# WHAT IS...



# COMPANY PRESENTATION



#### **OVERVIEW:**

SLG Sync is the lighting controls brand under SLG (Spring Lighting Group) – this presentation will highlight the products, app, and services offered by SLG SYNC.















### SO WHAT IS...





SLG Sync is a <u>commercial-grade</u>, network lighting controls system. Utilizing powerful <u>Bluetooth mesh</u> technology to connect sensors, fixtures, controllers, wall switches, and our APP for the easiest wireless controls option on the market with the best support.



## Luminaire Level Lighting Control (LLLC)



**SLG Sync has LLLC capabilities –** Capability to integrate/embed an occupancy sensor, ambient light sensor and networked controller directly into a luminaire (fixture) and/or kit at the time of manufacture; and also satisfy the Control Persistence capability.

## KEY PILLARS OF



#### **KEY PILLARS OF**



## **DEVICES**

# APP

#### **NLC LISTED**

OPTIONAL LAYOUT DESIGN

ON-SITE COMMISSIONING

#### **KEY PILLARS OF**



## **DEVICES**

#### **NLC LISTED**

LAYOUT DESIGN

ON-SITE COMMISSIONING

#### **DEVICES:**

Sensors, Controllers, Accessories, and Controls-Ready Fixtures.

#### APP:

Commissioning, controls, scheduling, and more. Available on Apple and Google Play store for FREE.

#### **NLC LISTED:**

Cyber security, energy monitoring, emergency lighting, external systems integration, energy rebates, and more.

#### **LAYOUT DESIGN:**

We will offer controls layout designs similar to our lighting designs offered by SLG Lighting. Available soon.

#### **ON-SITE COMMISSIONING:**

Our professional staff can handle on-site commissioning, recommended for larger projects.

#### THE TECHNOLOGY BEHIND...





# **SLG Sync** utilizes Bluetooth technology to build a network of devices that are all connected to each other wirelessly.

"When people think of Bluetooth they *generally think* of short-range, residential use products like headphones, speakers, and single light fixtures." **SLG SYNC IS NOT THAT!** 

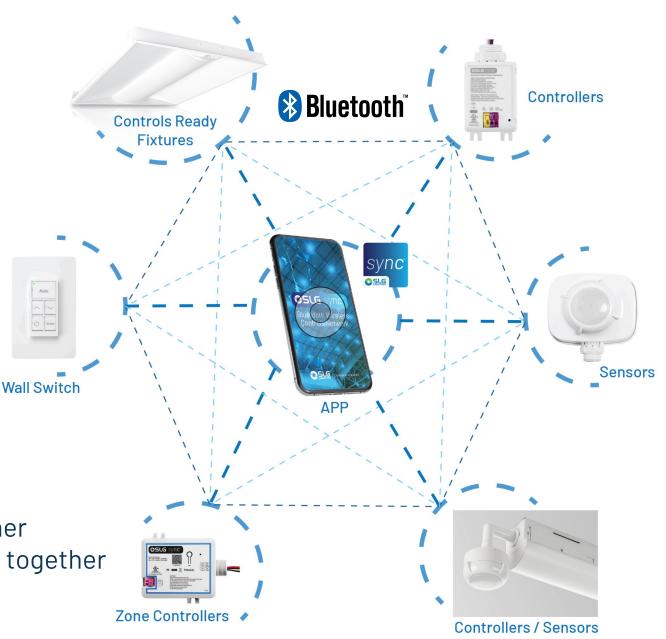




## **BLUETOOTH MESH**

SLG Sync builds a network (kind of like a spider web), where all devices of the system communicate wirelessly with the ability to connect hundreds of devices.

When a device is added to the network ALL other devices in the network recognize it – they work together in a wirelessly connected network.



# CAPABILITIES

This technology allows
SLG Sync to offer a robust,
commercial grade amount of
controls options while being
easy to commission and control
from a mobile device.

#### SYSTEM FEATURES

- Gateway Free Bluetooth Controls App
- 0-10V Dimming Bi-Level Motion
- Harvesting Daylight Harvesting Sensor
- PC Photocell Switch
- Spectrum Analysis
   Distinguished Nature & Artificial Light
- Energy Monitor
   Measure Energy Consumption

	wattotopper	Godd Syric
OCCUPANCY	<b>✓</b>	<b>*</b>
VACANCY	×	<b>*</b>
CONTINUOUS DIMMING	<b>✓</b>	<b>✓</b>
TUNABLE WHITE	×	<b>✓</b>
HIGH TRIM	<b>✓</b>	<b>✓</b>
DAYLIGHT HARVESTING	×	<b>✓</b>
APP CONTROL	×	<b>✓</b>
LINKAGE	×	<b>/</b>
GROUPS	×	<b>/</b>
SCENES	×	<b>✓</b>
SCHEDULE	×	<b>/</b>
CIRCADIAN	×	1
ENERGY MONITOR	×	<b>/</b>
REMOTE ACCESS	×	<b>/</b>

WattStopper® SSLG sync





## **DEVICES**

APP

**NLC LISTED** 

OPTIONAL

LAYOUT DESIGN

OPTIONAL ON-SITE COMMISSIONING

#### **DEVICES:**

#### -Sensors

Including integrated sensor + controller devices.
Bluetooth and ECO sensors.

#### -Controllers

Bluetooth and ECO controllers. Bluetooth Nodes.

#### -Accessories

Wall switch.

Receptacles.

Ceiling mount option.

## -Controls-Ready

**Fixtures** 

Plug and play, Bluetooth driver integrated fixtures.

# DEVICES/ Sensors





#### Use with one of these lenses





MSB-13-L7 20 - 40 ft Mounting Height

#### Compatibility

0-10V Dimming **High Bays** Middle Bays Strip Lighting

Adapter pieces used depending on fixture model





OR



**SR02** 

PLUG AND PLAY: Integrated controller and sensor combo, the 1/8" jack plugs directly into a receptacle on our HEC/HFO Selectable high bays offering a great stocking sensor.

Other compatible fixtures require simple knock-out installed receptacles (SR01 or SR02).



#### SENSOR APPLICATION



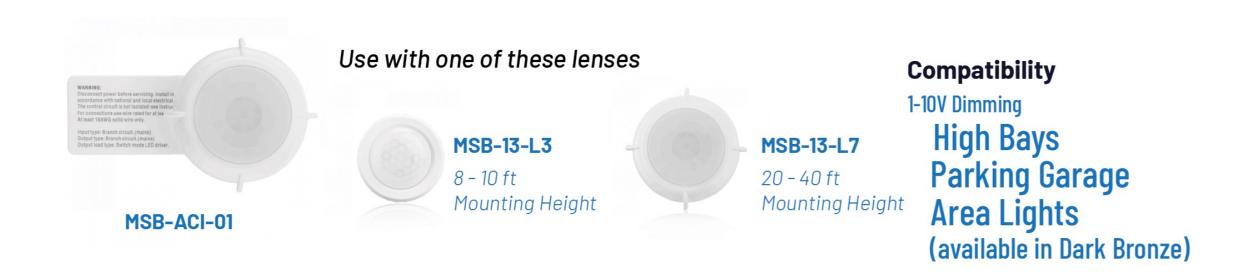
#### **Examples:**

HEC - Plug MSB-DCE-06 sensor directly into the recepticle.



#### Example:

TSC - Install SR02 using the knockout then plug in the MSB-DCE-06 sensor into the recepticle.



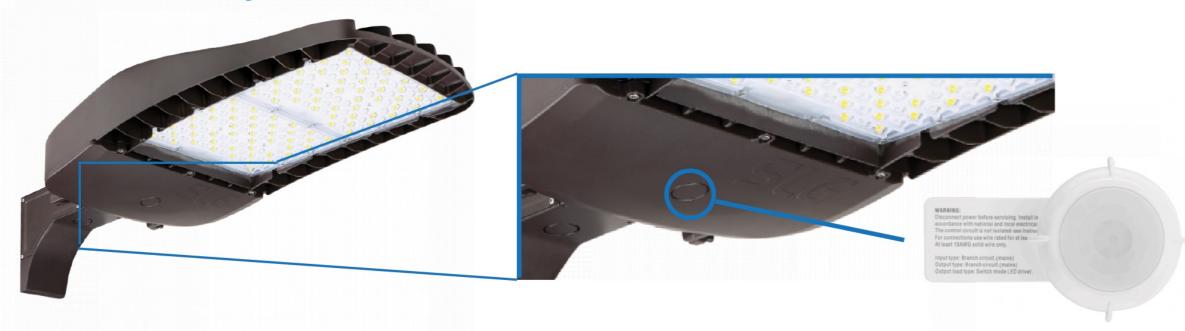
**DIM TO OFF:** Integrated controller and sensor combo featuring a 0-10V relay for full dim-to-off capabilities.



#### **SENSOR APPLICATION**

#### **Example:**

ALW - Install using the knock out.



**OUTDOOR USE:** UV Resistant option (dark finish) available for a clean look and improved lifeline.





MSB-ACE-04

#### Use with one of these lenses



MSB-13-L3 8 - 10 ft Mounting Height



MSB-13-L7 20 - 40 ft Mounting Height

#### Compatibility

1-10V Dimming High Bays **Vapor Tight** Canopy



#### Example:

CSC - Install using the knock out.



#### Controls Ready Fixture sensor Connects to "Controls Ready" fixtures.



MSE-DCI-08

#### Compatibility

Troffer
Panel
Strip Lighting



#### **Example:**

TPB -Install using recepticle on fixture.



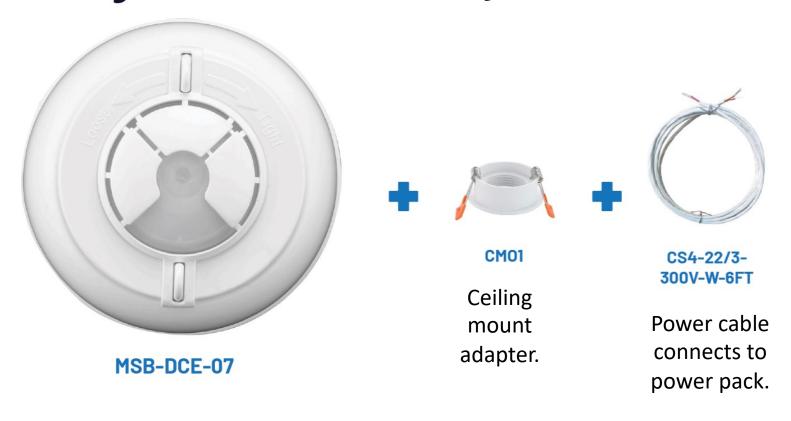
#### SENSOR APPLICATION



MSE-DCI-08



#### Ceiling sensor Mounts to a ceiling and wires to a controller.



#### Compatibility

Troffers
Panels
Office Lighting
20' Mounting Height



#### SENSOR APPLICATION

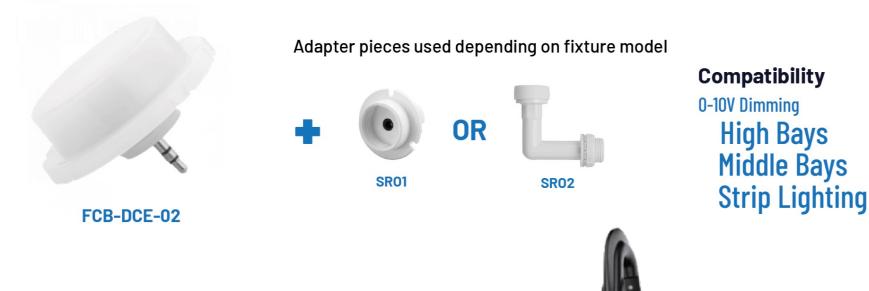




# DEVICES/ Controllers



**Bluetooth Node** Plug-in for easy installation.



#### Example:

FCB-DCE-02 plugs directly into the HFO LS2 G2's recepticle.





Fixture controller power pack Eco-power pack for most lighting applications.



#### Compatibility

Hard wired, low voltage lighting application.

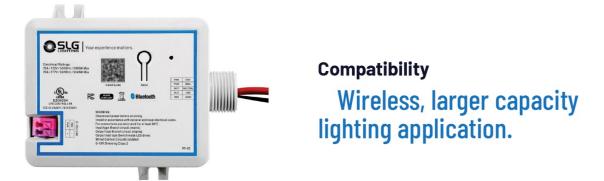
Fixture controller power pack Bluetooth power pack for lighting applications.



FCB-ACI-02



**Zone controller** Zone Controller which provides much higher power load than the standard fixture controller



ZCB-AC-04

**Emergency Lighting** Shuts down controls system in the event emergency lighting is enabled.



ZCB-AC-09

#### Compatibility

Emergency
Lighting
Applications

# DEVICES/ Accessories



#### **DEVICES/** Accessories



PIR - 1/8" Jack Recepticle for PIR Sensors/Nodes.

**SR01** 



PIR - 1/8" Jack Recepticle for PIR Sensors/Nodes -90° elbow.

**SR02** 



Snap-in ceiling mount for ceiling sensor.

**CM01** 



6' cabeling for ceiling mount sensor.

CS4-22/3-300V-W-6FT



NCB-DC-01

Energy monitoring -Saves controls configurations.





5 Key Bluetooth switch/remote.

**WCB-DC-025** 

Battery powered – average battery life of 3 years.



WC-WP-01

Wall plate for WCB-DC-025.



# TDB - Bluetooth Controls Ready LED Troffers



2' x 2' LED Troffer 35W / 4,500 Lm - MAX 3000K - 5000K CCT

2' x 4' LED Troffer 45W / 5,800 Lm - MAX 3000K - 5000K CCT

Simple sensor solution





# TDRB - Bluetooth Controls Ready LED Retrofit Kit Troffers



2' x 2' LED Retrofit Kit Troffer 30W / 3,800 Lm - MAX 3000K - 5000K CCT

2' x 4' LED Retrofit Kit Troffer (Not Pictured) 45W / 5,800 Lm - MAX 3000K - 5000K CCT

#### Simple sensor solution



MSE-DCI-08





# TDB - Bluetooth Controls Ready LED Troffers



2' x 2' LED Panel 30W / 3,800 Lm - MAX 3000K - 5000K CCT

2' x 4' LED Panel 50W / 6,400 Lm - MAX 3000K - 5000K CCT

Simple sensor solution





# TSB - Bluetooth Controls Ready LED Strip



**8** LED Strip (Not pictured) 75W / 9,900 Lm - MAX 3000K - 5000K CCT

> Simple sensor solution



**OSLG** Sync Lighting Controls

APP



### **DEVICES**

## APP

**NLC LISTED** 

OPTIONAL

LAYOUT DESIGN

OPTIONAL ON-SITE COMMISSIONING

### APP:

### -Lights

Individual light pairing – controls – and commissioning

### -Groups

Create/Manage groups of lights

### -Switches

Pair/Commission switches

### -Scenes

Create/Manage scenes (one-touch lighting settings)

### -More (Set Zones)

The "More" tab is for creating/managing zones, schedules, energy monitoring, and more



The **SLG Sync APP** is a lighting controls and commissioning app.

Featuring basic controls options like dimming, on/off, and color settings and powerful commissioning options, schedule setting, and more.

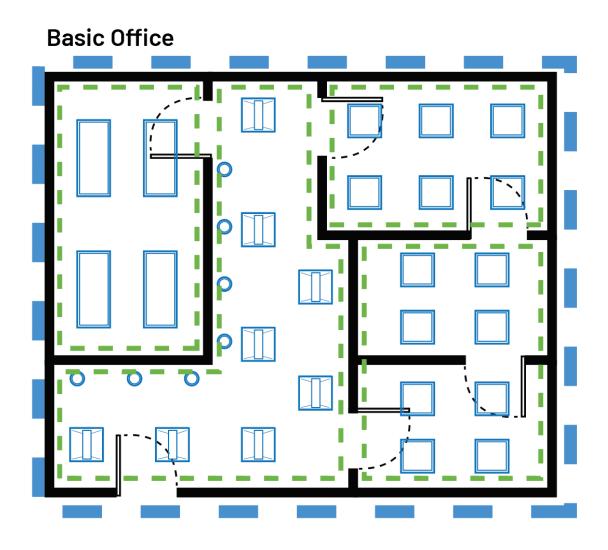


A <u>network lighting controls</u> project can be daunting – with the help of a <u>consumer friendly</u>, <u>commercial grade</u> system like **SLG Sync** that offers full customer support the process is easy.



### **OSLG** sync™ **APP/** Commissioning Overview

You'll want to start with an installation layout (SLG can provide) that will show where all devices will be installed. Then make a plan for the functionality needed for parts of the building.

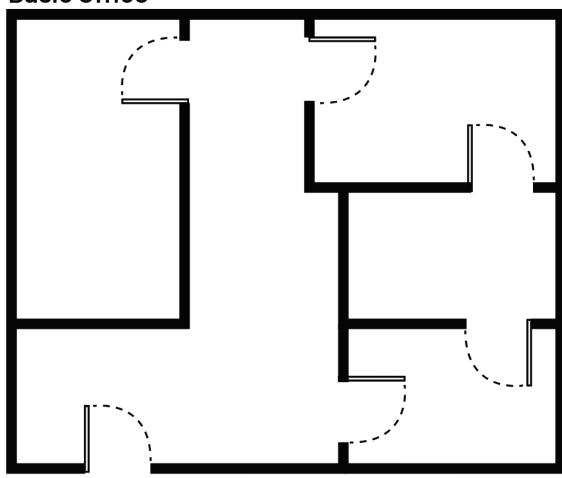


Note: Example purpose ONLY – not a real layout design.



### **OSLG** sync APP/ Commissioning Overview

### **Basic Office**



Here's an example of a building layout.

This office would be very dark!

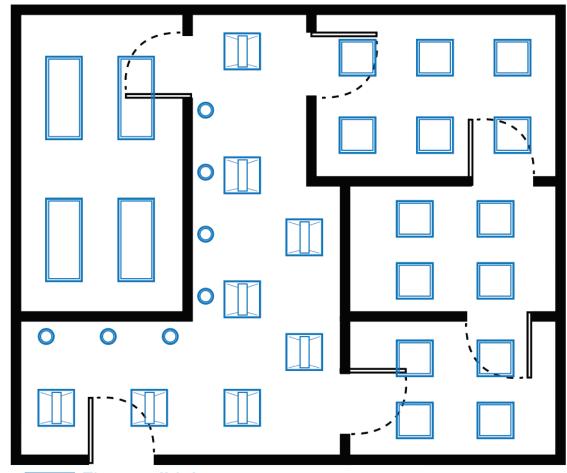
Let's fix that!

Note: Example purpose ONLY – not a real layout design.



### **OSLG** sync™ APP/ Commissioning Overview

### **Basic Office**



Fixtures/Lights

Note: Example purpose ONLY – not a real layout design.

That's better!

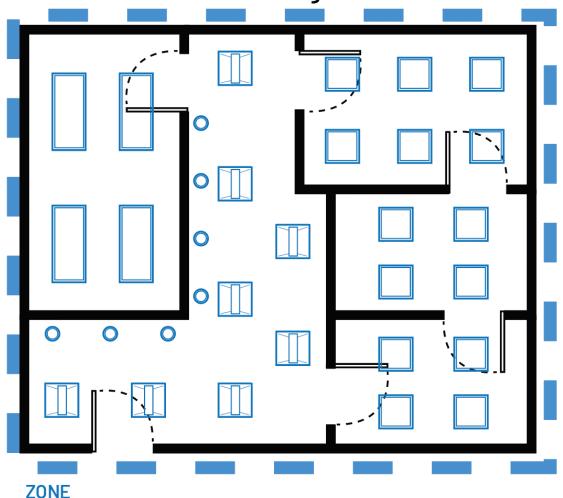
Now we've got **SLG Lighting** panels, troffers, and downlights laid out.

Time to group these lights together for optimal functionality and ease.



### **SLG Sync** APP/ Commissioning Overview





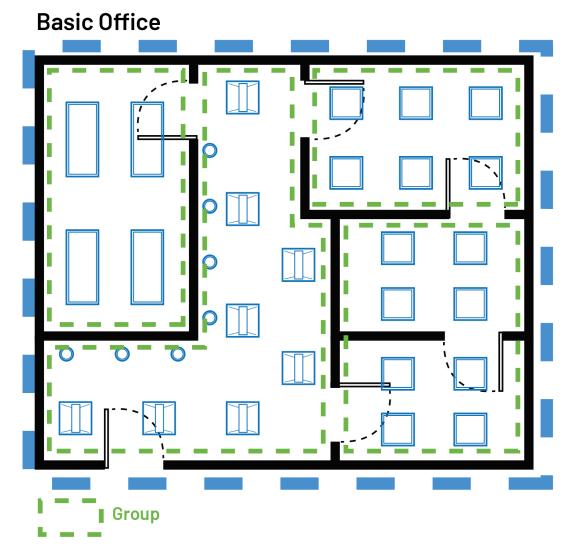
First we define a **ZONE**.

This is a selection of an area of lights divided based on their functionality (think scheduling needs).

Zones are created/managed in the "More" tab of the **SLG Sync APP.** 

Note: Example purpose ONLY – not a real layout design.

### **△SLG** Sync<sup>™</sup> APP/ Commissioning Overview



Note: Example purpose ONLY – not a real layout design.

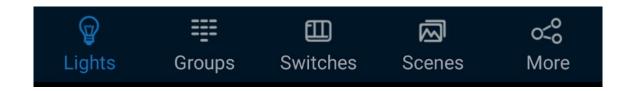
Then we define a Group.

A group is a selection of lights within a Zone – once assigned in the app, can be controlled together.

Groups are created/managed in the "Groups" tab of the SLG Sync APP.

## APP/ Lights

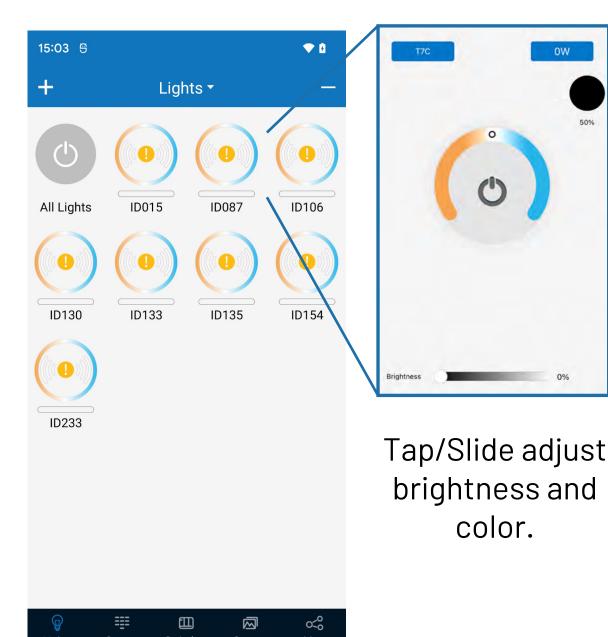




The **Lights** tab displays all the lights in the network. When adding a new light – this is the tab to use.

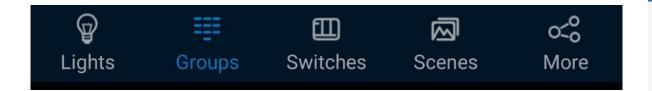
Lights can be assigned names and controlled individually.

This tab is ideal for trouble shooting, commissioning, and initial set up.



## APP/ Groups

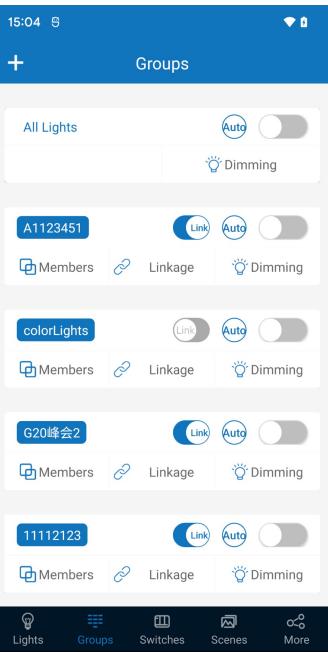




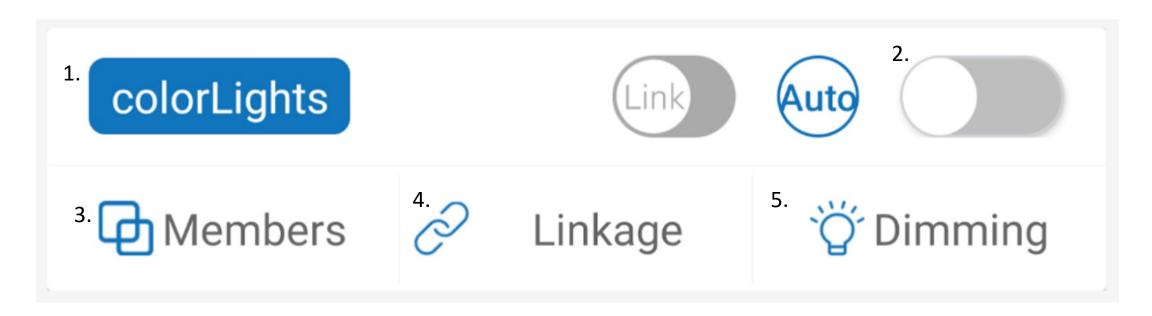
The **Groups** tab displays all the groups in the network. Users can create/edit/delete groups.

Lights can be assigned names and all the lights in a group can be controlled together.

This tab is ideal for trouble shooting, commissioning, and everyday controls.







- 1. The group name can be edited and called anything the user wants.
- 2. On/Off toggle turns on/off all the lights in the group.
- **3. Members** assign/delete lights from the group.

- **4. Linakge** Adjust brightness settings for this group when the group is linked to other groups/sensor.
- **5. Dimming** dimming controls for the group.

## APP/ Switches

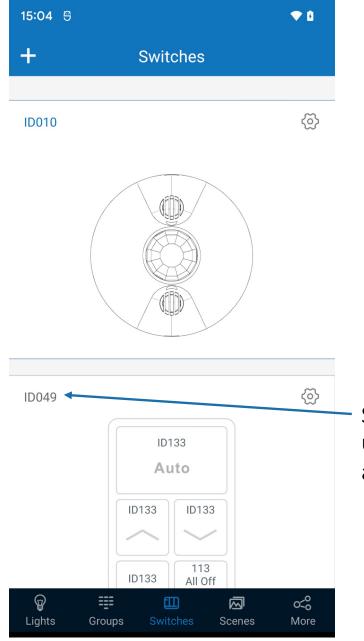




The **Switches** tab displays all the switches in the network. Users can assign groups/lights to each switch.

Any switches within range will be detected and edited using this tab.

Users can change the name and assign which lights/groups the switch will control.

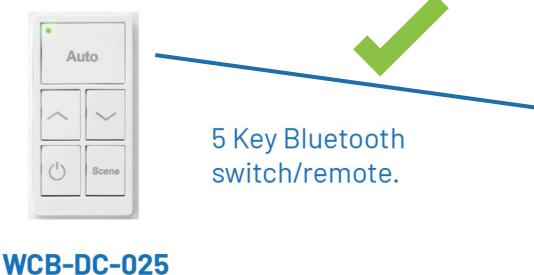


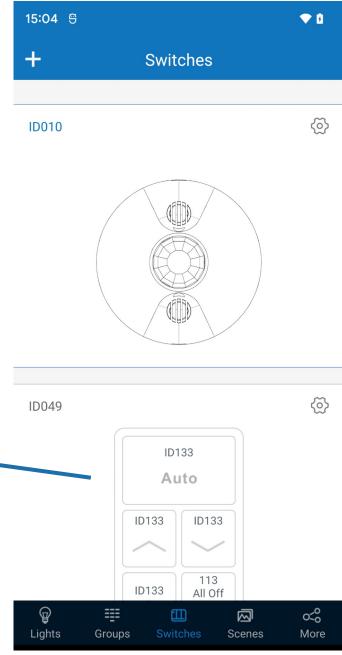
Switch name – users can edit and change this.





The wall switch will pair with the **SLG Sync APP** – allowing for easy commissioning for each wall switch.





## APP/ Scenes





The **Scenes** tab displays all the scenes in the network. Users can create/manage scenes using this tab.

Scenes are used for one button controls options. They allow different lighting atmospheres to be created at the tap of a button.

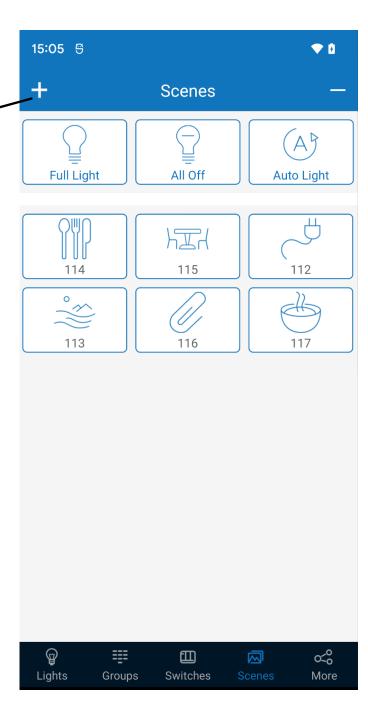
This tab is ideal for customization and dynamic lighting settings.





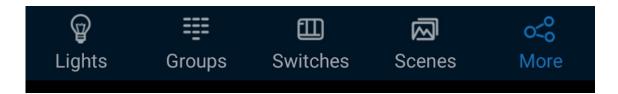
**Create a scene** – assign a unique icon, name, and assign specific lights and/or groups.

Selecting a scene will cause all lights/groups to change their settings to the applied scene.



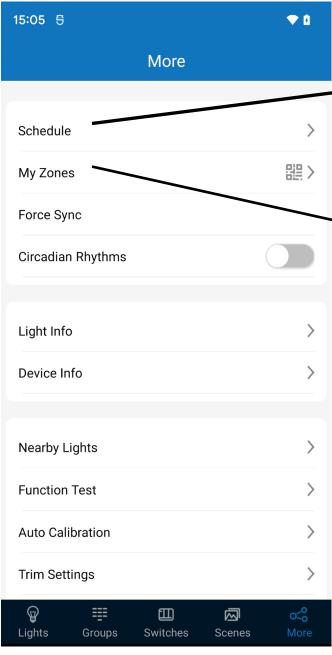
## APP/ More





The **More** tab displays all additional functions of the app – either settings that are rarely used or should only be accessed by qualified users.

Useful for **Zone Settings**, Schedules, and security settings.

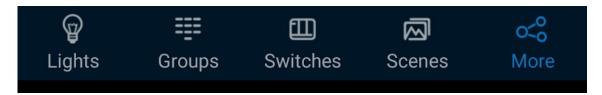


### Manage schedules

## Manage zones

Assign who can control lights

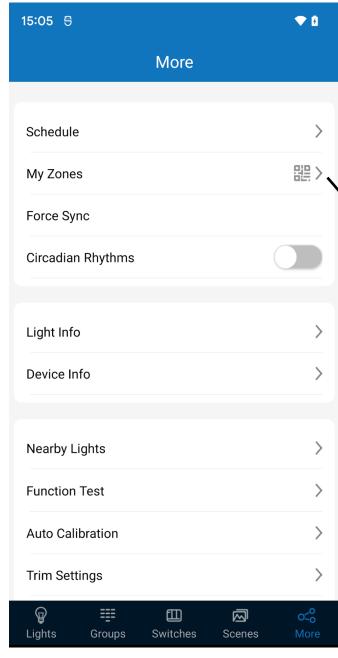




**Security Settings** – Can anyone with the app control the lights?

**No** – After initial commissioning, users can be given controls access via scanning a unique QR code.

Think of this as a key – <u>no lights can be</u> <u>controlled unless the user has the "key"</u> <u>that allows them to</u>. Scanning the QR code functions like a key.



### **ZONE QR code -**

Each Zone
generates a
custom QR code
that grants
access
controls to.

**OSLG** Sync Commercial Grade

## NLCLISTING



### **DEVICES**

APP

### **NLC LISTED**

OPTIONAL LAYOUT DESIGN

OPTIONAL ON-SITE COMMISSIONING

### **NLC LISTED:**

### -Cyber Security

**Network security and protection** 

### -Energy Monitoring

Save settings and energy efficiency

### -Emergency Lighting

Integrates with emergency lighting systems

### -External Systems Integration

Alarm systems and additional external systems easily integrated

### -Energy Rebates

NLC Listed systems earn additional rebates and abide by state regulations



### **SLG** sync™ NLC Listed/ Overview

**Networked lighting** is the gateway to energy-optimized cities. The **DLC** created the networked lighting controls program and **Qualified Products List** to help achieve real energy saving standards.



#### **SLG Sync**

Manufacturer: Spring Lighting Group, Inc.

Scale: Room or Zone, Structured Parking Technical Requirements Version: 5

PRODUCT OVERVIEW		
Manufacturer	Spring Lighting Group, Inc.	
Product Website	View Website	
QPL	Networked Lighting Controls	
Listing Status	Listed	
Date Qualified	2023-03-23	
Technical Support Phone	(281) 201-2925	
Standard Warranty Length	5	

SUMMARY	
<ul> <li>✓ Networking</li> <li>✓ Traffic Sensing</li> <li>✓ High-End Trim</li> <li>✓ Individual Luminaire Addressability</li> <li>✓ Control Persistence</li> <li>✓ Energy Monitoring</li> <li>✓ User Interface</li> <li>✓ Personal Control</li> <li>✓ Plug Load Control</li> <li>✓ Emergency Lighting</li> <li>✓ Color Changing/Tuning</li> </ul>	<ul> <li>Occupancy Sensing</li> <li>Daylight Harvesting</li> <li>Zoning</li> <li>Continuous Dimming</li> <li>Scheduling</li> <li>Remote Diagnostics</li> <li>Luminaire Level Lighting Control (LLLC)</li> <li>Load Shedding/Demand Response</li> <li>External Systems Integration</li> <li>Cybersecurity</li> <li>Scene Control</li> </ul>
NETWORK	VIEW DETAILS
INTEROPERABILITY	VIEW DETAILS
ENERGY SAVING STRATEGIES	VIEW DETAILS
CONTROL	VIEW DETAILS
ADDITIONAL CAPABILITIES	VIEW DETAILS
START-UP AND CONFIGURATION	VIEW DETAILS
VERSION HISTORY	VIEW DETAILS

34
unique lighting
controls
manufacturers
represented on the
NLC QPL

QUALIFY A SYSTEM  $\rightarrow$ 

**SLG** one of only 34 manufacturers that are **NLC Listed**.

**SLG Sync** 

Manufacturer: Spring Lighting Group, Inc.

**Brand:** SLG Lighting

Add to my list

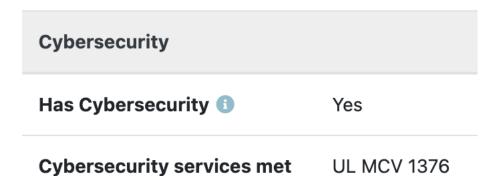
Interior Scope: Room or Zone, Structured Parking

**Technical Requirements Version: 5.0** 

## NLC Listed/ Cyber Security



### **OSLG Sync\*** NLC Listed/ Cyber Security





**SLG Sync** meets a strict, high level of cybersecurity and is verified as **GOLD** by UL standards.

## NLC Listed/ Energy Monitoring



standard

### **NLC Listed/ Energy Monitoring**

<b>Energy Monitoring</b>		
Has Energy Monitoring 1	Yes	
Energy monitoring method	Wattage LUT with manual data entry	
Is optional hardware or software needed? 1	Yes	L
Duration that aggregated energy data is available 1	5 YEAR	
Smallest spatial resolution of the data record ①	Per luminaire	Sir
Loads included in a data point of the reported	Light engine/lamp, Driver/ballast, Sensors	mo
Data record available	Regularly spaced timestamp, Luminaire % light outp Manufacturer (Energy Report), NLC Product (Energy type (e.g. warehouse, school, office)	•
Data record .CSV and/or API	.CSV	
Supported data format	ANSI	



Energy monitoring -Saves controls configurations.

NCB-DC-01

mple USB plug-in accessory for energy onitoring. Mini-SD Card required.

# NLC Listed/ Emergency Lighting



### **OSLG Sync** NLC Listed/ Emergency Lighting

**Emergency Lighting** 

Has Emergency Lighting 1

Yes



ZCB-AC-09

**SLG SYNC** integrates with emergency lighting systems with a simple controller installation.

When emergency lighting systems turn on, the ZCB-AC-09 shuts off the

**SLG Sync** controls system.

# NLC Listed/ External Systems Integration



### **SLG Sync** NLC Listed/ External Systems Integration

External Systems Integration	
Has External systems integration 1	Yes
Communication Protocols Supported	RS485

**SLG SYNC** integrates with external systems utilizing an RS485 protocol.

A security system is a good example of an external system **SLG SYNC** integrates with.

## NLC Listed/ Energy Rebates





Incentives: Since 2016 NLC-listed systems will pre-qualify for incentives and rebates from utilities across North America and gain access to the multi-billion dollar energy efficiency program market.



#### **NLC Listed/ Energy Rebates**



## Aggressive Growth: The DLC is

aggressively pushing for widespread adoption of control systems. NLC listed systems are becoming more and more of a HUGE cost saver thanks to rebates and State requirements.



In some cases (Chicago), up to a

\$1 per watt controlled.





## DEVICES

**NLC LISTED** 

LAYOUT DESIGN

**ON-SITE COMMISSIONING** 

#### **Layout Design:**

## -Installation

Layout designs make for easy installation

## -Devices

Know exactly which devices to order

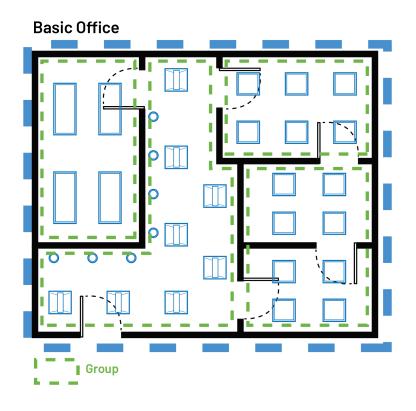


#### **Layout Design/** Professional Support

**SLG SYNC** will offer optional layout design help from an in-house qualified layout designer.

More information to come - reach out to your SLG rep for all the latest updates.





**OSLG** sync Professional Support

# ONSITE COMSSIONING



## **DEVICES**

APP

**NLC LISTED** 

OPTIONAL

LAYOUT DESIGN

**ON-SITE COMMISSIONING** 

#### **ON-SITE COMMISIONING:**

## -Professional Help

Ensure your lighting controls are done right with the help of an on-staff SLG Sync controls professional

## -Continued Support

We stay committed to support your customers even after commissioning



#### On-Site Commissioning/ Professional Support

**SLG SYNC** is a robust system offering an easy to use and supported commissioning app.

However we also understand that some projects demand a more hands-on approach.





#### On-Site Commissioning/ Professional Support

Our staff of professionals are available to be on the job site to make commissioning easy and stress-free.

Our dedicated customer support staff are on call ready to respond and answer any and all of your customer's questions, giving you the peace of mind that your customers are getting the absolute best controls experience.

## **ADDITIONAL INFORMATION**





#### **SLG Sync** Additional Information



**SLG SYNC** is a powerful system and while recommended for small to medium projects - we have the capability to scale for hundreds for fixtures.

For large scale projects we'll have available special SaaS controls/commissioning and a dedicated support team that goes way beyond the stock system.

For large scale projects we treat these as very special and work with you on these on a personal level. Ensuring the upmost professional service available on the commercial-grade market.

**SLG SYNC** will offer additional products and support within the coming months so be aware that the capabilities are growing to cover every application.

This includes bridge capabilities and remote access.

Stay connect on LinkedIn and YouTube to stay at the forefront of all SLG Sync has to offer.



FOLLOW US RIGHT NOW TO STAY CONNECTED:

## LinkedIn/SLG Lighting YouTube/@SLGLighting

