

Echo Distributed Power Series



Type(s)

Project

Date

Notes

GENERAL INFORMATION

The Echo 600 W Dimmers provide line dimming of various load types. The Phase Adaptive dimmer is perfect for Electronic Low Voltage (ELV), Incandescent, and Fluorescent loads, while the Forward Phase dimmer is better suited for Magnetic Low Voltage (MLV) loads. The dimmers mount to an electrical junction box.

APPLICATIONS

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

FEATURES

- Single-channel, 600-watt dimmer
- Forward or Reverse-phase dimming options
- 120 V or 277 V power input
- Plug and Play: ready to go out of the box, no software or external programming required
- Supports Unison Echo control stations and responsive controls
- EchoConnect: Two-wire topology-free system gives you the freedom to put station where you need them
 - Up to 16 Echo control products
 - Up to 16 Echo output products
 - Up to 500 m (1,640 ft) of control wire per system

REGULATORY AND COMPLIANCE

- cULus Listed
 - Conforms to UL 508 and UL 2043
- Rated for plenum use
- Supports Demand Response via EchoConnect

ORDERING INFORMATION

Echo Line Voltage Dimmer

MODEL	DESCRIPTION
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)

Accessories

MODEL	DESCRIPTION
E4VB	4 in Box with Voltage Barrier

Echo Power Requirements

EchoConnect	One unit of output power
Auxiliary Power	Not required

Echo Presets

Supports 16 Echo Presets



SPECIFICATIONS

FUNCTIONAL

- Control individual fixtures or power for tungsten, line-voltage LED and other general-purpose loads
- Supports loads up to 600 W, minimum of 1 W
- Phase Adaptive Dimmer provides automatic detection of required dimming mode (forward or reverse phase) with manual override selection
- Plug and Play: ready to go out of the box, no software or external programming required
- Interacts with Echo Responsive Controls and Stations

MECHANICAL

- Constructed of injection-molded ABS plastic
- 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 wiring exits through knockout mount
- EchoConnect wiring exits through side of controller
- microSD for field software upgrades
- Optional mounting plate available for applications that require low-voltage wiring to be in conduit
- External heatsink
- Mains power input:
 - 2.5 mm² (14 AWG) Hot - Black (120 V), Brown (277 V)
 - 2.5 mm² (14 AWG) Neutral - White
 - 2.5 mm² (14 AWG) Ground - Green/Yellow
- Dimmed output:
 - 2.5 mm² (14 AWG) Red
- EchoConnect Control Connection:
 - 1 mm² (18 AWG) Data- Black
 - 1 mm² (18 AWG) Data+ White
 - 1 mm² (18 AWG) Ground Green/Yellow

ELECTRICAL

- 120 V or 277 VAC, 50/60 Hz power input
- Phase-adaptive dimming variant, default reverse phase, auto-switches to forward phase depending on load type
- Forward phase dimming variant for magnetic loads dims in forward-phase only
- 600W load capacity
- EchoConnect Class 2 control network
 - Topology-free wiring using Belden 8471 or equivalent and one 1 mm² (18 AWG) ESD drain wire
 - Wiring may be bus, homerun or any combination of these
- Up to 500 m (1,640 ft) of control wiring per system
- Optional Cat5/5e wiring using Belden 1583A or equivalent
 - Requires optional Cat5 termination accessories

THERMAL

- Ambient room temperature: -10°C to 50°C (14°F to 113°F)
- Ambient humidity: 5%–95% non-condensing

ECHO FAMILY OF PRODUCTS

EchoConnect Power Supplies

MODEL	DESCRIPTION
E-SPS	6 U Room Station Power Supply, Knockout Mount
E-SPS-DIN Mk2	16 U DIN rail Station Power Supply with 24 V Aux
E-SPM-A	16 U DRd Station Power Module with 24 V Aux
E-APS2	24 V Aux Power Supply, Knockout Mount

EchoTouch

MODEL	DESCRIPTION
ETS	EchoTouch Controller Mk2

Echo Stations

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

Echo Responsive Controls

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

Echo Interfaces

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

Zone Controllers

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

Room Controllers

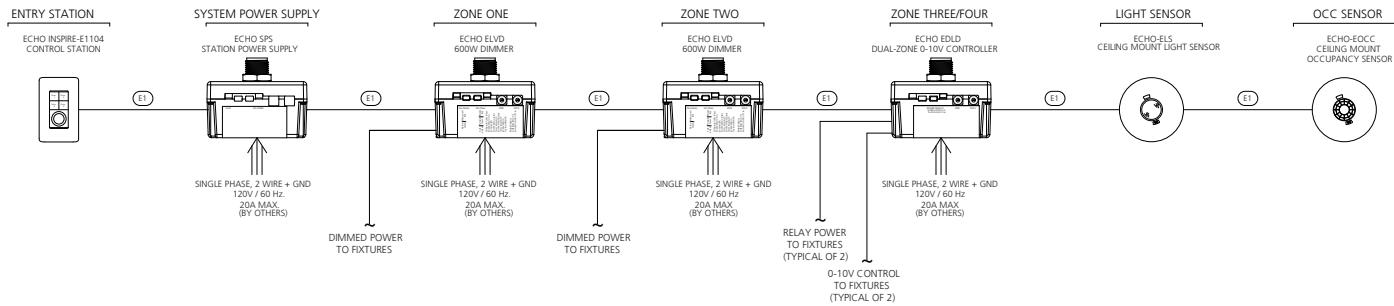
MODEL	DESCRIPTION
ERMC4-G2	Four Zone Room Controller
ERMCT4-G2	Four Zone Room Controller with TimeClock
ERMC8-G2	Eight Zone Room Controller
ERMCT8-G2	Eight Zone Room Controller with TimeClock

Panel Products

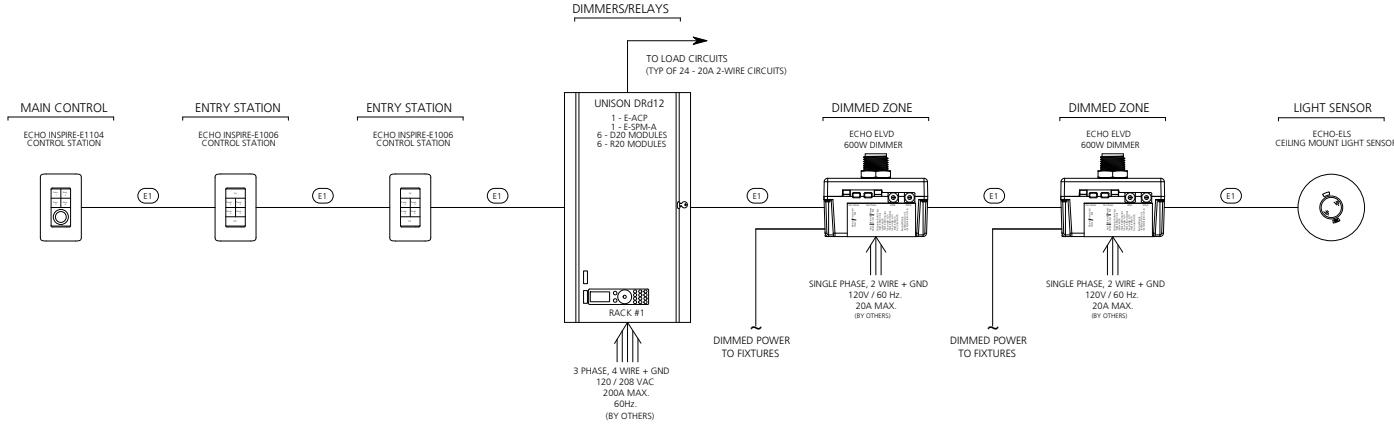
MODEL	DESCRIPTION
ERP	Echo Relay Panel Mains Feed
ERPA	Echo Relay Panel Mains Feed 277 V
ERP-FT	Echo Relay Panel Feedthrough
IQ	Sensor IQ Intelligent Breaker System
SR3	Sensor3 Power Control System
DRd	Unison DRd with Echo Control

SAMPLE ECHO SYSTEMS

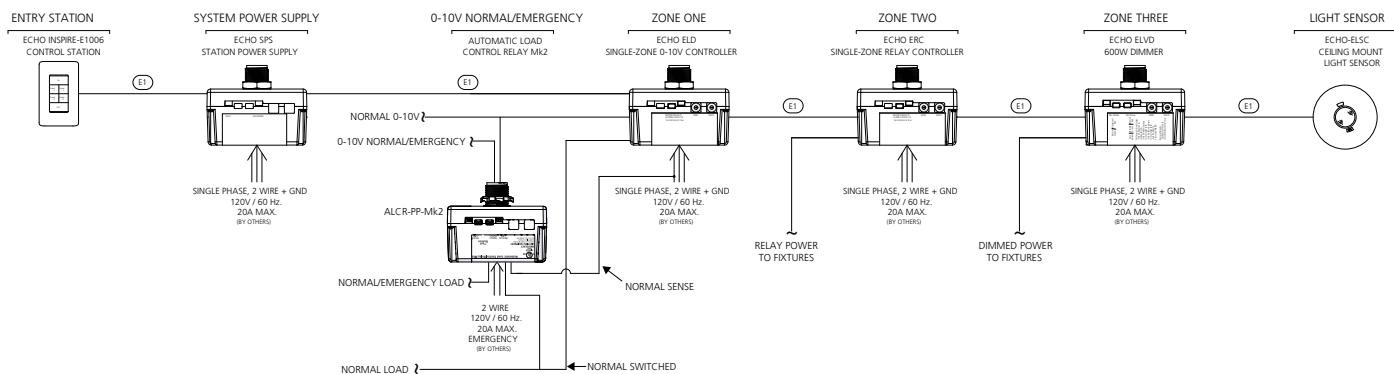
SMALL SYSTEM



MEDIUM SYSTEM

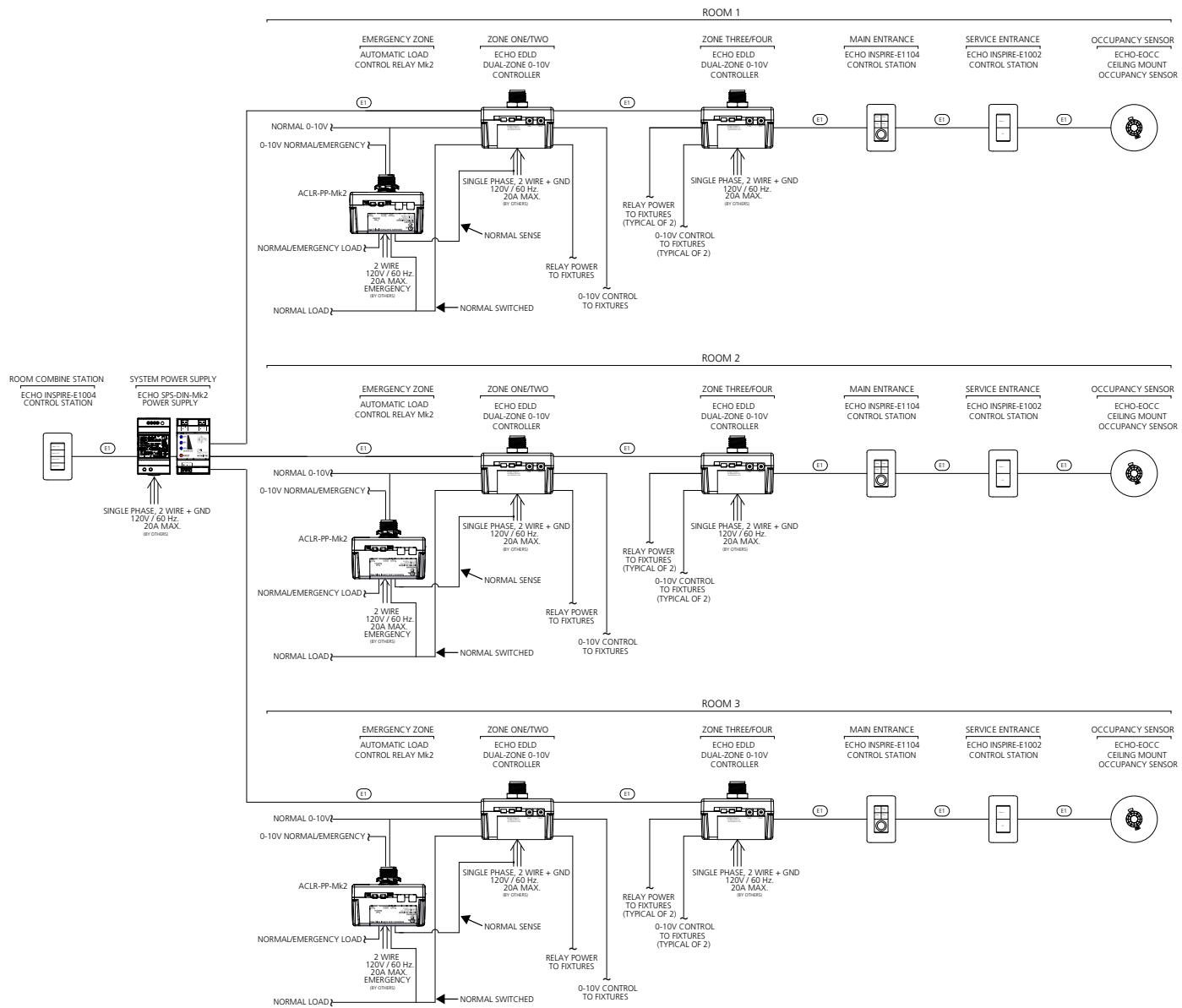


CONFERENCE ROOM



SAMPLE ECHO SYSTEMS

MEDIUM BALLROOM



PHYSICAL

Dimmer Dimensions[†]

MODEL	HEIGHT		WIDTH		DEPTH	
	mm	in	mm	in	mm	in
ELVD-G2 (All Variants)	51	2.0	89	3.5	77	3.0

Dimmer Weight[†]

MODEL	WEIGHT	
	kg	lb
ELVD-G2 (All Variants)	0.4	0.8

[†] Dimensions and weights are typical.

