Echoflex Solutions

Design Guide

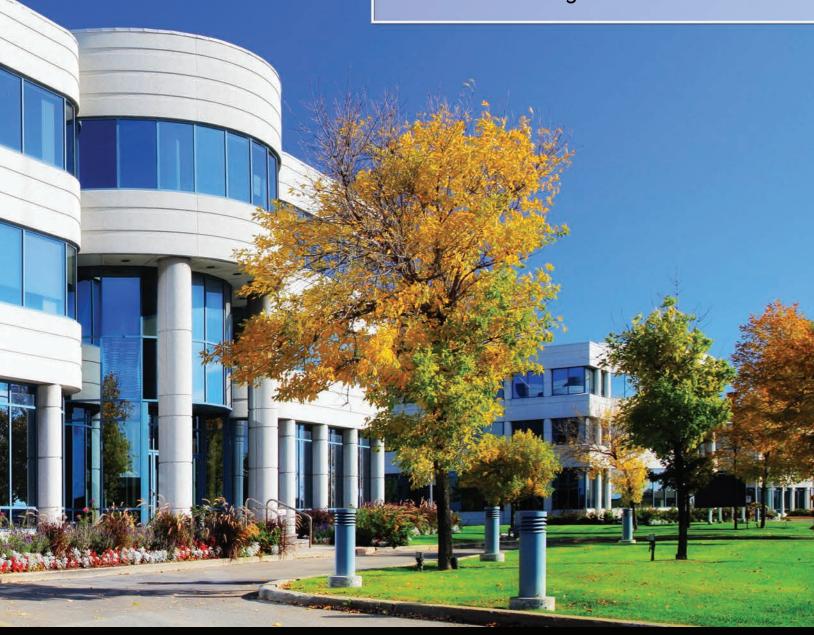
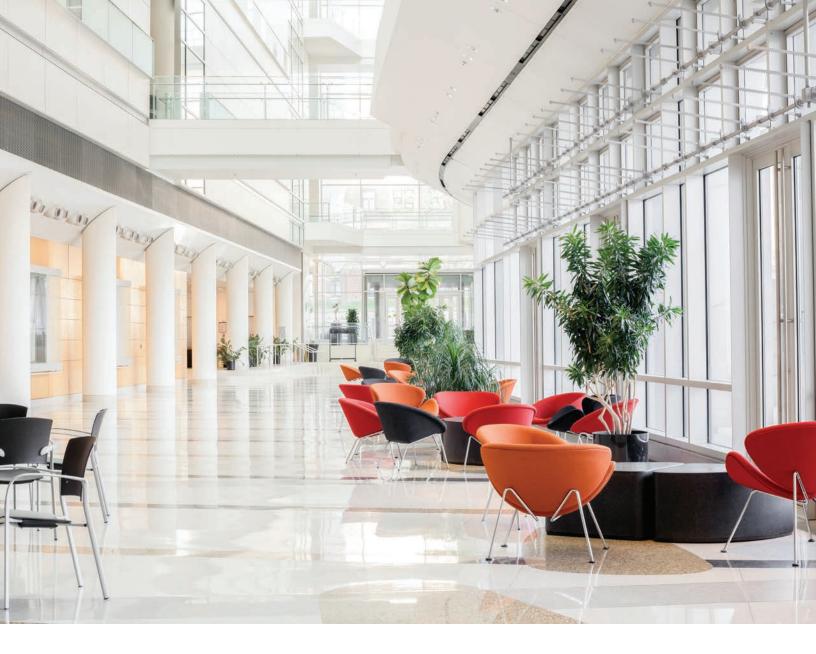


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Echoflex Solutions Control Systems

Echoflex Solutions designs superior lighting control systems and environmental sensors. With advanced wired and wireless sensors, switches, and control products, Echoflex provides flexible, best-in-class solutions for building control and energy management.

Echoflex's advanced systems are reliable, proven, and environmentally friendly, meeting the most stringent of energy codes while being simple to deploy, scalable, and virtually maintenance free. We offer the flexibility to provide a wired, wireless, or hybrid system for your project. Whether networked, centralized, distributed, or all of the above, Echoflex can deliver seamless integration with Building Management Systems for comprehensive facility control.

Echoflex Solutions offers proven systems that make intelligent control possible in any space.



Always be energy conscious

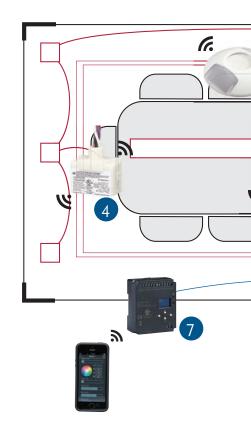
With Echoflex, environmentally-friendly design meets sound business sense. Occupancy/vacancy sensors (PIR or dual tech) and light sensors (lumen level and color temperature sensing) help to conserve energy and reduce costs. Our smart controllers with adjustable configuration parameters deliver control of individual fixtures, individual zones, or multiple zones, helping buildings meet demanding energy codes in the most cost effective manner. Echoflex systems also support communication with HVAC systems such as demand control ventilation applications.

System Interface Choices

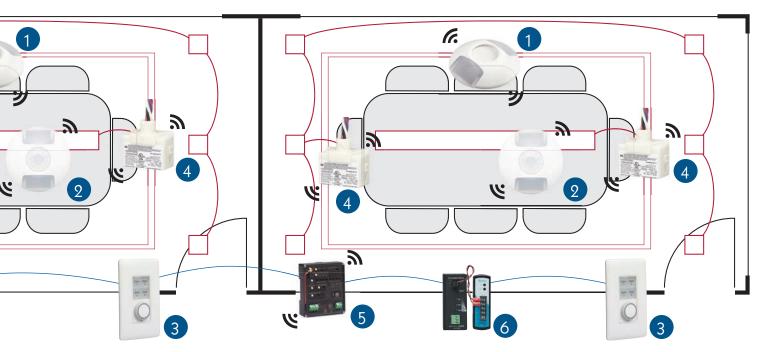
Industry-leading interfaces mean automation and customization at your fingertips. Stylishly designed control stations complement any decor with a variety of button configurations, colors, and customized labeling. The ElahoAccess app allows users to remotely control and configure Echoflex systems via Bluetooth or WiFi from any iOS or Android device. The ElahoTouch touchscreen offers advanced preset programming and space control in a sleek and attractive form factor.

Control that expands with your business

Since Echoflex systems are adaptable, adjustments can be made at any time, allowing button station relocation, preset reprogramming, and power controls to be reconfigured – ideal for lighting control retrofits or tenant improvements. New offices and areas can be added to the Echoflex control system without interrupting lighting in the rest of the building. New construction also benefits from the scalability of Echoflex's solution as core and shell can be completed with tenant fit-up to follow.







* See conference room control riser on page 8

1 Light Sensors

Detect natural and electric light level contribution and reduce electric lighting to save energy. Includes CCT technology for human-centric lighting applications.

2 Dual Tech Occupancy/Vacancy Sensors

Whether the lights are turned on automatically with a sensor or manually with a switch, Echoflex sensors will turn the lights off when the space is empty.

3 Control Stations

Sleek button and fader stations, with wireless and battery-free models that can be located anywhere for convenient lighting control.

4 Zone Controllers

Can divide spaces into zones to control areas of light separately or all together.

5 Elaho-Echoflex Interface

The Elaho-Echoflex Interface allows for wireless communication between Elaho and Echoflex control systems. When it's not practical to run wires between every device in your building's control system, the Elaho-Echoflex Interface is the solution.

6 Easy Wiring

Echoflex's wireless connectivity makes placing sensors, stations, and zone controllers a breeze. And with Elaho's configuration- and topology-free network that includes data and power on a single pair of wires, even the wired option is easy.

7 Elaho Expansion Bridge

Supports up to 64 Elaho stations and sensors within a single Elaho control system. Provides remote control and configuration of any Elaho system via iOS and Android smartphones and tablets with varying levels of password protection and access.



Giving guests more

It all starts with a guest and making their stay as pleasant and comfortable as possible. Echoflex ensures a luxurious visit with sensors and controllers that manage tunable white lights to help weary guests rest better; keycard switches to automatically turn amenities on; temperature sensors to keep the climate perfectly adjusted, and more. Echoflex doesn't forget the business side, either, with a full line of responsive controls to save on energy costs and easy integration into larger BMS and HVAC systems to keep costs low for the competitive hospitality market.

Relaxing retrofits

A hotel may be a classic landmark, but energy codes are constantly changing and the hospitality industry has to keep up. Echoflex's wireless technology and forward-thinking design mean it's easy to retrofit any venue. Wireless sensors, switches, and dimmers remove any obstacles existing construction may present. When wired solutions are called for, Elaho's topology-free network structure keeps things simple for contractors.

On point style

Guests expect more from hotels now and with Echoflex it's easy to deliver. Stylish switch stations and powerful programming tools mean custom presets and specialized looks for ballrooms and meeting spaces are just a tap away. The ElahoAccess app gives staff the ability to control lights directly on their smartphone or tablet, creating the perfect setting for the guest experience.

1 Easy Switching

A variety of wireless switching options make it easy to automate room power state options whenever a guest enters or leaves.

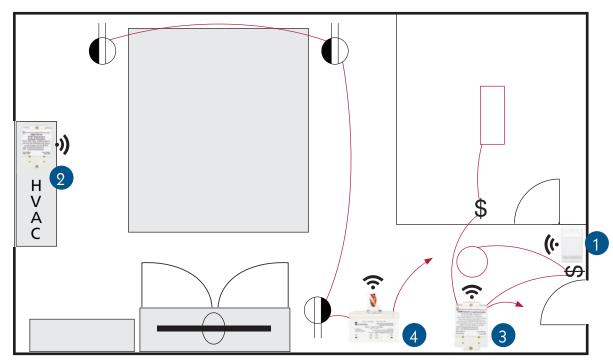
2 Environmental Controls

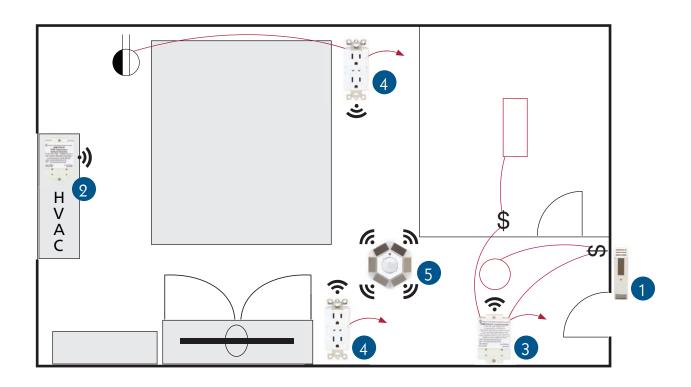
Temperature setback controllers keep a room perfectly comfortable for guests and maximize energy efficiency.

- 3 Zone Controllers
 Can divide spaces into zones to control areas of light separately or all together.
- 4 Receptacle Circuit Control
 Linked or individually controlled receptacles make it easy
 to meet energy codes.
- 5 Occupancy/Vacancy Sensors

Automatically turn lights on when a room is in use, and switches them off when a room becomes vacant.









Customized lesson plans for overachievers

Echoflex Solutions knows that every project, like every student, has different needs ... and resources. Our variety of wireless and wired controls means you'll have the right answer for every install. A wide variety of stations and interfaces means Echoflex is friendly to every type of user and school budget.

Advanced Placement

Echoflex's wireless technology means control stations, sensors, relays, dimmers, switches, and all your other lighting control needs can quickly be installed wherever you need them. And when wired is the way to go, Elaho's topology-free wiring and industry-standard cabling simplifies installation.

Plays well with others

Echoflex contact interfaces and BACnet gateways mean your lighting system seamlessly integrates with your AV or building management system. Contact input interfaces accept triggers from external sources to change the lighting while contact output interfaces provide simple integration with third-party management solutions.

Easy energy calculus

Echoflex turns schools green with its suite of advanced sensors. Elaho light sensors monitor natural sunlight and adjust the output of the electric lighting accordingly, reducing power usage. Wireless Echoflex photo sensors make retrofits easy, allowing you to place sensors wherever you need them, without the hassle of running new wire. A full range of occupancy and vacancy sensors, using PIR and dual tech sensing, offers more options for meeting energy code requirements.

Individual Attention

Whether you need scheduling, multiple zones for daylighting, or multiple custom presets for a room, Echoflex has you covered. Elaho room controllers with an optional integral time clock are ideal for exterior lighting, corridors, and other common areas. Echoflex tri-zone controllers support up to three different zones for daylight harvesting. Stylish Inspire control stations make it easy to store and recall custom preset looks.

Zone Controllers

Can divide spaces into zones to control areas of light separately or all together.

2 Light Sensors

Detect natural and electric light level contribution and reduce electric lighting to save energy. Optional sensors for tunable white applications.

3 Occupancy/Vacancy Sensors

Whether the lights are turned on automatically with a sensor or manually with a switch, Echoflex sensors will turn the lights off when the space is empty.

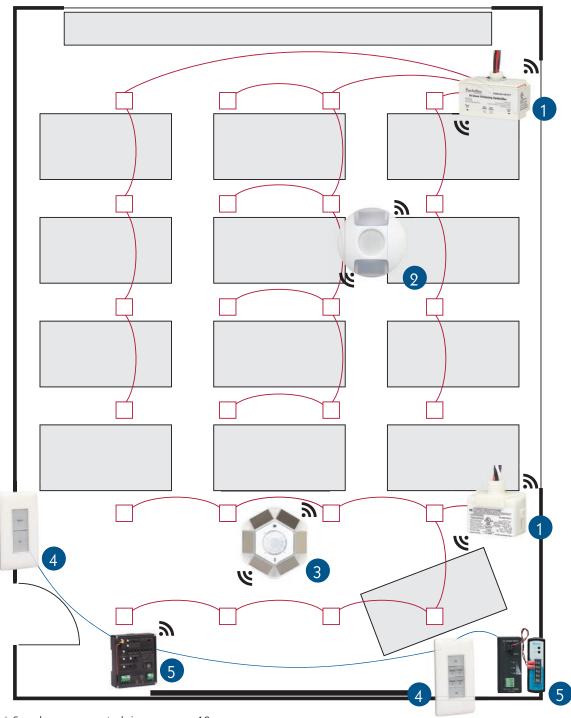
4 Control Stations

Sleek button and fader stations, with wireless and battery-free models that can be located anywhere for convenient lighting control.

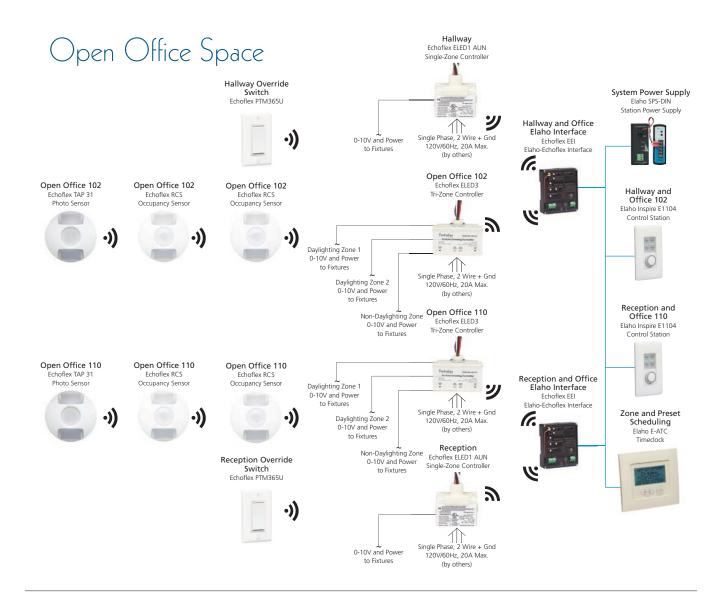
5 Easy Wiring

A configuration-free and topology-free network that includes data and power on a single pair of wires to deliver distributed lighting intelligence. Easy wireless integration simplifies installation even more.

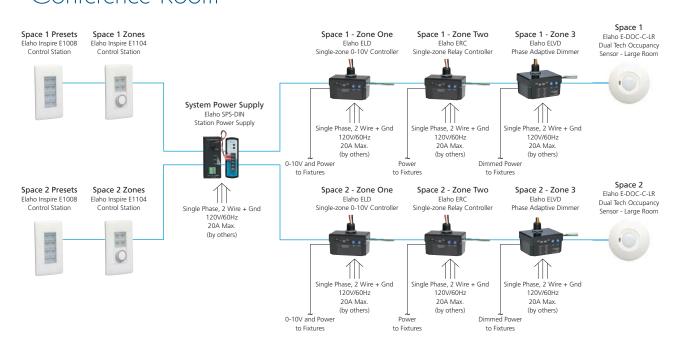




* See classroom control riser on page 10



Conference Room



Private Office Space

Split Duplex Receptacle 15A Outlet Controller



Switch Mount Occupancy Sensor Echoflex OWS-DT



Single-Zone Controller

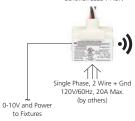
Single Phase, 2 Wire + Gnd 120V/60Hz, 20A Max.

(by others)

0-10V and Power

2

0-10V Dimming Controller Echoflex ELED1 AUN

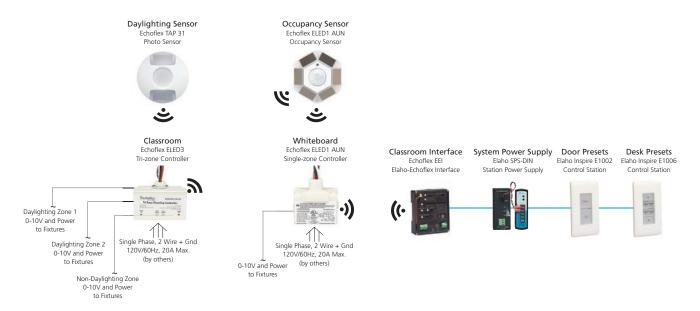


Open Office with BMS Integration Hallway Echoflex ELED1 AUN Single-Zone Controller Hallway Override Switch Echoflex PTM365U •)) Single Phase, 2 Wire + Gnd 0-10V and Power 120V/60Hz, 20A Max. (by others) Open Office 102 Echoflex ELED3 Open Office 102 Open Office 102 Open Office 102 Echoflex TAP 31 Photo Sensor Echoflex RCS Tri-Zone Controlle Occupancy Sensor Occupancy Sensor •)) Daylighting Zone 1 0-10V and Power Single Phase, 2 Wire + Gnd 120V/60Hz, 20A Max. to Fixtures Daylighting Zone 2 0-10V and Power to Fixtures Non-Daylighting Zone Open Office 110 Echoflex ELED3 Tri-Zone Controller 0-10V and Power to Fixtures Open Office 110 Open Office 110 Open Office 110 Echoflex RCS Echoflex RCS Occupancy Sensor Photo Sensor Occupancy Sensor -Daylighting Zone 1 0-10V and Power to Fixtures Single Phase, 2 Wire + Gnd 120V/60Hz, 20A Max. •)) Daylighting Zone 2 0-10V and Power (by others) to Fixtures Reception Non-Daylighting Zone Echoflex ELED1 AUN Reception Override 0-10V and Power to Fixtures

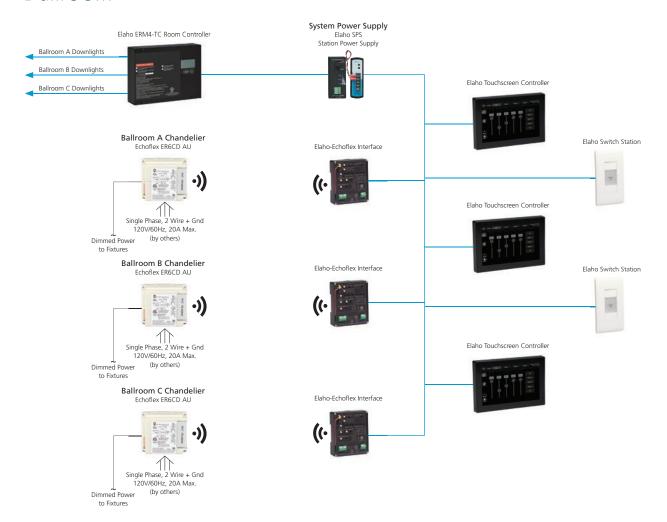
Switch Echoflex PTM365U



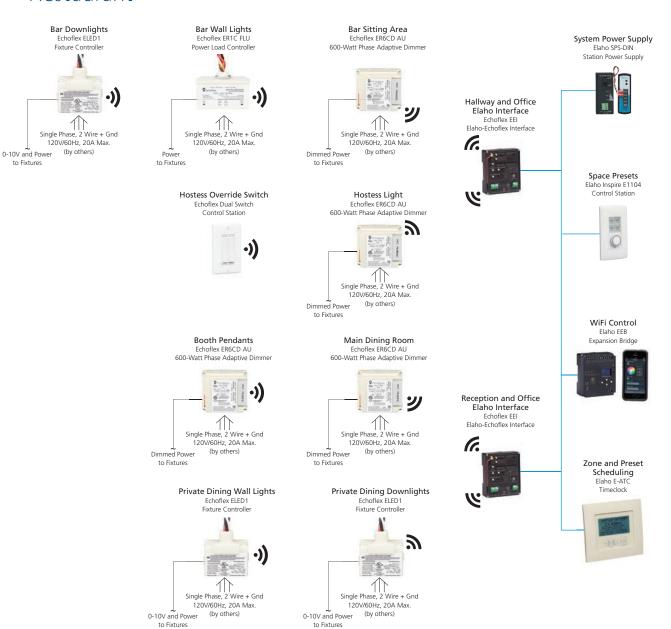
Classroom



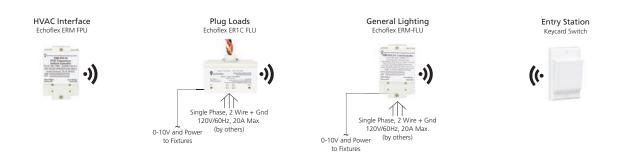
Ballroom



Restaurant



Hotel Room





Fixture, Zone, and Room Controllers



Echoflex Single-Zone Fixture Controller

Model number ELED1

- Individual fixture/single-zone control
- Relay switching with 0-10V dimming
- Supports occupancy/vacancy sensing, partial on/off, and daylighting
- 120-277V at 11.5A
- UL 924 Listed



Echoflex Tunable-White Fixture Controller

Model number ELED2

- Adjusts color temperature of tunable white fixtures
- Relay switching with 0-10V dimming
- Supports occupancy/vacancy sensing, partial on/off, and daylighting
- 120-277V at 20A
- UL 924 Listed



Echoflex Tri-Zone Fixture Controller

Model number ELED3

- Control for three separate zones, for a complete daylight harvesting solution
- Relay switching with 0-10V dimming
- Supports occupancy/vacancy sensing, partial on/off, and daylighting
- 120-277V at 20A
- UL 924 Listed



Echoflex 600-Watt Phase-Adaptive Dimmer

Model number ER6CD

- Reverse- or forward-phase single-channel 600-watt dimmer
- Individual fixture/single-zone control
- 120V or 277V (reverse-phase only) input power models available
- Integrated daylight harvesting control with Photo Inhibit feature



Echoflex Power Load Controller

Model number ER1C

- Individual fixture/single-zone relay control
- Wall-switch, timed, photo/daylight, or occupancy-based control
- 20A relay for receptacle control
- 120/277V at 20A; 347V at 15A



Echoflex Complete Room Dimming Controller

Model numbers ERDRC-FCU, ERDRC-FDU

- Individual fixture/single-zone control
- Responds to wireless wall switches, photo sensors, and occupancy sensors
- Responds to gateway control for scheduled events
- FC model supports wired occupancy sensor
- 120/277V at 20A; 347V at 15A



Echoflex Control Module

Model number ERM-FL, ERM-FS

- Single-channel relay control of up to 20 devices
- 120-277VAC at 15A; 24VAC/DC with 3A @ 30VDC
- Wall-switch, timed, photo/daylight, or occupancy-based control
- Central-command capabilities for integration into BMS systems



Echoflex Split Duplex Controller

Model number ERNR

- One 15-amp relay-switched outlet, one 15-amp constant-power outlet
- Wall-switch, keycard-switch, timed, door-switch, or occupancy-based control
- Gateway control implementing schedules or other events
- ETL and cETL Listed





Elaho Room Controller

Model number FRMCT

- Four- and eight-zone models available
- UL 924 Listed with integrated Sense Feed
- Supports multiple control spaces in a single controller
- Independent 120V, 277V, emergency and plug-load control in a single controller
- 0-10V control and relay outputs
- Integral power supply for up to six stations and power/output controllers
- Optional integral TimeClock for timed events



Emergency Bypass Load Controller

Model number EREB

- Automatic control of emergency power output to fixture or single zone emergency lighting upon loss of normal power
- UL 924 Listed
- Accepts Normal Sense Circuit and Class 2 Panic Circuit
- 120VAC and 277VAC
- Normally-closed, 20A fully-rated relay
- Power pack or DIN-rail form factors



Emergency Lighting Circuit Transfer Relay

Model number ELCTR

- UL1008 Listed to transfer a single 20A circuit at 120V or 277V
- Field-configurable fire alarm input can be normally open (N/O) or normally closed (N/C)
- Low-voltage relay breaks a 0-10V or DALI loop sending the drivers to full in an emergency state
- Standard push button and laser test options
- Automatically transfers load from normal power to emergency power
- Automatically transfers back to normal power when restored



Elaho 0-10V Controller

Model numbers ELD and EDLD

- One or two independently controlled outputs
- 0-10V output per relay for driver and ballast control
- 120-277V power input
- Half-inch knockout mount
- Fully-rated 20A relay per output



Elaho Relay Controller

Model numbers ERC and EDRC

- One or two independently controlled outputs
- 120-277V power input
- Half-inch knockout mount
- Fully-rated 20A relay per output



Elaho Phase-Adaptive Dimmer

Model number ELVD

- Reverse- or forward-phase operation
- Dimming mode auto-detection with optional manual selection
- 120V and 277V versions
- Supports loads up to 600W
- One-watt minimum load
- Half-inch knockout mount



Elaho Smart Space Controller

Model numbers ESSC and EDSSC

- One or two independently controlled outputs
- 0-10V output per relay for driver and ballast control
- 120-277V power input
- 24VDC output sensor power output
- Contact input for occupancy or photo sensor
- Half-inch knockout mount
- Fully-rated 20A relay per output



Switches and Control Stations



Echoflex Multi-Button Station

Model number MBI

- Multiple zone control and functions from one station
- Custom labelling options
- On/Off and dimming control



Echoflex Wall Switch Sensor

Model number OWS-IR. OWS-DT

- Available with PIR or dual tech detection
- On/Off and dimming control
- Occupancy control of lighting and plug loads
- Wired and wireless, battery-powered versions available



Echoflex Decorator Style Switch

Model number PTM265, PTM365

- Battery-free
- On/Off and dimming control
- Single- or dual-paddle
- PTM365 comes with UL and CSA certified barrier plate
- Available in Black, Almond, Ivory, White, or Gray finish



Echoflex Hotel Keycard Switch

Model number PTM265KCA

Echoflex Window/Door

Contact Switch

Model number MC-21

 Keycard-activated switch for hospitality suite control applications

• Solar-powered magnetic contact switch

• No limitations on relay assignments



Echoflex Wave Switch

Model number ETRS

- Battery-free
- On/Off and dimming control
- Single- or dual-paddle



Echoflex Handheld Switch

Model number ETRH

- Portable rocker-style switch
- Battery-free
- On/Off and dimming control
- Single- or dual-paddle



Echoflex Active Circuit Transmitter

• User-adjustable heartbeat

Model number ERM-DA

- Indicates when electrical 120-277V or 24VAC/DC circuit is active, allowing active circuit to trigger events
- Wireless repeater (single and dual hop) for boosting wireless signal for whole system



















Elaho Inspire Button Stations

Model numbers E1001, E1002, E1004, E1006, E1008

- One, two, four, six, or eight buttons
- Easy-to-change, user-specific, back-lit button legends with preset or zone control
- Space raise/lower control
- Zone or preset activation with raise/lower control
- Fastener-free faceplate attachment
- Cream, Gray, Black, or White finish
- Optional space on/off button
- Optional room-combine control

Elaho Inspire Four-Button Fader Station

Model number E1104

- Fader station with four selection buttons for preset and zone control
- Real-time hue, saturation, and intensity control of LEDs when used with the DMX Scene Controller
- Easy-to-change, user-specific back-lit button legends
- Space raise/lower control
- Zone or preset activation with raise/lower control
- Fastener-free faceplate attachment
- Cream, Gray, Black, or White Finish





Model number ETS

- Touchscreen control interface
- Color control, color tuning, zone, preset, and sequence control
- Supports EchoConnect, DMX/RDM, and sACN protocols
- Discovery, addressing, and mode selection of RDM fixtures
- Available with Cream, Gray, Black, or White Bezel
- Locking cover available



Elaho TimeClock

Model number E-ATC

- Intuitive six-button interface
- Large backlit display
- Time-of-day and astronomical events
- Support for up to 16 spaces



Elaho Keyswitch

Model number EPSLO

- Keyswitch control of presets, zones, station lockout, or more
- Lockout by default, additional programming via app



Elaho Preset Stations

Model number EPS05 and EPS10

- Available in five- and ten-button options
- LED indicator per button
- Available in Cream, Gray, Black, or White finish



Sensors and Responsive Controls



Echoflex Vacancy/Occupancy Sensor

Model number RVS, RCS, RVS-DT, RCS-DT

- Wireless self-powered and batterypowered occupancy/vacancy sensors
- PIR and dual tech (audio and PIR) options available
- Walk test mode to ensure motion range coverage



Echoflex 360 Ceiling/High Bay Sensor

Model number MOS-IR, MOS-DT

- Wireless, self-powered, occupancy/vacancy sensor
- PIR and dual tech (audio and PIR) options available
- Ceiling-mount, 360-degree angle of detection
- Special lensing option for high-bay applications (approx. 40 feet)
- Immediate response on occupancy states, ideal for auto-on or partial-on applications
- Options for small motion and large motion



Echoflex Occupancy Sensor

Model number ROS-WA, ROS-HW, ROS-KM

- Wireless, self-powered occupancy sensor
- Passive Infrared (PIR) detection
- Wide-angle, hallway, and cornermount models
- Small-motion detection
- Adjustable sensitivity to prevent nuisance triggering



Echoflex Wall Switch Sensor

Model number OWS-IR, OWS-DT

- Wired and wireless, battery-powered versions available
- PIR and dual tech (audio and PIR) options available
- On/Off and dimming control
- Occupancy control of lighting and plug loads



Echoflex TAP-31 Photo Sensor

Model number TAP-31

- Wireless, self-powered photo sensor for daylight switching or dimming
- Two selectable ranges: 0-1024 lux (95 fc) and 0-65535 lux (6090 fc)
- Supports open- or closed-loop daylighting applications
- Multiple mounting options
- Self-adjusting transmission rates to reduce energy usage



Echoflex TAP-41 Photo Sensor

Model number TAP-41

- Wireless, self-powered photo sensor for daylight switching or dimming
- Correlated color temperature feedback across a broad temperature range (1,000-10,000 K)
- Multiple mounting options
- Self-adjusting transmission rates to reduce energy usage



Echoflex Open Loop Photo Sensor

Model number WDS9

- Wireless, solar-powered open-loop photo sensor
- Indoor use only
- Monitors light levels up to 65,000 lux/6000 foot-candles





Elaho Ceiling- and Wall-mount Dual Tech Occupancy/Vacancy Sensor

Model number E-DOC and E-DVAC

- Audio and PIR detection
- Occupancy and vacancy detection options
- Ceiling-mount, small-room, large-room, and high-ceiling options available.
 Wall-mount wide and narrow coverage available
- Thirty-second grace timer
- Walk test function for PIR and audio coverage
- Supports small motion detection up to 45 feet
- Up to 2,000-square-foot coverage
- Available in Black or White



Elaho Switch-mount Dual Tech Occupancy Sensor

Model number E-DOC-SM

- Passive infrared and audio detection technologies
- One- and two-button options available
- Thirty-second grace timer
- Walk test function for PIR and audio coverage
- Supports small motion detection up to 45 feet
- Cream, Gray, Black, or White finish



Elaho Ceiling-mount PIR Occupancy and Vacancy Sensor

Model number EOCC and EVAC

- Occupancy and Vacancy sensor options
- Small-room, large-room, and highceiling options available
- Passive Infrared (PIR) detection
- Thirty-second grace timer
- Walk test function
- Available in Black or White



Elaho Light Sensor

Model number ELS

The Elaho Light Sensor automatically adjusts light levels to your target lux level and even supports two-sensor averaging, making it ideal for indoor, outdoor, and atrium use.

- Remote head-mounting option
- Built-in target lux configuration
- Two-sensor averaging for ideal light levels in a light-changing environment
- Single-head option for indoor, outdoor, and atrium settings (0-6500 lux, 0-610 fc)
- Available in Black or White



Interfaces and Gateways



Echoflex Demand Response Interface

Model number ERDRI

- Dedicated contact closure interface for Demand Response commands from utility
- Low-voltage interface



Echoflex Bidirectional BACnet Gateway

Model number MPM-GW

- Bidirectional Echoflex to BACnet gateway. Integrates Echoflex systems into BACnet building automation systems
- Programmable gateway for HVAC and/or lighting control applications



Echoflex USB Serial Interface

Model number ERUSB-S



Echoflex 4-Channel Contact Output Interface

Model number ERCOI

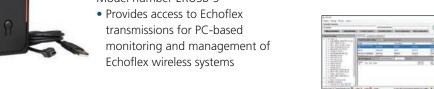
- Four wireless inputs and four SPDT outputs
- Each output can be individually controlled and linked to multiple switches or sensors
- Low-voltage interface to fire alarm, security, lighting, or control panels



Echoflex 4-Channel Contact Input Interface

Model number ERCII

- Four wired inputs and four wireless outputs (switch or occupancy)
- Each channel operates separately
- Low-voltage interface from fire alarm, security, lighting, or control panels



Garibaldi Remote Commissioning Software

Garibaldi commissioning software allows in-field customization of Echoflex pre-commissioned control systems to ensure optimum performance.





Elaho Expansion Bridge

Model number EEB

- Combines up to four Elaho segments for up to 64 control and output devices
- Connects to WiFi via network for use with ElahoAccess mobile app
- Utilizes Class 2 Station bus with 24VDC power



Elaho Echoflex Interface

Model number FFI

- Provides four inputs and four outputs for interface with Echoflex wireless devices
- Built-in 902 MHz EnOcean wireless radio
- Utilizes Class 2 Station bus with 24VDC power
- Allows ElahoAccess to have mobile control of wireless Echoflex devices and touchscreen control of wireless devices via the ElahoTouch



Elaho Contact Interfaces

Model numbers ECII and ECOI

- Available with four inputs or four outputs
- Inputs accept wet or dry contacts
- Inputs support momentary or maintained closures (per input)
- Output Interface provides triggers for third-party systems
- Outputs support normally open or normally closed operation (per output)
- Programmable through ElahoAccess mobile app
- Utilizes Class 2 Station bus with 24VDC power



ElahoAccess

Model number EACC

- Enables configuration of connected Elaho devices
- Activate, deactivate, and record presets
- Set light levels or combine spaces remotely
- Wall-mountable Bluetooth® interface with sleek design or WiFi connection using the Elaho Expansion Bridge
- Bluetooth interface for configuration and control over station network



Elaho DMX Scene Controller

Model number EDMXC

- Uses DMX-snapshot technology or ElahoAccess to capture lighting presets
- Easy-to-use remote programming
- Controls hue, saturation, and intensity for multi-address DMX luminaires
- Supports up to 32 presets
- Dynamic Color Picker available with ElahoAccess mobile app
- Utilizes Class 2 Station bus with 24VDC power



Elaho BACnet Interface

Model number EBI

- Allows Elaho Control System integration with building management systems
- Supports BACnet IP for simple Ethernet based integration
- Utilizes Class 2 Station bus with 24VDC power



Elaho Demand Response Interface

Model number EDRI

- Accepts Demand Response closure to reduce total load during times of peak demand
- Shares Demand Response status across the Elaho control network
- Utilizes Class 2 Station bus with 24VDC power



HVAC Controls and IoT Sensors



Echoflex Electronic Baseboard Controller

Model number ERM-FB

- Supports occupancy and Contact Switch set-back operation for energy savings
- Temperature averaging from multiple sensors
- Supports baseboard voltages of 120, 208, 240, and 277VAC
- Remote management and reporting for BMS integration



Echoflex Temperature Setback Controller

Model number ERM-FP

- Interfaces with hospitality PTAC equipment for setback control
- Supports Keycard and Contact Switch
- Temperature- and occupancy-based control
- Central Command support for BMS gateway control



Echoflex Temperature and Humidity Sensors

Model number RTS

- Wireless, solar-powered temperature and humidity sensor
- Additional models with temperature setpoint, fan speed, and occupancy override options
- Works with Echoflex Baseboard Controller and Echoflex Temperature Setback Controller to control heating equipment



Echoflex CO₂ Sensor

Model number RCT

- Wireless, solar-powered CO2, temperature, and humidity sensing
- Integrates well with any BMS
- Automated self-calibration feature
- Integrated pressure sensing for increased CO2 accuracy



Echoflex IoT Ceiling Sensor

Model number MOS-MT

 Wireless, solar-powered motion, sound, temperature, and light level sensor for IoT building monitoring and optimization applications



Power Infrastructure



Elaho Relay Panel Mains Feed

Model number ERP-MF

The Elaho Relay Panel Mains Feed features relay and line dimming control, switching with integral breakers, and options for low-voltage control. Its built-in power supply supports up to six stations and power controllers.

- Supports 10A, 15A, or 20A breakers
- 28-circuit panel with support for 24 relays/dimmers and 4 hot circuits
- 20A mechanically-held air-gap relays
- Optional 300-watt dimmer available per circuit
- Optional 0-10V or DALI output
- Optional network interface
- Astronomical and Real-time clock
- UL 924 Listed with normal power sense input
- Optional contact input cards



Elaho Relay Panel Feedthrough

Model number ERP-FT

The Elaho Relay Panel Feedthrough offers creative power distribution for all load types with relay switching for multiple voltages in a single panel. Its built-in power supply supports up to six stations and power controllers.

- 120V and 277V power control
- Up to 48 relay outputs
- Optional 0-10V or DALI output
- Astronomical and Real-time clock
- UL 924 Listed with normal power sense input
- Optional contact input cards





Elaho Station Power Supplies

Model number E-SPS-DIN, E-SPS, and E-APS

The Station Power Supply provides power for stations, responsive controls, and power controllers. The Station Power Supplies come in a variety of mounting options and form factors, making them ideal for healthcare facilities, office buildings, retail locations, houses of worship, schools, and more.

- Up to 1640 feet of control wiring
- Supports up to 16 power controllers or power panels
- Supports up to 16 stations or responsive controls
- Multiple form factors and mounting options available
- Optional 24VDC auxiliary power output



