

ElahoAccess App User Manual

3.3.0

Part Number: 8186M1250-3.3.0 Rev.A Released: 2019-12

To view a list of Echoflex Solutions trademarks and patents, go to **echoflexsolutions.com/ip**. All other trademarks, both marked and not marked, are the property of their respective owners.

Echoflex Solutions intends this document, whether printed or electronic, to be provided in its entirety.

Table of Contents

Congratulations	1
Bluetooth Device Specifications	1
Connecting to an Elaho Control System Compatible Devices Bluetooth connection Wi-Fi Connection Demo Mode	
Color Control Setup Control	
Document Conventions	9
Contacting Echoflex Solutions	10
Navigating the App	11
Main Menu	11
Connection Wink	12
Preset Control	
Navigating the page Record a Preset within a Space	16 16
Zone Control	17
Navigating the page	17
Special Control	21
Configuration Configurable Devices	22
Rename	26
Settings	

Configuring Devices	
Configuration Sharing	
Load, Save, and Share	
Сору То	
Wink	
Access BT Interface	
Wink	
Configuration	
General Configuration	31
Space Configuration	
BACnet Lighting Interface	
General Configuration	
BACnet Point Reference	37
Configuration Sharing	
Expansion Bridge	
Wink, Edit, and Delete	40
Configuration	40
Inspire Stations	41
Configuration	42
Configuration Sharing	45
Responsive Controls	
Dual Tech Occupancy Sensors	
Dual Tech Vacancy Sensors	54
PIR Occupancy Sensors	
PIR Vacancy Sensors	
Light Sensor	61
Zone Controllers	68
Zone Controller - Gen 2	68
Zone Controller	
0-10V Controller - Gen 2	68
0-10V Controller	
SmartSpace Controller - Gen 2	
SmartSpace Controller	
Relay Controller - Gen 2	
Dimmer Controllers	78
600W Phase-Adaptive Dimmer - Gen 2	

600W Forward Phase Dimmer - Gen 2 600W Dimmer	80 82
Room Controllers	84
Room Controller - Gen 2 Room Controller	84 90
DMX Scene Controller	93
Configuration Configuration Sharing	93 98
Contact Interfaces	99
Contact Interfaces Demand Response Interface	99 105
Preset Stations	
Configuring Preset Stations Configuration Sharing	109 110
Keyswitch Station	111
Configuration Configuration Sharing	111 112
References	113
Reference Other Documents	113
Actions Per Device	114
New Features	117

Congratulations

...on your purchase of the ElahoAccess Mobile App.

Use this wireless app in conjunction with the ElahoAccess Interface and the Elaho Expansion Bridge to configure and control individual Elaho system components.



ElahoAccess Interface

Elaho Expansion Bridge

For best performance and the most recent set of features, use ElahoAccess Mobile App v3.3.0 with ElahoAccess Interface v3.0 or higher and/or Elaho Expansion Bridge v3.0 or higher. The features discussed in this help system are available with the latest versions of Elaho control system components. The configuration pages displayed by ElahoAccess Mobile App for previous versions of components may appear different than what is described in this help system.

The ElahoAccess App uses Bluetooth® Smart wireless technology to communicate with the ElahoAccess Interface, and Wi-Fi to communicate with the Elaho Expansion Bridge.

Bluetooth Device Specifications



Bluetooth has become a global wireless standard and uses radio waves to send information wirelessly. Sending information at distances up to 100 meters, or 328 feet, Bluetooth technology operates in an unlicensed industrial, scientific and medical (ISM) band at 2.4 to 2.485 GHz, using a spread spectrum, frequency hopping, full-duplex signal at a nominal rate of 1600 hops/sec.

Use the Bluetooth enabled ElahoAccess Mobile App device within 30feet of the ElahoAccess Interface. Walls and other solid objects positioned between the transmitter and the receiver will impact the transmission of the Bluetooth signal. Avoid obstructions when possible.

Connecting to an Elaho Control System

To connect to an Elaho control system, launch the ElahoAccess Mobile App on your compatible device (see *Compatible Devices on page 2*). The Connection page displays for selection of the connection type, either Bluetooth or Wi-Fi. Choose to connect to either a Bluetooth system or a Wi-Fi system by swiping right or left. All systems that are discovered within range will be listed. *Demo Mode* is only visible as a Wi-Fi or Bluetooth interface choice if Demo Mode is enabled in the *Special Control* menu (see *Demo Mode on page 4* and *Special Control on page 21*).

Compatible Devices

Android

Run ElahoAccess on any device with Android Lollipop or newer. Bluetooth Smart (also known as Bluetooth Low Energy) is required for Bluetooth wireless connections to the ElahoAccess Interface and Wi-Fi compatibility is required for Wi-Fi wireless connections to the Elaho Expansion Bridge.

iOS

Run ElahoAccess on any device with iOS 11 and newer. Bluetooth Smart (also known as Bluetooth Low Energy) is required for Bluetooth wireless connections to the ElahoAccess Interface and Wi-Fi compatibility is required for Wi-Fi wireless connections to the Elaho Expansion Bridge.

Note: *iPhone 5, iPhone 5c, and iPad 4 devices are not supported in ElahoAccess versions 2.3.348 and later.*

Bluetooth connection

For connection to the Elaho control system using Bluetooth, select the Bluetooth option. See *Bluetooth Device Specifications on page* 1. All available Access BT Interfaces (ElahoAccess Interfaces) within range will display in the list for selection. Use the *Wink* feature to determine which Access BT Interface to select when more than one displays in the list (see *Wink on page 12*).

The symbol [] at the upper left of the Bluetooth connection screen

sorts the Bluetooth connections by signal strength (strongest at the top).



Note: When you select an Access BT Interface with security enabled, you will be prompted to enter a password before connecting to the Elaho control system. Security passwords can be set for control and configuration functionality separately. See Security on page 31.

 F
 EchoAccess

 BLUETOOTH
 WI-FI

 ♥
 Demo Mode
 ▷

 ♥
 Top Sys
 ▷

 ♥
 Bottom
 ▷

 ♥
 EchoAcc
 ▷

Selecting an Access BT Interface from the list connects to the Elaho control system and displays the **Preset Control** page where you will be able to control presets and zones for each **allowed space**. See **Preset Control on page 16** and **Allowed Spaces on page 33**. The number of spaces configured for the Elaho control system is indicated by dots on the bottom of the **Preset Control** page. Swipe the page to the left or right to access additional spaces.

Wi-Fi Connection

For connection to an Elaho control system using Wi-Fi, select the Wi-Fi option. A configured Expansion Bridge will display in the list for selection if it has previously been connected using its IP Address. If the Expansion Bridge has never been connected to the ElahoAccess Mobile App, you will need to identify the unit by its IP Address.

1. Click the [Add IP Address] button and enter the Expansion Bridge IP Address. The factory default IP Address is 10.101.19.101.





Note: You can find the Expansion Bridge IP Address on the user interface when it is powered.

2. Click [Ok] to close the "Enter IP Address" dialog.

Selecting an Expansion Bridge connects to the Elaho control system and displays the **Preset Control** page. See **Preset Control on** *page 16*.



Note: When you select an Expansion Bridge with <u>security</u> enabled, you will be prompted to enter a password before connecting to the Elaho control system. Security passwords can be set for control and configuration functionality separately from the General Configuration . See <u>Security on page 31</u>.

Note: If the Expansion Bridge you are expecting to connect to does not display, your Wi-Fi network may not allow multicast traffic. Do the following: 1) enable "Auto Discover" by toggling the Auto Discover switch so the switch is highlighted and the circular handle is on the right end of the slot, 2) manually enter the configured Expansion Bridge(s) IP Address into the application using the [Add IP Address] feature. Once the Expansion Bridge has been discovered and configured for the ElahoAccess Mobile App, the device will display in the list for all future connections.

Once connected, you will be able to control presets and zones for each configured space. The number of spaces configured for the Elaho control system is indicated by dots on the bottom of the *Preset Control* page. See *Preset Control on page 16*. Swipe the page to the left or right to access additional spaces.

Auto Discover

Tap the Auto Discover toggle switch to change its position. When the switch is positioned to the right as shown above, ElahoAccess will look for devices to connect to via Wi-Fi. When the Auto Discover toggle switch is positioned to the left, ElahoAccess will not automatically search for new devices to connect to. This is helpful for finding an Expansion Bridge without having to know and manually add its specific IP address.

Demo Mode

Demo Mode simulates an Access BT Interface or Expansion Bridge, allowing you to explore the ElahoAccess Mobile App features when no Access BT Interfaces or Expansion Bridges are available. To access Demo Mode, you must turn on the Demo Mode switch in the *Settings* menu. See *Settings on page 26*.

Tap the Main Menu icon <u>control</u> located in the upper right corner of the ElahoAccess Mobile App screen to display the Main Menu options. In Demo Mode, the same options appear as the standard Main Menu when connected to an Elaho control system.



Connection

Connection displays all interfaces that are available for connection. See *Connection on page 12*. An interface called "Demo Mode" appears on the screen under Bluetooth and under Wi-Fi.



Preset Control

Preset Control provides control of configured presets in each allowed space. See *Preset Control on page 16* and *Allowed Spaces on page 33*.



Zone Control

Zone Control provides manual control of individual zones in each allowed space. See *Zone Control on page 17* and *Allowed Spaces on page 33*.





Note: In order to see Color Control icons on the Zone Control page, you must configure the "Demo Mode" Expansion Bridge Space Configuration page with Color, Studio, or Color Temp zone types. See Space Configuration on page 33.

Special Control

Special Control provides advanced functionality such as station Lockout and Space Combine and Uncombine for each allowed space. See *Special Control on page 21* and *Allowed Spaces on page 33*.



Configuration

Configuration displays a list of example devices. See *Configuration on page 22*.



For more information on these example devices and their configuration options, see:

- Expansion Bridge on page 39
- BACnet Lighting Interface on page 35
- Demand Response Interface on page 105
- 600W Dimmer on page 82
- 600W Phase-Adaptive Dimmer Gen 2 on page 78
- DMX Scene Controller on page 93

- Inspire Stations on page 41
- Inspire Stations on page 41
- Keyswitch Station on page 111
- SmartSpace Controller on page 74
- Relay Controller on page 77
- SmartSpace Controller Gen 2 on page 71
- Relay Controller Gen 2 on page 76

About ElahoAccess displays the version number of the ElahoAccess Mobile App software.

Help opens an Internet browser window and displays this online help system.

Settings provides switches to enable or disable Demo Mode, Bluetooth Discover All Devices, and the Version Mismatch Warning, as well as access to Manage Files for sharing and deleting of saved configuration files from local storage on the mobile device. See *Settings on page 26*.

Color Control

ElahoAccess Mobile App allows Color, Color Temp, Tint, Hue, and Saturation control of patched LED zones on a DMX Scene Controller. You can control Color, Color Temp, Tint, and Intensity through the Zone Control page using sliders and a color wheel. Different combinations of Color Temp, Tint, Hue, Saturation, and Intensity can be controlled by setting up an Inspire 4 button fader station with its hardware Function switch set to Custom mode and fader push *Action* set to HSI Color Mode, Color Temp Mode, or Studio Mode. To work properly, settings in ElahoAccess Mobile App must be configured on multiple pages for multiple devices, as described below.

Color control functionality is available on Inspire 4 button fader stations without using the app. For more information, see the *Elaho Inspire Stations Programming Guide*.

Setup

- Verify that the fixtures to be controlled by the zone are in the correct mode, if applicable.
 See *Fixture Profile Details on page 95* for example fixtures and their profile types.
- 2. Use the *Main Menu* to navigate to the *Configuration* page. See *Main Menu on page 11* and *Configuration on page 22*.
- 3. Tap the DMX Scene Controller that you want to configure and swipe to the DMX Scene Controller's *Patch Configuration* page. See *Patch Configuration on page 95*.
 - Choose the correct profile from the Profile menu under the zone where you want to patch the fixtures and add the correct addresses.
- 4. Use the *Main Menu* to navigate to the *Configuration* page. See *Main Menu on page 11* and *Configuration on page 22*.
- 5. Tap the Access BT Interface or Expansion Bridge and swipe to the *Space Configuration* page. See *Space Configuration on page 33*.
 - Scroll down to the Zone Info section and select the correct *Type* for the zone.
 - See *Fixture Profile Details on page 95* for example fixtures and their compatible zone types.

Control

There are two ways to control a Color, Color Temp, or Studio Zone.

- 1. Use the *Zone Control* page to directly control the Zone's Intensity slider, Color wheel, Color Temp slider, and/or Tint slider, depending on the profile and zone type. See *Zone Control on page 17*.
 - Use the slider or tap on the number to the right of the slider and use the keyboard to enter a value for color temperature or tint. The range of color temperature is 0-100 in a Color zone or Color Temp zone. The range of color temperature is 2725-6450 (in Kelvin) in a Studio zone. The range of tint is 0-100.
 - **Zone Control** must be enabled under *General Configuration* for your Access BT Interface or Expansion Bridge. See *General Configuration on page 31*.
 - Color Temp Control must be enabled under *Space Configuration* for your Access BT Interface or Expansion Bridge if you choose the Color zone type and want to control color temperature. See *Space Configuration on page 33*.
- 2. Use a 4 Button with Fader Inspire Station.
 - Choose a Fader Push Action.
 - HSI Color Mode is a three-way push control that determines the Fader Rotate action, cycling through Intensity Raise/Lower, Saturation Raise/Lower, and Hue Raise/Lower.
 - Color Temp Mode is a two-way push control that toggles between two Fader Rotate actions: Intensity Raise/Lower and Color Temperature Raise/Lower.
 - **Studio Mode** is a three-way push control that determines the Fader Rotate action, cycling through Intensity Raise/Lower, Color Temperature Raise/Lower, and Tint Raise/Lower.
 - See Inspire Stations on page 41 for details on Inspire station actions.

Document Conventions

This document uses the following conventions to draw your attention to important information.

i

Note: Notes are helpful hints and information that is supplemental to the main text.



CAUTION: A Caution statement indicates situations where there may be undefined or unwanted consequences of an action, potential for data loss or an equipment problem.



WARNING: A Warning statement indicates situations where damage may occur, people may be harmed, or there are serious or dangerous consequences of an action



WARNING: RISK OF ELECTRIC SHOCK! This warning statement indicates situations where there is a risk of electric shock.

All Echoflex documents are available for free download from our website: echoflexsolutions.com.

Contacting Echoflex Solutions

If you are having difficulties, your most convenient resources are the references given in this document. To search more widely, try the Echoflex website at echoflexsolutions.com. If none of these resources are sufficient, contact Echoflex Technical Services.

When calling for help, please:

- Have a detailed description of the problem
- Be near the equipment for troubleshooting
- Have a notification number if you have called in previously

Echoflex Solutions

38924 Queensway Unit #1 Squamish, British Columbia Canada, V8B 0K8 888-324-6359 (toll-free) +1-778 733-0111 info@echoflexsolutions.com

Chapter 1 Navigating the App

Main Menu

Tap the Main Menu icon located in the upper right corner of the ElahoAccess Mobile App screen to display the Main Menu options. The options that display are dependent on whether you are connected to an Elaho control system or not.

Connected to an Elaho Control System

Once connected to an Elaho control system, tap the Main Menu icon in the upper right corner of the screen to access control and configuration options. See *Connecting to an Elaho Control System on page 1*.

• *Connection* displays all available Access BT Interfaces (Bluetooth) and Expansion Bridge (Wi-Fi) that are available for connection to the ElahoAccess Mobile App. See *Connection on the next page*.





Note: *Tapping on "Connection" disconnects your device from the Elaho control system. You will need to reconnect.*

- *Preset Control* provides control of configured presets in each allowed space. See *Preset Control on page 16* and *Allowed Spaces on page 33*.
- Zone Control provides manual control of individual zones in each allowed space. See Zone Control on page 17 and Allowed Spaces on page 33.



Note: Zone control is only available if the zone control switch is enabled in the connecting interface. See **General Configuration on page 31** for Access BT Interfaces and Expansion Bridges.

- *Special Control* provides advanced functionality such as station Lockout, Sequence control, and Space Combine and Uncombine for each allowed space. See *Special Control* on page 21 and Allowed Spaces on page 33.
- Configuration displays a list of all discovered configurable devices that are in allowed spaces. See Configuration on page 22 and Allowed Spaces on page 33.
- About ElahoAccess: displays the version number of the ElahoAccess Mobile App software.
- Help: opens an Internet browser window and displays this online help system.
- *Settings* provides switches to enable or disable Demo Mode, Bluetooth Discover All Devices, and the Version Mismatch Warning, as well as access to Manage Files for sharing and deleting of saved configuration files from local storage on the mobile device. See *Settings on page 26*.

Not Connected to an Elaho Control System

Tap on the Main Menu icon <u>in</u> in the upper right corner of your screen to access the Main Menu.

- Connection displays all available Access BT Interfaces (Bluetooth) and Elaho Expansion Bridge (Wi-Fi) that are available for connection to the ElahoAccess Mobile App. See Connection below.
- About ElahoAccess: displays the version number of the ElahoAccess Mobile App software
- Help: opens an Internet browser window and displays this online help system
- Settings provides controls for turning on Demo Mode, Bluetooth Discover All Devices, and the Version Mismatch Warning, as well as access to Manage Files for sharing and deleting of saved configuration files from local storage on the mobile device. See Settings on page 26 and Demo Mode on page 4.



Connection

The Connection page displays two connection types, either Bluetooth or Wi-Fi. Choose to connect to either a Bluetooth system or a Wi-Fi system by swiping right or left. All systems will be accessible on their respective screens, either Bluetooth or Wi-Fi.



The symbol 📑 at the upper left of the Bluetooth connection screen sorts the Bluetooth

connections by signal strength (strongest at the top).

Wink

Wink is a feature provided in the ElahoAccess Mobile App that enables physical identification of devices in a space. When the wink command is received, the device, depending on its features, either blinks local LEDs, blinks the controlled load(s), and when available, displays identifying text on the local LCD.

Wink a Connection Device

To enable the wink feature for an Access BT Interface or Expansion Bridge from the *Connection* page, drag the device name to the left, revealing the Wink button. See *Connection on the previous page* for more information about the Connection page.



- For an Access BT Interface, tapping [Wink] triggers the LEDs on the Access BT Interface to blink. LEDs are only visible with the station faceplate removed.
- For an Expansion Bridge, tapping [Wink] wakes the LCD on the front of the device and displays "Wink Command Received".

The device will return to normal operation after 16 seconds. The General Configuration and Space Configuration pages also have a Wink button at the bottom.

Wink a Configuration Device

To enable the wink feature for an Elaho device from the main *Configuration* page, drag the device name to the left, revealing the Wink button. See *Configuration on page 22* for more information about the Configuration page.



Winking a device causes the device to respond by blinking its local LEDs, and for certain devices its connected loads, 8 times over 16 seconds. Wink will auto-clear after 16 seconds and return the device to its normal operation. Using the device's local UI buttons or asserting control during the wink cycle disables wink, restores the previous look, then fades to the new control values.

The individual device configuration pages for most devices also have a Wink button in the lower right corner.

Device Response to Wink

Access BT Interface

Tapping [Wink] triggers the power and Bluetooth LEDs on the ElahoAccess Interface to blink. LEDs are only visible with the station faceplate removed.

Expansion Bridge

Tapping [Wink] triggers the power LED to blink, wakes the LCD on the front of the device, and displays "Wink Command Received".

Inspire Station

Tapping [Wink] triggers all button LEDs on the station to blink.

Responsive Controls

Tapping [Wink] triggers LEDs on the sensor to blink.

- For an Occupancy Sensor or Vacancy Sensor, the dome and the Aux and Mode button LEDs will blink.
- For a Photo Sensor, both the Aux and Mode button LEDs will blink.

Zone Controller

Tapping [Wink] triggers local LEDs on the controller to blink and triggers the controlled load(s) to blink.

Dimmer Controller

Tapping [Wink] triggers local LEDs on the controller to blink and triggers the controlled load(s) to blink.

Room Controller

Tapping [Wink] triggers the power LED on the unit to blink, visible only with the cover removed, and triggers the controlled load(s) to blink.

DMX Scene Controller

Tapping [Wink] triggers the power LED on the unit to blink.

Preset Station

Tapping [Wink] triggers all button LEDs on the station to blink.

Echoflex Interface

Tapping [Wink] blinks the green Learn/Teach LED and the amber Program Mode LED.

Preset Control

The Preset Control page displays all presets within all allowed spaces in the Elaho control system. Presets can be activated, deactivated, and recorded from this page.

Note: The number of presets available per space, as well as the preset and space name, is customized on the interface's Configuration page. See Access BT Interface on page 30 or Expansion Bridge on page 39 for more information.

Navigating the page

Individual presets are shown as labeled buttons. Each white dot on the bottom of the page indicates an additional space that is configured for the Elaho control system. The blue dot indicates the current selected space and its placement in relation to all configured spaces. The current selected space name is shown in the title bar of the displayed page.



- Swipe the screen to the left or right to navigate between spaces.
- Tap a Preset button to toggle the preset, playing the pre-programmed lighting look. An active preset displays with a light gray background, as Preset 2 is shown in the image above.

Record a Preset within a Space

- 1. Set the desired look on all Elaho products within the current space.
- 2. Tap the [rec.] button on the bottom of the Preset Control page to enable the record action.
- 3. Tap the desired preset button on the Preset Control page. The current lighting look will save to the selected presets on all Elaho devices within the space.



Note: Visibility of the record button can be defined on the interface's General Configuration page. See Access BT Interface on page 30 or Expansion Bridge on page 39 for more information.

Zone Control

From the Zone Control page you can access and modify all zones within all allowed spaces in the Elaho control system. With a DMX Scene Controller in an Elaho control system, zones can either be intensity or color zones. Zone control is only available if the zone control switch is enabled in the connecting interface. See *General Configuration on page 31* for Access BT Interfaces and Expansion Bridges.





Note: A single zone may consist of one or more fixtures or circuits.

Navigating the page

Individual zones are shown as sliders for control of the zone's intensity level. A zone that is configured as a Color Zone, Color Temp Zone, or Studio Zone displays a color wheel _____, color

temp icon **m**, or color temp/tint icon **m** next to the slider. Each white dot on the bottom of

the page indicates an additional space that is configured for the Elaho control system. The blue dot indicates the current selected space and its placement in relation to all configured spaces. The current selected space name is shown in the title bar of the displayed page. Swipe the screen to the left or right to navigate between spaces.

Space Level Control

If the Space Level Control switch is enabled in *General Configuration*, the top control on the Zone Control screen will be labeled with the name of the Space being controlled. See *General Configuration on page 31*. This top slider controls the level of all Zones in the Space. If you set all Zones in the Space using the Space Level Control slider and then change the level of individual Zones with their sliders, the Space Level Control slider will update to the highest level in the Space. The Space color picker, color temp slider, and tint slider control all Zones in the Space Level Control. In the example shown above captioned "Space Level Control Enabled", Space 1 has a color picker because Zone 2 is a Color Zone and Space 1 has color temperature and tint sliders because Zone 1 is a Studio Zone. Configuration on *page 33*.

Intensity Control

The black-and-white slider increases and decreases the selected zone's intensity. You can also tap on the number to the right of the slider and use the keyboard to enter a value between 0-100 for intensity.

Color Control

Color control is available for any zone that has been configured as a Color Zone or Color Temp Zone. See *Color Control on page 7* for more information about setting up fixture profiles and zones for color control, color temperature control, and tint control.

Tap the color wheel on the slider to display the color

picker. Use the available tools to set color as desired.

- By default, the color picker provides the ability to set color using red/green/blue (RGB) input, or you may toggle the switch to use hue/saturation (HS) instead. Color can be set in two ways:
 - Touch the color wheel to pick a color.
 - Use the available fields to set each individual red, green, and blue level (from 0-255) or set the hue level (0-360) and saturation level (0-100).



Color Temp Control

Color Temp control is available for any zone that has been configured as a Color Zone, Color Temp Zone, or Studio Zone. See *Color Control on page 7* for more information about setting up fixture profiles and zones for color control, color temperature control, and tint control.

• Tap the color temperature icon part to the slider to display the color temp slider and

set the color temperature as desired.

Color Temp Control (Color Temp Zone)	Color and Color Temp Controls (Color Zone, Color Temp Enabled)
iPod 💎 2:09 PM 🛞 🚥 +	iPod 🕈 2:09 PM 🖇 🚥 🕈
\lhd Space 1 \equiv	Space 1 =
Zone 1 💭	Zone 3
Zone 2 📀 20 %	Zone 4 ^ 26 %
Zone 3 ^ 21 % 21 %	RGB HS R 66 G 66 B 66
Zone 4	

- Use the slider or tap on the number to the right of the slider and use the keyboard to enter a value for color temperature. The range of color temperature is 0-100 in a Color zone or Color Temp zone. The range of color temperature is 2725-6450 (in Kelvin) in a Studio zone.
- The color temp slider is available for a Color Zone if the Color Temp Control switch is enabled for that zone on the interface's *Space Configuration* page. See *Space Configuration* on page 33.

Tint Control

Tint control is available for any zone that has been configured as a Studio Zone. See *Color Control on page 7* for more information about setting up fixture profiles and zones for color control, color temperature control, and tint control.

• Tap the color temperature and tint icon next to the slider to display the color temp

slider with the color temp icon and tint slider with the tint icon . Set the tint as

desired.

Color Temp and Tint Controls (Studio Zone)			
iPod 💎	2:08 PM	3 +	
\triangleleft	Space 1		
Zone 1		^	
0 -	•	1 9 %	
₽ —		4590 K	
۰ –		%	
Zone 2		0	
0 -	•	- 20 %	
Zone 3		₽	
0	•	- 21 %	
•		•	

• Use the slider or tap on the number to the right of the slider and use the keyboard to enter a value for tint. The range of tint is 0-100.

Special Control

The Special Control page displays advanced controls for a given space. These advanced controls display only when they are enabled for the connected interface, either Access BT Interface or Expansion Bridge. See the *General Configuration* page for the interface device (*General Configuration on page 31*).

Each allowed space in the connected Elaho control system is available for selection in the Special Control page. Each space is indicated as a dot on the bottom of the page. The blue dot signifies the placement of the current space among all spaces and the current selected space name displays at the top of the page. Swipe left or right to navigate between the available spaces.

- Lockout toggle the switch to Lock and Unlock stations within the current selected space.
- **Sequence** toggle the switch to Start or Stop the configured sequence in the current selected space. This feature is only supported in certain products.
- Timed Hold per Space status and settings display in systems that utilize an Elaho Astronomical TimeClock.
 - No Hold Active displays when Timed Hold is currently inactive for the selected space. Press [Start] to enable a Timed Hold. The Timed Hold is the length of time the current conditions will remain, until the schedule resumes normal operation.
 - **Timed Hold Active** displays when the Timed Hold is currently active for the selected space. Press [Cancel] to cancel the hold, or press [Restart] to restart the hold timer. Hold Time is the length of time that all Timed Hold conditions will remain, until the schedule resumes normal operation. Reference the *Elaho Astronomical TimeClock Configuration Manual* for additional information regarding hold time.
- Demand Response: A read-only display of Active or Inactive state.
- The Space Combine section of this page enables selection of spaces within the Elaho control system to combine with the current selected space.
 - The **Add Combined Space** drop-down menu located at the bottom of the page enables selection of spaces in the Elaho control system that you would like to combine with the current space.
 - To remove a combined space, tap the [X] next to the space number.
 - To uncombine all spaces from the current selected space, select the **[Uncombine All From This Space]** button located above the combined spaces list.





Configuration

The Configuration page displays a list of all discovered devices in the allowed spaces of the Elaho control system. All output products can be controlled by the app, but some devices are not configurable.



Note: Spaces that are set to Disallow for the selected interface will not display in the ElahoAccess Mobile App.



Configurable devices display a blue arrow on the right side of the device name. Devices in the list with a duplicate address will indicate with a red exclamation point on the right side of the device name.

Drag down and release on the Configuration screen to refresh the list of configurable devices.

From this page you can also *Wink* a configurable or non-configurable device (see *Wink on page 12*) and *Rename* a device (see *Rename on page 26*). Drag left to access a device's [Wink] and [Rename] buttons.



Configurable Devices

A blue arrow located on the right of a device name identifies a configurable device. Tap to select the device name to display its configurable properties for customization. Click on the following device names to learn more about their configuration parameters.

- Dual Tech Occupancy Sensors
 - Switch-mount
 - Ceiling-mount
 - Wall-mount
- Dual Tech Vacancy Sensors
 - Ceiling-mount
 - Wall-mount
- Access BT Interface
- Contact Interfaces
 - Contact Input Interface
 - Contact Output Interface
 - Demand Response Interface
- Expansion Bridge
- Inspire Stations
- Keyswitch Station
- Responsive Controls
 - Dual Tech Occupancy Sensors
 - Dual Tech Vacancy Sensors
 - PIR Occupancy Sensors
 - PIR Vacancy Sensors
 - Light Sensor

- Zone Controllers
 - 0-10V Controller Gen 2
 - 0-10V Controller
 - SmartSpace Controller Gen 2
 - SmartSpace Controller
 - Relay Controller Gen 2
 - Relay Controller
- Dimmer Controllers
 - 600W Phase-Adaptive Dimmer Gen 2
 - 600W Forward Phase Dimmer Gen 2
 - 600W Dimmer
- Room Controllers
 - Room Controller
 - Room Controller Gen 2
- DMX Scene Controller
- Preset Stations
- *BACnet Lighting Interface* (limited configuration)

Non-configurable Devices

Devices that do not have a blue arrow are controllable using the ElahoAccess Mobile App but do not have any configurable properties. These devices include E-ACP, Elaho Integration Interface, Elaho TimeClock, Echoflex Interface, Sensor CEM3, Sensor IQ, DIN Relay, and Relay Panels. For information to configure these devices, reference their applicable installation and configuration documentation available for download on the Echoflex website.

Sort by Port

When connected to an Expansion Bridge, the Connection page provides an additional filter based on the EchoConnect ports. By default, all devices discovered on all ports are displayed in the device list. To filter the list, select Port 1, Port 2, Port 3, or Port 4 from the available drop-down located on the top left.

Sort Devices List

By default, the devices list displays its discovered devices sorted *By Space* then by the device address (e.g. all devices in Space 1, lowest address to highest, then Space 2, etc.). Additional sort options include *By Address* and *By Type*. Change the sort by selecting the option from the available drop-down list.

Sorting by type sorts devices into device categories that can be expanded and collapsed.



Search Devices List

Search the devices list by specifying a keyword in the Search field. As you type, the list will filter to include only the items with names that match. Delete all search text to review the entire discovered devices list.

Rename

Devices that are discovered in ElahoAccess Mobile App display in the devices list with default names. Default names are assigned according to their device type. Some device names can be edited from their defaults using the [Rename] feature from the *Configuration* page. See *Configuration on page 22*.



Settings

The Settings page displays switches for several features and a button to Manage Files.

- *Demo Mode*: On enables Demo Mode simulation of an Access BT Interface or Expansion Bridge for exploring the ElahoAccess Mobile App features when a connection is not available. See *Demo Mode on page 4*.
- Bluetooth Discover All Mode: On enables Bluetooth Discover All. ElahoAccess Mobile App will find all Bluetooth devices within range. Off disables Bluetooth Discover All. ElahoAccess Mobile App will only find Access BT Interface stations within range.
- Version Mismatch Warning: On enables the warning that appears during *Copy To* or *Load* when the firmware on the sending (saving) device does not match the firmware on the receiving (loading) device. See *Configuration Sharing on page 28*.
- [Manage Files]: Tapping this button opens a list of saved configuration files. Buttons at the bottom of the list allow you to share or delete files.





- [Cancel]: Tap [Cancel] to return to the Settings menu.
- [Delete]: Tap the blue box to the left of the file you want to delete. An X appears in the box and the Share and Delete buttons become active (see screen shot above, right). Tap [Delete].
- [Share]: Tap the blue box to the left of the file you want to share. An X appears in the box and the Share and Delete buttons become active (see screen shot above, right). Tapping [Share] opens a list of applications for file sharing such as email, DropBox, iCloud Drive, Google Drive, etc. Available options vary for each mobile device. Consult your mobile device or file sharing application documentation for further help with file sharing.

Chapter 2 Configuring Devices

Access the *Configuration* page through the *Main Menu*. See *Configurable Devices on page 24* and *Non-configurable Devices on page 25* to see which devices can be configured through the ElahoAccess Mobile App.

Configuration Sharing

Buttons for the available sharing options can be found at the bottom of each device's *Configuration* screen. See *Configuration on page 22*.

Load, Save, and Share

Files accessed with Load, Save, and Share are stored locally on the mobile device.

Load

Tapping [Load] opens a list of saved ElahoAccess configuration files that are stored locally on the mobile device. Load is only available if there is a saved configuration file from the same device type.

- The device name will not be copied from the file to the device to avoid multiple devices with the same name.
- Available configuration files can be shared or deleted from the *Settings* menu. See *Settings on page 26*.
- Configuration files can be added to the local storage list by
 - saving a configuration using the ElahoAccess Mobile App Share button.
 - sharing an XML configuration file from email, DropBox, Google Drive, Apple iCloud Drive, or other file sharing application. Share the file and choose **Copy to ElahoAccess** (icon shown below). Consult your mobile device or file sharing application documentation for further help with file sharing.



ElahoAccess

Example workflow:

- User A shares an Inspire Station configuration file named "8buttonv1" by email from the ElahoAccess Mobile App on his mobile device.
- User B opens the email on his mobile device, opens the attached configuration file (8buttonv1.xml), and shares it. He chooses Import with ElahoAccess from the list of sharing options.
- User B opens the ElahoAccess Mobile App on his mobile device, navigates to an Inspire Station, taps [Load], and chooses 8button1.xml.
- User B's Inspire Station is now configured the same as User A's Inspire Station.
- A version mismatch warning appears if the firmware version on the sending device does not match the firmware version of the receiving device. You can disable the version mismatch warning in the *Settings* menu. See *Settings on page 26*.

Save

Tapping [Save] opens a dialog where you can enter a name for the current ElahoAccess configuration for an individual device. Tapping [Ok] saves the configuration file to local storage.

• Saved configurations can be shared or deleted from the *Settings* menu. See *Settings on page 26*.

Share

Tapping [Share] opens a dialog where you can enter a name for the current ElahoAccess configuration for an individual device. Tapping [Ok] opens a list of applications for file sharing such as email, DropBox, iCloud Drive, Google Drive, etc. Available options vary for each mobile device. Consult your mobile device or file sharing application documentation for further help with file sharing.

- Share also saves a copy of the device configuration to local storage.
- Saved configurations can be shared or deleted from the *Settings* menu. See *Settings on* page 26.

Сору То

Copy To copies the current ElahoAccess configuration to another device of the same type on the EchoConnect Bus. This option is only available if a device of the same type is detected. Tapping [Copy To] opens a dialog with a list of devices of the same type as the device you are currently configuring. You must select a device from the list before tapping [Ok].

• A version mismatch warning appears if the firmware version on the sending device does not match the firmware version of the receiving device. You can disable the version mismatch warning in the *Settings* menu. See *Settings on page 26*.

Wink

Wink is a feature provided in the ElahoAccess Mobile App that enables physical identification of devices in a space. See *Wink on page 12* for more information.

Access BT Interface

The ElahoAccess Interface (Access BT Interface) is the wall-mounted station that works in conjunction with the ElahoAccess Mobile App, using Bluetooth technology to configure and control Elaho presets, zones, spaces, and devices.





Note: When using Bluetooth, Echoflex recommends a wireless operating distance of no more than 30 ft (9.1 m) between the Access BT Interface station and the mobile device running the ElahoAccess Mobile App. Walls and other solid objects positioned between the transmitter and the receiver will impact the transmission of the wireless signal. Avoid obstructions when possible.

For more information on installing the Access BT Interface hardware, see the *ElahoAccess Installation Guide*.

Wink

Options are available to [*Wink*] an Access BT Interface that has been discovered by the ElahoAccess Mobile App, viewable on the Bluetooth *Connection* page. See *Wink on page 12* and *Connection on page 12*.

Use the Wink feature to determine which Access BT Interface to select when more than one displays in the connection list. See *Wink on page 12* for more information.

Configuration

To configure the ElahoAccess Interface you are connected to, select Configuration from the ElahoAccess menu, then select the Access BT Interface from the devices list. When viewing the device list in default sort order, the ElahoAccess Interface you are connected to will be the first device in the list.

See *General Configuration on page 31* and *Space Configuration on page 33* for information on the device's configuration settings.
General Configuration

The General Configuration page determines the user experience within the ElahoAccess Mobile App when connected to the selected interface, either Access BT Interface or Expansion Bridge.



Control Features

Control Features set the visibility of controls within the ElahoAccess Mobile App including Allow *Zone Control, Space Level Control*, Sequence Control, Lockout Control, TimeClock Hold Control, Space Combine Control, Preset Record Control, and Demand Response. See *Zone Control on page 17*

Security

Security has controls for Control Security and Configuration Security.



CAUTION: If you forget your passwords, you will not be able to change the control or configuration settings of your Access BT Interface or Expansion Bridge. Contact Echoflex Technical Support for help if you forget your passwords.

When a Security switch is set to On, a password entry field appears.



Control Security

When set to On, **Control Security** restricts access to an Access BT Interface or Expansion Bridge. When you attempt to connect to an interface, a password screen appears. Select [Save Password] to store the password in the ElahoAccess Mobile App.



Configuration Security

When set to On, **Configuration Security** restricts access to device configuration on an Access BT Interface or Expansion Bridge. When you choose **Configuration** from the **Main Menu**, a password screen appears.



Allowed Spaces

Allowed Spaces can be set to Allow or Disallow configuration of each individual Space from the selected interface. By default, all 16 Spaces are enabled (set to Allow).



Note: Spaces that are set to **Disallow** for the selected interface will not display in the ElahoAccess Mobile App.

The dots at the bottom of the screen indicate additional pages of configuration for the selected interface. Swipe left or right to access the *Space Configuration* page. See *Space Configuration below*.

Configuration Sharing

Four buttons are available at the bottom of the configuration screen: Load, Save, Share, and Wink. For more information, see *Configuration Sharing on page 28*.

Space Configuration

The Space Configuration page determines the user experience within the ElahoAccess Mobile App for the selected space when connected to the selected interface, either Access BT Interface or Expansion Bridge.

Pod ◆ 10:32 AM # ➡ ◆ ✓ Top Sys ■ ✓ Space Configuration ■	Pod ♥ 10:33 AM # ➡ ♥ ✓ Top Sys ➡ ✓ Space Configuration ➡
Select A Space Space 1 () Space 1 General Space Name Space 1 Number Of Presets 7 Number Of Zones 16	Zone Info Zone 1 Name Zone 1 Type Intensity Zone 2 Name Zone 2 Type Color
Preset Info Preset 1 Name Preset 1 Preset 2 Name Preset 2 Preset 3 Name Preset 3 Preset 4 Name Preset 4 Preset 5 Name Preset 5	Color Temp Control
	Load Save Share Wink

Settings include:

- [Select a Space] select a Space to configure from the available drop-down menu.
- **Space # General** edit the Space Name (limited to 27 alphanumeric characters), set the Number Of Presets, and set the Number Of Zones that are configurable for the selected Space.
- **Preset Info** edit the name of each configured Preset (limited to 27 alphanumeric characters) for the selected Space. Up to 16 Presets are allowed per Space.
- Zone Info
 - **Name** edit the name of each configured Zone (limited to 27 alphanumeric characters). Up to 16 Zones are allowed per Space.
 - Type select Intensity (intensity only), Color (intensity, color, and optional color temperature), Studio (intensity, color temperature, and tint), or Color Temp (intensity and color temperature). The Color zone type has a switch to show or hide Color Temp control on the Zone Control page. See Zone Control on page 17.

See *Color Control on page 7* for more information about setting up fixture profiles and zones for color control, color temperature control, and tint control.

The dots at the bottom of the screen indicate additional pages of configuration for the selected interface. Swipe left or right to access the *General Configuration* page. See *General Configuration* on page 31.

Configuration Sharing

Four buttons are available at the bottom of the configuration screen: Load, Save, Share, and Wink. For more information, see *Configuration Sharing on page 28*.

BACnet Lighting Interface



The BACnet Lighting Interface is a DIN rail mounted device that provides integration between the Elaho control system and a BACnet master controller. The BACnet Interface provides simple command structure support for intuitive integration of Elaho control systems over BACnet.

The BACnet Lighting Interface supports control and status over BACnet IP of the following Elaho control system features:

- Presets
- Zones
- Space Occupancy (status only)
- Space Lockout
- Space Timeclock Hold
- Space Demand Response

For the BACnet Protocol Implementation Conformance Statement (PICS), see the Elaho BACnet PICS Reference Guide at echoflexsolutions.com.

General Configuration





Note: The dots at the bottom of the screen indicate additional pages of configuration for the selected interface. Swipe left or right to access the BACnet Points page.

BACnet Info

Configure the BACnet Interface ID and BACnet UDP port.

BACnet Device Number

The BACnet Device Number uniquely identifies the BACnet Interface within the Building Management System. This number is configurable to any value between 0 and 65535. By default, this value is set to 109 on each BACnet Interface shipped from the factory.

BACnet UDP port

The BACnet UDP port is used by BACnet communications over IP to network messages. This number is configurable to any value between 1 and 65535. By default, this value is set to 47808 (0xBAC0) on each BACnet Interface shipped from the factory.

Expose to BACnet

Expose Spaces

All 16 Elaho Spaces can be controlled and monitored through BACnet client applications. Tap the box next to a space to expose it for BACnet control. A deselected space will not communicate any properties to BACnet.

Expose Zones

When enabled, zone intensity control and status are available to BACnet client applications. When disabled, no zone control or status is available for any space.

Expose Occupancy

When enabled, occupancy status for all exposed spaces is available to BACnet client applications. When disabled, no occupancy status is available for any space.

Expose Lockout

When enabled, lockout control and status for all exposed spaces is available to BACnet client applications. When disabled, no lockout control or status is available for any space.

Expose Timeclock Hold

When enabled, timeclock hold control and status for all exposed spaces is available to BACnet client applications. When disabled, no timeclock hold control or status is available for any space.

Expose Demand Response

When enabled, Demand Response control and status for all exposed spaces is available to BACnet client applications. When disabled, no Demand Response control or status is available for any space.

BACnet Point Reference

This page provides a reference summary of all BACnet points provided to BACnet clients, separated into categories (Analog Values, Binary Values, Binary Inputs, Multistate Values.) Each point is listed using its text name and instance number within the BACnet item array.



Note: When viewing each list, a point that is listed in white text is exposed for control and is available for BACnet client use. Any point that is gray is not exposed and therefore unavailable for BACnet control.



Analog Values

iPod 🕈	🕈 11:03 AM 🛛 🛊 🚃) +	
\triangleleft	BACnet Lighting Inter =	
	Analog Values	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 6 7 8 9 10 11 12 23 24 25 22 24 25	Analog Values Space 1: Zone 1 Space 1: Zone 2 Space 1: Zone 3 Space 1: Zone 4 Space 1: Zone 5 Space 1: Zone 6 Space 1: Zone 7 Space 1: Zone 8 Space 1: Zone 10 Space 1: Zone 11 Space 1: Zone 12 Space 1: Zone 13 Space 1: Zone 14 Space 1: Zone 15 Space 1: Zone 16 Space 2: Zone 1 Space 2: Zone 4 Space 2: Zone 5 Space 2: Zone 7 Space 2: Zone 8 Space 2: Zone 7 Space 2: Zone 8 Space 2: Zone 9	
	• •	
Load Bin	Save) (Share) (Copy To) (Wink) ary Inputs BACnet Lighting Inter	
Þ	Analog Values	
	Binary Values	
⊽	Binary Inputs	
1 2 3 4 5 6 7 8 9 10 11 2 3 4 5 6 7 8 9 10 11 2 3 4 5 6 7 8 9 10 11 2 3 4 5 6 7 8 9 10 11 2 3 4 5 6 7 8 9 10 11 2 3 4 5 6 7 8 9 10 11 2 3 4 5 6 7 8 9 10 11 12 10 10 11 10 11 10 10 10 10 10 10 10 10	Space 1 Occupancy Status Space 2 Occupancy Status Space 3 Occupancy Status Space 4 Occupancy Status Space 5 Occupancy Status Space 6 Occupancy Status Space 8 Occupancy Status Space 8 Occupancy Status Space 9 Occupancy Status Space 10 Occupancy Status Space 10 Occupancy Status Space 10 Occupancy Status Space 10 Occupancy Status Space 12 Occupancy Status Space 14 Occupancy Status Space 16 Occupancy Status Space 16 Occupancy Status	
	Multistate Values	
	• •	
Load	Save Share Copy To Wink	

Binary Values

S BACnet Point Reference
Analog Values
 Binary Values
 Space 2 Lockout Status Space 2 Lockout Status Space 4 Lockout Status Space 4 Lockout Status Space 4 Lockout Status Space 7 Lockout Status Space 7 Lockout Status Space 7 Lockout Status Space 9 Lockout Status Space 9 Lockout Status Space 10 Lockout Status Space 11 Lockout Status Space 12 Lockout Status Space 14 Lockout Status Space 15 Lockout Status Space 15 Lockout Status Space 16 Lockout Status Space 16 Lockout Status Space 17 Timeclock Hold Status Space 3 Timeclock Hold Status Space 4 Timeclock Hold Status Space 5 Timeclock Hold Status Space 6 Timeclock Hold Status
23 Space 7 Timeclock Hold Status
Load Save Share Copy To Wink
Multistate Values
BACnet Lighting Inter
BACnet Lighting Inter BACnet Point Reference
BACnet Lighting Inter BACnet Point Reference Analog Values Binary Values
BACnet Lighting Inter BACnet Lighting Inter BACnet Point Reference Analog Values Binary Values Binary Inputs
BACnet Lighting Inter BACnet Lighting Inter BACnet Point Reference Analog Values Binary Values Binary Inputs Multistate Values
 BaCnet Lighting Inter BaCnet Lighting Inter Bacnet Point Reference Binary Values Binary Inputs Multistate Values Space 1 Preset Status Space 2 Preset Status Space 3 Preset Status Space 6 Preset Status Space 7 Preset Status Space 7 Preset Status Space 7 Preset Status Space 7 Preset Status Space 10 Preset Status Space 11 Preset Status Space 12 Preset Status Space 13 Preset Status Space 14 Preset Status Space 15 Preset Status Space 16 Preset Status
 BaCnet Lighting Inter BaCnet Lighting Inter Bacnet Point Reference Binary Values Binary Values Binary Inputs Multistate Values Space 1 Preset Status Space 2 Preset Status Space 3 Preset Status Space 6 Preset Status Space 7 Preset Status Space 10 Preset Status Space 7 Preset Status Space 10 Preset Status Space 10 Preset Status Space 12 Preset Status Space 13 Preset Status Space 14 Preset Status Space 16 Preset Status

Configuration Sharing

Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.

Expansion Bridge

The Elaho Expansion Bridge provides control of the Elaho control system from the Unison Paradigm architectural control system. This bridge between control systems enables Paradigm control of Elaho presets and zones.



The Expansion Bridge also allows connection of up to four individual Elaho segments (control systems) so more control stations and Responsive Controls can be used within an Elaho control system. Each segment supports 16 power controllers and up to 16 Elaho devices (stations or responsive controls). Expansion Bridge integration enables Elaho segments to share spaces, presets, and zones.



Note: The Expansion Bridge does not add additional spaces, presets, or zones to the Elaho system totals.

Expansion Bridge configuration can be accomplished through the use of the ElahoAccess Mobile App or through Unison Paradigm LightDesigner software.

For more information on installing the Expansion Bridge hardware, see the *ElahoExpansion Bridge Installation Guide*. For information to configure the Expansion Bridge in a Paradigm system, reference the LightDesigner configuration software online help system.

Wink, Edit, and Delete

Options are available to [Wink], [Edit] and [Delete] an Expansion Bridge that has been discovered or manually connected from the Wi-Fi Connection page. Simply drag the name to the left, revealing the [Wink], [Edit], and [Delete] buttons.



Wink

Use the *Wink* feature to determine which Expansion Bridge to select when more than one displays in the list. See *Wink on page 12* for more information.

Edit

Selecting [Edit] displays an *Edit IP Address* dialog. Enter the new IP Address, then tap [Ok] to close the dialog. The new IP Address will display in the Wi-Fi Connection page with an unknown device name. Selecting the new device will prompt the ElahoAccess Mobile App to connect to the Elaho control system.

Delete

Selecting [Delete] removes the selected Expansion Bridge from the Wi-Fi Connection page. There is no undo. If you need to add an Expansion Bridge, tap [Add IP Address] and identify the unit by its IP Address.

Configuration

To configure the Expansion Bridge you are connected to, select Configuration from the ElahoAccess menu, then select the Expansion Bridge from the devices list (it will be the first device in the list when viewed in the default sort.)

See *General Configuration on page 31* and *Space Configuration on page 33* for information on the device's configuration settings.

Inspire Stations

Elaho Inspire Stations provide preset, zone, and space combine controls for use with Elaho and Sensor3 control systems. Stations are available in 1, 2, 4, 6, and 8 button assemblies, as well as a 4 button - 1 fader station. Station buttons are back-lit by both blue and amber LEDs and the 4 button station fader knob is back-lit with a blue LED.



See the *Elaho Inspire Station Installation Guide* and the *Elaho Inspire Station Programming Guide* for more information.

Configuration

When you configure an Inspire button station with the ElahoAccess Mobile App, a representative image of the selected station will display including labels for the currently configured button and fader assignments.

Tap on a button or fader control to configure its actions. The selected control's Configuration page displays. Configuration settings depend on the selected object type, either button or fader control.



Note: Changes made in the ElahoAccess Mobile App impact the behavior of the Inspire station when the station Function Selection Switch is set to Custom mode. A station set to either Preset or Zone mode will remain unaffected by configuration and control settings from the ElahoAccess Mobile App.



Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.



Button Configuration

Use the available drop-down menus and keypad to specify the desired configuration information. Additional configuration options will display depending on the selected *Action* (e.g. if the Push *Action* is set to Preset Toggle, Preset Number and Timing(s) will display for additional specification). The *Multi Space Enable* switch will display if the **Push** *Action* is set to Preset Activate, Preset Toggle, or Space Off, allowing you to choose multiple spaces to which that action will be applied.

T

Note: If Multi Space is enabled, the Push and Hold Action will be disabled and the Double Tap Action will be automatically configured.

Button Control Configuration (Multi Space Disabled)	Button Control Configuration (Multi Space Disabled)	
Inspire 4 Button 1 Fa	Inspire 4 Button 1 Fa	
Push	Timing (s) Default	
Action Preset Activat	Push and Hold	
Preset Number 2 Timion (s) Default	Action Space Raise	
	Double Tap	
Push and Hold	Action Preset Activat	
Action Space Raise	Preset Number 2	
Double Tap	Timing (s) 0.5	
Action Preset Activat	Multi Space Enable	
Preset Number 2	multiple spaces	
Timing (s) 0.5	Indicator Behavior	
Multi Space Enable	On Color None 💌	
multiple spaces	Off Color Amber 💿	
Button Control Configuration (Multi Space Enabled)	Button Control Configuration (Multi Space Enabled)	
Button Control Configuration (Multi Space Enabled) Pod Testing 2:40 PM Inspire 4 Button 1 Fa Button 2 Configuration	Button Control Configuration (Multi Space Enabled) Pod 246 PM 246 PM Sutton 1 Fa Button 2 Configuration	
Button Control Configuration (Multi Space Enabled) Prod Participation 2:46 PM Inspire 4 Button 1 Fa Button 2 Configuration Push	Button Control Configuration (Multi Space Enabled) Pod 246 PM Inspire 4 Button 1 Fa Button 2 Configuration Action Preset Activat	
Button Control Configuration (Multi Space Enabled)	Button Control Configuration (Multi Space Enabled) Pod 246 PM Inspire 4 Button 1 Fa Button 2 Configuration Action Preset Activative Preset Number 2	
Button Control Configuration (Multi Space Enabled) Pod Carlos 246 PM Inspire 4 Button 1 Fa Button 2 Configuration Push Action Preset Activat Preset Number 2	Button Control Configuration (Multi Space Enabled) Pod 246 PM Inspire 4 Button 1 Fa Button 2 Configuration Action Preset Activativ Preset Number 2 Timing (s) 0.5	
Button Control Configuration (Multi Space Enabled) Pod Carlos 246 PM Inspire 4 Button 1 Fa Button 2 Configuration Push Action Preset Number Timing (s) Default	Button Control Configuration (Multi Space Enabled)	
Button Control Configuration (Multi Space Enabled)	Button Control Configuration (Multi Space Enabled)	
Button Control Configuration (Multi Space Enabled)	Button Control Configuration (Multi Space Enabled) Pod 246 PM Inspire 4 Button 1 Fa Button 2 Configuration Action Preset Number 2 Timing (s) 0.5 Multi Space Enable Select space(s) to play preset Select space(s) to play preset Select space 3 Space 5 Space 6	
Button Control Configuration (Multi Space Enabled) Pod Carlos 246 PM Inspire 4 Button 1 Fa Button 2 Configuration Push Action Preset Activat Preset Number 2 Timing (s) Push and Hold Action No Function Double Tap	Button Control Configuration (Multi Space Enabled)	
Button Control Configuration (Multi Space Enabled) Post 2:46 PM 2:46	Button Control Configuration (Multi Space Enabled) Pod 246 PM Inspire 4 Button 1 Fa Button 2 Configuration Action Preset Activativ Preset Number 2 Timing (s) 0.5 Multi Space Enable Select space(s) to play preset Space 1 Space 2 Space 3 Space 4 Space 5 Space 6 Space 7 Space 8 Space 1 Space 12 Space 12 Space 14	
Button Control Configuration (Multi Space Enabled)	Button Control Configuration (Multi Space Enabled)	
Button Control Configuration (Multi Space Enabled) Post 246 PM 246 PM 2 Inspire 4 Button 1 Fa Button 2 Configuration Push Action Preset Activat. Preset Number 2 Timing (s) Default Push and Hold Action No Function Double Tap Action Preset Activat. Preset Number 2 Timing (s) 0.5	Button Control Configuration (Multi Space Enabled)	
Button Control Configuration (Multi Space Enabled)	Button Control Configuration (Multi Space Enabled)	

Push

Use the drop-down menu to select the Push Action of a button or fader control.

• Available actions include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Lower, Zone Raise, Zone Set to Level, Space Off, Space Toggle, Space Lower, Space Raise, Space Set to Level, Zone Select, Selection Lower, Selection Raise, Selection to Level, Selection Toggle, Space Combine Toggle, Space Combine, Space Uncombine, Sequence Toggle, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable

Push and Hold

Use the drop-down menu to select the Push and Hold Action of a button.

• Available actions include No Function, Zone Lower, Zone Raise, Space Lower, Space Raise, Selection Lower, Selection Raise

Double Tap

Use the drop-down menu to select the Double Tap Action of a button or fader control.

• Available actions include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Set to Level, Space Off, Space Toggle, Space Set to Level, Selection to Level, Selection Toggle, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable

Indicator Behavior

Use the drop-down menu to set the LED color of the button control when the action is "On" and when it is "Off".

Fader Configuration

Use the drop-down menu to select the *Action* of the fader control (4 button and fader station only) when the fader is pressed, double-tapped, or rotated to the left or right.

Push

Available actions for Fader Push include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Set to Level, Space Off, Space Toggle, Space Set to Level, Selection to Level, Selection Toggle, HSI Color Mode, Color Temp Mode, Studio Mode, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp

- HSI Color Mode is a three-way push control that determines the Fader Rotate action, cycling through Intensity Raise/Lower, Saturation Raise/Lower, and Hue Raise/Lower.
- Color Temp Mode is a two-way push control that toggles between two Fader Rotate actions: Intensity Raise/Lower and Color Temperature Raise/Lower.
- Studio Mode is a three-way push control that determines the Fader Rotate action, cycling through Intensity Raise/Lower, Color Temperature Raise/Lower, and Tint Raise/Lower.

Double Tap

Available actions for Fader Double Tap include *No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Set to Level, Space Off, Space Toggle, Space Set to Level, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp*



Fader

Available actions for Fader Rotate include No Function, Zone Raise / Lower, Space Raise / Lower, Selection Raise / Lower, Color Zone Hue R/L, Color Zone Sat. R/L, Zone Color Temp R/L, Zone Tint R/L, Selection Hue R/L, Selection Sat. R/L, Selection Tint R/L, Selection Color Temp R/L

See *Color Control on page 7* for more information about setting up fixture profiles and zones for color control, color temperature control, and tint control.

Configuration Sharing

Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.

Responsive Controls

Elaho Responsive Controls include Elaho Dual Tech Occupancy Sensor, Elaho Dual Tech Vacancy Sensor, Elaho PIR Occupancy Sensor, Elaho PIR Vacancy Sensor, and the Elaho Light Sensor. Ceiling-mount sensors are available in white or black finish. Wall-mount sensors are available in white, black, or cream finish. Switch-mount sensors are available in white, black, cream, or gray finish.



- Dual Tech Occupancy Sensors on the facing page
- Dual Tech Vacancy Sensors on page 54
- PIR Occupancy Sensors on page 57
- PIR Vacancy Sensors on page 59
- Light Sensor on page 61



Note: To configure a Dual Tech Occupancy Sensor, Dual Tech Vacancy Sensor, PIR Occupancy Sensor, PIR Vacancy Sensor, or Light Sensor using the ElahoAccess Mobile App, the sensor must be in Custom mode. To enable Custom mode, locate the DIP switch on the circuit board of a ceiling-mount or wall-mount station or the Function switch under the faceplate of a switch-mount station.

Dual Tech Occupancy Sensors

Elaho Dual Tech Occupancy Sensors use passive infrared (PIR) and acoustic detection to provide reliable occupancy and vacancy sensing for lighting control. These sensors provide both automatic on and automatic off functionality working in conjunction with commands from local stations. Dual Tech Occupancy Sensors are available in the following models:





Туре	Field of Detection	Coverage	
Ceiling-mount,	260 dograa	452 ft ² at 8 ft (42 m ² at 2.4 m)	
small room lens	360 degree	804 ft ² at 10 ft (74.3 m ² at 3 m)	
Ceiling-mount large		1,809 ft ² at 8 ft (168 m ² at 2.4 m)	
room lens	360 degree	3,019 ft ² at 10 ft (280 m ² at 3 m)	
Ceiling-mount, high	260 dograd	314 ft ² at 10 ft (29 m ² at 3 m)	
ceiling lens	360 degree	7,854 ft ² at 40 ft (730 m ² at 12 m)	
Wall-mount, wide angle lens	140 degree	60 ft (18.3 m) mounting height at 7-10 ft (2.1-3 m)	
Wall-mount, narrow angle lens	40 degree	16 ft (4.9 m) mounting height at 75 ft (22.9 m)	
Switch-mount, 1 button	180 degree	up to 45 ft (13.7 m)	
Switch-mount, 2 button	180 degree	up to 45 ft (13.7 m)	

Reference the *Elaho Dual Tech Ceiling-mount Occupancy Sensor Installation Guide*, *Elaho Dual Tech Wall-mount Occupancy Sensor Installation Guide*, or *Elaho Dual Tech Switch-mount Occupancy Sensor Installation Guide* for information on installing these sensors.

Configuring the Occupancy Sensor

When you choose to configure a Dual Tech Switch-mount Occupancy Sensor with the ElahoAccess Mobile App, a representative image of the selected sensor will display including labels for the currently configured sensor and button assignments (below left). Tapping the sensor (top) will bring you to the sensor configuration screen shown below right. To configure buttons on the switch-mount occupancy sensor, see *Configuring Buttons (Switch-mount Occupancy Sensor Only) on page 51*. Configuring a Dual Tech Ceiling-mount or Wall-mount Occupancy Sensor will take you immediately to the sensor configuration screen shown below right.

Device Configuration Screen (switch-mount only)	Sensor Configuration Screen (Dual Tech Mode Enabled)	Sensor Configuration Screen (Dual Tech Model Enabled)	
Pod 11:56 AM 8 - 1 DT 2 Button Sensor =	Pod * 4:54 PM * .	Pod * 4:54 PM * +	
Preset 1	Vacancy Timeout 15 Minutes Current Status Vacant Dual Tech Mode When Off, sensor operates in PIR Only mode. Auto Sound Sensitivity When Off, sensor uses Low sensitivity. Grace Period Audio Detect Enable Detection LEDs	Auto Sound Sensitivity When Off, sensor uses Low Grace Period Audio Detect Enable Detection LEDs Walktest Activated Vacancy Sensor Event Action Timing (s) Default	
Zone 2 Set	Vacancy Sensor Event Action Space Off Timing (s) Default	Occupancy Sensor Event Action Preset Activation Preset Number 1 Timing (s) Default	
(Load) (Save) (Share) (Copy To) (Wink)	Action Preset Activat	Multi Space Enable Enable to control presets in multiple spaces	

Use the available drop-down menus and keypad to specify the desired configuration information. Additional menu options will display based on the *Action* selected (e.g., if an *Action* is set to Preset Activate, Preset Number and Timing (in seconds) will display for specification). The *Multi Space Enable* switch will display if the Vacancy Sensor Event *Action* is set to Preset Activate or Space Off and Occupancy Sensor Event *Action* is set to Preset Activate, allowing you to choose multiple spaces to which these actions will be applied.

Note: To configure a Dual Tech Occupancy sensor with the ElahoAccess Mobile App, the sensor must be in Custom mode. To enable Custom mode, locate the DIP switch on the circuit board of a ceiling-mount or wall-mount station or the Function switch under the faceplate of a switch-mount station.



Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Vacancy Timeout

Use the drop down menu to set the length of time the sensor waits before triggering the next action. Options include 5 minutes, 15 minutes, 30 minutes, and Automatic. Vacancy Timeout is the amount of time the sensor waits to take action after no movement is detected. By default, vacancy timeout is set to 15 minutes.

When the sensor detects vacancy, the vacancy timeout period begins. If the sensor does not detect occupancy again during the vacancy timeout period, the vacancy action is triggered and a 30-second grace period begins.

Grace Period

The sensor features a 30-second grace period after a vacancy timeout occurs. During this grace period, if the sensor detects occupancy, it will turn on or restore the previous lighting condition.

Automatic

The **Automatic** vacancy timeout setting varies the vacancy timeout between 5 and 30 minutes depending on how often it identifies an occupancy trigger after a vacancy timeout occurs (during the grace period).

- Current Status (read-only) shows current status (either Vacant or Occupied) of the sensor.
- **Dual Tech Mode** use the toggle switch to enable or disable Dual Tech Mode. When Dual Tech Mode is disabled, the sensor operates in PIR Only Mode.
 - **Auto Sound Sensitivity** use the toggle switch to enable or disable automatic sound sensitivity. When this setting is enabled, the sensor will automatically adjust sound sensitivity. When this setting is disabled, the sensor will use Low sensitivity.
 - Grace Period Audio Detect use the toggle switch to enable or disable sound detection during the grace period. See *Vacancy Timeout above*.
- Enable Detection LEDs use the toggle switch to enable or disable the red detection LEDs. If enabled and occupancy is detected, the detection LEDs illuminate with each detected occupancy motion.
- Walktest Activated use the toggle switch to enable or disable the sensor's walktest feature. When walktest is enabled, physically walking through the space confirms the PIR functional sensor range, illuminating the red PIR LED with each detected occupancy motion. If audio detection is enabled, the green LED will illuminate when audio is detected.
- Vacancy Sensor Event use the drop-down menu to set the event *Action* that will take place when vacancy is detected.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.
- Occupancy Sensor Event use the drop-down menu to set the event *Action* that will take place when vacancy is detected.
 - Available actions include No Function, Preset Activate, Zone Set to Level, and Space Set to Level.

Configuring Buttons (Switch-mount Occupancy Sensor Only)

When you configure an Elaho Dual Tech Switch-mount Occupancy Sensor with the ElahoAccess Mobile App, a representative image of the selected station will display including labels for the currently configured button assignments and occupancy sensor assignment.



Tap on a button to configure its actions. To configure the occupancy sensor, see *Configuring the Occupancy Sensor on page 49*. The selected control's Configuration page displays. Additional menu options will display based on the *Action* selected (e.g., if the Push *Action* is set to Preset Activate, Preset Number and Timing (in seconds) displays for specification).



Note: To configure a Dual Tech Occupancy sensor with the ElahoAccess Mobile App, the sensor must be in Custom mode. To enable Custom mode, locate the DIP switch on the circuit board of a ceiling-mount or wall-mount station or the Function switch under the faceplate of a switch-mount station.



Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Button Configuration Screen (Multi Space Disabled)	Button Configuration Screen (Multi Space Disabled)	
DT 2 Button Sensor Euton 1 Configuration	DT 2 Button Sensor Euton 1 Configuration	
Push	Action Space Off Timing (s) Default	
Action Space Off	Push and Hold	
Push and Hold	Action Space Lower	
Action Space Lower	Double Tap	
Double Tap	Action Space Off Timing (s) 0.5	
Action Space Off Timing (s) 0.5	Multi Space Enable Enable to control presets in	
Multi Space Enable Enable to control presets in multiple spaces	Indicator Behavior	
Indicator Behavior	On Color Blue	
On Color Blue 💿	Off Color None 💿	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled)	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled)	
Button Configuration Screen (Multi Space Enabled) Pod DT 2 Button Sensor Button 1 Configuration Push	Button Configuration Screen (Multi Space Enabled)	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled) Pod © 2:35 PM DT 2 Button Sensor Button 1 Configuration Double Tap Action Space Off © Timing (s) 0.5	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled)	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled)	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled)	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled)	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled)	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled)	
Button Configuration Screen (Multi Space Enabled)	Button Configuration Screen (Multi Space Enabled)	

Use the available drop-down menus and keypad to specify the desired configuration information. Additional configuration options will display depending on the selected action. For example, if the Push *Action* is set to Preset Toggle, Preset Number and Timing(s) will display for additional specification. The *Multi Space Enable* switch will display if the **Push** *Action* is set to Preset Activate, Preset Toggle, or Space Off, allowing you to choose multiple spaces to which that action will be applied.



Note: If Multi Space is enabled, the Push and Hold Action will be disabled and the Double Tap Action will be automatically configured.

- Push use the drop-down menu to select the Push Action of a button or fader control.
 - Available actions include *No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Lower, Zone Raise, Zone Set to Level, Space Off, Space Toggle, Space Lower, Space Raise, Space Set to Level, Space Combine Toggle, Space Combine, Space Co*

- - Uncombine, Sequence Toggle, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable
- Push and Hold use the drop-down menu to select the Push and Hold Action of a button.
 Available actions include No Function, Zone Lower, Zone Raise, Space Lower, Space Raise
- **Double Tap** use the drop-down menu to select the Double Tap *Action* of a button or fader control.
 - Available actions include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Set to Level, Space Off, Space Toggle, Space Set to Level, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable
- Indicator Behavior use the drop-down menu to set the LED color of the button control when the action is "On" and when it is "Off". Choose between blue, amber, and off.

Configuration Sharing

Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.

Dual Tech Vacancy Sensors

Elaho Dual Tech Vacancy Sensors use passive infrared (PIR) and acoustic detection to provide reliable vacancy sensing for lighting control. The sensor relies on local station control for manual on and provides auto off functionality upon detection of vacancy. Dual Tech Vacancy Sensors are available in the following models:



Туре	Field of Detection	Coverage
Ceiling-mount, small	260 dograd	452 ft ² at 8 ft (42 m ² at 2.4 m)
room lens	360 degree	804 ft ² at 10 ft (74.3 m ² at 3 m)
Ceiling-mount, large	360 degree	1,809 ft ² at 8 ft (168 m ² at 2.4 m)
room lens		3,019 ft ² at 10 ft (280 m ² at 3 m)
Wall-mount, wide angle lens	140 degree	60 ft (18.3 m) mounting height at 7-10 ft (2.1-3 m)
Wall-mount, narrow angle lens	40 degree	16 ft (4.9 m) mounting height at 75 ft (22.9 m)

Reference the *Elaho Dual Tech Ceiling-mount Vacancy Sensor Installation Guide* or *Elaho Dual Tech Wall-mount Vacancy Sensor Installation Guide* for information on installing these sensors.

Configuring the Vacancy Sensor



Use the available drop-down menus and keypad to specify the desired configuration information. Additional menu options will display based on the *Action* selected (e.g., if the Vacancy Sensor Event *Action* is set to Preset Activate, Preset Number and Timing (in seconds) will display for specification). The *Multi Space Enable* switch will display if the Vacancy Sensor Event *Action* is set to Preset Activate or Space Off, allowing you to choose multiple spaces to which that action will be applied.



Note: To configure an Elaho Dual Tech Vacancy sensor with the ElahoAccess Mobile App, the sensor must be in Custom mode. To enable Custom mode, locate the DIP switch on the circuit board.

Vacancy Timeout

Use the drop down menu to set the length of time the sensor waits before triggering the next action. Options include 5 minutes, 15 minutes, 30 minutes, and Automatic. Vacancy Timeout is the amount of time the sensor waits to take action after no movement is detected. By default, vacancy timeout is set to 15 minutes.

When the sensor detects vacancy, the vacancy timeout period begins. If the sensor does not detect occupancy again during the vacancy timeout period, the vacancy action is triggered and a 30-second grace period begins.

Grace Period

The sensor features a 30-second grace period after a vacancy timeout occurs. During this grace period, if the sensor detects occupancy, it will turn on or restore the previous lighting condition.

Automatic

The **Automatic** vacancy timeout setting varies the vacancy timeout between 5 and 30 minutes depending on how often it identifies an occupancy trigger after a vacancy timeout occurs (during the grace period).

• Current Status (read only) - shows current status (either Vacant or Occupied) of the sensor.

- **Dual Tech Mode** use the toggle switch to enable or disable Dual Tech Mode. When Dual Tech Mode is disabled, the sensor operates in PIR Only Mode.
 - Auto Sound Sensitivity use the toggle switch to enable or disable automatic sound sensitivity. When this setting is enabled, the sensor will automatically adjust sound sensitivity. When this setting is disabled, the sensor will use Low sensitivity.
 Grace Period Audio Detect use the toggle switch to enable or disable sound detection during the grace period. See Vacancy Timeout on the previous page.
- Enable Detection LEDs use the toggle switch to enable or disable the red detection LEDs. If enabled and occupancy is detected, the detection LEDs illuminate with each detected occupancy motion.
- Walktest Activated use the toggle switch to enable or disable the sensor's walktest feature. When walktest is enabled, physically walking through the space confirms the functional sensor range, illuminating the red PIR LED with each detected occupancy motion. If audio detection is enabled, the green LED will illuminate when audio is detected.
- Vacancy Sensor Event use the drop-down menu to set the event *Action* that will take place when vacancy is detected.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.

Configuration Sharing

Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.

PIR Occupancy Sensors

The Elaho PIR Occupancy Sensor is a ceiling-mounted sensor that utilizes passive infrared (PIR) technology, providing reliable occupancy and vacancy detection for lighting control. These sensors provide both automatic on and automatic off functionality working in conjunction with commands from local stations. The PIR Occupancy Sensor provides 360 degree coverage of the installed location and is available in the following models:



Elaho PIR Occupancy Sensor		Coverage	
	Small room lens	450 ft ² at 8 ft (42 m ² at 2.4 m)	
E-OCC-SK		800 ft ² at 12 ft (74.3 m ² at 3 m)	
F. 0.00	Standard room lens	1,800 ft ² at 8 ft (167 m ² at 2.4 m)	
E-OCC		3,000 ft ² at 10 ft (279 m ² at 3 m)	
	High ceiling lens	350 ft ² at 10 ft (32.5 m ² at 3 m)	
E-OCC-AC		7,000 ft ² at 40 ft (650 m ² at 12 m)	

Reference the *Elaho Occupancy Sensor Installation Guide* for information on installing this sensor.

Configuring the Occupancy Sensor

Use the drop-down menus and keypad to set the configurable features. Additional menu options will display based on the *Action* selected (e.g., if the Vacancy Sensor Event *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification). The *Multi Space Enable* switch will display if the Vacancy Sensor Event *Action* is set to Preset Activate or Space Off and Occupancy Sensor Event *Action* is set to Preset Activate, allowing you to choose multiple spaces to which these actions will be applied.



Note: Changes made to the PIR Occupancy Sensor configuration settings using the ElahoAccess Mobile App impact the behavior of the sensor when Custom Config mode has been enabled (set to On). The Custom Config mode DIP switch is located on the circuit board (rear side) of the sensor. A sensor placed in Basic Config mode (Custom Config DIP switch set to Off) is unaffected by ElahoAccess Mobile App custom configuration settings.



- Vacancy Timeout use the drop-down menu to set the length of time the sensor waits before triggering the next action. Options include 5 minutes, 15 minutes, 30 minutes, and Automatic.
- Current Status (read-only) displays the current status (either Vacant or Occupied) of the Space controlled by the sensor.
- Enable Detection LEDs use the toggle switch to enable or disable the red detection LEDs. If enabled and occupancy is detected, the detection LEDs illuminate with each detected occupancy motion.
- Walktest Activated use the toggle switch to enable or disable the sensor's walktest feature. When walktest is enabled, physically walking through the space confirms the functional sensor range, illuminating the PIR LED with each detected occupancy motion.
- Vacancy Sensor Event use the drop-down menu to set the event *Action* that will take place when vacancy is detected. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.
- Occupancy Sensor Event use the drop-down menu to set the event *Action* that will take place when occupancy is detected. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).
 - Available actions include No Function, Preset Activate, Zone Set to Level, and Space Set to Level.

Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Configuration Sharing

Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.

PIR Vacancy Sensors

The Elaho PIR Vacancy Sensor is a ceiling-mounted sensor that utilizes passive infrared (PIR) technology, providing reliable vacancy detection for lighting control. The sensor relies on local station control for manual on and provides auto off functionality upon detection of vacancy. The PIR Vacancy Sensor provides 360 degree coverage of the installed location and is available in three models:



Elaho PIR Vacancy Sensor		Coverage	
E-VAC-SR	Small room lens	450 ft ² at 8 ft (42 m ² at 2.4 m) 800 ft ² at 10 ft (74.3 m ² at 3 m)	
E-VAC	Standard room lens	1,800 ft ² at 8 ft (167 m ² at 2.4 m) 3,000 ft ² at 10 ft (279 m ² at 3 m)	
E-VAC-HC	High ceiling lens	300 ft ² at 10 ft (28 ² at 3 m) 7,000 ft ² at 40 ft (650 m ² at 12 m)	

Reference the Elaho Vacancy Sensor Installation Guide for information on installing this sensor.

Configuring the Vacancy Sensor

Use the drop-down menus and keypad to set the configurable features. Additional menu options will display based on the *Action* selected (e.g., if the Vacancy Sensor Event *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification). The *Multi Space Enable* switch will display if the Vacancy Sensor Event *Action* is set to Preset Activate or Space Off, allowing you to choose multiple spaces to which that action will be applied.



Note: Changes made to the PIR Vacancy Sensor configuration settings using the ElahoAccess Mobile App impact the behavior of the sensor when Custom Config mode has been enabled (set to On). The Custom Config mode DIP switch is located on the circuit board (rear side) of the sensor. A sensor placed in Basic Config mode (Custom Config DIP switch set to Off) is unaffected by ElahoAccess Mobile App custom configuration settings.



- Vacancy Timeout use the drop-down menu to set the length of time the sensor waits before triggering the next action. Options include 5 minutes, 15 minutes, 30 minutes, and Automatic.
- Current Status (read-only) shows current status (either Vacant or Occupied) of the Space controlled by the sensor.
- Enable Detection LEDs use the toggle switch to enable or disable the red detection LEDs. If enabled and occupancy is detected, the detection LEDs illuminate with each detected occupancy motion.
- Walktest Activated use the toggle switch to enable or disable the sensor's walktest feature. When walktest is enabled, physically walking through the space confirms the functional sensor range, illuminating the PIR LED with each detected occupancy motion.
- Vacancy Sensor Event use the drop-down menu to set the event *Action* that will take place when vacancy is detected.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.

1

Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Configuration Sharing

Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.

Light Sensor

The Elaho Light Sensor (also known as a Photo Sensor) provides light level measurement and lighting control for the connected Elaho control system. The sensor measures lighting conditions to maintain a programmed lighting output in both dimmed and switched systems. Light Sensors are available in either black or white finish:



Elaho Light Sensor		
E-LS	Light Sensor head with controller	
E-LSC	Light Sensor controller Only	
E-LSH	Light Sensor head Only	

Each Light Sensor controller supports one or two Light Sensor heads. A Light Sensor head may be installed within the controller or installed remotely, using up to 1,000 feet (304m) of 16 AWG (1.3mm²) wire per controller. When using a pair of Light Sensor heads, both sensor heads transmit their light readings to a single Light Sensor controller. The controller averages the levels and uses them to control lighting within the space.

Reference the *Elaho Light Sensor Installation Guide* for more information on installing this sensor.

Configuring the Light Sensor



Use the drop-down menus and keypad to set the configurable features.

Note: Changes made to the Light Sensor configuration settings using the ElahoAccess Mobile App impact the behavior of the sensor when Custom Config mode has been enabled (set to On). The Custom Config mode DIP switch is located on the circuit board (rear side) of the sensor. A sensor placed in Basic Config mode (Custom Config DIP switch set to Off) is unaffected by ElahoAccess Mobile App custom configuration settings.



Note: If Off is played from a station, light sensor events will not turn lights on.



Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Light Settings

- Current Measurement (read-only) displays the Current Measurement (lux), Lower Threshold, and Upper Threshold (lux) of light of the sensor.
 - The Lower Threshold and Upper Threshold are calculated from the Photo Deadband setting and Target Lux Value and do not depend on the Current Measurement. See *Photo Deadband on page 63*.
 - Threshold values can be calculated by adding or subtracting the Photo Deadband fraction of the Target Lux Value to or from the Target Lux Value.
 - Lower Threshold = Target Lux Value (Target Lux Value x Photo Deadband)/100
 - Upper Threshold = Target Lux Value + (Target Lux Value x Photo Deadband)/100
- [Record Target] tap to use the current lux measurement as the Target Lux Value.
- **Target Lux Value** the current recorded target lux value, which can be manually adjusted (tap the value to manually adjust).

Sensitivity

- **Photo Timeout** set the length of time the Light Sensor waits before triggering the next action. Any manual lighting control in the space will reset this time. Options include 5 minutes, 15 minutes, 30 minutes, and 60 minutes.
- Photo Deadband this setting determines the Upper and Lower Thresholds discussed above, which limit how large the difference between the Target Lux Value and the Current Measurement can be before the sensor takes action. Photo Deadband is expressed as a % of the Target Lux Value.
 - Photo Deadband = (Current Measurement Target Lux Value/Target Lux Value) * 100

Photo Preset Inhibit

Photo Preset Inhibit prevents light sensor event actions if one of a user-defined list of presets is active or was the last preset played. When the *Enable Preset Inhibit* switch is enabled, a list of presets will appear. Tap the box to the left of each preset in the list to choose presets that will override photo control events.



• Allow Bright Event (switched mode) and Allow Lower Event (dimmed mode) - when this switch is enabled, lower or bright actions will not be affected by Daylight Exempt Presets, but raise and dark actions will be inhibited. When this switch is disabled, all raise, lower, bright, and dark actions will be inhibited by the Daylight Exempt Presets.

Action Type

Deactivate the switch for Switched mode, or activate the *Action Type* switch for Dimmed mode, and configure their related actions.

Configure Switched Mode

In switched mode, the sensor provides configuration of a Switched Bright Event and Switched Dark Event, each with configurable actions. Additional options display for configuration depending on the type of *Action* selected (e.g., if the Switched Bright Event *Action* is set to Preset Activate, Preset Number and Timing (in seconds) displays for specification). The *Multi Space Enable* switch will display if any *Action* is set to Preset Activate or Space Off, allowing you to choose multiple spaces to which that action will be applied.

- Switched Bright Event when measured light exceeds the Bright threshold (Target Lux Value plus Photo Deadband %), the Switched Bright Event Action occurs. Use the drop-down menus and keypad to set the event action, the preset associated with that action, and the timing of the preset fade.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.



- Switched Dark Event when the measured light is below the Dark threshold (Target Lux Value minus Photo Deadband %), the Switched Dark Event *Action* occurs. Use the drop-down menus and keypad to set the event action, the preset associated with that action, and the timing of the preset fade.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.

Configure Dimmed Mode

In dimmed mode, used for daylight harvesting installations, the sensor provides a Dimming Event that can be configured for either Space Raise/Lower or Zone Raise/Lower. When the measured light is found to be outside the set Photo Deadband, the sensor will continuously trigger Dimming Raise Events and Dimming Lower Events until the Target Lux Value is reached or artificial lighting reaches its maximum levels. See Photo Deadband on page 63.



Note: *Raise/Lower Event actions provide a "Change per second (%)" setting that is the amount of control applied per second while lux measurements are outside the Photo Deadband threshold. 1% is the default setting, meaning the lighting will change in 1% increments. Higher values equal a faster artificial lighting change.*

Additional options display for configuration depending on the type of *Action* selected, either Space Raise / Lower, Single Zone Raise / Lower or Dual Zone Raise / Lower.

Space Raise / Lower

iPq	∋d 💎 13	2:23 PM	* 💻 +
<] Light	t Sensor	≡
		Record Targ	et)
	Target Lux Valu	e <u>73</u>	
	Sensitivity		
	Photo Timeout	5 Minutes	
	Photo Deadban	d 10%	•
	Photo Preset	Inhibit	
	Enable Preset I	nhibit 🔵	
	Action Type		
	Change to switc behavior	thed mode	
	Dimming Eve (Outside Target +/- Dea	ent idband%i)	
	Action	Space Raise-Lower	
	Change per second (%)	100	
Ū	oad) (Save) (Sh	are Copy To) Wink

Setting the Dimming Event to Space Raise / Lower maintains the entire Space at the set Target Lux Value +/- the Photo Deadband using the set Change per second (%) rate. See Photo Deadband on page 63.

Zone Raise/Lower

Setting the Dimming Event Action to Zone Raise/Lower provides additional settings to determine if the zone type is a single or dual controlled zone.

Single Zone Raise/Lower

Selecting Single Zone Type provides options to set the Zone Number and the Change per second (%) rate.



Dual Zone Raise/Lower

Setting the Zone Type to *Dual* allows the Light Sensor to control two zones, a primary and a secondary, at different levels when issuing Dimming Event Raise/Lower commands. The sensor should be placed in the Primary zone.

The Primary Zone is the master, providing the Secondary Zone with Raise/Lower commands using a user-configured Daylight Exposure offset.


Daylight Exposure (%) is set to 100% for the Primary Zone Number and cannot be changed. The Primary Zone Number has the highest possible capacity for ambient daylight exposure, and this is the location where the Light Sensor will be sampling light. The Secondary Zone Number Daylight Exposure (%) setting is user configurable.

- 1. Set the Primary Zone Number.
- 2. Set the Change per second (%) rate for the Primary Zone Number.
- 3. Set the Secondary Zone Number.
- 4. Set the Daylight Exposure (%) for the Secondary Zone Number (allowed range 10-100%). This number represents the percentage of perceived ambient daylight at the Secondary Zone as compared to the Primary Zone.
 - The Change per second (%) setting for the Secondary Zone is read-only and automatically adjusts according to the relationship between the Daylight Exposure (%) in the Primary and Secondary Zone, as well as the Primary Zone Change per second (%) setting.

Configuration Sharing

Zone Controllers

Elaho Zone Controllers are designed to fulfill a specific installation need including the simplest relay control for flexible on-off functionality, complete control including relay, 0-10V control, 24 VDC auxiliary power for occupancy sensor integration, and contact closure trigger for occupancy and light sensor status, or dimming control for reverse- or forward-phase lighting loads.

Zone Controller - Gen 2

- 0-10V Controller Gen 2 below
- SmartSpace Controller Gen 2 on page 71
- Relay Controller Gen 2 on page 76

Zone Controller

- 0-10V Controller on page 70
- 0-10V Controller on page 70
- Relay Controller on page 77

Elaho Zone Controllers install to a junction box and easily integrate with otherElaho products in the Elaho control system including Power Controllers, control stations, and sensors. For more information on each of these products, reference the applicable installation manual.

0-10V Controller - Gen 2

Elaho 0-10V Dimming Controllers are available in single- or dual-zone 120/277V configurations and provide on/off functionality and 0-10V dimming for direct control of compatible LED drivers and fluorescent dimming ballasts up to 20 amps. The ElahoAccess Mobile App provides configuration of the 0-10V Controller circuits and preset fade times for all 16 built-in presets.

Configuring the Circuits and Preset Fade Times

Use the keypad to set the default preset fade timing and circuit values for each programmed preset.

- **Timing** use the keypad to set the preset fade timing used for all configured circuits in this preset.
- Circuit # Value use the keypad to set the intensity level for each individual circuit in this preset.



Configuring Demand Response



Swipe to the left or right to access the Demand Response page and enable or disable demand response for each circuit. Enter a **Value** between 0 and 99 to set the highest output level when Demand Response is Enabled.

Configuration Sharing

0-10V Controller

0-10V Dimming Controllers are available in single- or dual-zone 120/277V configurations and provide on/off functionality and 0-10V dimming for direct control of compatible LED drivers and fluorescent dimming ballasts up to 20 amps. The ElahoAccess Mobile App provides configuration of the 0-10V Controller circuits and preset fade times for all 8 built-in presets.

Configuring the Circuits and Preset Fade Times

Use the keypad to set the default preset fade timing and circuit values for each programmed preset.

Ped 9 1 Zone 0- Preset C	10V Dimmer
Preset 1	
Timing:	2
Circuit 1 Value	100
Preset 2	
Timing:	2
Circuit 1 Value	75
Preset 3	
Timing:	2
Circuit 1 Value	50
Preset 4	
Timing:	2
Load Save Sh	are Copy To Wink

- **Timing** use the keypad to set the preset fade timing used for all configured circuits in this preset.
- Circuit # Value use the keypad to set the intensity level for each individual circuit in this preset.

Configuration Sharing

SmartSpace Controller - Gen 2

SmartSpace Controllers are available in single- or dual-zone 120/277V configurations and provide on/off functionality for all types of lighting fixtures up to 20 amps, offer 0-10V dimming for direct control of compatible LED drivers and fluorescent dimming ballasts, provide 24 VDC power to an auxiliary device (such as an occupancy sensor), and receive dry contact input to initiate control events across the system. The ElahoAccess Mobile App provides configuration of the SmartSpace Controller features. The dots at the bottom of the screen indicate additional pages of configuration. Swipe left or right to access *Configuring the Event Actions* or *Configuring the Circuits and Preset Fade Times*.



Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Configuring the Event Actions

Use the drop-down menus and keypad to set the Event *Actions* and any additional options that display according to the action selected.

- Sensor Input use the drop-down menu to select Disabled, Occupancy, or Photo.
- Contact Status a read only status of the auxiliary input, based on the type of Sensor Input that is configured.
 - Disabled displays Contact Closed/Contact Open.
 - Occupancy displays Occupied/Vacant.
 - Photo displays Contact Closed, Dar /Contact Open, Bright.

The *Multi Space Enable* switch will display for specific configurations allowing you to choose multiple spaces to which these actions will be applied.

- for Occupancy Sensor Input if the Vacancy Event Action is set to Preset Activate or Space Off and the Occupancy Event Action is set to Preset Activate
- for Photo Sensor Input if the Bright Event Action and Dark Event Action are set to Preset Activate or Space Off

Vacancy Event (Aux Contact Open +30 seconds)



Note: A Gen 2 SmartSpace controller builds in a 30-second vacancy timeout upon receiving a vacancy command via the contact closure to avoid false vacancy triggers.

Use the drop-down menu to set the event *Action* that will take place when vacancy is detected. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).

• Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.

Occupancy Event (Aux Contact Closed)

Use the drop-down menu to set the event *Action* that will take place when occupancy is detected. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).

• Available actions include No Function, Preset Activate, Zone Set to Level, and Space Set to Level.

Bright Event (Aux Contact Open)

Use the drop-down menu to set the event *Action* that will take place when the Contact Status is in Bright state. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).

• Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.

Dark Event (Aux Contact Closed)

Use the drop-down menu to set the event *Action* that will take place when the Contact Status is in Dark state. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).

• Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.



Note: There is a five-minute delay between the last manual action in a space before a bright or dark event occurs. New input events are postponed until the delay timer expires.

Note: If off is played from a station the light sensor events will not turn lights on.

Configuring the Circuits and Preset Fade Times

Swipe to the left or right to access the Preset Configuration page and set the default timing and circuit values for each programmed preset.

- **Timing** use the keypad to set the preset fade timing used for all configured circuits in this preset.
- **Circuit # Value** use the keypad to set the intensity level for each individual circuit in this preset.



Configuring Demand Response



Swipe to the left or right to access the Demand Response page and enable or disable demand response for each circuit. Enter a **Value** between 0 and 99 to set the highest output level when Demand Response is Enabled.

Configuration Sharing

SmartSpace Controller

SmartSpace Controllers are available in single- or dual-zone 120/277V configurations and provide on/off functionality for all types of lighting fixtures up to 20 amps, offer 0-10V dimming for direct control of compatible LED drivers and fluorescent dimming ballasts, provide 24 VDC power to an auxiliary device (such as an occupancy sensor), and receive dry contact input to initiate control events across the system. The ElahoAccess Mobile App provides configuration of the SmartSpace Controller features. The dots at the bottom of the screen indicate additional pages of configuration. Swipe left or right to access *Configuring the Event Actions* or *Configuring the Circuits and Preset Fade Times*.



Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Configuring the Event Actions

Use the drop-down menus and keypad to set the Event *Actions* and any additional options that display according to the action selected.

- Aux Input Mode use the drop-down menu to select Disabled, Occupancy, or Photo.
- Contact Status a read-only status of the auxiliary input, based on the type of Aux Input Mode that is configured.
 - Disabled displays Contact Closed/Contact Open.
 - Occupancy displays Occupied/Vacant.
 - Photo displays Contact Closed, Dark/Contact Open, Bright.



Note: A SmartSpace controller builds in a 30-second vacancy timeout upon receiving a vacancy command via the contact closure to avoid false vacancy triggers.

Use the drop-down menu to set the event *Action* that will take place when vacancy is detected. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).

• Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.

Occupancy Event (Aux Contact Closed)

Use the drop-down menu to set the event *Action* that will take place when occupancy is detected. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).

• Available actions include No Function, Preset Activate, Zone Set to Level, and Space Set to Level.

2 Zone SmartSpace C

Space Off

Load) (Save) (Share) (Copy To) (Wini

Default

Aux Input Mode

Contact Status

Action

Action Preset Numbe Timing (s)

Timing (s)

Vacancy Event

Occupancy Event

Bright Event (Aux Contact Open)

Use the drop-down menu to set the event *Action* that will take place when the Contact Status is in Bright state. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).

• Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.

Dark Event (Aux Contact Closed)

Use the drop-down menu to set the event *Action* that will take place when the Contact Status is in Dark state. Additional menu options will display based on the *Action* selected (e.g., if the *Action* is set to Preset Active, Preset Number and Timing (in seconds) displays for specification).

• Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, and Space Set to Level.



Note: There is a five-minute delay between the last manual action in a space before a bright or dark event occurs. New input events are postponed until the delay timer expires.



Note: If off is played from a station the light sensor events will not turn lights on.

Configuring the Circuits and Preset Fade Times

Swipe to the left or right to access the second page and set the default timing and circuit values for each programmed preset.

- **Timing** use the keypad to set the preset fade timing used for all configured circuits in this preset.
- Circuit # Value use the keypad to set the intensity level for each individual circuit in this preset.

Configuration Sharing



Relay Controller - Gen 2

Elaho Relay Controllers are available in single- or dual-zone 120/277V configurations and provide flexible on/off functionality for all types of lighting fixtures up to 20 amps, such as general-purpose, tungsten, and fluorescent and LED fixtures. The ElahoAccess Mobile App provides configuration of the Relay Controller circuit(s) for all 16 built-in presets.

Configuring the Circuits

Use the switches to control the circuit(s) for each preset.



Configuring Demand Response

Swipe to the left or right to access the Demand Response page and enable or disable demand response for each circuit.



Configuration Sharing

Relay Controller

Relay Controllers are available in single- or dual-zone 120/277V configurations and provide flexible on/off functionality for all types of lighting fixtures up to 20 amps, such as general-purpose, tungsten, and fluorescent and LED fixtures. The ElahoAccess Mobile App provides configuration of the Relay Controller circuit(s) for all 8 built-in presets.

Configuring the Circuits

Use the switches to control the circuit(s) for each preset.

Pod ♥ 1:47 PM	ntroller
Preset Configur	ation =
Preset 1	_
Circuit 1 Value Off/On	
Circuit 2 Value Off/On	
Preset 2	
Circuit 1 Value Off/On	
Circuit 2 Value Off/On	
Preset 3	
Circuit 1 Value Off/On	
Circuit 2 Value Off/On	
Preset 4	
Load Save Share (Copy To) (Wink)

Configuration Sharing

Dimmer Controllers

600W Phase-Adaptive Dimmer - Gen 2

Elaho 600W Phase-Adaptive Dimmers are available in 120 V and 277 V configurations and provide smooth reverse- or forward-phase dimming for multiple types of lighting loads including tungsten, incandescent, line-drive LEDs, two-wire fluorescents, and electronic transformers. The ElahoAccess Mobile App provides configuration of the Phase-Adaptive Dimmer features.

Note: Echoflex Solutions does not support the use of the 600W Dimmer or 600W Phase-Adaptive Dimmer-G2 with magnetic loads. Use the 600W Forward Phase Dimmer - Gen 2 with magnetic loads. See 600W Forward Phase Dimmer - Gen 2 on page 80.

General Configuration

Use the drop-down menus and keypad to set the configurable features.

• **Dim Phase** - Use the drop-down menu to set the dimmer curve to either Automatic or Forward.



WARNING: Manually setting the dimmer to the incorrect mode for the connected load will result in damage to the dimmer.

Dim Mode - Tap to set the dimmer mode to either Normal or Fluorescent. **Fluorescent Turn On Percent** - Use the keypad to set the percent of output voltage at which you'd like the fluorescent fixtures to turn on.

Configuring the Circuits and Preset Fade Times

Swipe to the left or right to access the Preset Configuration page and set the default timing and circuit values for each programmed preset.

- **Timing** Use the keypad to set the preset fade timing used for all configured circuits in this preset.
- Circuit # Value Use the keypad to set the intensity level for each individual circuit in this preset.





Configuring Demand Response

Swipe to the left or right to access the Demand Response page and enable or disable demand response for each circuit. Enter a **Value** between 0 and 99 to set the highest output level when Demand Response is Enabled.



Configuration Sharing

600W Forward Phase Dimmer - Gen 2

Elaho 600W Forward Phase Dimmers are available in 120V and 277V configurations and provide smooth forward-phase dimming for line voltage loads up to 600 watts. The ElahoAccess Mobile App provides configuration of the Forward-Phase Dimmer features.

General Configuration

Use the drop-down menus and keypad to set the configurable features.

- **Dim Mode** Tap to set the dimmer mode to either Normal or Fluorescent.
- Fluorescent Turn On Percent Use the keypad to set the percent of output voltage at which you'd like the fluorescent fixtures to turn on.



Configuring the Circuits and Preset Fade Times

Swipe to the left or right to access the Preset Configuration page and set the default timing and circuit values for each programmed preset.

- **Timing** use the keypad to set the preset fade timing used for all configured circuits in this preset
- Circuit # Value use the keypad to set the intensity level for each individual circuit in this preset



Configuring Demand Response

Swipe to the left or right to access the Demand Response page and enable or disable demand response for each circuit. Enter a **Value** between 0 and 99 to set the highest output level when Demand Response is Enabled.



Configuration Sharing

600W Dimmer

600W Dimmers are available in 120 V and 277 V configurations and provide smooth reverse- or forward-phase dimming for multiple types of lighting loads including tungsten, incandescent, line-drive LEDs, two-wire fluorescents, and electronic transformers. The ElahoAccess Mobile App provides configuration of the Phase-Adaptive Dimmer features.



Note: Echoflex Solutions does not support the use of the 600W Dimmer or 600W Phase-Adaptive Dimmer-G2 with magnetic loads. Use the 600W Forward Phase Dimmer - Gen 2 with magnetic loads. See 600W Forward Phase Dimmer - Gen 2 on page 80.

General Configuration

Use the drop-down menus and keypad to set the configurable features.

• **Dim Phase** - Use the drop-down menu to set the dimmer curve to either Automatic, Forward, or Reverse.



WARNING: Manually setting the dimmer to the incorrect mode for the connected load will result in damage to the dimmer.

Dim Mode - Tap to set the dimmer mode to either Normal or Fluorescent.**Fluorescent Turn On Percent** - Use the keypad to set the percent of output voltage at which you'd like the fluorescent fixtures to turn on.



Configuring the Circuits and Preset Fade Times

Swipe to the left or right to access the second page and set the default timing and circuit values for each programmed preset.

Pod ♥ 2: 600W Preset C	Dimmer enfiguration
Preset 1	
Timing:	2
Circuit 1 Value	100
Preset 2	
Timing:	2
Circuit 1 Value	75
Preset 3	
Timing:	2
Circuit 1 Value	50
Preset 4	
	•
Load Save Sh	are Copy To Wink

- **Timing** Use the keypad to set the preset fade timing used for all configured circuits in this preset.
- Circuit # Value Use the keypad to set the intensity level for each individual circuit in this preset.

Configuration Sharing

Room Controllers

Room Controller - Gen 2

The Elaho Room Controller provides a complete power solution for small- and medium-sized rooms - all from a single product. Its feed-thru power input allows all four or eight relay outputs and 0-10V control to be fed by the same input circuit or for any number of circuits to be separately fed.



Four Room Controller models are available:

- 4 Zone
- 4 Zone with integrated TimeClock
- 8 Zone
- 8 Zone with integrated TimeClock

(

Note: For information to configure the integrated TimeClock, reference the Elaho Astronomical TimeClock Configuration Manual.

Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Configuring the Contact Input Type

The ElahoAccess Mobile App provides configuration of the Room Controller contact input according to the configuration setting on the physical product. During the installation process for the Room Controller, the contact input switch will have been set for either momentary or maintained operation. For more information on setting the Room Controller contact input switch, see the applicable installation guide.

The ElahoAccess Mobile App identifies the state of the contact input switch setting and displays it on the configuration page. The available options for user configuration are dependent on the configured input type.

Momentary Contact Input Type

When the Room Controller **Contact Input Type** is configured for Momentary functionality, momentary control event options display for configuration. A momentary contact input is similar to a single button push, executing the configured action with each closure of the dry contacts.



The *Multi Space Enable* switch will display if the **Push** *Action* is set to Preset Activate, Preset Toggle, or Space Off, allowing you to choose multiple spaces to which that action will be applied.



Note: If Multi Space is enabled, the Hold Action will be disabled and the Double Tap Action will be automatically configured.



Note: Each Elaho space can only have one assigned Demand Response input.

- Push a close/open event. Use the drop-down menu to select the Push Action.
 - Available actions include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Lower, Zone Raise, Zone Set to Level, Space Off, Space Toggle, Space Lower, Space Raise, Space Set to Level, Space Combine Toggle, Space Combine, Space Uncombine, Space Lockout Toggle, Space Lockout Enable, Space Lockout Disable, Sequence Toggle, Sequence Activate, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable
- Hold holding the contact closed. Use the drop-down menu to select the Hold Action.
 - Available actions include No Function, Zone Lower, Zone Raise, Space Lower, Space Raise
- **Double Tap** closing the closure twice. Use the drop-down menu to select the Double Tap *Action*.
 - Available actions include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Set to Level, Space Off, Space Toggle, Space Set to Level, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable

Maintained Contact Input Type

When the Room Controller **Contact Input Type** is configured for Maintained functionality, maintained control event closed and open options display for configuration.



Use the drop-down menus and keypad to set the **Contact Closed** and **Contact Opened** *Actions* and any additional options that display according to the actions selected. The **Multi Space Enable** switch will display if the **Maintained Open** *Action* is set to Preset Activate or Space Off and **Maintained Closed** *Action* is set to Preset Activate or Space Off, allowing you to choose multiple spaces to which these actions will be applied.

- Maintained Opened use the drop-down menu to select the action that occurs when the contact opens.
 - Available actions include *No Function, Preset Activate, Zone Set to Level, Space Off, Space Set to Level, Space Combine, Space Uncombine, Space Lockout Enable, Space Lockout Disable, Sequence Activate, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Enable, Timeclock Hold Disable*
- Maintained Closed use the drop-down menu to select the action that occurs when the contact closes.
 - Available actions include *No Function, Preset Activate, Zone Set to Level, Space Off, Space Set to Level, Space Combine, Space Uncombine, Space Lockout Enable, Space Lockout Disable, Sequence Activate, Space Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Enable, Timeclock Hold Disable.*

Occupancy Contact Input Type

When the Room Controller **Contact Input Type** is configured for Occupancy functionality, occupancy and vacancy event options display for configuration.



Use the drop-down menus and keypad to set the **Vacancy** and **Occupancy** *Actions* and any additional options that display according to the actions selected. The **Multi Space Enable** switch will display if the **Vacancy** *Action* is set to Preset Activate or Space Off and the **Occupancy** *Action* is set to Preset Activate, allowing you to choose multiple spaces to which these actions will be applied.

- Vacancy use the drop-down menu to select the action that occurs when the contact closes.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, Space Set to Level
- Occupancy use the drop-down menu to select the action that occurs when the contact opens.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Set to Level

Patch Configuration

When viewing the General Configuration page, swipe left or right to change to the Patch Configuration page. The Patch Configuration page provides the ability to patch each room controller output to a space and zone.

Note: Circuit Patch Configuration made in the ElahoAccess Mobile App only impacts the behavior of the Room Controller - Gen 2 when the Custom switch is enabled on the hardware. A Room Controller - Gen 2 with the Custom switch disabled will remain unaffected by Patch Configuration settings from the ElahoAccess Mobile App.

Configuring the Circuits and Preset Fade Times

The ElahoAccess Mobile App provides configuration of the Room Controller circuits and preset fade times for all 16 built-in presets. When viewing the Room Controller General Configuration page, swipe left or right until you get to the Preset Configuration page and set the desired circuit values and preset timing for each configured preset.

The looks configured in the Preset Configuration page for the selected Room Controller are activated from Elaho control stations, Elaho Responsive Controls, and Elaho TimeClock events.

- **Timing** use the keypad to set the preset fade timing used for all configured circuits in this preset.
- Circuit # Value use the keypad to set the intensity level for each individual circuit in this preset.

iPç	Pod 🗢 3:17 PM 🛛 🕸 💻					
<] ⁴z	Preset C	om Co configura	ation	<u>=</u>	
	Prese	t 1				J
	Timing		\square	2		
	Circuit	1 Value	\square	0		
	Circuit	2 Value	\square	0		
	Circuit	3 Value	\square	0		
	Circuit	4 Value	\square	0		
	Prese	t 2				
	Timing		\square	2		
	Circuit	1 Value	\square	0		
	Circuit	2 Value	\square	0		
	Circuit	3 Value	\square	0		
		•				
L	xad) (S	ave) (Sh	are) (Сору То	Wink	5

Configuring Demand Response

Swipe to the left or right to access the Demand Response page. Enable or disable demand response for each circuit and choose the spaces where demand response will be controlled by this circuit.

A Zone Room Control
Demand Response Status Open, Inactive
UL924 Emergency Open Contact Input Status
Demand Response Enabled
Demand Response Space(s)
Space 1 O Space 2 Space 3 O Space 4 Space 5 O Space 6
O Space 7 O Space 8 O Space 9 O Space 10
Space 11 O Space 12 Space 13 O Space 14
U Space 15 U Space 16
•••
Load Save Share Copy To Wink

Configuration Sharing

Room Controller

The Elaho Room Controller provides a complete power solution for small- and medium-sized rooms - all from a single product. Its feed-thru power input allows all four or eight relay outputs and 0-10V control to be fed by the same input circuit or for any number of circuits to be separately fed.



Four Room Controller models are available:

- 4 Zone
- 4 Zone with integrated TimeClock
- 8 Zone
- 8 Zone with integrated TimeClock



Note: For information to configure the integrated TimeClock, reference the Elaho Astronomical TimeClock Configuration Manual.



Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Configuring the AV Input Type

The ElahoAccess Mobile App provides configuration of the Elaho Room Controller Audio Visual contact input according to the configuration setting on the physical product. During the installation process for the Room Controller, the AV contact input switch will have been set for either momentary or maintained operation. For more information on setting the Room Controller AV contact input switch, see the applicable installation guide.

The ElahoAccess Mobile App identifies the state of the AV contact input switch setting and displays it on the configuration page. The available options for user configuration are dependent on the configured input type.

Momentary AV Input Type

When the Room Controller AV Input switch is configured for Momentary functionality, momentary control event options display for configuration. A momentary contact input is similar to a single button push, executing the configured action with each closure of the dry contacts.

Use the drop-down menus and keypad to set the **Contact Close** *Action* and any additional options that display according to the action selected.

• Available actions include *No Function, Preset Toggle, Preset Activate, Space Off, Space Toggle, Space Set to Level, Space Set to Color*



Maintained AV Input Type

When the Room Controller AV Input is configured for Maintained functionality, maintained control event closed and open options display for configuration.



Use the drop-down menus and keypad to set the **Contact Close** and **Contact Open** *Actions* and any additional options that display according to the actions selected.

- Contact Close use the drop-down menu to select the action that occurs when the contact closes.
 - Available actions include No Function, Preset Activate, Space Off, Space Set to Level, Space Set to Color
- Contact Open use the drop-down menu to select the action that occurs when the contact opens.
 - Available actions include No Function, Preset Activate, Space Off, Space Set to Level, Space Set to Color

Configuring the Circuits and Preset Fade Times

The ElahoAccess Mobile App provides configuration of the Room Controller circuits and preset fade times for all 16 built-in presets. When viewing the Room Controller General Configuration page, swipe to select the second page and set the desired circuit values and preset timing for each configured preset.

The looks configured in the Preset Configuration page for the selected Room Controller are activated from Elaho control stations, Elaho Responsive Controls, and Elaho TimeClock events.

iPod 🏶 🛛 2	13 PM 8 💼	
S Zone Ro	configuration	
Preset 1		
Timing:	2	
Circuit 1 Value	100	
Circuit 2 Value	100	
Circuit 3 Value	100	
Circuit 4 Value	100	
Preset 2		
Timing:	2	
Circuit 1 Value	75	
Circuit 2 Value	75	
Circuit 3 Value	75	
• •		
Load (Save) (Share) (Copy To) (Wink)		

- Timing use the keypad to set the preset fade timing used for all configured circuits in this preset
- Circuit # Value use the keypad to set the intensity level for each individual circuit in this preset

Configuration Sharing

DMX Scene Controller

The Elaho DMX Scene Controller provides control of dimmers and LED fixtures by storing and outputting DMX values. The DMX Scene Controller is capable of outputting a full universe of DMX 512 (512 addresses) and supports the storing of 32 presets.





Note: Configuration changes made to the DMX Scene Controller in the ElahoAccess Mobile App impact the Custom configuration mode of the DMX Scene Controller only. A DMX Scene Controller set to Basic mode will remain unaffected by configuration settings made in the ElahoAccess Mobile App. Basic and Custom modes are set at the DMX Scene Controller device using the Config Mode Switch.

For more information reference the Elaho DMX Scene Controller Installation Guide.

Configuration

To configure a DMX Scene Controller, select Configuration from the ElahoAccess Mobile App menu. All discovered devices will display for selection. Navigate to and select the DMX Scene Controller from the devices list for configuration. The General Configuration page displays for configuration. The dots at the bottom of the screen indicate additional pages of configuration for the DMX Scene Controller. Swipe left or right to access the General Configuration, Patch Configuration, Preset Configuration, or Sequence Configuration. Use the drop-down menus and keypad to set the configurable features.

General Configuration

DMX Scel	Configuration	
Control Unpatched Addresses		
Allow Patch Auto Dmx Output Refresh Rate Power On Behavior	Shirit Slow 31Hz Slow 31Hz	
DMX Loss Action DMX Active Action	None None	
P6001		
••	•••	
Load Save Share Copy To Wink		

Use the available drop-down menus and keypad to specify the desired configuration information. Additional configuration options will display depending on the selected action. For example, if the **Power On Behavior** is set to Preset, Preset Number will display for additional specification.

- Control Unpatched Addresses when enabled all DMX addresses in the universe will be snapshot-recorded into presets; when disabled only DMX addresses that are patched to the selected DMX Scene Controller zones will be snapshot-recorded into presets. When enabled, demand response can be enabled for unpatched addresses. See *Demand Response Configuration on page 98*.
- Allow Space Actions to Affect Unpatched Addresses when enabled all DMX addresses in the universe will be subject to space actions such as Space Raise and Lower; when disabled only DMX addresses that are patched to the selected DMX Scene Controller zones will be affected.
- Allow Patch Auto Shift when enabled DMX addresses will auto-adjust when consecutively patched fixture profiles are modified.
- DMX Output Refresh Rate
 - Use the drop-down menu to set the desired rate. The default rate is 35 Hz.
- **Power On Behavior** choose a behavior that will automatically occur when the DMX Scene Controller is powered on.
 - Available actions include Preset, Sequence, Last Look, and None. None is the default. If you choose Preset, a Preset Number field will appear. Use the keypad to enter a preset into the Preset Number field.
- DMX Loss Action choose an action that will occur if DMX input signal is lost.
 - Available actions include Preset, Sequence, None. None fades current output to Elaho control in 2 seconds. None is the default.
- DMX Active Action choose an action that will occur when DMX input is active. This action will not happen when the DMX Scene Controller is powered on.
 - Available actions include Preset, Off, Sequence, None. None is the default.

Patch Configuration

When viewing the General Configuration page, swipe left or right to change to the Patch Configuration page. The Patch Configuration page provides the ability to patch Zones individually, assigning each zone a fixture Profile and DMX address. Alternatively, patch multiple zones using the same Profile properties and assign the DMX start address using the Patch Wizard.

The following fixture profiles are available: *Intensity*, *RGB*, *RGB_S*, *RGB_SF*, *IRGBS*, *RGBA*, *RGBW*, *ICtT_S*, *ICtT_SF*, *CwWw*, *WwCw*, *CwMwWw*, *WwMwCw*, *ICwWw*, *and ICwMwWw*

Profile	Description	Zone Type	Compatible ETC Fixtures
Intensity		Intensity	
RGB	Red, Green, Blue	Color	D22, D40, D60, S4LED
RGB_S	Red, Green, Blue, Strobe	Color	D22, D40
RGB_SF	Red, Green, Blue, Strobe, Fan	Color	D60, S4LED
IRGBS	Intensity, Red, Green, Blue, Strobe	Color	ColorSource Par, Spot, Wash
RGBA	Red, Green, Blue, Amber	Color	
RGBW	Red, Green, Blue, White	Color	
ICtT_S	Intensity, Color Temp, Tint, Strobe	Studio	D22, D40 (Studio Mode)
ICtT_SF	Intensity, Color Temp, Tint, Strobe, Fan	Studio	D60, S4LED (Studio Mode)
CwWw	Cool white, Warm white	Color Temp	
WwCw	Warm white, Cool white	Color Temp	
CwMwWw	Cool white, Medium white, Warm white	Color Temp	
WwMwCw	Warm white, Medium white, Cool white	Color Temp	
ICwWw	Intensity, Cool white, Warm white	Color Temp	
ICwMwWw	Intensity, Cool white, Medium white, Warm white	Color Temp	

Fixture Profile Details

See *Color Control on page 7* for more information about setting up fixture profiles and zones for color control, color temperature control, and tint control.



- For each zone, use the drop-down menu to assign a color profile.
- Tap the [Add Addresses] button to assign additional DMX addresses to each zone.
- To delete a DMX address (or range of addresses) from the Current Addresses box, select the address and tap the [Delete] button. There is no undo.

Using the Patch Wizard



Tap the [Patch Wizard] button on the Patch Configuration page to patch multiple zones using the same Profile settings.

- **Profile** select the fixture profile for all included zones from the drop-down menu.
- **Zones** set which zones should be configured together with a similar set of profiles.
- **Start Address** set the DMX Start Address of the first zone to be configured; subsequent zones will be assigned consecutive DMX addresses.

Preset Configuration



The Preset Configuration page allows for the configuration of each local preset's fadetime. This is the time that the preset will take when activated or deactivated.

Sequence Configuration

DMX Scen Sequence	e Controller	
Enable Sequence		
Number of Steps	2	
Sequence Mode	Single	
Step 1		
Preset Number		
Fade Time	2	
Hold Time	2	
Step 2		
Preset Number	2	
Fade Time	2	
Hold Time	2	
• • • • •		
Load Save Sha	re Copy To Wink	

The Sequence Configuration page allows for the configuration of one sequence that plays presets in a predetermined order.

- Enable Sequence when Enable Sequence is turned on, the other settings for Number of Steps, Sequence Mode, and Steps become available.
- Number of Steps choose a number of steps in the sequence up to 32.
- Sequence Mode choose Single or Looping. Single mode will hold the last look until a new activity occurs.
- Step configuration
- Preset Number choose a preset to activate.
- Fade Time enter the time in seconds that it takes to transition to the preset (0-600).
- Hold Time enter the time in seconds that the preset is held before the next step (0-600).

Demand Response Configuration

Use the **Enabled** switches to enable or disable demand response for individual zones or all unpatched addresses and set an output level limit value between 0-99% that applies while demand response is enabled.

- The **Enabled** switch for Unpatched Addresses will only appear if Control Unpatched Addresses is enabled in General Configuration. See *page 94*.
- When demand response is enabled, a **Value** entry field appears. Use the keypad to enter a demand response limit value between 0-99. The output level of the zone (or all unpatched addresses) will not be allowed to exceed the **Value** percentage while demand response is enabled.

DMX Sce Demar	to 29 AM * controller
Unpatched /	Addresses
Enabled:	\bigcirc
Zone 1	
Enabled:	
Value:	50
Zone 2	
Enabled:	\bigcirc
Zone 3	
Enabled:	\bigcirc
Load) (Save) (S	hare) Copy To) (Wink)

Configuration Sharing

Contact Interfaces

Elaho Contact Interfaces are DIN rail mounted devices that are available in four input or four output configurations.

- Contact Input Interface on the next page accepts four momentary or maintained closures to trigger control actions within an Elaho system.
- Contact Output Interface on page 103 provides four normally open or normally closed output relays controlled by actions in the Elaho system.
- *Demand Response Interface on page 105* accepts four maintained closures to trigger demand response within an Elaho control system.

Contact Interfaces





Elaho Contact Interfaces are DIN rail mounted devices that are available in four input or four output configurations.

- Input Interface accepts four momentary or maintained closures to trigger control actions within an Elaho system.
- Output Interface provides four normally open or normally closed output relays controlled by actions in the Elaho system.

Contact Interfaces have a front panel configuration mode switch which allows selection between Basic and Custom configurations of the Contact Interface. Configuration settings done in the ElahoAccess Mobile App will not take effect unless the switch is set to Custom configuration. See the *Elaho Contact Interfaces Installation Guide* for information about the default behaviors of Contact Interfaces in Basic and Custom configuration.

Contact Interfaces have front panel rotary switches that select Space and Address/Zone. See the *Elaho Contact Interfaces Installation Guide* for more information on default settings.

Contact Input Interface

Each input (1 through 4) has its own configuration screen. Swipe left or right to access other inputs.



Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Contact Status

A read-only display of Open or Closed state

Select Input Type

Available actions depend on the Selected Input Type: Momentary, Maintained, or Occupancy. Use the available drop-down menus and keypad to specify the desired configuration information. Additional configuration options will display depending on the selected *Action* (e.g. if the Push *Action* is set to Preset Toggle, Preset Number and Timing(s) will display for additional specification.

Momentary:



The *Multi Space Enable* switch will display if the **Push** *Action* is set to Preset Activate, Preset Toggle, or Space Off, allowing you to choose multiple spaces to which that action will be applied.



Note: If Multi Space is enabled, the Hold Action will be disabled and the Double Tap Action will be automatically configured.

- Push a close/open event. Use the drop-down menu to select the Push Action.
 - Available actions include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Lower, Zone Raise, Zone Set to Level, Space Off, Space Toggle, Space Lower, Space Raise, Space Set to Level, Space Combine Toggle, Space Combine, Space Uncombine, Space Lockout Toggle, Space Lockout Enable, Space Lockout Disable, Sequence Toggle, Sequence Activate, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable
- Hold holding the contact closed. Use the drop-down menu to select the Hold Action.
 - Available actions include No Function, Zone Lower, Zone Raise, Space Lower, Space Raise
- **Double Tap** closing the closure twice. Use the drop-down menu to select the Double Tap *Action*.
 - Available actions include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Set to Level, Space Off, Space Toggle, Space Set to Level, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable

Maintained:

The **Multi Space Enable** switch will display if the **Maintained Open** *Action* is set to Preset Activate or Space Off and **Maintained Closed** *Action* is set to Preset Activate or Space Off, allowing you to choose multiple spaces to which these actions will be applied.

- Maintained Open use the drop-down menu to select the action that occurs when the contact opens.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, Space Set to Level, Space Combine, Space Uncombine, Space Lockout Enable, Space Lockout Disable, Sequence Activate, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Enable, Timeclock Hold Disable
- Maintained Closed use the drop-down menu to select the action that occurs when the contact closes.
- Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, Space Set to Level, Space Combine, Space Uncombine, Space Lockout Enable, Space Lockout Disable, Sequence Activate, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Enable, Timeclock Hold Disable


Occupancy:



Note: Only one input can be assigned to Occupancy per Contact Input Interface.

The *Multi Space Enable* switch will display if the Vacancy *Action* is set to Preset Activate or Space Off and the Occupancy *Action* is set to Preset Activate, allowing you to choose multiple spaces to which these actions will be applied.

- Vacancy use the drop-down menu to select the *Action* that occurs when vacancy is detected.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Off, Space Set to Level



Note: The Contact Input Interface builds in a 30-second vacancy timeout upon receiving a vacancy command via the contact closure to avoid false vacancy triggers.



- Occupancy use the drop-down menu to select the Action that occurs when occupancy is detected.
 - Available actions include No Function, Preset Activate, Zone Set to Level, Space Set to Level

Contact Output Interface



Use the available drop-down menus and keypad to specify the desired configuration information. Additional configuration options will display depending on the selected *Action* (e.g. if an *Action* is set to Preset Status, Preset Index will display for additional specification).

Contact Status

A read-only display of Open or Closed state.

Output Actions



Note: Functionality varies depending on whether the normally open or normally closed contact terminal is utilized. The behaviors listed below are assuming a normally open installation. The normally closed contact provides inverted behavior; its status is always the opposite of the normally open contact.

- Available actions include No Function, Preset Status, Zone Status, Space Combine, Space Occupancy Status, Space Off
 - Preset Status assigns a preset (1-64) to control the state of the contact output.
 - When the assigned preset is active, the corresponding output relay will be closed.
 - When the assigned preset is inactive, the corresponding output relay will be open.
 - Zone Status assigns a zone to the contact output and displays a switch for each preset in the zone. The switches set whether the output will be open or closed after each preset is played. Zone Status allows a contact to be controlled by more than one preset. Assigning Zone Status to the *Action(s)* of one or more Outputs will enable a page of Preset Configuration settings. Swipe left or right to move between General Configuration and Preset Configuration.

General Configuration	General Configuration	Preset Configuration				
Contact Output Interf	Contact Output Interf	Contact Output Interf				
Output 1	Contact Status Open	Preset 1				
Contact Status Closed	Action Zone Status	Zone 1: Output 2				
Action Preset Status	Zone Index 1	Zone 2: Output 3				
Preset Index 1	Output 3	Preset 2				
Output 2	Contact Status Open	Zone 1: Output 2				
Contact Status Open	Action Zone Status					
Action Zone Status 💿	Zone Index 2	zone z: Output 3				
Zone Index 1	Output 4	Preset 3				
Output 3	Contact Status Open	Zone 1: Output 2				
Contact Status Open	Action Base Combine Status	Zone 2: Outruit 3				
Action Zone Status	First Space 1					
Zone Index 2	Second Space 2	Preset 4				
• •	• •	• •				
Load Save Share Copy To Wink	Load Save Share Copy To Wink	Load Save Share Copy To Wink				

- When the switch under the Preset is activated, the corresponding relay output is closed.
- When the switch under the Preset is deactivated, the corresponding relay output is open.
- By default, all odd numbered presets, when activated, will close all relay outputs. All even numbered presets, when activated, will open all relay outputs. This is true until the preset is re-recorded with new values.
- Space Combine contact closes when the First Space and Second Space are combined.
- Space Occupancy Status contact closes when the Space Status is Occupied.
- **Space Off** contact closes when the Space is turned Off.

Configuration Sharing

Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.

Demand Response Interface



Elaho Demand Response Interfaces are DIN rail mounted devices that accept four maintained closures to trigger demand response within an Elaho control system.



Note: Each Elaho space can only have one assigned Demand Response input.

Demand Response Interfaces have a front panel configuration mode switch which allows selection between Basic and Custom configurations. Configuration settings done in the ElahoAccess Mobile App will not take effect unless the switch is set to Custom configuration. See the *Elaho Contact Interfaces Installation Guide* for information about the default behaviors of Demand Response Interfaces in Basic and Custom configuration.

Demand Response Interfaces have front panel rotary switches that select Space and Address/Zone. See the *Elaho Contact Interfaces Installation Guide* for more information on default settings.



Contact Status

A read-only display of Open or Closed state.

Enabled Switch

A switch to enable or disable demand response for each maintained input.

Spaces

The list of spaces where the contact controls demand response. Tap the box next to a space to add or remove the space from the list. Spaces that are assigned to another demand response input will not be available for selection because each Elaho space can only have one demand response input.

Q

Example: Spaces 2, 3, and 4 are not available for Contact 1 in the screenshot on the previous page because those spaces are already assigned to other enabled contacts.

Space Conflict

Contacts 1-4 control spaces 1-4 by default. The Space Conflict message will appear if you assign one of the spaces 1-4 to a contact that does not control that space by default and then enable the contact that would normally control that space by default. Tap **Cancel** to cancel enabling the contact or choose a different space for that contact to control and tap **OK**.

The Cannot Enable message appears when all spaces are assigned to other contacts. The contact you are trying to enable will remain disabled until you edit the list of spaces assigned to other contacts.



Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.





Preset Stations

Elaho Preset Stations are used to activate built-in presets in compatible power control products. Stations mount using a standard single-gang back box (RACO 690 or equivalent), or an optional surface-mount back box (part number 7081A2004-1) sold separately and available from Echoflex. Station faceplates and buttons are available in cream, ivory, gray, black, and signal white.

Reference the Elaho Preset Station Installation Guide for more information on Preset stations.



Note: Configuration changes made to the Preset Station in the ElahoAccess Mobile App impact the Custom configuration mode of the Preset Station only. A Preset Station set to Basic mode will remain unaffected by configuration settings made in the ElahoAccess Mobile App. Basic and Custom modes are set at the Preset Station using the designated DIP Switch 1 on the station electronics.



Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Configuring Preset Stations

To configure a Preset Station, select Configuration from the ElahoAccess Mobile App menu. All discovered devices will display for selection. Navigate to and select the Preset Station from the devices list for configuration. A representative image of the selected station will display.

Ten-Button Preset Station Initial View	Button Control Configuration (Multi Space Disabled)	Button Control Configuration (Multi Space Disabled)
Pod 9:49 AM # ■* <	IPod 9:49 AM * ■* Image: Second state	IPod 9:49 AM * 10 Button Preset =
Preset 1 Preset 6 Preset 2 Preset 7	Push Action Preset Number Timing (s) Push and Hold	Push and Hold Action Record Preset Number 1 Double Tap Action
Preset 3 Preset 8	Action Record Preset Number 1	Action Preset loggie Preset Number 1 Timing (s) 0.5
Preset 4 Preset 9 Preset 5 Preset 10	Action	Multi Space Enable Enable to control presets in multiple spaces
	Preset Number 1 Timing (s) 0.5	Indicator Behavior On Color Blue
Load Save Share Copy To Wink	Multi Space Enable Enable to control presets in	Off Color None 💿
Button Control Configuration (Multi Space Enabled)	Button Control Configuration (Multi Space Enabled)	
iPod 9:49 AM Image: Test state Image: Constraint of test state Image: Test state Image: Test state Image: Constraint of test state Image: Test state Image: Test state	iPod 9:49 AM * ■ IO Button Preset ■ Button 1 Configuration ■	
Push Action Preset Toggle Preset Number 1 Timing (s) Default	Action Preset Toggle Preset Number 1 Timing (s) 0.5	
Push and Hold Action No Function Double Tap	Space 1 O Space 2 Space 3 O Space 4 Space 5 O Space 6 Space 7 O Space 8 Space 9 O Space 10 Space 10 Space 12	
Action Preset Toggle Preset Number 1 Timing (s) 0.5	Space 13 Space 14 Space 15 Space 16 Indicator Behavior	
Multi Space Enable Select space(s) to play preset	On Color Blue Off Color None	

Configure each button individually on a Preset Station. The following options are available for each button. Additional menu options will display based on the *Action* selected (e.g., if an *Action* is set to Preset Active, Preset Number and Timing (in seconds) will display for specification). The *Multi Space Enable* switch will display if the **Push** *Action* is set to Preset Activate, Preset Toggle, or Space Off, allowing you to choose multiple spaces to which that action will be applied.

(

Note: If Multi Space is enabled, the Push and Hold Action will be disabled and the Double Tap Action will be automatically configured.

- Push use the drop-down menu to select the action of a pushed button.
 - Available actions include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Lower, Zone Raise, Zone Set to Level, Space Off, Space Toggle, Space Lower, Space Raise, Space Set to Level, Zone Select, Selection Lower, Selection Raise, Selection to Level, Selection Toggle, Space Combine Toggle, Space Combine, Space Uncombine, Sequence Toggle, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable
- **Push and Hold** use the drop-down to select the action of a button when you push and hold.
 - Available actions include No Function, Record, Zone Lower, Zone Raise, Space Lower, Space Raise, Selection Lower, Selection Raise
- **Double Tap** use the drop-down menu to select the action when you double tap on a button.
 - Available actions include No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Set to Level, Space Off, Space Toggle, Space Set to Level, Selection to Level, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp, Timeclock Hold Toggle, Timeclock Hold Enable, Timeclock Hold Disable
- Indicator Behavior set the color of the indicator light when an action is "on" and when it is "off." Not available for all actions.
 - Use the drop-down menu to set the LED color of the button control when the action is "On" and when it is "Off."

Configuration Sharing

Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.

Keyswitch Station

When in custom mode, Elaho Keyswitch Stations provide preset, zone, and space combine controls for use with Elaho and Sensor3 control systems. When in basic mode, Keyswitch Stations provide lockout function only.



See the Elaho Keyswitch Station Installation Guide for more information.

Configuration

When you configure a Keyswitch Station with the ElahoAccess Mobile App, the configuration page loads immediately.



i

Note: Changes made in the ElahoAccess Mobile App impact the behavior of the keyswitch station when DIP switch 2 is set to On. See the Elaho Keyswitch Station Installation Guide for more information on DIP switch settings.

(

Note: For a complete listing of configurable actions, reference Actions Per Device on page 114.

Use the available drop-down menus and keypad to specify the desired configuration information. Additional configuration options will display depending on the selected *Action* (e.g. if the **Key Turn** *Action* is set to Preset Toggle, Preset Number and Timing(s) will display for additional specification). The *Multi Space Enable* switch will display if the **Key Turn** *Action* is set to Preset Toggle, or Space Off, allowing you to choose multiple spaces to which that action will be applied.

- Key Turn use the drop-down menu to configure the Key Turn Action.
 - Available actions for Key Turn include *No Function, Preset Toggle, Preset Activate, Zone Toggle, Zone Set to Level, Space Off, Space Toggle, Space Set to Level, Space Combine Toggle, Space Combine, Space Uncombine, Space Lockout Toggle, Space Lockout Disable, Sequence Toggle, Sequence Activate, Zone Set to Color, Zone Set to Color Temp, Space Set to Color, Space Set to Color Temp*
- Indicator Behavior use the drop-down menu to set the LED color of the button control when the action is "On" and when it is "Off".

Configuration Sharing

Five buttons are available at the bottom of the configuration screen: Load, Save, Share, Copy To, and Wink. For more information, see *Configuration Sharing on page 28*.

Chapter 3

References

Reference Other Documents

For more information on installing Elaho device hardware or setting up and configuring Elaho devices that are not configured through ElahoAccess App, see the applicable installation and configuration manuals.

Actions Per Device

	Inspire Stations		Keyswitch Stations	SmartSpace Controller and SmartSpace Controller - Gen2			Preset Stations			Light Sensor				
	Push	Push and Hold	Double Tap	Fader Action		Occ	Vac	Bright	Dark	Push	Push and Hold	Double Tap	Switched Mode	Dimmed Mode
Selection Actions														
Saturation Raise/Lower				x										
Hue Raise/Lower				x										
Tint Raise/Lower				х										
Color Temp Raise/Lower				х										
Selection Raise/Lower	х	х		х						х	х			
Selection to Level	х		х	x						х		x		
Selection Toggle	х		х	x						х				
Zone Select	х									х				
Zone Actions														
Zone Raise/Lower	х	x		х						х	х			х
Dual Zone Raise/Lower														х
Zone Set to Color	х		х	x	x					х		x		
Zone Set to Color Temp	х		x	x	x					х		x		
Zone Set to Level	х		x	x	x	x	x	x	x	х		x	x	
Zone Toggle	х		x	x	x					х		x		
Color Zone Hue Raise/Lower				x										
Color Zone Sat. Raise/Lower				x										
Zone Color Temp Baise/Lower				×										
Zone Tint Raise/Lower				x										
Space and Preset Actions														
Preset Activate	x*		х	х	x	x (*G2)	x (*G2)	x (*G2)	x (*G2)	x*		x	x*	
Preset Toggle	x*		х	x	x					x*		x		
Record											х			
Sequence Activate					x									
Sequence Toggle	х				x					х				
Space Combine Toggle	х				x					х				
Space Combine/Uncombine	х				x					х				
Space Off	x*		х	х	x		x (*G2)	x (*G2)	x (*G2)	x*		x	x*	
Space Raise/Lower	х	x		x						х	x			x
Space Set to Color	х		x	x	x					x		x		
Space Set to Color Temp	x		x	x	x					x		x		
Space Set to Level	x		x	x	×	x	×	x	x	x		x	x	
Space Toggle	x		x	X	X					x		x		
Special Actions														
HSI Color Mode				x										
Color Temp Mode				x										
Studio Mode				x										
Space Lockout Toggle					x									
Space Lockout Enable/Disable					x									
Timeclock Hold Toggle	х		x							х		x		
Timeclock Hold Enable/Disable	x		x							х		x		

* Multi Space option available

*G2 Multi Space option available with Gen 2 version

	Contact Input Interface				PIR Occu	ipancy	PIR Vacancy	Dual Tech Switch-mount Occupancy Sensors (buttons)					
		Momentar	y	Maintained	Occup	ancy	Sens	ors	Sensors	Compa	, , ,		
	Push	Double Tap	Hold	Open/Closed	Occupancy Event	Vacancy Event	Occupancy Event	Vacancy Event	Vacancy Event	Push	Push and Hold	Double Tap	
Selection Actions													
Saturation Raise/Lower													
Hue Raise/Lower													
Tint Raise/Lower													
Color Temp Raise/Lower													
Selection Raise/Lower													
Selection to Level													
Selection Toggle													
Zone Select													
Zone Actions													
Zone Raise/Lower	x		×							x	x		
Dual Zone Baise/Lower	~									~	~		
Zone Set to Color	v	v		×			-			x		×	
Zone Set to Color Temp	Y	x x		x						x		x	
Zone Set to Level	v	× ×		×	v	v	×	v	×	×		×	
Zone Toggle	×	× ×		^	^	^	^	^	^	×		×	
Color Zone Hue Baise / Lower		^					-			^		^	
Color Zone Sat Baise/Lower													
Zono Color Tomp Paiso / Lower													
Zone Tint Raise/Lower													
Zone mit Kaise/Lower													
Space and Preset Actions													
Preset Activate	x*	x		x*	x*	x*	x*	x*	x*	x*		x	
Preset Toggle	x*	х								x*		x	
Record													
Sequence Activate	х			x									
Sequence Toggle	х									х			
Space Combine Toggle	х									х			
Space Combine/Uncombine	х			x						х			
Space Off	x*	х		x*		x*		x*	x*	x*		х	
Space Raise/Lower	х		x							х	х		
Space Set to Color	х	х		x						х		x	
Space Set to Color Temp	х	х		x						х		х	
Space Set to Level	х	х		x	х	х	x	x	х	х		x	
Space Toggle	х	x								x		х	
Special Actions													
HSI Color Mode													
Color Temp Mode													
Studio Mode													
Space Lockout Toggle	х												
Space Lockout Enable/Disable	х			x									
Timeclock Hold Toggle	х	х								x		x	
Timeclock Hold Enable/Disable	x	x		x						×		x	

* Multi Space option available

	Room Co AV II	ontroller 1put	Room Controller - Gen2 Sensor Input							
	Momentary	Maintained		Momentary Maintained Occu						
	Contact Close	Contact Open/Close	Push	Double Tap	Hold	Open/Closed	Occupancy Event	Vacancy Event		
Selection Actions										
Saturation Raise/Lower										
Hue Raise/Lower										
Tint Raise/Lower										
Color Temp Raise/Lower										
Selection Raise/Lower										
Selection to Level										
Selection Toggle										
Zone Select										
Zana Astiana										
Zone Actions					~					
Zone Raise/Lower			X		x					
Zana Satta Calar										
Zone Set to Color Term			X	X		x				
Zone Set to Color Temp			X	X		X				
Zone Set to Level			X	x		x	x	X		
Zone loggie			X	x						
Color Zone Hue Raise/Lower										
Color Zone Sat. Raise/Lower										
Zone Color Temp Raise/Lower										
Zone Tint Raise/Lower										
Space and Preset Actions										
Preset Activate	x	x	x*	х		x*	x*	x*		
Preset Toggle	х		x*	х						
Record										
Sequence Activate			x			x				
Sequence Toggle			x							
Space Combine Toggle			x							
Space Combine/Uncombine			x			x				
Space Off	x	x	x*	х		x*		x*		
Space Raise/Lower			x		х					
Space Set to Color	x	x	x	х		x				
Space Set to Color Temp			x	х		x				
Space Set to Level	x	x	x	x		x	x	x		
Space Toggle	х		x	х						
Special Actions										
HSI Color Mode										
Color Temp Mode										
Studio Mode										
Space Lockout Toggle			x							
Space Lockout Enable/Disable			x			x				
Timeclock Hold Toggle			x	x						
Timeclock Hold Enable/Disable			x	x		x				

* Multi Space option available

New Features

For best performance and the most recent set of features, use ElahoAccess Mobile App v3.3.0 with ElahoAccess Interface v3.0 or higher and/or Elaho Expansion Bridge v3.0 or higher. The features discussed in this help system are available with the latest versions of Elaho control system components. The configuration pages displayed by ElahoAccess Mobile App for previous versions of components may appear different than what is described in this help system.

Version 3.3

• New 600W Forward Phase Dimmer - Gen 2 on page 80.



Main Office Squamish, BC, Canada Phone +1 778 733 0111 Email info@echoflexsolutions.com Web echoflexsolutions.com ©2019 Echoflex Solutions, Inc. Trademark and patent info: echoflexsolutions.com/ip Product information and specifications subject to change. Echoflex Solutions intends this document to be provided in its entirety. 8186M1250-3.3.0 Rev A Released 2019-12