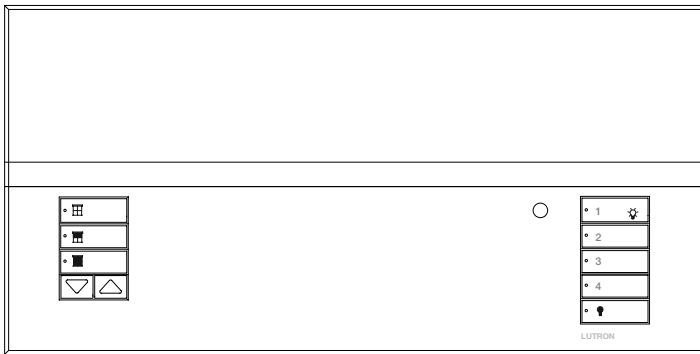


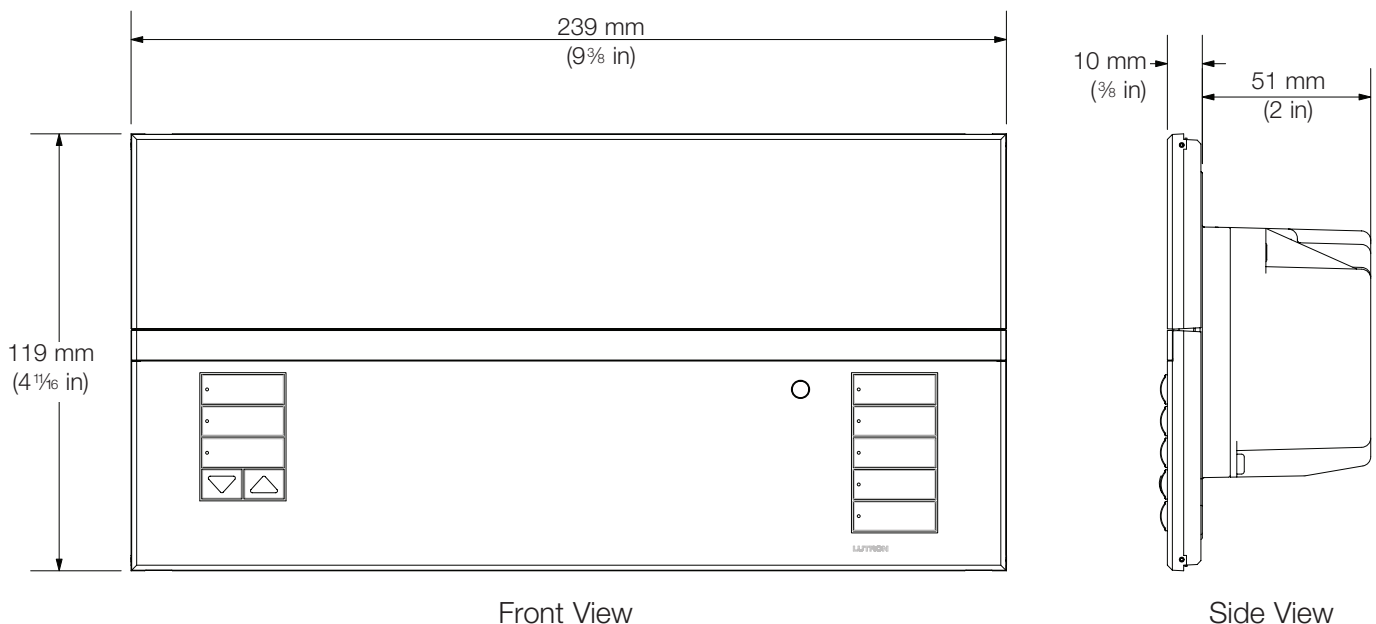
GRAFIK Eye® QS Wireless Control Unit (230 V~ Limited 434 MHz)



Description

GRAFIK Eye® QS Wireless is the premier energy-saving light and window treatment control. GRAFIK Eye® QS includes an astronomic timeclock, intuitive lighting presets, and direct window treatment control. Now with wireless technology, you can use the GRAFIK Eye® QS Wireless to seamlessly integrate with a variety of Lutron wireless products and systems, including Radio Powr Savr™ occupancy, vacancy, and daylight sensors, Sivoia® QS Wireless window treatments, Pico® wireless controls, and other GRAFIK Eye® wireless products. Additionally, the GRAFIK Eye® QS Wireless is compatible with all Lutron wired QS products and systems, including Quantum®.

Mechanical Dimensions



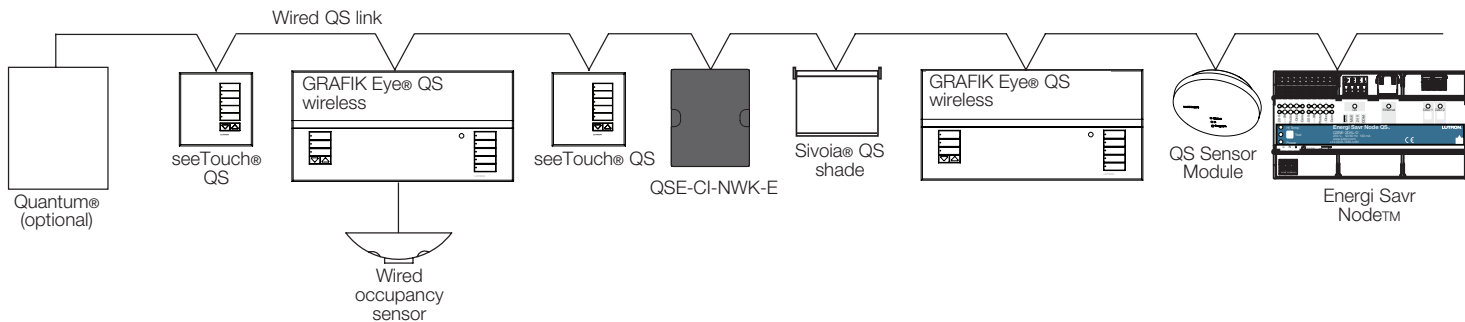
Fits into a 4-gang U.S. backbox, 90.4 mm (3.5 in) deep; Lutron P/N 245-254 or 76.2 mm (3.0 in) deep; Lutron P/N 241-400

Job Name:	Model Numbers:
Job Number:	

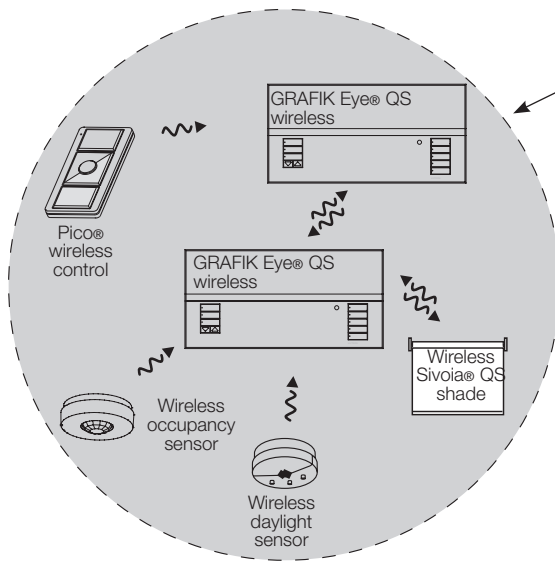
System Topologies

The GRAFIK Eye® QS Wireless can be specified in three different system topologies. Examples of each are shown below.

Example of Wired System

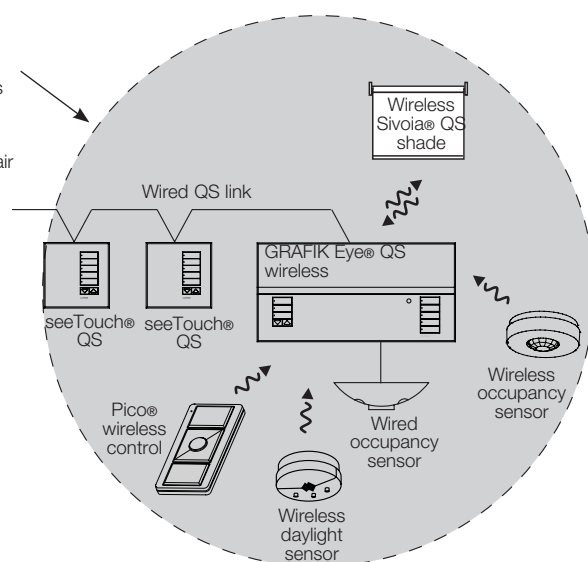


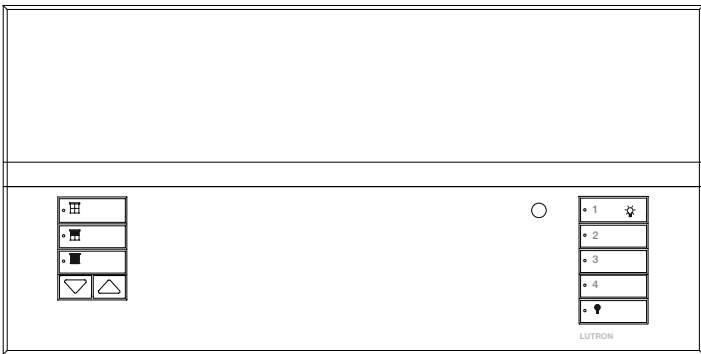
Example of GRAFIK Eye®-centric Wireless System



Example of Mixed Wired/GRAFIK Eye®-centric Wireless System

10 m
(30 ft)
wireless
range;
20 m
(60 ft)
in open air

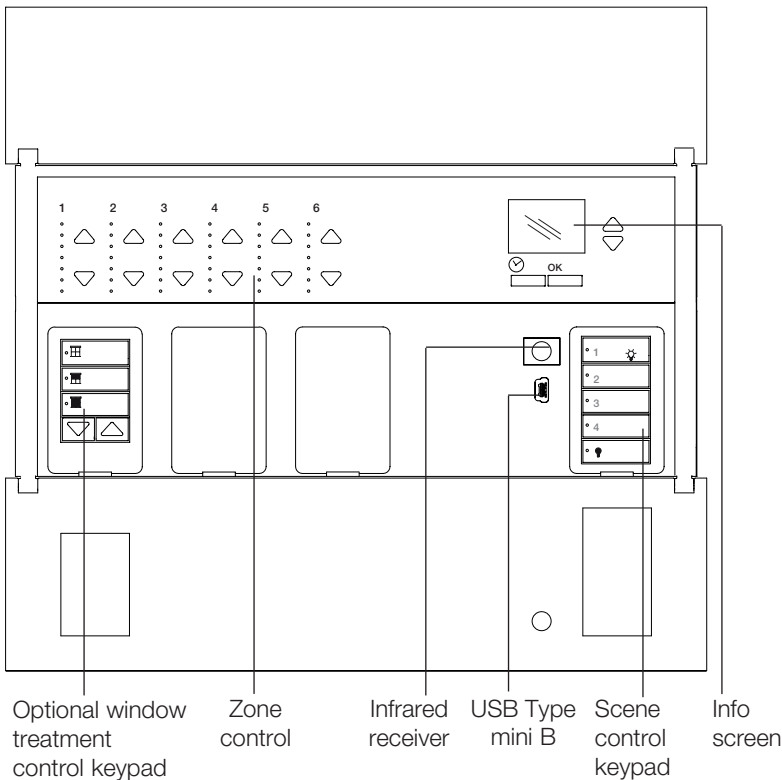




Note: Symbol-based Engraving (-SGN) shown.

Features

- Lutron's proprietary Clear Connect® RF technology. Operates in Limited 434 MHz band.
- Pushbutton recall of four preset lighting scenes, plus Off.
- Sixteen (16) total available scenes, plus Off scene.
- Zones can control many light source types directly or through power modules.
- Optional integrated window treatment control buttons, which can also be added to the unit after installation.
- Master override buttons to raise and lower all lights.
- Allows setup of lighting scenes and window treatment presets using buttons on the control unit.
- Built-in infrared (IR) receiver.
- External IR connection.
- Built-in astronomic timeclock.
- Info screen shows zone light level percentage, energy savings, zone labeling, and programming.
- Lockout option prevents accidental changes.
- Occupancy sensor input and 24 V= power for one occupancy sensor.
- QS communication link for seamless integration of lights, motorised window treatments, wallstations, and integration interfaces.
- Compatible with all Lutron QS system components.
- Wireless communication for seamless integration with a variety of Lutron wireless products and systems, including Radio Powr Savr™ occupancy and vacancy sensors, Sivoia® QS wireless window treatments, Pico® wireless control, and other GRAFIK Eye® QS wireless products.
- Backlit buttons with engraving make unit easy to locate and operate.
- Available in a variety of colours and finishes.



Job Name:

Model Numbers:

Job Number:

Specifications

Input Power

- 230 V~ 50/60 Hz

Environment

- 0 to 40 °C (32 to 104 °F)
- Relative humidity less than 90% non-condensing

Listings

- RF meets FCC 15.231

Lighting Sources/Load Types

Note: Maximum load 500 W per zone; 2 300 W total

- EcoSystem® and Hi-lume® 3D ballasts, and Hi-lume® LED drivers directly wired to integral EcoSystem® digital link
- Zones on Energi Savr Node™ products wired to the same QS link
 - Zones on Energi Savr Node™ with Softswitch®
 - Zones on Energi Savr Node™ for 0-10 V
 - Zones on Energi Savr Node™ with EcoSystem®
 Please refer to “Remote Zone Mapping” for important information.
- DMX channel(s) through DMX output interface (QSE-CI-DMX). Please refer to “Accessory Controls: DMX Output Interface”

Zones can also control the following lighting sources with a smooth, continuous square law dimming curve or on a full conduction non-dim basis:

- Incandescent
 - Halogen
 - Magnetic low-voltage transformer
 - Lutron Tu-Wire® electronic fluorescent dimming ballast
 - Neon and cold cathode
 - Non-dim (incandescent, magnetic low-voltage, Tu-Wire®, or neon/cold cathode)
- Please refer to “Capacities” for more information.

Zones can also control the following lighting sources with a smooth, continuous square law dimming curve or on a full conduction non-dim basis through separate Lutron power modules:

- Electronic low-voltage transformers (use ELV or Phase-Adaptive power module)
- Lutron 3-wire controlled electronic fluorescent dimming ballasts (use fluorescent 3-wire power module)
- Non-dim (use switching module)
- 0 - 10 V (use TVI)

Note: A zone may be programmed to control only one load type at a time.

Key Design Features

- Lightning strike protection meets ANSI/IEEE standard 62.41-1980. Can withstand voltage surges of up to 6 000 V~ and current surges of up to 3 000 A.
- Tested to withstand 16 kV electrostatic discharge without damage or memory loss.
- RTISS™-equipped: Compensates in real time for incoming line voltage variations (no visible flicker with +/-2% change in RMS voltage per cycle, and +/-2% Hz change in frequency per second).
- Power failure memory retains programming and light level settings for up to 10 years in the event of a power loss.
- The GRAFIK Eye® QS supplies 3 Power Draw Units (PDUs) on the QS link. For complete information, see “Power Draw Units on the QS Link,” Lutron P/N 369405.
- Faceplate is hinged at the top and bottom, and stays open at 180° for ease of access.

Scene and Shade Buttons

- Large, rounded buttons are easy to use.
- Backlit buttons with optional engraving make it easy to find and to operate the control unit in low light conditions (backlight can be disabled).
- Optional button engraving is angled up to the eye for easy reading.
- Predefined label stickers are included for field labeling.
- 4 preset lighting scenes, plus Off, are accessible from the front of the control unit.
- 12 additional scenes are stored in the control unit and are accessible from the integral timeclock, seeTouch® QS wallstations, and QS interfaces.
- Light levels fade smoothly between scenes. Fade time can be set differently for each scene: 0 to 59 seconds, or 1 to 60 minutes. Maximum fade time from Off is 3 seconds.

Job Name:	Model Numbers:
Job Number:	

Specifications

Shade Control

- The GRAFIK Eye® QS can include up to 3 shade button columns. Each column has backlit open, preset, close, and raise/lower buttons.
- Each shade button column can be programmed to operate one shade or a group of shades. (Shades may be assigned to more than one shade button column).
- Faceplates are available with 1, 2 and 3 shade button columns.

Wireless shade limitations:

- Access to the Sivoia® QS Wireless electronic drive unit (EDU) is required to associate shades with the GRAFIK Eye® QS and set their raise/lower limits.
Exception: Sivoia® QS Wireless cellular shades allow limit setting from the GRAFIK Eye® QS wireless control unit.
- Wired and wireless shades may not be programmed into the same shade button column; however, both may be used on the same GRAFIK Eye® QS control unit.
- Scene commands that affect wireless shades across multiple shade button columns will have a 1-second delay from column to column. This does not occur in RadioRA® 2 systems.

Zone Control

- Each zone has a dedicated raise and lower button to adjust the zone.
- Each zone has a dedicated 7 LED bar graph for level status. Percentage of light level and energy saved is displayed on the info screen.
- All zone information has blue backlit LEDs. Backlight turns off when idle for 30 seconds.
- High-end and low-end trim settings are adjustable per zone (high end from 99 to 55%; low end from 45 to 1%).
Note: Trim for remote zones must be adjusted locally on the Energi Savr Node™ unit.
- Each zone is programmable to only one load type at a time.

Info Screen

- OLED (organic LED) screen is viewable from all angles.
- Screen turns off when idle for 30 seconds.
- Programmable zone labels.
- Programmable scene labels.
- Status of real-time zone percentage and energy savings.
- Programmable timeclock schedules.
- Programmable window treatment labels.
- Selectable display languages:
 - English - Spanish - French
 - Italian - German - Portuguese

Astronomic Timeclock

- Integral to all units.
- 7 daily schedules available.
- One available holiday schedule is programmable by date up to one year in advance.
- 25 events per day maximum.
- Timeclock events are programmable to control scenes that affect any Energi Savr Node™ unit connected on the QS link without changing the local scene on the GRAFIK Eye® QS.
- Astronomic times are programmable by integral city database or by entering latitude and longitude. Sunrise/Sunset times automatically adjust throughout the year based on location.
- Automatically adjusts for Daylight Saving Time (DST); DST is programmable.
- Local timeclock events can activate any of the following features:
 - Scenes 1 to 16 and Off
 - Any available window treatment presets
 - Start and End afterhours mode
 - Enable and Disable daylighting for all zones/groups
 - Enable and Disable occupancy for occupancy/vacancy sensors
 - Enable and Disable occupied events for all occupancy sensors

System Communications and Capacities

- Low-voltage type IEC PELV/NEC® Class 2 wiring connects control units, wallstations, motorised window treatments, and control interfaces.
- A QS system can have up to 100 devices and 100 zones.
- A QS system can have up to 30 wireless devices.

Job Name:	Model Numbers:
Job Number:	

Specifications

Infrared

- Infrared (IR) receiver allows infrared transmitters to select 8 scenes, raise/lower lighting zones, or raise/lower window treatments.
- Transmitter buttons imitate buttons on faceplate.
- 15 m (50 ft) line of sight range.
- Terminal block infrared input for connection to a wired IR input from third-party equipment.
- IR can be disabled via programming.
- Works with Lutron GRX-IT and GRX-8IT infrared remote controls.

Accessory Controls: seeTouch® QS Wallstations (QSWE)

- Wired seeTouch® QS wallstations provide the following features:
 - Access to one or more of the 16 scenes on the GRAFIK Eye® QS Wireless control unit
 - Zone toggle, partitioning, sequencing, fine tune, panic mode, and timeclock enable/disable
 - Contact closure inputs
 - Certain functions are only available on specific wallstation configurations. Refer to the seeTouch® QS specification submittal.

Wireless RF Compatibility

- Lutron's proprietary Clear Connect® RF Technology operates in the Limited 434 MHz band
- Compatible with other Lutron wireless products/systems, such as:
 - Pico® (P/N QSRQP-)
 - Radio Powr Savr™ occupancy/vacancy/daylight sensors (P/N LRF7-)
 - Sivoia® QS wireless products
 - Other GRAFIK Eye® QS wireless units (P/N QSGRQ-)

Accessory Controls: Pico® Wireless Control (QSRQP models)

- The Pico® Wireless Control is battery powered. It can control GRAFIK Eye® QS wireless control units within a 10 m (30 ft) range (20 m/60 ft in open air). It provides the following features:
 - Control of one or more zones on the GRAFIK Eye® QS Wireless control unit: turns zone(s) on or off, raises/lowers zone(s), allows programmable light levels for each button, and goes to user-programmable preset level
 - Control of one or more scenes on the GRAFIK Eye® QS Wireless control unit: the Pico® wireless control can access any three sequential scenes (1 through 16), or any two sequential scenes and Off; and can raise and lower lighting levels.

Note: "Unaffected" is not a valid level for Pico® zone programming.

Accessory Controls: QS Sensor Module (QSM7)

- The QS Sensor Module provides a means to link wired or wireless occupancy sensors or daylight sensors, Pico® controls, and wired infrared sensors to a GRAFIK Eye® QS control unit via the wired QS link.
 - Occupancy sensors wired (or wirelessly linked) to a QS Sensor Module can be used by one or more GRAFIK Eye® QS control units on the wired link.
 - Daylight sensors wired (or wirelessly linked) to a QS Sensor Module can be used by one or more GRAFIK Eye® QS control units on the wired link.
 - Pico® wireless controls can control either one or more zones or scenes on the GRAFIK Eye® QS control unit.
 - Pico® wired controls can be used, when connected to a QS Sensor Module, to control one or more zones or scenes on the GRAFIK Eye® QS control unit.
 - Infrared sensors can control either one or more zones or scenes on the GRAFIK Eye® QS. Functionality varies; refer to the documentation for the QS Sensor Module for details.

Job Name:	Model Numbers:
Job Number:	

Specifications

Accessory Controls: Contact Closure Input/Output Interface (QSE-IO)

- Recalls preset light levels for the following set of scenes on the GRAFIK Eye® QS:
Scenes 1-4 and Off Scenes 9-12 and Off
Scenes 5-8 and Off Scenes 13-16 and Off
- Sequence scenes 5-16, Enable/Disable Zone Lockout, Enable/Disable Scene Lockout, Enable/Disable Panic Mode, Enable/Disable Timeclock.
- Occupancy Sensors. An individual input counts as 1 occupancy sensor for the GRAFIK Eye® QS. Each input can be assigned to either Scene Control or Zone Control (please refer to the Occupancy Sensor(s) section of this guide).
- Zone Toggle. Allows an input to toggle one or more zones between programmable preset level(s) and off.
- Shade Output mode. A Shade Column on the GRAFIK Eye® QS can be linked to control outputs 1-3 and/or outputs 4-5 on the QSE-IO.

Accessory Controls: DMX Output Interface (QSE-CI-DMX)

- Any zone on the GRAFIK Eye® QS control unit can be mapped to any single DMX512 Channel.
- Any zone on the GRAFIK Eye® QS control unit can be simultaneously mapped to any three DMX512 channels (providing RGB/CMY control).
- DMX loads cannot be used with daylighting.

Accessory Controls: Ethernet and RS232 Interface (QSE-CI-NWK-E)

- Allows for monitoring and control of the outputs and local scenes of the GRAFIK Eye® QS.

Other Accessory Controls and Devices

- Energi Savr Node™ QS (QSNE)

Unit Dissipation

- All models of GRAFIK Eye® QS Wireless control units (230 V~ Limited 434 MHz) dissipate no more than 100 BTUs/hour (29.3 W).

Occupancy Sensor(s)

- The GRAFIK Eye® QS works with occupancy sensors through either:
 - Scene Control: Up to four sensors activate user-selectable occupancy and vacancy scenes.
 - Zone Control: up to four sensors per zone activate user-selected occupancy and vacancy zone levels.
- Occupancy sensors may include:
 - Contact closure sensors wired to CCI input on back of GRAFIK Eye® QS
 - Wireless Radio Powr Savr™ occupancy or vacancy sensors (model numbers starting with LRF7)
 - Wired or wireless sensors connected QS Sensor Module (QSM7)
- If any sensor in a group detects occupancy, then the GRAFIK Eye® QS will go to the designated occupancy scene or zone level.
- If all sensors in a group detect vacancy, then the GRAFIK Eye® QS will go to the designated vacancy scene or zone level.
- Low battery: the Diagnostics screen will display a low battery symbol when applicable.
- If the GRAFIK Eye® QS control unit does not receive a signal from an occupancy sensor on the link (usually due to a dead battery), the lights associated with that sensor will go to the occupied level.

Job Name:	Model Numbers:
Job Number:	

Specifications

Daylight Sensor(s)

- The GRAFIK Eye® QS allows daylight sensors to control one or more lighting zones to adjust electric light levels based on measured daylight levels.
- Daylight sensors may include:
 - Wireless Radio Powr Savr™ (model numbers starting with LRF7)
 - Wired or wireless sensors connected to a QS sensor module (QSM7)
- A daylight sensor can control one or more GRAFIK Eye® QS zones:
 - Each zone can be calibrated to target light levels
 - A zone can be controlled by no more than one daylight sensor
- Daylight control can be enabled or disabled on a scene-by-scene basis
 - By default, daylight control is enabled in all scenes

Note: Daylight control through the GRAFIK Eye® QS control unit only affects select lighting loads. Shade groups cannot be controlled by daylight sensors. Daylighting does not affect DMX or RGB/CMY DMX loads.

Daylighting of Remote Zones linked to Energi Savr Node™ zones must be configured at the Energi Savr Node™ unit or through the *iPod*.

Contact Closure Input (CCI) with Power Supply Output

- Each GRAFIK Eye® QS has one contact closure input (Terminal A).
 - The attached device must provide a dry contact closure or solid-state output.
 - Input is miswire-protected up to 36 V $\overline{=}$.
- The contact closure is capable of accepting the following types of inputs:
 - Maintained (default): The GRAFIK Eye® QS control unit will act on both a contact closure and a contact open/release event.
 - Momentary: The GRAFIK Eye® QS control unit will act on only contact closure events.
- Each GRAFIK Eye® QS can supply 50 mA maximum at 24 V $\overline{=}$.
 - Useful for powering occupancy sensors.
 - An auxiliary power supply must be used if the device requires more than 50 mA.
- The CCI is capable of operating in the following modes
 - Occupancy: If an occupancy sensor is wired directly to the GRAFIK Eye® QS.
 - Emergency: This setting allows the GRAFIK Eye® QS to work with a LUT-ELI. When an emergency situation is detected, all lights will go to full on, and no operations will be allowed until the emergency signal is cleared.
 - Afterhours: Allows the CCI to start and end the afterhours mode.
 - Timeclock: Allows the CCI to enable and disable the timeclock.
 - Scene Lockout: Prevents the user from making any changes to the control unit. The current scene will stay on until the CCI enables normal operation.
 - Save Never: Prevents any changes from being saved while the CCI is being used.
 - Disable CCI: The CCI will have no effect on the system and will not appear on the list of available sensors.

Security Lockout Password

- A 4-digit password (using characters A to Z and 0 to 9) can be enabled/disabled to lock out access to the Programming Menu.
- By default there is no password enabled on the GRAFIK Eye® QS.
- In case the 4-digit password is forgotten, contact Lutron Technical Support to regain access.

iPod is a trademark of Apple Inc. registered in the U.S. and other countries.

Job Name:	Model Numbers:
Job Number:	

Specifications

Remote Zone Mapping

- Map a GRAFIK Eye® QS zone directly to an Energi Savr Node™ output so that programmed scenes in the GRAFIK Eye® QS control unit will directly control the output levels of the Energi Savr Node™.
- Adjust high-end and low-end trim for remote zones through the Energi Savr Node™ or Energi Savr app software.
- Change load types of remote zones through the Energi Savr Node™ or Energi Savr app software.
- Configure daylighting for remote zones through the Energi Savr Node™ or Energi Savr app software.
- Required:
 - GRAFIK Eye® QS control unit with firmware version 7.000 or higher
 - Energi Savr Node™ unit with firmware version 6.000 or higher
 - Energi Savr app version 6.0.0 or higher (required only if the Energi Savr Node™ unit has been configured using the app)

Partitioning

- When partition is open, creating one large space, automatically combines lighting preset functions for multiple GRAFIK Eye® QS control units.
- When partition is closed, creating two or more smaller spaces, lighting preset functions become independent.
- Requires one QSW2-2B wallstation, a GRX-IRPS infrared transmitter/receiver pair, and a GRX-12VDC power supply for operation.
- If occupancy sensors are required in a partitioned space, note that each room's occupancy sensor(s) will operate independent of the partition status.

Job Name:	Model Numbers:
Job Number:	

Specifications

Capacities		
Zones	Unit Capacity (watts)	Zone Capacity Capacity (watts)
6	2 300	500

Load Type Notes

- For applications with ELV loads or load wattages exceeding the specified capacities, please refer to specifications for Lutron power modules (NGRX-PB-AU; NGRX-ELVI-AU; NGRX-FDBI-AU).
- Not all loads must be connected; however, connected zones must have a minimum load of 40 W.
- Maximum total lighting load for a magnetic low-voltage zone is 500 VA / 400 W.
- No zone may be loaded with more than 500 W.
- For controlling low-wattage loads (CFL, LED) in a non-dim application, contact Lutron Technical Support for the appropriate solution.

System Limits

- The QS wired communication link is limited to 100 devices (wired or wireless) or 100 zones.

Job Name:	Model Numbers:
Job Number:	

GRAFIK Eye® QS Wireless

Custom Colour Options and Model Numbers

You must order a Base Unit and a Faceplate Kit

See Standard Colour Combinations page for faceplate, stripe, and button colours

Base Unit

QSGRQ - 6 PCE

Prefix

6 Zones

Phase Control Triac-CE

Example:

QSGRQ-6PCE

6-zone base unit
and

QSGFP-2IV-SGN

Ivory faceplate kit with two
window treatment columns and
symbol-based engraving

Faceplate Kit

(includes coordinating stripe and buttons; see Standard Colour Combinations page)

QSGFP -

Face-
plate
Prefix

Number of
Window Treatment
Columns

Omit = none
1 = 1 column
2 = 2 columns
3 = 3 columns

Top
Door
Colour

Omit = same as
unit
T = Translucent

Colour/
Finish

Keypad
Engraving
Code

Faceplate Custom Colour/Finish Codes

Architectural Matte Finishes

Standard	
(ship in 48 hours)	
White	WH
Ivory	IV
Beige	BE
Gray	GR
Brown	BR
Black	BL
Almond	AL
Light Almond	LA

Architectural Metal Finishes

Bright Brass	BB
Bright Chrome	BC
Bright Nickel	BN
Satin Brass	SB
Satin Chrome	SC
Satin Nickel	SN
Antique Brass	QB
Antique Bronze	QZ

Anodised Aluminum

Clear	CLA
Black	BLA
Brass	BRA

Satin Colour Matte Finishes

Snow	SW
Biscuit	BI
Eggshell	ES
Taupe	TP
Midnight	MN
Limestone	LS
Stone	ST
Desert Stone	DS
Terracotta	TC
Hot	HT
Goldstone	GS
Palladium	PD
Plum	PL
Turquoise	TQ
Bluestone	BG
Sea Glass	SG
Greenbrier	GB
Sienna	SI
Merlot	MR
Mocha Stone	MS

Keypad Engraving Codes

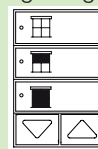
Omit = Unengraved

Ships with engraving certificate that
customer can redeem at no charge

SGN = Symbol-based Engraving



Lighting
keypad



Window
treatment
column

NST = Non-Standard Text Engraving
Please visit the GRAFIK Eye® QS website
at www.lutron.com/grafikeyeqs
for custom engraving forms. Submit
completed form with order, and unit will
ship engraved as specified by customer.

Job Name:

Model Numbers:

Job Number:

GRAFIK Eye® QS Wireless

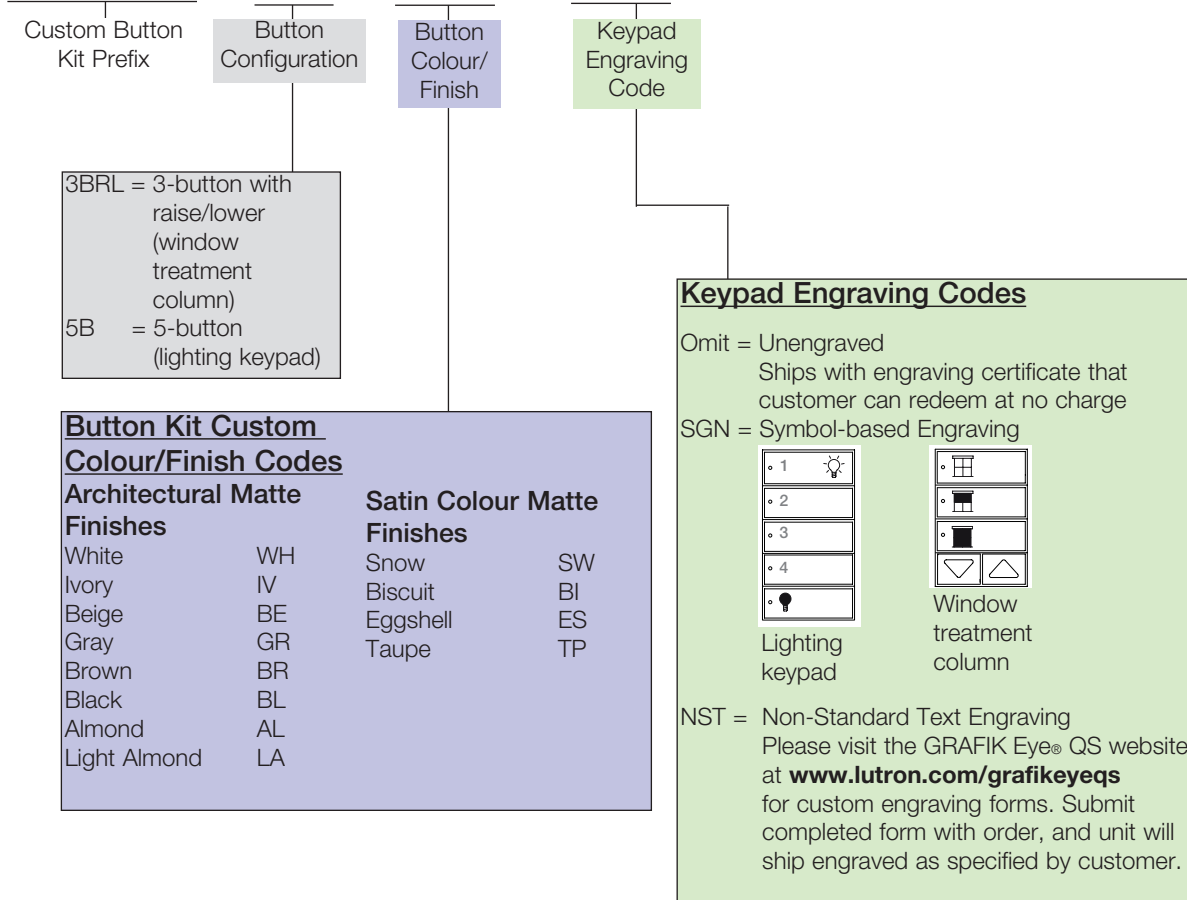
Custom Options and Model Numbers

See previous pages for Standard and Other Custom Model Numbers

See Standard Colour Combinations page for faceplate, stripe, and button colours

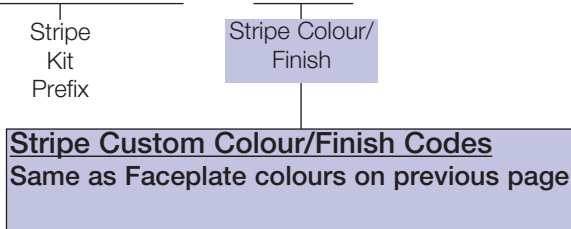
Custom Button Kit

QSGB - 5B - WH -



Custom Stripe Kit

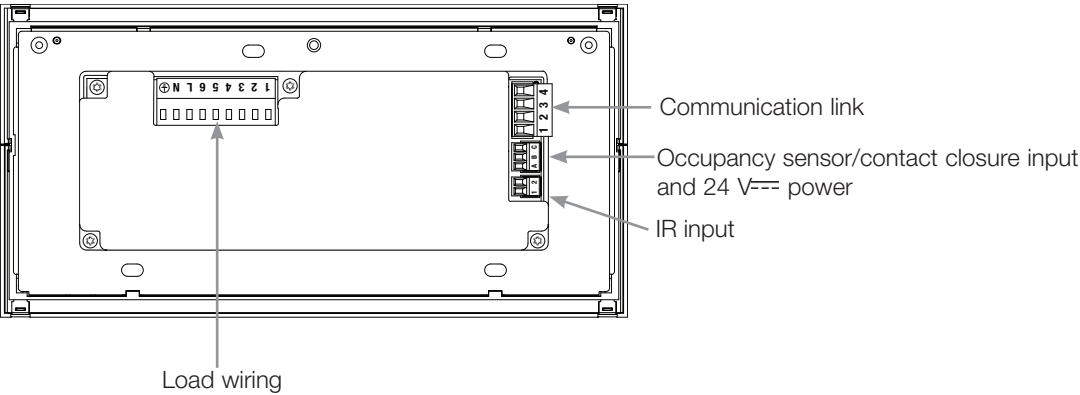
QSGS - WH



Job Name:	Model Numbers:
Job Number:	

Wiring Diagrams

Terminations



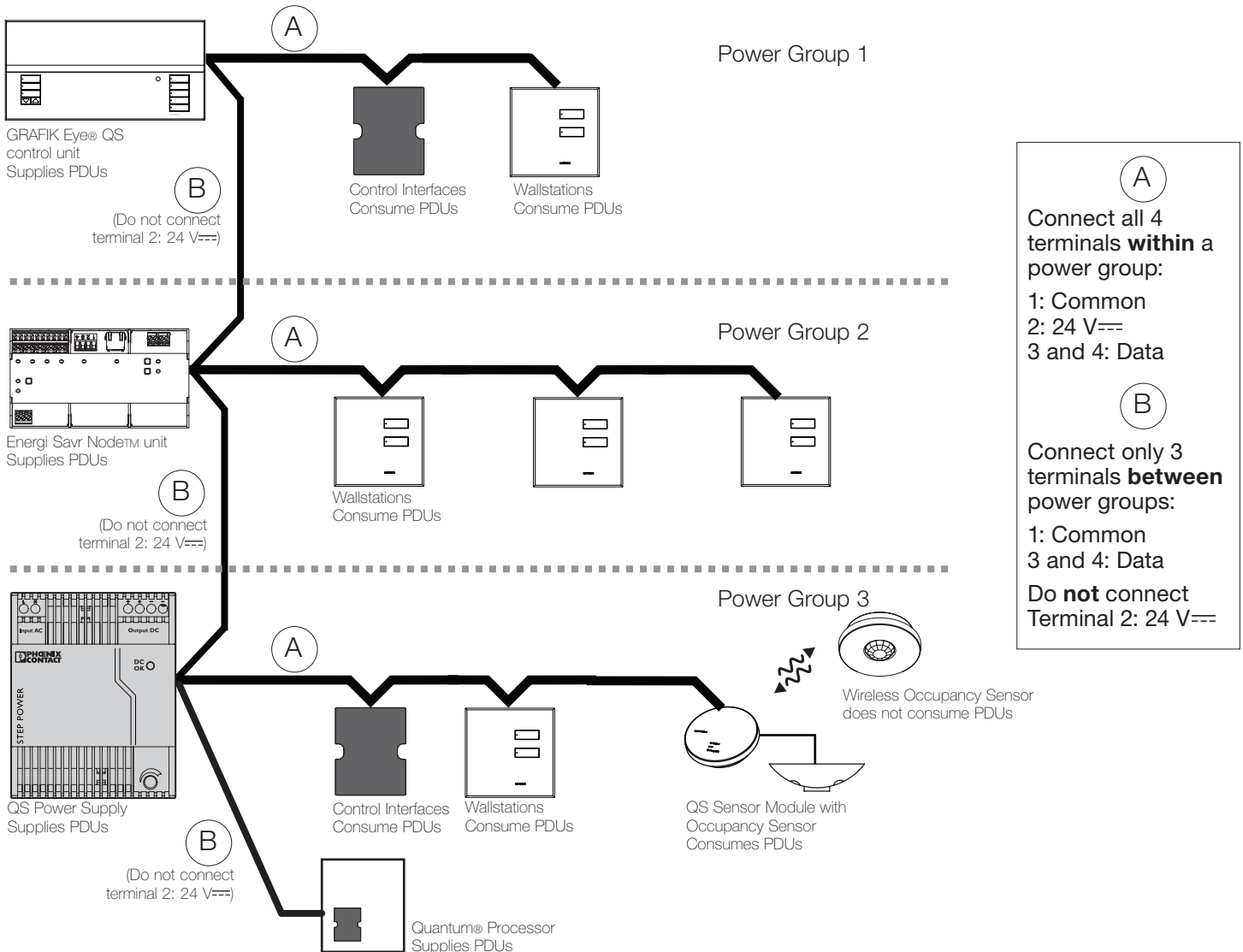
Job Name:	Model Numbers:
Job Number:	

Power Group Wiring Example

On the QS link, there are devices that supply power and devices that consume power. Each device has a specific number of Power Draw Units (PDUs) it either supplies or consumes. A Power Group consists of one device that supplies power and one or more devices that consume power; each Power Group may have only one power-supplying device. Refer to the QS Link Power Draw Units specification submittal (Lutron P/N 369405) for more information concerning PDUs.

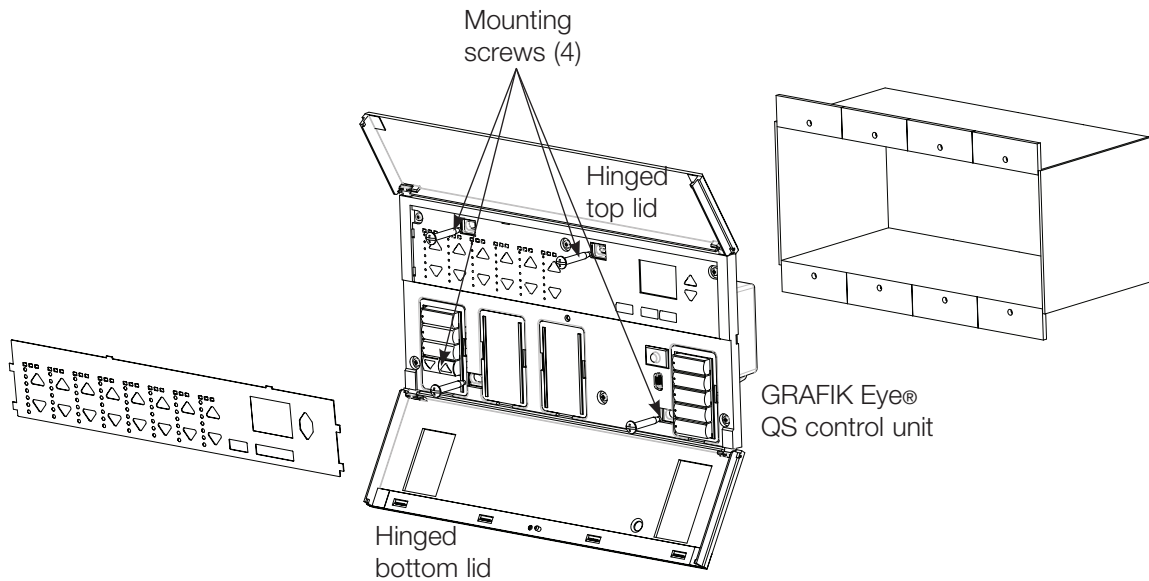
Within Power Groups on the QS link, connect all 4 terminals (1, 2, 3, and 4), shown by the letter A in the diagram. Between devices on the QS link that supply power, connect only terminals 1, 3, and 4 (NOT terminal 2), shown by the letter B on the diagram. Refer to the specific device documentation for wiring details.

Wiring can be T-tapped or daisy-chained.

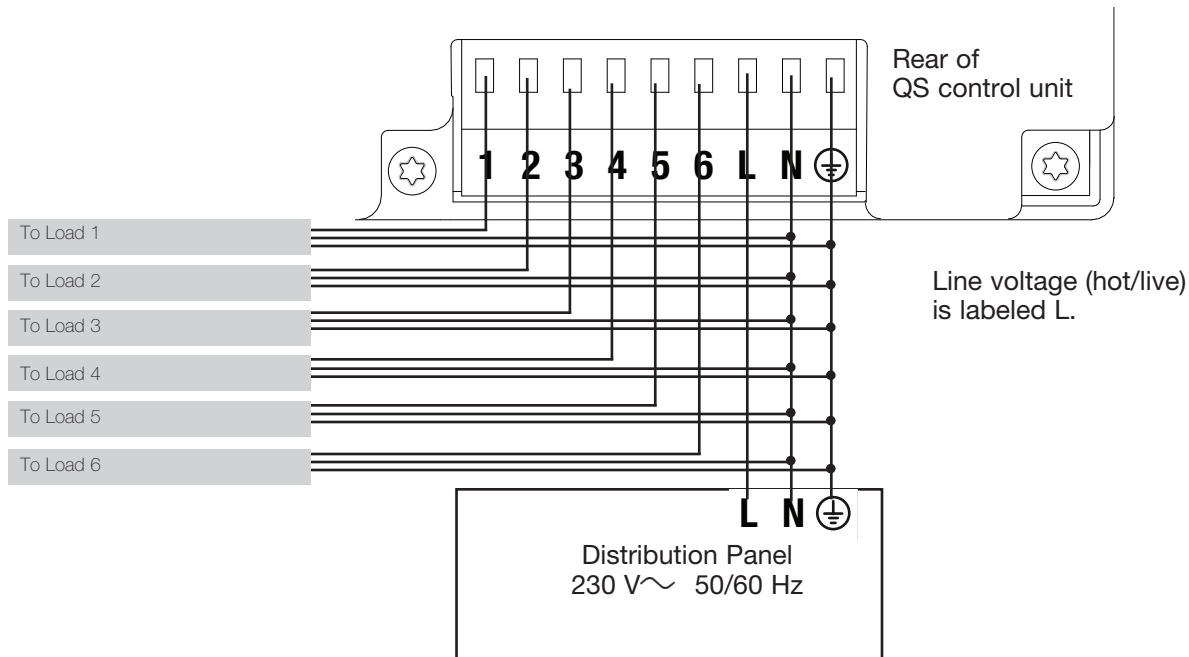


Job Name:	Model Numbers:
Job Number:	

Mounting



Line Voltage Wiring



- Pull power wiring from distribution panel and to light fixtures.
- Each line voltage terminal can accept one 4.0 mm² (12 AWG) wire.
- Consult Lutron for non-dim relay wiring and/or load side emergency transfer wiring.

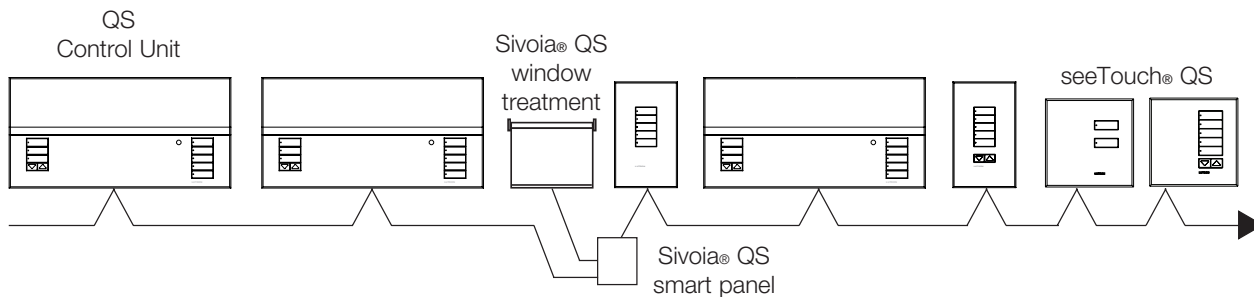
Job Name:	Model Numbers:
Job Number:	

IEC PELV/NEC® Class 2 QS System Low-Voltage Wiring

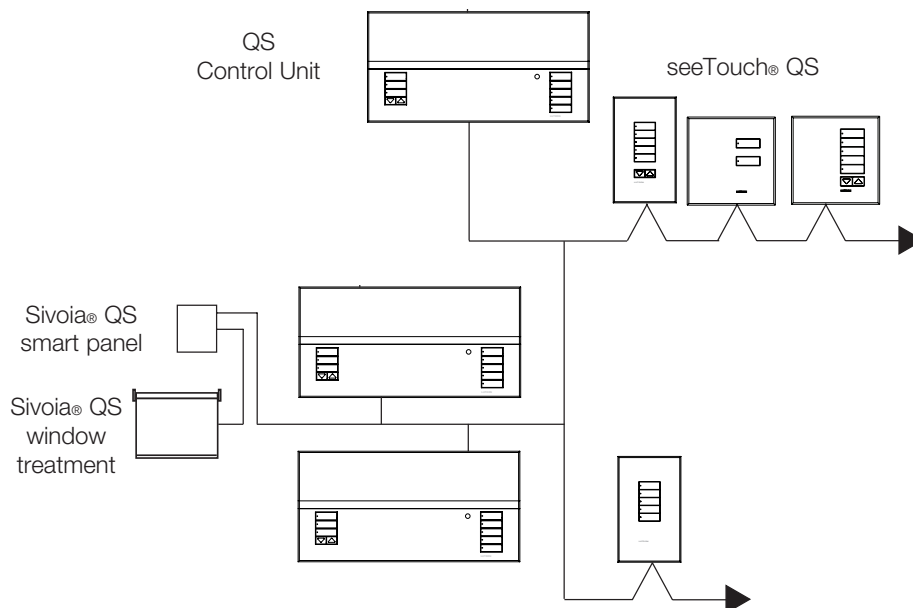
- System communication uses low-voltage wiring.
- Wiring can be daisy-chained or T-tapped.
- Wiring must be run separately from line/mains voltage.
- Total length of control link must not exceed 610 m (2 000 ft).
- IEC PELV/NEC® Class 2 wiring link:

QS Link Wiring Length	Wire Gauge	Lutron Cable Part Number
Less than 153 m (500 ft)	Power (terminals 1 and 2) 1 pair 1.0 mm ² (18 AWG)	GRX-CBL-346S (non-plenum) GRX-PCBL-346S (plenum)
	Data (terminals 3 and 4) 1 twisted, shielded pair 0.5 mm ² (22 AWG)	
153 to 610 m (500 to 2 000 ft)	Power (terminals 1 and 2) 1 pair 4.0 mm ² (12 AWG)	GRX-CBL-46L (non-plenum) GRX-PCBL-46L (plenum)
	Data (terminals 3 and 4) 1 twisted, shielded pair 0.5 mm ² (22 AWG)	

Daisy-Chain Wiring Example



T-Tap Wiring Example



Job Name:	Model Numbers:
Job Number:	