



Type(s)
Project
Date
Notes

GENERAL INFORMATION

Distributed system integration - Elaho Contact Interfaces are available with 4-Input, Demand Response or 4-Output versions that provide simple and seamless integration with other control systems. The Elaho Contact Input Interface (ECII) and Demand Response Interface (EDRI) accept wet or dry contacts and uses the closure to execute lighting actions in your Elaho system. The Demand Response Interface allows a utility company to trigger a reduction of load within Elaho Control System Spaces. The Elaho Contact Output Interface (ECOI) provides triggers to control external devices. Additionally, the output interface can send Elaho system control status updates/messages/information, enhancing communications with building management systems.

APPLICATIONS

- Small theaters
- Hospitality
- Healthcare facilities
- Conference and meeting rooms
- Lobby spaces
- Retail
- Houses of worship

FEATURES

- Available with 4-inputs, Demand Response or 4-outputs
- Input and Demand Response interface support wet or dry contacts
- Inputs a support momentary or maintained closures (per input)
- Demand Reponse supports maintained closures
- Outputs provides triggers for third-party systems
- Outputs support normally open or normally closed operation (per output)
- Programmable through ElahoAccess mobile app
- Two-wire topology-free system gives you the freedom to easily place stations wherever they are needed
- DIN rail mounted for simple installation

REGULATORY AND COMPLIANCE

- cULus Listed
- CE Certified

ORDERING INFORMATION

Interface Stations

MODEL	DESCRIPTION
ECII	Contact Input Interface
EDRI	Demand Response Interface
ECOI	Contact Output Interface

Mounting Accessories

MODEL	DESCRIPTION
-DIN	Low-Voltage DIN-Rail Cover Kit

ELAHO POWER REQUIREMENTS

Contact Input Interface

Bus Power:	1 Unit of Control Power
Auxiliary Power:	40 mA

Demand Response Interface

Bus Power:	1 Unit of Control Power
Auxiliary Power:	40 mA

Contact Output Interface

Bus Power:	1 Unit of Output Power
Auxiliary Power:	40 mA

Elaho Presets (ECOI Only)

Supports 16 Presets

SPECIFICATIONS

FUNCTIONAL

- Integrates with all Elaho System products
- Input Interface provides four contacts in to trigger presets, zones, space combine, etc.
- One input per contact input interface can be used to trigger space occupancy
- Demand Response Interface provides trigger of Demand Response in Spaces, one space per input
- Output Interface opens and closes relays based on zone, preset, occupancy, or other control status

MECHANICAL

- Constructed of injection-molded black ABS plastic
- Five-unit-wide DIN Enclosure complies with DIN43880 (35/7.5 rail)
- Four integrated contact input terminals or four integrated contact output terminals
- Toggle switch for Basic and Custom and Config Mode
- Contact Status and power indicators
 - Green status indicator
 - Blue power indicator

ELECTRICAL

- Connects via two-wire control network through low-voltage Class 2 wiring + 24 VDC auxiliary power
 - Topology-free wiring over Belden 8471 or equivalent and one #14 ESD drain wire
 - Two #16 AWG wires for 24 VDC auxiliary power
 - Max draw 40 mA at 24 VDC
 - Supports optional use of Belden 1583A or equivalent Ethernet control wire when used with Cat5 termination accessories
 - Wiring may be bus, loop, homerun or any combination of these
 - Supports up to 500 m (1,640 ft) of control wiring
 - Up to 1,000 ft using Cat5
- MicroSD card slot for firmware maintenance
- Wire connections made using rising clamp screw terminals with support for 12–25 AWG (0.2 mm²–4 mm²) wire

CONTACT AND DEMAND RESPONSE INPUTS

- Four pairs of terminal connectors support In and V-Out per input
- Wet or dry contact closure per input
- Momentary or Maintained input supported per contact (Input Interface)
- Maintained input supports per contact (Demand Response)
- Each input supports up to 2,000 ft of 18 AWG wire (1000 ft to a switch, 1000 ft back to device), when device is fed with 24 VDC input
- LED status indicator per inout indicates current input state

CONTACT OUTPUTS

- Four sets of terminal connectors for relay outputs
 - Normally open "N.O.", normally closed "N.C.", and common "COM" connectors
 - Each output is rated for 2 A @ 30 VDC/VAC
- LED status indicator per inout indicates current output state

THERMAL

- Ambient room temperature: 0°–50° C (32°–122° F)
- Ambient humidity: Maximum 90% non-condensing

FUNCTIONALITY

BASIC MODE FUNCTIONALITY

Contact Input Interface

- Basic Mode
 - Inputs control Presets 1-4 (momentary)
 - Close / Open event: Toggle Preset
 - Contact held closed: Space Raise
 - Contact closed in rapid succession: Quick Toggle Preset
- Custom Mode without ElahoAccess Configuration
 - Inputs control Presets 1-4 (maintained)
 - Close/ Open event: Toggle Preset

Demand Response Interface

- Inputs trigger Demand Response in Spaces 1-4 (Default)

Contact Output Interface

- Basic Mode
 - Relays outputs are controlled by Zones 1-4
 - Zone at 0: Contact Open
 - Zone above 0: Contact Closed
- Custom Mode without ElahoAccess Configuration
 - Relay outputs are controlled by the status of Presets 1-4
 - When the status of an assigned Preset is active, the corresponding relay output will be closed
 - When the status of an assigned preset is inactive, the corresponding relay will be open

FUNCTIONALITY

CUSTOM MODE FUNCTIONALITY

(Requires Programing with ElahoAccess Mobile App and additional hardware)

Contact Input Interface (Momentary)

- Push: 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
- Double Tap: 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
- Hold: No Function, Zone Lower, Zone Raise, Space Lower, Space Raise

Contact Input Interface (Maintained)

- Maintained Open: 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: 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

Contact Input Interface (Occupancy) - One per interface

- Occupancy: No Function, Preset Activate, Zone Set to Level, Space Set to Level
- Vacancy: No Function, Preset Activate, Zone Set to Level, Space Off, Space Set to Level

Demand Response Interface

- Each contact can be assigned to trigger Demand Response in any Space or collection of Spaces
- A Space can only be assigned to a single contact

Contact Output Interface

- Zone Status: If value is non-zero the output will be closed
- Preset Status: If Preset is active the output will be closed
- Space Combine Status: If combined output will be closed
- Space Occupancy Status: If Occupied contact will be closed
- Space Off: If Space is off contact will be closed

ELAHO FAMILY PRODUCTS

Bus Power Supplies

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

ElahoTouch

MODEL	DESCRIPTION
ETS	ElahoTouch Controller Mk2

Elaho Stations

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

Elaho Responsive Controls

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

Elaho Interfaces

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

Zone Controllers

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

Room Controllers

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

Panel Products

MODEL	DESCRIPTION
ERP	Elaho Relay Panel Mains Feed
ERPA	Elaho Relay Panel Mains Feed 277 V
ERP-FT	Elaho Relay Panel Feedthrough

PHYSICAL

Product Dimensions

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	in	mm	in	mm	in	mm	lb	kg
ECII	3.5	90	3.0	76	1.0	25	0.22	0.10
EDRI	3.5	90	3.0	76	1.0	25	0.22	0.10
ECIO	3.5	90	3.0	76	1.0	25	0.22	0.10

