

# GRAFIK Eye

## Installation Instructions

*Please Read*



### Description

The GRX-IRPS infrared transmitter/receiver pair automatically coordinates preset lighting functions in areas with partitions, such as meeting rooms and ballrooms. Sensors may be used with a *GRAFIK Eye* 3000/4000 system, *GRAFIK Eye* QS, and *GRAFIK* 5000™/*GRAFIK* 6000®/*GRAFIK* 7000™ Centralized Lighting Control Systems.

- Automatically combines lighting preset functions when partition is open, creating one large space.
- Lighting preset functions become independent as partition is closed, creating several smaller spaces.

Sensors require additional Lutron interface for proper operation:

- GRX-IO or OMX-IO and GRX-12VDC power supply if used with *GRAFIK Eye* 3000/4000 system, or some *GRAFIK* 5000/6000/7000 systems
- QSWS2-2B wallstation and power supply if used with *GRAFIK Eye* QS
- seeTouch® S0 series wallstation with occupancy sensor connection if used with *GRAFIK* 5000/6000/7000 system

## GRX-IRPS-WH Infrared Transmitter/Receiver (TX/RX) Pair

PELV (Class 2: USA) Device  
12 - 24 V $\equiv$  100 mA

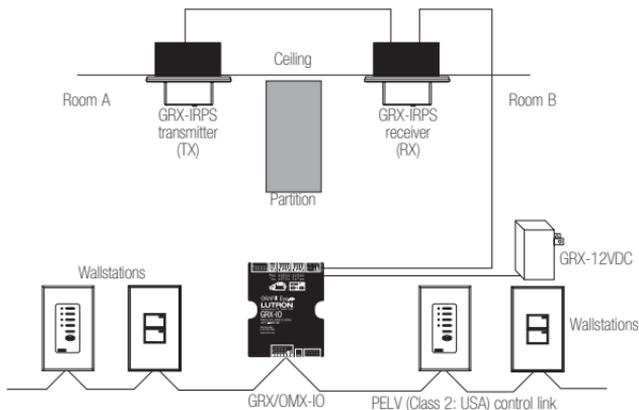
### Important Notes

1. Read all instructions carefully before starting installation.
2. This device must be installed by a qualified electrician.
3. Install in accordance with the National Electric Code (NEC®) and all applicable local regulations.
4. Turn power OFF at the control panel before installing the device. Do not connect high-voltage power to low-voltage terminals. Improper wiring can result in personal injury or damage to the device or to other equipment.

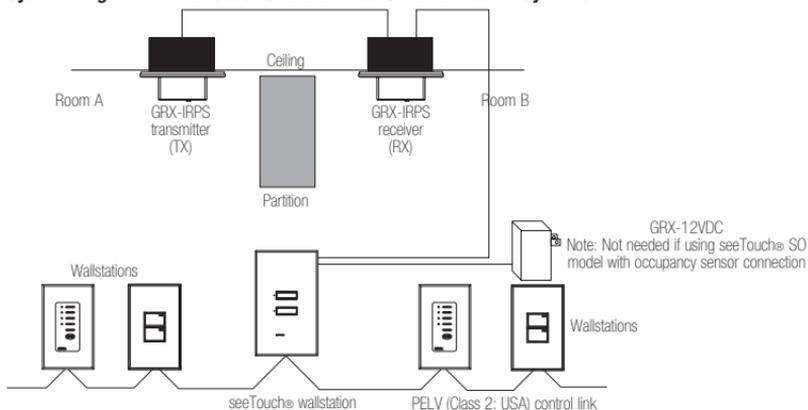
### Specifications

- Operating voltage: Low-voltage PELV (Class 2: USA) 12 V $\equiv$  from GRX-12VDC plug-in power supply (ordered separately). One GRX-12VDC can supply power to a maximum of five sensor transmitter/receiver pairs.
- Transmitter and receiver have reverse polarity and short-circuit protection.
- Receiver includes an LED indicator that assists in sensor alignment during installation and sensor operating status.
- One GRX-IO or OMX-IO interface (ordered separately) can accommodate a maximum of five transmitter/ receiver pairs for five different moveable walls.
- One QSWS2 wallstation (ordered separately) can accommodate one transmitter/receiver pair for one moveable wall.
- One S0 series wallstation with occupancy sensor connection (ordered separately) can accommodate and supply power for one transmitter/receiver pair for one moveable wall. This will count as two devices on the link.
- 32 - 104 °F (0 - 40 °C). Relative humidity less than 90% non-condensing.
- Surface mount indoors only.

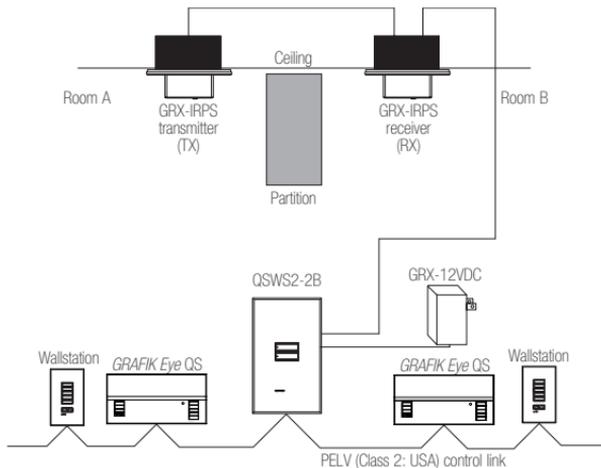
**System Diagram: GRAFIK Eye® 3000 and 4000 Systems**  
**GRAFIK 5000™/GRAFIK 6000®/GRAFIK 7000™ Systems**



**System Diagram: GRAFIK 5000™/GRAFIK 6000®/GRAFIK 7000™ Systems**

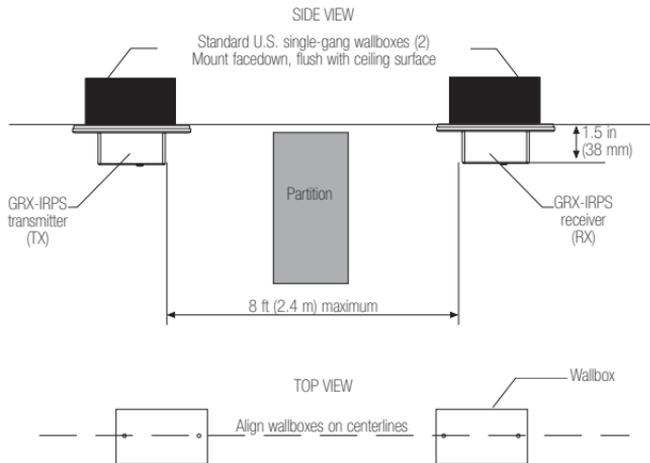


## System Diagram: GRAFIK Eye® QS System



### Dimensions and Mounting

- Mount receiver and transmitter in standard U.S. single-gang wallboxes (3.5 in/89 mm deep) wallboxes. Recess wallbox facedown in ceiling.
- Mount wallboxes exactly in line with each other to ensure correct operation.
- Mount the receiver and transmitter so that the partition, when closed, blocks the signal between them. Some wallboxes may need to be extended.
- Mount the receiver and transmitter a maximum of 8 ft (2.4 m) apart.
- Use adjustable mounting brackets to align infrared signal during installation.



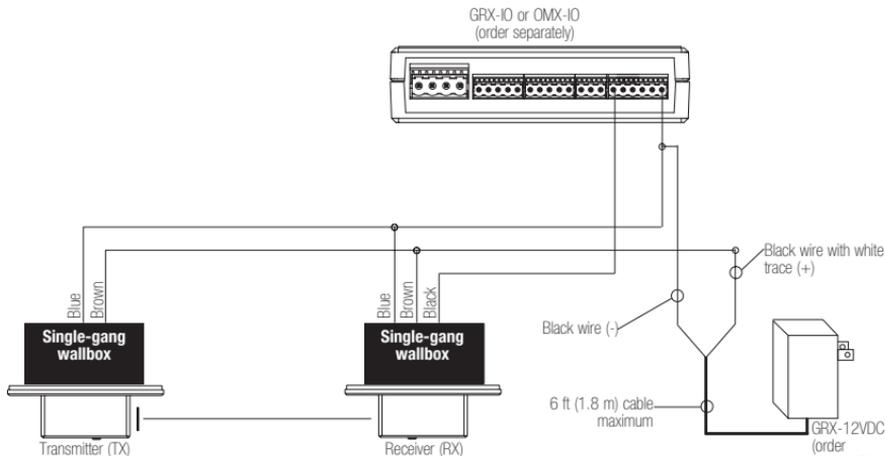
## Wiring



**WARNING: Shock Hazard.** May result in serious injury or death. Always turn off the power to the control panel before doing any work.

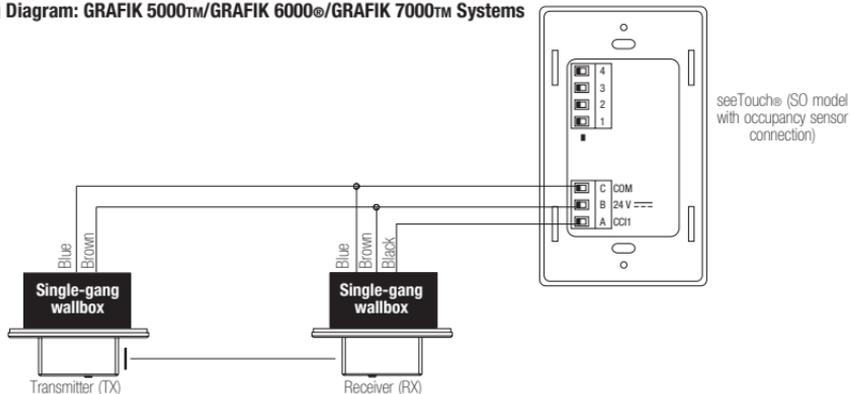
1. Turn power OFF.
2. Strip insulation from wires so 3/8 in (10 mm) bare wire is exposed.
3. Gently squeeze the sides of the GRX-IRPS cover and remove to expose the sensor mounting bracket. Unsnap the plastic faceplate.
4. Connect wiring as shown on pages 6 and 7, through the back of the transmitter/receiver. Confirm all connections.
5. Attach the device to the ceiling-mounted wallbox. Do not fully tighten the screws.
6. Plug in the GRX-12VDC to apply power to the transmitter and receiver. Note: Do not restore power to the control panel until after the installation of the system is complete.
7. Verify that the transmitter and receiver are properly aligned (the movable partition must be OPEN to allow the beam to travel from the transmitter to the receiver). A red LED should be lit on the transmitter to indicate that it is properly powered and transmitting. Adjust the horizontal and vertical alignment of the units until they are aligned.  
Receiver LED(s) lit (with the partition open):
  - Orange and green. Indicates that a strong signal is being received.
  - Orange. Receiver is partially misaligned, improper functionality may occur.
  - No LED. Receiver is misaligned, improper functionality will occur.
  - Green. Receiver is completely misaligned and no signal is being received.
8. Close and re-open the movable partition to verify that the orange LED on the receiver turns OFF when the partition is closed and ON when the partition is re-opened. The green LED on the receiver should stay on when the partition is open or closed.
9. Tighten all screws and verify that the orange and green LEDs on the receiver are still on.
10. Snap the faceplate onto the unit.
11. Snap the cover over the sensor.
12. Restore power to the control panel.

**Wiring Diagram: GRAFIK Eye® 3000 and 4000 Systems  
GRAFIK 5000™/GRAFIK 6000®/GRAFIK 7000™ Systems**



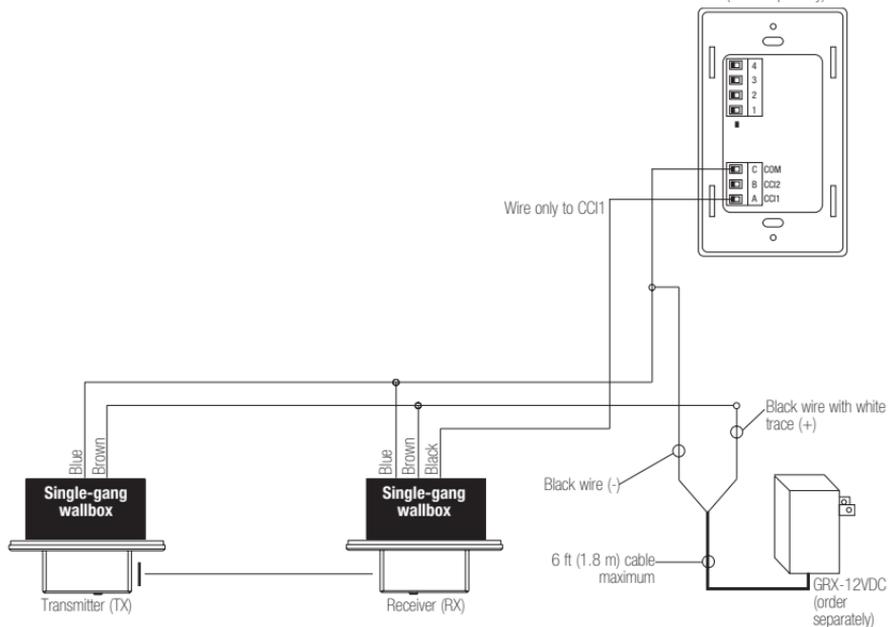
Note: System shown with IRPS wired to CCI1. May be wired to CCI1 - CCI5.

**Wiring Diagram: GRAFIK 5000™/GRAFIK 6000®/GRAFIK 7000™ Systems**



**Wiring Diagram: GRAFIK Eye® QS System  
or GRAFIK 5000™/GRAFIK 6000®/GRAFIK 7000™ Systems**

QSW52 (QS system)  
or seeTouche® S0 model  
(GRAFIK 5000/6000/7000 system)  
(order separately)



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## 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 will 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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