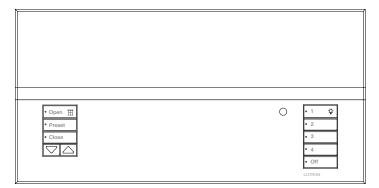
369309g 1 12.20.19

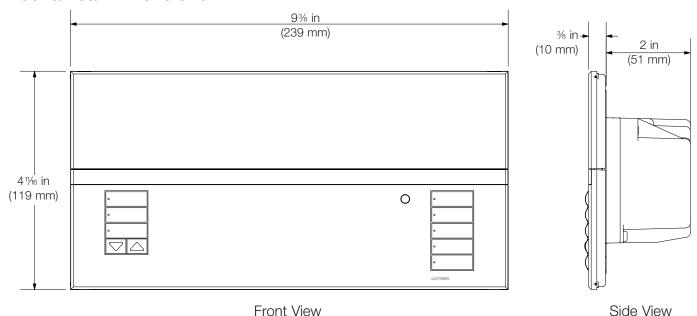
### **GRAFIK Eye QS Control Unit**



### Description

GRAFIK Eye QS is the premier energy-saving light and shade control. The GRAFIK Eye QS control unit includes an astronomic timeclock, intuitive lighting presets, and direct shade control. Additionally, the GRAFIK Eye QS control unit is compatible with all Lutron wired QS products and systems, including Quantum systems.

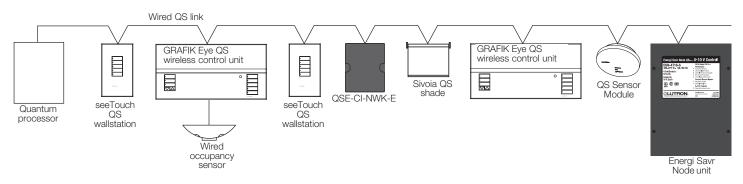
### **Mechanical Dimensions**



Fits into a 4-gang U.S. backbox,  $3\frac{1}{2}$  in (90.4 mm) deep (Lutron P/N 245-254) or 3 in (76.2 mm) deep (Lutron P/N 241-400)

### **System Topology**

### **Example of Wired System**

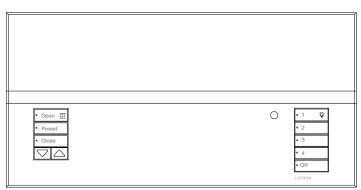


### **LUTRON** SPECIFICATION SUBMITTAL

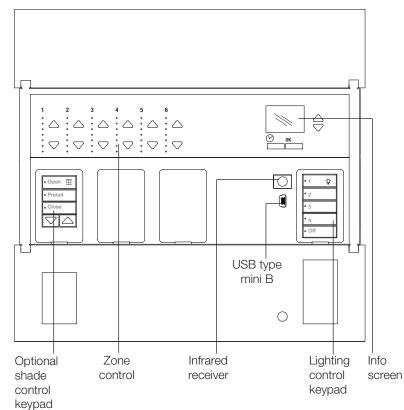
Job Name: Model Numbers:

Job Number:

369309g 2 12.20.19



Note: General Engraving (-EGN) shown.



#### **Features**

- 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 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.
- Backlit buttons with engraving make unit easy to locate and operate.
- Available in a variety of colors and finishes.

#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name: Model Numbers:

Job Number:

369309g 3 12.20.19

### **Specifications**

### Input Power

- 120−127 V~ 50/60 Hz
- 220-240 V∼ 50/60 Hz

### Listings (120−127 V~)

- cULus CEC (Title 24)
- NOM

#### **Environment**

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

### **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"

Controls 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
- Lutron Hi-lume 2-wire LTE LED driver
- Advance Mark 10<sub>®</sub> electronic dimming ballast
- Neon and cold cathode
- Non-dim (incandescent, magnetic low-voltage, Tu-Wire, or neon/cold cathode)
- Cree LR4/6, 120 V~ fixtures (for loading capacities, please refer to the LED report card located at www.lutron.com/LEDtool)

Please refer to "Capacities" for more information.

Controls the following lighting sources with a smooth, continuous square law dimming curve or on a full conduction non-dim basis through separate Lutron power interfaces:

- Electronic low-voltage transformers (use ELV or Phase-Adaptive power module: PHPM-PA-DV-WH/ PHPM-PA-120-WH)
- Lutron 3-wire controlled electronic fluorescent dimming ballasts (use fluorescent 3-wire power module: PHPM-3F-DV-WH/PHPM-3F-120-WH)
- Lutron 3-wire controlled LED drivers (use flourescent 3-wire power module: PHPM-3F-DV-WH/ PHPM-3F-120-WH)
- Non-dim (use switching module: PHPM-SW-DV-WH)
- 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 6000 V∼ 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 control unit supplies 3 Power Draw Units (PDUs) on the QS link.
  - For complete information, see the **Power Draw Units on the QS Link** Spec (369405) on www.lutron.com.
- 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 Scene Off is 3 seconds.

JTRON	SPECIE	ICATION	SHRM	ΙΤΤΔΙ

Job Name:	Model Numbers:
Job Number:	

369309g 4 12.20.19

### **Specifications**

#### **Shade Control**

- The GRAFIK Eye QS control unit 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.

#### **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- 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 Eve QS control unit.
- 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<sub>®</sub> Class 2 wiring connects control units, wallstations, motorized shades, and control interfaces.
- A QS system can have up to 100 devices and 100 zones.

### 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.

#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369309g 5 12.20.19

### **Specifications**

## Accessory Controls: seeTouch QS Wallstations (QSWS2)

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

### 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 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.
  - Infrared sensors can control either one or more zones or scenes on the GRAFIK Eye QS control unit.
     Functionality varies; refer to the documentation for the QS Sensor Module for details.
  - Pico wireless controls wirelessly linked to a QS Sensor Module can be used to control 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.

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

- Recalls preset light levels for the following set of scenes on the GRAFIK Eye QS control unit:
  - 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 control unit.

   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 control unit 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 control unit.

## 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 sequencings (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). See the specification submittal for complete details.

#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369309g 6 12.20.19

### **Specifications**

### Occupancy Sensor(s)

- The GRAFIK Eye QS control unit 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 control unit
  - Wired or wireless sensors connected QS sensor module (QSM)
- If any sensor in a group detects occupancy, then the GRAFIK Eye QS control unit will go to the designated occupancy scene or zone level.
- If all sensors in a group detect vacancy, then the GRAFIK Eye QS control unit 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 control unit allows daylight sensors to control one or more lighting zones to adjust electric light levels based on measured daylight levels.
- Daylight sensors may include:
  - Wired or wireless sensors connected to a QS sensor module (QSM)
- A daylight sensor can control one or more GRAFIK Eye QS control unit 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*.

## Contact Closure Input (CCI) with Power Supply Output

- Each GRAFIK Eye QS control unit 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 control unit 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 control unit.
  - Emergency: This setting allows the GRAFIK Eye QS control unit 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-character 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 control unit.
- If case the 4-digit password is forgotten, contact Lutron Customer Assistance to regain access.

#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

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

369309g 7 12.20.19

### **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 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.

**LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number	

369309g 8 12.20.19

### Capacities

	220−240 V∼ 50/60 Hz	120−127 V∼ 50/60 Hz	
Unit Capacity (watts)	3000	2000	c (UL) US
MLV	3000 VA / 2400 W	2000 VA / 1600 W	
Zone Capacity (watts)	40-1200	25-800	NOM
MLV	40-1200 VA / 40-960 W	25-800 VA / 25-600 W	MUM LS

### Load Type Notes (Zones 1, 2 and 3)

- 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 (such as the PHPM-PA-DV-WH) must be used with the control unit.
- 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:
  - 120-127 V~: 800 VA / 600 W
  - 220-240 V~: 1200 VA / 960 W
- Maximum total lighting load for Lutron Tu-Wire and Advance Mark 10<sub>®</sub> electronic dimming ballasts (120 to 127 V~ only)
  must not exceed 6 A per zone or 16 A per unit.
- No zone may be loaded with more than the capacity specified above. For higher wattage applications, or for 277 V~ applications, use Lutron power module PHPM-PA, PHPM-WBX, PHPM-PA-DV, PHPM-SW, or PHPM-WBX-DV.
- For controlling low-wattage loads (CFL, LED) in a non-dim application, contact Lutron Customer Assistance for the appropriate solution.

### **System Limits**

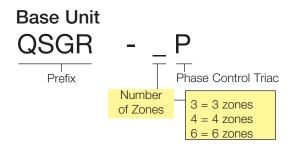
The QS wired communication link is limited to 100 devices or 100 zones.

#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369309g 9 12.20.19

### GRAFIK Eye QS Control Unit 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



### Example:

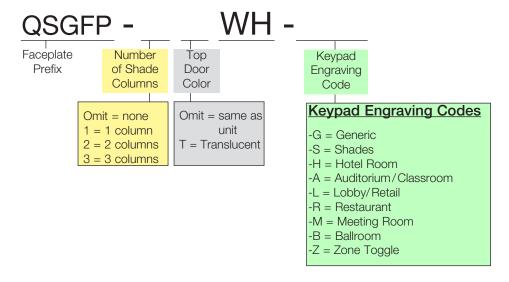
### QSGR-6P

6-zone base unit and

### QSGFP-2WH-G

Ivory faceplate kit with two shade columns and general engraving

## Standard Engraved Faceplate Kit (WH only) (includes coordinating stripe and buttons)



#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369309g 10 12.20.19

### GRAFIK Eye QS Control Unit (continued)

## Standard and Custom Color Options and Model Numbers (continued)

Standard Engraved Faceplate Kit (WH only) (continued)

Generic (	(-G)

<u> </u>	<u> </u>
1	Ÿ
2	
3	
4	
Off	ੂ

### Meeting Room (-M)

All On 🌣
Meeting
A/V
Cleaning
All Off ♀

### Shades (-S)

·	
Open ⊞	l
Preset 1	l
Preset 2	I
Preset 3	I
Close T	I

### Ballroom (-B)

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

### Hotel Room (-H)

High 🌣
Medium
Low
Nightlight
Off §

### Zone Toggle (-Z)

Zone 1	
Zone 2	
Zone 3	
Zone 4	
Zone 5	

### Auditorium/Classroom (-A)

All On 🌣
Present
Lecture
Exam
ΛII Off ο

### Lobby/Retail (-L)

All On 🌣
Morning
Afternoon
Evening
All Off ♀

### Restaurant (-R)

All On 🔅
Breakfast
Lunch
Dinner
All Off Q

### **LUTRON** SPECIFICATION SUBMITTAL

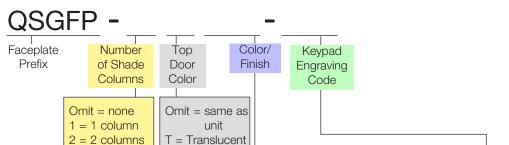
Job Name:	Model Numbers:
Job Number:	

<sup>\*</sup> 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.

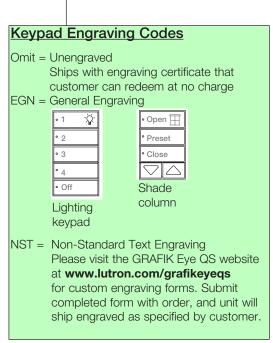
3 = 3 columns

369309g 11 12.20.19

### **GRAFIK Eye QS Control Unit (continued)** Standard and Custom Color Options and Model Numbers (continued) Custom (non-standard) Faceplate Kit (includes coordinating stripe and buttons)



Faceplate Custom Color/Finish Codes								
Architectural Matte Architectural Metal			Satin Color Matte					
Finishes		Finishes			Finishes			
Standard		Bright Brass BB		Snow	SW			
(ship in 48 hours)		Bright C	Bright Chrome BC		Midnight	MN		
White	WH	Bright N	lickel	BN	Taupe	TP		
Ivory	IV	Satin Br		SB	Biscuit	BI		
Beige	BE		nrome		Eggshell	ES		
Gray	GR	Satin Ni		SN	Palladium	PD		
Brown	BR		Brass		Hot	HT		
Black	BL	Antique	Bronze	QZ	Merlot	MR		
Almond	AL				Plum	PL		
Light Almond LA Ano			ed Alun	ninum	Sienna	SI		
Finishes				Terracotta	TC			
Clear CLA					Bluestone	BG		
		Black	BLA		Greenbriar	GB		
		Brass	BRA		Goldstone	GS		
Brade Brat					Mocha Stone	MS		
					Stone	ST		
					Desert Stone	DS		
					Limestone	LS		
For the latest colo	r offering	gs please	see our	website:				
http://www.lutron.com/satincolors								



#### **LUTRON** SPECIFICATION SUBMITTAL

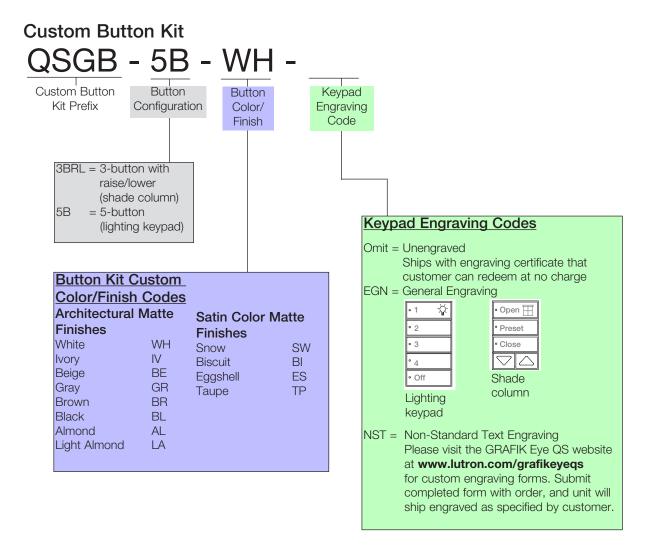
Job Name:	Model Numbers:
Job Number	

369309g 12 12.20.19

### GRAFIK Eye QS Control Unit (continued)

Standard and Custom Color Options and Model Numbers (continued) See previous page for Other Custom Model Numbers

See Standard Color Combinations page for faceplate, stripe, and button colors



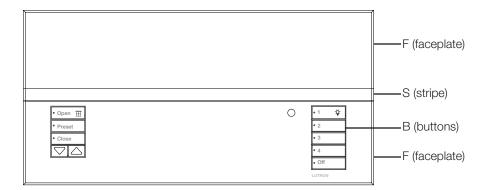
### Custom Stripe Kit



Job Name:	Model Numbers:
Job Number:	

369309g 13 12.20.19

### GRAFIK Eye QS Control Unit Standard Color Combinations See previous pages for Custom Model Numbers



Faceplate is comprised of a top and bottom. The bottom will always be the color indicated under "faceplate." The top may be the same color or translucent. Use the chart for faceplates that have the same color top and bottom. If a translucent lid is chosen, the stripe will automatically be the same color as the bottom lid.

### Example:

If you order QSGR-4P-1WH, your GRAFIK Eye QS control unit with 4 lighting zones and 1 shade zone will come with a white faceplate (both top and bottom), gray stripe, and white buttons.

Suffix	Faceplate (F)	Stripe (S)	Button (B)	Suffix	Faceplate (F)	Stripe (S)	Button (B)
Architectural Matte			Satin Matte				
WH	White	Gray	White	SW	Snow	Gray	Snow
IV	lvory	Beige	Ivory	MN	Midnight	Gray	Black
BE	Beige	Ivory	Beige	TP	Taupe	Gray	Taupe
GR	Gray	Black	Gray	BI	Biscuit	Eggshell	Biscuit
BR	Brown	Black	Brown	ES	Eggshell	Beige	Eggshell
BL	Black	Gray	Black	PD	Palladium	Gray	Gray
AL	Almond	Light Almond	Almond	HT	Hot	Taupe	Taupe
LA	Light Almond	Almond	Light Almond	MR	Merlot	Taupe	Taupe
Archited	ctural Metal			PL	Plum	Taupe	Taupe
BB	Bright Brass	Black	Black	SI	Sienna	Brown	Brown
BC	Bright Chrome	Black	Black	TC	Terracotta	Taupe	Taupe
BN	Bright Nickel	Black	Black	BG	Bluestone	Gray	Gray
SB	Satin Brass	Black	Black	GB	Greenbriar	Gray	Gray
SC	Satin Chrome	Black	Black	GS	Goldstone	Ivory	Ivory
SN	Satin Nickel	Black	Black	MS	Mocha Stone	Taupe	Taupe
QB	Antique Brass	Black	Black	ST	Stone	Gray	Gray
QZ	Antique Bronze	Black	Black	DS	Desert Stone	Taupe	Taupe
Anodized			LS	Limestone	Gray	Gray	
CLA		Black	Black				
BLA	Black	Black	Black	For the la	atest color offering	as please see o	ur website:
BRA	Brass	Black	Black	1	vw.lutron.com/sat		

### **\$\infty\$LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369309g 14 12.20.19

### Wiring Diagrams

### **Terminations**



### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

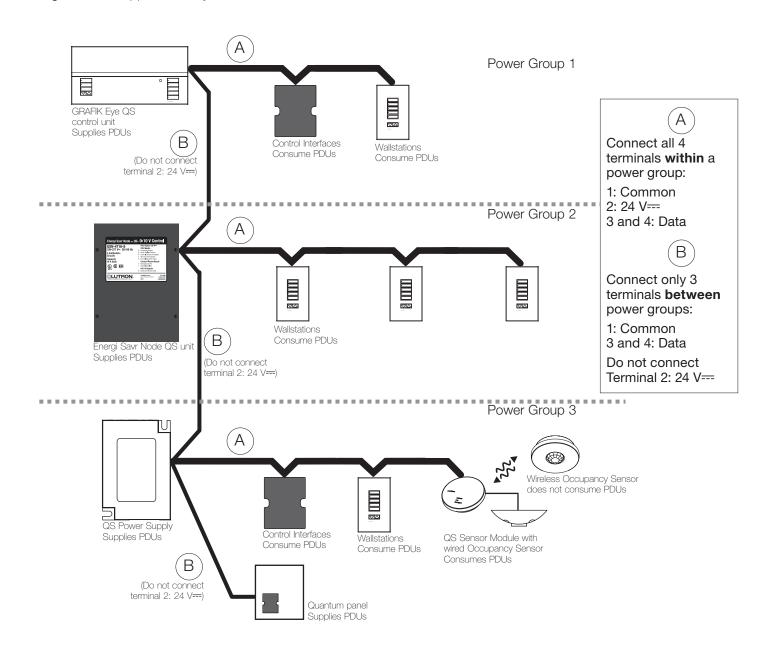
369309g 15 12.20.19

### **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 **Power Draw Units on the QS Link** Spec (369405) on www.lutron.com 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.

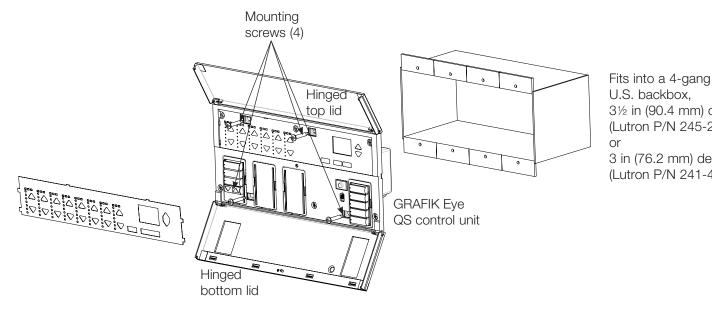


#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

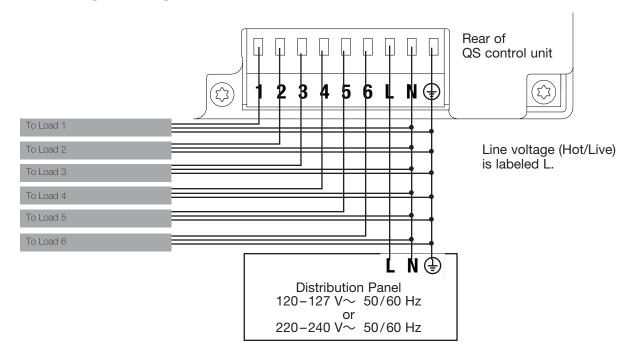
369309g 16 12.20.19

### Mounting



U.S. backbox, 3½ in (90.4 mm) deep (Lutron P/N 245-254) 3 in (76.2 mm) deep (Lutron P/N 241-400)

### **Line Voltage Wiring**



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

#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369309g 17 12.20.19

Page

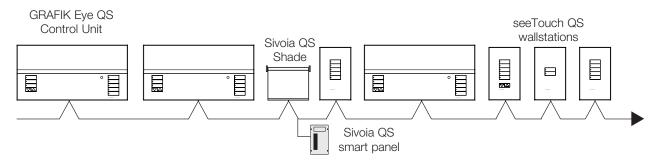
### IEC PELV/NEC® Class 2 QS System Wiring

- 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 2000 ft (610 m).

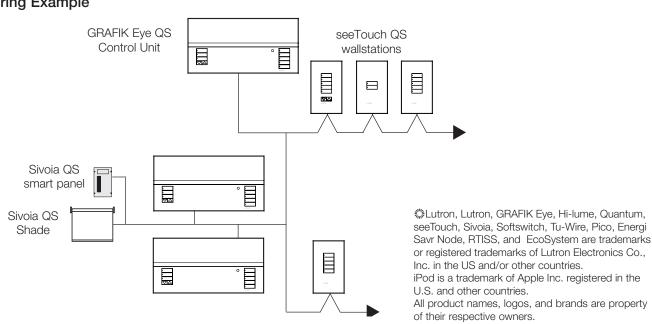
### Wire Sizes (check compatibility in your area)

QS Link 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 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 to 2000 ft (153 to 610 m)	Power (terminals 1 and 2) 1 pair 12 AWG (4.0 mm²)  GRX-C	GRX-CBL-46L (non-plenum)
	Data (terminals 3 and 4) 1 twisted, shielded pair 22 AWG (0.5 mm²)	GRX-PCBL-46L (plenum)

### **Daisy-Chain Wiring Example**



### T-Tap Wiring Example



# Job Name: Model Numbers:

SPECIFICATION SUBMITTAL

Job Number:

**CLUTRON**