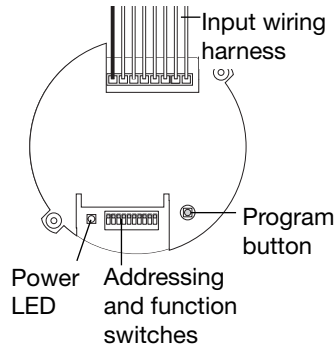


Installation Instructions

Please Read before Installing

Overview

The GRX-WCI is for use with GRAFIK Eye 3000 and 4000 series systems. The GRX-WCI mounts behind the user-supplied switch to select or adjust scenes in up to eight control units. The interface provides from two to seven contact closure inputs.



Specifications

- Operating voltage: PELV (Class 2: USA) low-voltage type inputs, 12 V_{AC} when used on a GRX-3000 system and 24 V_{AC} when used on a GRX-4000 system.
- If input switch is solid state, it must have an output with an on-state saturation voltage less than 1 V_{AC} at 1 mA and an off-state leakage current of less than 1 mA. Outputs must be capable of switching operating voltage for desired life of system.
- The recommended wallbox depth is 61 mm. The wallbox depth requirements vary with the depth of the switch being used.
- The GRX-WCI uses one address on the communication link.
- If there is any question as to whether a switch is compatible with these specifications, contact the manufacturer of the switch.
- **Environment:** Ambient operating temperature 0-40 °C (32-104 °F), 0-90% humidity, non-condensing. *Indoor use only.*



Caution: The GRX-WCI is *not* designed to work with the line/mains voltage switches. Use with line/mains voltage switches could result in premature failure of the switch being used.



Caution: Install in accordance with all local and national electric codes.

Low-Voltage PELV (Class 2: USA) Wiring

- Use low-voltage PELV (Class 2: USA) wiring to daisy-chain the GRX-WCI to GRX-3000/4000 control units and other components.
- Make connections inside the wallbox, switchbox, or junction box with a maximum wire length of 2.5 m from the link to the GRX-WCI.

When used with GRX-3000 control units:

- Use two 1.0 mm² (#18 AWG) conductors for common (terminal 1) and 12 V_{AC} (terminal 2). Be sure to wire the terminal 2 connection correctly; refer to the GRX-3000 *Installation Guide*.
- Use one shielded, twisted pair 1.0 mm² (#18 AWG) wires for data link (terminals 3 and 4).

When used with GRX-4000 control units:

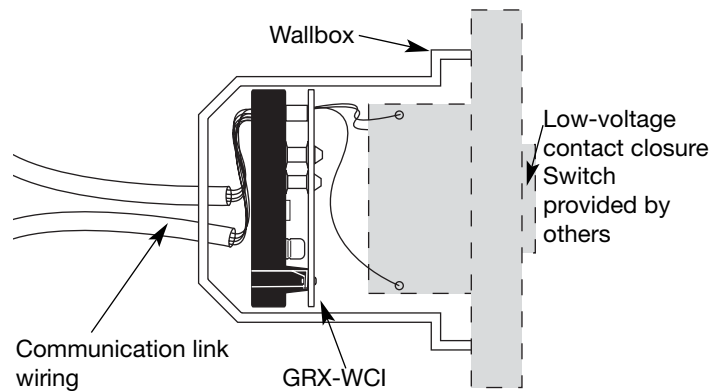
- Use two 2.5 mm² (#12 AWG) conductors for common (terminal 1) and 24 V_{AC} (terminal 2). These will not fit into terminals; see next page for connection details.
- Use one shielded, twisted pair 1.0 mm² (#18 AWG) wires for data link (terminals 3 and 4).
- Connect drain/shield as shown on next page.
 - Do not connect ground/earth to GRX-WCI.
 - Connect the bare drain wires and cut off the outside shield.

Installation

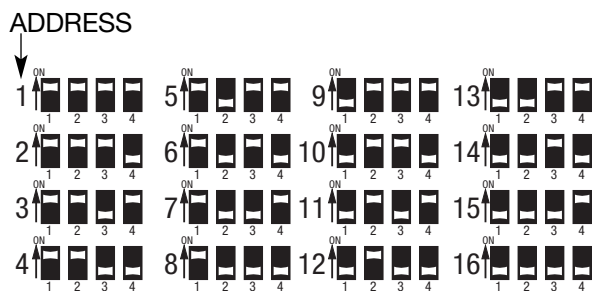
Warning! Always turn the circuit breaker/MCB to OFF or remove the main fuse from the power line before doing any work. Failure to do so can result in serious personal injury.

1. Turn power OFF.
2. Mount Lutron wallbox (P/N 241-758) or German and UK backboxes (60.30 mm measured center to center of mounting holes).
3. Set Address. Assign a unique address to each GRX-WCI using the addressing switches on the front of the control. See GRX-WCI Addressing for switch settings. Be sure to record the address for future programming purposes.
4. Select Function. Set function switches 5 through 10 on the GRX-WCI to select its function. See the chart on the next page for switches and their functions.
5. Connect the GRX-WCI to the communication link. Strip insulation from the wires so that 10 mm (3/8 in.) of bare wire is exposed for 1.0 mm² (#18 AWG) wire. Each terminal will accept one or two 1.0 mm² (#18 AWG) wires. See the Communication Link Wiring Diagram.
6. Connect the contact closure inputs. Use PELV (Class 2: USA) or better cable. Cap off or cut off unused input wires. See the Contact Closure Input Wiring Diagram.
7. Mount the GRX-WCI as shown in the Mounting Diagram. The GRX-WCI is unsupported in the wallbox.
8. Restore power.

Mounting Diagram



GRX-WCI Addressing



GRX-WCI Function Switches

FUNCTIONS

	Function Switch Settings					Inputs 1-4	Input 5	Input 6	Input 7
	5	6	7	8	9				
4-scene with master raise/lower		Scenes 1 to 4	Off	Raise	Lower				
		Scenes 5 to 8	Off	Raise	Lower				
		Scenes 9 to 12	Off	Raise	Lower				
		Scenes 13 to 16	Off	Raise	Lower				

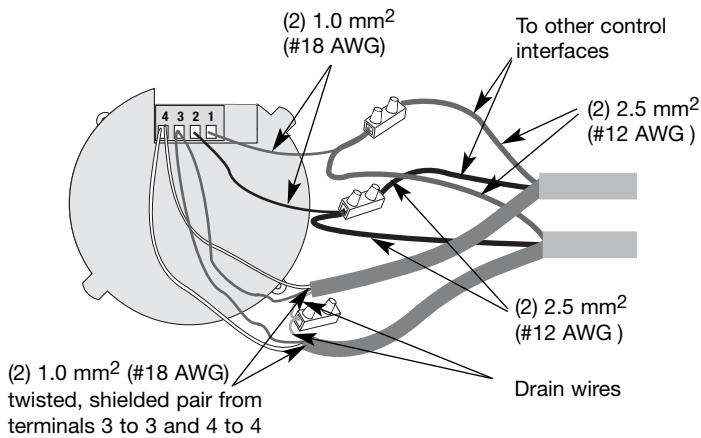
	Function Switch Settings					Input 6	Input 7
	5	6	7	8	9	10	
2-button entrance wallstation interface*		Selects scene 1					Turns lights off
2-button scene selection*		Selects scene 9					Selects scene 10
		Selects scene 13					Selects scene 14
2-button panic wallstation*		Selects scene 16 (light full ON). Locks all other system controls from this control unit (scene lock).					Restores previous scene; removes lockout control (scene lock).
2-button fine tuning*		Temporarily brightens selected zone(s)					Temporarily dims selected zone(s)
2-button zone lockout*		Allows only temporary adjustments to zones; won't affect preset scene settings.					Disables zone lockout
2-button sequencing*		Starts a sequence; loops continuously through scenes 5 to 16 using fade times entered at control units.					Turns sequencing Off
1-button entrance control interface for momentary switch inputs*		Alternately selects between scene 1 and Off.					No effect
		Selects scene 1 when contacts close.					No effect
1-button occupant sensor/entrance control interface for maintained inputs (causes event upon closure and opening)*		No response when contacts close.					No effect
		Selects Off when contacts open.					No effect

*Inputs 1 through 5 are inactive.

Communication Link Wiring

- PELV (Class 2: USA) low-voltage wiring connects the GRX-WCI to GRX-3000/4000 control units and other components.
- You can link up to 8 control units and up to 16 total GRX-WCIs, wallstations, and/or control interfaces, for a total of 24 control points.

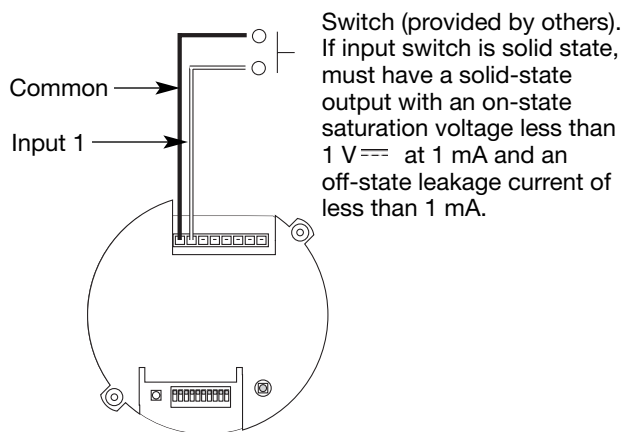
Wiring



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

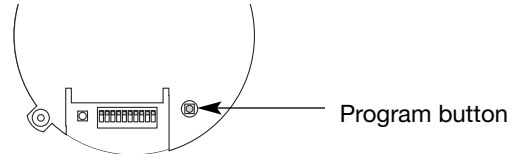
Contact Closure Wiring

- Connect the desired input(s) and common wires to the switch provided by others.
- Cap off unused input wires.



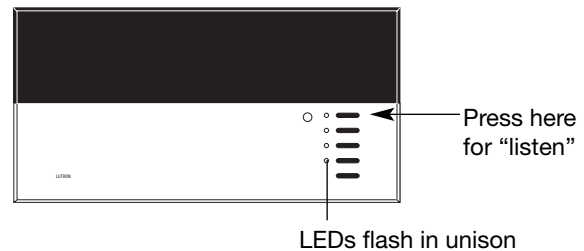
System Communications

- If used as part of an unaddressed system (control units not addressed), the GRX-WCI will affect all control units on the system.
 - For an addressed system (control units addressed), follow the steps below.
1. **Enter program mode** (only one GRX-WCI can be in program mode at a time). Press and hold the program button for about 3 seconds, until the LED starts flashing.



2. **Identify the control unit(s)** that you want to “listen” to this GRX-WCI. (Control units must be addressed!) Press and hold the top scene button on the control unit for about 3 seconds, until the LEDs flash in unison. Repeat for each control unit that you want to “listen” to the GRX-WCI.

Control unit



Note: To make a “listening” control unit not listen to a GRX-WCI, put the GRX-WCI in program mode, then press the “listening” control unit’s OFF button until the LEDs stop flashing.

3. **Exit program mode.** Press and hold the program button for about 3 seconds, until the LED stops flashing.

Troubleshooting

Symptom

Power LED is off

Possible Cause

A different wallstation is in program mode

Power is not present at WCI; make sure the lighting system is powered up and check for miswires

Power LED flashes

WCI is in program mode

Power LED is on, but the system response isn't correct

WCI is improperly programmed.

Verify correct function switch settings and check system programming

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LIMITED WARRANTY

Lutron will, at its option, repair or replace any unit that is defective in materials or manufacture within one year after purchase. For warranty service, return unit to place of purchase or mail to Lutron at 7200 Suter Rd., Coopersburg, PA 18036-1299, postage pre-paid.

This warranty is in lieu of all other express warranties, and the implied warranty of merchantability is limited to one year from purchase. This warranty does not cover the cost of installation, removal or reinstallation, or damage resulting from misuse, abuse, or improper or incorrect repair, or damage from improper wiring or installation. This warranty does not cover incidental or consequential damages. Lutron's liability on any claim for damages arising out of or in connection with the manufacture, sale, installation, delivery, or use of the unit shall never exceed the purchase price of the unit.

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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