Design and Application Guide

July 2025

intelligent

EVO Lite standalone lighting control system **Easy to install. Cost effective. Reliable performance.**





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ILC

BAA

BABA

O intelligent

Smart. Scalable. Flexible.

ILC is dedicated to building long-lasting relationships and providing high-quality commercial lighting control products. Technology and commitment to quality has kept ILC at the top of the lighting control industry for over 30 years.

Integrity, honesty and respect are the core of ILC. Quality products, services and processes, as well as open communication, is central in each relationship. We listen to and understand your facility's unique lighting needs and design a plan that delivers on our promise to provide lighting control systems that perform to your satisfaction.

ILC's innovative products lead the industry in distributed lighting control solutions. Digital, scalable, flexible and energy-efficient lighting control systems, combined with exceptional service and support, is what you can expect from Intelligent Lighting Controls.

Simplifying Lighting Controls from Installation to Use



Simple and Reliable

The EVO Lite system is designed to be an easy to install solution that is not only cost effective but also provides the same reliable performance and easy maintenance that our customers have come to expect of ILC's products.



Standard Five-Year Warranty

We back our products with a five-year warranty to match their unbeatable reliability.



Made in the USA

ILC values service, and great service begins with great production- right here in the USA. Get quality products that are manufactured and assembled in the USA.



Lighting Solutions

The new EVO Lite system is designed to be an easy-to-install solution that is not only cost-effective but also provides the same reliable performance and easy maintenance that our customers have come to expect of ILC's products. Simple push button programming and preconfigured functions eliminate the need for startup programming.

The EVO Lite system provides:

- Standalone system with no addressing required
- Low cost per zone
- Energy savings with passive dual-tech occupancy/vacancy sensing and daylight harvesting
- Easy installation with all CAT-5 wiring and pre-configured for plug-and-play operation
- Cost-effective scalability with switch stations that dim 1 or 2 zones and support 3-way dimming and also capability to support traditional 18/3 wiring
- Made in the USA, meets BAA and BABA requirements

Discover the ILC cost-effective plug-and-play lighting control system that is simple to install today!

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EVO Lite Overview

EVO Lite is a cost-effective standalone lighting system that simplifies installation and optimizes cost for 1 or 2-zone applications. EVO Lite also has predetermined functions to speed installation and ease the commissioning process. This easy configuration process greatly reduces any costs associated with start up on simple applications.

Features

- Made in the USA, meets BAA and BABA requirements
- Plug load compatible
- Provides On/Off and 0-10V dimming control
- Direct 0-10V daylight control from ELCS Ceiling Sensors
- 3-Way dimming

Warranty

Five-Year limited warranty

EVO Lite System

This diagram shows the main components and topology of the ILC EVO Lite system. The EVO Lite devices use CAT-5 cable for device to device communications. See EVO Lite design guide for typical wiring data.







EVO Lite is not compatible with networked EVO systems. Each EVO Lite component has a blue back to highlight this incompatibility.

	EVO Lite Device	Current Draw	Catalog Numbers
EVO Lite Power Pack		Capacity: 350mA	ELPP
EVO Lite Ceiling Sensor		10mA	ELCS-06-AR ELCS-20-AR
EVO Lite G3 Wall Switch available in 1 or 2 zones and Non-Dim or MZD style	Zone 1 Zone 2 Off	7mA	ELG3- * -1 ELG3- * -2 ELG3- * -1-MZD ELG3- * -2-MZD *Colors available WH IV GY LA BK RD White Ivory Gray Light Black Red
EVO Lite Wall Sensor Switch available in 1 or 2 zones and Non-Dim or MZD style	Zone 1 Zone 2 Off Off Off Off	10mA	ELWS- * -1 ELWS- * -2 ELWS- * -1-MZD ELWS- * -2-MZD *Colors available WH IV GY LA BK RD White Ivory Gray Light Black Red

Power Pack

The EVO Lite Power Pack operates one load of lighting or plug load. This power pack includes 12 configuration options, an onboard relay, and 0-10V dimming, integrated into one package for easy installation. The EVO Lite power pack is ideal for small offices or classrooms, made to meet energy code with daylight harvesting, plug load control, occupancy sensing, and vacancy sensing options. It has two RJ45 ports for switches, sensors, and additional power packs. This convenient and easy to install power pack can be used as a single device or combined with other EVO Lite power packs, for multi-zone operation.

Features

- Made in the USA, meets BAA and BABA requirements
- Enclosure suitable for plenum mounting
- Plug load compatible
- Stand alone relay pack with 0-10V dimming
- 350mA power provided for occupancy or vacancy sensors and switch stations
- RJ45 connectors for EVO Lite switches and sensors





Power Pack Configuration

Display Configuration / Test Mode

- Tap config button
 - Red or blue LED will flash the configuration number
 - If the red LED flashes, then the power pack is configured as power pack A
 - If the blue LED flashes, then the power pack is configured as power pack B

Change Configuration

- Hold the config button for 4 seconds to enter set configuration mode
 - Either the red or blue LED will begin to flash fast depending on the current configuration
 - Red flashing Currently programmed as Power Pack A
 - Blue flashing Currently programmed as Power Pack B
 - Continue to hold the config button until the desired LED is flashing
 - Red to configure as Power Pack A
 - Blue to configure as Power Pack B
 - Release the config button and the red or blue LED will go solid on
 - Tap the config button 1 to 12 times to select a configuration type
 - After the config button is not tapped for 4 seconds, the configuration is saved
 - The red or blue LED will flash the configuration number for validation

Configuration	Description	Power Pack B
1	1-Zone, ELG3 Switch, Manual on (vacancy) to previous dim level / Full auto off	Occ-On/Off, Plug load
2	2-Zone, ELG3 or ELWS Switch, Manual on (vacancy) to previous dim level / Full auto off	(2nd zone)
3	1-Zone, ELG3 Switch, Auto on (occupancy) to 50% / Full auto off. Manual on to previous dim level	Duplicate
4	2-Zone, ELG3 or ELWS Switch, Auto on (occupancy) to 50% / Full auto off. Manual on to previous dim level	(2nd zone)
5	1-Zone, ELG3 Switch, Auto (Occupancy) on to previous dim level / Full auto off	Duplicate
6	1-Zone, ELWS Switch, Auto on (occupancy) to previous dim level / Full auto off	Duplicate
7	1-Zone, ELWS Switch, Manual on (vacancy) to previous dim level / Full auto off	Duplicate
8	1-Zone, ELWS Switch, Auto on (occupancy) to previous dim level / Full auto off. Manual on to 50%	Duplicate
9	1-Zone, ELWS Switch, Auto on (occupancy) to previous dim level / Full auto off. Manual on to 100%	Duplicate
10	1-Zone, ELWS Switch, Manual on (vacancy) to previous dim level / Full auto off	Occ-On/Off, Plug load
11	1-Zone, ELG3 Switch, Auto on (occupancy) to 100% / Partial auto off to 50%	Duplicate
12	1-Zone, ELG3 Switch, Auto on (occupancy) to 100% / Partial auto off to 20% after sensor timeout / Full off after an additional 20 min of inactivity	Duplicate

Configuring an ELPP as Power Pack B is only used for 2-zone applications (configs 2 & 4) or when using an ELPP for plug load control (configs 1 & 10). For all other configurations, Power Pack B will duplicate operation of Power Pack A.

Additional ELPP power packs can be added for plug load control when installed after an ELCS Ceiling Sensor and set to power pack B, configuration 1.

The recommended best practice is to have no more than 10 ELPP power packs connected together. Consult factory for applications requiring more than 10 connected ELPP's.



Ceiling Sensor

The EVO Lite Ceiling Sensor is a low profile ceiling mount sensor designed to install in a standard commercial ceiling. The sensor is provided with dual-tech operation utilizing passive infrared and passive acoustic sensing. Configured with a few simple button presses for easy set-up and adjustment, this sensor supports occupancy and vacancy in a single device. The ELCS connects to other EVO Light devices via CAT-5 but also supports traditional 18/3 wiring, offering the contractor multiple wiring options, and allowing the ELCS to be used with the 24VDC ceiling sensor inputs of ILC's LightLEEDer and AP3 systems, as well as most 3rd party systems and power packs.

The ceiling sensor also has a full range photo sensor and supports open loop daylight dimming. The EVO Lite ceiling sensor uses the newest digital components and detection techniques for superior performance. Sensors detect occupant movement as they move through the field of view via passive infrared technology. With two models available for both small and large motion and an auxiliary relay for HVAC, the ELCS is a cost effective and feature rich sensing device. Acoustic technology enables enhanced detection once the lighting is turned on.

Features

- Made in the USA, meets BAA and BABA requirements
- Dual Tech sensor with PIR and acoustics
- Available in small/large motion detection
- Incorporated photo sensor for daylighting 0 to 1800 fc
- 2 Isolated RJ45 jacks
- ILC blue rear cover
- Wire leads for hardwired connection, photo sensor 0-10V dimming, and auxiliary relay
- · Push-button switch for configuring sensor settings
- LED indicators for programming sequence verification and sensor activation PIR (red) and Acoustic (blue)
- Same enclosure and mounting as LightSync digital sensor
- Auxiliary relay output for connection to BAS system or Plug load Power Pack
- Recommended mounting height: 8-15ft

catalog number: ELCS-06-AR EVO Lite Ceiling Sensor - Small Motion up to ~600sq. ft. ELCS-20-AR EVO Lite Ceiling Sensor - Large Motion up to ~2000sq. ft.

Top View









Ceiling Sensor Configuration

Sensor Button Sequences

- Hold button for 20 seconds to enter configuration mode
- Red LED will flash parameter number every 3 seconds
 - Tap for next Parameter
 - · Hold to Select
- Blue LED will flash parameter value number every 3 seconds
 - Tap for next Parameter
 - Hold to Select
- To save changes, go to Parameter 8 and select option 2
- 20 second idle timer will discard edits

Parameter		Value	
Blink		Blink	
1	Unused		
2	PIR Sensitivity	1	Low
		2	Mid
		3	High
3	Acoustic Sensitivity	1	Low
		2	Mid
		3	High
		4	Disabled
4	Vacancy Time	1	5 Min
		2	10 Min
		3	15 Min
		4	20 Min
		5	30 Min
		6	60 Min
		7	120 Min
5	LEDs	1	Disabled
		2	Enabled
6	PC/0-10V Scale	1	0 - 2.5
		2	0 - 5.0
		3	0 - 7.5
		4	0 - 10
		5	2.5 - 10
		6	5.0 - 10
		7	7.5 - 10
7	Photocell / Occ Disable	1	Off
	(Relay cutout)	2	88%
		3	75%
		4	62%
		5	50%
		6	38%
		7	25%
		8	12%
8	Exit Settings Mode	1	Discard
		2	Save

Default settings are shown in green





Sensor Settings

Setting	Options
PIR Sensitivity	Low, Medium, High
Acoustic Sensitivity	Low, Medium, High, Disabled
Vacancy Time	5, 10, 15, 20, 30, 60, 120 min
LED Visibility	Enable / Disable
PC 0-10V Scale	0-10V standard Open Loop dimming with +/- 2.5V, 5.0V and 7.5V offsets
Cut Out relay for Occupancy (disabled by Light level)	Cut Out relay range - Off, 88%, 75%, 62%, 50%, 38%, 25%, 12%

Wall Sensor Switch

The EVO Lite Wall Sensor is a cost-effective combination dual-tech occupancy sensor and switch station in a single device, featuring infrared and overlapping acoustic sensing. This sensor allows for hardwired connection over CAT-5 to the EVO Lite Power Pack.

Selectable dual-tech or PIR-only modes, timeouts, and sensitivities allow adjustments for superior performance in any space. The ELWS matches ILC's LSG3 family of digital switches, is available in the same six colors and 1 or 2-zone stations configurations supporting multi-zone dimming.

Features

- Made in the USA, meets BAA and BABA requirements
- Dual Tech PIR and acoustic sensor
- MZD models have raise and lower buttons for ramp up and ramp down dimming
- Low voltage for quick and easy installation

catalog number:	
ELWS- * -1	EVO Lite Wall Sensor Switch, various colors available, 1 button, non-dim
ELWS- * -2	EVO Lite Wall Sensor Switch, various colors available, 2 button, non-dim
ELWS- * -1-MZD	EVO Lite Wall Sensor Switch, various colors available, 1 button, multi-zone
ELWS- * -2-MZD	EVO Lite Wall Sensor Switch, various colors available, 2 button, multi-zone



wall plate cover not included





ELWS Configurations





ELW

ELWS MZD Configurations



 Zone 1

Zone 2

Off

▲

ELWS-XX-2-MZD



Wall Sensor Switch Configuration

Sensor Button Sequences

- Hold On or Zone 1 button for 20 seconds to enter configuration mode
- Red LED will flash parameter number every 3 seconds
 - Tap for next Parameter
 - Hold to Select
- Blue LED will flash parameter value number every 3 seconds
 - Tap for next Parameter
 - · Hold to Select
- To save changes, go to Parameter 6 and select option 2
- 20 second idle timer will discard edits

P	arameter		Value
Blink		Blink	
1	MZD Enabled	1	Disabled
		2	Enabled
2	PIR Sensitivity	1	Low
		2	Mid
		3	High
			Invalid
3	Acoustic Sensitivity	1	Low
		2	Mid
		3	High
		4	Disabled
4	Vacancy Time	1	5 Min
		2	10 Min
		3	15 Min
		4	20 Min
		5	30 Min
		6	60 Min
		7	120 Min
5	LEDs	1	Disabled
		2	Enabled
6	Exit Settings Mode	1	Discard
		2	Save

Default settings are shown in green



Sensor Settings

Setting	Options
PIR Sensitivity	Low, Medium, High
Acoustic Sensitivity	Low, Medium, High, Disabled
Vacancy Time	5, 10, 15, 20, 30, 60, 120 min
LED Visibility	Enable / Disable

G3 Wall Switch

The EVO Lite G3 Switch is a cost effective, versatile and easy to use hardwired over CAT-5 device. 1 or 2-zone control with Press-and-Hold Ramp-Up/Ramp-Down dimming from the EVO Lite Power Pack.

Features

- Made in the USA, meets BAA and BABA requirements
- No field configuring required
- Available in same colors as LightSync G3 switches
- Color change kits available
- RJ45 ports for hardwire CAT-5 connection to EVO Lite Power Pack
- MZD capable 2-zone dimming
- Matches LightSync G3 switches
- ILC blue rear cover
- Powered from EVO Lite Power Pack
- · Low voltage for quick and easy installation

catalog number:

 ELG3-*-1
 EVO Lite G3 Wall Switch, various colors available, 1 button, non-dim

 ELG3-*-2
 EVO Lite G3 Wall Switch, various colors available, 2 button, non-dim

 ELG3-*-1-MZD
 EVO Lite G3 Wall Switch, various colors available, 1 button, multi-zone

 ELG3-*-2-MZD
 EVO Lite G3 Wall Switch, various colors available, 1 button, multi-zone

4.18"



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wall plate cover not included



ELG3 MZD Configurations





ELG3-XX-1-MZD

ELG3-XX-2-MZD

Typical applications wiring diagrams

Configurations Default setting is Configuration 1, Power Pack A.

Configurations are designed to support certain switch types. See below for which switch types are compatible with each configuration. Generally, an ELPP power pack cannot be controlled by multiple switch types, unless those switch types are all supported by the power packs configuration.

Config	Supported Switch Types	Zones	Application	Power Pack A	Power Pack B	Wiring Diagram
1	ELG3-xx-1 ELG3-xx-1-MZD	1	1-Zone, ELG3 Switch, Vacancy (with optional plug load)	Zone 1 Manual on to previous dim level Full auto off	Plug load Auto on/Auto off only Ignores manual control	A
2	ELG3-xx-2 ELG3-xx-2-MZD ELWS-xx-2 ELWS-xx-2-MZD	2	2-Zone, ELG3 or ELWS Switch, Vacancy	Zone 1 Manual on to previous dim level Full auto off	Zone 2 Manual on to previous dim level Full auto off	с
3	ELG3-xx-1 ELG3-xx-1-MZD	1	1-Zone, ELG3 Switch, Occupancy (On to 50%)	Zone 1 Auto on to 50% Manual on to previous dim level Full auto off	Duplicate	В
4	ELG3-xx-2 ELG3-xx-2-MZD ELWS-xx-2 ELWS-xx-2-MZD	2	2-Zone, ELG3 or ELWS Switch, Occupancy (On to 50%)	Zone 1 Auto on to 50% Manual on to previous dim level Full auto off	Zone 2 Auto on to 50% Manual on to previous dim level Full auto off	с
5	ELG3-xx-1 ELG3-xx-1-MZD	1	1-Zone, ELG3 Switch, Occupancy	Zone 1 Auto on to previous dim level Full Auto off	Duplicate	В
6	ELWS-xx-1 ELWS-xx-1-MZD	1	1-Zone, ELWS Switch (On/Off), Occupancy	Zone 1 Auto on to previous dim level Full auto off	Duplicate	D
7	ELWS-xx-1 ELWS-xx-1-MZD	1	1-Zone, ELWS Switch (On/Off), Vacancy	Zone 1 Manual on to previous dim level Full auto off	Duplicate	D
8	ELWS-xx-1 ELWS-xx-1-MZD	1	1-Zone, ELWS Switch (On-50%/Off), Occupancy	Zone 1 Auto on to previous dim level Manual on to 50% Full auto off	Duplicate	D
9	ELWS-xx-1 ELWS-xx-1-MZD	1	1-Zone, ELWS Switch (On-100%/Off), Occupancy	Zone 1 Auto on to previous dim level Manual on to 100% Full auto off	Duplicate	D
10	ELWS-xx-1 ELWS-xx-1-MZD	1	1-Zone, ELWS Switch, Vacancy	Zone 1 Manual on to previous dim level Full auto off	Plug load Auto on/Auto off Manual on Ignores manual off	D
11	ELG3-xx-1 ELG3-xx-1-MZD	1	1-Zone, ELG3 Switch Occupancy (On-100%/Partial/Off to 50%)	Zone 1 Auto on to 100% Partial auto off to 50%	Duplicate	в
12	ELG3-xx-1 ELG3-xx-1-MZD	1	1-Zone, ELG3 Switch Occupancy (On-100%/Partial/Off to 20%)	Zone 1 Auto on to 100% Partial auto off to 20% after sen- sor timeout Full off after an additional 20 min of inactivity	Duplicate	В

Configuring an ELPP as Power Pack B is only used for 2-zone applications (configs 2 & 4) or when using an ELPP for plug load control (configs 1 & 10). For all other configurations, Power Pack B will duplicate operation of Power Pack A.

Additional ELPP power packs can be added for plug load control when installed after an ELCS Ceiling Sensor and set to power pack B, configuration 1. The recommended best practice is to have no more than 10 ELPP power packs connected together. Consult factory for applications requiring more than 10 connected ELPP's.

EVO Lite: Configuration Diagrams

- 1. Switch information does not pass through EVO Lite Ceiling Sensors. Ceiling Sensors should always be at the end of an isolated system, or between two isolated systems.
- 2. Placing the ELCS ceiling sensor between the two ELPP's will isolate the switch station buttons allowing for independent switch control with combined occupancy control.
- 3. Regardless of what configuration is used for lighting loads, power packs used for plug load control should be set to Configuration 1, Power Pack B and will be controlled as Auto On/Auto off only.

Diagram A

Configuration 1



Diagram **B**

Configuration 3, 5, 11, and 12



Configuration Diagrams

- 1. Switch information does not pass through EVO Lite Ceiling Sensors. Ceiling Sensors should always be at the end of an isolated system, or between two isolated systems.
- 2. Placing the ELCS ceiling sensor between the two ELPP's will isolate the switch station buttons allowing for independent switch control with combined occupancy control.
- 3. Regardless of what configuration is used for lighting loads, power packs used for plug load control should be set to Configuration 1, Power Pack B and will be controlled as Auto On/Auto off only.

Diagram C

Configuration 2 and 4

Note: Supports 2-zone Switches / Wall Sensor Switches only.



Diagram **D**

Configuration 6 7, 8, 9 and 10

Note: Supports Wall Sensor Switches only, does not support standard switches, 2nd Power Pack optional.



Wiring Diagram

- 1. Switch information does not pass through EVO Lite Ceiling Sensors. Ceiling Sensors should always be at the end of an isolated system, or between two isolated systems.
- 2. Placing the ELCS ceiling sensor between the two ELPP's will isolate the switch station buttons allowing for independent switch control with combined occupancy control.
- 3. Regardless of what configuration is used for lighting loads, power packs used for plug load control should be set to Configuration 1, Power Pack B and will be controlled as Auto On/Auto off only.



Configuration and Power Pack A / B

Independent zones with the same ELCS ceiling sensor



EVO Lite example:

Wiring Diagram - Daylighting

- 1. Switch information does not pass through EVO Lite Ceiling Sensors. Ceiling Sensors should always be at the end of an isolated system, or between two isolated systems.
- 2. Placing the ELCS ceiling sensor between the two ELPP's will isolate the switch station buttons allowing for independent switch control with combined occupancy control.
- 3. Regardless of what configuration is used for lighting loads, power packs used for plug load control should be set to Configuration 1, Power Pack B and will be controlled as Auto On/Auto off only.
- 4. To use the ELCS's integrated daylight sensor, connect the 0-10V leads from the sensor the light fixture's 0-10V input as shown. The lighting level will automatically be reduced by the sensor based on daylight conditions in the space. The sensor will determine the max lighting level in the space. If using a dimming ELWS or ELG3 switch, the lighting level can be reduced below the level set by the sensor, but it cannot be raised above it.



EVO Lite example:

Wiring Diagram - 3rd Party Sensors / Power Packs

3rd party power packs can be used via the ELCS dry contacts (AUX relay contacts).

Wire via ELPP AUX replay contacts (Dry contacts)





EVO Lite example:

Wiring Diagram - Hospital room with Normal and Critical power

For applications like Health Care where two circuits need to be controlled together as a single zone.



Note: The ELPP is not a UL924 device. The application illustrated above is for emergency lighting fed from Critical power, commonly used in healthcare, where the intent is for the lighting controls to remain functional during a loss of normal utility power. This is different from emergency egress lighting fed from Life Safety/Emergency power where the intent is to use a UL924 device to bypass control and force the lights on to full bright.





ILC's innovative products lead the industry in distributed lighting control solutions.

Digital, scalable, flexible and energyefficient lighting control systems, combined with exceptional service and support, is what you can expect from Intelligent Lighting Controls.

ILC Support

The ILC Technical Support Team simplifies design and specification. We're committed to supporting your project needs from design to occupancy and beyond.

Technical Support:

Phone: 952-842-2588

Email (US): ilc.techsupport@ilc-usa.com



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At Cooper Lighting Solutions, we build forward-thinking lighting solutions that make people's lives safer, while making buildings, homes and cities smarter and more sustainable. We deliver an industry-leading portfolio of residential, sports, infrastructure, industrial, and commercial LED lighting; plus lighting controls and smart lighting systems.

We question, we seek, and we solve. Because building a better world means asking tough questions and pushing harder for answers. Together with our customers, we create solutions that build a better world. At Cooper Lighting Solutions, we push past the ordinary to build brighter.

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and Smart Spaces Platform WaveLinx Trellix Infrastructure



SCAN for more Intelligent Lighting Controls information



Cooper Lighting Solutions 1121 Highway 74 South Peachtree City, GA 30269 www.cooperlighting.com Intelligent Lighting Controls (ILC) 7620 Golden Triangle Drive Eden Prairie, MN 55344 Phone: 952-829-1900

www.ilc-usa.com

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