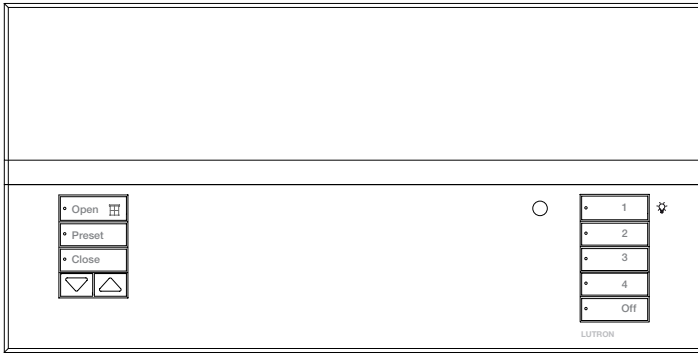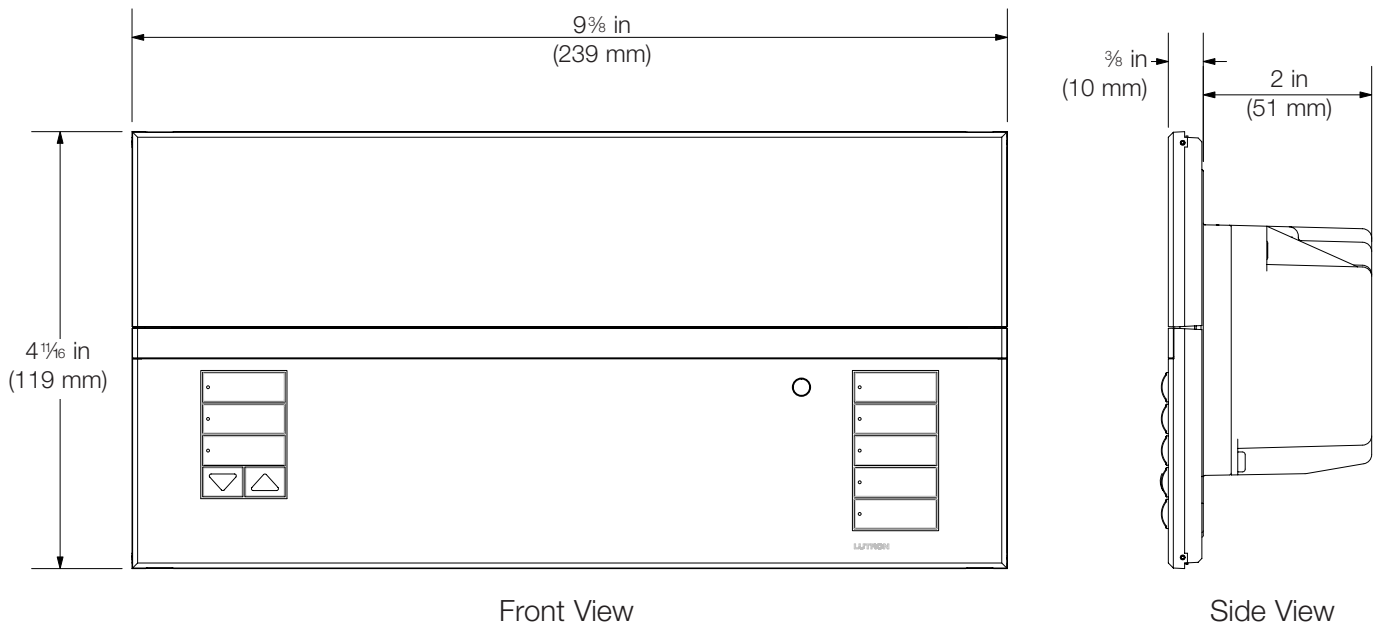## GRAFIK Eye QS Wireless Control Unit

Description

GRAFIK Eye QS Wireless is the premier energy-saving light and shade control. GRAFIK Eye QS includes an astronomic timeclock, intuitive lighting presets, and direct shade 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 RadioRA 2, Radio Powr Savr occupancy, vacancy, and daylight sensors, Sivoia QS Wireless shades, Pico wireless controls, and other GRAFIK Eye QS Wireless control units. Additionally, the GRAFIK Eye QS Wireless is compatible with all Lutron wired QS products and systems, including Quantum systems.

Mechanical Dimensions

Front View
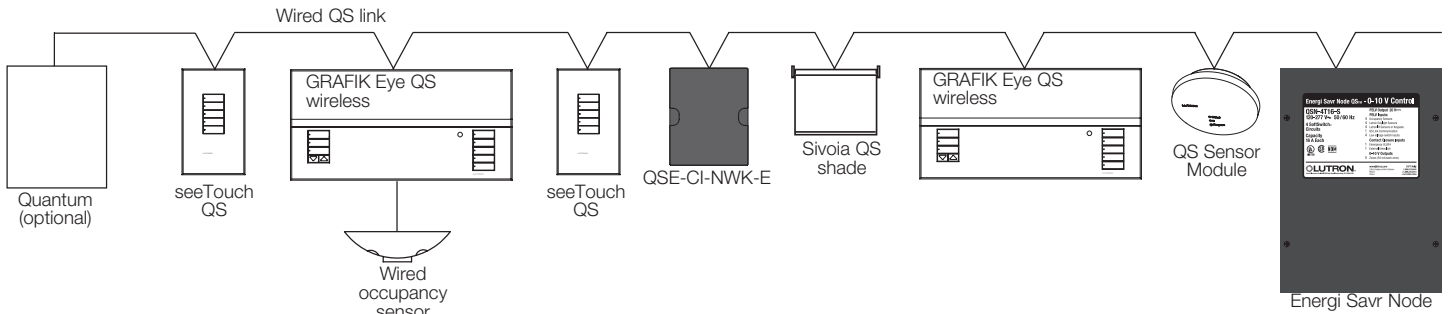
Side View

Fits into a 4-gang U.S. backbox, 3.5 in (90.4 mm) deep (Lutron P/N 245-254) or 3 in (76.2 mm) deep (Lutron P/N 241-400)

✷LUTRON   SPECIFICATION SUBMITTAL   Page

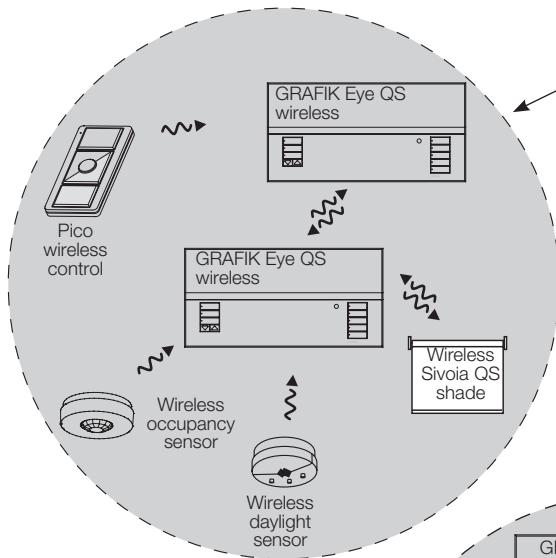| Job Name:	Model Numbers:
Job Number:	

GRAFIK Eye QS

System Topologies

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

Example of Wired System

Example of GRAFIK Eye-centric Wireless System

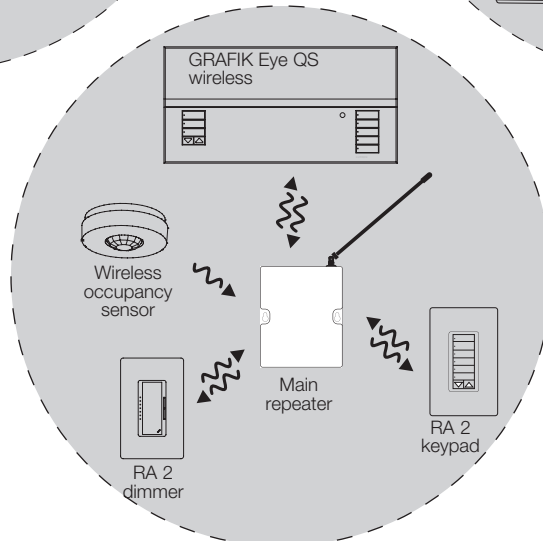### Example of Mixed Wired/GRAFIK Eye-centric Wireless System

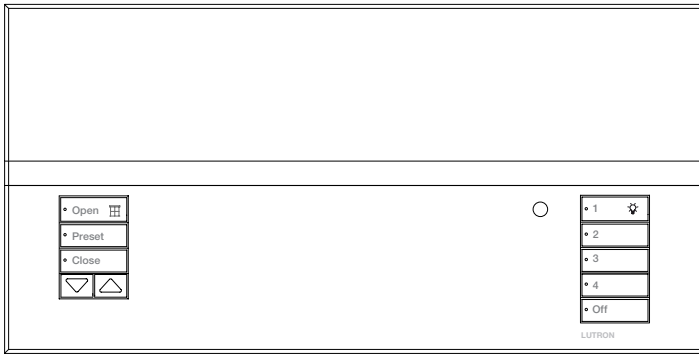30 ft (10 m) wireless range; 60 ft (20 m) in open air
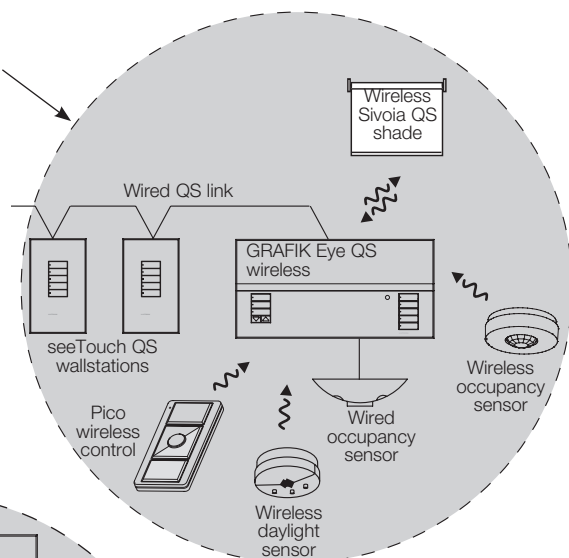
Example of Wireless System with Main Repeater (RadioRA 2)

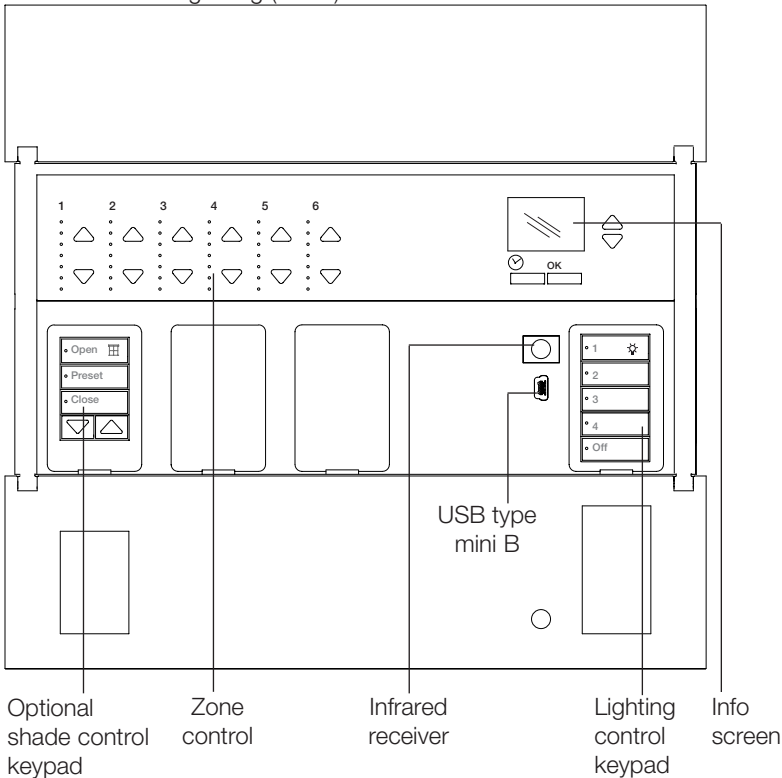Refer to RadioRA 2 documentation (www.lutron.com/radiora2) for specification information.

Note: Wired QS link is disabled when the GRAFIK Eye QS is added to a RadioRA 2 system.

Job Name:	Model Numbers:
Job Number:	

Note: General Engraving (-EGN) shown.

- Optional shade control keypad
- Zone control
- Infrared receiver
- USB type mini B
- Lighting control keypad
- Info screen

Features

- Lutron's proprietary Clear Connect RF technology. Operates in the 431.0 – 437.0 MHz band.
- Push button 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 shade 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 shade 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, motorized window treatments, occupancy sensors, 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 RadioRA 2, Radio Powr Savr occupancy, vacancy, and daylight sensors, Sivoia QS wireless shades, Pico wireless control, HomeWorks QS, and other GRAFIK Eye QS wireless control units.
- Backlit buttons with engraving make unit easy to locate and operate.
- Available in a variety of colors and finishes.

Job Name:	Model Numbers:
Job Number:	

Specifications

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

Regulatory Approvals
- ANATEL

Lighting Sources/Load Types
- 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)
- 0-10V (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 6000 V$\sim$ and current surges of up to 3000 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.

Job Name:	Model Numbers:
Job Number:	

Specifications

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 Scene Off is 3 seconds.

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 shade labels.
- Selectable display languages:
  - English
  - Italian
  - Spanish
  - German
  - French
  - Portuguese

Job Name:	Model Numbers:
Job Number:	

Specifications

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 shade 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, motorized shades, and control interfaces.
- A QS system can have up to 100 devices and 100 zones.
- A GRAFIK Eye can have up to 30 wireless devices associated to it.

Infrared

- Infrared (IR) receiver allows infrared transmitters to select 8 scenes, raise/lower lighting zones, or raise/lower shades.
- Transmitter buttons imitate buttons on faceplate.
- 50 ft (15 m) 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 (QSWS2 or QSWE)

- Wired seeTouch QS keypads provide the following features:
  – Access to one or more of the 16 scenes on the GRAFIK Eye QS Wireless
  – 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

- Features Lutron's proprietary Clear Connect RF Technology
- Operates in the 431.0 – 437.0 MHz band
- Compatible with other Lutron wireless products/systems, such as:
  - Pico (P/N QSR4P or MRF2)
  - Radio Powr Savr occupancy/vacancy/daylight sensors (P/N LRF2-)
  - RadioRA 2 wireless system
  - Sivoia QS wireless products
  - Other GRAFIK Eye QS wireless units (P/N QSGRJ-BRA)
  - HomeWorks QS system

Accessory Controls: Pico Wireless Control (QSR4P or MRF2 models)

- The Pico Wireless Control is battery powered. It can control GRAFIK Eye QS wireless control units within a 30 ft (10 m) range (60 ft/20 m 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.
- Use the QSR4P in systems with a RadioRA 2 main repeater. The MRF2 models will NOT work with RadioRA 2.

Job Name:	Model Numbers:
Job Number:	

Specifications

Accessory Controls: QS Sensor Module (QSM2)

- 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, daylight sensors, and Pico wireless devices can be shared by one or more GRAFIK Eye control units on the 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.

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.
- Refer to the Specification Submittal for the QSE-IO for a full list of its available features.

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.

Accessory Controls: QS Keyswitch Wallstations (QSWS2-KS)

- Recalls preset light levels for any two scenes including Off
- Allows fine-tuning (raise/lower level) of a zone or group of zones
- Starts/Stops scene sequencing (Scenes 1-4 or Scenes 5-16)
- Enables/Disables Timeclock
- Enables/Disables occupancy sensors
- Enables/Disabled daylight sensors
- Allows toggle of Zone(s) to a preset level and off
- Enables/Disables panic mode
- Starts/Stops afterhours mode

Other Accessory Controls and Devices

- Energi Savr Node QS (ESN)

Job Name:	Model Numbers:
Job Number:	

Specifications

Occupancy Sensor(s)

- The GRAFIK Eye QS works with occupancy sensors through either:
  - Scene Control: Up to 16 sensors activate user-selected 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 LRF2)
  - Wired or wireless sensors connected QS Sensor Module (QSM)
- 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.

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 LRF2)
  - Wired or wireless sensors connected to a QS sensor module (QSM)
- 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 Energi Savr Node app for *iPod*.

* Applicable only to units that ship with firmware version 9.002 and higher. Previous versions support up to 4 sensors.

Job Name:	Model Numbers:
Job Number:	

Specifications

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⎓.
- 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⎓.
  - 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, choose this setting so that the occupancy sensor will work correctly.
  - 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.
  - Never Save: 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 Customer Assistance to regain access.

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 wallstation (either a QSWS2, QSWS2-2B or a QSE-IO), 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:	

Capacities

	240 V∼ 50 / 60 Hz	120 V∼ 50 / 60 Hz
Unit Capacity (watts)	2400	1200
MLV	2400 VA / 1920 W	1200 VA / 960 W
Zone Capacity (watts)	40 – 1200	25 – 800
MLV	40 – 1200 VA / 40 – 960 W	25 – 800 VA / 25 – 600 W

Load Type Notes

- All electronic low-voltage (ELV) lighting used with an interface must be rated for reverse phase control dimming. Before installing an ELV light source, verify with the manufacturer that their transformer can be dimmed. When dimming, an ELV interface (check compatibility in your area for correct model; see www.lutron.com/qs for more information) must be used with the control unit. For 240 V∼ applications with ELV loads or load wattages exceeding the specified capacities, please refer to the PHPM-PA-277/DV specification sheet.
- Not all zones must be connected; however, connected zones must have a minimum load as specified above.
- Maximum total lighting load for a magnetic low-voltage (MLV) varies by input voltage:
  – 120 V∼: 800 VA / 600 W
  – 240 V∼: 1200 VA / 960 W
- Maximum total lighting load for Lutron Tu-Wire and Advance Mark 10 electronic dimming ballasts (120 V∼ only) must not exceed 6 A per zone or 10 A per unit.
- No zone may be loaded with more than the capacity specified above. For higher wattage applications, use a Lutron PHPM power module (check compatibility in your area for correct model; see www.lutron.com/qs for more information).
- For controlling low-wattage loads (CFL, LED) in a non-dim application, contact Lutron Customer Assistance for the appropriate solution.

System Limits

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

Job Name:	Model Numbers:
Job Number:	

GRAFIK Eye QS Wireless
Standard and Custom Color Options and Model Numbers
You must order a Base Unit and a Faceplate Kit
See Standard Color Combinations page for faceplate, stripe, and button colors

Base Unit

QSGRJ - _ PBA

Prefix

Number of Zones

Phase Control Triac

| 3 = 3 zones |
| 4 = 4 zones |
| 6 = 6 zones |
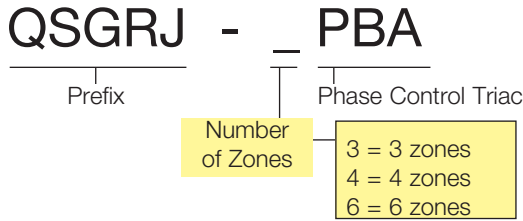
Example:

QSGRJ-6PBA
6-zone base unit
            and
QSGFP-1WH-G
Ivory faceplate kit with two shade columns and general engraving

Standard Engraved Faceplate Kit (WH only)
(includes coordinating stripe and buttons)
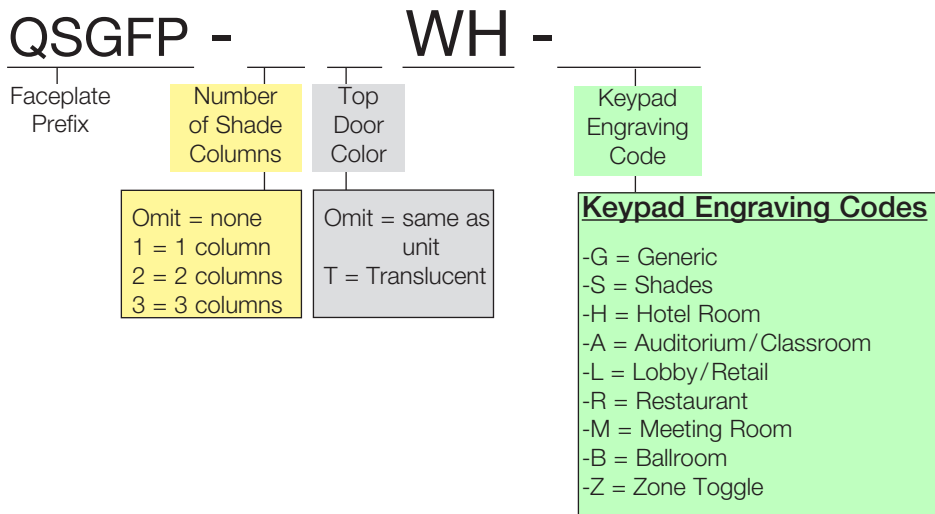
QSGFP - ___ WH - ___

Faceplate Prefix

Number of Shade Columns

Top Door Color

Keypad Engraving Code

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

Omit = same as unit
T = Translucent

Keypad Engraving Codes

-G = Generic
-S = Shades
-H = Hotel Room
-A = Auditorium / Classroom
-L = Lobby / Retail
-R = Restaurant
-M = Meeting Room
-B = Ballroom
-Z = Zone Toggle

Job Name:	Model Numbers:
Job Number:	

GRAFIK Eye QS Wireless *(continued)*
Standard and Custom Color Options and Model Numbers *(continued)*
Standard Engraved Faceplate Kit (WH only) *(continued)*

<u>Generic (-G)</u>

1	☼
2	
3	
4	
Off	♀

<u>Meeting Room (-M)</u>

All On	☼
Meeting	
A/V	
Cleaning	
All Off	♀

<u>Shades (-S)</u>

Open	⊞
Preset 1	
Preset 2	
Preset 3	
Close	▮

<u>Ballroom (-B)</u>

All On	☼
Event 1	
Event 2	
Event 3	
All Off	♀

<u>Hotel Room (-H)</u>

High	☼
Medium	
Low	
Nightlight	
Off	♀

<u>Zone Toggle (-Z)</u>

Zone 1
Zone 2
Zone 3
Zone 4
Zone 5

<u>Auditorium / Classroom (-A)</u>

All On	☼
Present	
Lecture	
Exam	
All Off	♀

<u>Lobby / Retail (-L)</u>

All On	☼
Morning	
Afternoon	
Evening	
All Off	♀

<u>Restaurant (-R)</u>

All On	☼
Breakfast	
Lunch	
Dinner	
All Off	♀

* Standard engraving text does not automatically assign or re-assign system programming to the QS keypad buttons. Project-specific customer input and programming by a Lutron service team member is still required to achieve a desired sequence of operation / system functionality per control.
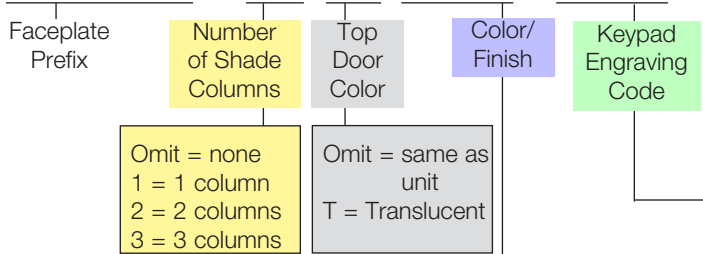
Job Name:	Model Numbers:
Job Number:	

GRAFIK Eye QS Wireless *(continued)*
Standard and Custom Color Options and Model Numbers *(continued)*

Custom (non-standard) Faceplate Kit
(includes coordinating stripe and buttons)

QSGFP - ___ ___ - ___

Faceplate Prefix	Number of Shade Columns	Top Door Color	Color/ Finish	Keypad Engraving Code

Number of Shade Columns:
Omit = none
1 = 1 column
2 = 2 columns
3 = 3 columns

Top Door Color:
Omit = same as unit
T = Translucent

Faceplate Custom Color/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

Anodized Aluminum Finishes
Clear	CLA
Black	BLA
Brass	BRA

Satin Color 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
EGN = General Engraving

Lighting keypad

Shade 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 *(continued)*
Custom Options and Model Numbers
See previous pages for Standard and Other Custom Model Numbers
See Standard Color Combinations page for faceplate, stripe, and button colors

Custom Button Kit

QSGB - 5B - WH -

Custom Button Kit Prefix

Button Configuration

Button Color/Finish

Keypad Engraving Code

3BRL = 3-button with raise/lower (shade column)
5B = 5-button (lighting keypad)

Button Kit Custom Color/Finish Codes

Architectural Matte Finishes

White	WH
Ivory	IV
Beige	BE
Gray	GR
Brown	BR
Black	BL
Almond	AL
Light Almond	LA

Satin Color Matte Finishes

Snow	SW
Biscuit	BI
Eggshell	ES
Taupe	TP

Keypad Engraving Codes

Omit = Unengraved
Ships with engraving certificate that customer can redeem at no charge

EGN = General Engraving

- 1 ☼
- 2
- 3
- 4
- Off

Lighting keypad

- Open ⊞
- Preset
- Close
- ▽ △

Shade 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.
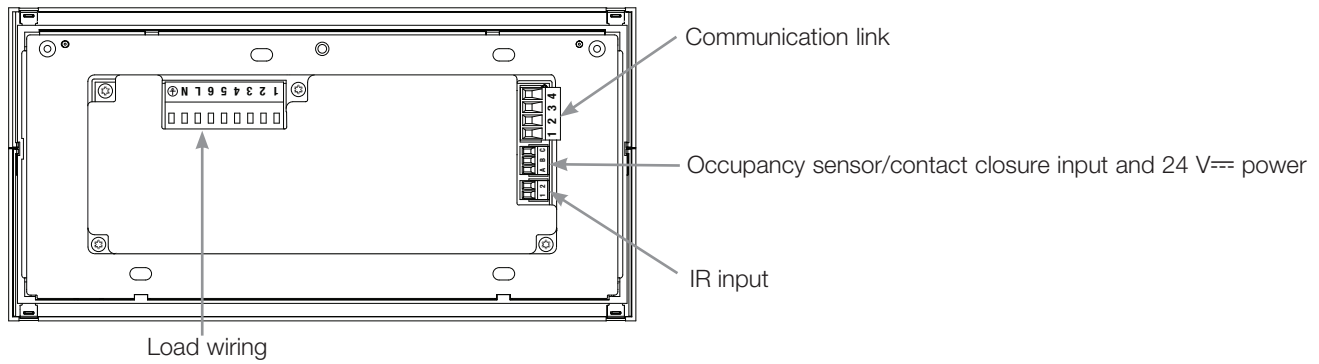
Custom Stripe Kit

QSGS - WH

Stripe Kit Prefix

Stripe Color/Finish

Stripe Custom Color/Finish Codes
Same as Faceplate colors on previous page

Job Name:	Model Numbers:
Job Number:	

Wiring Diagrams
Terminations

Communication link

Occupancy sensor/contact closure input and 24 V⎓ power
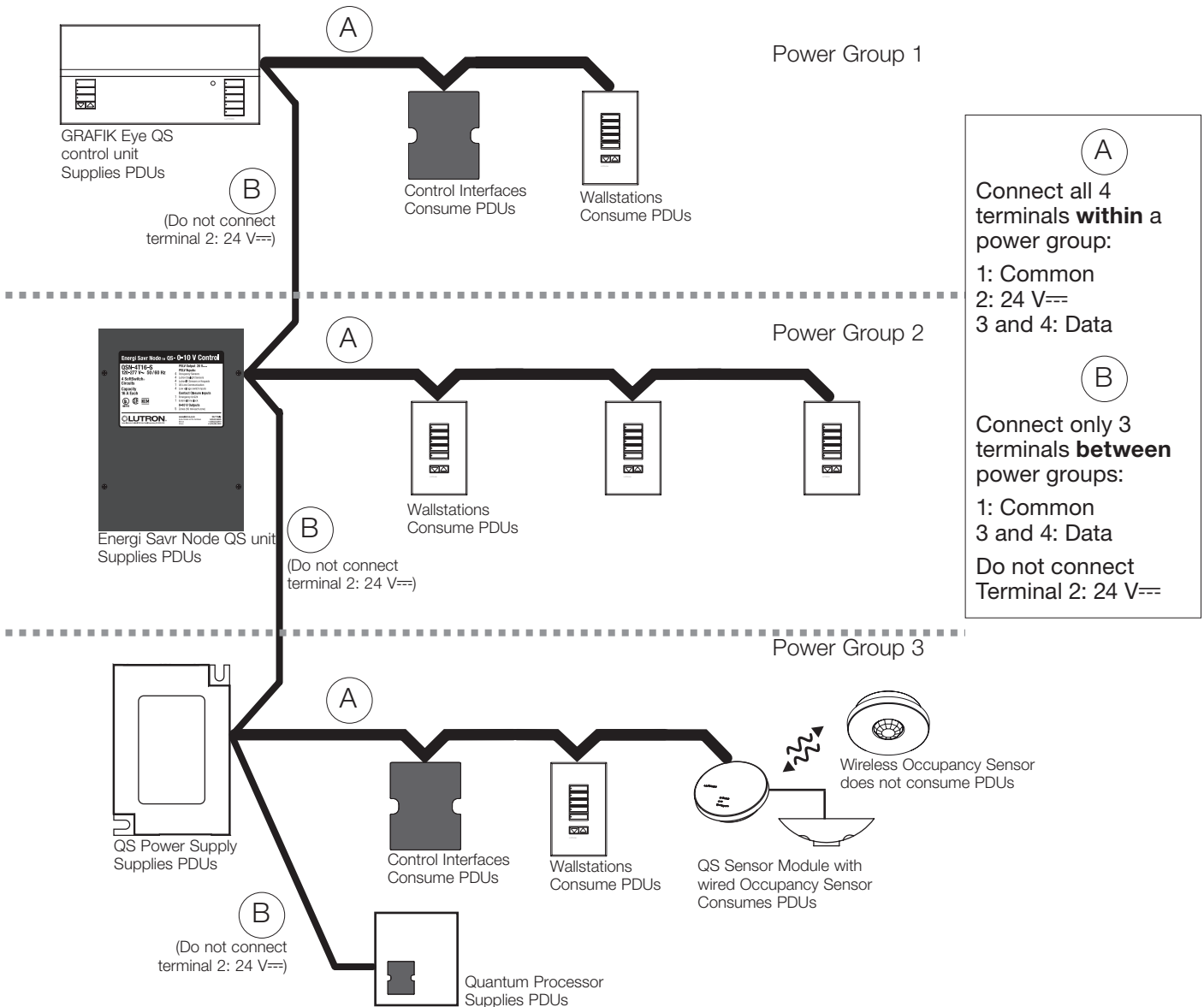
IR input

Load wiring

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.
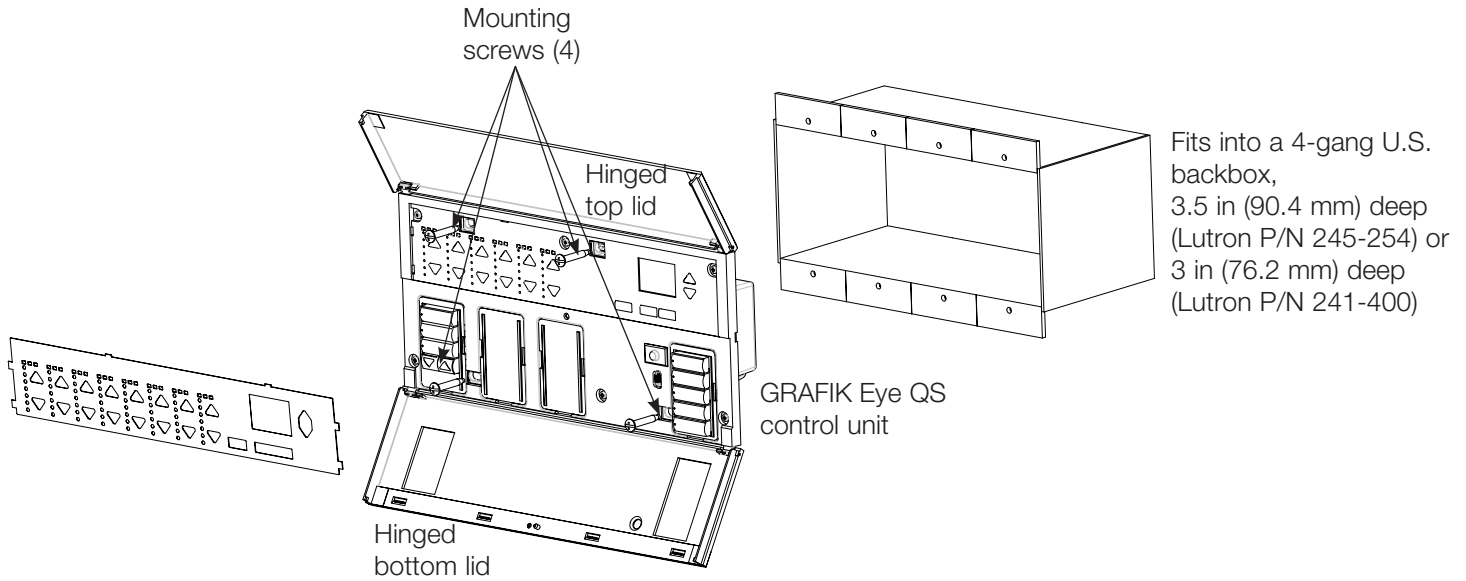
Within Power Groups on the QS link, connect all 4 terminals (1, 2, 3, and 4), shown by the letter A in the diagram. Between devices on the QS link that supply power, connect only terminals 1, 3, and 4 (NOT terminal 2), shown by the letter B on the diagram.
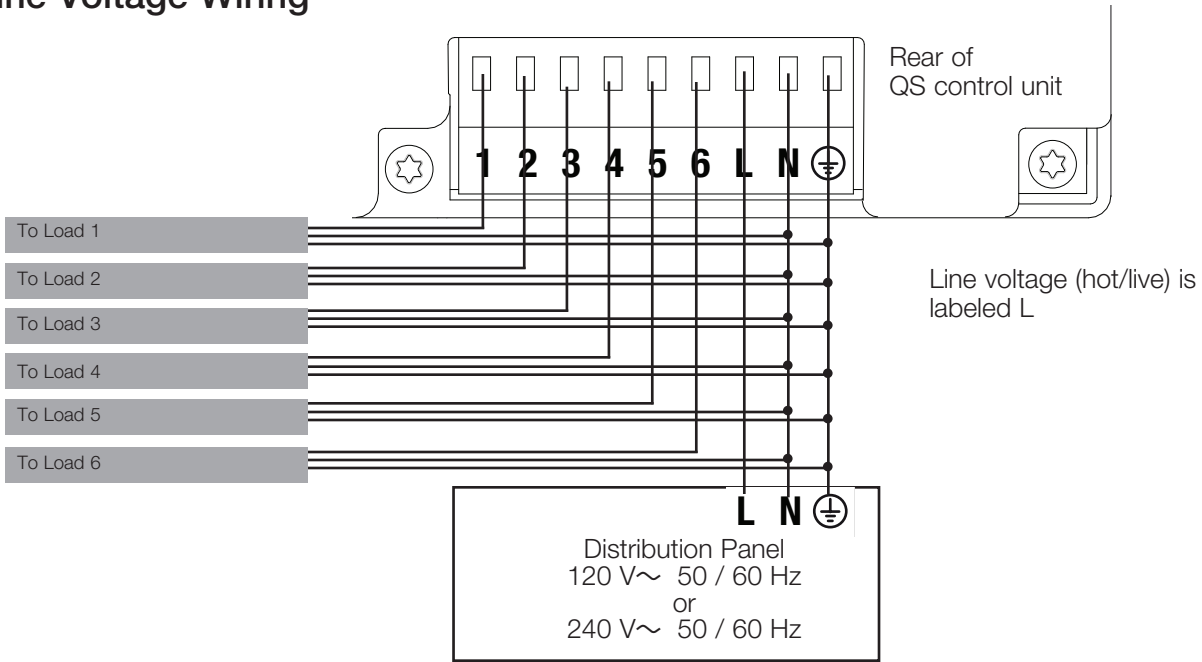
Wiring can be T-tapped or daisy-chained.

GRAFIK Eye QS control unit Supplies PDUs

(Do not connect terminal 2: 24 V⎓)

Power Group 1

Control Interfaces Consume PDUs

Wallstations Consume PDUs

Energi Savr Node QS unit Supplies PDUs

(Do not connect terminal 2: 24 V⎓)

Power Group 2

Wallstations Consume PDUs

Power Group 3

QS Power Supply Supplies PDUs

(Do not connect terminal 2: 24 V⎓)

Control Interfaces Consume PDUs

Wallstations Consume PDUs

QS Sensor Module with wired Occupancy Sensor Consumes PDUs

Wireless Occupancy Sensor does not consume PDUs

Quantum Processor Supplies PDUs

A Connect all 4 terminals **within** a power group:
1: Common
2: 24 V⎓
3 and 4: Data

B Connect only 3 terminals **between** power groups:
1: Common
3 and 4: Data
Do not connect Terminal 2: 24 V⎓

Job Name:	Model Numbers:
Job Number:	

Mounting

Mounting screws (4)

Hinged top lid

GRAFIK Eye QS control unit

Hinged bottom lid

Fits into a 4-gang U.S. backbox, 3.5 in (90.4 mm) deep (Lutron P/N 245-254) or 3 in (76.2 mm) deep (Lutron P/N 241-400)

Line Voltage Wiring

Rear of QS control unit

1 2 3 4 5 6 L N ⊕

To Load 1
To Load 2
To Load 3
To Load 4
To Load 5
To Load 6

Line voltage (hot/live) is labeled L

L N ⊕

Distribution Panel
120 V∼ 50 / 60 Hz
or
240 V∼ 50 / 60 Hz

- Pull power wiring from distribution panel and to light fixtures.
- Each line voltage terminal can accept one 12 AWG (4.0 mm^2) wire.
- Consult Lutron for non-dim relay wiring and/or load side emergency transfer wiring.

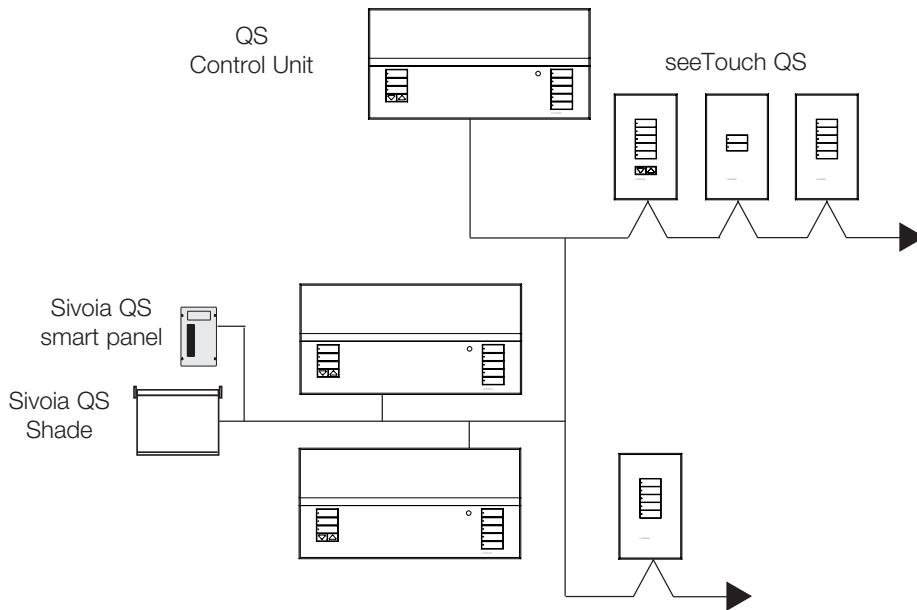| Job Name:	Model Numbers:
Job Number:	

IEC PELV/NEC® Class 2 QS System Wiring

- System communication wiring can be daisy-chained or T-tapped.
- Wiring must be run separately from line/mains voltage.
- IEC PELV/NEC® Class 2 wiring link requires:
  Two 18 AWG (1.0 mm²) conductors for control power.
  One twisted, shielded pair of 22 AWG (0.5 mm²) for data link.
  Available from Lutron, P/N GRX-CBL-346S; check compatibility in your area.
- Total length of control link must not exceed 2000 ft (610 m).

Daisy-Chain Wiring Example

QS
Control Unit

Sivoia QS
Shade

seeTouch QS

Sivoia QS
smart panel

T-Tap Wiring Example

QS
Control Unit

seeTouch QS

Sivoia QS
smart panel

Sivoia QS
Shade

❋**LUTRON** SPECIFICATION SUBMITTAL

Page

Job Name:	Model Numbers:
Job Number:	