THE SIMPLE SOLUTION TO ENHANCED LIGHTING CONTROL

designed to be better.™

WATTSTOPPER® ARCHITECTURAL DIMMING PLATFORM OVERVIEW
DELIVERING ON

the experience

Technology is rapidly changing the experience expectation in the built environment. The demands on lighting control and automation systems can be particularly stringent.

Wattstopper Architectural Dimming is leading the way in application expertise with scalable lighting and effortless control solutions. With over 60 years of combined industry knowledge and code standard expertise, our product experts have partnered their mastery of control sensing systems, Architectural Dimming, and automated lighting solutions to create one ultimate platform to meet precise dimming and energy conservation objectives.
The products in the Architectural Dimming platform include the Lighting Control and Automation Panel (LCAP) series, along with a range of unique user interfaces.

Our Architectural Dimming systems are designed for:

- Dimming control of a wide range of lighting types
- A high degree of programmability
- Customized dimming curves
- Smooth dimming over long and short fades
- Control of DMX and Dali lighting
- Simple control of Wattstopper Human Centric Lighting (HCL) using touch screens or mobile app
- Control for simple and intuitive user interfaces
- Integration with shades, BACnet, and other building systems including Digital Lighting Management (DLM)
The Nemacolin resort prides itself in creating one-of-a-kind experiences for its guests. No detail is overlooked, especially in the area of lighting. The resort utilized the Wattstopper Architectural Dimming platform to integrate into or control all lighting scenes, including specialty lighting. The platform provided a system that was easy to install, program, and operate. Additionally, the Equinox touchscreens and keypads with unique widget environment provided personalization of lighting as well as a consistent aesthetic look.

“The potential for customization is very good. We can pretty much set up any lighting scene needed.”

James McMahan
Director of Information Technology at Nemacolin

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NEMACOLIN WOODLANDS RESORT
FARMINGTON, PA

case study
The LCAP series provides high density and fully configurable Architectural Dimming and integration with unique user interfaces that delivers simple end user control.

**LCAP-L**
The LCAP32L is designed for small to medium spaces requiring control of up to 16 separate lighting loads.

**LCAP-H/HS**
The LCAP44H/HS panels are designed for medium to large spaces requiring dimming and control of up to 24 separate lighting loads.

**LCAP-M/MS**
The LCAP32M/S and 44M/S are designed for medium to large spaces requiring control of up to 48 separate line voltage lighting circuits.

**LCAP-A**
The LCAP44A is an auxiliary panel for use with any of the other panels in the LCAP series. It is designed for medium to large spaces requiring dimming of large quantities of 0-10V or PWM-controlled lighting loads, with up to 24 loads per LCAP44A.

**LCAP - M/MS or LCAP - A with Main Lug Option**
Several LCAP panel types can also have additional Main Lug options. The Main Lug panels can support 18-36 breakers from 120-480 VAC and single or three phase. They can be a Main Lug only or a Main Lug with circuit breaker.

**brains & brawn**
### LCAP Configuration Options

#### Modules & Stations

<table>
<thead>
<tr>
<th>Model Number</th>
<th>LCAP</th>
<th>32L</th>
<th>44H</th>
<th>44HS</th>
<th>32M</th>
<th>32S</th>
<th>44M</th>
<th>44S</th>
<th>44A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10V or PWM Control Station</td>
<td>With Relay</td>
<td>4 Load</td>
<td>5 Amp @ 120/277V</td>
<td>Up To 4</td>
<td>Up To 4</td>
<td>Up To 4</td>
<td>N/A</td>
<td>N/A</td>
<td>Up To 6</td>
</tr>
<tr>
<td>Forward Phase Control Power Booster Station</td>
<td>1 Load</td>
<td>16 Amp @ 120/277V</td>
<td>Up To 2</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Reverse Phase Control Power Booster Station</td>
<td>1 Load</td>
<td>8 Amp @ 120 3.5 Amp @ 277V</td>
<td>Up To 2</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Forward Phase Control Dimming Module</td>
<td>12 Load</td>
<td>16 Amp @ 120/277V</td>
<td>N/A</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 4</td>
<td>Up To 4</td>
</tr>
<tr>
<td>Universal Dimming Module</td>
<td>8 Load</td>
<td>32A Total Per Module @ 120/277V</td>
<td>N/A</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 4</td>
<td>Up To 4</td>
</tr>
<tr>
<td>8 Line Feed 8 Load Latching Relay Module</td>
<td>16 Amp @ 120/277V</td>
<td>N/A</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 2</td>
<td>Up To 4</td>
<td>Up To 4</td>
</tr>
</tbody>
</table>

#### Processors

- **LITE Processor**
- **FULL Processor**
- **NO Processor**
- **NO Processor**
- **FULL Processor**
- **NO Processor**
- **NO Processor**
Equinox is a range of unique interfaces that provides end users with intuitive navigation and a simple user experience. The touchscreens and keypads make it easy to control lighting from simple on/off to complex scenes, shades, HCL and color control to divide and combine applications.

The Equinox touchscreens are designed specifically for commercial spaces to simplify the complexity of controlling lighting and shades in rooms for entire buildings.

- Intuitive control of lighting, scenes, and shades including HCL control
- A single control point “Room Button”
- Works in concert with the Equinox Mobile App
- Control partitioned spaces with divide and combine widgets
- A compact alternative to the Equinox 73 LCD
- Create and modify scenes, events, timers, and schedules from the touchscreen
- System access from the touchscreens is customizable and can be as restrictive or as broad as needed
- Available for Android and iOS devices
- Consistent controls as found in the EQ73 and EQ41 touch screens
- App also provides access and control of multiple facilities
- Control lighting, shades, and scenes while allowing for visual feedback for dimmable scenes
- Automatically adjusts to the lit space and ‘sleeps’ during inactive time
- Modular programmable keypad
- Available in one to five buttons and up to four gang configurations
- Custom color palette to mix or match finishes for trims, buttons, and faceplates
- Added personalization with custom engraved keys
- Back-light feature for ease of visibility in dark spaces
A widget is a software application, such as lighting or scene control, embedded in Equinox touchscreens. With only a swipe, flick, or scroll, widgets allow for intuitive system navigation and control. Widgets empower users to personalize the system to their changing environment such as easily replicating the visual comfort of natural daylight with HCL.

**Room Button / Home Screen**
Provides simple on/off control of the space while still allowing the user to access other widgets or favorite scenes.

**Lighting Control**
Use the lighting widget to control discrete lighting loads and for control of HCL or tunable lighting.

**Shade Widget**
Easily control groups of shades or individual shades.

**Scene Widget**
Access a collection of scenes and use the scene from the widget or add it to the favorites bar on the home screen for quick access.

**Settings Menu**
Perform admin functions and create or edit scenes, schedules, or events using this widget.

**Divide and Combine (partitioning)**
Provides discrete control of partitioned spaces. Easily control groups of lights or shades within those spaces.
The Equinox app and accompanying in-wall touchscreens epitomize the ideal user experience by providing a remarkably simple interface for managing commercial environments.

With multiple system widgets available and three user levels—admin, manager, and guest—Equinox can dynamically personalize each iPhone, iPad, and iPod or mobile Android device for any profile.

**Download**

Download the app from the iTunes Store or the Google Play store, install it on the desired tablet, and let the app read the controller system information and build the widgets. Next, configure the different widgets for each tablet and each profile.

**Highlights**

Legrand brings absolute consistency between your mobile Apple or Android devices and the integrated Equinox world. Whether you're inside or outside of the building, users have constant access and control.

**Operation**

The Equinox app for mobile devices and tablets follows a simple licensing model. An app licensed on a system through the installation of Equinox 73 or 41 touchscreens and/or purchasing and installing an Equinox app SD license card. Every Equinox 73 and 41 on a project authorizes one mobile or tablet device license without the need of the SD license card. You can purchase an appropriately sized SD license card if you have additional tablet or mobile devices beyond the Equinox 73 or 41 devices on the project. Simply insert the card into the InFusion controller and leave it there. Your additional mobile devices will be ready to go.

**Shade Widget**

- Simple control of shades using sliders or presets
- Complex control is available through the use of timers, schedulers, sensor integration, or divide and combine
- See status and position of all shades on a project
- Add specific shades and presets to favorites bar

**Divide and Combine**

- Create custom partitioning control of both lighting and shades with minimal programming using the powerful Design Center software program
- Visual representation of divide and combine rooms and status of lighting and shades
- Manual or automatic control of spaces lighting and shades via touchscreen of sensor control
- Takes the complexity out of lighting and shade control of partitioned spaces

**Lighting Widget**

- Simple control of lighting using sliders, presets, or scenes
- Create scenes, schedules, and events from the touchscreen or mobile device for maximum end-user control of the system
- Full control of HCL and Full Color Lighting
- DMX color selection using separate hue, saturation, and intensity controls using RGBW, HSIC, and HSL protocols
- Save HCL or full color swatches as favorites

**SIMPLE BY DESIGN**

at your fingertips
Design Center

- Set up touchscreens based on system design – only the right widgets populate based on the lighting and shading in the space
- Easy design of partitioned spaces
- Set up and modify schedules and timers from Design Center or touchscreens. All changes written to controller memory card.
- Set-up and programming for tunable white and color control
- Equinox view provides live feedback and control of the virtual touchscreen
- Programming of task and scenes using variables, i.e. “if-then” statements for complex control scenarios
The adaptable DLM technology platform provides a controlled infrastructure at every switch, outlet, and lighting load for optimal energy performance.

Integrating the LMDI-100 interface with the Architectural Dimming platform enables building-wide lighting control and energy saving solution.

- Provides bidirectional control between the DLM and Architectural Dimming systems
- Simple user interface through the Equinox touchscreens and keypads
- Easy integration and setup through Design Center software
A hotel project is the perfect example of system synergies between Architectural Dimming and DLM.

While the Architectural Dimming system is used to control the layered lighting system in the lobby, restaurant, and meeting rooms, the DLM system is controlling back of house and outdoor spaces. A single touchscreen or mobile device can be used to control the entire facility. Lighting management can be achieved from multiple interfaces and time-based or sensor-based controls. The designer can define and achieve the desired control criteria for each area from a single system — DLM, Architectural Dimming, or both together.
This hospital is one of the most innovative healthcare projects in the country from its green design, construction, maintenance solutions, and lighting strategies. Legrand solutions were used for the hallways, corridors, and general gathering areas in the facility included the Wattstopper Architectural Dimming platform, which easily met lighting design goals. Incorporating exceptional lighting controls and adjustable lighting levels were important in creating a specific ambiance for each space. Such as, delivering lower light levels in doctor’s lounges to create a more relaxed environment.

“The building is designed to provide as much access to natural light as possible and an open floor plan for collaboration will provide scientists with research spaces that foster creativity, productivity and a robust exchange of ideas.”

BRIGHAM AND WOMEN’S HOSPITAL BUILDING FOR TRANSFORMATIVE MEDICINE
BOSTON, MA

case study
For a successful project, we recognize that system selection, design, programming, and support need to be synchronized between your project design requirements, our system capabilities, and our application and technical support network.

From the initial client meeting, through the system’s basis of design, project mobilization, installation, and start-up, we will provide in-depth assistance for every facet of your project.

THE IDEAL EXPERIENCE

delivered
designed to be better™