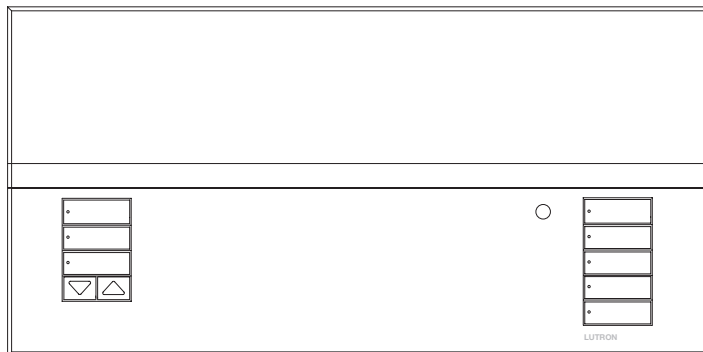




# GRAFIK Eye® QS Control Unit

**Please Read**



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, contact closure input, and engravable 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 $\sim$ 50/60 Hz	220 - 240 V $\sim$ 50/60 Hz
<b>Unit Capacity (watts)</b>	2000 W	3000 W
<b>MLV</b>	2000 VA 1600 W	3000 VA 2400 W
<b>Zone Capacity (watts)</b>	25 - 800 W	40 - 1200 W
<b>MLV</b>	25 - 800 VA 25 - 600 W	40 - 1200 VA 40 - 960 W

See page 6 for IEC PELV/NEC® Class 2 ratings.

# Quick Installation and Operation Guide

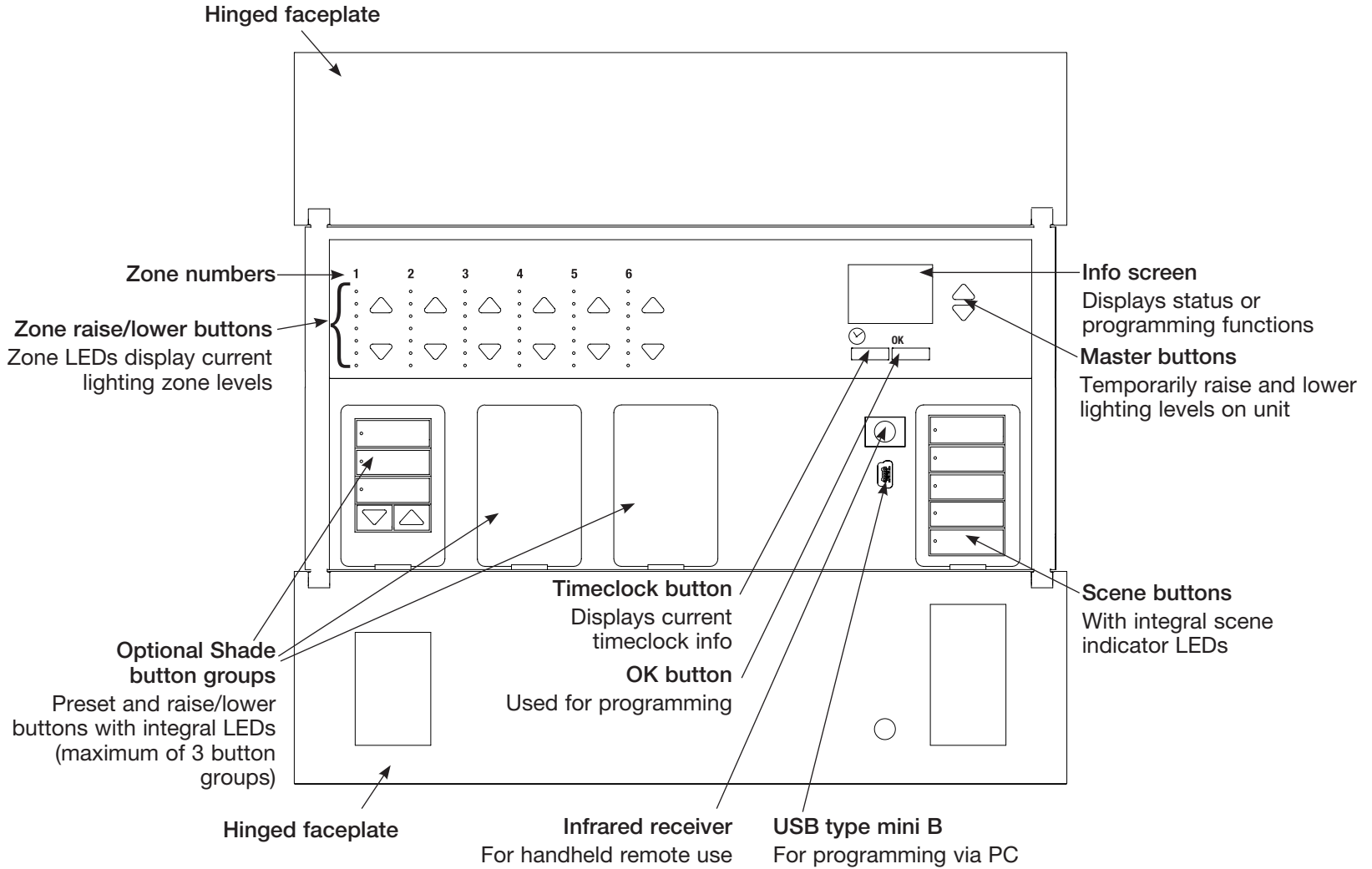
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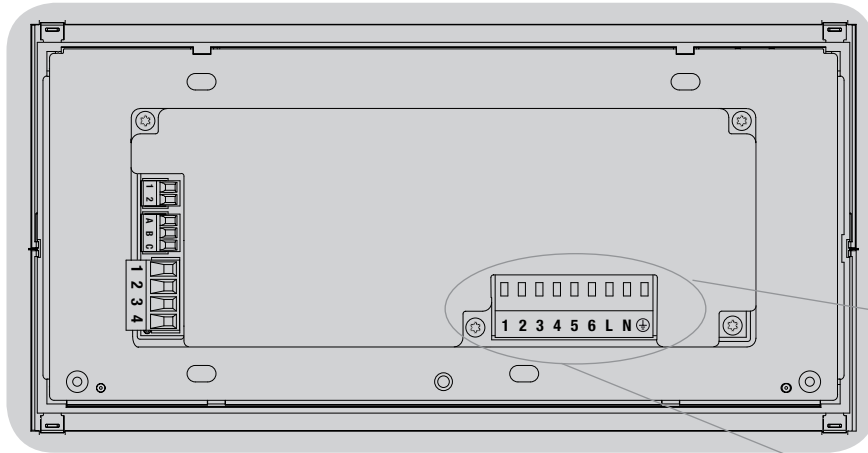
For additional features and advanced functions, see the complete installation and operation guide at [www.lutron.com/qs](http://www.lutron.com/qs)

For California residents only:  
The batteries in these devices contain Perchlorate Material – special handling may apply. For more information visit [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)

# Features and Functions of the GRAFIK Eye® QS Control Unit



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



## Line Voltage/Mains Cables and Load Wiring

### Terminal labels:

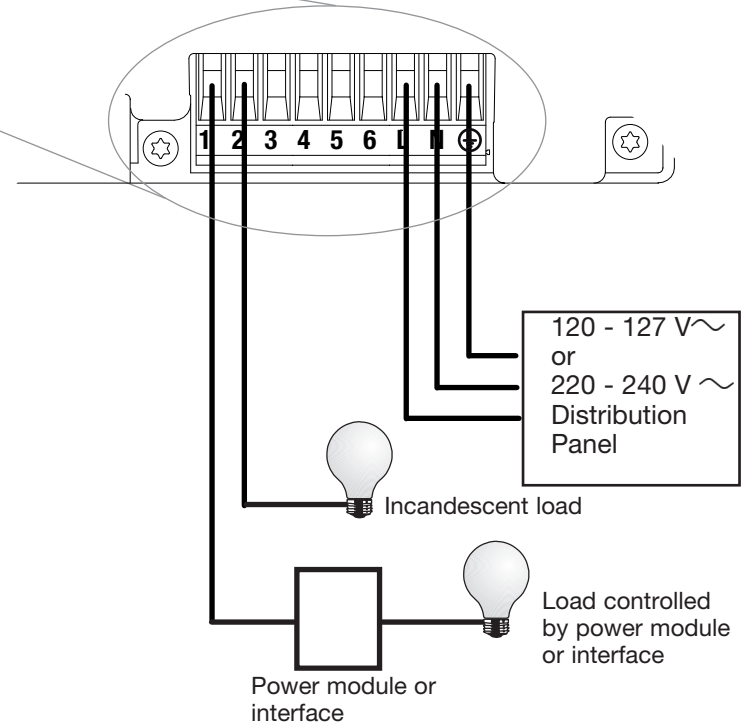
L: Hot/Live

N: Neutral

⊕: Ground

1-6: Dimmed/Switched  
line voltage outputs

12 AWG (4.0 mm<sup>2</sup>)  
each terminal

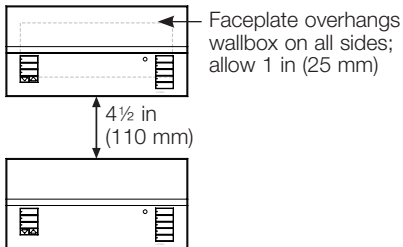


# Wiring the GRAFIK Eye® QS Control Unit: Line Voltage Wiring Details

- 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.
- IEC PELV/NEC® Class 2 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 IEC PELV/NEC® Class 2 terminals.

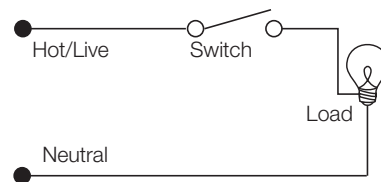
**Step 1: Install wallbox.** Mount a 3½ in (89 mm) deep 4-gang U.S. wallbox on a dry, flat indoor surface that is accessible and allows for system programming and operation. Allow at least 4½ in (110 mm) clearance above and below the faceplate to ensure proper heat dissipation. Allow 1 in (25 mm) for 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 line voltage wiring diagrams.
- Do not mix different load types on the same zone.
- Follow all local and national electrical codes when installing IEC PELV/NEC® Class 2 wiring with line voltage/mains wiring.

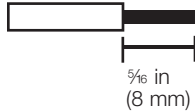


**WARNING! Shock hazard.** May result in serious injury or death. Always turn off circuit breaker or remove main fuse from power line before doing any work. Before connecting the loads to the GRAFIK Eye® QS control unit, test the loads for short-circuits.

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

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

- Strip  $\frac{5}{16}$  in (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·lb (0.6 N·m) for line voltage/mains connections and 5.0 in·lb (0.6 N·m) for the earth/ground connection.

**Note:** See the zone setup section for a list of compatible load types and instructions for programming the GRAFIK Eye® QS control unit to properly recognize them.

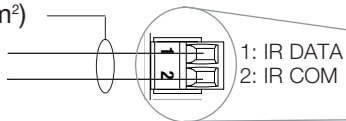
**Notice: Risk of damage to unit.** GRAFIK Eye® QS control units must be installed by a qualified electrician in accordance with all applicable regulations and building codes. Improper wiring can result in damage to control units or other equipment.

**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®, 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 Control Unit: Overview of IEC PELV/NEC® Class 2 Wiring

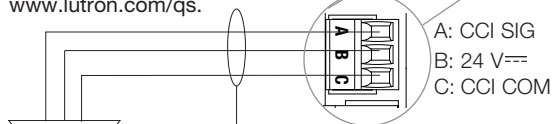
## IR Wiring

18 AWG (1.0 mm<sup>2</sup>)  
each terminal  
From external  
IR connection  
(by others)

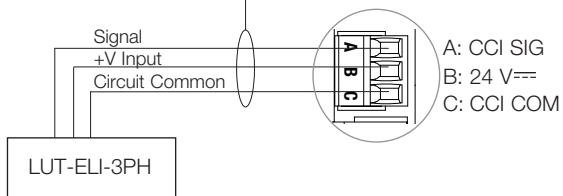


## Contact Closure Input Wiring

24 V<sub>DC</sub> 50 mA  
For settings, see the full installation  
and operation guide at  
[www.lutron.com/qs](http://www.lutron.com/qs).

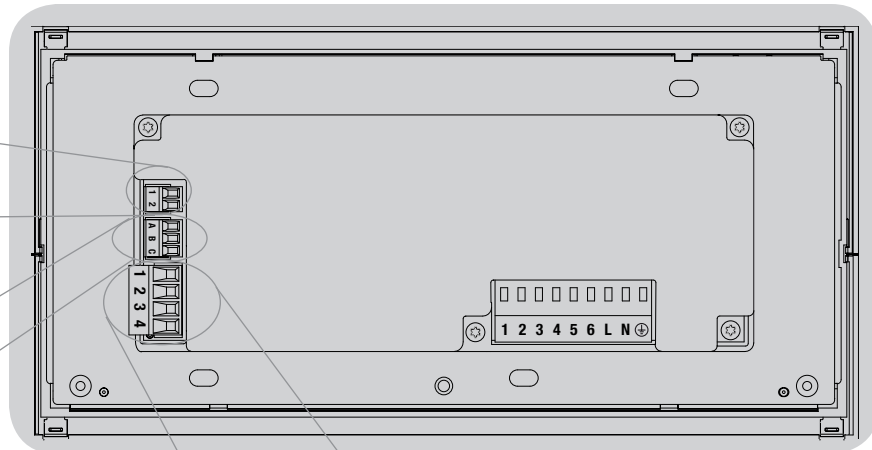


**Example:**  
Occupancy sensor  
(maximum 1)



**Example:**  
Emergency lighting interface (maximum 1)

**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.



## QS Link Control Wiring

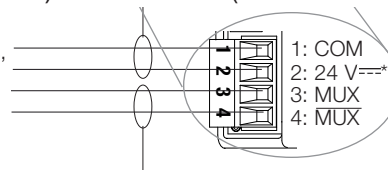
24 V<sub>DC</sub> 100 mA

### Common and power (terminals 1 and 2):

Two 18 AWG (1.0 mm<sup>2</sup>) each terminal (for link <500 ft/153 m)

Two 12 AWG (4.0 mm<sup>2</sup>) each terminal (for link 500-2000 ft/153-610 m)

To control stations,  
shades, or other  
GRAFIK Eye® QS  
control units



\*Do not connect terminal 2 between any GRAFIK Eye® QS control unit and any other power supply, including another GRAFIK Eye® QS control unit. See "Power Group Wiring" for a detailed wiring example.

### Data (terminals 3 and 4):

Twisted, shielded pair 22 AWG (0.5 mm<sup>2</sup>)  
each terminal

**Note:** Use appropriate wire connecting devices as specified by local codes.

# Wiring the GRAFIK Eye® QS Control Unit: QS Link Control Wiring Details

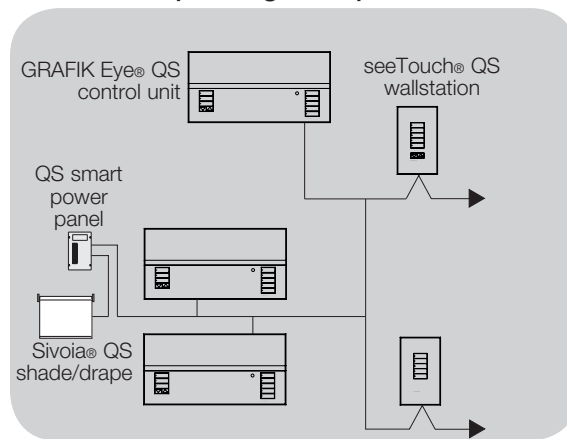
- System communication uses IEC PELV/NEC® Class 2 wiring.
- Follow all local and national electrical codes when installing IEC PELV/NEC® Class 2 wiring with line voltage/mains wiring.
- Each terminal accepts up to two 18 AWG (1.0 mm<sup>2</sup>) wires.
- Total length of control link must not exceed 2000 ft (610 m).
- Make all connections in the control unit's wallbox.
- Wiring can be T-tapped or daisy-chained.
- IEC PELV/NEC® Class 2 24 V<sup>---</sup> 150 mA.

## System Limits

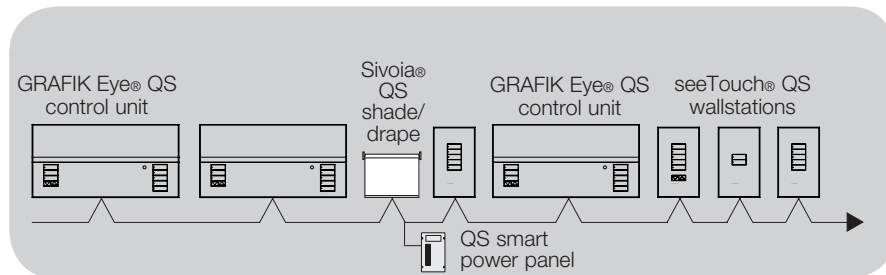
The QS wired communication link is limited to 100 devices or 100 zones.

The GRAFIK Eye® QS control unit supplies 3 Power Draw Units (PDUs) on the QS link. Refer to the QS Link Power Draw Units specification submittal (Lutron PN 369405) for more information concerning Power Draw Units.

## T-Tap Wiring Example



## Daisy-Chain Wiring Example



Wire Sizes (check compatibility in your area)

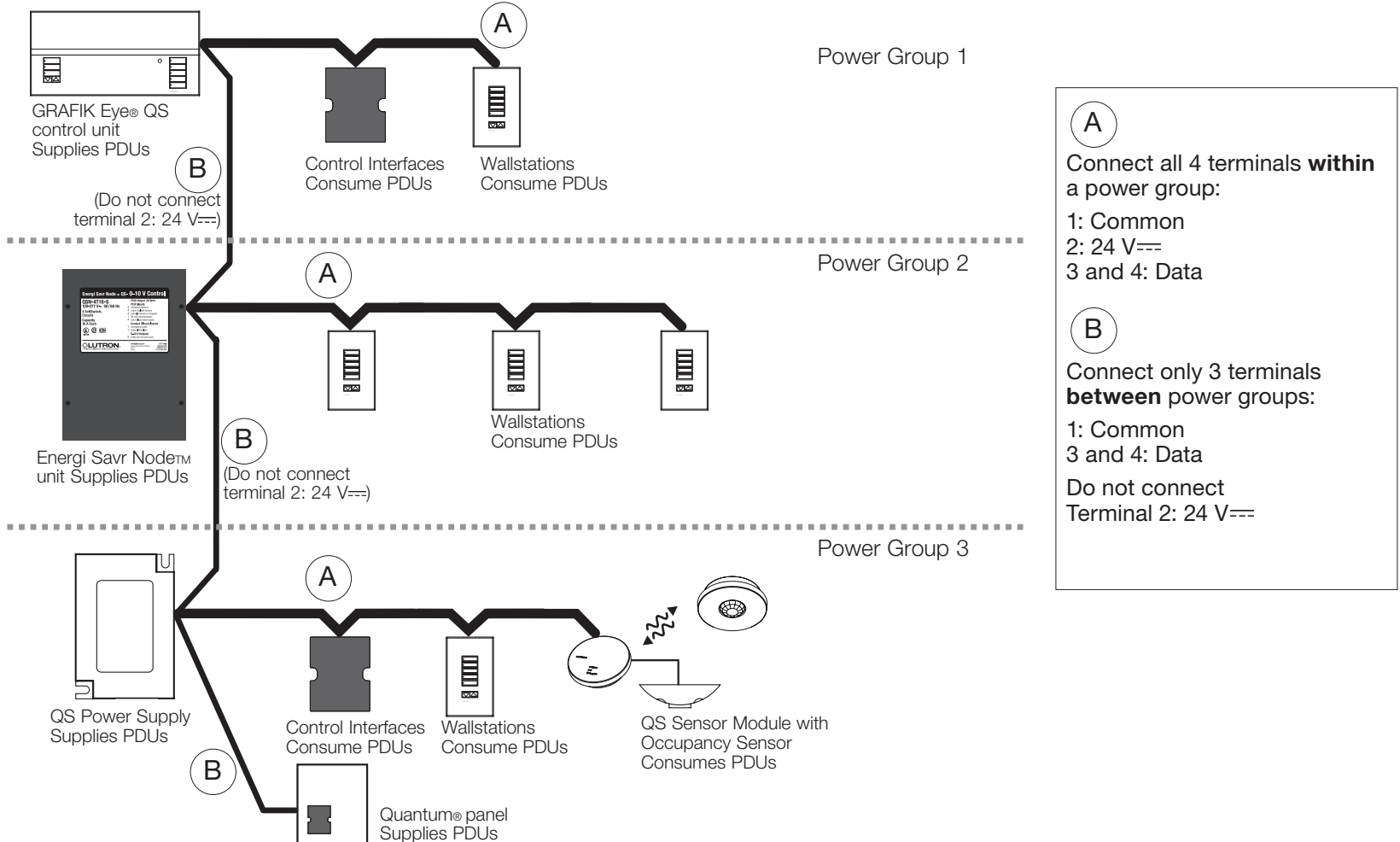
QS Link Wiring Length	Wire Gauge	Lutron Cable Part Number
Less than 500 ft (153 m)	Power (terminals 1 and 2) 1 pair 18 AWG (1.0 mm <sup>2</sup> )	GRX-CBL-346S (non-plenum) GRX-PCBL-346S (plenum)
	Data (terminals 3 and 4) 1 twisted, shielded pair 22 AWG (0.5 mm <sup>2</sup> )	
500 to 2 000 ft (153 to 610 m)	Power (terminals 1 and 2) 1 pair 12 AWG (4.0 mm <sup>2</sup> )	GRX-CBL-46L (non-plenum) GRX-PCBL-46L (plenum)
	Data (terminals 3 and 4) 1 twisted, shielded pair 22 AWG (0.5 mm <sup>2</sup> )	

# Wiring the GRAFIK Eye® QS Control Unit: Power Group Wiring Example

On the QS link, there are devices that supply power and devices that consume power. Each device has a specific number of Power Draw Units (PDUs) it either supplies or consumes. A Power Group consists of one device that supplies power and one or more devices that consume power; each Power Group may have only one power-supplying device. Refer to the QS Link Power Draw Units specification submittal (Lutron PN 369405) for more information concerning PDUs.

Within Power Groups on the QS link, connect all 4 terminals (1, 2, 3, and 4), shown by the letter A in the diagram. Between devices on the QS link that supply power, connect only terminals 1, 3, and 4 (NOT terminal 2), shown by the letter B on the diagram.

Wiring can be T-tapped or daisy-chained.





# Completing Installation of the GRAFIK Eye® QS Control Unit

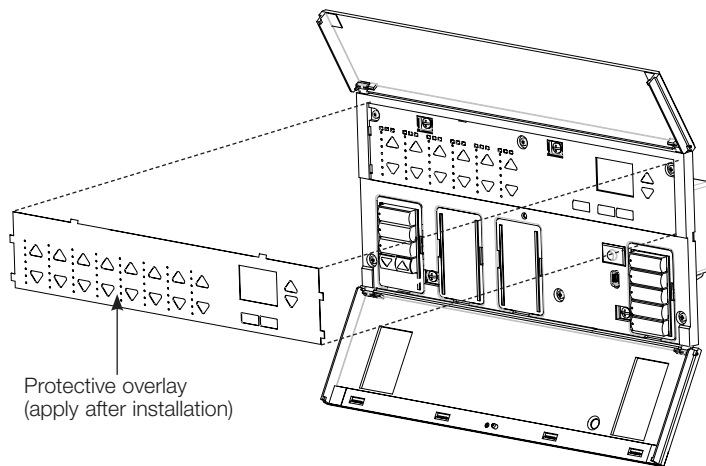
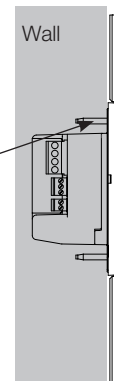
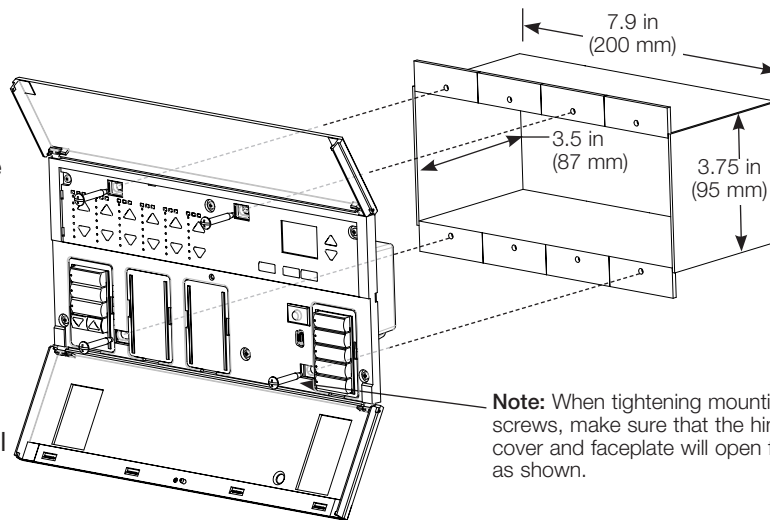
1. Mount the control unit in the wallbox as shown using the four screws provided.

**Note:** Follow all local and national electrical codes when installing IEC PELV/NEC® Class 2 wiring with line voltage/mains wiring.

2. Verify installation:

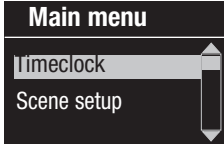
- Restore power.
- Press the top scene button. The LED will light.
- Press the zone raise and lower buttons. Make sure the control unit is dimming all connected loads.

3. Apply the protective overlay to the control unit.

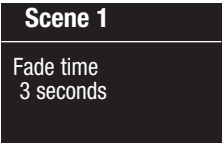


# Programming Mode

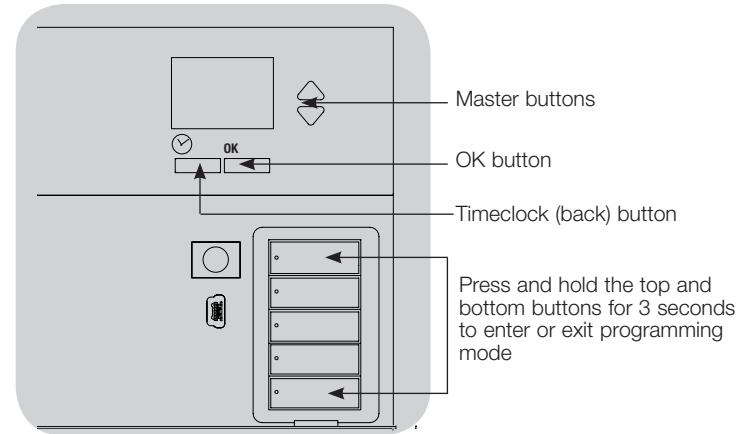
## Entering and Exiting Programming Mode



Entering 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.



Exiting 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 question, the Timeclock button is “No”.

# Wireless Mode

Many models of the GRAFIK Eye® QS control unit 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.

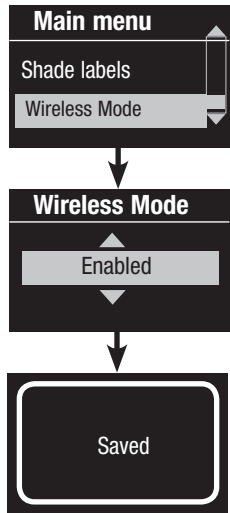
(See the RadioRA® Setup Guide; Lutron PN 044254.)

Units supporting wireless communication are labeled “GRAFIK Eye® QS Wireless” on the front label of the unit.

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 associated while in Enabled mode.

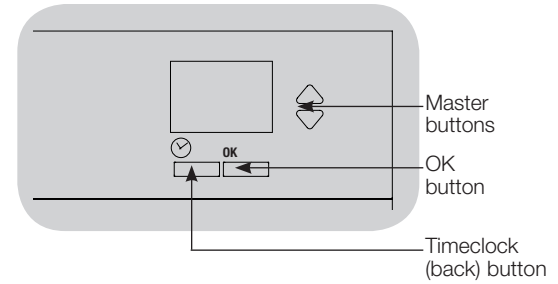
## Changing the wireless mode of the GRAFIK Eye® QS Wireless control unit:



1. Enter programming mode.
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.

### Notes

- The wireless signal has a range of 30 ft (9 m) through standard construction or 60 ft (18 m) line of sight.
- When used within a RadioRA® 2 system, the wired QS link on the GRAFIK Eye® QS control unit 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 and Industry Canada license-exempt RSS standard(s). 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.

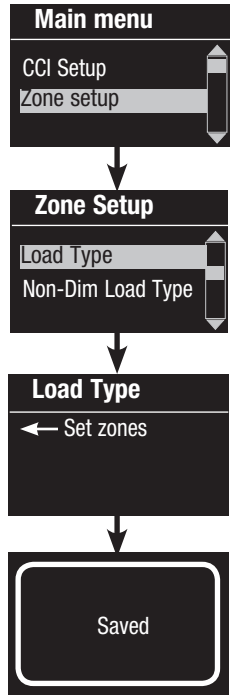
These limits are designed to provide reasonable protection against harmful interference in a residential and commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference 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.

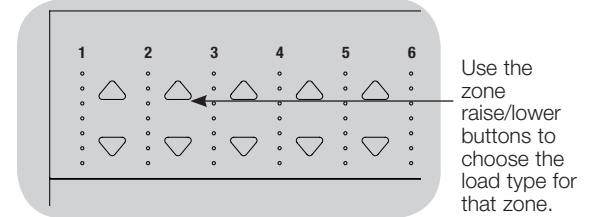
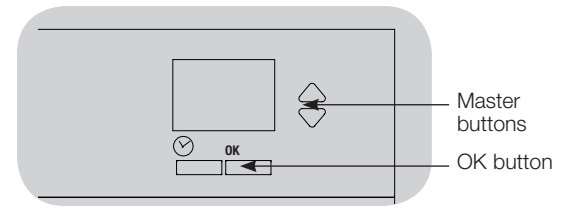
Consult the dealer or an experienced radio/TV technician for help.

# Zone Setup

## Assigning Load Types

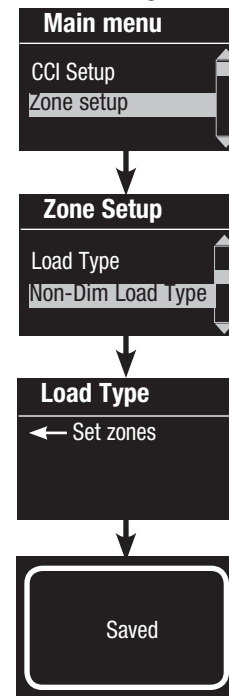


1. Enter programming mode.
2. Use the Master buttons to highlight “Zone setup” and press the OK button to accept.
3. Use the Master buttons to highlight “Load type”. Press the OK button to accept. See “Setting Load Types” table on the next page.
4. Use the zone raise/lower buttons to choose the load 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 saved.
6. Exit programming mode.



## Assigning Non-Dim Load Type

Zones assigned to non-dim loads have three available configurations:

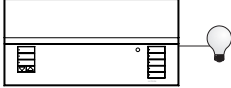
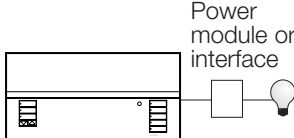


- LOFO: Last On, First Off
- FOFO: First On, First Off
- FOLO: First On, Last Off

Scenes made up of both dim and non-dim load types will toggle the non-dim loads before the dim loads in a “First” on/off configuration, and after the dim loads in a “Last” on/off configuration.

1. Enter programming mode.
2. Use the Master buttons to highlight “Zone setup” and press the OK button to accept.
3. Use the Master buttons to highlight “Non-Dim 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 non-dim load type for that zone. (Zones not programmed as non-dim will be displayed as Unaffected.) Press the OK button to accept.
5. The info screen will confirm that your load type has been saved.
6. Exit programming mode.

## Zone Setup (continued)

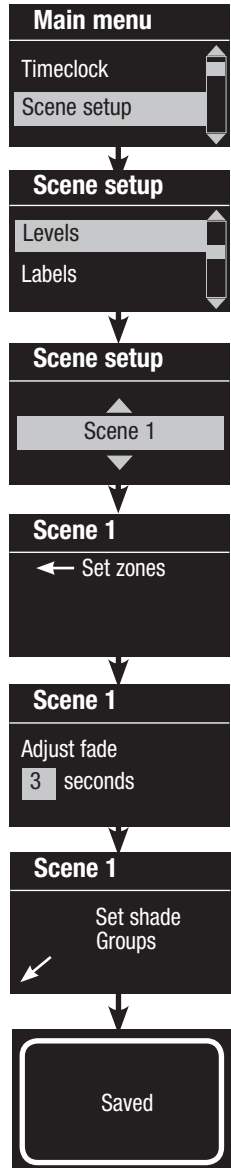
Setting Load Types			
		Direct control via GRAFIK Eye® QS control unit	Control via power module or interface
			
Fixture load type		Choose this load type from the menu on the GRAFIK Eye® QS control unit:	
Zones 1 - 6	Incandescent	Incandescent	Power module
	MLV (magnetic low-voltage)	MLV	Power module
	ELV (electronic low-voltage)	—	Power module
	Hi-Lume®/Eco-10®	—	Fluorescent module
	0-10 V	—	Fluorescent module
	Non-dim lighting loads	Non-dim	Non-dim
	Neon/Cold cathode	Neon, CC	Neon, CC
	Tu-Wire®	Tu-Wire	Tu-Wire
	Advance Mark X®	Tu-Wire	Tu-Wire
	DMX	—	DMX
	RGB/CMY DMX	—	RGB/CMY DMX
	Cree LR4/LR6 LED	Cree LR4/LR6 LED	Fluorescent module

### Load Type Notes

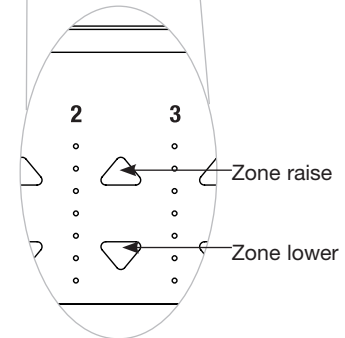
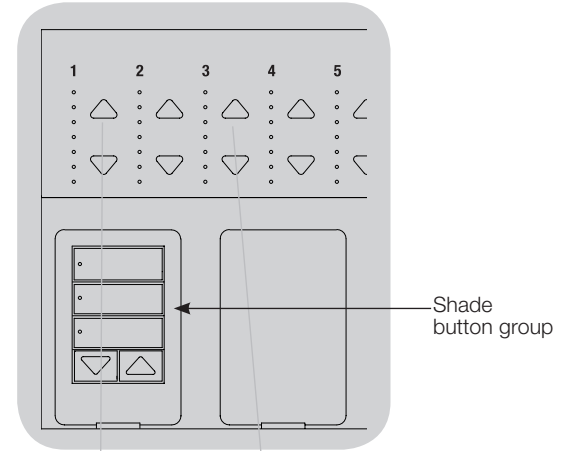
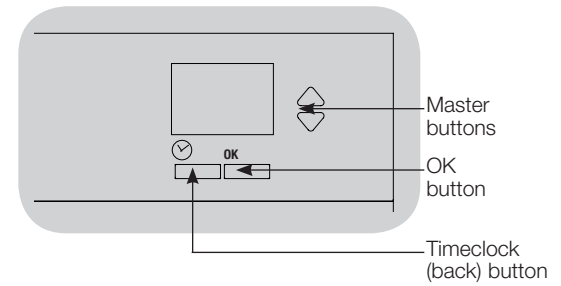
- All electronic low-voltage (ELV) lighting used with an interface must be rated for reverse phase control dimming. Before installing an ELV light source, verify with the manufacturer that their transformer can be dimmed. When dimming, an ELV interface (such as the PHPM-PA-DV-WH) must be used with the control unit.
  - 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.
  - Maximum total lighting load for Lutron® Tu-Wire® and Advance Mark X® electronic dimming ballasts (120 to 127 V $\sim$  only) must not exceed 6 A per zone or 16 A per unit.
- ### Zone ratings:
- Not all zones must be connected; however, connected zones must have a minimum load:  
120 - 127 V $\sim$ : 25 W  
220 - 240 V $\sim$ : 40 W
  - Maximum zone loads:  
120 - 127 V $\sim$ : 800 W  
220 - 240 V $\sim$ : 1200 W
  - Maximum total lighting load for magnetic low-voltage (MLV) varies by input voltage:  
120 - 127 V $\sim$ : 800 VA / 600 W  
220 - 240 V $\sim$ : 1200 VA / 960 W

# Scene Setup

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

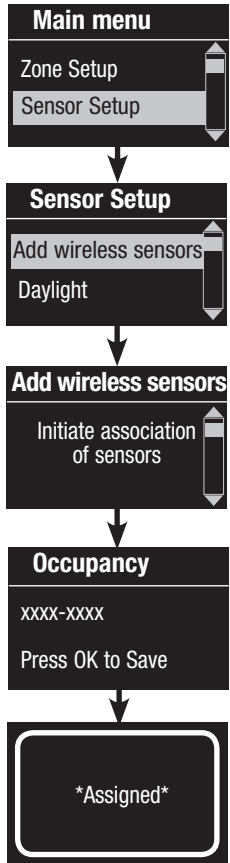


1. Enter programming mode.
2. Use the Master buttons to highlight “Scene setup” and press the OK button to accept.
3. Use the Master buttons to highlight “Levels” to adjust lighting and/or shade levels. Press the OK button to accept. Use the Master buttons to highlight the scene number of your desired 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.  
Set each shade group to the desired level for this scene. When all shade groups are at the desired level, press the OK button to accept.  
For shade programming, see the full installation and operation guide at [www.lutron.com/qs](http://www.lutron.com/qs).
7. The info screen will confirm that your scene has been saved.
8. Exit programming mode.



# Occupancy Sensor Setup

Associating wireless occupancy sensors and GRAFIK Eye® QS Wireless control units (for wireless enabled units only):

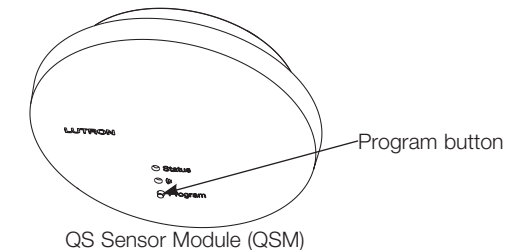
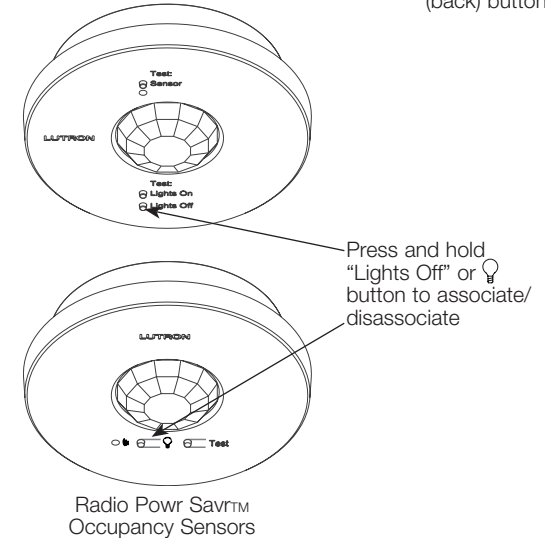
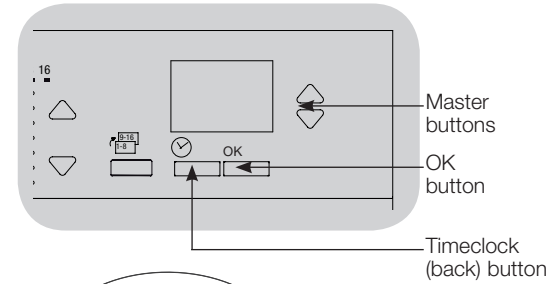


1. Make sure the wireless mode of the GRAFIK Eye® QS control unit is “Enabled”.
2. Enter programming mode.
3. Use the Master buttons to highlight “Sensor setup” and press the OK button to accept.
4. Use the Master buttons to highlight “Add wireless sensors” and press the OK button to accept.
5. Press and hold the “Lights Off” button (☾ on some sensors) on the occupancy sensor for 6 seconds. The lens will start flashing and the info screen on the GRAFIK Eye® QS Wireless control unit will display the sensor’s serial number.
6. Press the OK button on the GRAFIK Eye® QS control unit. A screen will confirm that the sensor has been assigned. (To disassociate a wireless occupancy sensor from the GRAFIK Eye® QS control unit, Refer to the Radio Powr Savr™ occupancy sensor install guide to return the sensor to its “out-of-box” functionality. Doing so will remove its programming from the GRAFIK Eye® QS control unit.)
7. Repeat the above steps for all desired sensors.
8. Exit programming mode.

## Associating wireless occupancy sensors through QS Sensor Modules (QSM):

1. Press and hold the Program button on the QSM for 3 seconds to enter programming mode. There will be 1 audible beep and the Status LED will begin flashing. The info screen on the GRAFIK Eye® QS control unit will display that the QSM is in programming mode.
2. Press and hold the “Lights Off” button (☾ on some sensors) on the occupancy sensor for 6 seconds. There will be 3 audible beeps from the QSM to verify association.
3. Press and hold the Program button on the QSM for 3 seconds to exit programming mode.

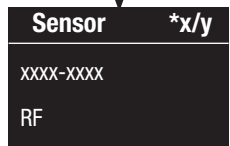
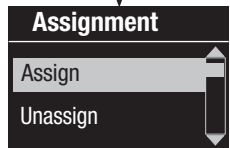
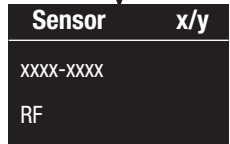
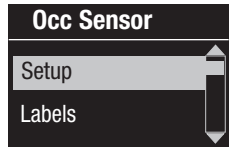
**Note:** The wireless signal has a range of 30 ft (9 m) through standard construction or 60 ft (18 m) line of sight.



# Occupancy Sensor Setup

## Scene Mode

This step allows you to assign up to four occupancy sensors to the GRAFIK Eye® QS control unit.



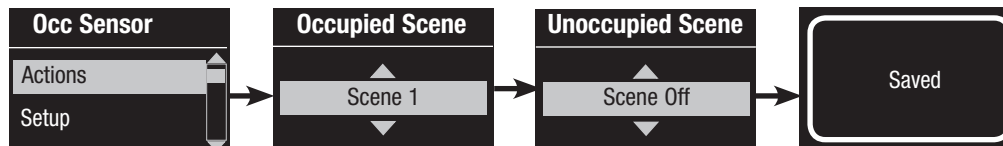
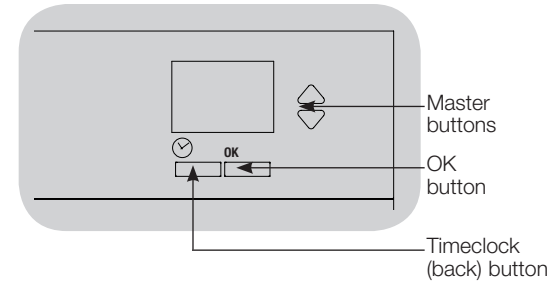
## Selecting Sensors

1. If not already done, associate occupancy sensors and set to "Scene Mode".
2. Use the Master buttons to highlight "Setup" and press the OK button to accept. The info 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. Once a sensor has been assigned, it will appear with an asterisk (\*) in the sensor list. Repeat for additional sensors.

**Note:** If wireless sensors are not found, verify that they are associated correctly.

## Setting the Sensor Action

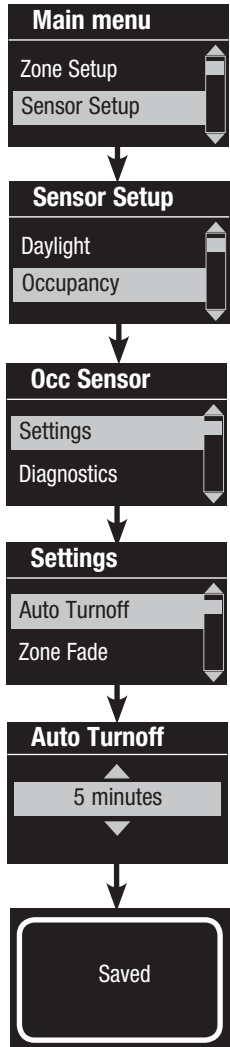
1. Press the Timeclock (back) button to return to the Occ Sensor screen. Use the Master buttons to highlight "Actions" and press the OK button. By default, the occupied scene is set to "No Action" and the unoccupied scene is set to "Scene Off".
2. Use the Master buttons to highlight the scene you wish 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.
3. Exit programming mode.





# Occupancy Sensor Setup

## Configuring Occupancy Sensor Settings (optional)



### Occupancy Sensor Settings

**Note:** These settings affect all sensors assigned to the GRAFIK Eye® QS control unit.

**Grace Period:** If the GRAFIK Eye® QS control unit is transitioning to an unoccupied state, motion detected within the grace period will return the lights to 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. Use when occupancy sensor does not provide sufficient delay.

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 control unit 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).

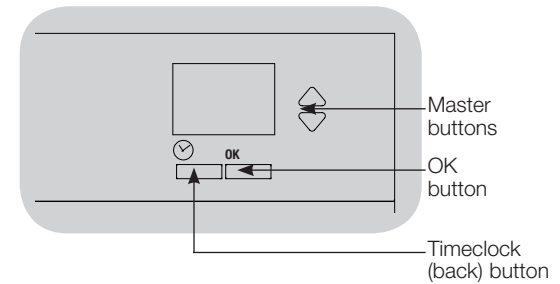
Range: Disabled or 1 – 30 minutes (default Disabled).

**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 – 10 minutes (default 10 seconds).

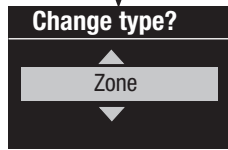
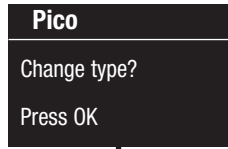
### Configuring the Sensor Settings:

1. Enter programming mode.
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. 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.

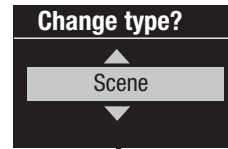


# Pico® Wireless Control Setup

Associating the Pico® wireless control with a GRAFIK Eye® QS Wireless control unit:  
(for wireless enabled GRAFIK Eye® QS control units only)

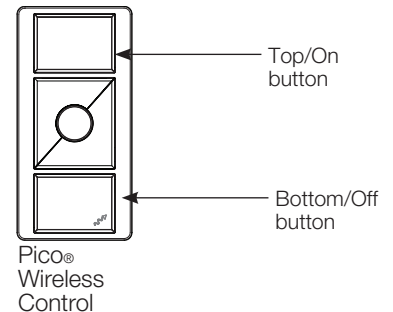
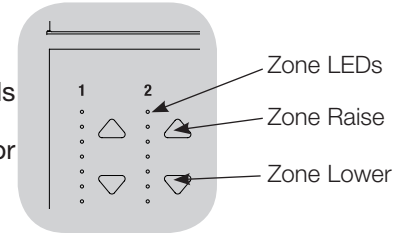
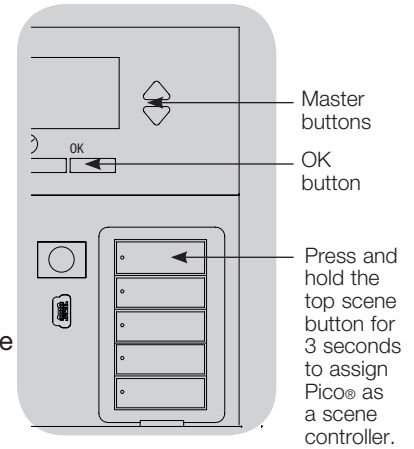


OR



1. Make sure the wireless mode of the GRAFIK Eye® QS control unit is “Enabled”.
2. On the Pico® wireless control, press and hold the top (on) and bottom (off) buttons for 3 seconds. The info screen on the GRAFIK Eye® QS control unit will display the Pico® options. Press the OK button on the GRAFIK Eye® QS control unit to select the desired operation type for the Pico®.
- 3a. To assign the Pico® wireless control as a zone controller, use the Master buttons to select “Zone” and press the OK button to accept. Use the zone raise/lower buttons for a zone to select a desired preset level, and then press the zone raise and lower buttons simultaneously for 1 second (until the zone LEDs flash at the programmed preset level). Repeat for all zones you wish to control with the Pico® wireless control.
- OR
- 3b. To assign the Pico® wireless control as a scene controller, use the Master buttons to select “Scene” and press the OK button to accept. Press and hold the top scene button on the GRAFIK Eye® QS control unit for 3 seconds (until the scene LEDs flash).
4. On the Pico® wireless control, press and hold the top and bottom buttons for 3 seconds until the LEDs on the GRAFIK Eye® QS control unit stop flashing.

Note: The wireless signal has a range of 30 ft (9 m) through standard construction or 60 ft (18 m) line of sight.



# Troubleshooting

Symptom	Possible Causes	Solution
Unit does not power up	Circuit Breaker is off	Switch circuit breaker on
Unit does not control loads	Miswire	Verify wiring to unit and loads
Circuit breaker is tripping	System short circuited	Find and correct shorts
	System overload	Verify zone/unit loading is within ratings (see Zone Setup section)
Zone control does not work	Miswire	Make sure loads are connected to the right zones
Zone control yields incorrect results	Loose or disconnected wire	Connect zone wires to loads
	Burned out lamps	Replace bad lamps
	Incorrect load type selected	Assign the zone to the appropriate load type (see Zone Setup section)
	Dimming limits set incorrectly	Adjust High End/Low End values (see Zone Setup section)
One or more zones are always “full on” and zone intensity is not adjustable Zone control affects more than one zone	Miswire	Make sure loads are connected to the right zones
	Shorted line output	Check wiring; if wiring is correct, call Lutron Technical Support
Faceplate is warm	Normal operation	Solid-state controls dissipate about 2% of the connected load as heat. No action is required
Unit does not allow scene change or zone adjustments	Unit is in wrong save mode	Change to correct save mode
	QS device in system has locked the unit	Check programming and state of QS devices
Cannot program fade time from “Scene Off”	Fade time from “Scene Off” is not programmable; can only program fade time to “Scene Off”	Fade time from “Scene Off” is always 3 seconds
Integral (direct-wired) contact closure input does not work	Miswire	Check wiring on contact closure input
	Input CCI signal is not received	Verify the input device is operating properly
	Unit is in wrong CCI mode and/or type	Change to correct CCI mode and/or type for your application
QS devices on link are not working	Miswire or loose connection on QS link	Verify QS link wiring to all devices
	QS device is not associated	Place the QS device into programming mode, and hold the “Scene 1” button on the GRAFIK Eye® QS control unit to associate the two devices
	QS device programming is incorrect	Verify the functionality and programming on the QS devices
Timeclock events do not occur Sunrise or sunset events do not occur at the correct time	Timeclock is disabled	Enable the timeclock
	Time/date is not set correctly	Set the time/date
	Location is not set correctly	Set the latitude and longitude of the unit’s location
	Holiday schedule is in effect	Normal schedule will resume when the holiday ends

# 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 lighting 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.
2. 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.
3. Equipment and parts external to the unit, including those sold or supplied by Lutron (which may be covered by a separate warranty).
4. 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.

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### 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.

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