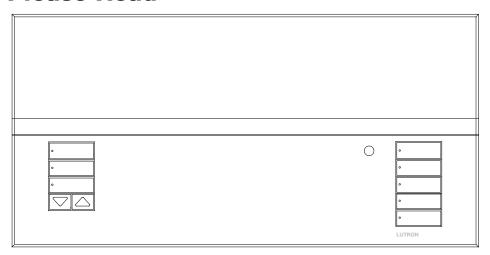


## GRAFIK Eye, QS

## Please Read



# Installation and Operation Guide

The GRAFIK Eye QS control unit allows for control of both lights and shades, without interfaces, using a single control unit. Features include pushbutton scene recall, info screen that displays energy savings and status, IR receiver, astronomic timeclock, occupancy sensor connection, and backlit buttons that are easy to find and operate.

Model Numbers: QSGRJ-3P, QSGRJ-4P, QSGRJ-6P QSGR-3P, QSGR-4P, QSGR-6P

	120 V∼ 50/60 Hz	220 - 240 V∼ 50/60 Hz
Unit Capacity (watts)	2 000	3 000
MLV	2 000 VA / 1 600 W	3 000 VA / 2 400 W
Zone Capacity (watts)	25 – 800	40 – 1 200
MLV	25 – 800 VA / 25 – 600 W	40 – 1 200 VA / 40 – 960 W

See page 8 for PELV (Class 2: USA) ratings.

## **Contents**

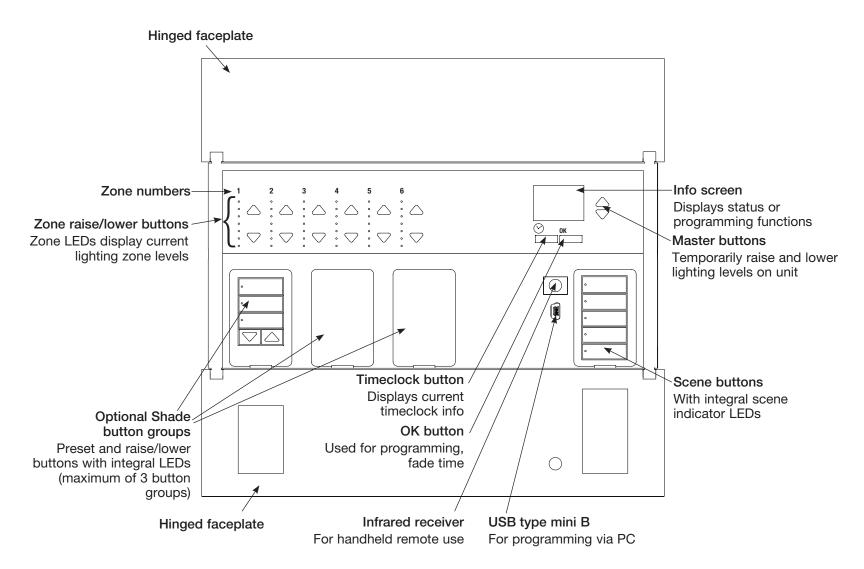
Features and Functions of the GRAFIK Eye® QS
Wiring the GRAFIK Eye® QS  Overview of Line Voltage/Mains Wiring
Completing Installation of the GRAFIK Eye® QS11
General Functionality12
Pre-Programmed Button Functionality 13
Zone Button Operation Zone LED Displays for % of Lighting Levels14
Programming Mode Entering and Exiting Programming Mode 15 Navigating Menus in Programming Mode 15
Wireless Mode
Zone Setup       17         Assign Load Types       17         Setting Load Types       18         Set High End or Low End Trim       19         Set Minimum Level (optional)       19         Label a Zone (optional)       20

Contact Closure Input (CCI) Mode Setup	21
Associating Wireless Occupancy Sensors and GRAFIK Eye® QS Wireless Control Units	22
Occupancy Sensor Setup  Mode Assignment	23
Scene Mode	25 26
Scene Setup Set Zone Levels, Fade Rates, and Shade Group Actions	28
Label a Scene (optional)	
Quick Scene Programming Save by OK Mode	31
Fimeclock Operation Set Time and Date Set Location Set Daylight Saving Time Add an Event Delete an Event View an Event Set a Holiday View a Holiday Delete a Holiday Delete a Schedule Delete a Schedule Afterhours Mode Set Up Afterhours Mode End Afterhours Mode	33 34 35 35 36 36 37 37 37 38 39
Associating PICO™ Wireless Controls and GRAFIK Eye® QS Wireless Control Units To use the <i>PICO</i> Wireless Control as a Scene Controller	40
To use the PICO Wireless Control as a	

Associating Sivoia® QS Shades/Drapes and GRAFIK Eye® QS Control Units 42
Adjusting Shade Settings Setting Limits
Preset Adjustment: Simple Method
Associating Multiple GRAFIK Eye® QS Control Units
Diagnostics and Special Settings Enable/Disable Timeclock
Enable/Disable IR Receiver
Activate System Accessories 48
Faceplate Removal
anguage Selection48
Froubleshooting49
Froubleshooting: Wireless Functions50
Froubleshooting: Shade Functions 5
Warranty52
Contact Information52

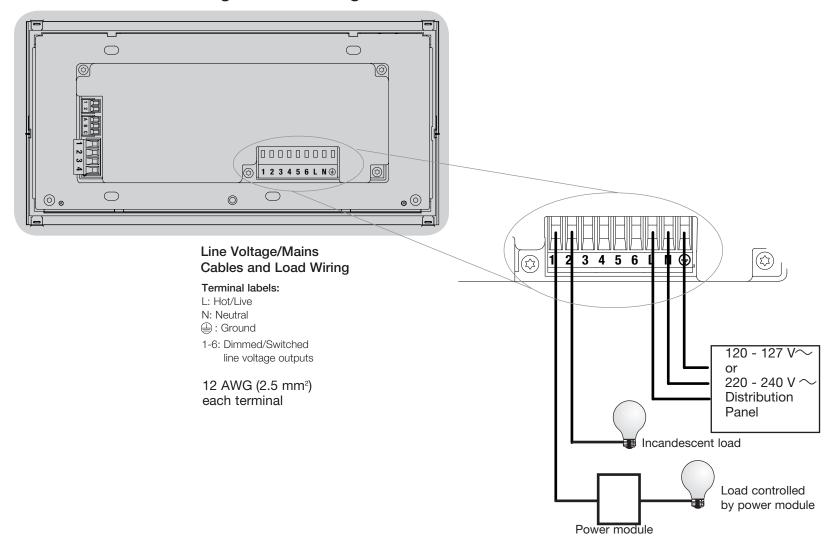


## Features and Functions of the GRAFIK Eye® QS





## Wiring the GRAFIK Eye® QS: Overview of Line Voltage/Mains Wiring



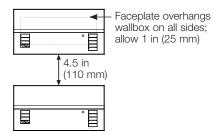


## Wiring the GRAFIK Eye® QS: Line Voltage Wiring Details

- Use properly certified cable for all line voltage/mains cables.
- Proper short-circuit and overload protection must be provided at the distribution panel. You can use up to a 20 A circuit breaker for your installation.
- Install in accordance with all local and national electrical codes.
- PELV (Class 2: USA) terminals may be temporarily unplugged for ease of IR, occupancy sensor, and control wiring.
- Notice: Risk of damage to unit. Do not connect line voltage/mains cable to PELV (Class 2: USA) terminals.

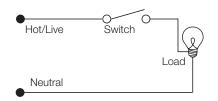
Step 1: Install wallbox. Mount a 31/2-in (89 mm) deep 4-gang U.S. wallbox on a dry, flat indoor surface that is accessible and allows for system programming and operation. Allow at least 41/2 in (110 mm) clearance above and below the faceplate to ensure proper heat dissipation. Allow 1 in (25 mm) for faceplate overhang on all sides.

Note: 4-gang wallbox available from Lutron; P/N 241400.



#### Step 2: Test load wiring.

- Turn power OFF at the circuit breaker or fuse box.
- Connect a standard light switch between the live lead and load wire to test the circuit.
- Turn power ON and check for short or open circuits. If load does not operate, the circuit is open. If the circuit breaker trips (fuse blows or opens), a load short may exist. Correct short or open circuits and test again.



#### Step 3: Check control unit wiring.

- Earth/ground terminal connection must be made as shown in wiring diagrams (see page 4).
- Do not mix different load types on the same zone.
- Follow all local and national electrical codes when installing PELV (Class 2: USA) wiring with line voltage/mains wiring.



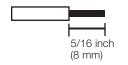
WARNING! Shock hazard. May result in serious injury or death. Always turn off circuit breaker or remove main fuse from power line before doing any work. Before connecting the loads to the GRAFIK Eve QS control unit, test the loads for short-circuits.



## Wiring the GRAFIK Eye QS: Line Voltage Wiring Details (continued)

#### Step 4: Connect line voltage and loads to control unit.

• Strip 5/16 inch (8 mm) of insulation off the line voltage/mains cables in the wallbox.



 Connect the line voltage/mains, ground, and load wires to the appropriate terminals on the back of the control unit.

L: Hot/Live N: Neutral : Ground

Terminals 1-6: Dimmed/Switched line voltage outputs The recommended installation torque is 5.0 in·lbs (0.6 N·m) for line voltage/mains connections and 5.0 in·lbs (0.6 N·m) for the earth/ground connection.

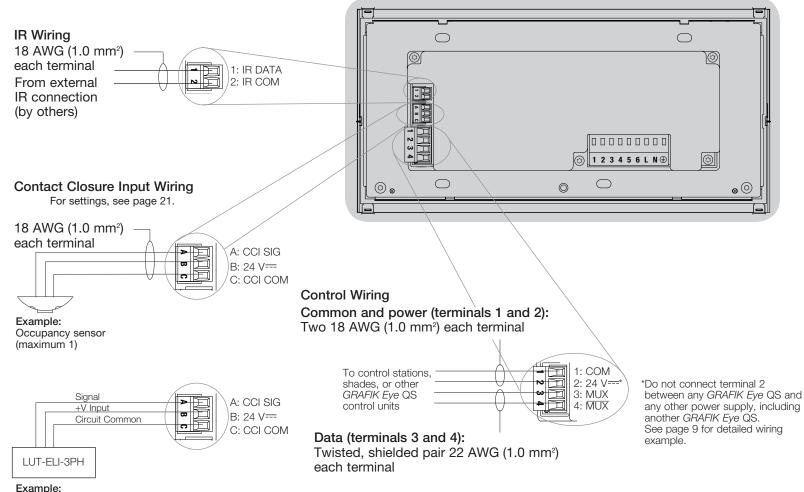
Note: See page 18 for a list of compatible load types and instructions for programming the GRAFIK Eye QS to properly recognize them.

Notice: Risk of damage to unit. GRAFIK Eye QS control units must be installed by a qualified electrician in accordance with all applicable regulations and building codes. Improper wiring can result in damage to control units or other equipment.

Note: To avoid overheating and possible damage to equipment, do not install control units to dim receptacles, motor-operated appliances, or fluorescent lighting not equipped with Lutron Hi-lume®, Eco-10®, or Tu-Wire® electronic dimming ballasts, or other devices approved for your location. In dimmed magnetic low-voltage circuits, you can prevent transformer overheating and failure by avoiding excessively high current flow. Do not operate control units with any lamps removed or burned out; replace any burned out lamps immediately; use only transformers that incorporate thermal protection or fused primary windings. Control units are designed for residential and commercial use, for indoor use only.



## Wiring the GRAFIK Eye® QS: Overview of PELV (Class 2: USA) Wiring



Note: Use appropriate wire connecting devices Emergency lighting interface (maximum 1) as specified by local codes.

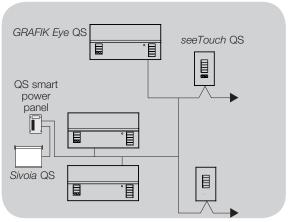
Note: The GRAFIK Eye QS control unit must be powered by a Normal/Emergency distribution panel for proper ELI operation. Refer to the LUT-ELI-3PH Installation Guide for the complete wiring diagram.



## Wiring the GRAFIK Eye<sub>®</sub> QS: **QS Link Control Wiring Details**

- System communication uses PELV (Class 2: USA) wiring.
- Follow all local and national electrical codes when installing PELV (Class 2: USA) wiring with line voltage/mains wiring.
- Each terminal accepts up to two 18 AWG (1.0 mm<sup>2</sup>) wires.
- Total length of control link must not exceed 2 000 feet (610 m).
- Make all connections in the control unit's wallbox.
- Wiring can be T-tapped or daisy-chained.
- Wire sizes:
  - Two 18 AWG (1.0 mm<sup>2</sup>) conductors for control power.
  - One twisted, shielded pair of 22 AWG (1.0 mm<sup>2</sup>) for data link.
  - Cable is available from Lutron: GRX-CBL-346S-500 (non-plenum) and GRX-PCBL-346S-500 (plenum). Check compatibility in your area.
- PELV (Class 2: USA) 24 V== 150 mA.

#### T-Tap Wiring Example

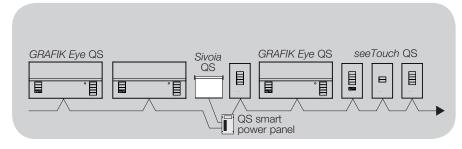


#### **System Limits**

The QS wired communication link is limited to 100 devices or 100 zones. Please note the zone count and power draw unit information in the following table.

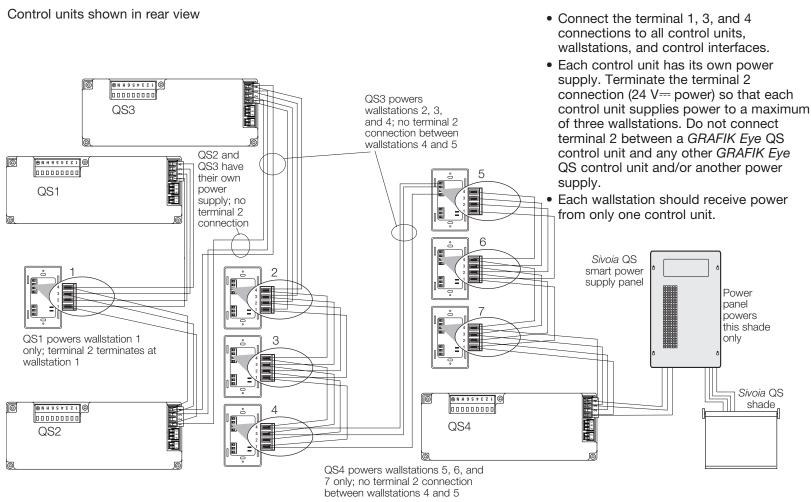
	QS Device	Zone Count	Power Draw Units (supplied)	Power Draw Units (consumed)
<b>B</b> . <b>B</b>	3-zone GRAFIK Eye QS	3	3	0
<b>B</b> . <b>B</b>	4-zone GRAFIK Eye QS	4	3	0
<b>1</b>	6-zone GRAFIK Eye QS	6	3	0
<b>a</b> . <b>a</b>	8-zone GRAFIK Eye QS	8	3	0
	16-zone GRAFIK Eye QS	16	3	0
	seeTouch® QS	0	0	1
	International seeTouch® QS	0	0	1
	Sivoia® QS	1	0	(Refer to Spec. Submittal)
	Contact closure interface	5	0	3
	Network interface	0	0	2
•	DMX interface	0	0	2
	QS smart power panel	0	(Refer to Spec. Submittal)	0
	QS link power supply	0	8	0

### Daisy-Chain Wiring Example





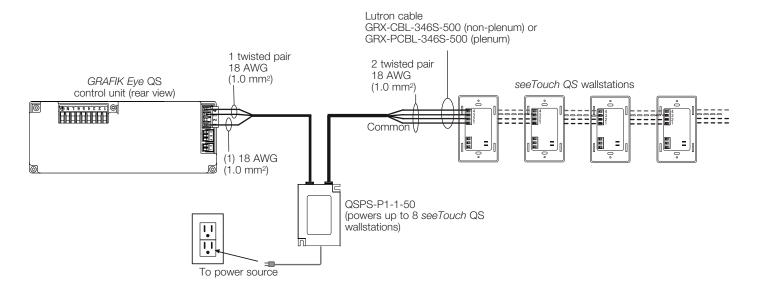
## Wiring the GRAFIK Eye® QS: **QS Link Control Wiring and Terminal Connection Example**





## Wiring the GRAFIK Eye® QS: Powering More Than 3 Wallstations

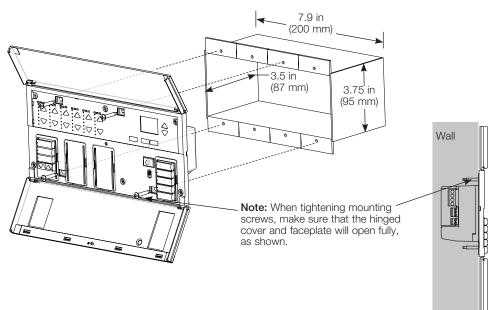
- The GRAFIK Eye QS can power up to 3 seeTouch® wallstations. An external 24 V power supply is required to power more than three wallstations.
- The +24 VDC wire from the power supply connects to QS link terminal 2 on all of the wallstations it is powering. This wire does not connect to terminal 2 on the GRAFIK Eye QS.
- The Common wire from the power supply connects to QS link terminal 1 on all of the wallstations it is powering and terminal 1 on the GRAFIK Eye QS.
- The communication signals on the QS link (terminals 3 and 4) connect from the wallstations to the GRAFIK Eye QS on twisted, shielded cable just as when an additional power supply is not being used. Control unit shown in rear view.

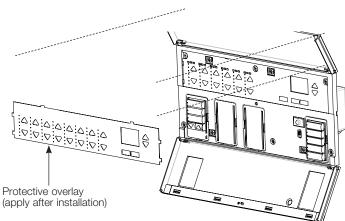




## Completing Installation of the GRAFIK Eye® QS

- 1. Mount the control unit in the wallbox as shown using the four screws provided. Note: Follow all local and national electrical codes when installing PELV (Class 2: USA) wiring with line voltage/ mains wiring.
- 2. Verify installation:
- Restore power.
- Press the top scene button. The LED will light.
- Press the zone raise or lower button. Make sure the control unit is dimming all connected loads.
- 3. Apply the protective overlay to the control unit. See page 20 for instructions for naming zones.







## **General Functionality**

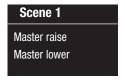
The info screen turns off 30 seconds after the last button press or completion of the last scene change. See example screens below.

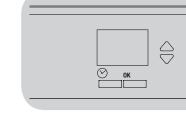


OK

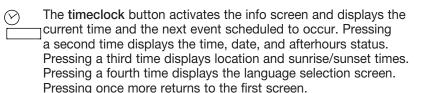
The Master buttons activate the info screen. These buttons temporarily raise or lower all dimmable lights (except those programmed as unaffected in the current scene). Adjustments are temporary and do not affect scene programming.

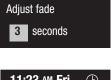
Note: Master buttons affect all zones.





The **OK** button activates the info screen (when off), which then shows the current scene and its fade time. In Save Always mode, it allows fade time adjustment. In Save by OK mode, pressing a second time allows zone adjustment; pressing a third time allows fade adjustment.





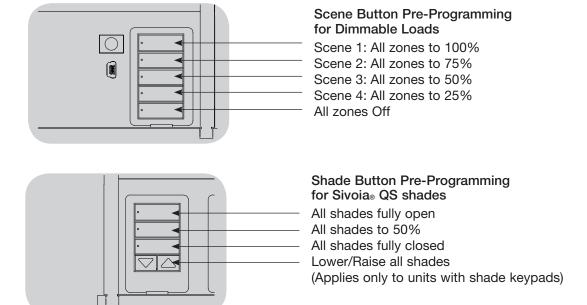
Scene 1





## Pre-Programmed Button Functionality

The GRAFIK Eye® QS controls most lighting loads without special programming. Each unit ships with pre-programmed default settings for the scene and shade buttons. For load types other than those shown below (dimmable or non-dim), set the load type before proceeding. See pages 17-18 for instructions on setting load type. See page 28 for instructions on changing scene settings.





## **Zone Button Operation**

Each zone column (LEDs and buttons) represents one zone of lights. Pressing any button on a column turns on the info screen and displays the zone's current light level and current energy savings.

Pressing the raise and lower buttons on a zone causes different actions depending on zone type (see below).

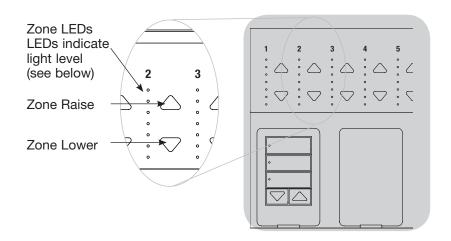
#### Dimmable zones:

- Press and hold to raise/lower all lights in a zone; release to stop
- Press raise or lower to stop a zone that is fading
- Raising lights from off to full on or lowering from full on to off takes 5 seconds
- Press raise and lower simultaneously to toggle between full on and off
- Press and hold lower for 6 seconds after the zone has gone to 0% light level to set the zone as unaffected in the current scene (the zone will not change when this scene is initiated)

#### Non-dim zones:

- Press raise to turn zone on
- · Press lower to turn zone off

Note: To set zone types, see pages 17-18.



#### Zone LED Displays for % of Lighting Levels

Light Level (%)	Off	1–17	18-33	34-49	50-66	67-82	83-99	On/ 100	UA
Dimmable Load Types	•			•	•	•••••	•••••	••••	•••••
Non-Dim Load Types									•

#### Legend:

UA = Unaffected (lights are not affected by scene button or Master buttons)

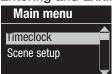
I FD lit





## **Programming Mode**

#### **Entering and Exiting Programming Mode**



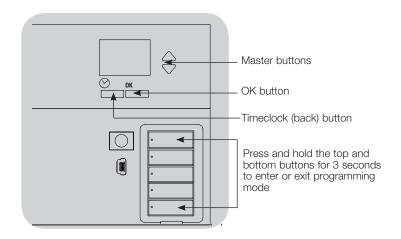
To enter programming mode:

Press and hold the top and bottom scene buttons simultaneously for 3 seconds. The LEDs in the scene buttons will scroll from top to bottom, confirming that you are in programming mode, and the info screen will display the main menu.



#### To exit programming mode:

Press and hold the top and bottom scene buttons simultaneously for 3 seconds. The info screen will go to Scene 1.



#### Navigating Menus in Programming Mode

#### Master Buttons

The Master buttons allow you to move through the menu choices. The current choice is highlighted on the info screen.

#### **OK Button**

The OK button chooses the current highlighted menu choice. This will either take you to the next menu or accept a setting you have selected. When the screen displays a Yes/No question, the OK button is "Yes".

#### Timeclock Button

The timeclock button functions as a "back" button during programming mode. Pressing the timeclock button takes you back one step in the current menu. Pressing it repeatedly will eventually return you to the main menu, but will not exit programming mode. When the screen displays a Yes/No guestion, the Timeclock button is "No".



#### Wireless Mode

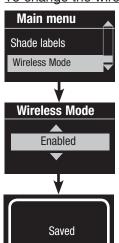
Many models of the GRAFIK Eye® QS support wireless communication with other Lutron products. This feature allows for easy integration of wireless sensors, keypads, remotes, and shades for single-room wireless applications, as well as compatibility with other Lutron wireless systems such as RadioRA® 2. (See the RadioRA® 2 Installation Guide for RadioRA® 2 setup.)

Units supporting wireless communication have model numbers beginning with QSGRJ or QSGRK.

The wireless feature of the GRAFIK Eye QS Wireless control unit has three (3) modes of operation.

- Disabled: Use for wired-only systems.
- Enabled: The GRAFIK Eye QS Wireless control unit will respond to any programming commands from nearby Lutron QS wireless (and compatible) products.
- Ignore Programming (default): The GRAFIK Eye QS Wireless control unit will only respond to normal operation commands from wireless devices programmed while in Enabled mode.

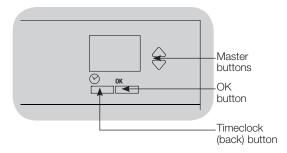
To change the wireless mode of the GRAFIK Eye QS wireless control unit:



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Wireless Mode" and press the OK button to accept.
- 3. Use the Master buttons to highlight the desired wireless mode, and press the OK button to accept.
- 4. The info screen will display a confirming "Saved" message.
- 5. Exit programming mode (see page 15).

#### Notes

- The wireless signal has a range of 30 feet (10 m) through standard construction.
- When used within a RadioRA® 2 system, the wired QS link on the GRAFIK Eye QS is disabled, and certain features that do not pertain to RadioRA® 2 are not accessible.



#### **FCC Information**

Changes or modifications not expressly approved by Lutron Electronics Co. could void the user's authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

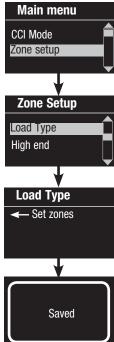
These limits are designed to provide reasonable protection against harmful interference in a residential and commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

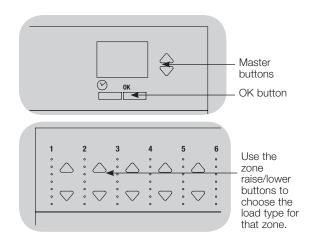


## **Zone Setup**

#### **Assign Load Types**



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Zone setup" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Load type". Press the OK button to accept. See "Setting Load Types" table on the next page.
- 4. Use the zone raise/lower buttons to choose the load type for that zone. See the list on the next page for supported load types. Press the OK button to accept.
- 5. The info screen will confirm that your load type has been
- 6. Exit programming mode (see page 15).





## Zone Setup (continued)

Setting Load Types				
		Direct control via GRAFIK Eye⊚ QS	Control via power module	
			Power module	
	Fixture load type	Choose this load type from the menu on the GRAFIK Eye⊚ QS:		
	Incandescent	Incandescent	Power module	
	MLV (magnetic low-voltage)	MLV	Power module	
	ELV (electronic low-voltage)	_	Power module	
υ	Hi-Lume®/Eco-10®	_	Fluorescent module	
Zones 1 - 6	Non-dim	Non-dim LOFO or Non-dim FOFO	Non-dim LOFO or Non-dim FOFO	
	Neon/Cold cathode	Neon, CC	Neon, CC	
	Tu-Wire®	Tu-Wire®	Tu-Wire®	
	DMX	DMX		
	RGB/CMYK DMX	RGB/CMYK DMX	_	

#### Zone ratings:

- Not all zones must be connected; however, connected zones must have a minimum load: 120 - 127 V~: 25 W; 220 - 240 V~: 40 W
- Maximum zone loads:

120 - 127 V∼: 800 W; 220 - 240 V∼: 1200 W

 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

#### **Load Type Notes**

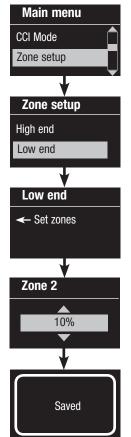
- All electronic low-voltage (ELV) lighting used with an interface must be rated for reverse phase control dimming. Before installing an ELV light source, verify with the manufacturer that their transformer can be dimmed. When dimming, an ELV interface (such as the PHPM-PA-DV-WH) must be used with the control unit.
- "LOFO" and "FOFO" refer to how non-dim loads will operate in conjunction with dimmable loads receiving the same command.
  - In LOFO (last on, first off), nondim loads will turn on once all other loads reach their assigned dim level.
  - In FOFO (first on, first off), nondim loads will turn on as soon as they receive the command, regardless of the dim level of other connected loads.
  - Both configurations have nondim loads turn off as soon as the Off command is received. regardless of the dim level of other connected loads.
- For all DMX or RGB/CMY DMX lighting, an external DMX interface (such as the QSE-CI-DMX) must be used with the control unit.



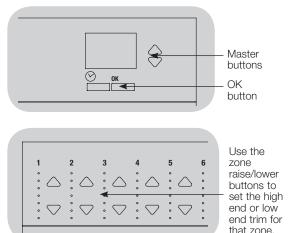
## **Zone Setup**

#### Set High End or Low End Trim

- If you are unsure about appropriate high and low end settings, please contact Lutron Technical Support for assistance.
- High and low end trim settings limit the maximum and minimum output of a dimming zone. Trim levels are set automatically when the load type is programmed.



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Zone setup" and press the OK button to accept.
- 3. Use the Master buttons to highlight "High end" or "Low end" (this example shows low end). Press the OK button to accept.
- 4. Use the zone raise/lower buttons to set the high end or low end trim for that zone. The info screen will display each zone number and percentage as you adjust it. Press the OK button to accept.
- 5. The info screen will confirm that your setting has been saved.
- 6. Exit programming mode (see page 15).



#### Set Minimum Level (optional)

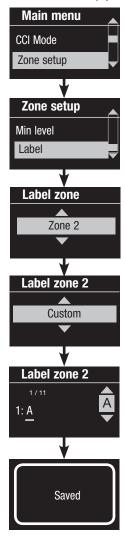
Some local regulations specify a minimum lighting level for dimming zones in occupied buildings. If this pertains to you, follow these steps to set up your minimum lighting level.

- Zone setup Low end Min level Min level Off Saved
- 1. Enter programming mode (see page 15) and select "Zone setup," then "Min level". Press the OK button to accept.
  - 2. Use the Master buttons to highlight "OFF" if you want your lights to go all the way off at their minimum light level, or "10%" if you want that to be the minimum light level. Press the OK button to accept.
    - Note: Non-dim loads will turn off regardless of the minimum level setting.
  - 3. The info screen will confirm that your minimum level has been saved.
  - 4. Exit programming mode (see page 15).



## **Zone Setup**

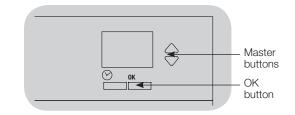
#### Label a Zone (optional)



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Zone setup" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Label" and press the OK button to accept.
- 4. Use the Master buttons to change the zone number to your desired zone. Custom zone labels will appear if previously set. Press the OK button to accept.
- 5. Use the Master buttons to highlight "Custom" and press the OK button to accept. Or, highlight "Default" to return the zone label to the default (e.g., Zone 1).
- 6. Use the Master buttons to scroll through the characters (lowercase and uppercase letters, plus numbers 0 through 9). The character you are currently changing will be underlined on the screen. Press OK to select the character you want, then repeat for all available characters. Choose a space (no character) and press OK repeatedly for any remaining characters. Press the OK button to accept.

Note: Custom zone labels will always begin with the zone number and a colon (e.g., 1: Uplights).

- 7. The info screen will confirm that your name has been saved.
- 8. Exit programming mode (see page 15).



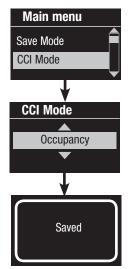


## Contact Closure Input (CCI) Mode Setup

#### (wired directly to the GRAFIK Eye® QS)

The integral contact closure input (CCI) on the back of the GRAFIK Eye® QS can be configured to match the installation requirements. The choices are listed and explained below. (See page 7 for wiring details.)

To change the operation of the contact closure input:



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "CCI Mode" and press the OK button to accept.
- 3. Use the Master buttons to highlight the mode you wish the CCI to control. Press the OK button to accept.
- 4. The info screen will confirm that your setting has been saved.
- 5. Exit programming mode (see page 15).

#### CCI Mode Settings

Occupancy: Allows a wired occupancy sensor to be included in the list of available sensors when setting up occupancy actions.

Emergency: This setting allows the GRAFIK Eye QS to work with a LUT-ELI-3PH emergency lighting interface. 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.

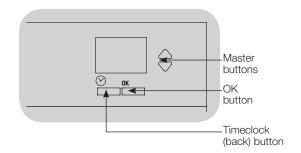
Afterhours: Allows the CCI to start and end the afterhours mode.

Timeclock: Allows the CCI to enable and disable the timeclock.

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 occupancy sensors within the sensor setup menu.





## Associating Wireless Occupancy Sensors and GRAFIK Eye. QS Wireless Control Units (for wireless enabled units only)

Lutron's wireless Radio Powr Savrm occupancy and vacancy sensors can be associated with the GRAFIK Eye QS Wireless to activate scenes when occupancy or vacancy is detected.

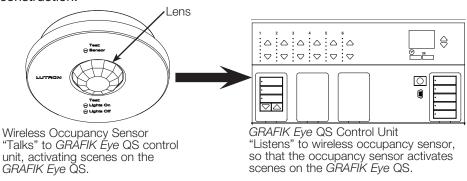
This section applies to installations where the GRAFIK Eye QS Wireless is being used in a single-room wireless installation. Refer to the RadioRA® 2 installation guide for setting up occupancy and vacancy sensors in a RadioRA® 2 system.

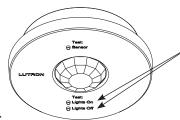
To associate wireless occupancy sensors and GRAFIK Eye QS control units:

- 1. Make sure the wireless mode of the GRAFIK Eve QS control unit is "Enabled" (see page 16).
- 2. Press and hold the "Lights On" and "Lights Off" buttons on the front of the occupancy/vacancy sensor simultaneously until the lens starts flashing (about 3 seconds). The info screen on the GRAFIK Eve QS will display "Occ Sensor Programming."
- 3. Press and hold the top scene button of the GRAFIK Eye QS Wireless control unit until the LEDs flash (about 3 seconds).
- 4. Return to the occupancy sensor. Press and hold the "Lights On" and "Lights Off" buttons simultaneously until the lens stops flashing (about 3 seconds).
- 5. Test communication between the devices using the "Lights On" and "Lights Off" buttons.

To <u>disassociate</u> wireless occupancy sensors and *GRAFIK Eye* control units: Simply repeat the association steps, in the same order; press and hold the bottom scene button on the GRAFIK Eye QS to disassociate.

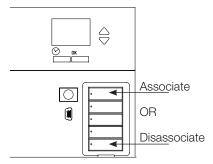
Note: The wireless signal has a range of 30 feet (10 m) through standard construction.





On the wireless occupancy sensor, press and hold the "Lights On" and "Lights Off" buttons for 3 seconds to begin or end association or disassociation with the GRAFIK Eye QS control unit.

Note: Pressing the "Lights On" button initiates the "occupied" action on the GRAFIK Eye QS control unit. Pressing the "Lights Off" button initiates the "unoccupied" action.



On the GRAFIK Eye QS control unit, press and hold the top scene button for 3 seconds to associate, or press and hold the bottom scene button for 3 seconds to disassociate with the occupancy sensor.



#### Mode Assignment

Main menu

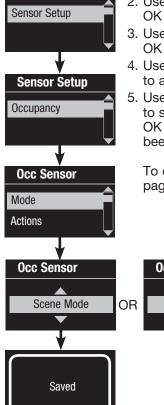
This step allows you to assign occupancy sensors (wired and wireless) on the QS link or connected to the GRAFIK Eye® QS control unit. Sensors can be assigned in either Scene Mode or Zone Mode.

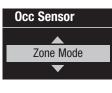
Scene Mode (default) is useful when the GRAFIK Eye QS is controlling lights in a single room or area. Up to four sensors can be assigned to the GRAFIK Eye QS to activate a scene when the space is occupied, and another scene when unoccupied.

Zone Mode is useful when the GRAFIK Eye QS is controlling lights in multiple rooms or areas. Up to four sensors can be assigned to each zone (a sensor can be assigned to more than one zone) to send the zones to user-selectable occupied and unoccupied levels.

- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Sensor setup" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Occupancy" and press the OK button to accept.
- 4. Use the Master buttons to highlight "Mode" and press the OK button to accept.
- 5. Use the Master buttons to highlight "Scene Mode" to assign sensors to scenes, or "Zone Mode" to assign sensors to zones. Press the OK button to accept. A screen will confirm your selected mode has been saved and you will return to the Occ Sensor screen.

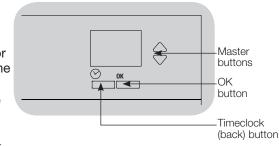
To configure Scene Mode, see page 24. To configure Zone Mode, see page 25.





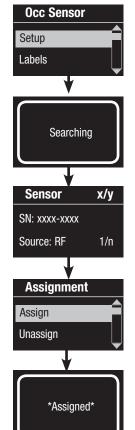






#### Scene Mode

This step allows you to assign occupied and unoccupied scenes to up to four occupancy sensors connected to the GRAFIK Eye® QS control unit.



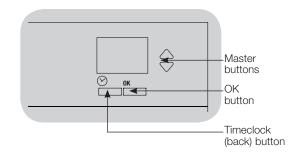
#### Select Sensors

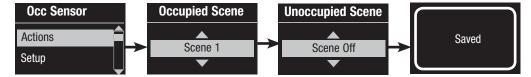
- 1. If not already done, complete the steps on page 22, and select "Scene Mode".
- 2. Use the Master buttons to highlight "Setup" and press the OK button to accept. The screen will display "Searching" while the unit detects available occupancy sensors.
- 3. Use the Master buttons to scroll through the list of available occupancy sensors. When the desired sensor is displayed, press the OK button to select it. Then choose "Assign" or "Unassign" from the following menu and press OK. A screen will verify your choice has been completed. Repeat for additional sensors.

#### Set Sensor Action

- 4. Press the Back button to return to the Occ Sensor screen. Use the Master buttons to highlight "Actions" and press the OK button to accept. By default, the occupied scene is set to "No Action" and the unoccupied scene is set to "Scene Off".
- 5. Use the Master buttons to highlight the scene you wish to use for occupied status and press the OK button to accept. Repeat for the scene you wish to use for unoccupied status. Press the OK button to accept.
- 6. Exit programming mode (see page 15).

Note: If wireless sensors are not found, verify that they are associated correctly (see page 22).

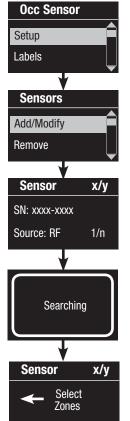






#### Zone Mode

This step allows you to assign occupied and unoccupied zone levels to up to four occupancy sensors per zone connected to the GRAFIK Eye® QS control unit. Sensors can be added to more than one zone.

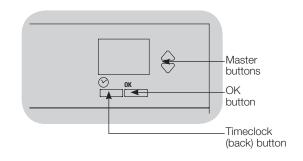


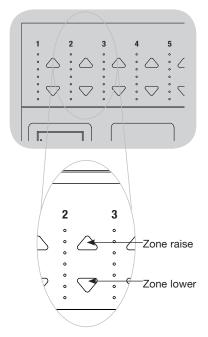
#### Select Sensors

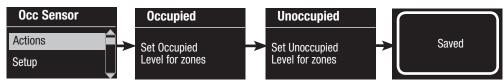
- 1. If not already done, complete the steps on page 22, and select "Zone Mode".
- 2. Use the Master buttons to highlight "Setup" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Add/Modify" and press the OK button to accept. Available sensors will be displayed.
- 4. You can assign up to four sensors per zone, and a sensor can be assigned to more than one zone. Use the Master buttons to scroll through the sensors until the one you wish to assign or unassign is highlighted, and press the OK button to select
- 5. Use the zone raise and lower buttons for each zone to assign or unassign the sensor to that zone. The zone raise button assigns the displayed sensor, and the zone lower button unassigns it. Repeat for all desired sensors and press OK. A screen will verify your settings have been saved.

#### Set Sensor Action

- 6. Press the Back button to return to the Occ Sensor screen. Use the Master buttons to highlight "Actions" and press the OK button to accept.
- 7. Use the zone raise and lower buttons to adjust each zone to its desired occupied level and press the OK button to accept. Press and hold the zone lower button to designate a zone as unaffected by the sensor.
  - Repeat for the zone levels you wish to use for unoccupied status. Press the OK button to accept.
- 8. Exit programming mode (see page 15). Note: If wireless sensors are not found, verify that they are associated correctly (see page 22).

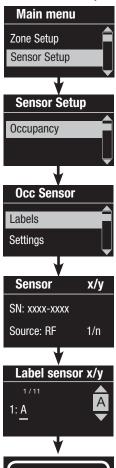




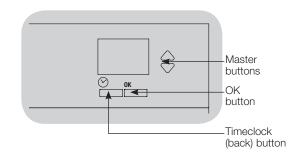




Label an Occupancy Sensor (optional)



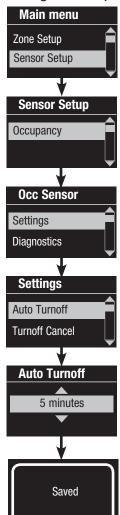
- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Sensor Setup" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Occupancy" and press the OK button to accept.
- 4. Use the Master buttons to highlight "Labels" and press the OK button to accept.
- 5. Use the Master buttons to display an occupancy sensor to label and press OK to select.
- 6. Use the Master buttons to scroll through the characters (lowercase and uppercase letters, plus numbers 0 through 9). The character you are currently changing will be underlined on the screen. Press OK to select the character you want, then repeat for all available characters. Choose a space (no character) and press OK for any remaining characters. Press the OK button to accept.
- 7. The info screen will confirm that your name has been saved.
- 8. Exit programming mode (see page 15).





Saved

#### Configure Occupancy Sensor Settings



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Sensor Setup" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Occupancy" and press the OK button to accept.
- 4. Use the Master buttons to highlight "Settings" and press the OK button to accept.
- 5. Use the Master buttons to highlight the setting you wish to configure. See below for descriptions of the settings and their values. Press the OK button to accept.
- 6. Use the Master buttons to adjust the value of the selected setting. Press the OK button to accept.
- 7. The info screen will confirm that your setting has been saved.
- 8. Exit programming mode (see page 15).

#### **Occupancy Sensor Settings**

Note: These settings affect all sensors assigned to the GRAFIK Eve QS.

Grace Period: If an occupancy sensor detects vacancy, motion detected within the grace period will maintain the lights at the previously occupied level.

Range: 15 – 30 seconds (default 15 seconds).

Vacancy Delay: An additional time delay after vacancy is detected and before unoccupied action occurs. Useful when occupancy sensor does not provide sufficient delay. Applies only to occupancy sensors, not vacancy sensors.

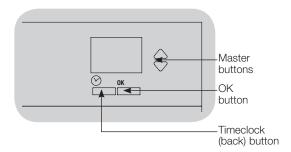
Range: 0 – 30 minutes (default 0 minutes).

Auto Turnoff: If lights assigned to an occupancy sensor are turned on manually without the sensor reporting occupancy, the GRAFIK Eye QS can be set to automatically turn off the lights after a set time delay. Disable this feature by setting the time delay to 0 (disabled).

Range: 1 – 30 minutes (default 30 minutes).

Zone Fade: When in Zone Mode, lights can be set to fade to the unoccupied levels over this period of time.

Range: 0 – 59 seconds; 1 – 60 minutes (default 10 seconds).





## Scene Setup

Timeclock

#### Set Zone Levels, Fade Rates, and Shade Group Actions

- Main menu Scene setup
- Scene setup Levels Labels
- Scene 1

Scene setup

✓— Set zones

Scene 1

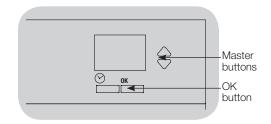
- Scene 1 Adjust fade 3 seconds
- Scene 1 Set shade Groups

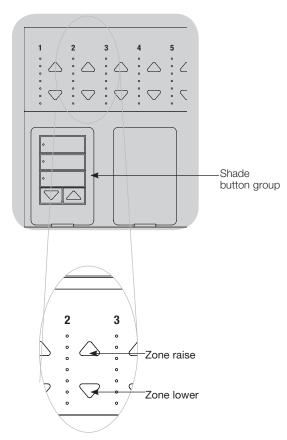
- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Scene setup" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Levels" to adjust lighting and/or shade levels. Press the OK button to accept. Use the Master buttons to highlight the scene number of your desired scene. Press the OK button to accept.
- 4. Set each zone to the desired light level for this scene using the zone raise/lower buttons. The info screen will display the zone and percentage as you adjust it.

To set a zone as unaffected, lower the light levels all the way to off, then hold the zone lower button for 3 seconds. The screen will display "---" and the three middle LEDs for the zone will be lit to indicate this zone is unaffected by the scene (the zone will not change when this scene is initiated).

When all zones are at the desired level, press the OK button to accept.

- 5. Use the Master buttons to set the fade time for this scene. Press the OK button to accept.
- 6. Note: This step is applicable only if you have shades on your system. If you do not have or do not wish to set shade groups for this scene, press the OK button to skip this step. Press the shade button that will take the shades assigned to that button group to the level you want for this scene. Repeat for any additional shade button groups. Press the OK button to accept. For shade programming, see pages 42 through 45.
- 7. The info screen will confirm that your scene has been saved.
- 8. Exit programming mode (see page 15).



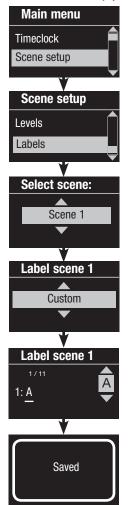




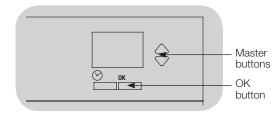
Saved

## Scene Setup

#### Label a Scene (optional)

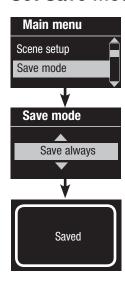


- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Scene setup" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Labels" and press the OK button to accept.
- 4. Use the Master buttons to highlight your desired scene. Press the OK button to accept.
- 5. Use the Master buttons to highlight "Custom" and press the OK button to accept.
- 6. Use the Master buttons to scroll through the characters (lowercase and uppercase letters, plus numbers 0 through 9). The character you are currently changing will be underlined on the screen. Press OK to select the character you want, then repeat for all available characters. Choose a space (no character) and press OK for any remaining characters. Press the OK button to accept.
- 7. The info screen will confirm that your name has been saved.
- 8. Exit programming mode (see page 15).

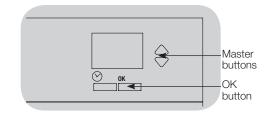




#### Set Save Mode



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Save mode" and press the OK button to accept.
- 3. Use the Master buttons to highlight the save mode you would like. The save modes are listed and explained below.
- 4. Press the OK button to accept. The info screen will confirm that your save mode has been saved.
- 5. Exit programming mode (see page 15).



#### Save Modes

Save by OK (default mode)	Quick scene programming mode; zone adjustments are temporary until the OK button is pressed to confirm the selection
Save always	Automatically save changes made to lighting levels or fade time to Off (Master button changes are temporary)
Save never	Do not save any temporary changes to lighting levels or fade time
Four scenes (typically used for rented spaces)	Zone raise/lower buttons are disabled Master raise/lower buttons, wallstations, and IR receiver are still enabled for adjustment of light level, but these changes are not saved
Button disable (typically used in a public space)	Only the timeclock button, IR receiver, and wallstations can be used to make temporary changes

Note: Scene Off changes can only be saved through scene setup in programming mode (see page 28).



## **Quick Scene Programming**

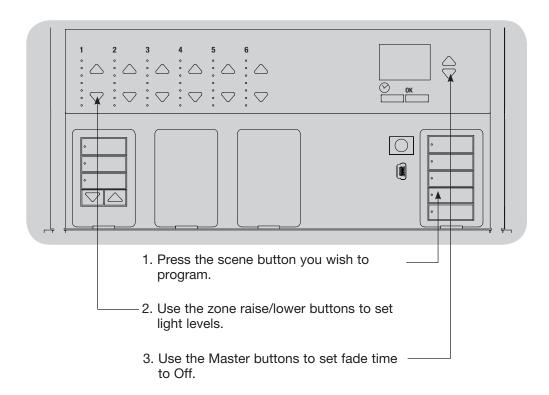
#### Save by OK Mode

By default, the GRAFIK Eye® QS is in "Save by OK" mode, which allows you to quickly set scenes without entering program mode.

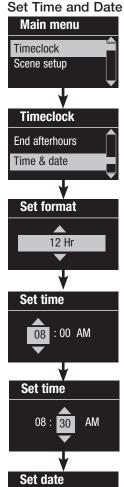
- 1. Press the button for the scene you want to set; its LED will light and the lights will go to the current settings.
- 2. Use the zone raise/lower buttons to set all lights to the desired levels. Press the OK button.
- 3. To set the fade time to Off for this scene. press the OK button, then use the Master buttons to set the desired fade time to Off. Press the OK button to save.

#### Notes

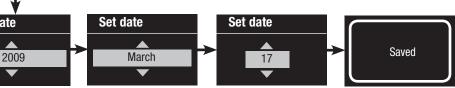
- Using the Master buttons to raise or lower lighting settings is still temporary.
- To set a zone to unaffected (---), press and hold the zone lower button for 6 seconds after the zone has gone to 0% light level.

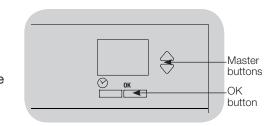






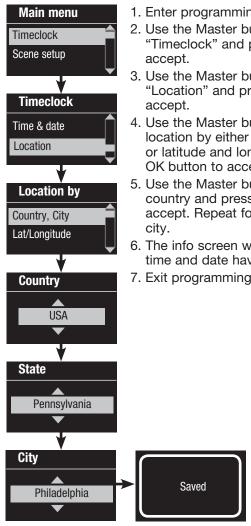
- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Timeclock" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Time & date" and press the OK button to accept.
- 4. Use the Master buttons to highlight either "12 Hr" or "24 Hr" format for time display and press the OK button to accept.
- 5. Use the Master buttons to highlight the current hour and press the OK button to accept. Repeat for the current minutes.
- 6. Use the Master buttons to highlight the current year and press the OK button to accept. Repeat for the current month and date.
- 7. The info screen will confirm that your time and date have been saved.
- 8. Exit programming mode (see page 15).





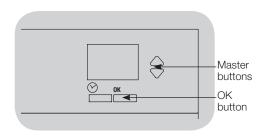


#### Set Location

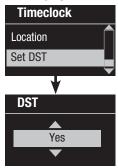


- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Timeclock" and press the OK button to
- 3. Use the Master buttons to highlight "Location" and press the OK button to
- 4. Use the Master buttons to set your location by either country and city or latitude and longitude. Press the OK button to accept.
- 5. Use the Master buttons to highlight the country and press the OK button to accept. Repeat for the state and closest
- 6. The info screen will confirm that your time and date have been saved.
- 7. Exit programming mode (see page 15).





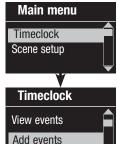
#### Set Daylight Saving Time

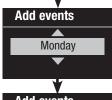


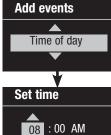
- 1. Enter programming mode (see page 15) and select "Timeclock". Use the Master buttons to highlight "Set DST" and press the OK button to accept.
- 2. Use the Master buttons to highlight "YES" if your location observes daylight saving time, or "NO" if it does not. Press the OK button to accept.
- 3. If yes, use the Master buttons to choose either "USA 2007" (the second Sunday in March to the first Sunday in November), or "Other." For "Other." follow the screens to set start and end dates and amount of time.
- 4. Press the OK button to accept. The info screen will confirm that your time and date have been saved.
- 5. Exit programming mode (see page 15).

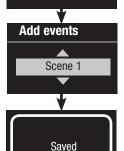


#### Add an Event









**LUTRON** 

- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Timeclock" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Add events" and press the OK button to accept.
- 4. Use the Master buttons to highlight the day of the week for this event; press the OK button to accept.
- 5. Use the Master buttons to highlight the type of event (fixed time of day, or relative to sunrise or sunset); press the OK button to accept.
- 6. For a fixed-time event, use the Master buttons to highlight the hour for your event to begin; press the OK button to accept. Repeat for the minutes.

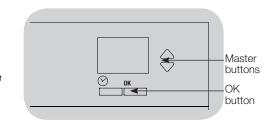
For a relative time event, use the Master buttons and the OK button to set the hour, then the minutes relative to sunrise or sunset (maximum of 1 hour, 59 minutes before or after sunrise or sunset).

7. Use the Master buttons to highlight the scene you wish to activate for this event.

For a timeclock event involving only shades, scroll through the scenes to find the group of shades and the action (1, 2, or 3; open, preset, or close) you want to add to the timeclock event.

Or, press the button on the shade button group that produces the action you want to add to this timeclock event. Press the OK button to accept.

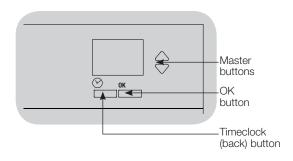
- 8. The info screen will confirm that your event has been saved.
- 9. Exit programming mode (see page 15).



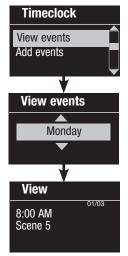
#### Delete an Event



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Timeclock" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Delete events" and press the OK button to accept.
- 4. Use the Master buttons to highlight the day of the week (or holiday) when the event occurs; press the OK button to accept.
- 5. Use the Master buttons to highlight the event to delete; press the OK button to accept.
- 6. A screen will appear, verifying you wish to delete the event. Press the OK button to accept and delete; otherwise, press the timeclock button to go back.
- 7. The info screen will confirm that your event has been deleted.
- 8. Exit programming mode (see page 15).



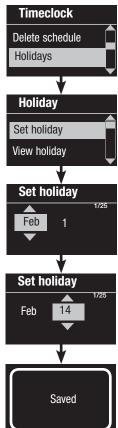
#### View an Event



- 1. Enter programming mode (see page 15), select "Timeclock," and select "View events".
- 2. Use the Master buttons to highlight the day of the week (or holiday) when the event occurs; press the OK button to accept.
- 3. Use the Master buttons to highlight the event to view; press the OK button to accept.
- 4. Press the OK button to return to the Timeclock menu.
- 5. Exit programming mode (see page 15).

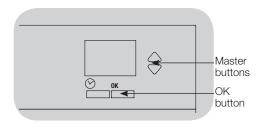


#### Set a Holiday

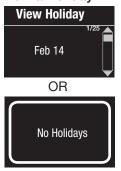


- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Timeclock" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Holidays" and press the OK button to accept.
- 4. Use the Master buttons to highlight "Set holiday" and press the OK button to accept.
- 5. Use the Master buttons to highlight the month of the holiday and press the OK button to accept. Repeat for the date.
- 6. The info screen will confirm that your holiday has been set.
- 7. Exit programming mode (see page 15).

Note: The GRAFIK Eye® QS supports up to 25 unique holidays. Follow the steps on page 34 to add Holiday timeclock events.

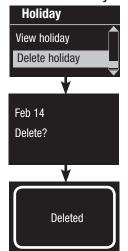


#### View a Holiday



- 1. Enter programming mode (see page 15), select "Timeclock," select "Holidays," and select "View holiday".
- 2. Use the Master buttons to scroll through the dates of the programmed holidays.
- 3. If no holidays are programmed, the info screen will display a screen informing vou.
- 4. Exit programming mode (see page 15).

#### Delete a Holiday

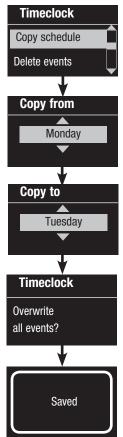


- 1. Enter programming mode (see page 15), select "Timeclock," select "Holidays," and select "Delete holiday".
- 2. Use the Master buttons to highlight the holiday you wish to delete and press the OK button to accept.
- 3. The info screen will confirm that your event has been deleted.
- 4. Exit programming mode (see page 15).

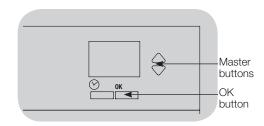


## **Timeclock Operation**

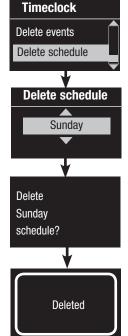
### Copy a Schedule



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Timeclock" and press the OK button to accept.
- 3. Use the Master buttons to highlight "Copy Schedule" and press the OK button to accept.
- 4. Use the Master buttons to highlight the day you want to copy the schedule from and press the OK button to accept.
- 5. Use the Master buttons to highlight the day you want to copy the schedule to and press the OK button to accept.
- 6. The info screen will ask you to confirm overwriting all events occurring on the selected day to copy to; press the OK button to accept.
- 7. Exit programming mode (see page 15).



#### Delete a Schedule



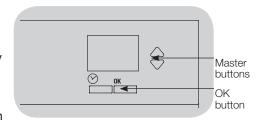
- 1. Enter programming mode (see page 15), select "Timeclock." and select "Delete schedule".
- 2. Use the Master buttons to highlight the day of the schedule you wish to delete and press the OK button to accept.
- 3. The info screen will confirm that your event has been deleted.
- 4. The info screen will ask you to confirm deleting the schedule on the selected day; press the OK button to accept.
- 5. Exit programming mode (see page 15).



### **Timeclock Operation**

#### Afterhours Mode

Afterhours Mode is an advanced power-saving feature. It allows occupants to manually turn on lights, but automatically turns the lights off after a specified amount of time (Delay time). Before turning off, the lights can be set to flash to warn occupants, giving them the opportunity to extend the time until Afterhours Mode is activated by pressing a button on the GRAFIK Eye QS or on any associated wallstation. Afterhours Mode can be started and stopped by Timeclock events (see page 34).



### Afterhours Settings include:

Flash count: How many times the lights will dim and brighten (for dimmable loads) or turn on and off (for non-dim loads) to warn the occupants the lights will be going to the Afterhours Scene (default 3 flashes).

Delay time: How long the system will wait from the end of the Flash Count until the lights go to the Afterhours Scene (default 15 minutes).

Warn time: How long the system will wait after a button is pressed on the GRAFIK Eye QS or on any associated wallstation (or the space is occupied) to warn the occupants that the lights will be going to the Afterhours Scene and restart the Delay Time countdown (default 5 minutes).

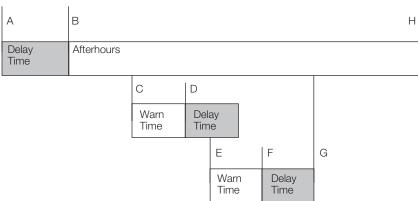
Afterhours Scene: Set by the user, the scene the lights will go to when Afterhours Mode is enabled (default scene is Scene 5).

#### Afterhours also has three modes to choose from:

Enabled: The enabled mode walks the user through each of the above settings' screens (see the next page). The initial values shown on the screens are the defaults; press OK to accept, or use the Master buttons to modify the values. A GRAFIK Eye in enabled mode will also cause any other associated GRAFIK Eye on the link (if it is not in afterhours disabled mode) to go into afterhours mode. (See page 46 for an explanation of association.)

Disabled: A GRAFIK Eye in disabled mode will not send any of the loads it controls into Afterhours Mode, even if set as a timeclock event or asked to by another GRAFIK Eve on the link.

Follow: A GRAFIK Eye in follow mode has no afterhours settings of its own, but it will carry out the settings of another associated GRAFIK Eye on the link that goes into afterhours mode.



#### Afterhours Example

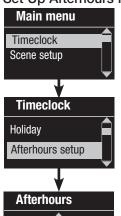
- A: Timeclock initiates start of afterhours mode. Lights flash and Delay Time begins
- B: Delay Time ends and Afterhours scene is activated
- C: User presses a button to override Afterhours and keep lights on
- D: Lights flash and Delay Time begins
- E: User presses a button to override Afterhours and keep lights on
- F: Lights flash and Delay Time begins
- G: Delay Time ends and Afterhours scene is activated
- H: Timeclock ends Afterhours mode

(continued on the next page)



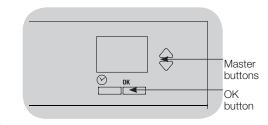
### **Timeclock Operation**

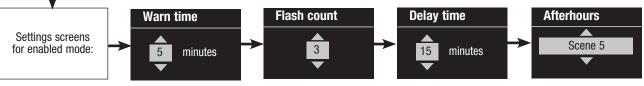
#### Set Up Afterhours Mode

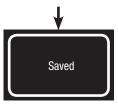


Enabled

- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Timeclock", press the OK button to accept, then use the Master buttons to highlight "Afterhours setup", and press the OK button to accept.
- 3. Use the Master buttons to highlight either "Enabled", "Follow", or "Disabled". (See the previous page for explanations of the three modes.) Press the OK button to accept.
- 4. If "enabled" was selected, use the Master buttons to highlight the values for each setting; press the OK button to accept each and continue to the next.
- 5. The info screen will confirm that your afterhours settings have been saved.
- 6. Exit programming mode (see page 15).







#### **End Afterhours Mode**

To interrupt the afterhours mode and return to the programmed timeclock event,



- 1. Enter programming mode (see page 15), select "Timeclock," and select "End afterhours". Press the OK button to accept.
- 2. The info screen will confirm that afterhours mode is ended.
- 3. Exit programming mode (see page 15).

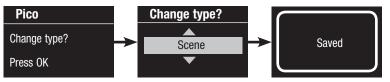


# Associating Pico™ Wireless Controls and GRAFIK Eye® QS Wireless Control Units

When a GRAFIK Eve QS wireless system includes a Pico wireless control, you can use the Pico wireless control as either a scene controller or a zone controller. This page describes using the Pico wireless control as a scene controller; the next page describes using it as a zone controller.

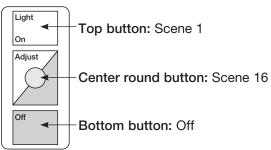
To use the Pico wireless control as a scene controller with a GRAFIK Eye QS Wireless control unit:

- 1. Make sure the wireless mode of the GRAFIK Eye QS control unit is "Enabled" (see page 16).
- 2.On the Pico, press and hold the top (on) and bottom (off) buttons for 3 seconds. The LED on the Pico will flash slowly, and the scene button LEDs on the GRAFIK Eye QS will all flash.
- 3.On the GRAFIK Eye QS, the info screen will ask for confirmation that you wish to change the type; press the OK button. Use the Master buttons on the GRAFIK Eye QS to select "Scene". Press OK to save.

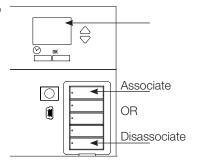


- 4.To associate the GRAFIK Eye QS with the Pico, press and hold the top scene button on the GRAFIK Eye QS for 3 seconds (until the LEDs all flash).
  - To disassociate the GRAFIK Eye QS with the Pico, press and hold the bottom scene button on the GRAFIK Eve QS for 3 seconds (until the LEDs stop flashing).
- 5.On the Pico, press and hold the top (on) and bottom (off) buttons for 3 seconds. The LED on the Pico and the LEDs on associated GRAFIK Eye QS Wireless control units will stop flashing.

Functionality of the Pico control when programmed as a scene controller:



Note: The wireless signal has a range of 30 feet (10 m) through standard construction.



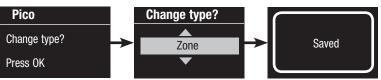
On the GRAFIK Eve QS control unit, press and hold the top scene button for 3 seconds to associate, or press and hold the bottom scene button for 3 seconds to disassociate with the Pico control.



## Associating Pico™ Wireless Controls and GRAFIK Eye® QS Wireless Control Units

To use the Pico wireless controller as a zone controller with a GRAFIK Eye QS Wireless control unit:

- 1. Make sure the wireless mode of the GRAFIK Eye QS control unit is "Enabled" (see page 16).
- 2.On the Pico, press and hold the top (on) and bottom (off) buttons for 3 seconds. The LED on the Pico will flash slowly, and the scene buttons LEDs on the GRAFIK Eye QS will all flash.
- 3.On the GRAFIK Eye QS, the info screen will ask for confirmation that you wish to change the type; press the OK button. Use the Master buttons on the GRAFIK Eve QS to select "Zone". Press OK to save.

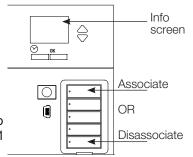


4.To assign a zone on the GRAFIK Eye QS to the Pico, use the zone raise/lower buttons for that zone to set the desired preset level, then press and hold the zone raise and lower buttons simultaneously for 1 second (until the LEDs flash at the programmed preset level).

To unassign a zone on the GRAFIK Eye QS to the Pico, while the zone LEDs are flashing, press and hold the zone raise and lower buttons simultaneously for 1 second (until the LEDs stop flashing and the 3 middle LEDs light).

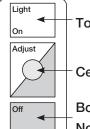
Repeat this step to assign levels for all desired zones to the Pico control. Zones assigned to the Pico will have all LEDs flashing in unison, and zones not assigned will have the 3 middle LEDs lit.

5.On the Pico, press and hold the top (on) and bottom (off) buttons for 3 seconds. The LED on the Pico and the LEDs on associated GRAFIK Eye QS Wireless control units will stop flashing.



On the GRAFIK Eye QS control unit, press and hold the top scene button for 3 seconds to associate, or press and hold the bottom scene button for 3 seconds to disassociate with the *Pico* control.

### Functionality of the *Pico* control when programmed as a zone controller:

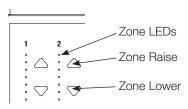


Top button: All assigned zones go to 100%

Center round button: All assigned zones go to the programmed preset level (Press and hold to save current levels on assigned zone as preset)

Bottom button: All assigned zones go to Off

Note: The wireless signal has a range of 30 feet (10 m) through standard construction.





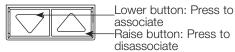
# Associating Sivoia QS Shades/Drapes and GRAFIK Eye QS Control Units

When a GRAFIK Eye QS system consists of Sivoia QS shades (or drapes) and a GRAFIK Eye QS with one or more shade button groups, you can associate the shade button groups on the control unit with the shades so the shade buttons can directly control the shades.

### For Sivoia QS Shades wired directly to the GRAFIK Eye QS control unit:

### To associate or disassociate shades with a shade button group:

- 1. On the GRAFIK Eye QS shade button group you wish to assign shades to. enter shade programming mode: Press and hold the top (open) and bottom (close) buttons simultaneously for 3 seconds. The top and bottom LEDs will flash.
  - Shades that are unassigned will move to up (open), and shades that are assigned will move to close (down).
- 2. Tap the top (open) button to start assigning.
- 3. Tap the top (open) button repeatedly to cycle forward through the addresses; tap the bottom (close) button to cycle backward.
- 4. Press the shade group lower button to associate the shade.
  - Press the shade group raise button to disassociate the shade.



5. Exit shade programming mode: Press and hold the top (open) and bottom (close) buttons simultaneously for 3 seconds. The top and bottom LEDs will stop flashing.

#### For Wireless Sivoia QS Shades:

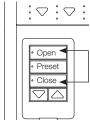
### To <u>associate</u> shades with a shade button group:

- 1. Make sure the wireless mode of the GRAFIK Eve QS control unit is "Enabled" (see page 16).
- 2.On the GRAFIK Eye QS shade button group you wish to assign shades to, enter shade programming mode: Press and hold the top (open) and bottom (close) buttons simultaneously for 3 seconds. The top and bottom LEDs will flash.
- 3. The LEDs on the electronic drive unit (EDU) and the wireless antenna of unassociated shades/drapes will blink slowly. On the shade/drape that you wish to associate with the shade button group, tap any button; the LED on the EDU will blink rapidly to indicate the shade is now associated with the shade button group on the GRAFIK Eye QS.
- 4. Repeat step 2 to associate additional shades/drapes to that shade button group.
- 5. Exit shade programming mode: Press and hold the top (open) and bottom (close) buttons simultaneously for 3 seconds. The top and bottom LEDs will stop flashing.
- 6. Repeat steps 1 through 5 for additional shade button groups, as applicable.

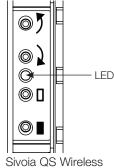
### To disassociate shades with a shade button group:

Repeat, in the same order, the steps above for associating shades/drapes. When in shade programming mode, tap any button on the electronic drive unit (EDU) of the shades/ drapes that you wish to disassociate from the shade button group; the green LEDs on the EDU and antenna will blink slowly to indicate the shade is disassociated from the shade button group on the GRAFIK Eye QS.

Note: The wireless signal has a range of 30 feet (10 m) through standard construction.



Press and hold the top (open) and bottom (close) buttons on the GRAFIK Eve QS shade button group to enter or exit shade programming mode.



shade/drape EDU

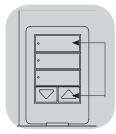


### Adjusting Shade Settings (for Wired and Wireless Sivoia QS Shades/Drapes)

### **Setting Limits**

Note: Entering Limit Setup mode may cause shades to move approximately 8 inches (200 mm) up or down. Be sure that each shade is positioned so that the fabric can safely move 8 inches (200 mm) up or down before entering Limit Setup mode.

1.On any shade button group, press and hold simultaneously the top and raise buttons. The LEDs next to the top and bottom buttons will cycle.



At any time while in Limit Setup mode, you can move all shades together to their current open limit by double-tapping the top button, or to their current close limit by double-tapping the bottom button. Once shade/blind electronic drive units (EDUs) have been assigned to shade button groups, limits can be set for an EDU only using the shade button group it is assigned to, and a shade button group can set limits only for those EDUs assigned to it.

- 2. Select the EDU you want to adjust using the top button on the shade button group. Each time you press and release the top button, a different EDU that is assigned to that shade button group will open and close in an 8-inch (200 mm) range to indicate it is selected. Tap the top button until the EDU for the shade you wish to adjust moves. (You can also use the bottom button, which
- 3. Adjust the currently selected EDU to the desired level for the open limit (the maximum the shade is allowed to open) using the raise and lower buttons.

opposite order.)

moves through the assigned EDUs in the



- 4. Press and hold the top button on the shade button group for 5 seconds to store the current position as the open limit. The LED next to the top button will flash quickly for 2 seconds.
- 5. Adjust the currently selected EDU to the desired level for the close limit (the maximum the shade is allowed to close) using the raise and lower buttons.
- 6. Press and hold the bottom button on the shade button group for 5 seconds to store the current position as the close limit. The LED next to the bottom button will flash quickly for 2 seconds.

- 7. Repeat steps 2 through 6 to set the open and close limits for each shade assigned to the shade button group.
- 8. Press and hold simultaneously the top and raise buttons on the shade button group to exit Limit Setup mode.

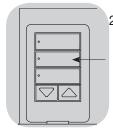


## Adjusting Shade Settings (for Wired and Wireless Sivoia® QS Shades/Drapes)

### Preset Adjustment: Simple Method



1. Use the raise and lower buttons on the shade button group to set all EDUs (electronic drive units of the shades) to the desired preset levels.



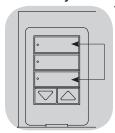
2. Press and hold the middle button on the shade button group for 5 seconds to save the EDU preset positions. The LED next to the button will flash and then light continuously, indicating the preset has been stored.

Note: Once EDU presets have been assigned to buttons on a shade button group, those presets are accessible for an EDU only using the shade button group it is assigned to, and a shade button group can access preset levels only for those EDUs assigned to it.

### Preset Adjustment: Advanced Method

Note: The advanced method for adjusting presets is needed only if you wish to have the shades assigned to the shade button group set at different positions in the preset. If, however, you wish all the shades in the group to be lined up with one another in the preset, you should use the Simple Method at left.

Note: Entering Assignment mode will cause the shades to move between their open and close limits. Be sure that the open and close limits have been set correctly.



- 1. On the shade button group whose preset you wish to adjust, press and hold simultaneously the top and bottom buttons. The LEDs next to the buttons will flash. EDUs (electronic drive units) for the assigned shades will move to their closed limits, and EDUs for unassigned shades will move to their open limits
- 2. Press and release the middle button on that shade button group. The adjacent LED will blink rapidly. EDUs for assigned shades will automatically move to their current preset settings.



3. Use the raise and lower buttons to move all EDUs for assigned shades together to the desired preset setting.

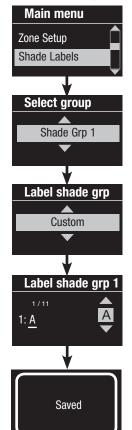
- 4. To move an EDU individually to its desired preset setting, select the EDU using the top button on the shade button group. Each time you press and release the top button, a different EDU that is assigned to that shade button group will open and close in an 8-inch (200 mm) range. Press repeatedly until the EDU for the shade you wish to adjust moves. Adjust that EDU to the desired height using the raise and lower buttons. Repeat this step for all assigned EDUs.
- 5. Once you are satisfied that all the assigned EDUs are set to the positions you want to assign as the preset, press and hold the middle button on the shade button group for 5 seconds. The preset will be saved.
- 6. Press and hold simultaneously the top and bottom buttons on the shade button group for 5 seconds to exit to normal mode. The LEDs next to the buttons will stop flashing.



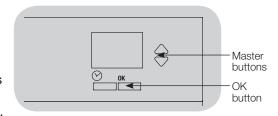
### Adjusting Shade Settings

(for Wired and Wireless Sivoia® QS Shades/Drapes)

Name a Group of Shades



- 1. Enter programming mode (see page 15).
- 2. Use the Master buttons to highlight "Shade Labels" and press the OK button to accept.
- 3. Use the Master buttons to highlight your desired shade group. Press the OK button to accept.
- 4. Use the Master buttons to highlight "Custom" and press the OK button to accept.
- 5. Use the Master buttons to scroll through the characters (lowercase and uppercase letters, plus numbers 0 through 9). The character you are currently changing will be underlined on the screen. Press OK to select the character you want, then repeat for all available characters. Choose a space (no character) and press OK for any remaining characters. Press the OK button to accept.
- 6. The info screen will confirm that your name has been saved.
- 7. Exit programming mode (see page 15).





## Associating Multiple GRAFIK Eye QS Control Units

When there is more than one GRAFIK Eye QS control unit in a system, it is often convenient to associate them so that certain functions carry over to other associated GRAFIK Eye QS control units.

- Wired units: When first wired on the QS link, all unprogrammed GRAFIK Eye QS wired control units will replicate scene activations and Master button presses by other control units on the link. Associating or disassociating control units determines which units on the QS link will "talk" or "listen" to each other. Control units associated on a wired QS link will also replicate timeclock and contact closure settings.
- Wireless units: GRAFIK Eye QS Wireless control units will not automatically replicate scene activations or Master button presses, and must be programmed to do so. (Associating two wireless control units will not pass timeclock and contact closure settings to each other.) When associating multiple wireless control units, make sure the wireless mode of both units is set to "Enabled."

Note: The wireless signal has a range of 30 feet (10 m) through standard construction.

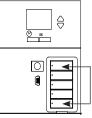
#### To associate two GRAFIK Eye QS control units:

- 1. Begin with the GRAFIK Eve QS control unit that will "talk" (button presses will be replicated on the other control unit; in the drawing below this is GRAFIK Eye QS A). Press and hold the top and bottom scene buttons until the LEDs flash (about 3 seconds).
- 2. Continue with the GRAFIK Eye QS control unit that will "listen" (replicate button presses on the other control unit: in the drawing below this is GRAFIK Eye QS B). Press and hold the top scene button until the LEDs flash (about 3 seconds).
- 3. Return to the GRAFIK Eye QS control unit that will "talk" (A). Press and hold the top and bottom scene buttons until the LEDs stop flashing (about 3 seconds).
- 4. Repeating the process in reverse allows GRAFIK Eye QS A to also "listen" to GRAFIK Eye QS B, so that both units will follow each other.

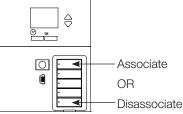
#### To disassociate two GRAFIK Eye QS control units:

Simply repeat the association steps, in the same order; press and hold the bottom scene button on B to disassociate.

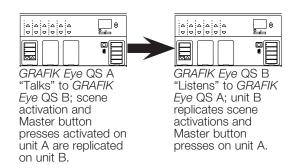
Note: A control unit can be associated with as many other control units as exist on the link. Any unit can replicate any other unit's button presses, and any unit's button presses can be replicated on an unlimited number of control units.



On the unit that will "talk", press and hold the top and bottom scene buttons for 3 seconds to begin or end association or disassociation with the unit that will "listen".



On the unit that will "listen", press and hold the top scene button for 3 seconds to associate, or press and hold the bottom scene button for 3 seconds to disassociate with the unit that will "talk".

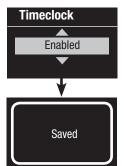




## **Diagnostics and Special Settings**

#### Enable/Disable Timeclock

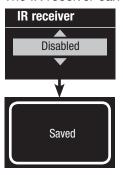
The timeclock can be enabled or disabled as desired.



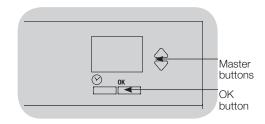
- 1. Enter programming mode (see page 15), select "Timeclock," and select "Enable/ Disable". Press the OK button to accept.
- 2. Use the Master buttons to highlight either "Enabled" or "Disabled". Press the OK button to accept.
- 3. The info screen will confirm that your setting has been saved.
- 4. Exit programming mode (see page 15).

#### Enable/Disable IR Receiver

The IR receiver can be enabled or disabled as desired.

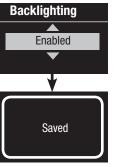


- 1. Enter programming mode (see page 15) and select "IR receiver". Press the OK button to accept.
- 2. Use the Master buttons to highlight either "Enabled" or "Disabled". Press the OK button to accept.
- 3. The info screen will confirm that your setting has been saved.
- 4. Exit programming mode (see page 15).



### **Enable/Disable Backlighting**

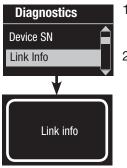
The backlighting on the info screen can be enabled or disabled as desired.



- 1. Enter programming mode (see page 15) and select "Backlighting". Press the OK button to accept.
- 2. Use the Master buttons to highlight either "Enabled" or "Disabled". Press the OK button to accept.
- 3. The info screen will confirm that your setting has been saved.
- 4. Exit programming mode (see page 15).

### **Diagnostics**

If you are having trouble with your control unit and call Lutron Technical Support, you may be asked for diagnostic information about your unit.



- 1. Enter programming mode (see page 15) and select "Diagnostics". Press the OK button to accept.
- 2. Use the Master buttons to highlight the option that will display the required information. The info screen can display the device serial number, link information, code version, or USB status. There is also an option to reset the USB connection (do this only if asked to by Lutron Technical Support).
- 4. Exit programming mode (see page 15).



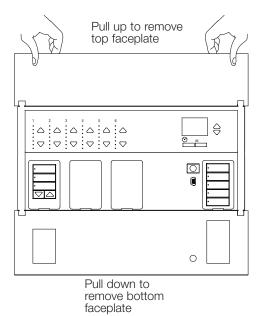
### **Activate System Accessories**

Once your GRAFIK Eye® QS control unit is programmed, you will need to activate any accessories or interfaces that are a part of the system. Refer to the instructions included with those devices to set them up for proper communication with the control unit.

### Faceplate Removal

The faceplates may need to be removed to change the color or to write in zone labels. To remove either faceplate, open it fully (flush to the wall), and pull up (for the top faceplate) or down (for the bottom faceplate) to pull the hinges out of their slots.

Replace by sliding the hinges back into their slots.

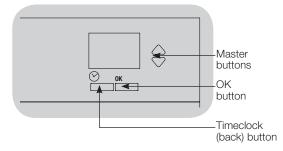


### Language Selection

The GRAFIK Eye® QS is capable of operating in the following languages:

- Enalish
- French
- Spanish
- German
- Italian

To change the language to one of these choices, press the Timeclock button four times, until the "Language" screen is displayed. (Note: Do not put the unit in programming mode.) Use the Master buttons to highlight your preferred language, and press the OK button to select and save.





# Troubleshooting

Symptom	Possible Causes	Remedy
Unit does not control loads Unit does not turn lights on LEDs on front of unit are not ON Circuit breaker is tripping	Circuit breaker is off Low zone settings Miswire System short circuit System overload	Switch circuit breaker on Reprogram scenes to a higher intensity Check wiring Find and correct shorts Make sure unit is not overloaded (see Zone Setup section))
Unit does not control load Zone control does not work	Miswire Disconnected wire Burned-out lamps	Check wiring Connect zone wires to loads Replace bad lamps
1 or more zones are "full on" when any scene is on and zone intensity is not adjustable	Miswire Shorted line output	Make sure loads are connected to the right zones Replace control unit
A Zone control affects more than one zone	Miswire	Check for shorts between zone outputs
Keypad buttons are not working	Miswire or loose connection on low-voltage link	Tighten loose connections at PELV terminals on all units and
Keypad LEDs are not tracking	Wallstation programming is incorrect	other devices in the system Check the keypad function and programming on the units
Faceplate is warm	Normal operation	Solid-state controls dissipate about 2% of the connected load as heat.
Unit does not allow scene change or zone adjustments Cannot program fade time from Off	Unit in wrong save mode Keypad in system has locked the unit Fade time from Off not programmable; can only program fade time to Off	Change to correct save mode Check programming and state of keypads Fade time from Off is always 3 seconds
Integral (direct-wired) contact closure input does not work	Miswire Input closure/opening is not occurring Unit is in wrong CCI mode	Check wiring on contact closure input Check that the input device is opening and closing properly Change to correct CCI mode
Timeclock events do not occur Sunrise or sunset events do not occur at the correct time	Timeclock is disabled Time is not set correctly Date is not set correctly Location is not set correctly Holiday schedule is in effect	Enable the timeclock Set the time Set the date Set the latitude and longitude correctly Remove the holiday schedule from your programming



# Troubleshooting (continued): Wireless Functions (for wireless enabled units only)

Symptom	Possible Causes	Remedy
Cannot associate a wireless device to a unit	Unit does not support wireless functionality  Unit in incorrect wireless mode  Maximum number of devices have been associated with unit	Verify unit has a model number beginning with QSGRJ or QSGRK Change wireless mode to "Enabled" (see page 16) Remove devices or associate with a different unit
Associated wireless devices do not control unit	Wireless device has been unassigned from unit Unit in incorrect wireless mode Multiple devices were associated to a unit and their settings do not match Devices are not receiving power Out of range	Reassign wireless device to unit Change to correct wireless mode (see page 16) Verify wireless device settings are consistent Check wireless device's wiring/battery Verify wireless device is within range (30 feet/10 m)
Wireless devices operate incorrectly	System is not configured correctly  Intended settings were not saved	Make sure wireless device settings are programmed as indicated Reprogram wireless device settings
Wireless devices selectively operate	Multiple devices were associated to a unit and their settings do not match Devices are not receiving power Out of range	Verify wireless device settings are consistent  Check wireless device's wiring/battery Verify wireless device is within range (30 feet)
Screen often prompts for wireless device association	Unit left in "Enabled" (wireless mode) when not adding devices	Change wireless mode to "Ignore Programming" (see page 16)

For additional assistance with specific wireless devices or a RadioRA® 2 system, refer to the installation guide that came with the equipment.



# Troubleshooting (continued): Shade Functions

Symptom	Possible Causes	Remedy
EDU (electronic drive unit of the shade) will not move	EDU is not powered Shade fabric is caught on something EDU is not assigned to a shade button group	Check EDU power Check and unbind shade fabric Assign the EDU to a shade button group
EDU (electronic drive unit of the shade) does not fully open or fully close	Presets have been set incorrectly Limits have been set incorrectly Shade fabric is caught on something	Try using raise/lower buttons on shade button group Set limits correctly Check and unbind shade fabric
Shade moves in the opposite direction when raise/ lower buttons are pushed	Open and close limits have been reversed	Set limits correctly
Shade button group LEDs are off and keypad will not control any shade	No power is going to shade button group	Check and wire power to shade button group
Shade button group LEDs are on but keypad will not control any shade	All presets are set to the same height Communications link is not wired to the EDU EDU has been unassigned from shade button group	Try using raise/lower buttons on shade button group Check and wire the EDU link Reassign the EDU to the shade button group
Shade button group does not operate all the shades it is assigned to	EDU has been unassigned from shade button group All presets are set to the same height EDU is not wired correctly Shade button group is not wired correctly	Reassign the EDU to the shade button group Try using raise/lower buttons on shade button group Check and rewire EDU Check and rewire shade button group
Shades in a room move on their own	EDUs are assigned to a shade button group in another room	Reassign the EDU to the correct shade button group



### Warranty

# Lutron Electronics Co., Inc. One Year Limited Warranty

For a period of one year from the date of purchase, and subject to the exclusions and restrictions described below, Lutron warrants each new unit to be free from manufacturing defects. Lutron will, at its option, either repair the defective unit or issue a credit equal to the purchase price of the defective unit to the Customer against the purchase price of comparable replacement part purchased from Lutron. Replacements for the unit provided by Lutron or, at its sole discretion, an approved vendor may be new, used, repaired, reconditioned, and/or made by a different manufacturer.

If the unit is commissioned by Lutron or a Lutron approved third party as part of a Lutron commissioned lightling control system, the term of this warranty will be extended, and any credits against the cost of replacement parts will be prorated, in accordance with the warranty issued with the commissioned system, except that the term of the unit's warranty term will be measured from the date of its commissioning.

#### **EXCLUSIONS AND RESTRICTIONS**

This Warranty does not cover, and Lutron and its suppliers are not responsible for:

- 1. Damage, malfunction or inoperability diagnosed by Lutron or a Lutron approved third party as caused by normal wear and tear, abuse, misuse, incorrect installation, neglect, accident, interference or environmental factors, such as (a) use of incorrect line voltages, fuses or circuit breakers; (b) failure to install, maintain and operate the unit pursuant to the operating instructions provided by Lutron and the applicable provisions of the National Electrical Code and of the Safety Standards of Underwriter's Laboratories; (c) use of incompatible devices or accessories; (d) improper or insufficient ventilation; (e) unauthorized repairs or adjustments; (f) vandalism; or (g) an act of God, such as fire, lightning, flooding, tornado, earthquake, hurricane or other problems beyond Lutron's control.
- On-site labor costs to diagnose issues with, and to remove, repair, replace, adjust, reinstall and/or reprogram the unit or any of its components.
- Equipment and parts external to the unit, including those sold or supplied by Lutron (which may be covered by a separate warranty).
- The cost of repairing or replacing other property that is damaged when the unit does not work properly, even if the damage was caused by the unit.

EXCEPT ÁS EXPRESSLY PROVIDED IN THIS WARRANTY, THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF ANY TYPE, INCLUDING ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. LUTRON DOES NOT WARRANT THAT THE UNIT WILL OPERATE WITHOUT INTERRUPTION OR BE ERROR FREE.

NO LUTRON AGENT, EMPLOYEE OR REPRESENTATIVE HAS ANY AUTHORITY TO BIND LUTRON TO ANY AFFIRMATION, REPRESENTATION OR WARRANTY CONCERNING THE UNIT. UNLESS AN AFFIRMATION, REPRESENTATION OR WARRANTY MADE BY AN AGENT, EMPLOYEE OR REPRESENTATIVE IS SPECIFICALLY INCLUDED HEREIN, OR IN STANDARD PRINTED MATERIALS PROVIDED BY LUTRON, IT DOES NOT FORM A PART OF THE BASIS OF ANY BARGAIN BETWEEN LUTRON AND CUSTOMER AND WILL NOT IN ANY WAY BE ENFORCEABLE BY CUSTOMER.

IN NO EVENT WILL LUTRON OR ANY OTHER PARTY BE LIABLE FOR EXEMPLARY, CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,

DAMAGES FOR LOSS OF PROFITS, CONFIDENTIAL OR OTHER INFORMATION, OR PRIVACY; BUSINESS INTERRUPTION; PERSONAL INJURY; FAILURE TO MEET ANY DUTY, INCLUDING OF GOOD FAITH OR OF REASONABLE CARE; NEGLIGENCE, OR ANY OTHER PECUNIARY OR OTHER LOSS WHATSOEVER), NOR FOR ANY REPAIR WORK UNDERTAKEN WITHOUT LUTRON'S WRITTEN CONSENT ARISING OUT OF OR IN ANY WAY RELATED TO THE INSTALLATION, DEINSTALLATION, USE OF OR INABILITY TO USE THE UNIT OR OTHERWISE UNDER OR IN CONNECTION WITH ANY PROVISION OF THIS WARRANTY, OR ANY AGREEMENT INCORPORATING THIS WARRANTY, EVEN IN THE EVENT OF THE FAULT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, BREACH OF CONTRACT OR BREACH OF WARRANTY OF LUTRON OR ANY SUPPLIER, AND EVEN IF LUTRON OR ANY OTHER PARTY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

NOTWITHSTANDING ANY DAMAGES THAT CUSTOMER MIGHT INCUR FOR ANY REASON WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ALL DIRECT DAMAGES AND ALL DAMAGES LISTED ABOVE), THE ENTIRE LIABILITY OF LUTRON AND OF ALL OTHER PARTIES UNDER THIS WARRANTY ON ANY CLAIM FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, INSTALLATION, DELIVERY, USE, REPAIR, OR REPLACEMENT OF THE UNIT, OR ANY AGREEMENT INCORPORATING THIS WARRANTY, AND CUSTOMER'S SOLE REMEDY FOR THE FOREGOING, WILL BE LIMITED TO THE AMOUNT PAID TO LUTRON BY CUSTOMER FOR THE UNIT. THE FOREGOING LIMITATIONS, EXCLUSIONS AND DISCLAIMERS WILL APPLY TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW, EVEN IF ANY REMEDY FAILS ITS ESSENTIAL PURPOSE.

#### TO MAKE A WARRANTY CLAIM

To make a warranty claim, promptly notify Lutron within the warranty period described above by calling the Lutron Technical Support Center at (800) 523-9466. Lutron, in its sole discretion, will determine what action, if any, is required under this warranty. To better enable Lutron to address a warranty claim, have the unit's serial and model numbers available when making the call. If Lutron, in its sole discretion, determines that an on-site visit or other remedial action is necessary, Lutron may send a Lutron Services Co. representative or coordinate the dispatch of a representative from a Lutron approved vendor to Customer's site, and/or coordinate a warranty service call between Customer and a Lutron approved vendor.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

These products may be covered under one or more of the following U.S. patents: 5,191,265; 5,430,356; 5,463,286; 5,838,226; 5,848,054; 5,905,442; 5,949,200; 5,982,103; 6,091,205; 6,188,181; 6,380,692; 6,687,487; 6,803,728; D546,294; D647,733; D547,734; D550,163; D550,164; D550,165; D550,166; D551,179; D552,042; and corresponding foreign patents. Other U.S. and foreign patents may be pending.

NEC is a registered trademark of the National Fire Protection Association, Quincy, Massachusetts.

Lutron, the sunburst logo, Sivoia, Hi-lume, Eco-10, Tu-Wire, RadioRA, see Touch, and GRAFIK Eye are registered trademarks of Lutron Electronics Co., Inc.

© 2009 Lutron Electronics Co., Inc.



Internet: www.lutron.com E-mail: product@lutron.com

# WORLD HEADQUARTERS USA

Lutron Electronics Co., Inc.
7200 Suter Road, Coopersburg, PA 18036-1299
TEL +1.610.282.3800
FAX +1.610.282.1243
Toll-Free 1.888.LUTRON1
Technical Support 1.800.523.9466

#### **North and South America Technical Hotlines**

USA, Canada, Caribbean: 1.800.523.9466 Mexico: +1.888.235.2910 Central/South America: +1.610.282.6701

# EUROPEAN HEADQUARTERS United Kingdom

Lutron EA Ltd.
6 Sovereign Close, London, E1W 3JF United Kingdom TEL +44.(0)20.7702.0657
FAX +44.(0)20.7480.6899
FREEPHONE (UK) 0800.282.107
Technical support +44.(0)20.7680.4481

# ASIAN HEADQUARTERS Singapore

Lutron GL Ltd.
15 Hoe Chiang Road, #07-03 Euro Asia Centre,
Singapore 089316
TEL +65.6220.4666
FAX +65.6220.4333

#### Asia Technical Hotlines

Northern China: 10.800.712.1536 Southern China: 10.800.120.1536 Hong Kong: 800.901.849 Indonesia: 001.803.011.3994 Japan: +81.3.5575.8411 Macau: 0800.401 Singapore: 800.120.4491 Tailand: 001.801.137.737 Thailand: 001.800.120.665853 Other countries: +65.6220.4666



