GRAFIK Eye QS Wireless Control Unit (230 V~ CE)

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

Mechanical Dimensions

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

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

Example of Wired System

Example of GRAFIK Eye-centric Wireless System

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

- Lutron’s proprietary Clear Connect RF technology. Operates in 868 MHz band.
- Pushbutton recall of four preset lighting scenes, plus Off.
- Sixteen (16) total available scenes, plus Off scene.
- Zones can control many light source types directly or through power modules.
- Optional integrated window treatment control buttons, which can also be added to the unit after installation.
- Master override buttons to raise and lower all lights.
- Allows setup of lighting scenes and window treatment presets using buttons on the control unit.
- Built-in infrared (IR) receiver.
- External IR connection.
- Built-in astronomic timeclock.
- Info screen shows zone light level percentage, energy savings, zone labeling, and programming.
- Lockout option prevents accidental changes.
- Occupancy sensor input and 24 V power for one occupancy sensor.
- QS communication link for seamless integration of lights, motorised window treatments, wallstations, and integration interfaces.
- Compatible with all Lutron QS system components.
- Wireless communication for seamless integration with a variety of Lutron wireless products and systems, including Radio PowrSavr occupancy and vacancy sensors, Sivoia QS wireless window treatments, Pico wireless control, and other GRAFIK Eye QS wireless products.
- Backlit buttons with engraving make unit easy to locate and operate.
- Available in a variety of colours and finishes.
Specifications

Input Power
• 230 V~ 50 Hz

Environment
• 0 to 40 °C
• Relative humidity less than 90% non-condensing

Compliance
• CE

Lighting Sources/Load Types
• EcoSystem and Hi-lume 3D ballasts, and Hi-lume LED drivers directly wired to integral EcoSystem digital link
• Zones on Energi Savr Node products wired to the same QS link
  – Zones on Energi Savr Node with Softswitch
  – Zones on Energi Savr Node for 0-10 V
  – Zones on Energi Savr Node with EcoSystem

Please refer to “Remote Zone Mapping” for important information.
• DMX channel(s) through DMX output interface (QSE-CI-DMX). Please refer to “Accessory Controls: DMX Output Interface”

Zones can also control the following lighting sources with a smooth, continuous square law dimming curve or on a full conduction non-dim basis:
• Incandescent
• Halogen
• Magnetic low-voltage transformer
• Lutron Tu-Wire electronic fluorescent dimming ballast
• Neon and cold cathode
• Non-dim (incandescent, magnetic low-voltage, Tu-Wire, or neon/cold cathode)

Please refer to “Capacities” for more information.

Zones can also control the following lighting sources with a smooth, continuous square law dimming curve or on a full conduction non-dim basis through separate Lutron power modules:
• 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
• RF meets IEC 801-2.
• Lightning strike protection meets ANSI/IEEE standard 62.41-1980. Can withstand voltage surges of up to 6 000 V~ and current surges of up to 3 000 A.
• Tested to withstand 16 kV electrostatic discharge without damage or memory loss.
• RTISS Equipped: Compensates in real time for incoming line voltage variations (no visible flicker with +/-2% change in RMS voltage per cycle, and +/-2% Hz change in frequency per second).
• Power failure memory retains programming and light level settings for up to 10 years in the event of a power loss.
• The GRAFIK Eye QS supplies 3 Power Draw Units (PDUs) on the QS link.

For complete information, see app note #405 “Power Draw Units on the QS Link,” (P/N 369405) at 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.

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# LUTRON SPECIFICATION SUBMITTAL

<table>
<thead>
<tr>
<th>Job Name:</th>
<th>Model Numbers:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Specifications

Shade Control
- The GRAFIK Eye QS can include up to 3 shade button columns. Each column has backlit open, preset, close, and raise/lower buttons.
- Each shade button column can be programmed to operate one shade or a group of shades. (Shades may be assigned to more than one shade button column).
- Faceplates are available with 1, 2 and 3 shade button columns.
- Wireless shade limitations:
  - Access to the Sivoia QS Wireless electronic drive unit (EDU) is required to associate shades with the GRAFIK Eye QS and set their raise/lower limits.
  - Wired and wireless shades may not be programmed into the same shade button column; however, both may be used on the same GRAFIK Eye QS control unit.
- Scene commands that affect wireless shades across multiple shade button columns will have a 1-second delay from column to column. This does not occur in RadioRA 2 systems.

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

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

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

System Communications and Capacities
- Low-voltage type IEC PELV wiring connects control units, wallstations, motorised window treatments, and control interfaces.
- A QS system can have up to 100 devices and 100 zones.
- A QS system can have up to 30 wireless devices.

Infrared
- Infrared (IR) receiver allows infrared transmitters to select 8 scenes, raise/lower lighting zones, or raise/lower window treatments.
- Transmitter buttons imitate buttons on faceplate.
- 15 m 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.
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 control unit
  - 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 868 MHz band
- Compatible with other Lutron wireless products/systems, such as:
  - Pico (P/N QSR8P and QSRKP)
  - Radio Powr Savr occupancy/vacancy/daylight sensors (P/N LRF3-)
  - Sivola QS wireless products
  - Other GRAFIK Eye QS wireless units (P/N QSGRK-)

Accessory Controls: Pico Wireless Control (QSR8P models)
- The Pico Wireless Control is battery powered. It can control GRAFIK Eye QS wireless control units within a 10 m range (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.

Accessory Controls: QS Sensor Module (QSM3)
- 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.
  - 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 5-8 and Off
  - Scenes 9-12 and Off
  - Scenes 13-16 and Off
- Sequence scenes 5-16, Enable/Disable Zone Lockout, Enable/Disable Scene Lockout, Enable/Disable Panic Mode, Enable/Disable Timeclock.
- Occupancy Sensors. An individual input counts as 1 occupancy sensor for the GRAFIK Eye QS. Each input can be assigned to either Scene Control or Zone Control (please refer to the Occupancy Sensor(s) section of this guide).
- Zone Toggle. Allows an input to toggle one or more zones between programmable preset level(s) and off.
- Shade Output mode. A Shade Column on the GRAFIK Eye QS can be linked to control outputs 1-3 and/or outputs 4-5 on the QSE-IO.

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

Other Accessory Controls and Devices
• Energi Savr Node (ESN)

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 LRF3)
  – Wired or wireless sensors connected to a 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 LRF3)
  – 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 only affects 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.
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.
  - Emergency: This setting allows the GRAFIK Eye QS to work with a LUT-ELI. When an emergency situation is detected, all lights will go to full on, and no operations will be allowed until the emergency signal is cleared.
  - Afterhours: Allows the CCI to start and end the afterhours mode.
  - Timeclock: Allows the CCI to enable and disable the timeclock.
  - Scene Lockout: Prevents the user from making any changes to the control unit. The current scene will stay on until the CCI enables normal operation.
  - Save Never: Prevents any changes from being saved while the CCI is being used.
  - Disable CCI: The CCI will have no effect on the system and will not appear on the list of available sensors.

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 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.

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.
Specifications

<table>
<thead>
<tr>
<th>Capabilities</th>
<th>Capacity</th>
<th>Zone Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zones</td>
<td>Unit</td>
<td>Zone</td>
</tr>
<tr>
<td>3</td>
<td>1 500</td>
<td>500</td>
</tr>
<tr>
<td>4</td>
<td>2 000</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>2 300</td>
<td>500</td>
</tr>
</tbody>
</table>

Load Type Notes
- For applications with ELV loads or load wattages exceeding the specified capacities, please refer to specifications for Lutron power modules (NGRX-PB-CE; NGRX-ELVI-CE; ELVI-1000-CE).
- Not all loads must be connected; however, connected zones must have a minimum load of 40 W.
- Maximum total lighting load for a magnetic low-voltage zone is 500 VA / 400 W.
- No zone may be loaded with more than 500 W.

System Limits
- The QS wired communication link is limited to 100 devices (wired or wireless) or 100 zones.
GRAFIK Eye QS Wireless

Standard Model Numbers

See following pages for Ordering Custom (Non-Standard) Model Numbers

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

**QSGRK** - **PCE** - **WH**

**Prefix**

**Phase Control Triac-CE**

**Number of Zones**

3 = 3 zones
4 = 4 zones
6 = 6 zones

**Number of Window Treatment Columns**

Omit = none
1 = 1 window treatment column

**Top Door Colour**

Omit = White
T = Translucent

White (standard colour)

Example:

QSGRK-6PCE-1TWH

6-zone standard white unit with 1 window treatment column and translucent top door.

Unit will ship unengraved with engraving certificate that customer can redeem at no charge.

Available Standard Model Numbers

<table>
<thead>
<tr>
<th>3 Zones</th>
<th>4 Zones</th>
<th>6 Zones</th>
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<tbody>
<tr>
<td>QSGRK-3PCE-WH</td>
<td>QSGRK-4PCE-WH</td>
<td>QSGRK-6PCE-WH</td>
</tr>
<tr>
<td>QSGRK-3PCE-TWH</td>
<td>QSGRK-4PCE-TWH</td>
<td>QSGRK-6PCE-TWH</td>
</tr>
<tr>
<td>QSGRK-3PCE-1WH</td>
<td>QSGRK-4PCE-1WH</td>
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<tr>
<td>QSGRK-3PCE-1TWH</td>
<td>QSGRK-4PCE-1TWH</td>
<td>QSGRK-6PCE-1TWH</td>
</tr>
</tbody>
</table>

**Important Note:**

For any non-standard units, you must order **BOTH** a base unit and a Faceplate Kit. Please see the Custom Ordering Information on the following pages.
GRAFIK Eye QS Wireless
Custom (non-standard) Colour Options and Model Numbers
You must order a Base Unit and a Faceplate Kit
See Standard Colour Combinations page for faceplate, stripe, and button colours

Base Unit
QSGRK - PCE
Prefix
Number of Zones
3 = 3 zones
4 = 4 zones
6 = 6 zones
Phase Control Triac-CE

Example:
QSGRK-6PCE
6-zone base unit
and
QSGFP-2WH-G
Ivory faceplate kit with two
window treatment columns and
symbol-based engraving

Standard Engraved Faceplate Kit (WH only)
(includes coordinating stripe and buttons)
QSGFP - WH -
Faceplate Prefix
Number of Shade Columns
Omit = none
1 = 1 column
2 = 2 columns
3 = 3 columns
Top Door Colour
Omit = same as unit
T = Translucent
Keypad Engraving Code

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
**GRAFIK Eye QS Wireless (continued)**

Standard Engraved Faceplate Kit (WH only) (continued)

<table>
<thead>
<tr>
<th>Generic (-G)</th>
<th>Meeting Room (-M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All On</td>
</tr>
<tr>
<td>2</td>
<td>Meeting</td>
</tr>
<tr>
<td>3</td>
<td>A/V</td>
</tr>
<tr>
<td>4</td>
<td>Cleaning</td>
</tr>
<tr>
<td>Off</td>
<td>All Off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shades (-S)</th>
<th>Ballroom (-B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>All On</td>
</tr>
<tr>
<td>Preset 1</td>
<td>Event 1</td>
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<tr>
<td>Preset 2</td>
<td>Event 2</td>
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<tr>
<td>Preset 3</td>
<td>Event 3</td>
</tr>
<tr>
<td>Close</td>
<td>All Off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hotel Room (-H)</th>
<th>Zone Toggle (-Z)</th>
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<tbody>
<tr>
<td>High</td>
<td>Zone 1</td>
</tr>
<tr>
<td>Medium</td>
<td>Zone 2</td>
</tr>
<tr>
<td>Low</td>
<td>Zone 3</td>
</tr>
<tr>
<td>Nightlight</td>
<td>Zone 4</td>
</tr>
<tr>
<td>Off</td>
<td>Zone 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Auditorium /Classroom (-A)</th>
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</thead>
<tbody>
<tr>
<td>All On</td>
</tr>
<tr>
<td>Present</td>
</tr>
<tr>
<td>Lecture</td>
</tr>
<tr>
<td>Exam</td>
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<tr>
<td>All Off</td>
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</table>

<table>
<thead>
<tr>
<th>Lobby/Retail (-L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All On</td>
</tr>
<tr>
<td>Morning</td>
</tr>
<tr>
<td>Afternoon</td>
</tr>
<tr>
<td>Evening</td>
</tr>
<tr>
<td>All Off</td>
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</table>

<table>
<thead>
<tr>
<th>Restaurant (-R)</th>
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</thead>
<tbody>
<tr>
<td>All On</td>
</tr>
<tr>
<td>Breakfast</td>
</tr>
<tr>
<td>Lunch</td>
</tr>
<tr>
<td>Dinner</td>
</tr>
<tr>
<td>All Off</td>
</tr>
</tbody>
</table>

* 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.
GRAFIK Eye QS Wireless (continued)

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

QSGFP -

<table>
<thead>
<tr>
<th>Faceplate Prefix</th>
<th>Number of Window Treatment Columns</th>
<th>Top Door Colour</th>
<th>Colour/Finish</th>
<th>Keypad Engraving Code</th>
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<tbody>
<tr>
<td>Omit = none</td>
<td>1 = 1 column</td>
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<td></td>
<td>2 = 2 columns</td>
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</tr>
<tr>
<td></td>
<td>3 = 3 columns</td>
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<td></td>
</tr>
</tbody>
</table>

Faceplate Custom Colour/Finish Codes

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

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

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

Architectural Metal Finishes

Anodised Aluminum Finishes
Clear CLA
Black BLA
Brass BRA

Keypad Engraving Codes
Omit = Unengraved
Ships with engraving certificate that customer can redeem at no charge
SGN = Symbol-based Engraving

NST = Non-Standard Text Engraving
Please visit the GRAFIK Eye QS website at www.lutron.com/grafikeyqs for custom engraving forms. Submit completed form with order, and unit will ship engraved as specified by customer.
GRAFIK Eye QS Wireless
Custom Options and Model Numbers
See previous pages for Standard and Other Custom Model Numbers
See Standard Colour Combinations page for faceplate, stripe, and button colours

Custom Button Kit

**QSGB - 5B - WH**

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

**Button Kit Custom Colour/Finish Codes**

<table>
<thead>
<tr>
<th>Architectural Matte Finishes</th>
<th>Satin Colour Matte Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>White WH</td>
<td>Snow SW</td>
</tr>
<tr>
<td>Ivory IV</td>
<td>Biscuit BI</td>
</tr>
<tr>
<td>Beige BE</td>
<td>Eggshell ES</td>
</tr>
<tr>
<td>Gray GR</td>
<td>Taupe TP</td>
</tr>
<tr>
<td>Brown BR</td>
<td></td>
</tr>
<tr>
<td>Black BL</td>
<td></td>
</tr>
<tr>
<td>Almond AL</td>
<td></td>
</tr>
<tr>
<td>Light Almond LA</td>
<td></td>
</tr>
</tbody>
</table>

**Keypad Engraving Codes**

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- **NST** = Non-Standard Text Engraving

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Custom Stripe Kit

**QSGS - WH**

- **QSGS** = QSGS - WH

**Stripe Custom Colour/Finish Codes**

Same as Faceplate colours on previous page
### GRAFIK Eye QS Wireless Standard Colour Combinations

See previous pages for Standard and Custom Model Numbers

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Faceplate (F)</th>
<th>Stripe (S)</th>
<th>Button (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WH</td>
<td>White</td>
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<td>White</td>
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<tr>
<td>IV</td>
<td>Ivory</td>
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<td>Ivory</td>
</tr>
<tr>
<td>BE</td>
<td>Beige</td>
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<td>Beige</td>
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<td>Gray</td>
<td>Black</td>
<td>Gray</td>
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<tr>
<td>BR</td>
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<td>Black</td>
<td>Gray</td>
<td>Black</td>
</tr>
<tr>
<td>AL</td>
<td>Almond</td>
<td>Light Almond</td>
<td>Almond</td>
</tr>
<tr>
<td>LA</td>
<td>Light Almond</td>
<td>Almond</td>
<td>Light Almond</td>
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</table>

#### Architectural Matte

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Faceplate (F)</th>
<th>Stripe (S)</th>
<th>Button (B)</th>
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</thead>
<tbody>
<tr>
<td>MN</td>
<td>Midnight</td>
<td>Gray</td>
<td>Black</td>
</tr>
<tr>
<td>TP</td>
<td>Taupe</td>
<td>Gray</td>
<td>Taupe</td>
</tr>
<tr>
<td>SW</td>
<td>Snow</td>
<td>Gray</td>
<td>Snow</td>
</tr>
<tr>
<td>ES</td>
<td>Eggshell</td>
<td>Beige</td>
<td>Eggshell</td>
</tr>
<tr>
<td>BI</td>
<td>Biscuit</td>
<td>Eggshell</td>
<td>Biscuit</td>
</tr>
<tr>
<td>LS</td>
<td>Limestone</td>
<td>Gray</td>
<td>Gray</td>
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<tr>
<td>DS</td>
<td>Desert Stone</td>
<td>Taupe</td>
<td>Taupe</td>
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<tr>
<td>TC</td>
<td>Terracotta</td>
<td>Taupe</td>
<td>Taupe</td>
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<tr>
<td>BG</td>
<td>Bluestone</td>
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<td>Gray</td>
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<tr>
<td>HT</td>
<td>Hot</td>
<td>Taupe</td>
<td>Taupe</td>
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<tr>
<td>MR</td>
<td>Merlot</td>
<td>Taupe</td>
<td>Taupe</td>
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<tr>
<td>SI</td>
<td>Sienna</td>
<td>Brown</td>
<td>Brown</td>
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<td>GB</td>
<td>Greenbrier</td>
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<tr>
<td>SG</td>
<td>Sea Glass</td>
<td>Gray</td>
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<tr>
<td>MS</td>
<td>Mocha Stone</td>
<td>Taupe</td>
<td>Taupe</td>
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<tr>
<td>GS</td>
<td>Goldstone</td>
<td>Ivory</td>
<td>Ivory</td>
</tr>
<tr>
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<td>Palladium</td>
<td>Gray</td>
<td>Gray</td>
</tr>
<tr>
<td>PL</td>
<td>Plum</td>
<td>Taupe</td>
<td>Taupe</td>
</tr>
<tr>
<td>TQ</td>
<td>Turquoise</td>
<td>Gray</td>
<td>Gray</td>
</tr>
</tbody>
</table>

#### Anodised

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Faceplate (F)</th>
<th>Stripe (S)</th>
<th>Button (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA</td>
<td>Clear</td>
<td>Black</td>
<td>Black</td>
</tr>
<tr>
<td>BLA</td>
<td>Black</td>
<td>Black</td>
<td>Black</td>
</tr>
<tr>
<td>BRA</td>
<td>Brass</td>
<td>Black</td>
<td>Black</td>
</tr>
</tbody>
</table>

#### International Wallbox

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Faceplate (F)</th>
<th>Stripe (S)</th>
<th>Button (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>Argentum</td>
<td>Black</td>
<td>Black</td>
</tr>
<tr>
<td>MC</td>
<td>Mica</td>
<td>Gray</td>
<td>Black</td>
</tr>
<tr>
<td>AW</td>
<td>Arctic White</td>
<td>Gray</td>
<td>White</td>
</tr>
</tbody>
</table>

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.

**Example:**
If you order QSGRK-4PCE-1WH, your GRAFIK Eye QS with 4 lighting zones and one window treatment column will come with a white faceplate (both top and bottom), gray stripe, and white buttons.
Wiring Diagrams

Terminations

- Communication link
- Occupancy sensor/contact closure input and 24 V power
- IR input
- Load wiring
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.

---

**Power Group 1**

- GRAFIK Eye QS control unit
  - Supplies PDUs
  - (Do not connect terminal 2: 24 V~)

**Power Group 2**

- Energi Savr Node unit
  - Supplies PDUs
  - (Do not connect terminal 2: 24 V~)

**Power Group 3**

- QS Power Supply
  - Supplies PDUs
  - (Do not connect terminal 2: 24 V~)

- QS Sensor Module with Occupancy Sensor
  - Consumes PDUs

---

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

**Connect only 3 terminals between power groups:**
1: Common
3 and 4: Data

**Do not connect Terminal 2: 24 V~**

---

**Control Interfaces**
- Consume PDUs

**Wallstations**
- Consume PDUs

**Wireless Occupancy Sensor**
- Does not consume PDUs
Mounting

Mounting screws (4)

Fits into a 4-gang U.S. backbox, 90.4 mm deep (Lutron P/N 245-254) or 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 4.0 mm² wire.
- Consult Lutron for non-dim relay wiring and/or load side emergency transfer wiring.
IEC PELV 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 610 m.

Wire Sizes (check compatibility in your area)

<table>
<thead>
<tr>
<th>QS Link Wiring Length</th>
<th>Wire Gauge</th>
<th>Lutron Cable Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 153 m</td>
<td>Power (terminals 1 and 2)</td>
<td>GRX-CBL-346S, GRX-PCBL-346S</td>
</tr>
<tr>
<td></td>
<td>1 pair 1.0 mm²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data (terminals 3 and 4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 twisted, shielded pair 0.5 mm²</td>
<td></td>
</tr>
<tr>
<td>153 to 610 m</td>
<td>Power (terminals 1 and 2)</td>
<td>GRX-CBL-46L, GRX-PCBL-46L</td>
</tr>
<tr>
<td></td>
<td>1 pair 4.0 mm²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data (terminals 3 and 4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 twisted, shielded pair 0.5 mm²</td>
<td></td>
</tr>
</tbody>
</table>

Daisy-Chain Wiring Example

T-Tap Wiring Example

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