

preset lighting control systems | GRAFIK Eye_® 4000 and LCP128_™

Lighting control solutions for commercial and institutional spaces



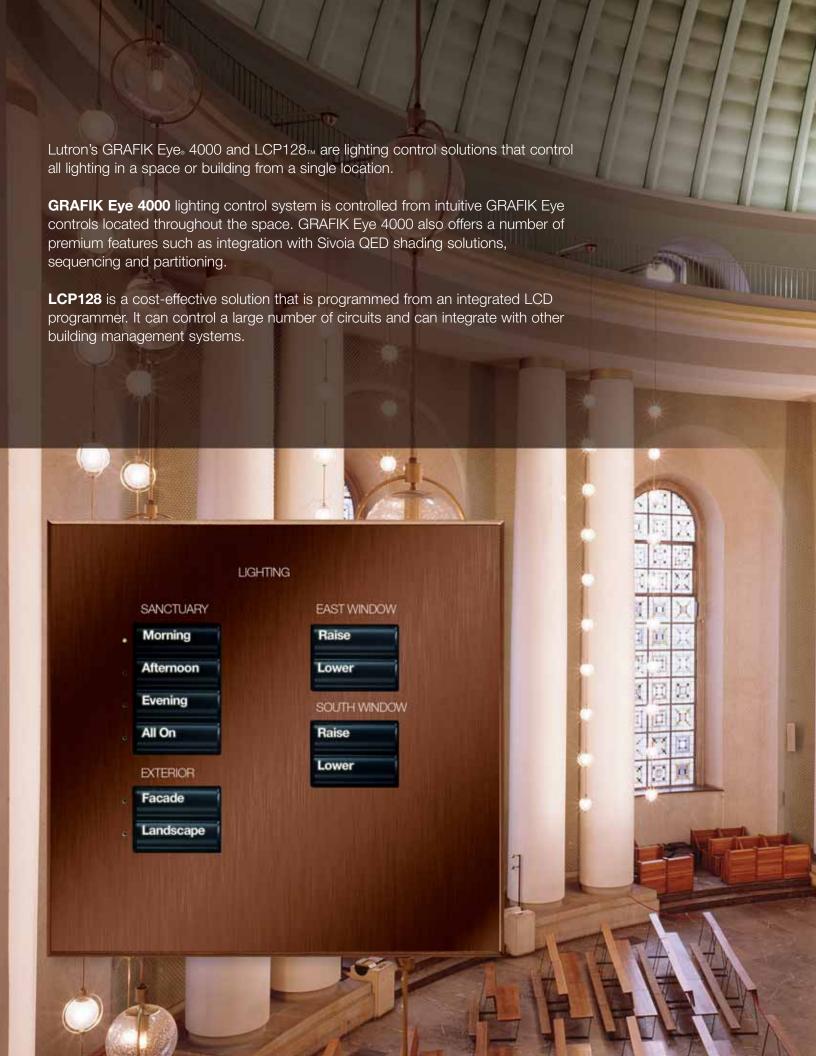
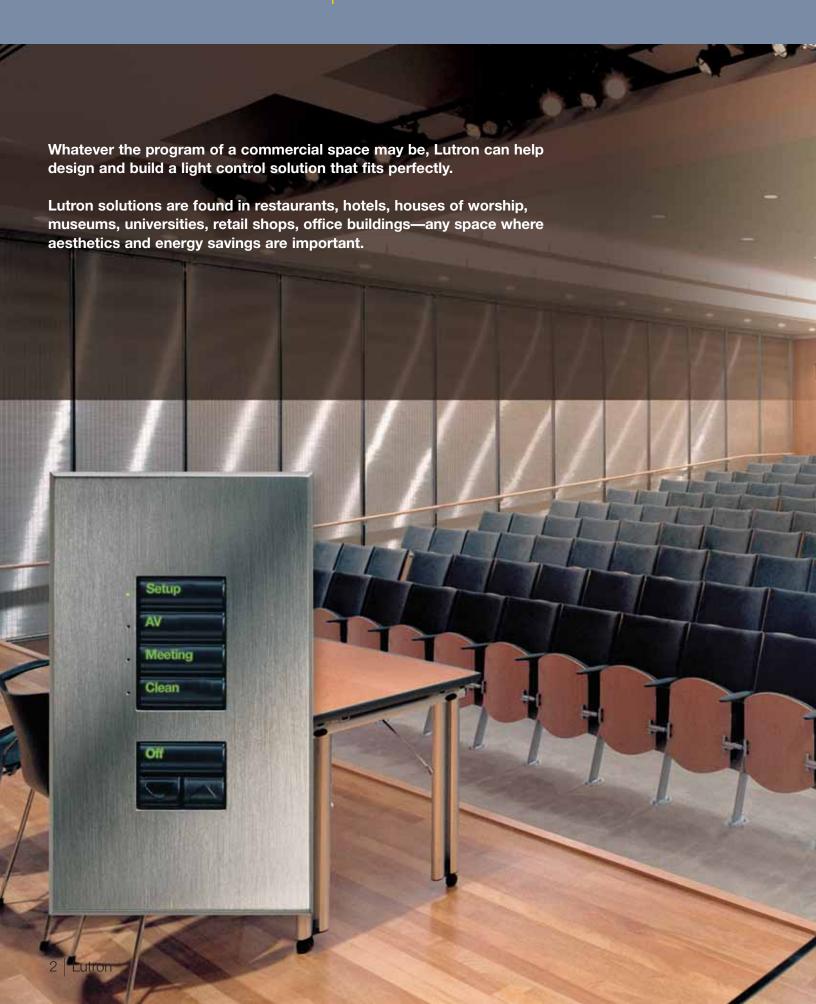




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commercial systems | benefits





Understanding the needs of your project is our top priority. Preset light control is the heart of light control in a commercial or institutional application. We'll work with you to develop a system that:

- creates the right experience
- outfits a space for multiple uses
- makes the architecture of a space more dynamic
- increases productivity within a space by providing just the right light
- balances daylight and electric light
- integrates with other building management systems
- enhances safety and security
- saves energy
- offers the flexibility to adapt easily to changes within a space

preset lighting control systems overview



GRAFIK Eye. 4000 and LCP128, are precision engineered lighting control systems for commercial applications. Both systems serve as hubs where all the circuits within the lighting control system converge.

The needs of a building or space determine which system is most appropriate.

The **GRAFIK Eye 4000** lighting control system is designed to provide dimming, switching and daylight control. The system consists of panels, GRAFIK Eye control units, and system interfaces. It is ideal for partitionable spaces, retail spaces, public spaces and multi-use areas.

LCP128 is a combination dimming and switching system that provides a complete lighting control solution. The system consists of panels and seeTouch, wallstation controls. An integrated LCD programmer makes the system easy to program and reconfigure to the needs of your project. The LCP128 system is well suited for light commercial spaces such as restaurants, retail stores, houses of worship, and auditoriums.

Each solution is customized to meet the specific needs of your business or project.

preset lighting control systems | how they differ

What lighting control features does your project need?

	GRAFIK4000	LCP128
scene control Lighting "presets" call up different scenes for different purposes.	✓	✓
entertainment lighting Control DMX lighting and integrate with DMX lighting consoles.	✓	✓
portable control IR or RF remote control for on-the-fly light control	√ ol.	✓
personal controls Enable employees to adjust individual workspace	√ e.	✓
time scheduling Turn lights on and off automatically based on a user-defined schedule.	✓	✓
occupant response Lights respond to room occupancy.	✓	✓
BMS integration Light control integrates with other building management systems.	✓	✓
manual overrides Provide control points throughout a space.	✓	1
partitioning Light control adapts to changing room configurations automatically.	✓	
sequencing Preset scenes cycle automatically to create effect	✓ cts.	
daylight control Integrate electronic window treatments with light controls.	✓	
daylighting Daylight sensors balance electric lights with available daylight.	✓	

GRAFIK Eye. 4000 system applications

GRAFIK Eye 4000 is a flexible lighting control solution that adapts to the needs of your space.



ballroom – adapt control in partitionable spacesLarge partitionable spaces call for flexible control options depending on the arrangement of the movable walls.



conference room – make the space more functional by setting the right lighting

Recall preset lighting with the touch of a button.



high-end retail – set the right mood for each eventCall attention to merchandise by creating a dynamic and dramatic shopping experience.



museum – display artwork in its best lightProtect art from harmful UV rays by using shades.

GRAFIK Eye_® 4000 system design goals

What lighting control features does your project need?



partitioning

Light control adapts to changing room configurations automatically.



manual overrides

Provide control points throughout a space.



scene control

Light "presets" call up different scenes for different purposes.



daylight control

Integrate electronic window treatments with light controls.



sequencing

Preset scenes cycle automatically to create effects.



daylight control

Integrate electronic window treatments with light controls.



sequencing

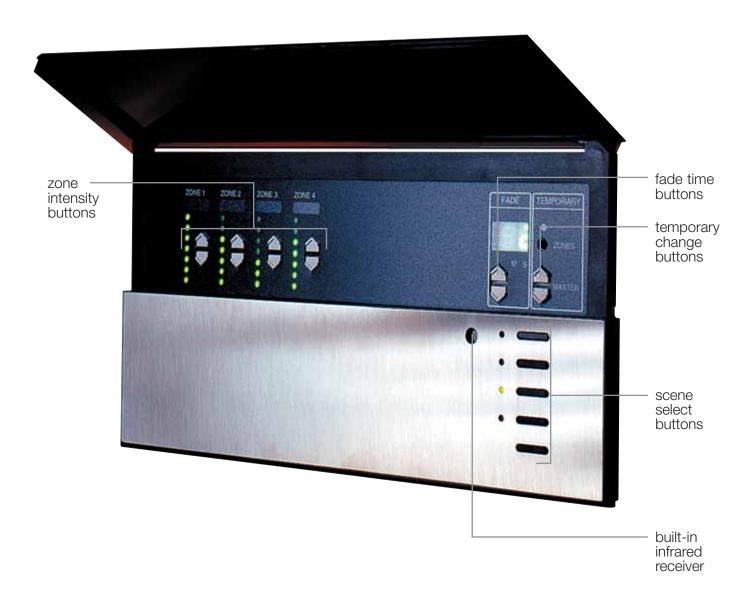
Preset scenes cycle automatically to create effects.

GRAFIK Eye. 4000 system introduction

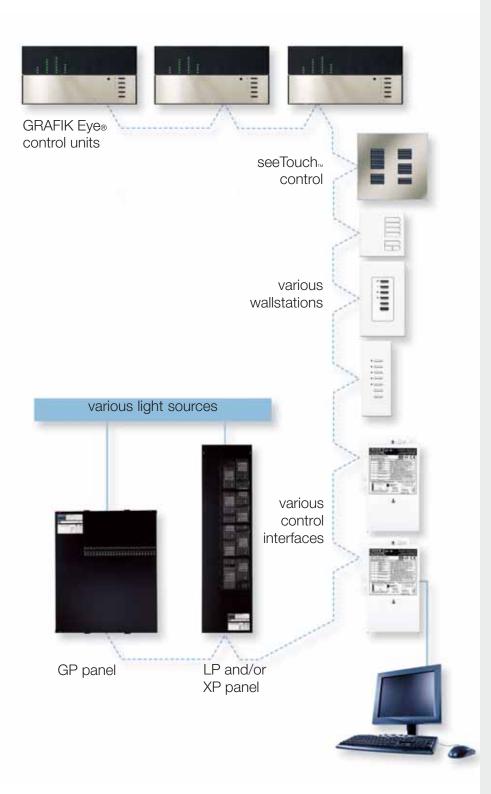
GRAFIK Eye. 4000 lighting control system

The Lutron GRAFIK Eye. 4000 lighting control system is designed to provide dimming, switching and daylight control. It is ideal for partitionable spaces, retail spaces, public spaces and multi-use areas. Each solution is customized to meet the customer's specific needs.

The system includes partitioning, sequencing, Sivoia QED™ shading integration and daylighting capabilities.



GRAFIK Eye_® 4000 system overview



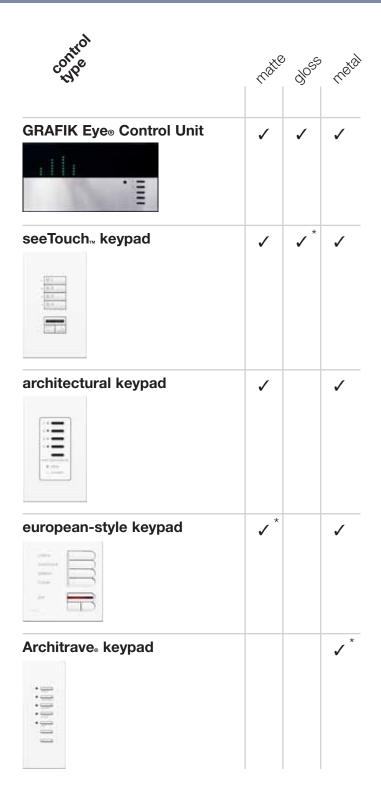
typical system

- GRAFIK Eye. control units
- GP and/or LP dimming panels with RTISS™ (Real-Time Illumination Stability System) technology to dim lights XP switching panels with Softswitch™ technology for switching lights on and off
- PC-based set-up software for modeling and control strategies
- low-voltage wallstations for local control

features

- contact closure input/output devices to integrate with occupancy sensors, daylight sensors and daylight control/projection screens
- shade control to control daylight
- DMX integration
- RS232 integration
- astronomic timeclock
- partition status indication

GRAFIK Eye_® 4000 system | controls



notes:

Due to printing limitations, colors and finishes shown cannot be guaranteed to perfectly match actual product colors.

* Not all products are available in all colors. Consult your local Lutron representative for specific color information.

GRAFIK Eye_® 4000 system power panels

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GP	offices classrooms museums retail ballrooms	120V, 277V, 220-240V (AU), 230V (CE), 100V (JA), 50 or 60HZ	feed through main lugs, main breaker, dual tap main lugs isolator switch		2000W/VA 16A continuous/ circuit 10A 230V (CE)	inc, mlv, elv, fl, n, cc, nd	high-grade toroidal filter
LP	offices classrooms museums retail ballrooms	120V, 220- 240V (AU), 230V (CE)	main lugs, main breaker isolation switch	4-32 lighting zones (1-8 dimming modules)	16A continuous/ module 13A 230V (CE)	inc, mlv, elv, n, cc, nd, motor, interface needed for fl	highest- grade toroidal filter
XP Softswitch™	hallways parking gymnasiums natatoriums	120V, 277V, 347V, 220- 240V (AU), 230V (CE)	feed through main lugs	4-48 (feed through panels) 4-42 (panels with breakers)	16A continuous/ circuit	all lamp types and motor loads	no
DCI	auditoriums sound rooms	120V 60Hz	feed through	1-3	1200W continuous/ circuit	inc	inaudible

GRAFIK Eye. 4000 system hotel ballroom application



flexibility + efficiency

Ballrooms generate a sizable portion of a hotel's revenue. They are pillars of the facility's financial health. To attract meeting and event planners, and to make sure they return, ballrooms need to be as flexible as possible. The GRAFIK Eye 4000 system is a thoroughly adaptable solution for flexible ballroom spaces.

Additionally, because lighting is typically the largest electrical load in a hotel, ballrooms must be as efficient as possible. The GRAFIK Eye 4000 can ensure that no more than exactly the right light is used, bringing increased operational efficiency to the space.

grand ballroom

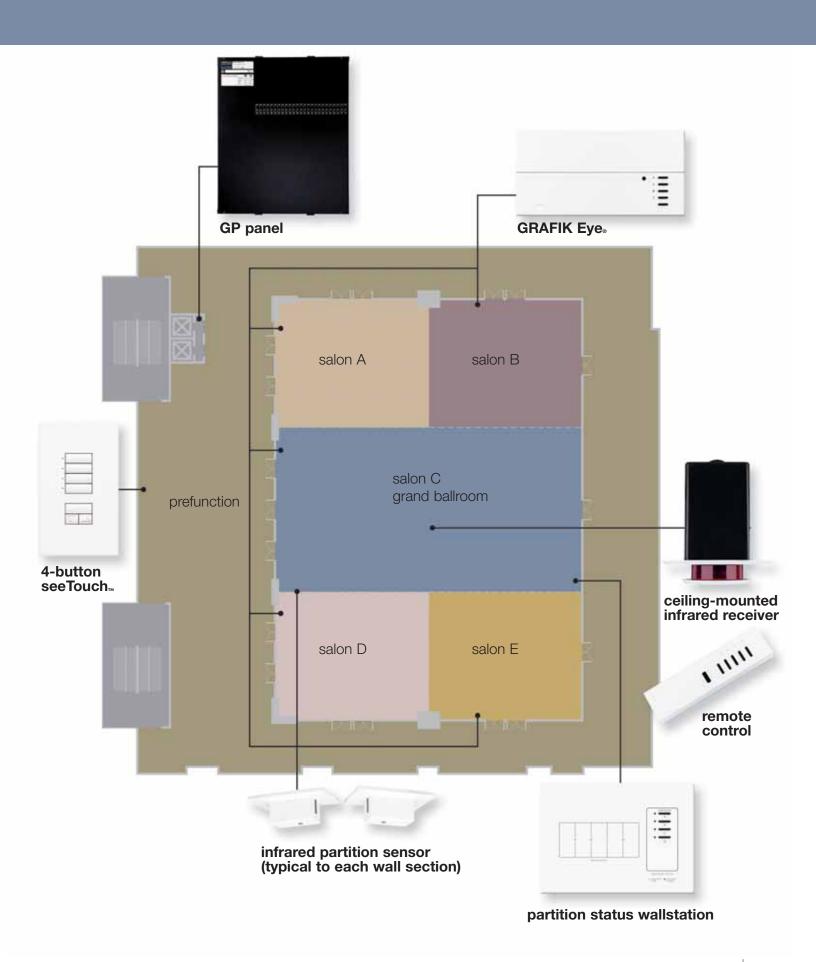
Create the perfect mood for any event or celebration. Make the ballroom more flexible.

salon A

After a keynote address, when the partitions roll out for breakout sessions, light zones can be controlled individually in each new room, no matter how the space is configured. Within partitioned rooms, meeting organizers or hotel staff can use intuitive and attractive GRAFIK Eye wall controls to adjust the lights manually allowing them to provide the proper lighting for speeches, A/V presentations or open discussion.

prefunction

GRAFIK Eye 4000 light controls increase operational efficiency, reducing energy usage and extending lamp life. The system's timeclock can integrate with occupancy sensors, turning off lights in unoccupied rooms after hours, eliminating energy waste in the space.



GRAFIK Eye. 4000 system | conference room application



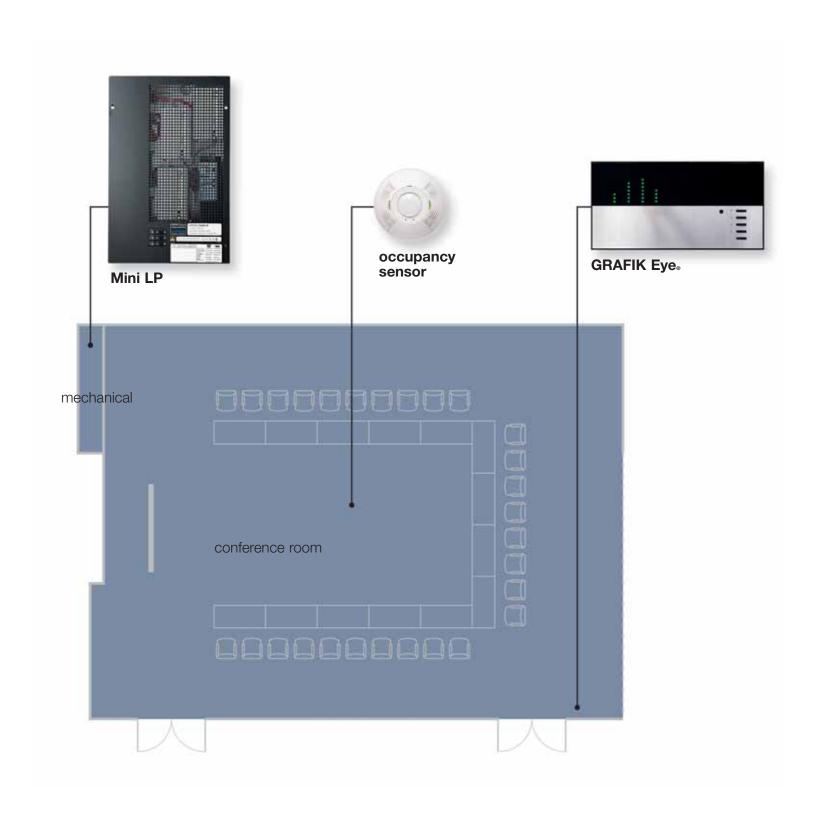
the tools for any task

The conference room is the site of innovation, collaboration and communication. These spaces require technology that enhances the free flow of ideas and that presents an organization at its best. GRAFIK Eye 4000 integrates with conference room technology and puts control of the environment in the hands of the meeting attendees. At the same time, the system keeps energy costs at a minimum by providing no more than exactly the right light.

large conference room

Make conference rooms more flexible. Control the lighting to accommodate activities such as roundtable discussions, single-speaker presentations, video presentations, cleanup-even videoconferencing.

Save energy by using occupancy sensors to turn off the lights when the conference room is not in use.



GRAFIK Eye. 4000 system high-end retail application



the customer experience

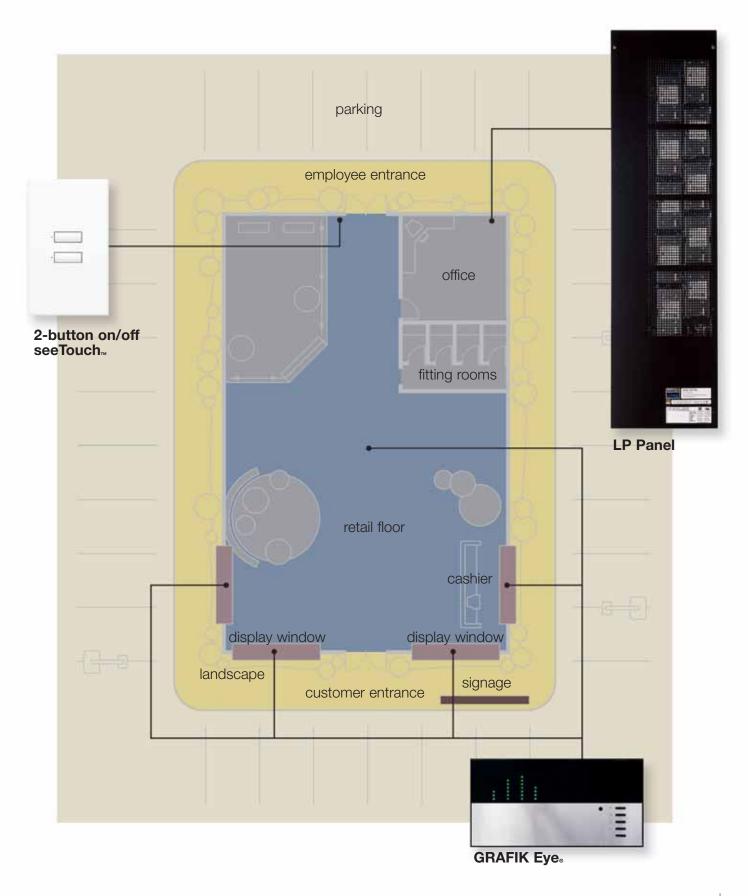
Whether a high-end retail store is displaying a sleek evening gown, a flawless timepiece, or the latest home theater display, it depends on lighting. The lighting should render color perfectly. It should highlight texture. It should focus customers' attention with precision and understatement. Altogether, it should present the merchandise in a context that inspires. GRAFIK Eye 4000 is the ideal fit for the retail environment that depends upon leaving customers with a deep impression of luxury and style. With GRAFIK Eye 4000, light control frames the customer's understanding of the retail space.

retail floor

Enhance the your customers shopping experience by creating a dramatic and elegant atmosphere using lighting sequences. The lighting control system integrates seamlessly with virtually silent Sivoia QED window treatments. When shades are integrated with daylight sensors, they can automatically raise and lower in response to daylight, protecting valuable fabrics, furnishings and equipment from sun damage.

display windows

Draw customers attention by creating dynamic merchandise displays.



GRAFIK Eye. 4000 system museum application



a work of art

Museums and galleries have a mandate to display art in precisely the right light. Too much light, too little light, glare, limited daylight all these are challenges curators and gallery managers must contend with. With the GRAFIK Eye 4000, intuitive, powerful light control is made easy. Harmful sun glare can be controlled automatically. Exhibits spaces are constantly rearranged. New exhibits requires new lighting. GRAFIK Eye 4000 keeps up. GRAFIK Eye 4000 gives curators and gallery managers the tools to let the art speak for itself.



gallery

Instantly recall the proper light intensity for optimum color rendition with the touch of a button.



exhibit

Easily reconfigure the lighting within the space to accommodate touring exhibitions.



lobby

Protect valuable art from harmful UV rays by automatically raising and lowering shades based on time of day or the presence of daylight. Lutron can provide a wide range of fabrics that vary in the amount of light they allow through.



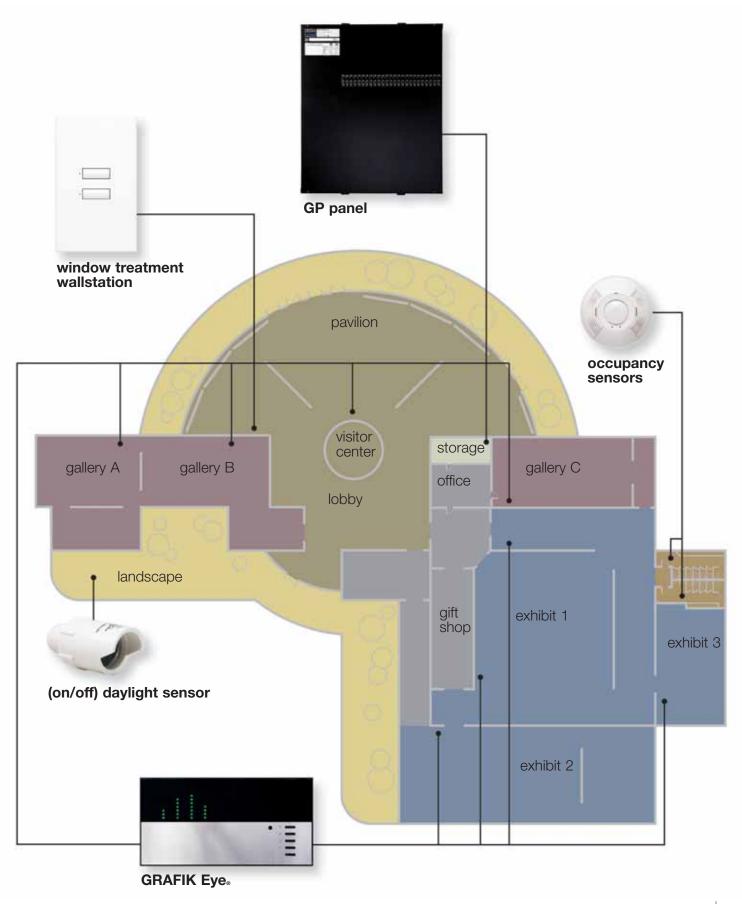
restrooms

Save energy in areas with intermittent use. Occupancy sensors will turn off lighting when areas are unoccupied.



landscape

Beautify the building and its surroundings. Make the building architecture as compelling as the artwork within by creating dramatic lighting effects.



LCP128_™ system applications

LCP128 is a cost-effective solution that automates many of the routine lighting adjustments needed throughout the day.



restaurant - timed control

Change the lighting seamlessly throughout the day to create the perfect dining experience.



retail space - intuitive control

Integrate with precision-designed manual controls for highly adaptable lighting.



house of worship - scene control

Set the right mood for any activity or event.



auditorium – architectural and theatrical control from one system

Temporarily move control of the lighting system to a theatrical sound board for special events.

LCP128_™ system design goals

What lighting control features does your project need?



time scheduling

Turn lights on and off automatically based on a user-defined schedule.



manual overrides

Provide control points throughout a space.



scene control

Lighting "presets" call up different scenes for different purposes.



entertainment lighting

Control DMX lighting and integrate with DMX lighting consoles.

LCP128_™ system introduction

The LCP128 system is an integrated lighting control solution that unites all lighting circuits - switched and dimmed, interior and exterior – in one simple system.



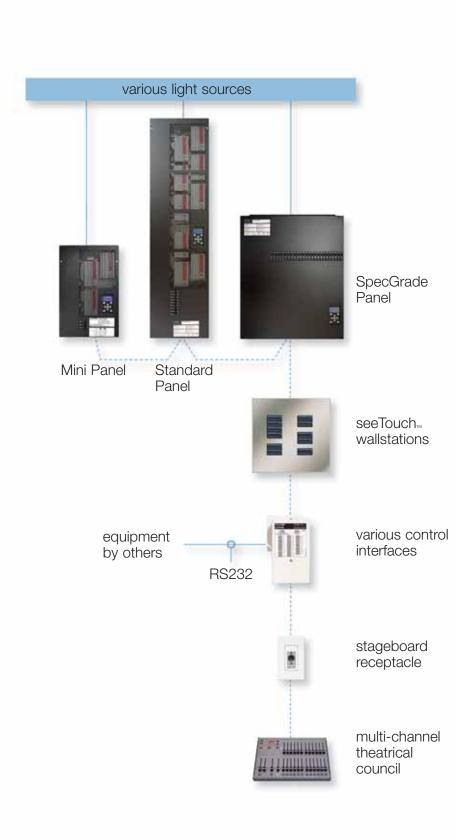
System benefits

flexibility - This self-contained lighting control system offers numerous options for control.Individual lighting patterns can be selected via the astronomical time clock, occupant sensors, daylight sensors or manual wallstations to meet the specific needs of the property.

simplicity – Easily override the scheduled lighting operation with the integrated menu-based LCD programmer or remote mounted wallstations.

Lower installation cost - Panels are prewired to reduce installation time and material cost. Integrated panels with circuit breakers help eliminate redundant hardware and allow contractors to install fewer components.

LCP128_™ system overview



typical system

- LCP128 standard and/or LCP128 SPecGrade panels with RTISS™ (Real-Time Illumination Stability System) technology to dim lights. XP switching panels with SoftSwitch_m technology for switching lights on and off.
- Integrated LCD Programmer for system setup
- Low-voltage seeTouch wallstations for local control.

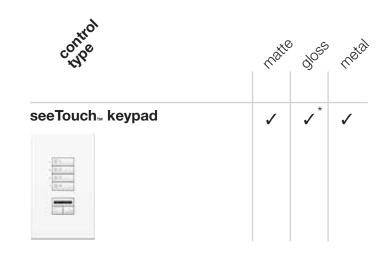
options

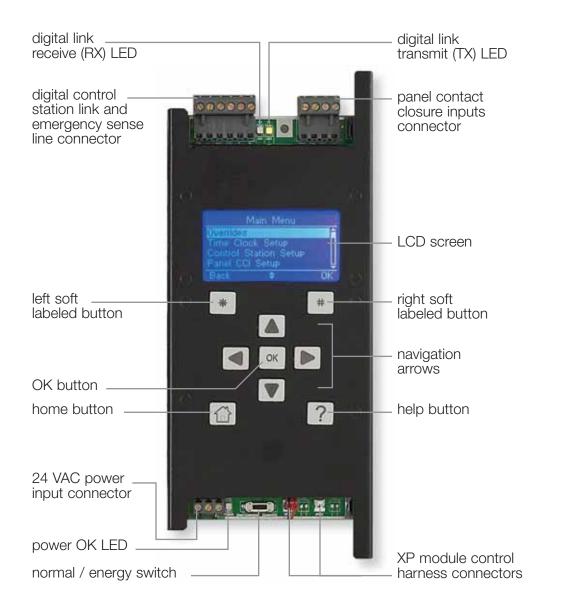
- Contact closure input/output devices to integrate with occupancy sensors, daylight sensors and daylight control/projection screens.
- DMX integration
- RS232 integration
- Astronomic timeclock

LCP128_™ system control options

control options

Choose from a wide range of control styles, colors and finishes. Add PC-based software for easy set-up and archiving, timeclock integration and sequencing.





LCP128_™ system power panels

panel	applications	VOJISOS.	Calegrale	runderite	load rating	load type	variable for
LCP128 Standard	casual dining retail	120V, 220- 240V (AU), 230V (CE) 50/60Hz	feed through, main lugs, main breaker, dual tap main lugs	36 lighting zones (1-9 modules)	16A continuous per module, 13A 230V (CE)	motor	high-grade toroidal filter
LCP128 SpecGrade	high-end dining high-end retail auditorium house of worship	120V, 277V 50/60Hz	feed through, main lugs, main breaker, dual tap main lugs	8-24 lighting zones (16 + 277V)	2000W/VA, 16A continuous circuit	fluorescent	highest- grade toroidal filter

The new LCP128 SpecGrade lighting control panels expand upon the capabilities of the existing LCP128 system by increasing flexibility, capacity, and performance.

flexibility – Easily change the load types required in the space without additional hardware. Universal dimming cards can be reprogrammed in the field to match any load types, including incandescent, magnetic low voltage, electronic low voltage, fluorescent, neon cold cathode, and non-dim.

performance – The lamp-noise suppression performance provided by the standard LCP128 panel is sufficient for most applications. Noise sensitive applications such as sound rooms or auditoriums require the superior lamp noise suppression performance offered by the LCP128 SpecGrade. It is common to use current rise-time as an indicator of this performance; the longer the rise-time, the less the lamp noise.

increased capacity – The LCP128 SpecGrade panel has a load capacity of 16A per circuit. It is also available in a 277V version.

integration – The LCP128 SpecGrade can easily integrate with a DMX512/1190-compatible stage-lighting console via an ODMX-512 interface from Lutron.

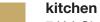
LCP128_™ system restaurant application



a memorable experience

A great restaurant has an attentive, knowledgeable front-of-house staff. It boasts a uniformly delicious menu. A great restaurant's ambience is romantic, or fun, or sophisticated, depending upon its ambitions. And more than ever, great restaurants depend on great light control to create an experience for guests that welcomes them, that transports them, and that brings them back.

Moreover, restaurant are busy. Flawless lighting control that runs on a timeclock keeps the waitstaff focused on the customers and management focused on operation.



7AM Chef and staff start culinary preparation: Lights full on.

office

10AM Manager arrives: Occupancy sensor turns lights on.

open dining

10AM Wait staff arrive: Lights full on for setup.
11AM Restaurant opens: Preset "lunch" scene on.
4PM Dinner: Lights fade to "dinner" scene.
1AM Closing: All dining lights full on for cleanup.
2AM Last employee leaves: All interior lights off.

private dining

4PM Private birthday party: Adjust lighting to preset "party" scene.

bar

4PM Cocktail hour: Bartender adjusts bar lighting in bar area.

12AM Last call: Lights ramp to full on.

landscape and parking

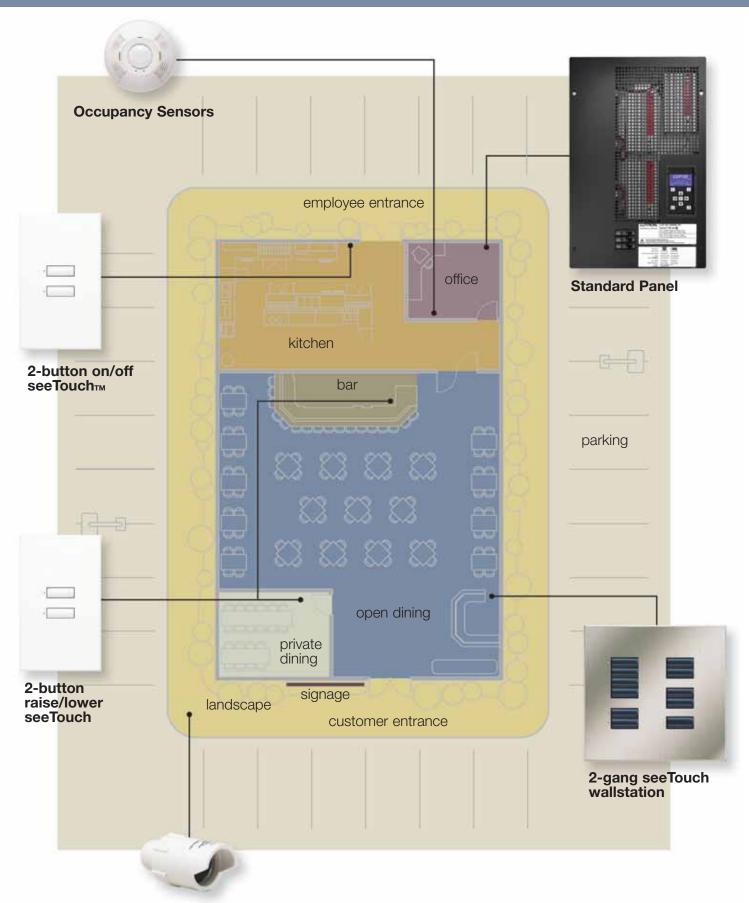
5PM Sunset: Landscape lights on and parking lot lights on.

1AM Closing: Landscape lights off. 2AM Last employee leaves: Parking lot lights

timed-off for employee safety.

signage

11AM Restaurant opens: Signage lighting on. 1AM Closing: Signage lighting off.



LCP128_™ system retail application



merchandise in its best light

In retail, success depends upon catching and holding your customers' interest. Every inch of a retail store is thoughtfully designed so customers get the most out of their visit. A successful lighting control strategy brings merchandise to life. And with inventory constantly shifting, lighting control keeps up, providing the right light for the products. At the same time, lighting control is an easy, energy-saving solution that can run automatically, turning off lights based on time of day and whether or not there are occupants in a space.



9AM Manager arrives. Occupancy sensor activates office lights.

Throughout day: Occupancy sensors keep lights off when office is unoccupied, saving energy. 10PM Office lights turn off automatically when manager leaves.

sales floor

9AM Sales floor lights come full on as staff prepares for opening.

10AM Sales floor lights dim automatically for opening. 5PM Interior lights dim to adjust to reduced daylight. 9PM Sales floor lights come full on after close for cleaning and inventory adjustment.

10PM Staff leaves. Sales floor lights turn off.

fitting rooms

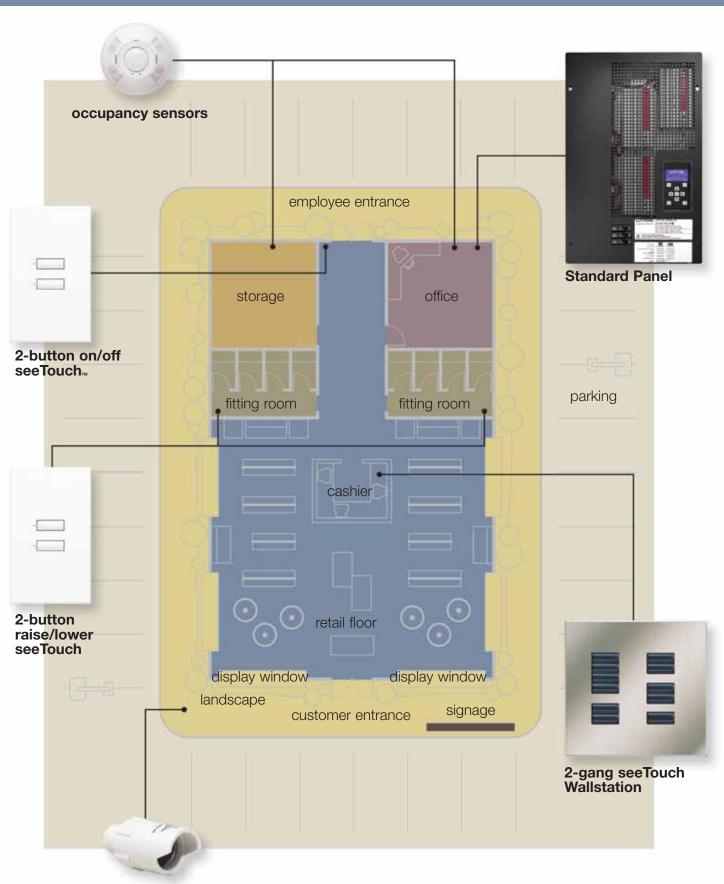
10AM Fitting rooms lights turn on.
Throughout day: Customers adjust lighting manually.
9PM Fitting room lights turn off.

exterior

10AM Signage and display window lights turn on automatically.

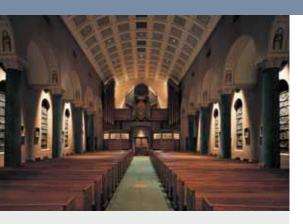
5PM Landscape and parking lights turn on. 9PM Display window lights dim to 50 percent. 10PM Landscape lights turn off. Parking lot lights timed off for employee safety.

12AM Display window lights turn off.



(on/off) daylight sensor

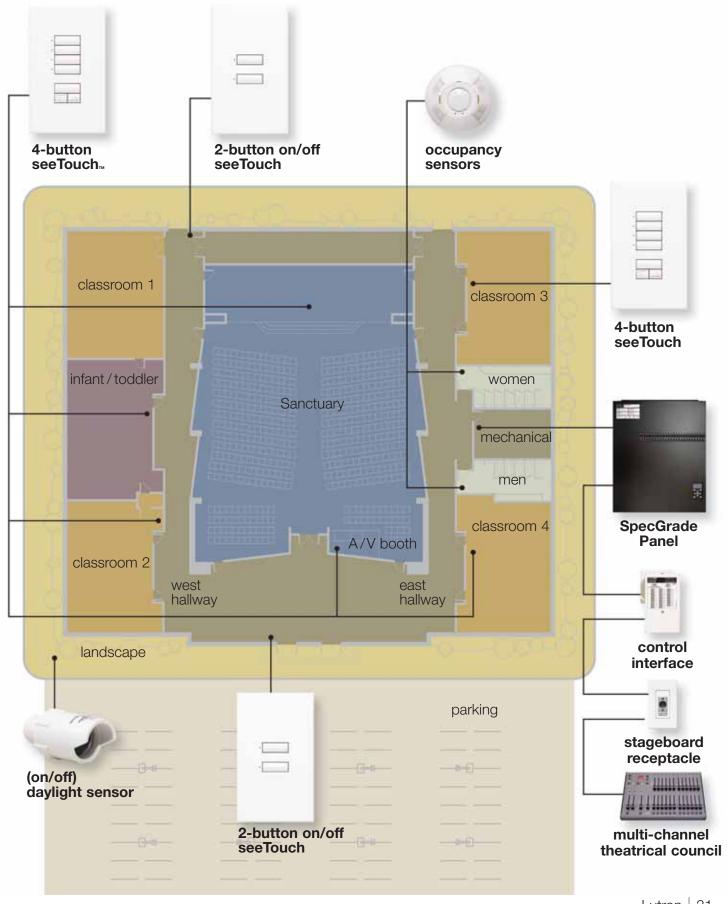
LCP128_™ system house of worship application



a reverent space

Lighting in a house of worship creates changes with the needs of the space. A congregation can be led in solemnity or celebration and the service will be fully supported with control of the lighting. The lighting can integrate with DMX systems when the need for theatrical light control arises. And because houses of worship are used so much by the community for so many reasons, every room can be integrated into one system, controlling costs while making the space as useful as possible.





LCP128™ system auditorium application



start the show

Auditoriums are used for just about every event that requires the attention of a large number of people: presentations, ceremonies, theater, music, speeches. The spaces need to be adaptable to meet an everchanging list of uses, and yet keep costs as low as possible. With LCP128, theatrical lighting integrates easily into the space simply attach the control board to the system and the architectural lighting can be controlled from the DMX console. SeeTouch wallstations are easy-to-use, so anyone using the space can benefit from their intuitive design. And overall, one control allows simple adjustment of the lights in the entire space.



Provide a welcoming environment by dimming the lobby lighting. Enhance safety and security by integrating with a security system. Signal end of intermission by softly dimming the lights, directing the audience back to their seats.

stage

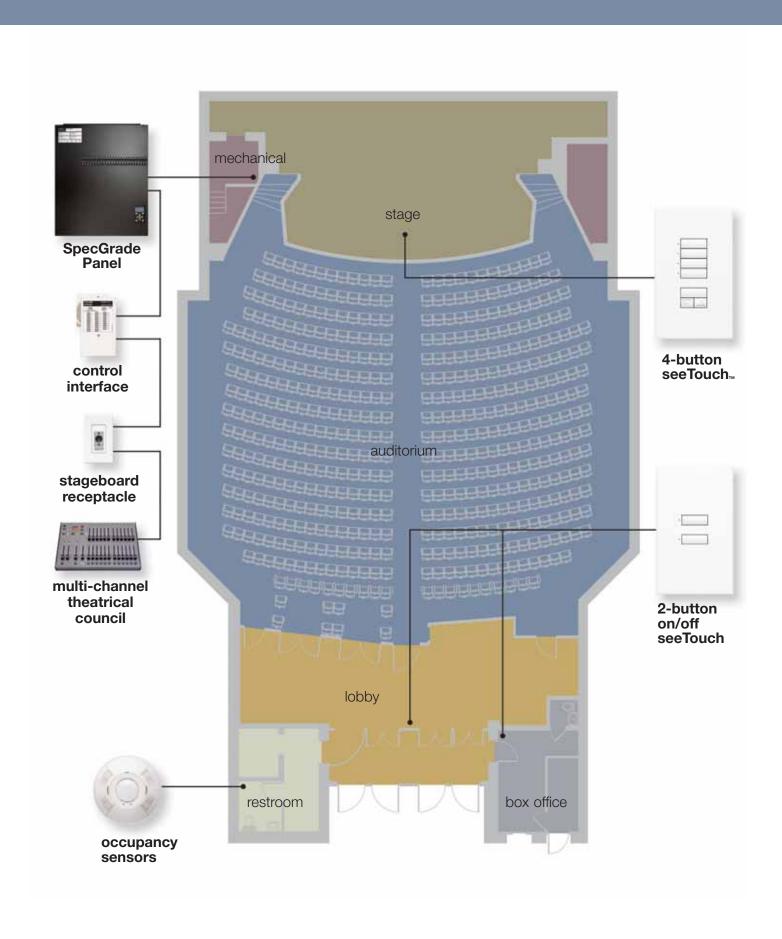
Create the ideal lighting for any performance. Integrate LCP128 seamlessly with DMX512/1190-compatible stage lighting to provide total control of the stage lighting.

auditorium

Slowly bring the lights to full on to allow the audience to exit safely.

restrooms

Save energy in areas with intermittent use. Occupancy sensors will turn off lighting when areas are unoccupied.





Lutron controls your light...

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