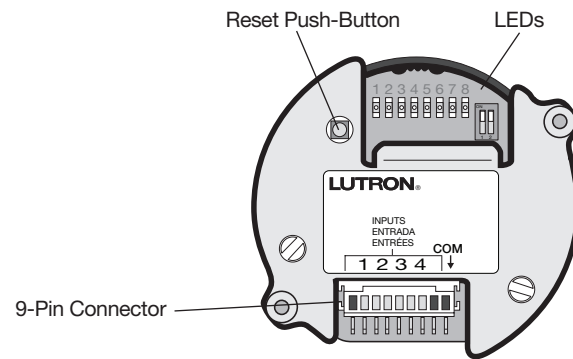
CAUTION: Do NOT connect high-voltage power to low-voltage terminals. Improper wiring can result in personal injury or damage to product or other equipment.

Note: Lutron recommends that the HW-QS-ACI be installed by a qualified electrician.

1. Disconnect power to the QS wired link by turning OFF all circuit breakers connected to any QS link power supply.
2. Strip insulation 3/8 in (10 mm) and loosen the terminal block screws.
3. Connect the QS link to the terminal block and tighten the screws 5 in-lbs (0.6 N•m).
4. Connect the 9-pin connector of the included harness to the 9-pin connector of the HW-QS-ACI.



5. Turn on power to the HW-QS-ACI by energizing the QS link. Wait 10-seconds for the unit to power up (LEDs 1-8 should remain off. If the LEDs start scrolling, consult the troubleshooting section.).
6. Verify that the HW-QS-ACI is operational by resetting it to its factory default. Using a small screwdriver, press the Reset push-button according to the following sequence:
 - a. Press the Reset push-button three times quickly, and keep holding the button down on the third push until all LEDs start flashing.
 - b. Quickly push the button three more times. LEDs will blink to indicate that the unit is resetting.



7. Use the appropriate system setup software to program the HW-QS-ACI once wiring is complete.
8. Push all wires and the HW-QS-ACI into the backbox. As a reminder, these wires need to be attached to the Aviena keypad (ships separately).

Troubleshooting

Symptom	Possible Causes
LEDs on the HW-QS-ACI are scrolling.	The HW-QS-ACI is receiving power on terminals 1 & 2 of the QS wired link, but is not communicating with the QS link on terminals 3 & 4. Check for miswires or loose connections.
LEDs on the HW-QS-ACI do not turn on when following wiring instruction #6. OR LEDs on the HW-QS-ACI do not turn on when connected to a keypad and the toggle switches are activated.	The HW-QS-ACI is not receiving enough power on terminals 1 & 2 of the QS wired link. -Check for miswires or loose connections. -Verify that the QS link is powered and not overloaded. See “Power Draw Units on the QS Link”, Lutron PN 369405, at https://assets.lutron.com/a/documents/369405_pdu_spec_submittal.pdf

Warranty

www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy.

FCC INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 –Reorient or relocate the receiving antenna.
 –Increase the separation between the equipment and receiver.
 –Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 –Consult the dealer or an experienced radio/TV technician for help.