# **Echoflex Solutions**

# **Elaho Light Sensor**







## **Responsive Control Series**



#### GENERAL INFORMATION

Having the lights on in an already well-lit area means wasted energy and bigger electrical bills. Light Sensors are the sensible way to lower energy expenditures and meet energy codes. Light Sensors have a neutral look that easily blends into their surroundings. The sensors are ready to go in their standard form, or you can detach the sensor's RemoLux head to use as a remote sensor. It is perfect for atriums and other spaces with high ceilings. The Light Sensor can also be installed indoors or outdoors.

#### **APPLICATIONS**

- Houses of worship
- Education
- Hospitality
- Healthcare facilities
- Office buildings
- Conference rooms
- · Meeting rooms
- Retail

#### **FEATURES**

- Sensor Controller with or without integrated Light Sensor
- RemoLux: Light Sensor can be mounted within controller housing or remotely
  - Remote sensors connect using Belden 8471 or two #16AWG wires
  - Filler included for remote-head applications
- DuaLux: Supports up to two sensors to average light levels in large areas
- Single Light Sensor for indoor, outdoor and atrium use
- Configurable to activate or deactivate any controller
- Two-wire, topology-free bus for power and communication
- Each sensor counts as one station with up to two light heads
- Available in white and black
- · Supports switched and dimming daylight harvesting
- Multi Space Preset functionality

## **GENERAL**

- UL and cUL LISTED
- CE Marked
- CA Title 24 compliant

## ORDERING INFORMATION

#### **Light Sensor**

MODEL	DESCRIPTION	
ELS	Light Sensor with Controller	
ELSC	Light Sensor Controller Only	
ELSH	Light Sensor Head Only	

Note: Sensors come standard in pure white (RAL9010). Add -4 to the end of any model number for black (RAL9004)

#### **Power Requirements**

Bus Power:	One unit of control power
Auxiliary Power:	Not required



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#### SPECIFICATIONS

#### **FUNCTIONAL**

- Configurable on and off set points
- Preforms space raise and lower for controllers configured to the same space
- Configurable delay/offset
- Light Sensor can be mounted within controller housing or remotely; filler included for remote head applications
- Support for up to two sensors with averaging of light levels
- Single Light Sensor for indoor, outdoor and atrium use

#### **MECHANICAL**

- Constructed of injection-molded, ABS plastic in Pure White (RAL9010) or Black (RAL 9004)
- Electronics assembly and mounting plate included
- Two cantilevered configuration buttons
- No visible means of attachment
- Surface or box mountable using included mounting plate
  - Supports drywall, plaster, wood, and concrete mounting
  - Mounts to any standard electrical box (supplied by others)
  - Mounts to compressed-fiber ceilings using wire-form adapter
- · Supports internal or remote mounting of light sensor
  - Remote light head mounts to any 1/2" or 3/4" knockout
- Remote Heads use conformal-coated circuit boards resistant to corrosion from moisture
  - IP65 rated when used with a weather-tight backbox

#### **ELECTRICAL**

- Controller connects via low-voltage Class 2 wiring
  - Topology-free and polarity-independent wiring over Belden 8471 or equivalent and one #14 ESD drain wire
  - Wiring may be bus, loop, homerun or any combination of these
- Up to 500 meters (1640 feet) of control wiring per system
- Supports optional Cat5/5e wiring using Belden 1583A or equivalent
- Requires optional Cat5 termination accessories
- Remote sensors connect using two #16AWG wires up to 1000' away from controller
- UL and cUL LISTED, CE marked

#### **ENVIRONMENTAL**

- Ambient room temperature: -30 to 55°C / -22 to 130°F
- Ambient humidity: Maximum 90% non-condensing

#### FUNCTIONALITY

#### **BASIC MODE FUNCTIONALITY**

- Above Target Lux Event: Space Lower
- Below Target Lux Event: Space Raise

#### **CUSTOM MODE FUNCTIONALITY**

(Requires Programing With ElahoAccess® Mobile App and additional connection hardware)

- Switched Mode Bright Events Supported:
  - Preset Activate\*
  - Zone Set to Level
  - Space Off\*
  - Space Set to Level
- Switched Mode Dark Events Supported:
  - Preset Activate\*
  - Zone Set to Level
  - Space Off\*
  - Space Set to Level
- Dimmed Mode Space Control:
  - Space Raise
  - Space Lower
- Dimmed Mode Single Zone Control:
  - Zone Raise
  - Zone Lower
- Dimmed Mode Dual Zone Control:
  - Zone 1 Raise
  - Zone 1 Lower
  - Zone 2 Percentage Raise
  - Zone 2 Percentage Lower
- \*Multi Space capable allowing for presets to be recalled in multiple spaces from a single control

## **Responsive Control Series**

## ELAHO FAMILY PRODUCTS

## **Bus Power Supplies**

MODEL	DESCRIPTION			
E-SPS	6U Room Station Power Supply, Knockout Mount			
E-SPS-DIN	16U DIN rail Station Power Supply with 24V Aux			
E-SPM	16U DRd Station Power Module			
E-SPM-A	16U DRd Station Power Module with 24V Aux			
E-SPM-RM	16U Rack-Mount Station Power Module Aux			
E-SPM-RM-A	16U Rack-Mount Station Power Module 24V Aux			
E-SPM-WM	16U Wall-Mount Station Power Module			
E-SPM-WM-A	16U Wall-Mount Station Power Module 24V Aux			
E-APS	24V Aux Power Supply, Knockout Mount			

## **ElahoTouch**

MODEL	DESCRIPTION		
ETS	ElahoTouch Controller		

## **Elaho Stations**

MODEL	DESCRIPTION			
E1001	Inspire One Button Station			
E1002	Inspire Two Button Station			
E1004	Inspire Four Button Station			
E1006	Inspire Six Button Station			
E1008	Inspire Eight Button Station			
E1104	Inspire Four Button with Fader Station			
EPS05	Preset Station - 5 Button			
EPS10	Preset Station - 10 Button			
EPSLO	Lockout Station			
E-ATC	TimeClock			

## **Elaho Responsive Controls**

Elalio Responsive Controls				
MODEL	DESCRIPTION			
ELS	Light Sensor			
EOCC	Ceiling-Mount PIR Occupancy Sensor			
EVAC	Ceiling-Mount PIR Vacancy Sensor			
E-DOC-C	Ceiling-Mount Dual Tech Occupancy Sensor			
E-DVAC-C	Ceiling-Mount Dual Tech Vacancy Sensor			
E-DOC-W	Wall-Mount Dual Tech Occupancy Sensor			
E-DVAC-W	Wall-Mount Dual Tech Vacancy Sensor			
E-DOC-SM1	Switch-Mount Dual Tech Sensor - One Button			
E-DOC-SM2	Switch-Mount Dual Tech Sensor - Two Button			

## **Elaho Interfaces**

MODEL	DESCRIPTION			
EACC	ElahoAccess Interface			
EEB	Expansion Bridge			
EDMXC	DMX Scene Controller			
EEI	Elaho-Echoflex Interface			
ECII	Contact Input Interface			
ECOI	Contact Output Interface			
EDRI	Demand Response Interface			
EBI	BACnet Interface			

### **Zone Controllers**

MODEL	DESCRIPTION			
ERC-G2	One Zone Relay Controller			
EDRC-G2	Two Zone Relay Controller			
ELD-G2	One Zone 0-10V Controller			
EDLD-G2	Two Zone 0-10V Controller			
ESSC-G2	One Zone SmartSpace Controller			
EDSSC-G2	Two Zone SmartSpace Controller			
ELVD-G2	600-Watt Phase Adaptive Dimmer			
ELVD-277-G2	600-Watt Phase Adaptive Dimmer- 277V			

## **Room Controllers**

MODEL	DESCRIPTION		
ERMC4-G2	Four Zone Room Controller		
ERMCT4-G2	Four Zone Room Controller with TimeClock		
ERMC8-G2	Eight Zone Room Controller		
ERMCT8-G2	Eight Zone Room Controller with TimeClock		

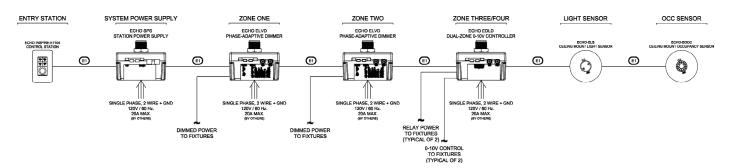
## **Panel Products**

MODEL	DESCRIPTION		
ERP	Elaho Relay Panel Mains Feed		
ERP-FT	Elaho Relay Panel Feed Through		

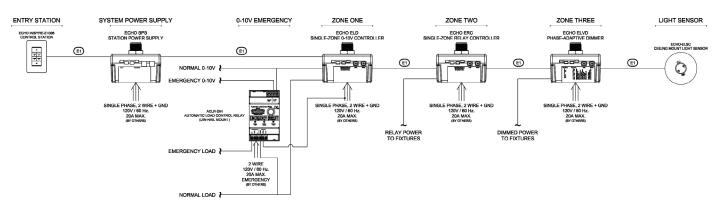
## **Responsive Control Series**

SAMPLE SYSTEMS

### **SMALL SYSTEM**



#### **CONFERENCE ROOM**



# **Responsive Control Series**

### PHYSICAL

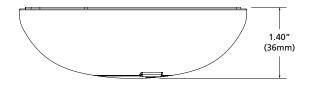
### **Light Sensor Dimensions\***

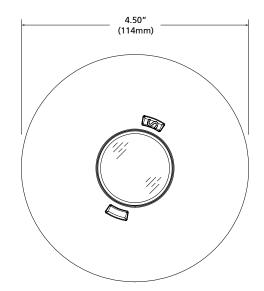
MODEL	DIAMETER		DEI	PTH
	in	mm	in	mm
ELS/ ELSC	4.50	114	1.40	36
ELSH	1.60	41	0.66	17

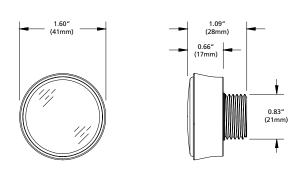
## **Light Sensor Weights\***

MODEL	WEIGHT		SHIPPING	WEIGHT
	oz	g	OZ	g
ELS	3	76.5	9	255.1
ELSC	3	76.5	9	235.3
ELSH	1	28.3	7	178.6

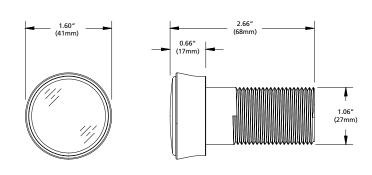
<sup>\*</sup>Weights and dimensions typical







SHOWN WITHOUT INCLUDED THREADED EXTENDER



SHOWN WITH INCLUDED THREADED EXTENDER