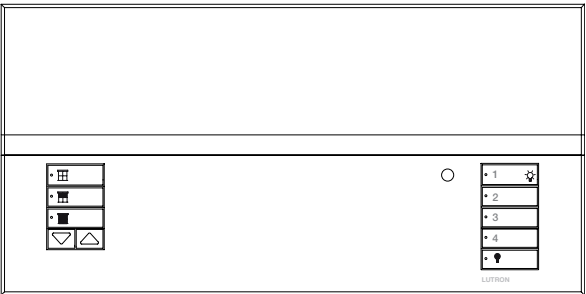


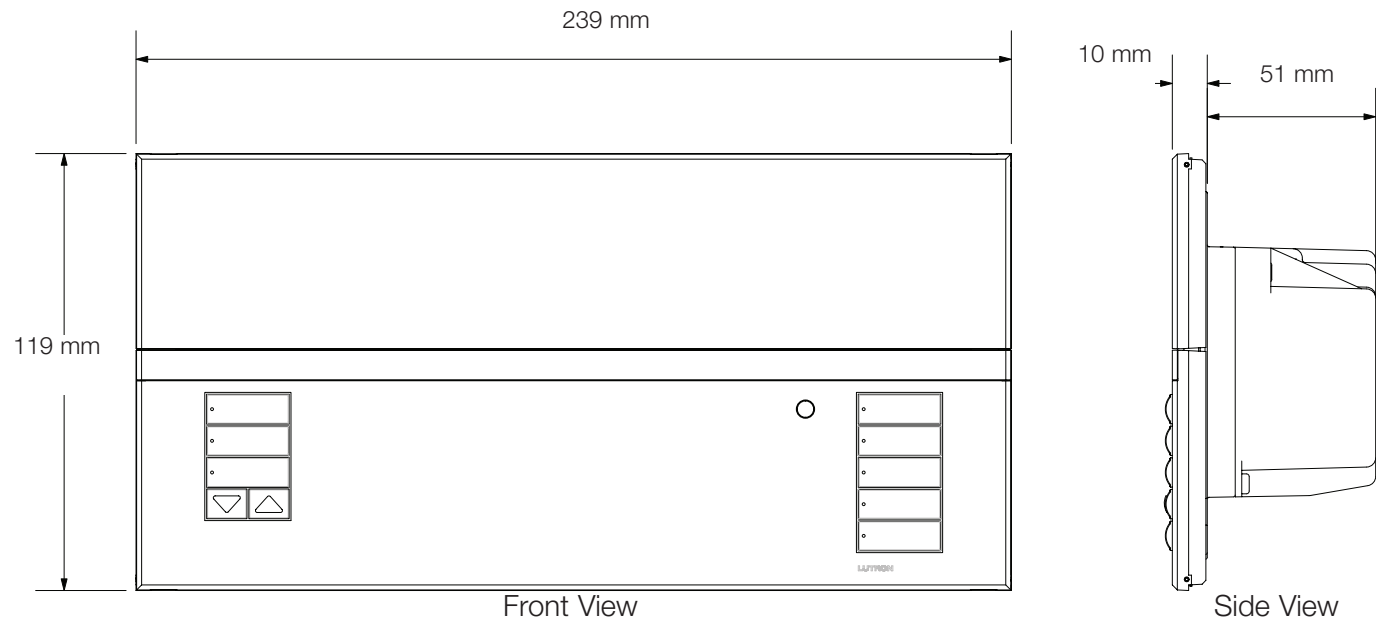
GRAFIK Eye® QS Control Unit with DALI (CE)



**Description**

GRAFIK Eye® QS with DALI is the premier energy-saving lighting and shade control. GRAFIK Eye® QS features an astronomic timeclock, intuitive lighting presets, and direct shade control, which are seamlessly integrated with DALI-compliant output devices, and Lutron’s QS components and systems. Now with an integral DALI-compliant bus supply, you can use the GRAFIK Eye® QS with DALI to control digital loads and shades without interfaces, and integrate with a variety of Lutron products and systems, including Sivoia® QS shades and all Lutron wired QS products and systems, including Quantum®.

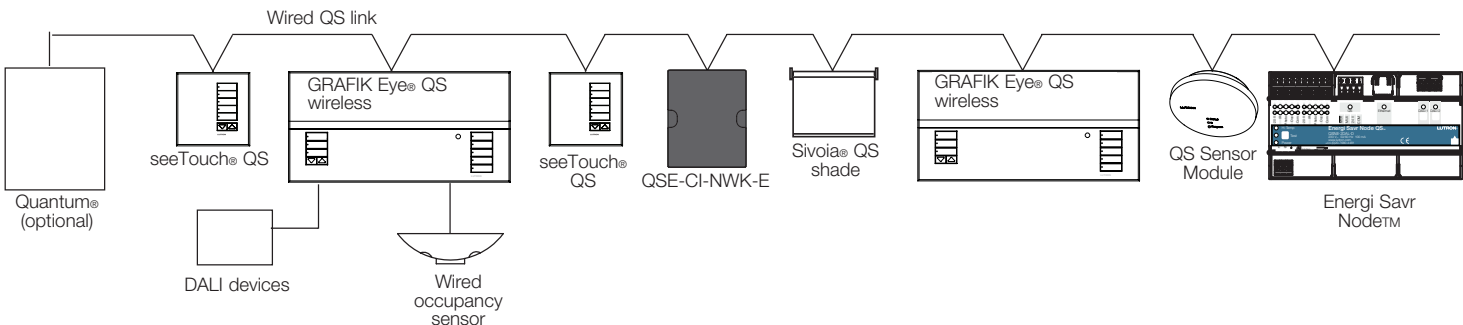
Mechanical Dimensions



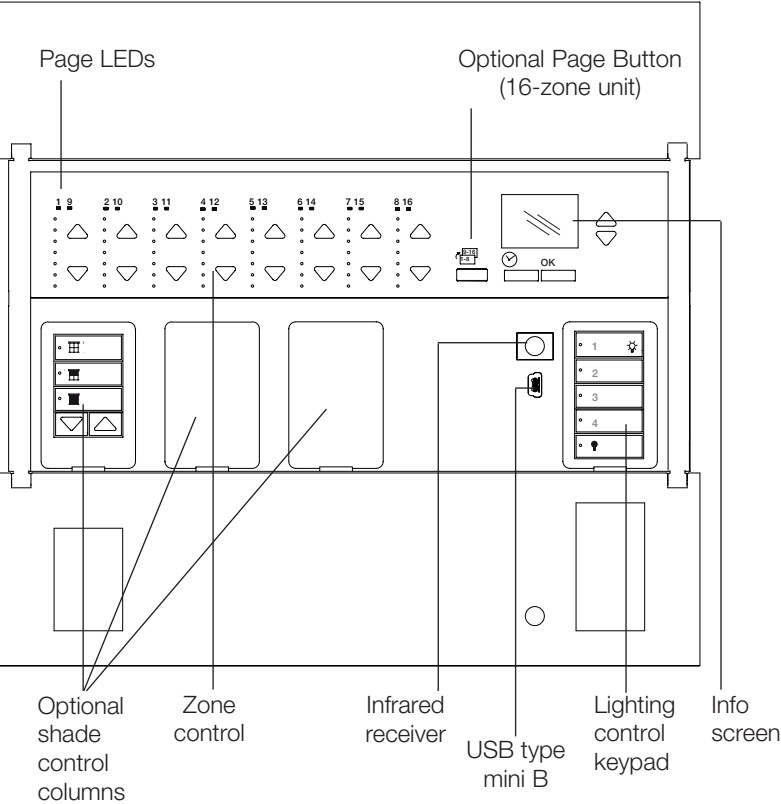
Fits into a 4-gang U.S. backbox, 90.4 mm deep (Lutron P/N 245-254) or 76.2 mm deep (Lutron P/N 241-400)

System Topology

Example of Wired System



Job Name:	Model Numbers:
Job Number:	



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

- Features**
- Pushbutton recall of four preset lighting scenes, plus Off.
  - Sixteen (16) total available scenes, plus Off scene.
  - Optional integrated shade control buttons, which can also be added to the unit after installation.
  - Master override buttons to raise and lower all lights.
  - Allows setup of lighting scenes and shade presets using buttons on the control unit.
  - Built-in infrared (IR) receiver.
  - External IR connection.
  - Built-in astronomic timeclock.
  - Info screen shows zone light level percentage, energy savings, zone labeling, programming, and Digital Addressable Load setup.
  - Lockout option prevents accidental changes.
  - Occupancy sensor input and 24 V<sup>---</sup> power for one occupancy sensor.
  - QS communication link for seamless integration of lights, motorised window treatments, wallstations, and integration interfaces.
  - Compatible with all Lutron QS system components.
  - Control up to 6, 8, or 16 zones of DALI-compliant loads from internal bus supply.
  - Up to 64 DALI-compliant output devices can be addressed and grouped into zones.
  - Integral DALI setup and programming through the info screen.
  - Backlit buttons with engraving make unit easy to locate and operate.
  - Available in a variety of colours and finishes.

Job Name:	Model Numbers:
Job Number:	

## Specifications

### Input Power

- 220-240 V $\sim$  50/60 Hz

### Environment

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

### Compliance

- CE

### Lighting Sources/Load Types

- Up to 64 DALI-compliant output devices (devices must comply with IEC/EN 60929) can be addressed and grouped into zones.
- Before system is addressed, Zone 4 will transmit broadcast commands to all DALI-compliant loads wired to the GRAFIK Eye® QS.
- Zones on Energi Savr Node™ products wired to the same QS link
  - Zones on Energi Savr Node™ with Softswitch®
  - Zones on Energi Savr Node™ for 0-10 V
  - Zones on Energi Savr Node™ with EcoSystem®
 Please refer to "Remote Zone Mapping" for important information.
- DMX channel(s) through DMX output interface (QSE-CI-DMX). Please refer to "Accessory Controls: DMX Output Interface"

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

### Key Design Features

- Tested to withstand 16 kV electrostatic discharge without damage or memory loss.
- Tested to withstand voltage surges of up to 6 000 V $\sim$  and current surges of up to 3 000 A. Lightning strike protection meets ANSI/IEEE 62.41-1980 standard.
- Power failure memory retains programming and light level settings for up to 10 years in the event of a power loss.
- The GRAFIK Eye® QS supplies 3 Power Draw Units (PDUs) on the QS link.  
For complete information, see "Power Draw Units on the QS Link," Lutron P/N 369405
- Faceplate is hinged at the top and bottom, and stays open at 180° for ease of access.

### Scene and Shade Buttons

- Large, rounded buttons are easy to use.
- Backlit buttons with optional engraving make it easy to find and to operate the control unit in low light conditions (backlight can be disabled).
- Optional button engraving is angled up to the eye for easy reading.
- Predefined label stickers are included for field labeling.
- 4 preset lighting scenes, plus Off, are accessible from the front of the control unit.
- 12 additional scenes are stored in the control unit and are accessible from the integral timeclock, see Touch® QS wallstations, and QS interfaces.
- Light levels fade smoothly between scenes. Fade time can be set differently for each scene: 0 to 59 seconds, or 1 to 60 minutes. Maximum fade time from Off is 3 seconds. Maximum fade time from Scene Off is 3 seconds.

### Shade Control

- The GRAFIK Eye® QS can include up to 3 shade button columns. Each column has backlit open, preset, close, and raise/lower buttons.
- Each shade button column can be programmed to operate one shade or a group of shades. (Shades may be assigned to more than one shade button column).
- Faceplates are available with 1, 2 and 3 shade button columns.

### Zone Control

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

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	

## Specifications

### Info Screen

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

### Astronomic Timeclock

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

### System Communications and Capacities

- IEC PELV wiring connects control units, wallstations, motorised shades, and control interfaces.
- A QS system can have up to 100 devices and 100 zones.
- Class 1/Class 2 wiring connects DALI-compliant output devices to control unit.

### Infrared

- Infrared (IR) receiver allows infrared transmitters to select 8 scenes, raise/lower lighting zones, or raise/lower shades.
- Transmitter buttons imitate buttons on faceplate.
- 15 m line of sight range.
- Terminal block infrared input for direct contact with external IR connection.
- IR can be disabled via programming.
- Works with Lutron GRX-IT and GRX-8IT infrared remote controllers.

### Accessory Controls: seeTouch® QS Wallstations (QSWE)

- Wired seeTouch® QS keypads provide the following features:
  - Access to one or more of the 16 scenes on the GRAFIK Eye® QS Wireless
  - Zone toggle, partitioning, sequencing, fine tune, panic mode, and timeclock enable/disable
  - Contact closure inputs
  - Certain functions are only available on specific wallstation configurations. Refer to the seeTouch® QS specification submittal.

### Accessory Controls: QS Sensor Module (QSM)

- The QS Sensor Module provides a means to link wired or wireless occupancy sensors or daylight sensors, Pico® controls, and wired infrared sensors to a GRAFIK Eye® QS control unit via the wired QS link.
  - Occupancy sensors wired (or wirelessly linked) to a QS Sensor Module can be used by one or more GRAFIK Eye® QS control units on the wired link.
  - Daylight sensors wired (or wirelessly linked) to a QS Sensor Module can be used by one or more GRAFIK Eye® QS control units on the wired link.
  - Infrared sensors can control either one or more zones or scenes on the GRAFIK Eye® QS. Functionality varies; refer to the documentation for the QS Sensor Module for details.
  - Pico® wireless controls can control either one or more zones or scenes on the GRAFIK Eye® QS.
  - Pico wired controls can be used, when connected to a QS Sensor Module, to control one or more zones or scenes on the GRAFIK Eye® QS control unit.

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	

## Specifications

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

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

### Accessory Controls:

#### DMX Output Interface (QSE-CI-DMX)

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

### Accessory Controls: Ethernet and RS232 Interface (QSE-CI-NWK-E)

- Allows for monitoring and control of the outputs and local scenes of the GRAFIK Eye® QS.

### DALI Ballasts and Devices

- Supports all DALI ballasts (maximum of 64 ballasts per GRAFIK Eye® control unit)

### Other Accessory Controls and Devices

- Energi Savr Node™ QS (ESN)

### Occupancy Sensor(s)

- The GRAFIK Eye® QS works with occupancy sensors through either:
  - Scene Control: Up to four sensors activate user-selectable occupancy and vacancy scenes.
  - Zone Control: up to four sensors per zone activate user-selected occupancy and vacancy zone levels.
- Occupancy sensors may include:
  - Contact closure sensor wired to CCI input on back of GRAFIK Eye® QS
  - Wired sensors connected to Energi Savr Node™
  - Wired or wireless sensors connected QS Sensor Module (QSM)
- If any sensor in a group detects occupancy, then the GRAFIK Eye® QS will go to the designated occupancy scene or zone level.
- If all sensors in a group detect vacancy, then the GRAFIK Eye® QS will go to the designated vacancy scene or zone level.
- Low battery: the Diagnostics screen will display a low battery symbol when applicable.
- If the GRAFIK Eye® QS control unit does not receive a signal from an occupancy sensor on the link (usually due to a dead battery), the lights associated with that sensor will go to the occupied level.

Job Name:

Model Numbers:

Job Number:

## Specifications

### Daylight Sensor(s)

- The GRAFIK Eye® QS with DALI works with compatible daylight sensors to adjust electric light levels based on measured daylight levels. Sensors can be configured to control either GRAFIK Eye® QS zones or groups of DALI loads independent of zoning.
- Daylight sensors may include:
  - Wired or wireless sensors connected to a QS sensor module (QSM)
- In Zone Mode, a daylight sensor can control one or more GRAFIK Eye® QS zones. Each zone can be calibrated to target light levels.
  - A zone can be controlled by no more than one daylight sensor
- In Group Mode, a daylight sensor can control one or more DALI loads, regardless of how they are zoned on the GRAFIK Eye® QS.
  - A group can be controlled by a single daylight sensor
  - Each group can be calibrated to independent target light levels
  - Up to 16 groups are available
- Daylight control can be enabled or disabled on a scene-by-scene basis
  - By default, daylight control is enabled in all scenes

**Note:** Daylight control through the GRAFIK Eye® QS only affects lighting loads. Shade groups cannot be controlled by daylight sensors. Daylighting does not affect DMX or RGB/CMY DMX loads. Daylighting of Remote Zones linked to Energi Savr Node™ zones must be configured at the Energi Savr Node™ unit or through the *iPod*.

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

- Each GRAFIK Eye® QS has one contact closure input (Terminal A).
  - The attached device must provide a dry contact closure or solid-state output.
  - Input is miswire-protected up to 36 V $\overline{=}$ .
- The contact closure is capable of accepting the following types of inputs:
  - Maintained (default): The GRAFIK Eye® QS control unit will act on both a contact closure and a contact open/release event.
  - Momentary: The GRAFIK Eye® QS control unit will act on only contact closure events.
- Each GRAFIK Eye® QS can supply 50 mA maximum at 24 V $\overline{=}$ .
  - Useful for powering occupancy sensors.
  - An auxiliary power supply must be used if the device requires more than 50 mA.
- The CCI is capable of operating in the following modes
  - Occupancy: If an occupancy sensor is wired directly to the GRAFIK Eye® QS, choose this setting so that the occupancy sensor will work correctly.
  - Emergency: This setting allows the GRAFIK Eye® QS to work with a LUT-ELI. When an emergency situation is detected, all lights will go to full on, and no operations will be allowed until the emergency signal is cleared.
  - Afterhours: Allows the CCI to start and end the afterhours mode.
  - Timeclock: Allows the CCI to enable and disable the timeclock.
  - Scene Lockout: Prevents the user from making any changes to the control unit. The current scene will stay on until the CCI enables normal operation.
  - Never Save: Prevents any changes from being saved while the CCI is being used.
  - Disable CCI: The CCI will have no effect on the system and will not appear on the list of available sensors.

iPod is a trademark of Apple Inc. registered in the U.S. and other countries.

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	

## Specifications

### Unit Dissipation

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

### System Limits

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

### Security Lockout Password

- A 4-digit password (using characters A to Z and 0 to 9) can be enabled/disabled to lock out access to the Programming Menu.
- By default there is no password enabled on the GRAFIK Eye® QS.
- If case the 4-digit password is forgotten, contact Lutron Technical Support to regain access.

### Remote Zone Mapping

- Map a GRAFIK Eye® QS zone directly to an Energi Savr Node™ output so that programmed scenes in the GRAFIK Eye® QS control unit will directly control the output levels of the Energi Savr Node™.
- Adjust high-end and low-end trim for remote zones through the Energi Savr Node™ or Energi Savr app software.
- Change load types of remote zones through the Energi Savr Node™ or Energi Savr app software.
- Configure daylighting for remote zones through the Energi Savr Node™ or Energi Savr app software.
- Required:
  - GRAFIK Eye® QS control unit with firmware version 7.000 or higher
  - Energi Savr Node™ unit with firmware version 6.000 or higher
  - Energi Savr app version 6.0.0 or higher (required only if the Energi Savr Node™ unit has been configured using the app)

### Partitioning

- When partition is open, creating one large space, automatically combines lighting preset functions for multiple GRAFIK Eye® QS control units.
- When partition is closed, creating two or more smaller spaces, lighting preset functions become independent.
- Requires one QWS2-2B wallstation, a GRX-IRPS infrared transmitter/receiver pair, and a GRX-12VDC power supply for operation.
- If occupancy sensors are required in a partitioned space, note that each room's occupancy sensor(s) will operate independent of the partition status.

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	



## GRAFIK Eye® QS for Digital Addressable Loads

### Custom Colour Options and Model Numbers

You must order a Base Unit and a Faceplate Kit

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

#### Base Unit

QSGR - \_ D

Prefix

Number  
of Zones

Digital Addressable Loads

6 = 6 zones  
8 = 8 zones  
16 = 16 zones

#### Example:

**QSGR-6D**

6-zone base unit  
and

**QSGFP-2IV-SGN**

Ivory faceplate kit with two  
shade columns and symbol-  
based engraving

#### Faceplate Kit

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

QSGFP -

Faceplate  
Prefix

Number  
of Shade  
Columns

Top  
Door  
Colour

Colour/  
Finish

Keypad  
Engraving  
Code

Omit = none  
1 = 1 column  
2 = 2 columns  
3 = 3 columns

Omit = same as  
unit  
T = Translucent

#### Faceplate Custom Colour/Finish Codes

##### Architectural Matte Finishes

White	WH
Ivory	IV
Beige	BE
Gray	GR
Brown	BR
Black	BL
Almond	AL
Light Almond	LA

##### Architectural Metal Finishes

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

##### Anodised Aluminum Finishes

Clear	CLA
Black	BLA
Brass	BRA

##### Satin Colour Matte Finishes

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

#### Keypad Engraving Codes

Omit = Unengraved

Ships with engraving certificate that  
customer can redeem at no charge

SGN = International (symbol-based) Engraving



Lighting  
keypad



Shade  
column

NST = Non-Standard Text Engraving  
Please visit the GRAFIK Eye® QS website  
at [www.lutron.com/grafikeyeqs](http://www.lutron.com/grafikeyeqs)  
for custom engraving forms. Submit  
completed form with order, and unit will  
ship engraved as specified by customer.

Job Name:

Model Numbers:

Job Number:



## GRAFIK Eye® QS for Digital Addressable Loads

### Custom Options and Model Numbers

See previous pages for Standard and Other Custom Model Numbers

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

### Custom Button Kit

# QSGB - 5B - WH -

Custom Button  
Kit Prefix

Button  
Configuration

Button  
Colour/  
Finish

Keypad  
Engraving  
Code

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

#### Button Kit Custom Colour/Finish

##### Codes

##### Architectural Matte Finishes

White	WH
Ivory	IV
Beige	BE
Gray	GR
Brown	BR
Black	BL
Almond	AL
Light Almond	LA

##### Satin Colour Matte Finishes

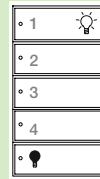
Snow	SW
Biscuit	BI
Eggshell	ES
Taupe	TP

#### Keypad Engraving Codes

Omit = Unengraved

Ships with engraving certificate that  
customer can redeem at no charge

SGN = Symbol-based Engraving



Lighting  
keypad



Shade  
column

NST = Non-Standard Text Engraving

Please visit the GRAFIK Eye® QS website  
at [www.lutron.com/grafikeyeqs](http://www.lutron.com/grafikeyeqs)  
for custom engraving forms. Submit  
completed form with order, and unit will  
ship engraved as specified by customer.

### Custom Stripe Kit

# QSGS -

Stripe  
Kit  
Prefix

Stripe Colour/  
Finish

#### Stripe Custom Colour/Finish Codes

Same as Faceplate colours on previous page

Job Name:

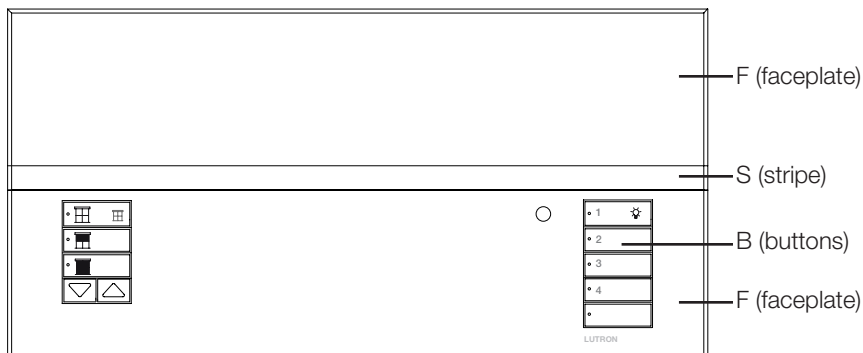
Model Numbers:

Job Number:

## GRAFIK Eye® QS for Digital Addressable Loads

### Standard Colour Combinations

See previous pages for Standard and Custom Model Numbers



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

Suffix	Faceplate (F)	Stripe (S)	Button (B)	Suffix	Faceplate (F)	Stripe (S)	Button (B)
<b>Architectural Matte</b>				<b>Satin Matte</b>			
WH	White	Gray	White	MN	Midnight	Gray	Black
IV	Ivory	Beige	Ivory	TP	Taupe	Gray	Taupe
BE	Beige	Ivory	Beige	SW	Snow	Gray	Snow
GR	Gray	Black	Gray	ES	Eggshell	Beige	Eggshell
BR	Brown	Black	Brown	BI	Biscuit	Eggshell	Biscuit
BL	Black	Gray	Black	LS	Limestone	Gray	Gray
AL	Almond	Light Almond	Almond	ST	Stone	Gray	Gray
LA	Light Almond	Almond	Light Almond	DS	Desert Stone	Taupe	Taupe
<b>Architectural Metal</b>				TC	Terracotta	Taupe	Taupe
BB	Bright Brass	Black	Black	BG	Bluestone	Gray	Gray
BC	Bright Chrome	Black	Black	HT	Hot	Taupe	Taupe
BN	Bright Nickel	Black	Black	MR	Merlot	Taupe	Taupe
SB	Satin Brass	Black	Black	SI	Sienna	Brown	Brown
SC	Satin Chrome	Black	Black	GB	Greenbrier	Gray	Gray
SN	Satin Nickel	Black	Black	SG	Sea Glass	Gray	Gray
QB	Antique Brass	Black	Black	MS	Mocha Stone	Taupe	Taupe
QZ	Antique Bronze	Black	Black	GS	Goldstone	Ivory	Ivory
<b>Anodised</b>				PD	Palladium	Gray	Gray
CLA	Clear	Black	Black	PL	Plum	Taupe	Taupe
BLA	Black	Black	Black	TQ	Turquoise	Gray	Gray
BRA	Brass	Black	Black				

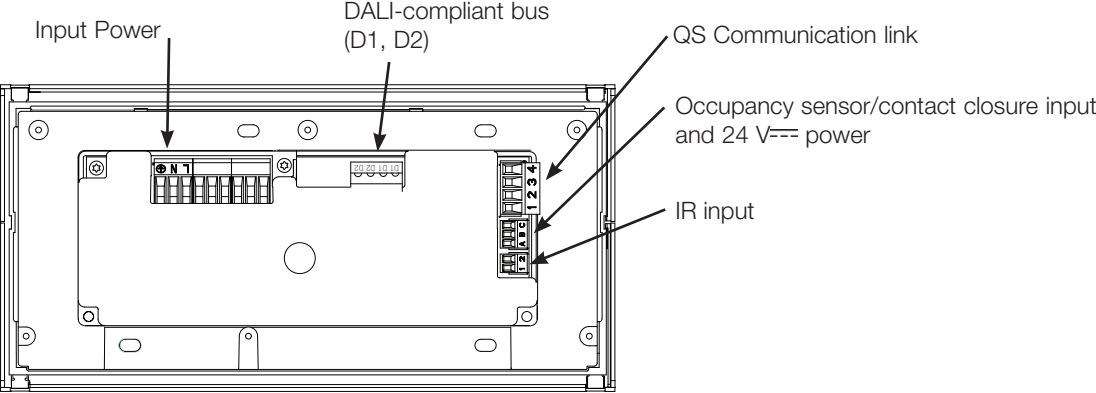
Job Name:

Model Numbers:

Job Number:

Overview

Terminations



Wire Gauge	Maximum DALI-compliant Bus Wire Length
4.0 mm <sup>2</sup>	671 m
2.5 mm <sup>2</sup>	427 m
1.5 mm <sup>2</sup>	275 m
1.0 mm <sup>2</sup>	175 m

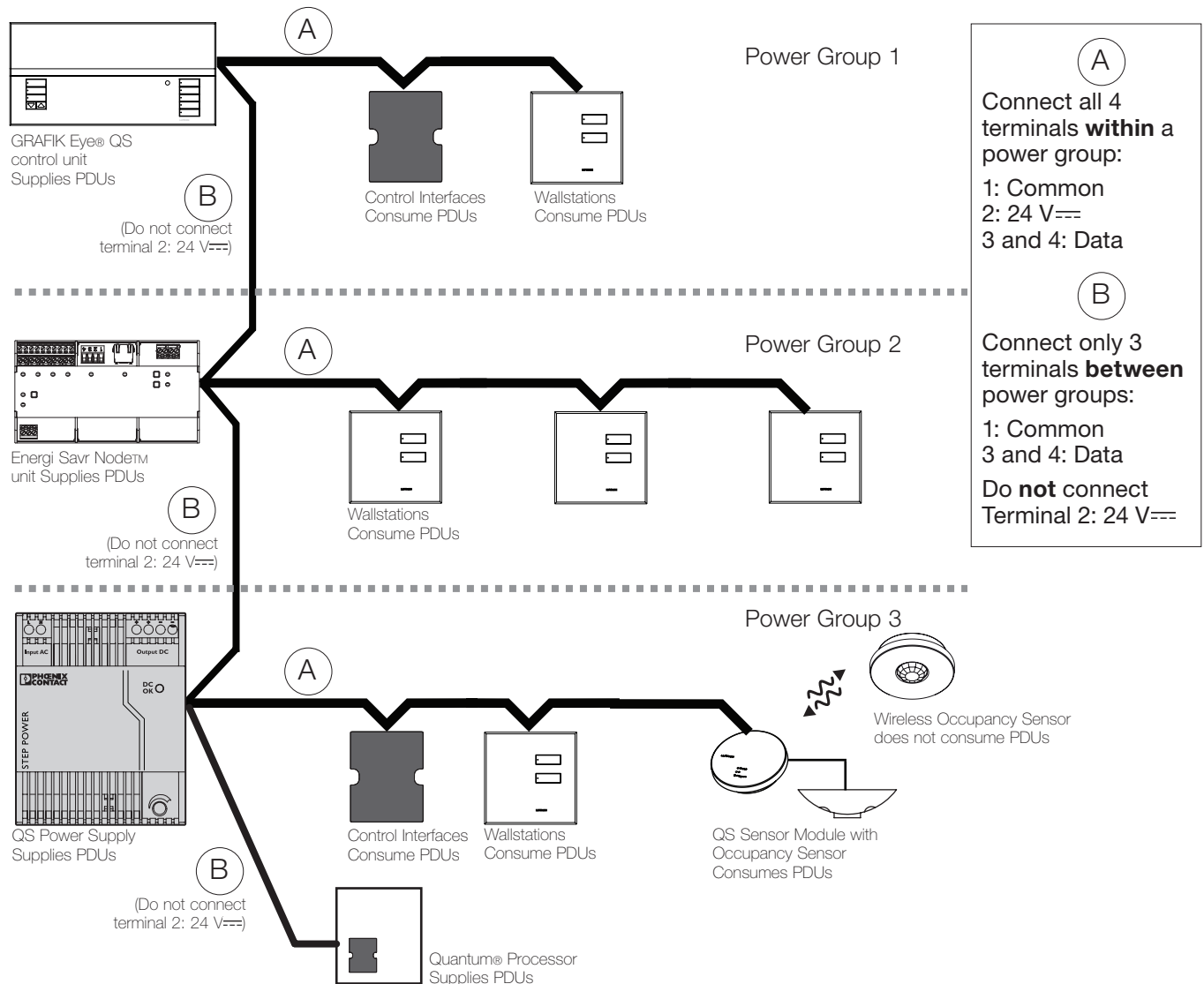
Job Name:	Model Numbers:
Job Number:	

## Power Group Wiring Example

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

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

Wiring can be T-tapped or daisy-chained.

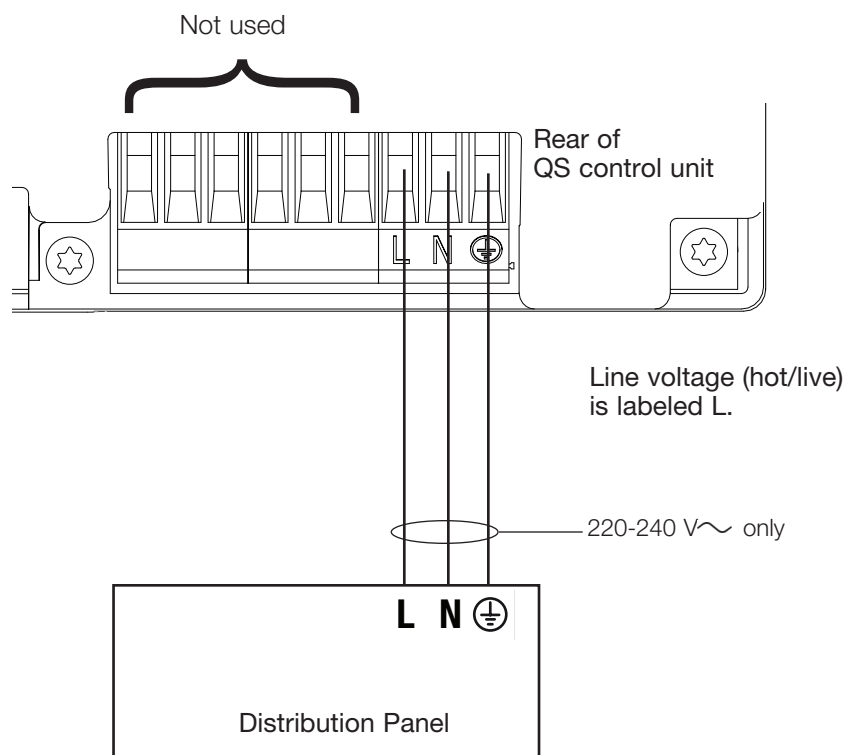


Job Name:

Model Numbers:

Job Number:

## Line Voltage Wiring



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

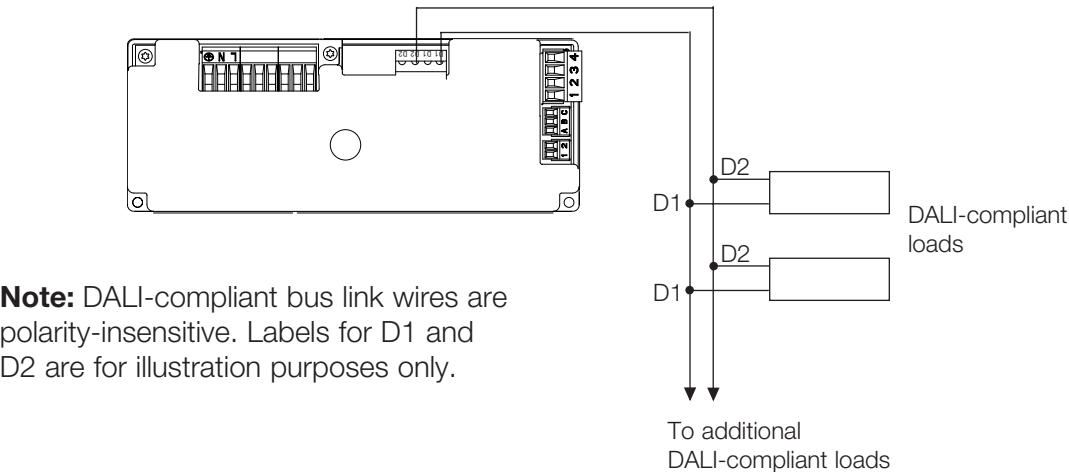
Job Name:

Model Numbers:

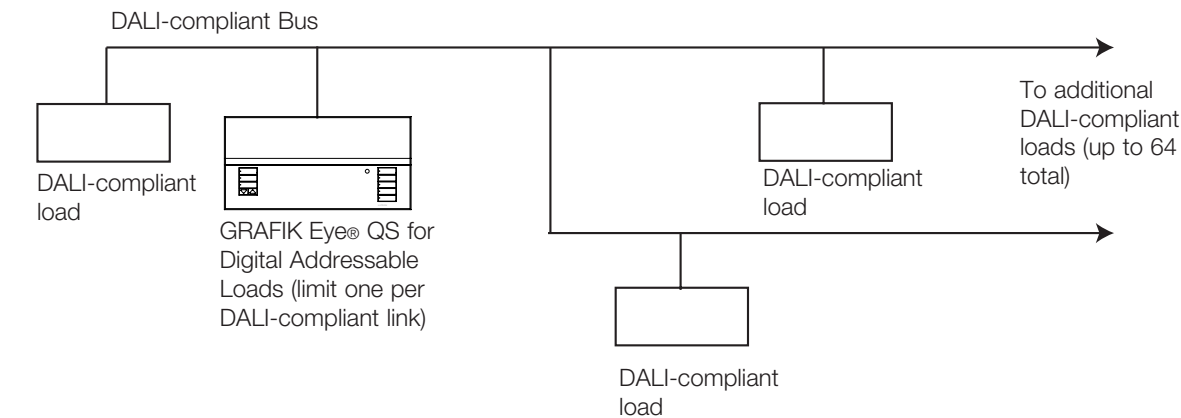
Job Number:

# DALI-Compliant Bus Wiring

## DALI-Compliant Bus Link Terminal Detail



## DALI-Compliant Bus Wiring Example



Job Name:	Model Numbers:
Job Number:	

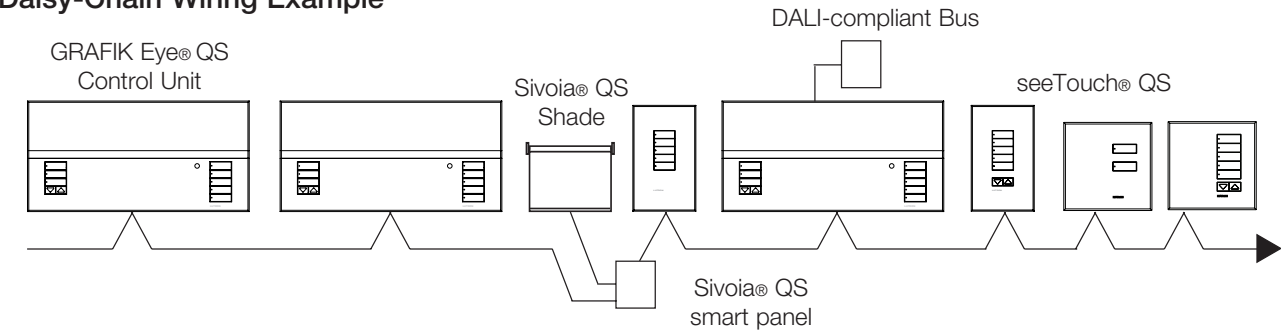
IEC PELV QS Link Wiring

- Wiring can be daisy-chained or T-tapped.
- Wiring must be run separately from line/mains voltage.
- Total length of control link must not exceed 610 m.

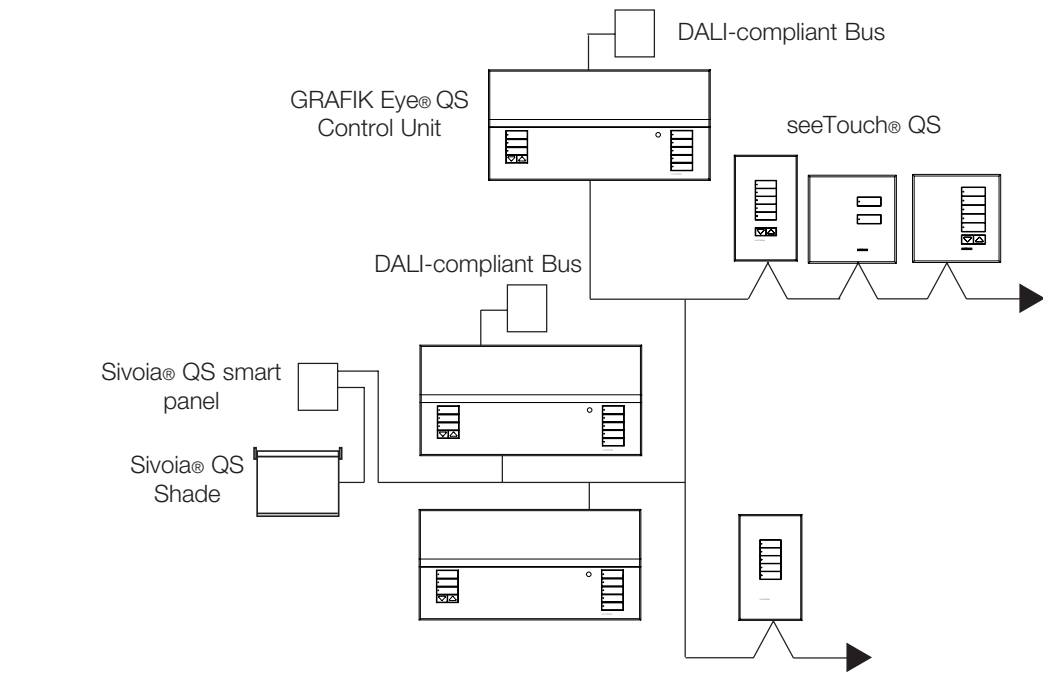
Wire Sizes (check compatibility in your area)

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

Daisy-Chain Wiring Example



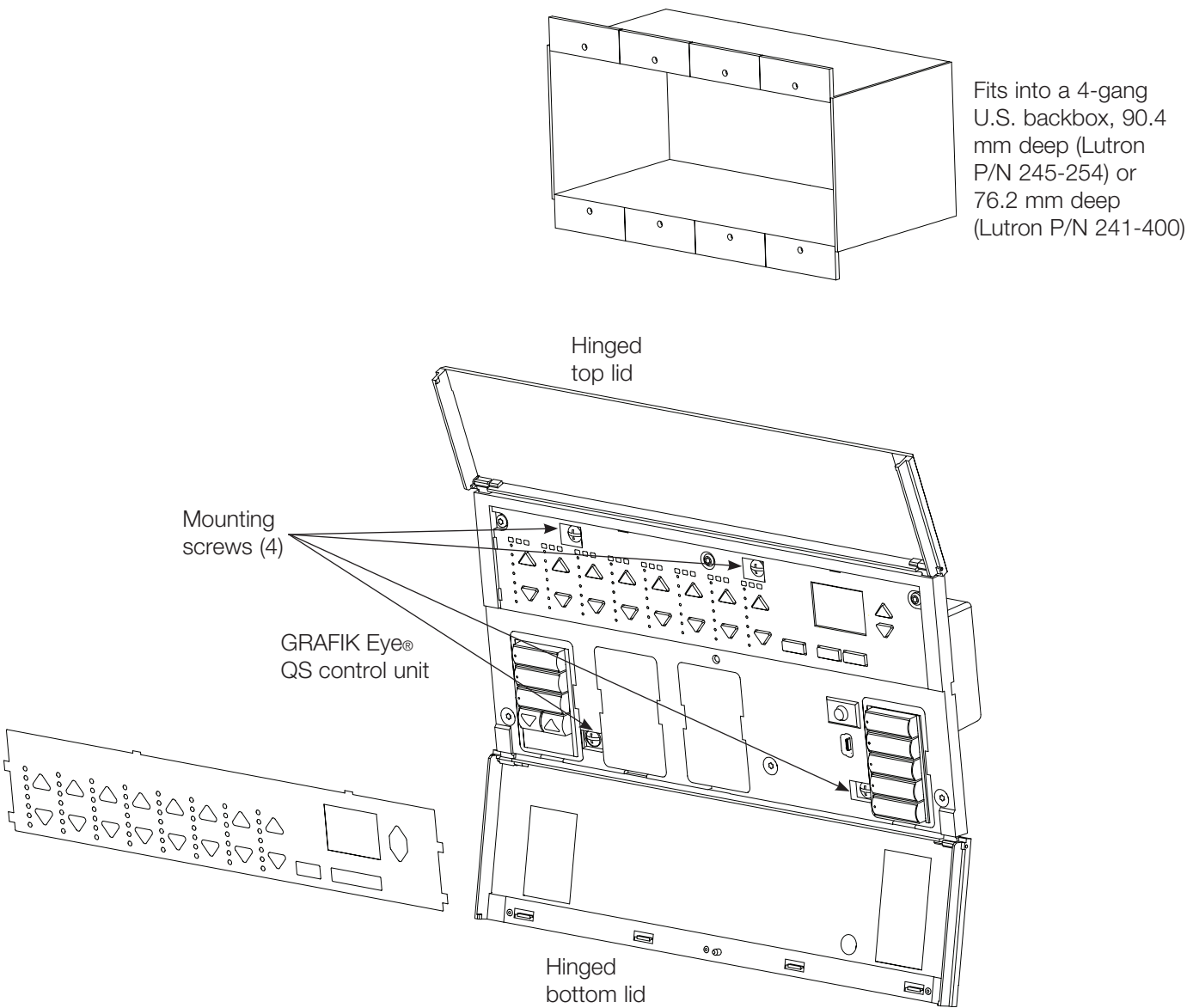
T-Tap Wiring Example



Job Name:	Model Numbers:
Job Number:	



Mounting



Job Name:	Model Numbers:
Job Number:	

## Lutron Approved DALI Ballasts

The Lutron policy requires that all DALI ballasts connected to Lutron DALI controllers be tested to meet the DALI specification called out in the IEC Standard 60929. We have found that although many DALI device manufacturers claim to make devices that meet the DALI standard, the devices fail when tested against a standard DALI qualification tester.

As a service to our customers, we have pre-qualified ballasts from reputed vendors. To lower installation and commissioning costs, we strongly encourage our customers to use devices from the approved list. Please check for updates to this list at [www.lutron.com](http://www.lutron.com).

If it is not possible to find an approved device that meets your job needs, please contact your Lutron salesperson, applications engineer or construction manager. We might be able to recommend an alternative. If not we might, at our discretion, charge a fee to test the ballast of your choice for compliance to the DALI standard.

If you need to send a DALI device to us for testing, please contact your Lutron salesperson, applications engineer or construction manager for a quote.

Our goal is to create a hassle free commissioning process for our customers.

Manufacturer	Model Number	Date Tested	# of Lamps	Wattage	Lamp Type
Phillips	HF-R TD 14-35 TL5 EII	March 11th 2010	1	14-35 W	TL5
Phillips	HF-R TD 240 PL-L EII	March 11th 2010	2	40 W	PL-L
Phillips	HF-R TD 318 TLD EII	March 11th 2010	3	18 W	TL-D
Osram	QTI DALI 2x28/54 DIM	March 11th 2010	2	28, 54 W	T5
Osram	QTI DALI 1x14/24 DIM	March 11th 2010	1	14, 24 W	T5
Osram	QTI DALI 1x28/54 DIM	March 11th 2010	1	28, 54 W	T5
Osram	QTI DALI 4X14/24 DIM	March 11th 2010	4	14, 24 W	T5
Osram	QTI DALI 2X35/49/80 DIM:	March 11th 2010	2	35, 49, 80 W	T5
Osram	QTI DALI 2X14/24 DIM	March 11th 2010	2	14, 24 W	T5
Osram	QTI DALI 3X14/24 DIM	March 11th 2010	3	14, 24 W	T5
Osram	QTI DALI-T/E 1X18-57 DIM	March 11th 2010	1	18, 57 W	T8
Osram	QTI DALI 4X18 DIM:	March 11th 2010	4	18 W	T8
Osram	QTI DALI 1x35/49/80 DIM	March 11th 2010	1	35, 49, 80 W	T5
Osram	QTI DALI-T/E 2X 18/42	March 11th 2010	2	18, 42 W	T8
TRIDONIC.ATCO	PCA 1/14 T5 EXCEL one4all LP	March 11th 2010	1	14 W	T5
TRIDONIC.ATCO	PCA 1/28 T5 EXCEL one4all LP	March 11th 2010	1	28 W	T5
TRIDONIC.ATCO	DALI-PCD 300 one4all	March 11th 2010	1	30-300 VA	INC LV HAL
TRIDONIC.ATCO	PCA 2/26 TCD EXCEL one4all	March 11th 2010	2	26 W	TC-TEL
TRIDONIC.ATCO	PCA 1/40 T5c EXCEL one4all	March 11th 2010	1	40 W	T5C
TRIDONIC.ATCO	PCA 2/40 TCL EXCEL one4all	March 11th 2010	2	40 W	TC-L
TRIDONIC.ATCO	PCA 2/35 T5 EXCEL one4all LP	March 11th 2010	2	35 W	T5
TRIDONIC.ATCO	PCA 4/14 T5 EXCEL one4all	March 11th 2010	4	14 W	T5
TRIDONIC.ATCO	TE-DC2 0300 D101 one4all	March 11th 2010		300 VA	ELV
TRIDONIC.ATCO	TE-0150 one4all sc	March 11th 2010		150 VA	ELV
TRIDONIC.ATCO	TE-0105 one4all sc	March 11th 2010	1	20-105 W	INC LV HAL
Helvar	EL2X28si	March 11th 2010	2	28 W	T5
Sylvania	QTP 1x14 T5/UNV Dali	March 11th 2010	1	14 W	T5

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	