

preset lighting control systems | GRAFIK Eye_® 4000 and LCP128_™ Lighting control solutions for commercial and institutional spaces



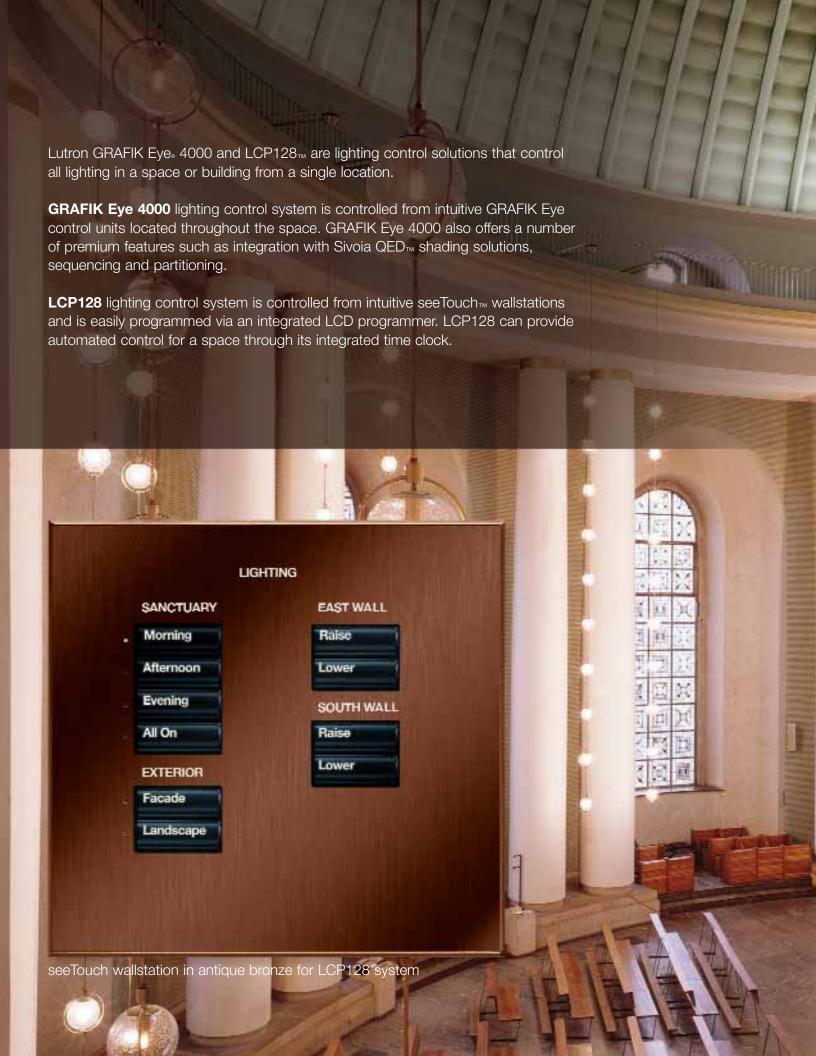
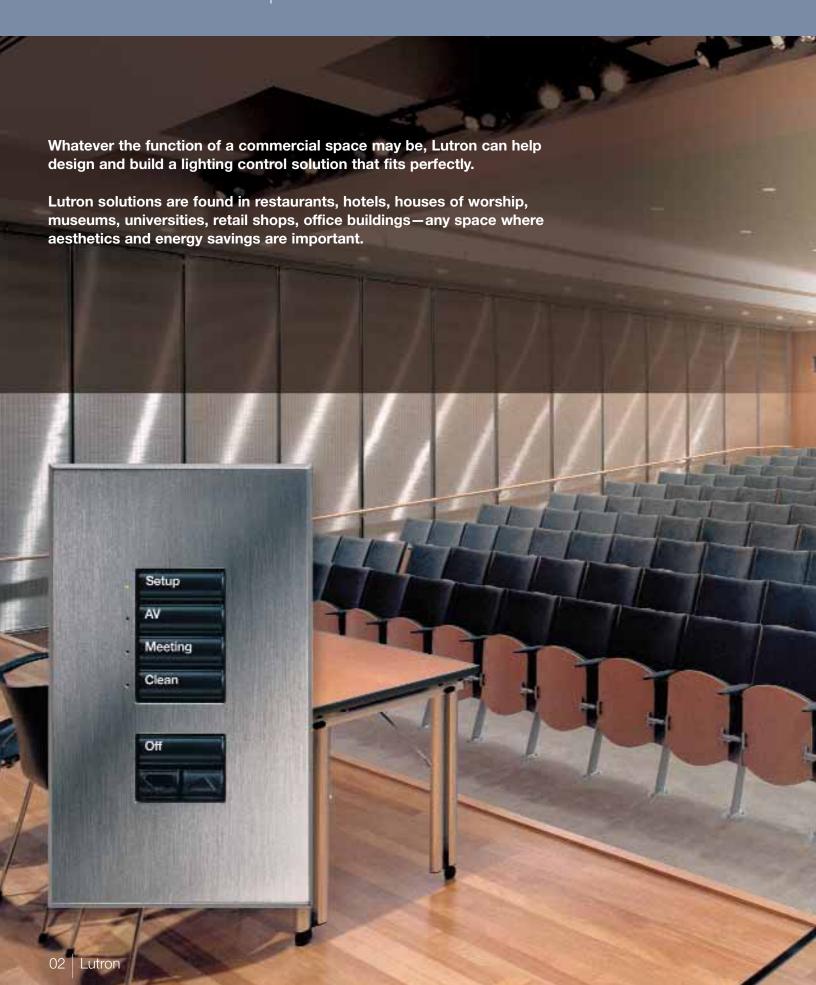




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commercial systems | benefits





Understanding the needs of your project is our top priority. Preset lighting control is the heart of lighting 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 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.

What lighting control features does your project need?

		GRAFIK Eye _® 4000	LCP128 _™
	scene control Lighting "presets" call up different scenes for different purposes.	✓	✓
	portable control IR remote control for handheld lighting control.	✓	✓
	time scheduling Turn lights on and off automatically based on a user-defined schedule.	✓	✓
	occupant response Lights respond to room occupancy.	✓	✓
	BMS integration Lighting control integrates with building management systems.	✓	✓
	manual overrides Provide control points throughout a space.	✓	✓
	daylight control Integrate electronic window treatments with lighting controls.	✓	✓
	console control Take control with connection to DMX consoles.	✓	✓
	entertainment lighting Control DMX lighting and theatrical fixtures.	✓	
AB	partitioning Lighting controls automatically adapt to changes in room configurations.	✓	
1234	sequencing Preset scenes cycle automatically to create effects.	✓	
	daylighting Daylight sensors balance electric lights with available daylight.	✓	

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



ballroom

Large partitionable spaces call for flexible control options depending on the arrangement of the movable walls.

conference room

Make the space more functional by adjusting both natural and electric light to set just the right light.



high-end retail

Call attention to merchandise by creating a dynamic and dramatic shopping experience.



museum

Display artwork in its best light. Protect art from harmful UV rays by using shades.

GRAFIK Eye. 4000 system | design goals

What lighting control features does your project need?



partitioning

Lighting controls automatically adapt to changes in room configurations.



manual overrides

Provide control points throughout a space.



scene control

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



daylight control

Integrate electronic window treatments with lighting controls.



sequencing

Preset scenes cycle automatically to create effects.



daylight control

Integrate electronic window treatments with lighting controls.



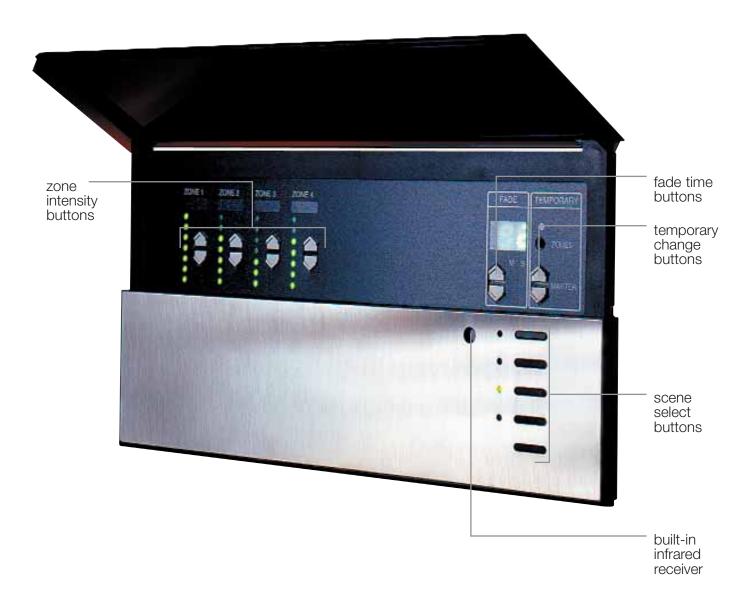
sequencing

Preset scenes cycle automatically to create effects.

GRAFIK Eye. 4000 system | introduction

GRAFIK Eye 4000 is a lighting control system that 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.

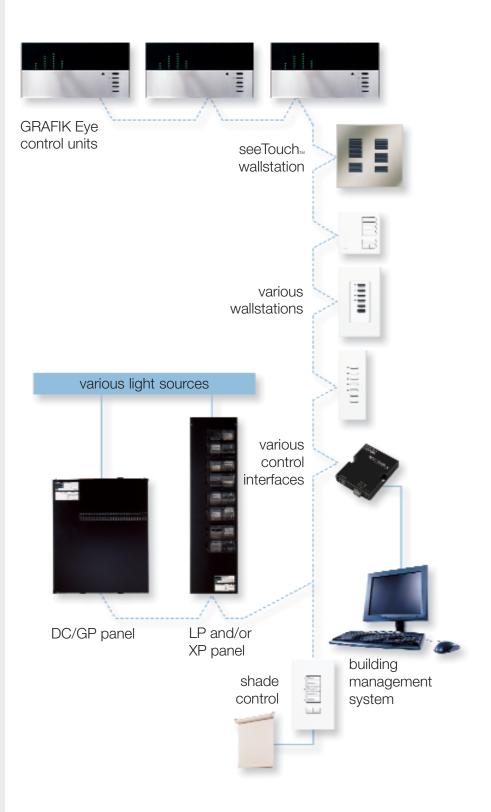


typical system

- · 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 setup software for modeling and control strategies
- low-voltage wallstations for additional local control

features

- contact closure input/output devices to integrate with occupancy sensors, daylight sensors and daylight control/projection screens
- daylight control with automated shades
- · DMX integration
- Ethernet TCP/IP and RS232 integration
- · astronomical time clock
- · partition status indication



GRAFIK Eye_® 4000 system | control options



control options

Choose from a wide range of control styles, colors and finishes.

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 boardrooms	120V, 277V, 220-240V (AU), 230V (CE), 100V (JA), 50/60Hz	feed through main lugs, main breaker, dual tap main lugs isolator switch		120V: 2000W/VA, 277V: 4500W/VA, 220-240V: 3840W/VA, 230V: 2300W/VA, 100V: 1600W/VA*	incandescent, magnetic low-voltage, electronic low-voltage, fluorescent, neon/cold cathode, non-dim	highest- grade toroidal filter
LP	offices classrooms museums retail ballrooms	120V, 220- 240V (AU), 230V (CE)	main lugs, main breaker isolation switch	4-32 lighting circuits (1-8 dimming modules)	16A continuous/ module 13A 230V (CE)	incandescent, magnetic low-voltage, electronic low-voltage, fluorescent (requires interface), neon/cold cathode, non- dim, motor	high-grade toroidal filter
XP Softswitch _™	hallways parking gymnasiums natatoriums open offices	120V, 277V, 347V, 220- 240V (AU), 230V (CE)	feed through main lugs, main breaker isolation switch	4-48 (feed through panels), 4-42 (panels with breakers), 4-24 (CE and AU)	16A continuous/ circuit	all lamp types and motor loads	n/a
DC	auditoriums sound rooms MRI	120V 60Hz	feed through	1-3	1200W continuous/ circuit	incandescent	inaudible

^{*} All are 16A continuous/circuit except 230V, which is 10A continuous/circuit

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. GRAFIK Eye 4000 can ensure that the right amount of 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.

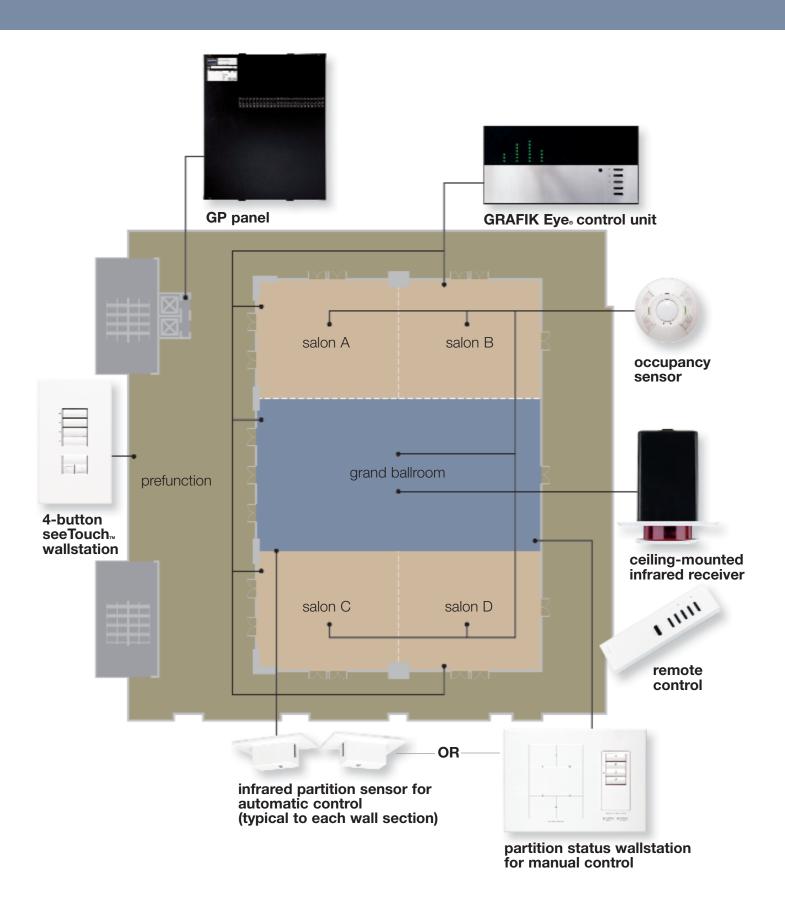
salons

After a keynote address, when the partitions roll out for breakout sessions, zones of light 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 control units or automatic partition sensors to adjust the lights, allowing them to provide the proper lighting for speeches, A/V presentations or open discussion.

Increase operational efficiency, reduce energy usage and extend lamp life. The system's time clock can integrate with occupancy sensors, turning off lights in unoccupied rooms after hours, eliminating energy waste in the space.

prefunction

Provide a welcoming environment by dimming the prefunction area lighting. Enhance safety by integrating with a security system.



GRAFIK Eye. 4000 system | conference room application



the tools for any task

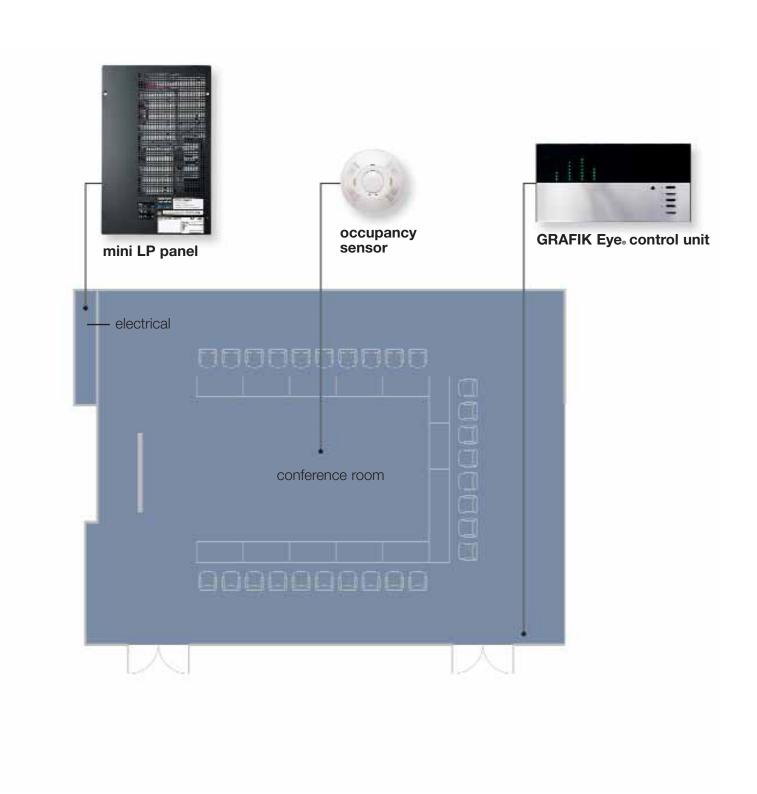
The conference room is the site of innovation, collaboration and communication. These spaces require technology that enhances the free flow of ideas and that presents an organization at its best. GRAFIK Eye 4000 integrates with conference room technology and puts control of the environment in the hands of the meeting attendees. At the same time, the system keeps energy costs at a minimum by using occupancy sensors.



large conference room

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

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

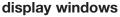


the customer experience

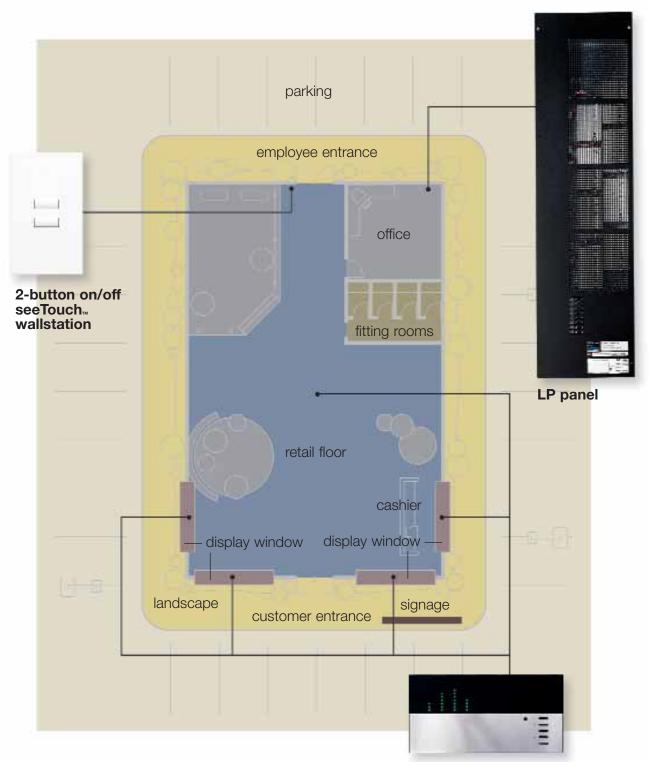
Whether a high-end retail store is displaying a sleek evening gown, a flawless timepiece, or the latest home theater display, lighting plays a key role. The lighting should render color perfectly. It should highlight texture. It should focus customers' attention with precision, and present the merchandise 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, lighting control frames the customer's understanding of the retail space.



Enhance 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.



Draw customers' attention by creating dynamic merchandise displays.



GRAFIK Eye. control unit

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 daylightall these are challenges curators and gallery managers must contend with. With the GRAFIK Eye 4000, intuitive, powerful lighting control is made easy. Harmful sun glare can be controlled automatically.

As exhibit spaces are rearranged, and as new exhibits are added, GRAFIK Eye 4000 can be easily reconfigured to present the artwork in its best light. 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 rendering with the touch of a button.

exhibit

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

lobby

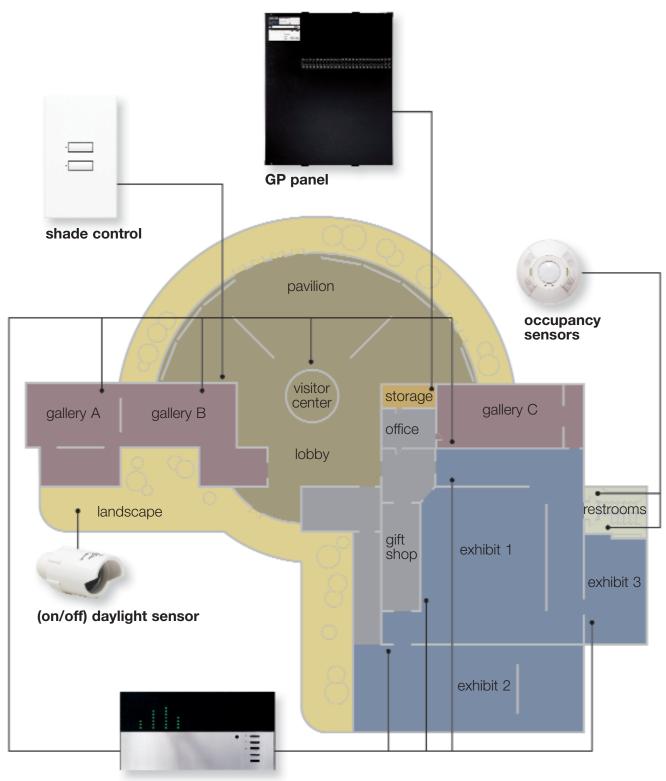
Protect valuable art from harmful UV rays by automatically raising and lowering shades based on time of day or the presence of daylight. Lutron can provide a wide range of fabrics that vary in the amount of light they allow through.

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.



GRAFIK Eye_® control unit

LCP128 is a simple lighting control solution that provides automated control for a space.



restaurant

Automate lighting adjustments throughout the day to create the perfect dining experience and increase operational efficiency.



retail space

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



house of worship

Scene control sets the right mood for any activity or event.



auditorium

Temporarily move control of the lighting system to a theatrical console 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.



console control

Take control with connection to DMX consoles.

LCP128™ system | introduction

LCP128 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, occupancy 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.

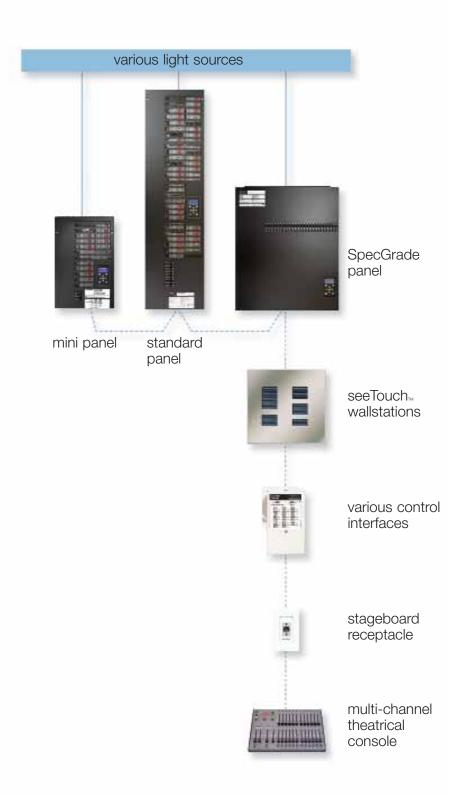
lower installation cost – Panels are prewired to reduce installation time and material cost. Integrated panels with circuit breakers help eliminate redundant hardware and allow contractors to install fewer components.

typical system

- LCP128 panels with RTISS_™ (Real-Time Illumination Stability System) technology to dim lights
- XP switching modules with Softswitch_™ technology can be used for switching lights on and off
- integrated LCD programmer for system setup
- low-voltage seeTouch wallstations for local control
- control interfaces for integration with security systems

features

- contact closure input/output devices to integrate with occupancy sensors, daylight sensors and daylight control/projection screens
- DMX integration
- Ethernet TCP/IP and RS232 integration
- astronomical time clock



LCP128™ system | control options



control options

Other control styles, colors and finishes are available. Please contact your local Lutron representative for further details, or visit www.lutron.com/LCP128.



LCP128 controller

Easily program the entire LCP128 system via the integrated controller.

notes:

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LCP128™ system | power panels

Saley.	applications	voltage	Para reed	runder of	load rating	losd type	latily design
LCP128 mini	casual dining retail hotel lobby	120V, 220- 240V (AU), 230V (CE) 50/60Hz	feed through, input breaker(s)	4-12 lighting circuits (1-3 modules)	16A continuous per module, 13A 230V (CE)	incandescent, magnetic low-voltage, electronic low-voltage, neon/cold cathode, non-dim, motor	high-grade toroidal filter
LCP128 standard	casual dining retail hotel lobby	120V, 220- 240V (AU), 230V (CE) 50/60Hz	feed through, main lugs	4-36 lighting circuits (1-9 modules)	16A continuous per module, 13A 230V (CE)	incandescent, magnetic low-voltage, electronic low-voltage, neon/cold cathode, non-dim, 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 circuits (16 circuits for 277V)	120V: 2000W/VA 16A continuous/ circuit, 277V: 4500W/VA 16A continuous/ circuit	incandescent, magnetic low-voltage, electronic low-voltage, fluorescent, neon/cold cathode, non-dim	highest- grade toroidal filter

The new LCP128 SpecGrade lighting control panels expand upon the capabilities of the existing LCP128 system by increasing flexibility, capacity, integration 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 type, including incandescent, magnetic low-voltage, electronic low-voltage, fluorescent, neon/cold cathode, and non-dim.

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

integration – Along with the LCP128 mini and the LCP128 standard, the LCP128 SpecGrade can easily integrate with a DMX512-compatible stage-lighting console via an ODMX-512 interface from Lutron.

performance – Improved lamp noise suppression performance accommodates noise-sensitive applications such as sound rooms and auditoriums.

LCP128™ system | restaurant application

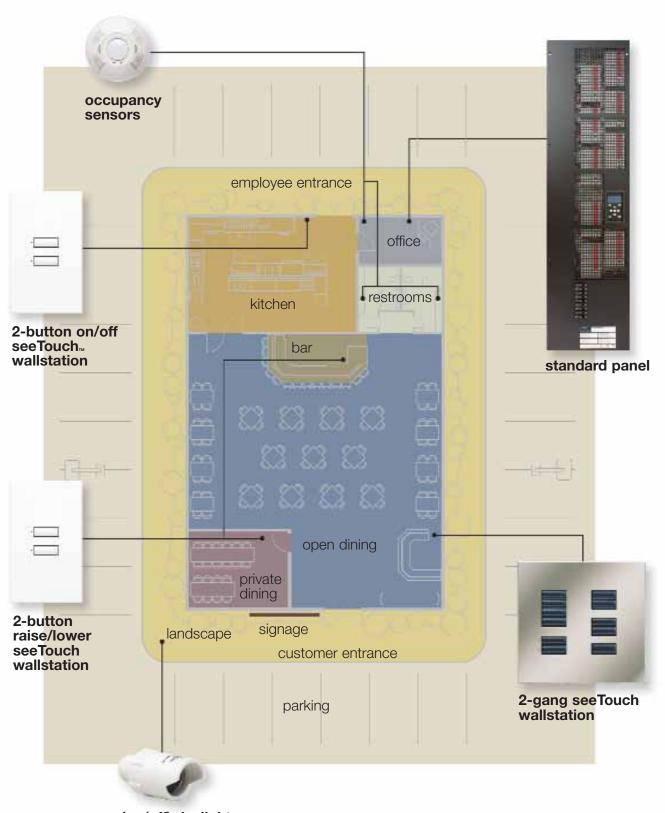


a memorable experience

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 lighting control to create an experience for guests that welcomes them, that transports them, and that brings them back, again and again.

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





(on/off) daylight sensor

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, energysaving 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.

10PM Manager leaves: Office lights turn off

automatically.

Throughout day: Occupancy sensors keep lights off when office is unoccupied, saving energy.

sales floor

9AM Store opens: Floor lights come to full on.

10AM Sales floor lights dim automatically for opening. 5PM Interior lights dim to adjust to reduced daylight.

9PM Store closing: Floor lights come full on after close

for cleaning and inventory adjustment.

10PM Staff leaves: Sales floor lights turn off.

fitting rooms

Fitting room lights turn on. **10AM**

9PM Fitting room lights turn off.

> Throughout day: Customers adjust lighting manually.

exterior

10AM Signage and display window lights turn

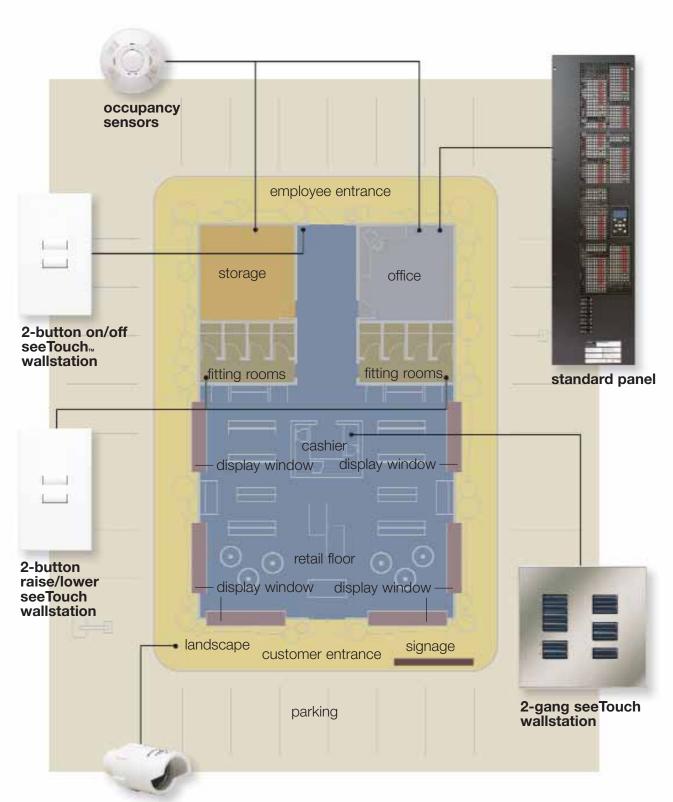
on automatically.

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

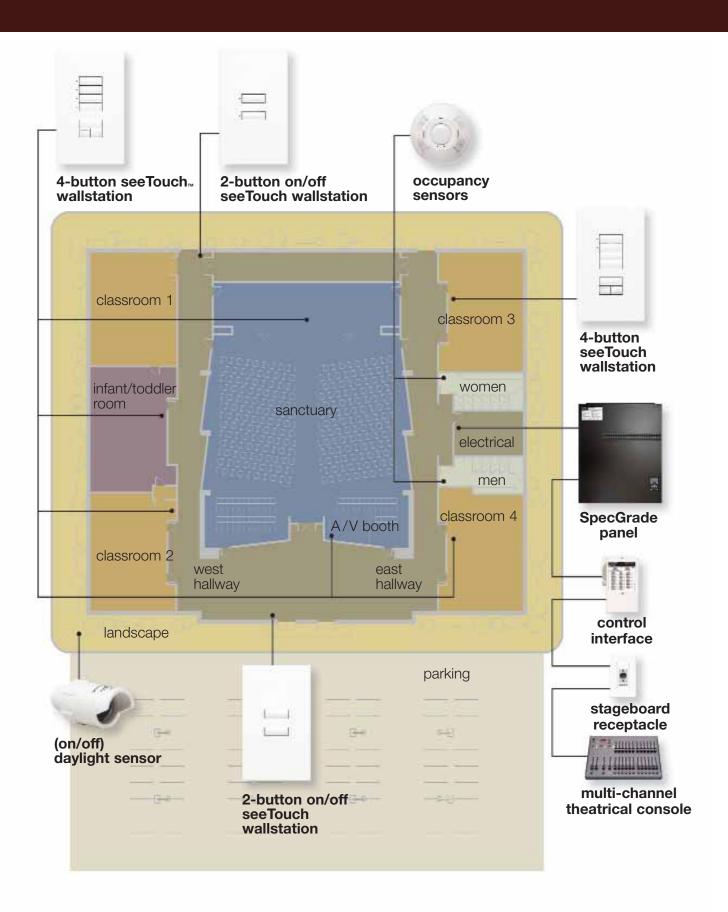
LCP128™ system | house of worship application



a reverent space

Lighting needs to be adaptable in order to accommodate the needs of a house of worship. A congregation can be led in solemnity or celebration and the service will be fully supported with control of the lighting. A DMX512 theatrical console can be plugged in to take control of the lighting during special events. Houses of worship are used by the community for a variety of activities, and LCP128 allows every room to be integrated into one system, controlling costs while making the space flexible.





LCP128™ system | auditorium application



start the show

Auditoriums are used for a variety of events that draw large numbers of guests: Presentations, ceremonies, theater, music, speeches. The space needs to be adaptable to meet an everchanging list of uses, and yet keep costs as low as possible. With LCP128, simply plug in the control board 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.



lobby

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. Plug in a DMX512 theatrical console to take control of the lighting during special events.



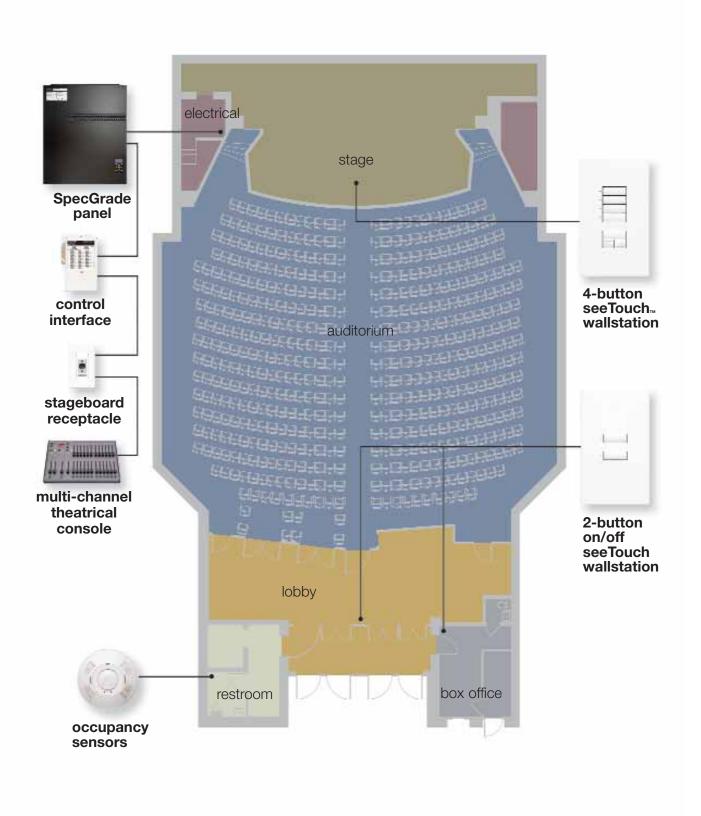
auditorium

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.





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