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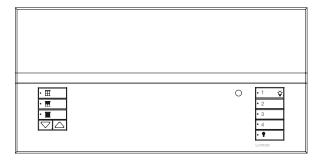
### GRAFIK Eye QS Wireless Control Unit with DALI<sub>®</sub> (CE Limited)

#### Description

GRAFIK Eye QS with DALI® is the premier energy-saving lighting and shade control. GRAFIK Eye QS features an astronomic timeclock, intuitive lighting presets, and direct shade control, which are seamlessly integrated with DALI®-compliant fluorescent ballasts and LED drivers, and Lutron's QS components and systems. Now with wireless technology and an integral DALI®-compliant bus supply, you can use the GRAFIK Eye QS wireless with DALI® to control digital loads and shades without interfaces, and integrate with a variety of Lutron wireless products and systems, including Radio Powr Savr occupancy, vacancy, and daylight sensors, Sivoia QS wireless shades, Pico wireless control, and other GRAFIK Eye QS wireless is compatible with all Lutron wired QS products and systems, including Quantum.

#### Features

- Lutron's proprietary Clear Connect RF technology. Operates in limited 868 MHz band.
- Pushbutton recall of four preset lighting scenes, plus Off.
- Sixteen (16) total available scenes, plus Off scene.
- 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, programming, and Digital Addressable Load setup.
- 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 shades, Pico wireless control, and other GRAFIK Eye QS wireless products.
- Control up to 6, 8, or 16 zones of DALI<sub>®</sub>-compliant loads from internal bus supply.
- Up to 64 DALIe-compliant fluorescent ballasts or LED drivers can be addressed and grouped into zones.
- Integral DALI® setup and programming through the info screen.
- Backlit buttons with engraving make unit easy to locate and operate.
- Available in a variety of colours and finishes.



#### DALI<sub>®</sub> Compatibility

In order to ensure compatibility with Lutron DALI® controllers, the connected DALI® LED drivers and fluorescent ballasts must be DALI-2® certified and marked. In addition to compatibility, it is important to select high quality and high-performance LED drivers and fluorescent ballasts. DALI-2® certified devices are readily available from many manufacturers and are tested for compatibility with the standard. For a complete list of available DALI-2® certified devices, see the DiiA® website at https://www.digitalilluminationinterface.org/products. DALI® devices that are not listed on the DiiA® website and are not marked DALI-2® cannot be considered DALI-2® certified.

The DALI® version-1 standard does not ensure compatibility. To apply the original DALI® version-1 mark on LED drivers and fluorescent ballasts, no verification of the test results was required, and manufacturers could self-declare compliance and apply the DALI® mark. If you would like to use an LED driver or fluorescent ballast that is not DALI-2® certified but carries a DALI® version-1 logo, Lutron recommends that these devices be tested to ensure compatibility. Lutron is able to perform this testing on request. Samples of the drivers and light engines must be submitted to Lutron and the expected turnaround time is 6 to 8 weeks after the drivers are received. Fees for testing may apply. Lutron recommends that this testing be performed before the fixtures and lighting controls are purchased and installed. Contact your Lutron sales representative for more information.

### **LUTRON** SPECIFICATION SUBMITTAL

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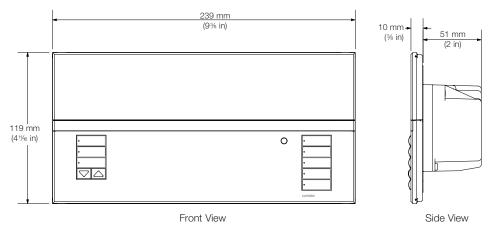
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#### **Mechanical Dimensions**

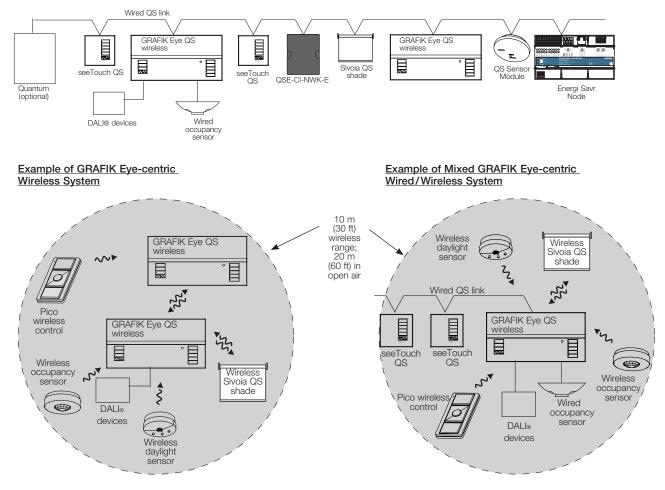


Fits into a 4-gang U.S. backbox, 90.4 mm (3.5 in) deep (Lutron P/N 245-254) or 76.2 mm (3 in) deep (Lutron P/N 241-400)

#### **System Topologies**

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

#### Example of Wired System



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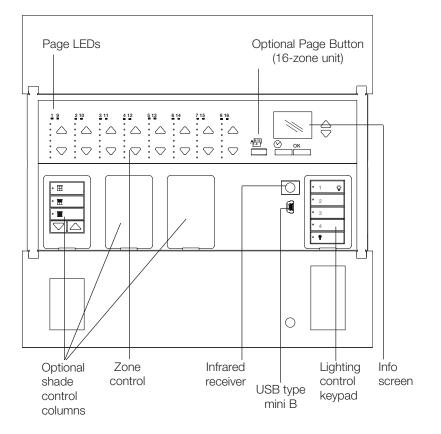


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#### **Preset Dimming Controls**

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

### **LUTRON** SPECIFICATION SUBMITTAL

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Job Name:	Model Numbers:	
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### **Specifications**

#### Input Power

• 220-240 V∼ 50/60 Hz

#### Environment

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

#### Compliance

• CE

#### Lighting Sources/Load Types

- Up to 64 DALI<sub>®</sub>-compliant output devices (devices must comply with IEC/EN 60929) can be addressed and grouped into zones.
- Before system is addressed, Zone 4 will transmit broadcast commands to all DALI<sub>®</sub>-compliant loads wired to the GRAFIK Eye QS.
- 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".

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

#### **Key Design Features**

- RF meets IEC 801-2.
- Tested to withstand 16 kV electrostatic discharge without damage or memory loss.
- Tested to withstand voltage surges of up to 6 000 V~ and current surges of up to 3 000 A. Lightning strike protection meets ANSI/IEEE 62.41-1980 standard.
- 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 90 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.

### **LUTRON** SPECIFICATION SUBMITTAL

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### **Specifications**

#### 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 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 shades, 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.
- Class 1/Class 2 wiring connects DALI-compliant output devices to control unit.

#### 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.
- 15 m (50 ft) line of sight range.
- Terminal block infrared input for direct contact with external IR connection.
- IR can be disabled via programming.
- Works with Lutron GRX-IT and GRX-8IT infrared remote controllers.

### Page Job Name: Model Numbers: Job Number:

#### SPECIFICATION SUBMITTAL

### **Specifications**

#### Accessory Controls: seeTouch QS Wallstations (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.
  - Various other functions that are available on specific wallstation configurations. Refer to the seeTouch specification submittal.

#### Wireless RF Compatibility

- Features Lutron's proprietary Clear Connect RF technology.
- Operates in the limited 868 MHz band.
- Compatible with other Lutron wireless products/systems, such as:
  - Pico (P/N QSRMP-)
  - Radio Powr Savr occupancy/vacancy/daylight sensors (P/N LRF4-)
  - Sivoia QS wireless products
  - Other GRAFIK Eye QS wireless units (P/N QSGRM-)

## Accessory Controls: Pico Wireless Control (P/N QSRMP-)

- 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 (QSM4)

- 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.

# 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).

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• DMX loads cannot be used with daylighting.

Job Name:	Model Numbers:	
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### **Specifications**

## 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.

#### DALI<sub>®</sub> Ballasts and Devices

• Supports all DALI<sub>®</sub> ballasts (maximum of 64 ballasts per GRAFIK Eye control unit).

#### Other Accessory Controls and Devices

• Energi Savr Node QS (QSNE)

#### 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 sensor wired to CCI input on back of GRAFIK Eye QS.
  - Wireless Radio Powr Savr occupancy or vacancy sensors (model numbers starting with LRF4).
  - 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 with DALI® works with compatible daylight sensors to adjust electric light levels based on measured daylight levels. Sensors can be configured to control either GRAFIK Eye QS zones or groups of DALI® loads independent of zoning.
- Daylight sensors may include:
  - Wireless Radio Powr Savr (model numbers starting with LRF4).
  - Wired or wireless sensors connected to a QS sensor module (QSM4).
- In Zone Mode, 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.
- In group mode, a daylight sensor can control one or more DALI<sub>®</sub> loads, regardless of how they are zoned on the GRAFIK Eye QS.
  - A group can be controlled by a single daylight sensor
  - Each group can be calibrated to independent target light levels.
  - Up to 16 groups are available.
- 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. iPod is a trademark of Apple Inc. registered in the U.S. and other countries.

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### **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.
- If case the 4-digit password is forgotten, contact Lutron Customer Assistance to regain access.

### **LUTRON** SPECIFICATION SUBMITTAL

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### **Specifications**

#### **Unit Dissipation**

• All models of GRAFIK Eye QS Wireless for Digital Addressable Loads dissipate no more than 35 BTUs/hour.

#### System Limits

- The QS wired communication link is limited to 100 devices (wired or wireless) or 100 zones.
- The QS wireless communication link supports up to 30 wireless devices.

#### **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).

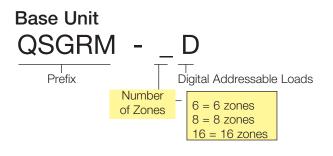
#### Partitioning

- 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 QSWS2-2B 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.

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### GRAFIK Eye QS Wireless for Digital Addressable Loads 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



Example:

QSGRM-6D 6-zone base unit and QSGFP-2IV-SGN Ivory faceplate kit with two shade columns and symbolbased engraving

### Faceplate Kit

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

QSGFP -	-		
Faceplate Prefix Omit = none 1 = 1 column 2 = 2 column 3 = 3 column	e Door Finish Colour Omit = same as unit T = Translucent	Engraving Code	
Faceplate	e Custom Colour/Fir	<u>nish Codes</u>	Keypad Engraving Codes
Architectural MatteFinishesWhiteWHIvoryIVBeigeBEGrayGRBrownBRBlackBLAlmondALLight AlmondLAFor the latest color offerinplease see our website:http://www.lutron.com/sa	0	Satin Colour MatteFinishesSnowSWMidnightMNTaupeTPBiscuitBIEggshellESPalladiumPDHotHTMerlotMRPlumPLSiennaSITerracottaTCBluestoneBGGreenbriarGBGoldstoneMSStoneSTDesert StoneDSLimestoneLS	Omit = Unengraved    Ships with engraving certificate that    customer can redeem at no charge    SGN = International (symbol-based) Engraving    ●1    ●2    •3    •4    •1    •1    •2    •3    •4    •1    •1    •1    •2    •3    •4    •1    •1    •2    •3    •4    •1    •1    •2    •3    •4    •1    •1    •1    •1    •1    •1    •1    •1    •1    •1    •1    •1    •2    •3    •2    •3    •1    •1    •2    •3    •3    •1    •2

Model Numbers:

#### **LUTRON** SPECIFICATION SUBMITTAL

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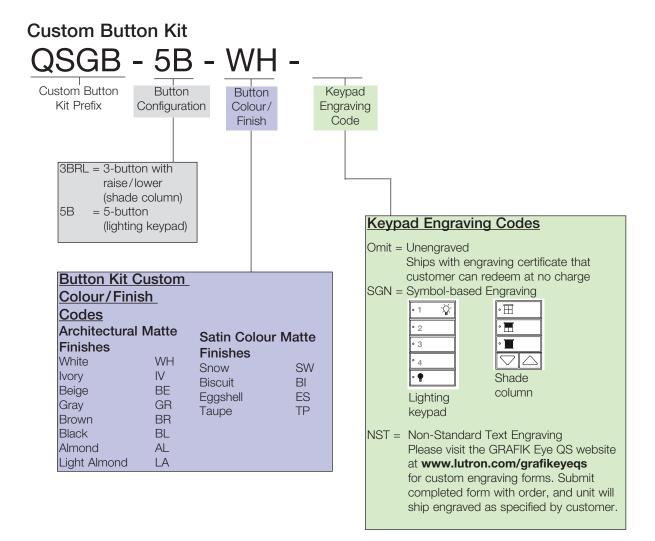
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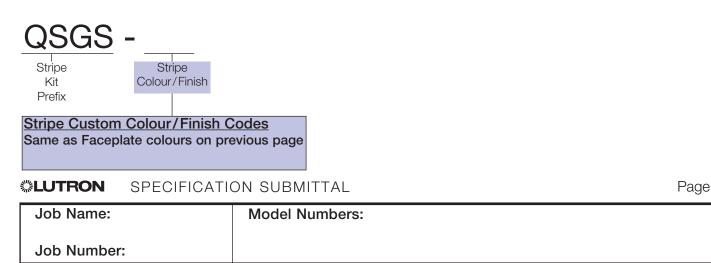
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### GRAFIK Eye QS Wireless for Digital Addressable Loads Custom Options and Model Numbers See previous pages for Standard and Other Custom Model Numbers

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



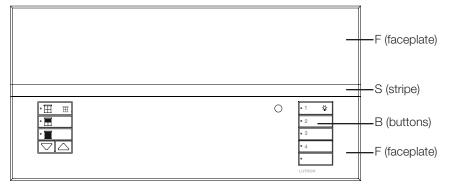
### Custom Stripe Kit



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## GRAFIK Eye QS Wireless for Digital Addressable Loads Standard Colour Combinations

See previous pages for Standard and Custom Model Numbers



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

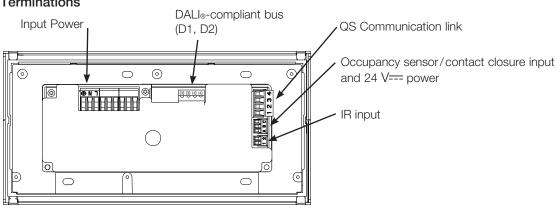
Suffix	Faceplate (F)	Stripe (S)	Button (B)	Suffix	Faceplate (F)	Stripe (S)	Button (B)
Archited	ctural Matte			Satin M	atte		
WH	White	Gray	White	SW	Snow	Gray	Snow
IV	lvory	Beige	lvory	MN	Midnight	Gray	Black
BE	Beige	lvory	Beige	TP	Taupe	Gray	Taupe
GR	Gray	Black	Gray	BI	Biscuit	Eggshell	Biscuit
BR	Brown	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	lvory	lvory
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	lvory	lvory
Anodise	ed			LS	Limestone	Gray	Gray
CLA	Clear	Black	Black				
BLA	Black	Black	Black	For the la	atest color offering	gs please see o	ur website:
BRA	Brass	Black	Black		vw.lutron.com/sat		

#### **LUTRON** SPECIFICATION SUBMITTAL

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#### Overview Terminations



#### Maximum DALI®-compliant

Wire Gauge	Bus Wire Length
4.0 mm <sup>2</sup> (12 AWG)	671 m (2 200 ft)
2.5 mm² (14 AWG)	427 m (1 400 ft)
1.5 mm² (16 AWG)	275 m (900 ft)
1.0 mm <sup>2</sup> (18 AWG)	175 m (570 ft)

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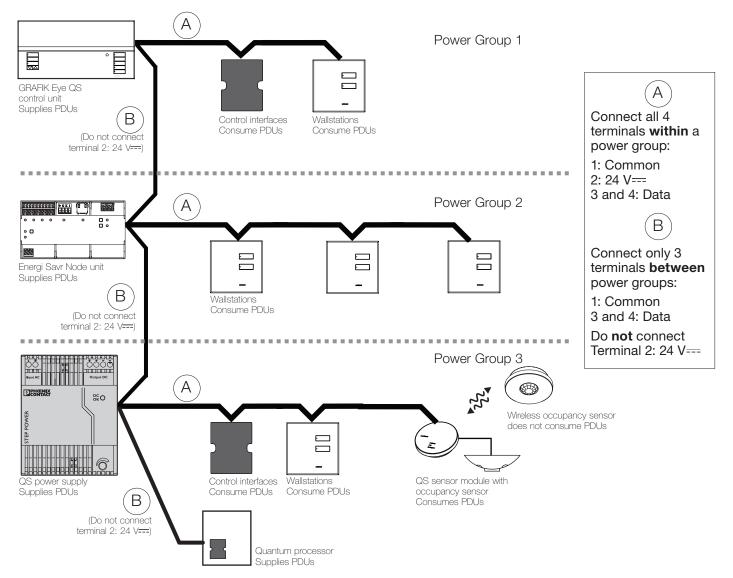
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#### **Power Group Wiring Example**

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.

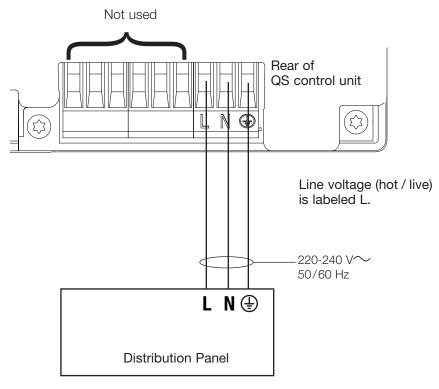
Within power groups on the QS link, connect all 4 terminals (1, 2, 3, and 4), shown by the letter A in the diagram. Between devices on the QS link that supply power, connect only terminals 1, 3, and 4 (NOT terminal 2), shown by the letter B on the diagram. Refer to the specific device documentation for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

Wiring can be T-tapped or daisy-chained.



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Job Name:	Model Numbers:	
Job Number:		

### Line Voltage Wiring



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

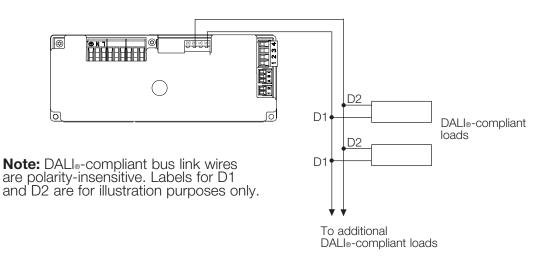
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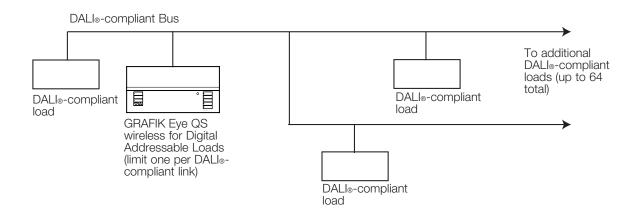
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### DALI<sub>®</sub>-Compliant Bus Wiring

DALI®-Compliant Bus Link Terminal Detail



**DALI-Compliant Bus Wiring Example** 



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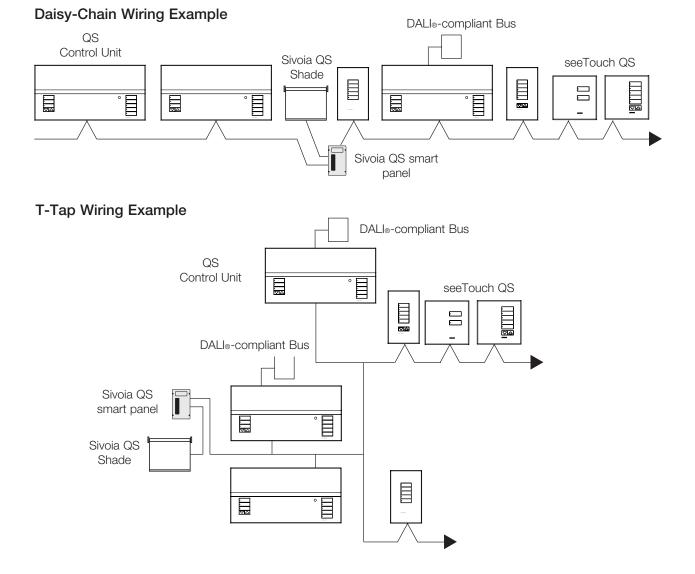
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#### **Preset Dimming Controls**

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

- System communication uses low-voltage wiring.
- 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 1.0 mm<sup>2</sup> (18 AWG) conductors for control power.
  - One twisted, shielded pair of 1.0 mm<sup>2</sup> (18 AWG) for data link.
  - Available from Lutron, P/N GRX-CBL-346S; check compatibility in your area.
- Total length of control link must not exceed 610 m (2 000 ft).

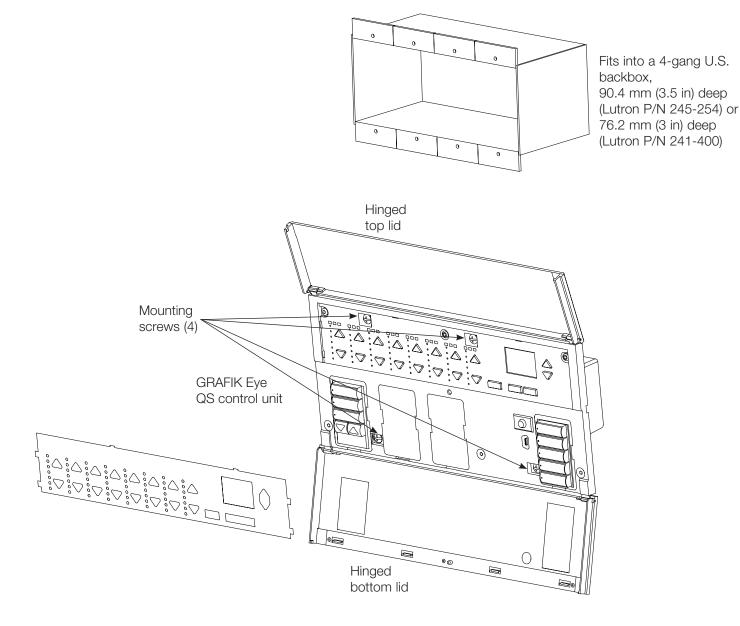


#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

### Mounting

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Job Name:	Model Numbers:
Job Number:	