

LUTRON®

For Your Information ...



GRAFIK Eye® and Partitionable Spaces

Overview

This application note answers typical questions about using *GRAFIK Eye* Systems with partitioned spaces, and will guide you in selecting the controls that best meet your needs.

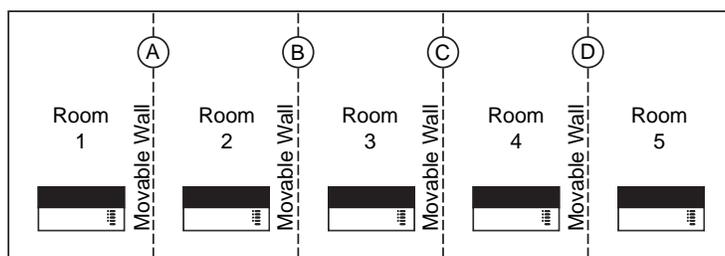
Why is Lighting Control Important for Partitioned Spaces?

Most lighting controls are set up for a room with the expectation that the floor plan will be consistent. Partitioned spaces are always changing and need lighting controls that reflect that flexibility.

Without Partition Status Control, all of the lights in the space are split into many smaller independent zones with multiple control stations throughout the space. This way each room can be controlled independently when the partitions are closed. When the partitions are open and the room is combined into one large space, a user must go to every single control station and manually adjust the lights to match the layout of the room.

Lutron's Solution

Lutron lighting controls can adapt to the room's configuration and use. A single control location can operate the entire space when all the walls are open and the space is configured as one large room. When that same space is separated by movable partitions, the lighting controls only affect the lights in their specific room.



Example: Walls A and B are open, while walls C and D are closed.

Selecting a scene in Room 1 also selects a scene in Rooms 2 and 3. Rooms 4 and 5 are unaffected.

System Options

Lutron offers various levels of automation and customization to meet the needs of your space and your budget. Partition controls can automatically sense the position of the walls and adjust the lighting control function accordingly. Lutron also offers systems that let the user of the space manually set the status of the partitions with wallstation controls. Options for *GRAFIK Eye* Systems include:

- **Automatic Partition Status Control**
- **Manual Wallstation Controls and Custom Faceplate Wallstations**
- **Automatic Scene Selection Wallstations**

Automatic Partition Status Control

GRX-IRPS-WH

The GRX-IRPS-WH is perfect for installations where the occupants will be moving partitions themselves and a facility employee will not be available to ensure that the partition settings are correct. The Infrared Partition Sensor detects when a wall has been moved and automatically signals the appropriate *GRAFIK Eye* Control Units.



No Button to Push:

Mounted on the ceiling, the GRX-IRPS uses an invisible beam of Infrared light to sense whether a partition is open or closed. The IR sensor is automatic and does not require the user to do anything more than move the walls and set the light level in the space. The *GRAFIK Eye* Control Units automatically know which zones to control.

How it works:

The GRX-IRPS provides a signal to a GRX-AV Interface. The GRX-AV tells the *GRAFIK Eye* Control Units which areas of the room are affected by partitions. The GRX-IRPS must be used in combination with a GRX-AV interface.

Note: Up to five GRX-IRPS's can be connected to one GRX-AV. Each GRX-AV can control up to eight *GRAFIK Eye* 3000/4000 Series Control Units.

Manual Wallstation Control

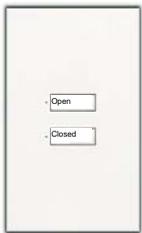
Manual partition control wallstations are a cost-effective way to install flexible control of partitioned spaces. Similar to wallstations that select preset lighting scenes, Partition Status Wallstations signal the *GRAFIK Eye Control Units* with the position of movable walls in the space. The Control Units then combine their functions accordingly.

These wallstations are not automatic; they require that anyone who moves a partition remembers to select the correct button on the wallstation.

This product works well when a member of the facilities staff will be setting the partitions for the room and will be familiar with the proper operation of the lighting controls.

Standard Partition Control Wallstations

Two-Button Wallstations placed at each partition let the user combine or separate the lighting controls in two adjacent rooms. A wallstation is placed adjacent to the partition that it corresponds to. Wallstations with up to four buttons are also available. These controls allow the user to set the status of up to four movable walls from one location.



SG-2BN

seeTouch™



SG-4PSN



NTGRX-2B

Architectural Style



NTGRX-4PS



EGRX-2BN

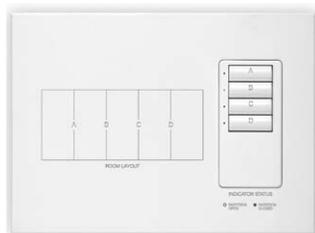
European Style



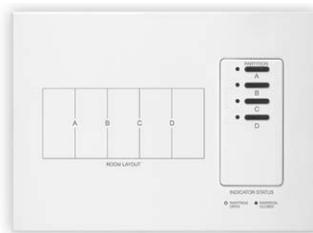
EGRX-4PS

Custom Faceplate Wallstations

Lutron's custom engraving capability provides the option of having the floor plan engraved on the faceplate of your wallstation to match the specific layout of the space that you wish to partition. These controls are available in two different button designs – *seeTouch* and Architectural Style.



seeTouch



Architectural Style

Automatic Scene Selection Wallstation

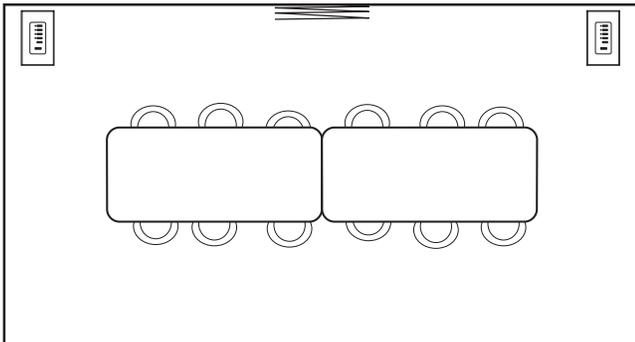
Wallstation with Preset Scenes that change with Partition Status

The NTGRX-SI4S-IR wallstation is used in spaces with one movable partition. With this wallstation, the preset scenes automatically adapt to the partition status. The wallstation has four buttons that select scenes. The scene that each button selects changes when the partition status changes. Pressing the top button when the partition is open selects Scene 1, the same button selects Scene 5 when the partition is closed. Therefore, each wallstation has eight total scenes; Scenes 1-4 would be customized for when the partition is open, while Scenes 5-8 would be customized for a closed partition.

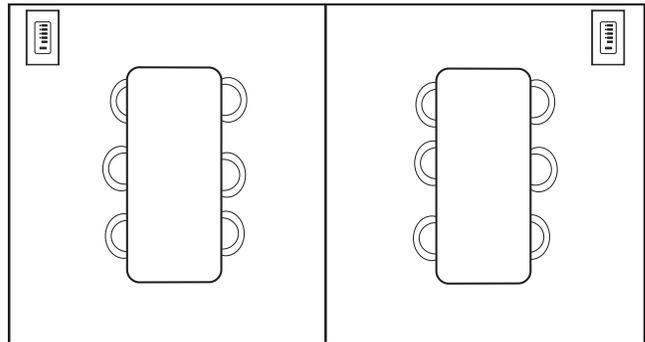
How it works:

The wallstation can accept a signal from any device that provides a maintained contact closure output (for automatic response, this needs to be a switch, or other device such as the GRX-IRPS, that is activated when the partition closes). This sets the status of the partition for the wallstation. The wallstation then changes which scenes are selected on the *GRAFIK Eye* Control Unit.

In order to have separate scenes and independent operation in a partitioned space, the maintained contact closure must be wired to two NTGRX-SI4S-IR wallstations and a GRX-AV. The GRX-AV is used to set the partition status for *GRAFIK Eye* Control Units (see Lutron Application Note A12 for wiring diagrams).



Partition Open
Both wallstations select Scene 1 - 4.



Partition Closed
Each room has independent control of Scenes 5 - 8, which may be different for each room.

Call Lutron for a *seeTouch* style of the NTGRX-SI4S-IR.

Worldwide Technical and Sales Assistance

If you need assistance, call the toll-free **Lutron Technical Support Center**. Please provide exact model number when calling.
24 hours/day + 7 days/week
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