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QSE-CI-NWK-E Control Interface

The QSE-CI-NWK-E is a versatile integration access point for Lutron QS-based systems. Through either RS232 or TCP/IP over Ethernet, third-party devices can control and/or monitor a QS system.

Features

- Easily integrate with touchscreens, PCs, A/V systems, or other digital systems and devices.
- Control and monitor GRAFIK Eye QS, Sivoia QS, Energi Savr Node, and other products on the wired QS link.
- Monitor lighting scenes, levels, shade positions and more. For a full list of commands see Integration Protocol document (P/N 040249) at www.lutron.com
- Up to 10 QSE-CI-NWK-E control interfaces are allowed per QS link.
- The QSE-CI-NWK-E is Quantum compatible. Refer to the Quantum System Specification Sheet (P/N 369634) at www.lutron.com for compatibility details.

Job Name:	Model Numbers:	
Job Number:		

Specifications

Regulatory Approvals

- RoHS Compliant
- CE Marked
- NOM
- cULus

Power

- SELV/PELV/NEC® Class 2
- Operating voltage: 24–36 V⎓ 65 mA

QS Link Limits

- The QS wired communications link is limited to 100 devices and 100 zones. Each QSE-CI-NWK-E control interface counts as 1 device and 0 zones.
- Each QSE-CI-NWK-E control interface consumes 2 Power Draw Units (PDU) on the QS link. Refer to the QS Link Power Draw Units Specification Submittal (P/N 369405) at www.lutron.com for more information.
- The maximum wiring length for the QS link is 2000 ft (610 m).

Environment

- 32 °F to 104 °F (0 °C to 40 °C).
- Relative humidity less than 90% non-condensing.
- Indoor use only.
- Unit generates heat, maximum 8 BTU/hr.

Integration Features

- Monitoring: Current scene, zone level, button presses, shade group levels.
- Control: Scene selection, scene lockout, zone lockout, sequencing, zone raise/lower, master raise/lower, set shade group level, simulate button press/release.

  For the full list of features and commands, please refer to the Integration Protocol document (P/N 040249) at www.lutron.com

Compatible Components

- Compatible with most QS devices. For a complete list of compatible components see Integration Protocol document (P/N 040249) at www.lutron.com

Requirements

- QS Link Power Supply, such as a:
  – GRAFIK Eye QS.
  – QS Link power supply, such as the QSPS-P1-1-50 .
  – Energi Savr Node QS.
- QS Communication Link - SELV/PELV/NEC® Class 2 (see QS Link Wire Sizes table).

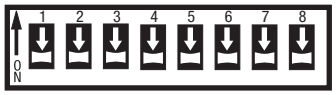
Protocol

- Integration Protocol document (P/N 040249) at www.lutron.com

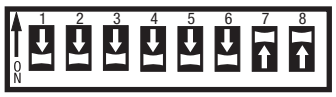
RS232 Connection

- Standard 9-pin female serial connector on interface.
- 50 ft (15 m) maximum serial cable length.
- Dip switches are set at factory, all Off.
- Dip switches are used to set RS232 baud rate:

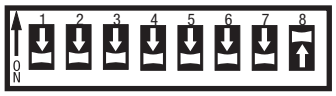
DIP Switch Settings for RS232 Baud Rate



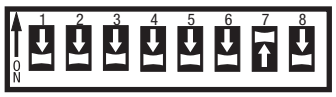
115200 (default)



38400



19200



9600

Ethernet Connection

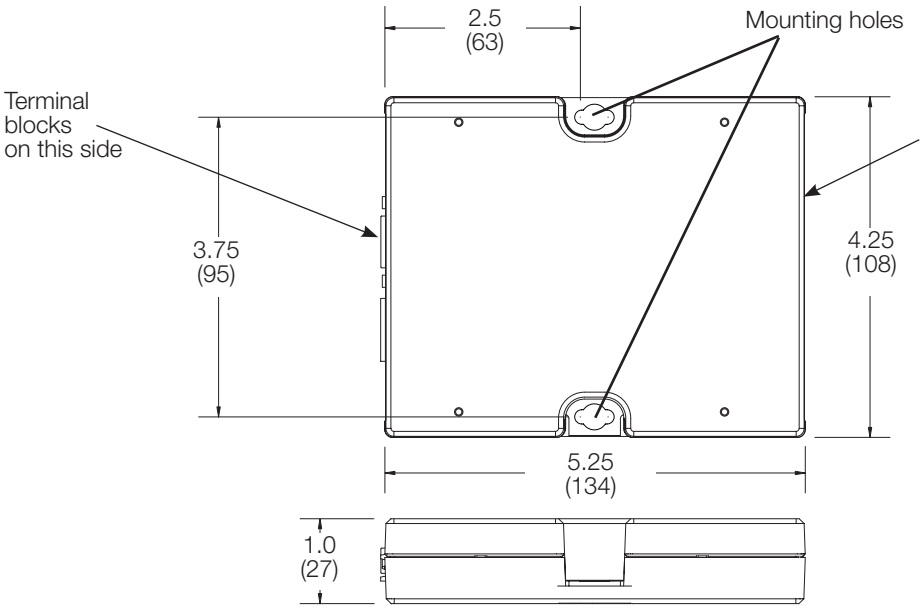
- Standard CAT5 (or better) cable, 328 ft (100 m) maximum, connects the QSE-CI-NWK-E interface to a PC or other Ethernet source.
- Supports MDI/MDIX auto-crossover (no crossover cable needed).
- Auto-negotiation of 10 or 100 Mbps speed and full- or half-duplex operation.
- Default IP address is 192.168.250.1. Can be changed using the Lutron DeviceIP tool.

  Note: Either the RS232 or the Ethernet can be used, but not both.

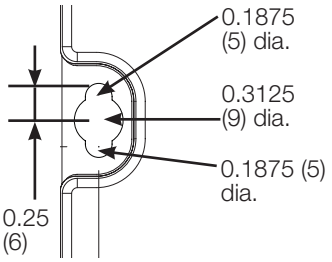
Job Name:	Model Numbers:	
Job Number:		

Dimensions

Dimensions are in inches (mm)



Mounting Hole Detail



#6 or #8 (M3 or M4)
screw recommended

Mounting Options

Mount where terminal blocks, switches, and LEDs are accessible. Strip 3/8 in (10 mm) of insulation from wires. Each data link terminal will accept up to two 18 AWG (1.0 mm²) wires. Connect wiring as shown on the Wiring page. LED 1 lights continuously (Power) and LED 7 blinks rapidly (Data Link RX) when the SELV/PELV/NEC® Class 2 Data Link is installed correctly. Choose from the following mounting methods:

1 Direct Wall Mounting

Mount the control interface directly on a wall, as shown in Mounting Methods at right, using screws (not included). When mounting, provide sufficient space for connecting cables.

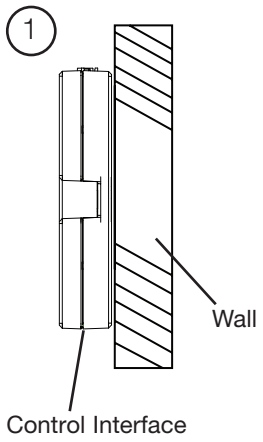
2 Rack Mounting

Place the unit in the LUT-19AV-1U AV rack using screws provided with the unit. The LUT-19AV-1U will hold up to four units.

3 Enclosed Wall Mounting

If conduit is desired for wiring, use the LUT-5x10-ENC to mount one unit.

Mounting Methods

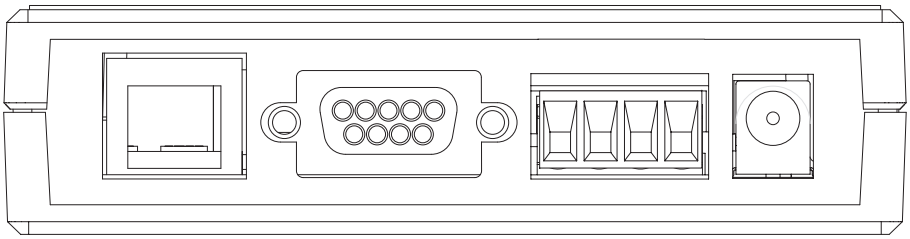


LUT-19AV-1U

LUT-5x10-ENC

Job Name:	Model Numbers:	
Job Number:		

Terminal Locations

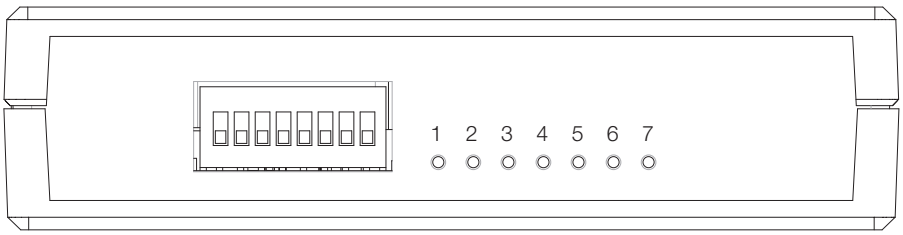


Ethernet Link (to PC or AV Equipment

Female 9-pin RS232 Link (to PC or AV Equipment)

QS Link to other wired QS system Devices

LED and DIP Switch Locations



DIP Switches

LED 1: Power
LED 2: Ethernet Activity
LED 3: Unused
LED 4: RS232 Link Tx
LED 5: RS232 Link Rx
LED 6: QS Link Tx
LED 7: QS Link Rx

Wiring

RS232 Link

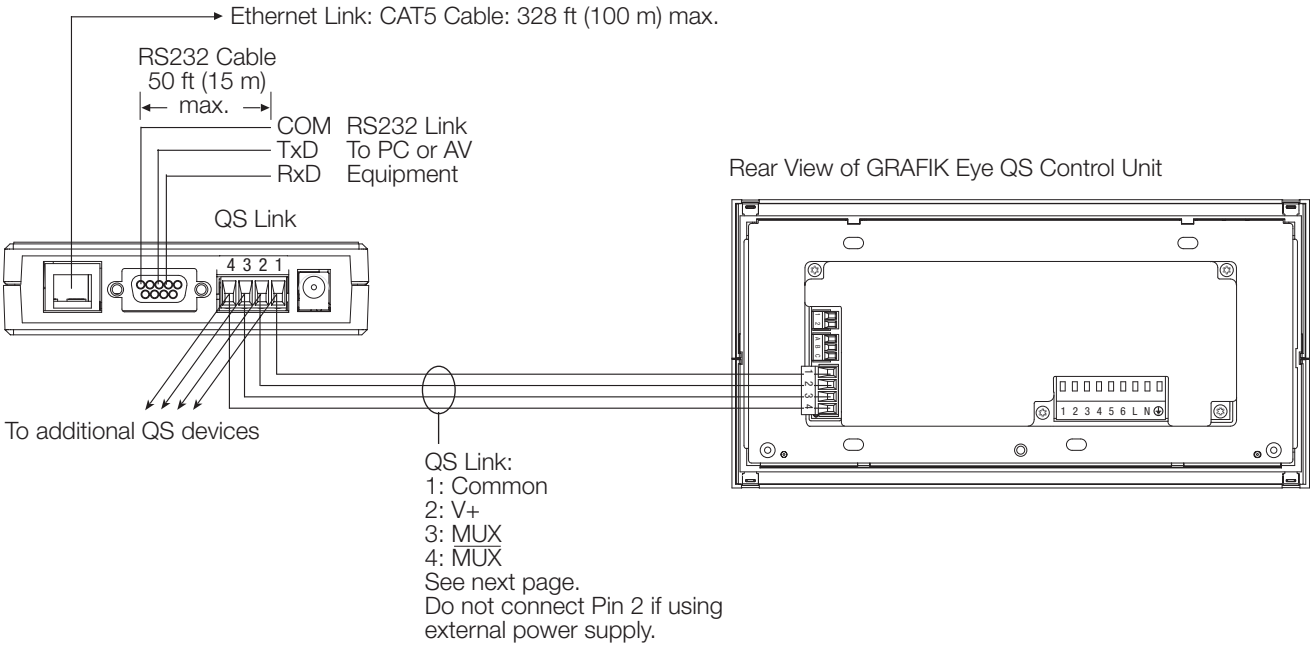
- Standard 9-pin serial connector plugs into RS232 equipment, and to QSE-CI-NWK-E.
- Must be 50 ft (15 m) or less.

RS232 Signals

Signals	Pin on 9-Pin Cable
Com	5
TxD	3
RxD	2

Ethernet Link Wiring

- Standard CAT5 cable connects QSE-CI-NWK-E Interface to PC, router, or other Ethernet source.
- No crossover cable needed.
- Must be 328 ft (100 m) or less.
- Ethernet network and cable provided by others.

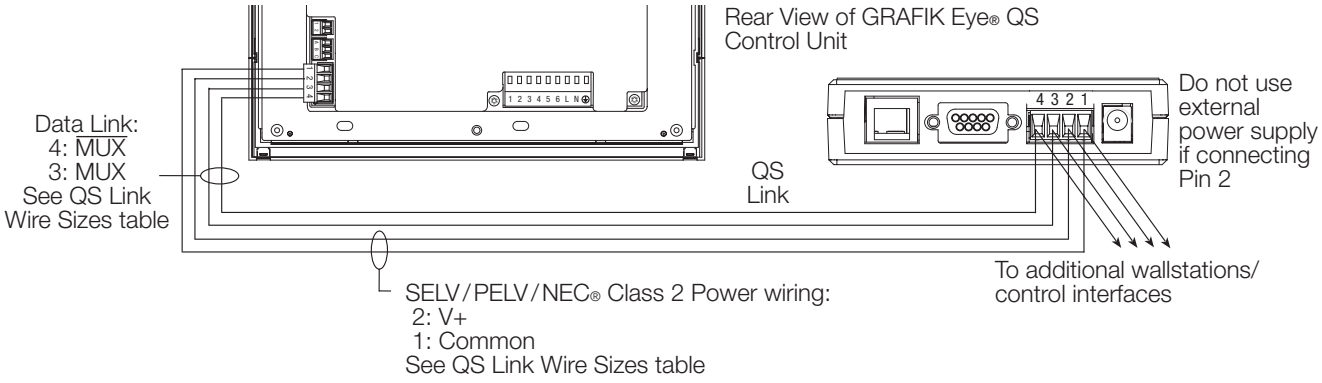


Job Name:	Model Numbers:	
Job Number:		

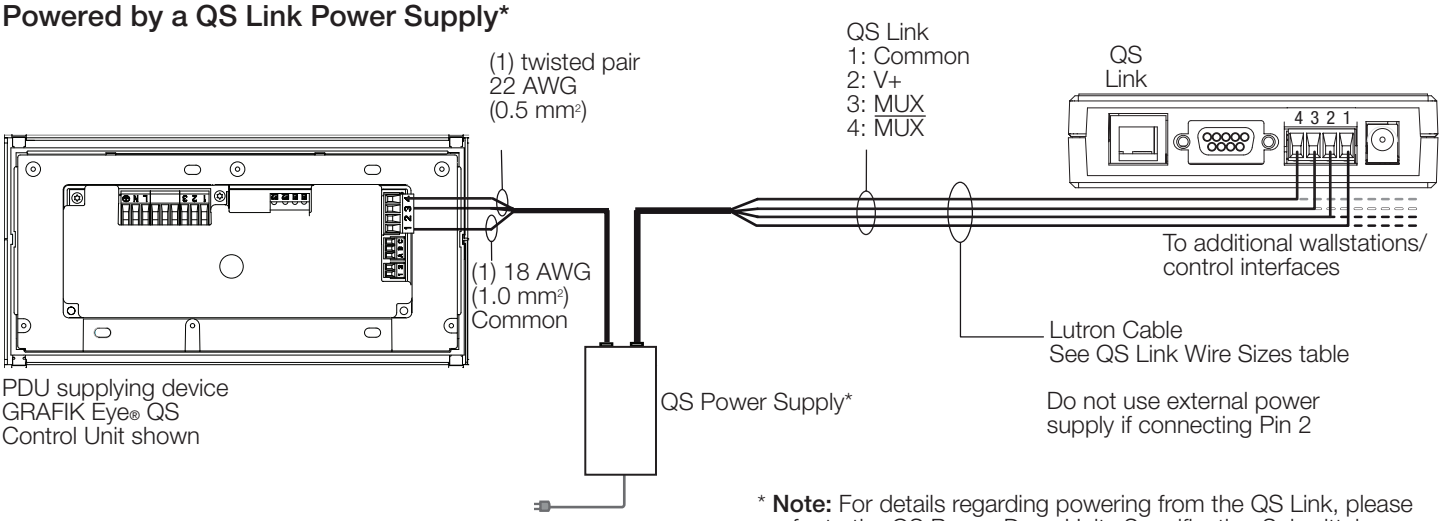
Wiring (continued): QS Link Wiring Methods (choose one)

- System communication uses SELV/PELV/NEC® Class 2 wiring. Follow all local and national electrical codes for installation.
- Each terminal accepts up to two 18 AWG (1.0 mm²) wires or one 12 AWG (4.0 mm²) wire.
- Total length of control link must not exceed 2000 ft (610 m).
- Do not allow SELV/PELV/NEC® Class 2 wires to contact live/mains wire.
- Typical Wire Sizes: See QS Link Wire Sizes table.
- Connect the terminal 1, 3, and 4 connections to all control units, wallstations, and control interfaces in the QS system. For terminal 2 connectivity, see below.

Powered by GRAFIK Eye QS Control Unit



Powered by a QS Link Power Supply*



* **Note:** For details regarding powering from the QS Link, please refer to the QS Power Draw Units Specification Submittal (P/N 369405) at www.Lutron.com

QS Link Wire Sizes (check compatibility in your area)

QS Link Wiring Length	Wire Gauge	Lutron Cable Part Number
< 500 ft (153 m)	Power (terminals 1 and 2) 1 pair 18 AWG (1.0 mm²)	GRX-CBL-346S (non-plenum) GRX-PCBL-346S (plenum)
	Data (terminals 3 and 4) 1 twisted, shielded pair 22 AWG (0.5 mm²)	
500 ft–2000 ft (153 m–610 m)	Power (terminals 1 and 2) 1 pair 12 AWG (4.0 mm²)	GRX-CBL-46L (non-plenum) GRX-PCBL-46L (plenum)
	Data (terminals 3 and 4) 1 twisted, shielded pair 22 AWG (0.5 mm²)	

Job Name:	Model Numbers:	
Job Number:		