Unison Echo Light Sensor

Echo Control Series



Type(s)
Project
Date
Notes

GENERAL INFORMATION

Having the lights on in an already well-lit area means wasted energy and bigger electrical bills. Echo 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 Echo controller
- EchoConnect: 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
- Two-zone daylighting control from a single sensor
- Multi Space Preset functionality

REGULATORY AND COMPLIANCE

- cuLUs Listed
- CE Compliant

ORDERING INFORMATION

Echo Light Sensor

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

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

Echo Power Requirements

EchoConnect:	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 EchoConnect control network utilizing 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 m (1,640 ft) 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 ft away from controller

ENVIRONMENTAL

- Light Sensor Controller ambient operating temperature range is 0°-70° C (32°-158° F), 10-100% non-condensing humidity
- Light Sensor remote head can be installed indoors or onto an outdoor weatherproof enclosure. Ambient operating temperature range is -25°-70° C (-13°-158° F), 10-100% non-condensing humidity

FUNCTIONALITY

BASIC MODE FUNCTIONALITY

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

CUSTOM MODE FUNCTIONALITY

(Requires Programing With EchoAccess 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

ECHO FAMILY OF PRODUCTS

EchoConnect Power Supplies

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

EchoTouch

MODEL	DESCRIPTION	
ETS	EchoTouch Controller Mk2	

Echo 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	Echo Preset Station - 5 Button			
EPS10	Echo Preset Station - 10 Button			
EPSKS	Echo Keyswitch Station			
E-ATC	Echo TimeClock			

Echo 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			

Echo Interfaces

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

Zone Controllers

MODEL	DESCRIPTION	
ERC-G2	One Zone Relay Controller	
EDRC-G2	Two Zone Relay Controller	
ELD-G2	One Zone 0–10 V Controller	
EDLD-G2	Two Zone 0–10 V Controller	
ESSC-G2	One Zone SmartSpace Controller	
EDSSC-G2	Two Zone SmartSpace Controller	
ELVD-G2	600-Watt Phase Adaptive Dimmer (120 V)	
ELVD-277-G2	600-Watt Phase Adaptive Dimmer (277 V)	
ELVD-G2-MLV	600-Watt Forward Phase Dimmer (120 V)	
ELVD-277-G2-MLV	600-Watt Forward Phase Dimmer (277 V)	

Room Controllers

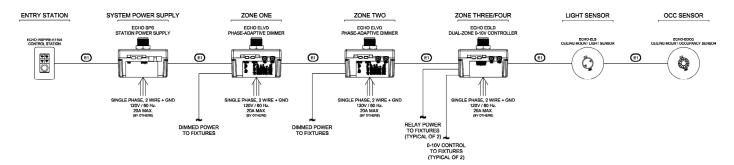
MODEL	DESCRIPTION		
ERMC4-G2	Four Zone Room Controller		
ERMCT4-G2	Four Zone Room Controller with TimeClock		
ERMC8-G2	Eight Zone Room Controller		
ERMCT8-G2	Eight Zone Room Controller with TimeClock		

Panel Products

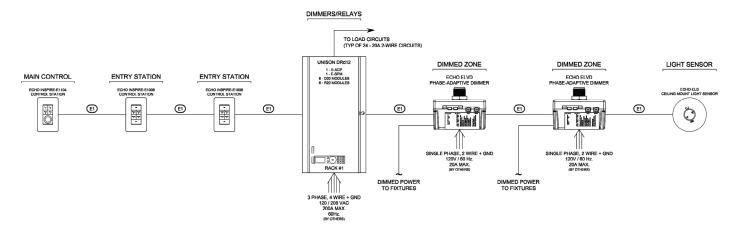
MODEL	DESCRIPTION			
ERP	Echo Relay Panel Mains Feed			
ERP-FT	Echo Relay Panel Feed Through			
IQ	Sensor IQ Intelligent Breaker System			
SR3	Sensor3 Power Control System			
DRd	Unison DRd with Echo Control			

SAMPLE ECHO SYSTEMS

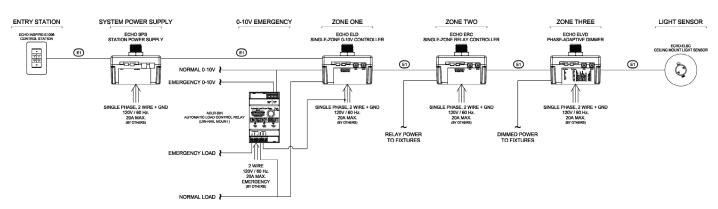
SMALL SYSTEM



MEDIUM SYSTEM

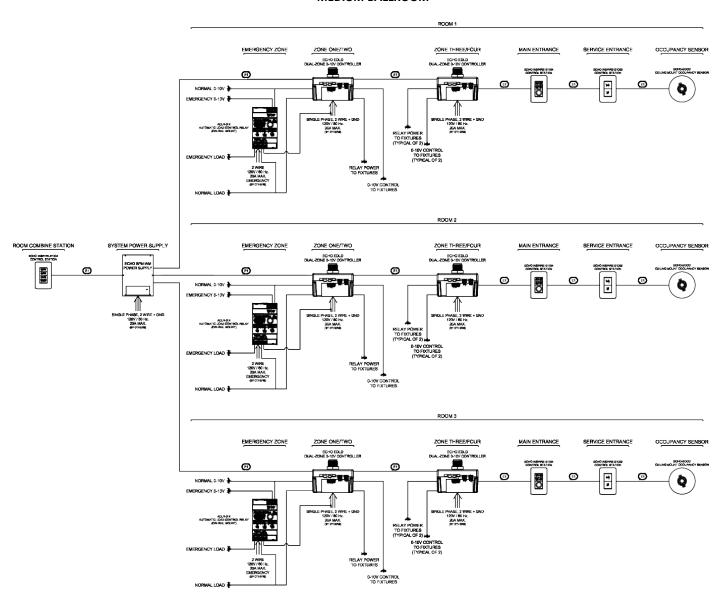


CONFERENCE ROOM



SAMPLE ECHO SYSTEMS

MEDIUM BALLROOM



PHYSICAL

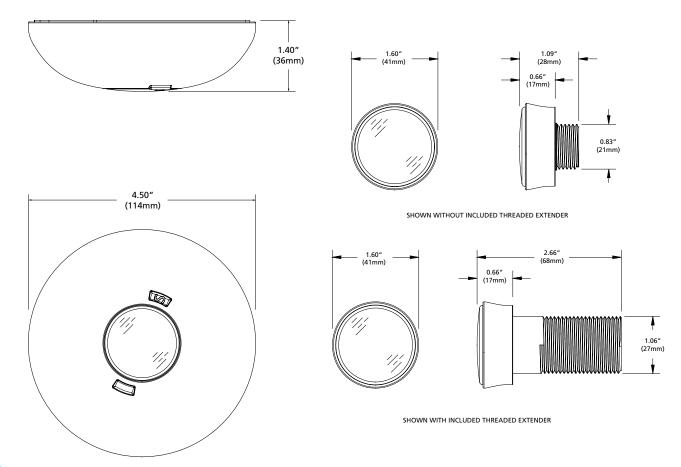
Light Sensor Dimensions*

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

Light Sensor Weights*

MODEL	WEI	WEIGHT		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

^{*}Weights and dimensions typical





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