

## GRAFIK Eye 3000 Series Control Unit

Cover (shown open)



### Description

- Provides pushbutton recall of four preset lighting scenes, plus Off.
- Allows setup of lighting scenes using buttons on the Control Unit.
- Controls many light source types directly, and others using power interfaces.
- Provides lockout options to prevent accidental changes.
- Includes built-in infrared receiver for operation with an optional remote control.

### Models available to:

- Accept 120V, 220-240V (non-CE), 230V (CE) and 100V input power.
- Control two to six zones of lighting.

### GRX-3100 Control Units

Provide setup using buttons on the Control Unit.

### GRX-3500 Control Units

Provide optional setup using a PC, including setting lighting levels in 1% increments.

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<b>Job Number:</b> <input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>

## Specifications

### Input Power

- 120V, 220-240V (non-CE), 230V (CE) or 100V, 50/60Hz.
- Lightning Strike Protection: Meets ANSI/IEEE standard 62.41-1980. Can withstand voltage surges of up to 6000V and current surges of up to 3000A.

### Lighting Sources/Load Types

Controls the following lighting sources with a smooth, continuous Square Law dimming curve or on a full conduction non-dim basis:

- Incandescent, Tungsten, Magnetic Low Voltage Transformer
- Lutron Tu-Wire® Electronic Fluorescent Dimming Ballast
- Neon and Cold Cathode

Controls the following lighting sources with a smooth continuous Square Law dimming curve through separate power interfaces:

- Electronic Low Voltage Transformer
- Lutron Electronic Fluorescent Dimming Ballast

### Preset Control

- 4 preset lighting scenes and off are accessible from the Control Unit front panel.
- 12 additional scenes are stored in the Control Unit. These scenes are accessible via Wallstations and/or Control Interfaces.
- Light levels fade smoothly between scenes. Fade time can be set differently for each scene, between 0-59 sec. or 1-60 min. Fade time from Off is capped at 5 sec.

### Key Design Features

- Meets IEC 801-2. Tested to withstand 15kV electrostatic discharge without damage or memory loss.
- Compensates in real time for incoming line voltage variations: No visible flicker with +/-2% change in RMS voltage/cycle and +/-2% Hz change in frequency/second.
- 10-year power failure memory automatically restores lighting to levels prior to power interruption.
- Faceplate snaps on with no visible means of attachment.

### System Communications and Capacities

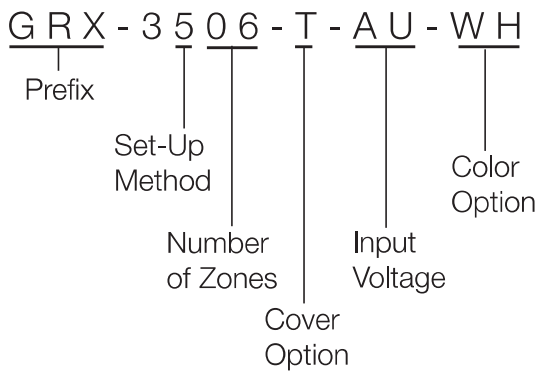
- Low-voltage type Class 2 (PELV) wiring connects Control Units, Wallstations, and Control Interfaces:
- Up to 8 Control Units may be linked to control up to 48 zones.
- Up to 16 total Wallstations and Control Interfaces may be added for a total of 24 control points.

### Environment

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

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## How to Build a Model Number



**Prefix:**

**GRX** for Grafik Eye 3000 Series Control Units

**Set-Up Method:**

**1** for standard via front panel  
**5** for PC setup

**Number of Zones:**

2, 3, 4, or 6

**Cover Option:**

**A** for Opaque  
**T** for Translucent Black

**Input Voltage**

**\_** (no code) for 120V Single Feed  
**AU** for 220-240V (non-CE)  
**CE** for 230V (CE)  
**JA** for 100V

**Color Option:**

See Color Options list

**Cover Options**

Opaque **A**  
 Cover and Base will match.  
 Translucent Black **T**  
 Black Cover and choice of base color.

Also available:  
 - Custom controls  
 - Color matching  
 - Engraving

These options ship in 4 to 6 weeks

**Color Options**

**Architectural Matte Finishes**

Standard – Ship in 48 hours  
 Cover Option: A or T  
 White **WH**  
 Ivory **IV**  
 Beige **BE**  
 Gray **GR**  
 Brown **BR**  
 Black **BL**

**Designer Gloss Finishes**

Ship in 4 to 6 weeks  
 Cover Option: A only  
 White **GWH**  
 Light Almond **GLA**  
 Almond **GAL**  
 Ivory **GIV**

**Satin Color Matte Finishes**

Cover Option: A or T  
 Hot **HT**  
 Ochre **OC**  
 Terracotta **TC**  
 Desert Stone **DS**  
 Stone **ST**  
 Limestone **LS**  
 Blue Mist **BT**  
 Midnight **MN**  
 Taupe **TP**  
 Biscuit **BI**  
 Eggshell **ES**  
 Snow **SW**

**Architectural Metal Finishes**

Cover Option: T only  
 Bright Brass **BB**  
 Bright Chrome **BC**  
 Satin Brass **SB**  
 Satin Chrome **SC**  
 Satin Nickel **SN**  
 Antique Brass **QB**  
 Antique Bronze **QZ**  
 Bright Nickel **BN**

**Anodized Aluminum Finishes**

Cover Option: T only  
 Clear **CLA**  
 Black **BLA**  
 Brass **BRA**  
 Bronze **BZA**

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## Model Numbers

### 120V Input Power

Number of Zones	Standard Setup	PC Setup	Unit Capacity (Watts/VA)	Zone Capacity (Watts/VA)
2	GRX-3102-_-_-	GRX-3502-_-_-	1200	800
3	GRX-3103-_-_-	GRX-3503-_-_-	1500	800
4	GRX-3104-_-_-	GRX-3504-_-_-	2000	800
6	GRX-3106-_-_-	GRX-3506-_-_-	2000	800

### 220–240V (non-CE) Input Power

Number of Zones	Standard Setup	PC Setup	Unit Capacity (Watts/VA)	Zone Capacity (Watts/VA)
2	GRX-3102-_-AU-__	GRX-3502-_-AU-__	1600	1200
3	GRX-3103-_-AU-__	GRX-3503-_-AU-__	2400	1200
4	GRX-3104-_-AU-__	GRX-3504-_-AU-__	3000	1200
6	GRX-3106-_-AU-__	GRX-3506-_-AU-__	3000	1200

### 230V (CE) Input Power

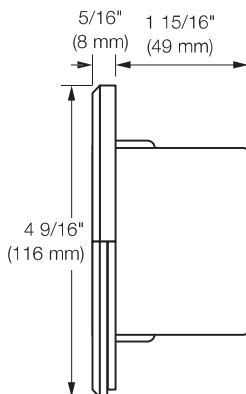
Number of Zones	Standard Setup	PC Setup	Unit Capacity (Watts/VA)	Zone Capacity (Watts/VA)
2	GRX-3102-_-CE-__	GRX-3502-_-CE-__	1600	800
3	GRX-3103-_-CE-__	GRX-3503-_-CE-__	2300	800
4	GRX-3104-_-CE-__	GRX-3504-_-CE-__	2300	800
6	GRX-3106-_-CE-__	GRX-3506-_-CE-__	2300	800

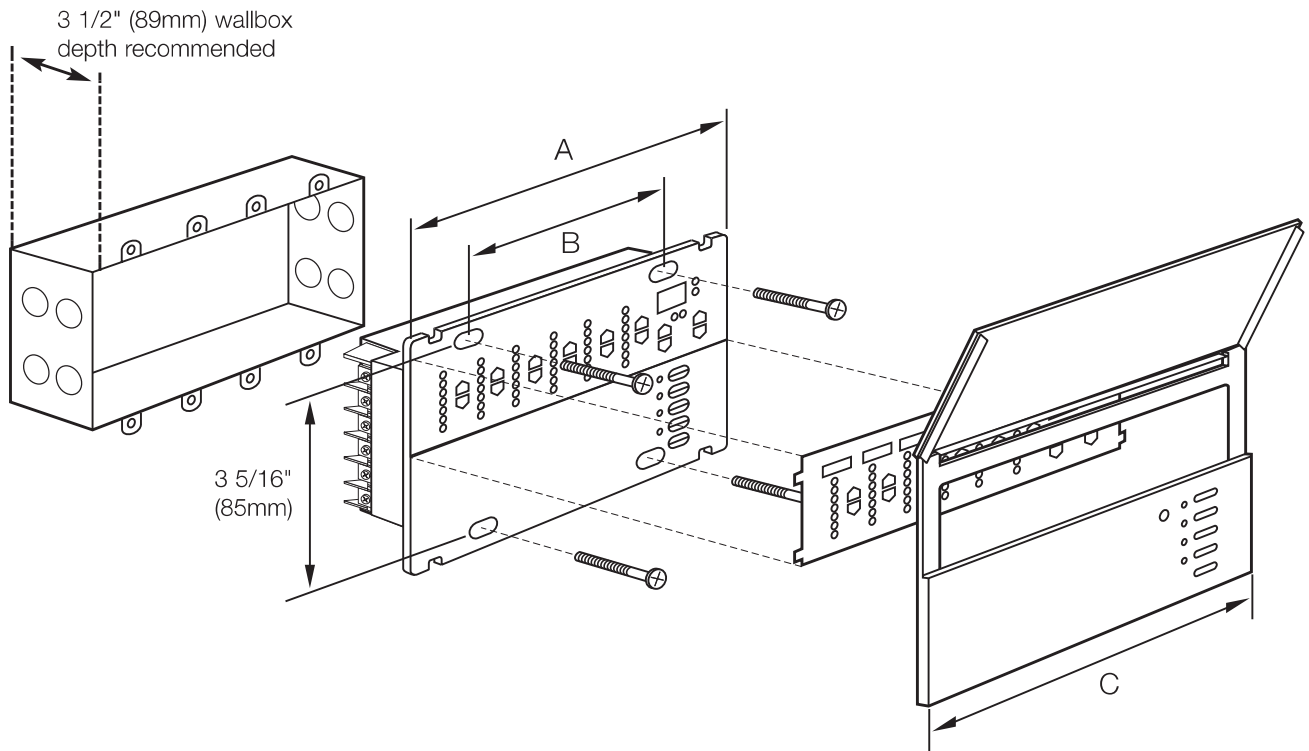
### 100V Input Power

Number of Zones	Standard Setup	PC Setup	Unit Capacity (Watts/VA)	Zone Capacity (Watts/VA)
2	GRX-3102-_-JA-__	GRX-3502-_-JA-__	1000	600
3	GRX-3103-_-JA-__	GRX-3503-_-JA-__	1250	600
4	GRX-3104-_-JA-__	GRX-3504-_-JA-__	1600	600
6	GRX-3106-_-JA-__	GRX-3506-_-JA-__	1600	600

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### Dimensions and Mounting - All Voltages Except 230V (CE)

Model	Side View	A	B	C	Wallbox <sup>1</sup> U.S. Size	Depth
2-Zone: GRX-3102 GRX-3502		4 5/16" (123mm)	1 13/16" (46mm)	5.56" (141mm)	2 Gang	3.5" (89mm)
3-Zone: GRX-3103 GRX-3503		6 11/16" (168mm)	3 5/8" (92mm)	7.25" (184mm)	3 Gang	3.5" (89mm)
4-Zone: GRX-3104 GRX-3504		8 5/16" (208mm)	5 7/16" (138mm)	8.94" (227mm)	4 Gang	3.5" (89mm)
6-Zone: GRX-3106 GRX-3506		8 5/16" (208mm)	5 7/16" (138mm)	8.94" (227)	4 Gang	3.5" (89mm)

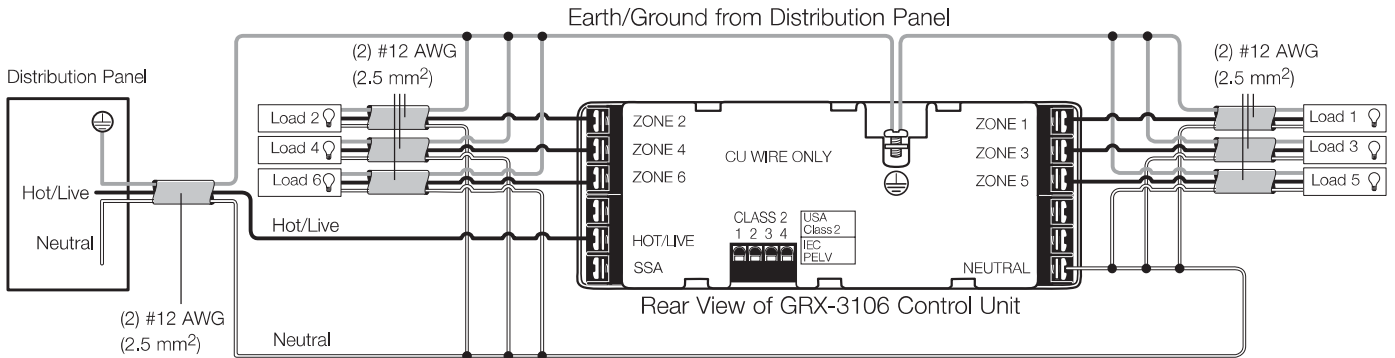


<sup>1</sup> Can be ordered from Lutron.

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### Line Voltage Wiring - 120V, 100V, 220-240V Models

- Pull power wiring from distribution panel and to light fixtures.
- Each line voltage terminal can accept up to two #12 AWG (2.5mm<sup>2</sup>) wires.



Consult Lutron for:

- Non-dim relay wiring.
- Load side emergency transfer wiring.

### Low-Voltage Class 2 (PELV) Wiring

- System communications use low-voltage Class 2 (PELV) wiring.
- Wiring must be daisy-chained.
- Wiring must run separately from line (mains) voltage.

Class 2 (PELV) wiring link requires:

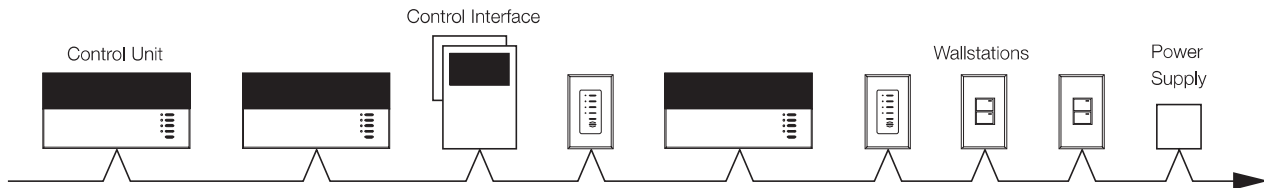
Two #12 AWG (2.5mm<sup>2</sup>) conductors for control power.

One twisted, shielded pair of #18 AWG (0.625mm<sup>2</sup>) for data link.

Total length of Control Link may be up to 2,000 ft. (610m).

Approved low-voltage cable is available from Lutron<sup>1</sup>, Belden, and Liberty.

These are approved with #22 AWG data link wires.



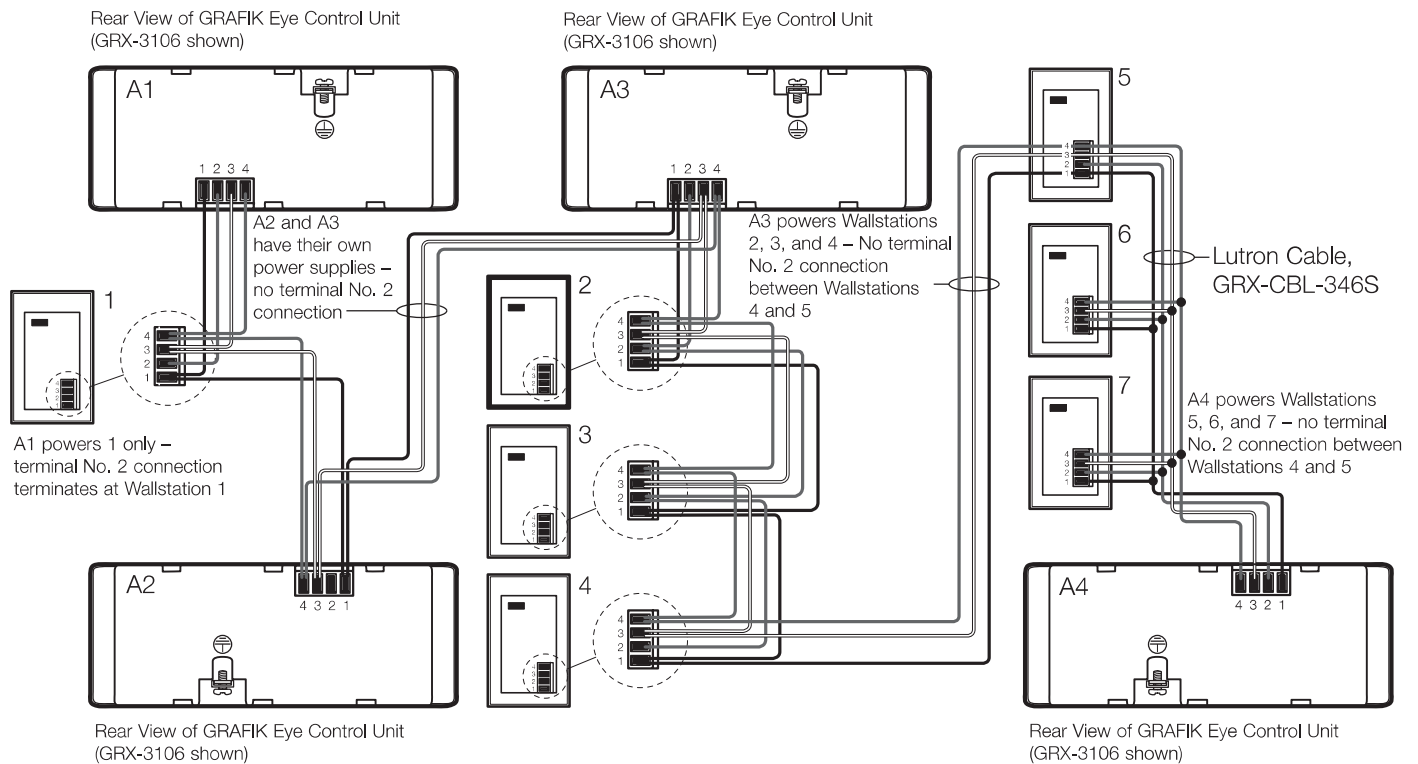
<sup>1</sup> GRX-CBL-346S Class 2 (PELV) wiring cable is available from Lutron and contains:  
 Two #12 AWG (2.5mm<sup>2</sup>) conductors for control power.  
 One twisted, shielded pair of #22 AWG (0.625mm<sup>2</sup>) for data link.

External 12VDC Power Supply is required to power more than three Wallstations and/or Control Interfaces from a single Control Unit.

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## Class 2 (PELV) Terminal Connections

- Each Class 2 (PELV) terminal accepts up to two #18 AWG (1.0mm<sup>2</sup>) wires.
- Daisy chain the terminal 1, 3, and 4 connections to all Control Units, Wallstations, and Control Interfaces.
- Each Control Unit has its own power supply. Terminate the terminal 2 connection (12VDC power) so that each Control Unit supplies power to a maximum of three Wallstations. Each Wallstation should receive power from only one Control Unit.
- Total length of Class 2 (PELV) wiring may be up to 2,000 ft. (600m).
- Make all connections in the Control Unit's wallbox. Remote connections (T-taps) must be in a switchbox or junction box with a maximum wire length of 8 ft. (2.5m) from the link to the connected unit.
- Do not allow Class 2 (PELV) wires to contact line/main wires.



**Note:**

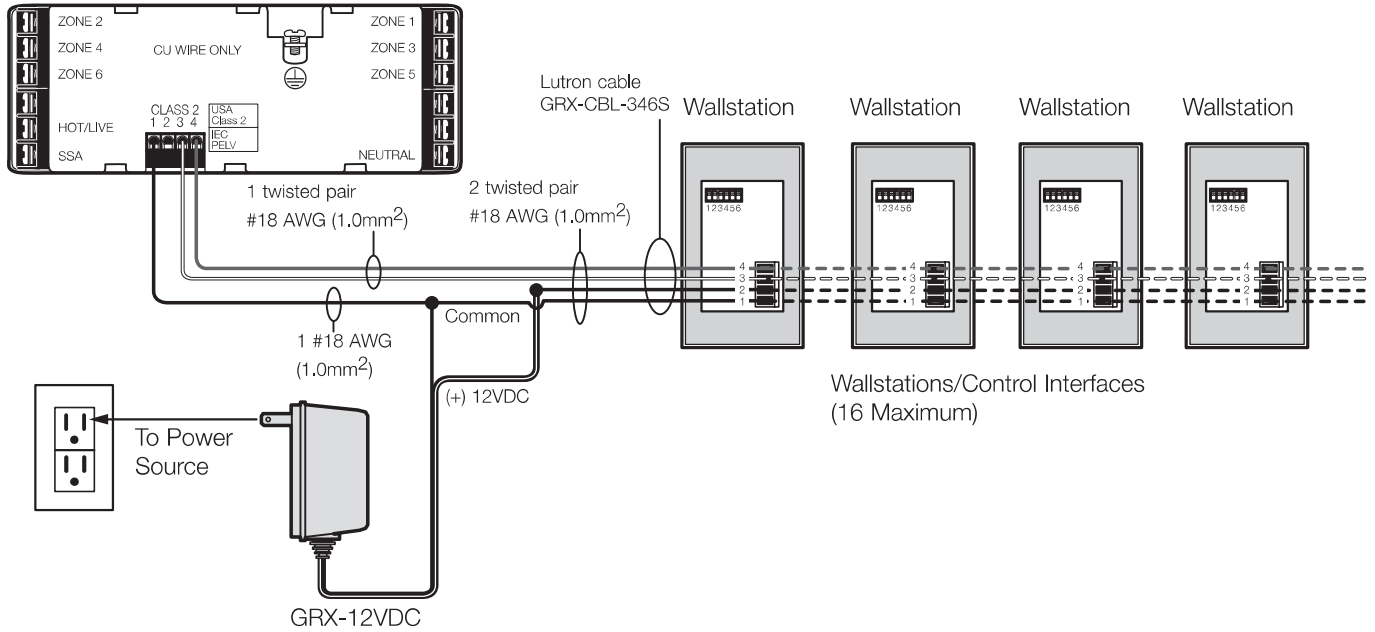
- Up to 8 GRAFIK Eye 3000 Series Control Units and 16 Wallstations/Control Interfaces may be daisy-chained together in one system.
- Class 2/PELV cable is available from Lutron - order GRX-CBL-346S.

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<b>Job Number:</b>	<input type="text"/>

## GRX-12VDC Power Supply Wiring

External 12VDC Power Supply is required to power more than three Wallstations and/or Control Interfaces from a single Control Unit.

Rear View of GRAFIK Eye Control Unit (GRX-3106 shown)



Note:  
Do not connect terminal No. 2 between GRAFIK Eye 3000 Series Control Unit and GRX-12VDC Power Supply

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<b>Job Number:</b> <input type="text"/>	<input type="text"/>	<input type="text"/>