



Type(s)

Project

Date

Notes

GENERAL INFORMATION

Elaho 0-10V Dimming Controllers offer fully-rated 20-amp relays coupled with 0–10 V dimming for direct control of compatible LED drivers and fluorescent dimming ballasts. The Controller mounts to fixtures and electrical junction boxes.

APPLICATIONS

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

FEATURES

- Single- and dual-zone options
- 20 A fully-rated relay for use with general purpose, tungsten, fluorescent and LED loads
- Fully isolated 0–10 V dimming for direct connection to dimming ballasts and LED drivers
- 120/277 VAC power input
- Plug and Play: ready to go out of the box, no software or external programming required
- Supports Elaho control stations and responsive controls
- Supports Demand Response via station bus
- Two-wire topology-free system gives you the freedom to put stations where you need them
 - Up to 16 control products
 - Up to 16 output products
 - Up to 500 m (1,640 ft) of control wire per system

REGULATORY AND COMPLIANCE

- cULus LISTED
- Rated for plenum use

ORDERING INFORMATION

0-10V Dimming Controller

MODEL	DESCRIPTION
ELD-G2	Single-zone 0–10 V Controller
EDLD-G2	Dual-zone 0–10 V Controller

Accessories

MODEL	DESCRIPTION
E4VB	4" Box with voltage barrier

Power Requirements

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

Presets

Supports 16 Presets

SPECIFICATIONS

FUNCTIONAL

- Control for individual fixtures, zone power and 0–10 V dimming for fluorescent ballasts and LED drivers
- Plug and Play: ready to go out of the box, no software or external programming required
- Interacts with Elaho control stations and responsive controls

MECHANICAL

- Constructed of injection-molded ABS plastic
- Single-zone and dual-zone options
- Button interface and LED indicator per zone for configuration
- Rotary dials for selection of space and zone number
- Half-inch conduit knockout mounted
- Mains-voltage and 0–10 V wiring exits through knockout mount
- Station bus wiring exits through side of controller
- Optional mounting plate available for applications that require low-voltage wiring to be in conduit
- MicroSD for field software upgrades
- Mains power input:
 - 12 AWG Hot - Black
 - 14 AWG Neutral - White
- Relay output:
 - Zone 1, 12 AWG - Red
 - Zone 2, 12 AWG - Red/White (Dual-zone only)
- 0-10V dimming output:
 - Zone 1, 22 AWG - Violet and Gray
 - Zone 2, 22 AWG - Violet/White and Gray/White (Dual-zone only)
- Control connection:
 - Control, 18 AWG - Black and White
 - Ground, 18 AWG - Green/Yellow

ELECTRICAL

- 120–277 V, 60 Hz power input
- Normally Open (NO) 20 A fully-rated relay
- 0–10 VDC ballast control (sink) rated for 100 mA maximum, fully isolated from ground
- Class 2 control network
 - Topology-free wiring using Belden 8471 or equivalent and one #18 ESD drain wire
 - Wiring may be bus, loop, homerun or any combination of these
- Up to 500 meters (1640 feet) of control wiring per system
- Optional Cat5/5e wiring using Belden 1583A or equivalent
 - Requires optional Cat5 termination accessories
- cULus LISTED
- Conforms to UL 508 and UL 2043

THERMAL

- Ambient room temperature: -10°–45°C (14°–113°F)
- Ambient humidity: 5–95% non-condensing

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
EEI	Elaho-Echoflex Interface
ECII	Contact Input Interface
ECOI	Contact Output Interface
EDRI	Demand Response Interface
EBI	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

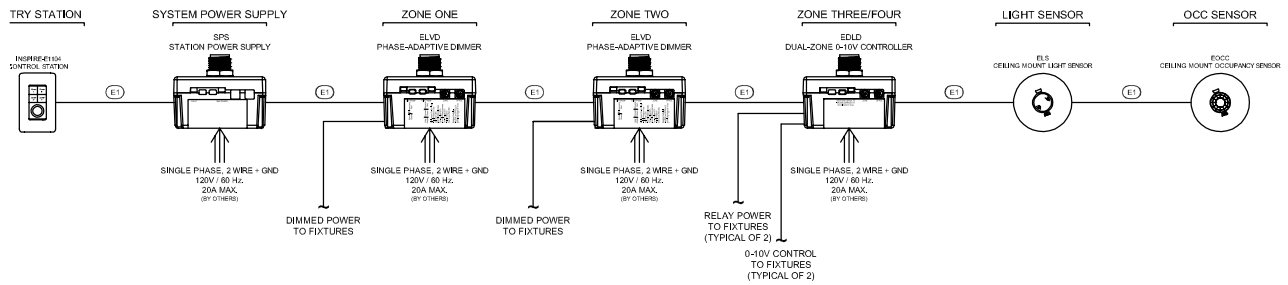
MODEL	DESCRIPTION
ERMC4-G2	Four Zone Room Controller
ERMCT4-G2	Four Zone Room Controller with TimeClock
ERMC8-G2	Eight Zone Room Controller
ERMCT8-G2	Eight Zone Room Controller with TimeClock

Panel Products

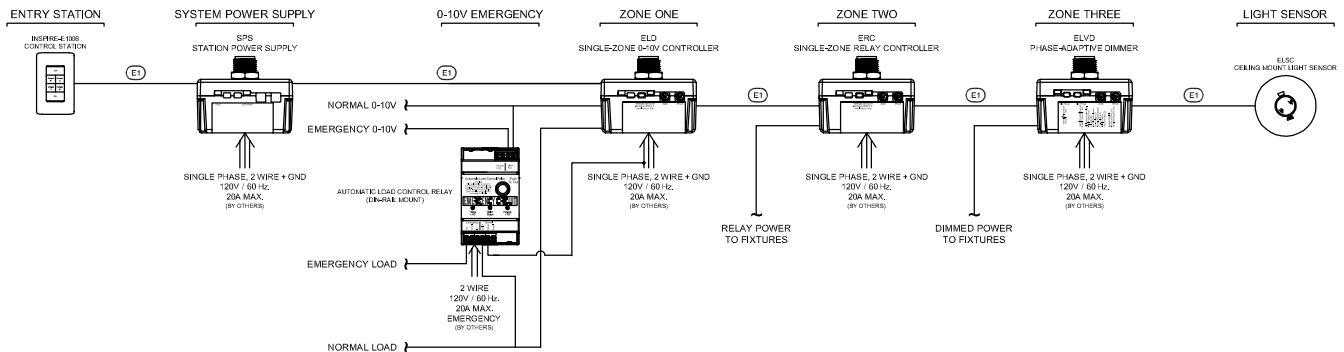
MODEL	DESCRIPTION
ERP	Elaho Relay Panel Mains Feed
ERPA	Elaho Relay Panel Mains Feed 277 V
ERP-FT	Elaho Relay Panel Feedthrough

SAMPLE SYSTEMS

SMALL SYSTEM



CONFERENCE ROOM



PHYSICAL

Dimmer Dimensions

MODEL	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
ELD-G2	2.0	50.8	3.5	88.9	3.0	76.2
EDLD-G2	2.0	50.8	3.5	88.9	3.0	76.2

Dimmer Weights

MODEL	WEIGHT	
	lb	kg
ELD-G2	0.75	0.34
EDLD-G2	0.75	0.34

