



Type(s)

Project

Date

Notes

## GENERAL INFORMATION

Buildings waste electricity as a result of lights being left on in an unoccupied room. Echo Occupancy and Vacancy Sensors are a convenient and simple solution for any facility to eliminate wasted energy by automatically turning off lighting loads when a room is empty. The low-profile, sleek sensors can be installed anywhere to provide uninterrupted, 24/7/365 operation, without affecting the look and beauty of their surroundings.

### APPLICATIONS

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

### FEATURES

- Supports for occupancy or vacancy detection as required
- Passive infrared (PIR) sensing technology
- Three versions available:
  - Large room
  - Small room
  - High ceiling
- Walk-thru mode for coverage verification
- Field-installed coverage masks
- Options for manual-on/auto-off (Vacancy Sensor) and auto-on/off (Occupancy Sensor)
- EchoConnect: two-wire, topology-free bus for power and communication
- Multi Space Preset functionality
- Available in white and black

### REGULATORY AND COMPLIANCE

- cULus Listed
- CE compliant

## ORDERING INFORMATION

### Echo Occupancy and Vacancy Sensors

MODEL	DESCRIPTION
EOCC	Occupancy Sensor with 2,000 sq. ft. coverage*
EOCC-SR	Occupancy Sensor with 500 sq. ft. coverage*
EOCC-HC	Occupancy Sensor for high ceilings
EVAC	Vacancy Sensor with 2,000 sq. ft. coverage*
EVAC-SR	Vacancy Sensor with 500 sq. ft. coverage*
EVAC-HC	Vacancy Sensor for high ceilings

\*Measurements based off 3 m (9 ft) ceiling height. For specific coverage patterns, see [page 6](#).

Note: Sensors come standard in pure white (RAL 9010). Add -4 to the end of any model number for black (RAL 9004).

### Echo Power Requirements

EchoConnect:	One unit of control power
Auxiliary Power:	Not required



## SPECIFICATIONS

## FUNCTIONAL

- Occupancy sensors supports configurable auto-on/auto-off functionality (occupancy sensing) functions
- Vacancy sensors supports configurable manual-on/auto-off (vacancy sensing) functions
- 360 degree coverage pattern
  - Includes configurable coverage masks
- Connects to EchoConnect, no additional power pack required
- Supports walk-thru mode for verifying coverage area
  - Sensor lens illuminates for walk-thru and test mode operation
- Three coverage options available

Model	Coverage m <sup>2</sup>	Coverage ft <sup>2</sup>
Small Room Sensor	41.8 m <sup>2</sup> at 2.4 m	450 ft <sup>2</sup> at 8 ft
	74.3 m <sup>2</sup> at 6.7 m	800 ft <sup>2</sup> at 12 ft
Large Room Sensor	167 m <sup>2</sup> at 2.4 m	1800 ft <sup>2</sup> at 8 ft
	279 m <sup>2</sup> at 6.7 m	3000 ft <sup>2</sup> at 12 ft
High Ceiling Sensor	28 m <sup>2</sup> at 2.4 m	300 ft <sup>2</sup> at 10 ft
	650 m <sup>2</sup> at 12.2 m	7000 ft <sup>2</sup> at 40 ft

- Sensor coverage tested to NEMA WD 7-2000

## MECHANICAL

- Constructed of injection-molded, ABS plastic in Pure White (RAL 9010) or Black (RAL 9004)
- Electronics assembly and mounting plate included
- Two cantilevered configuration buttons
- No visible means of attachment
- Surface- or box-mountable using included mounting plate
  - Supports drywall, plaster, wood and concrete mounting
  - Mounts to any standard electrical box (supplied by others)
  - Mounts to compressed fiber ceilings with included wire form
- Field-installed lens mask allow customized occupancy detection fields

## ELECTRICAL

- Connect via EchoConnect two-wire control network utilizing low-voltage Class 2 wiring
  - Topology-free and polarity-independent wiring over Belden 8471 or equivalent and one 2.5 mm<sup>2</sup> (14 AWG) ESD drain wire
  - Wiring may be bus, loop, home run or any combination of these
- Up to 500 meters (1,640 feet) of control wiring per system
- Supports optional Cat5/5e wiring using Belden 1583A or equivalent
  - Requires optional Cat5 termination accessories
- cULus, CE Certified

## ENVIRONMENTAL

- Ambient room temperature: 0°–40° C (32°–104° F)
- Ambient humidity: Maximum 90% (non-condensing)

## FUNCTIONALITY

## BASIC MODE FUNCTIONALITY

- Occupancy Sensor
  - Occupancy Event: Play selected default preset
  - Vacancy Event: Space off
- Vacancy Sensor
  - Occupancy Event: N/A
  - Vacancy Event: Space off

## CUSTOM MODE FUNCTIONALITY

Custom configuration with EchoAccess App and additional connection hardware.

- Occupancy Events Supported
  - Preset Activate\*
  - Zone Set to Level
  - Space Set to Level
- Vacancy Events Supported
  - Preset Activate\*
  - Zone Set to Level
  - Space Set to Level
  - Space Off\*

\*Multi-Space capable allowing for presets to be recalled in multiple spaces from a single control.

## ECHO FAMILY OF PRODUCTS

## EchoConnect 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-SPM-A	16 U DRd Station Power Module with 24 V Aux
E-APS	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
EEl	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

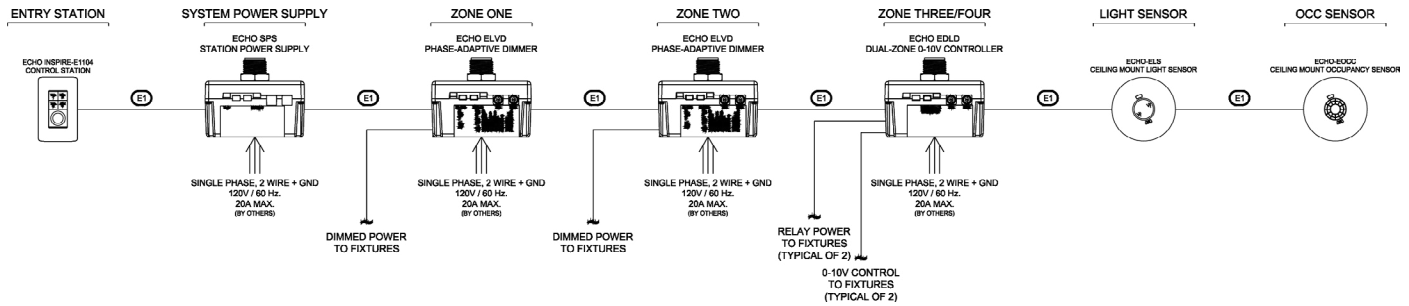
MODEL	DESCRIPTION
ERMC4-G2	Four Zone Room Controller
ERMCT4-G2	Four Zone Room Controller with TimeClock
ERMC8-G2	Eight Zone Room Controller
ERMCT8-G2	Eight Zone Room Controller with TimeClock

## Panel Products

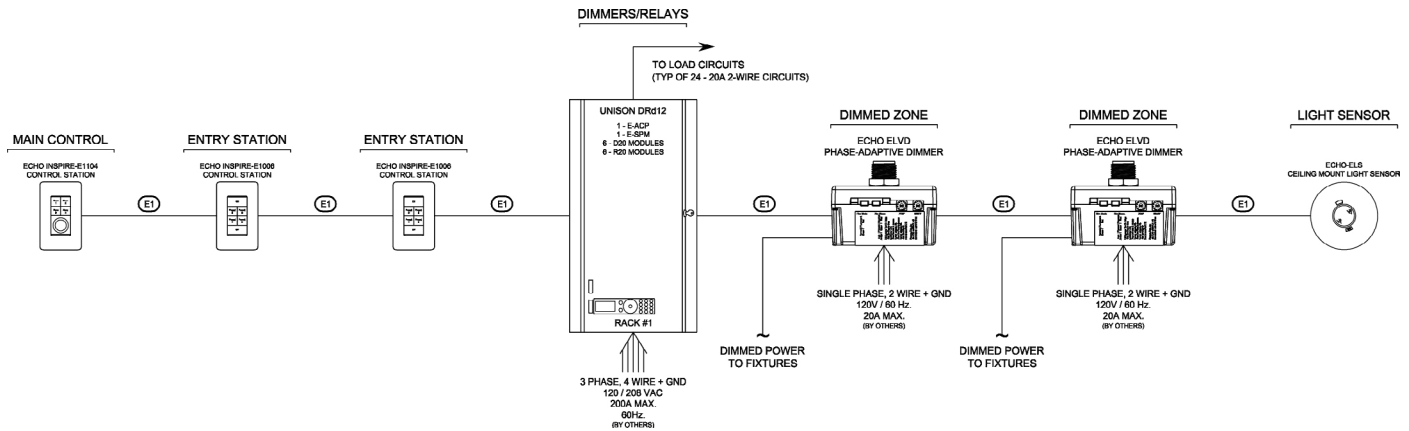
MODEL	DESCRIPTION
ERP	Echo Relay Panel Mains Feed
ERP-FT	Echo Relay Panel Feed Through
IQ	Sensor IQ Intelligent Breaker System
SR3	Sensor3 Power Control System
DRd	Unison DRd with Echo Control

## SAMPLE ECHO SYSTEMS

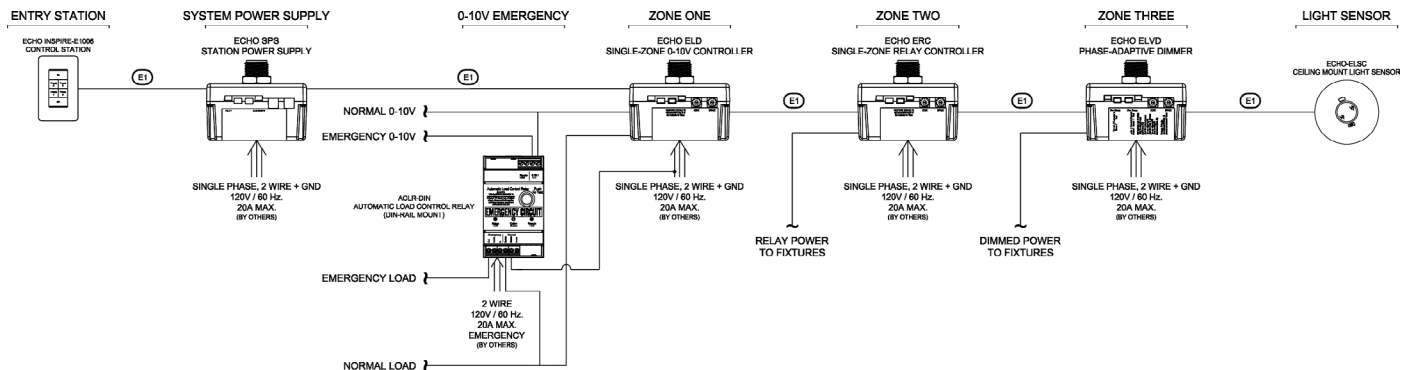
## SMALL SYSTEM



## MEDIUM SYSTEM

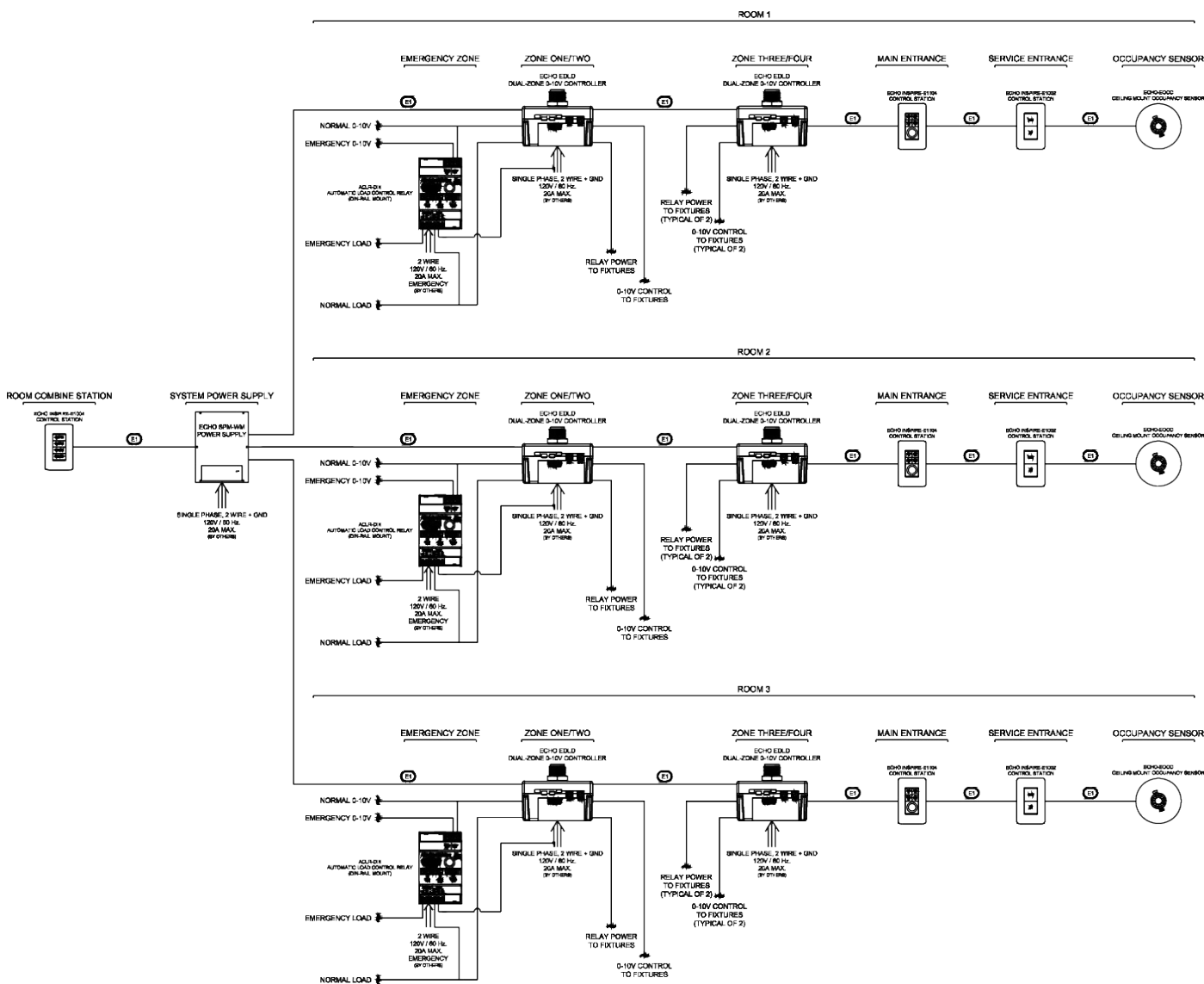


## CONFERENCE ROOM

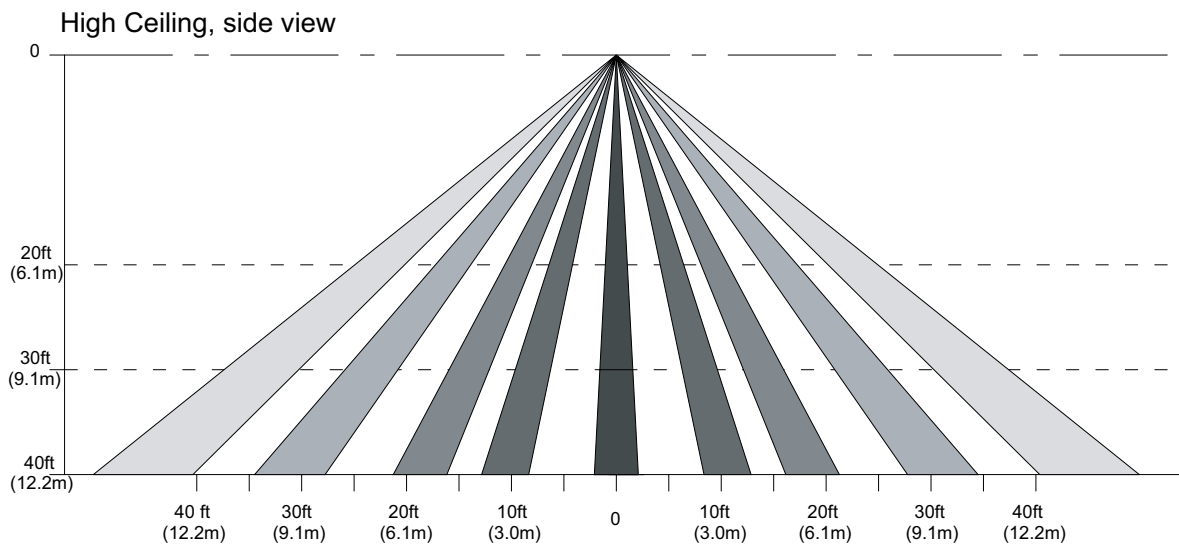
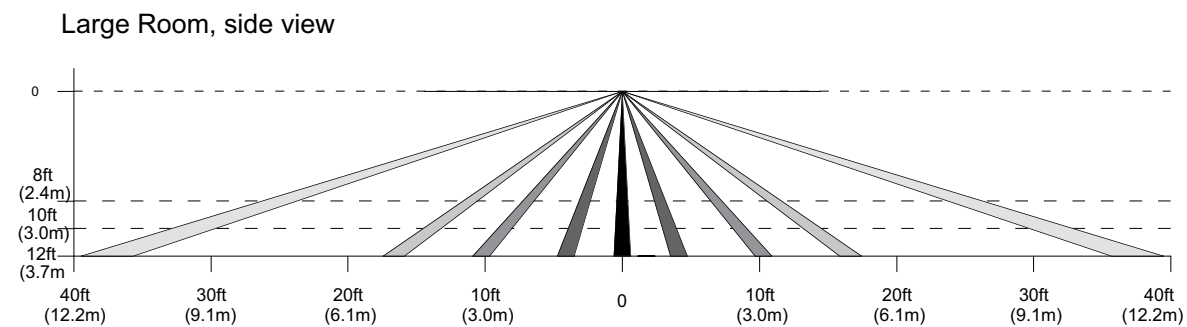
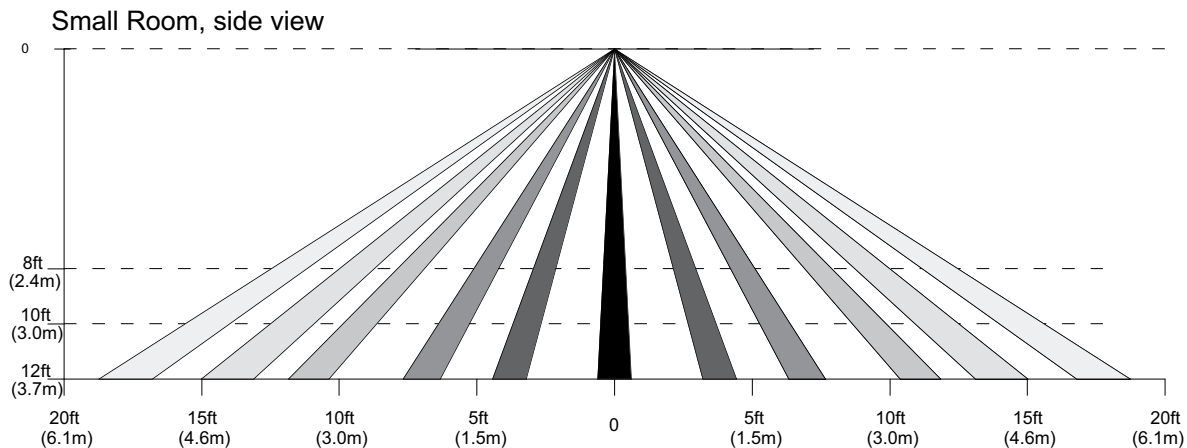


## SAMPLE ECHO SYSTEMS

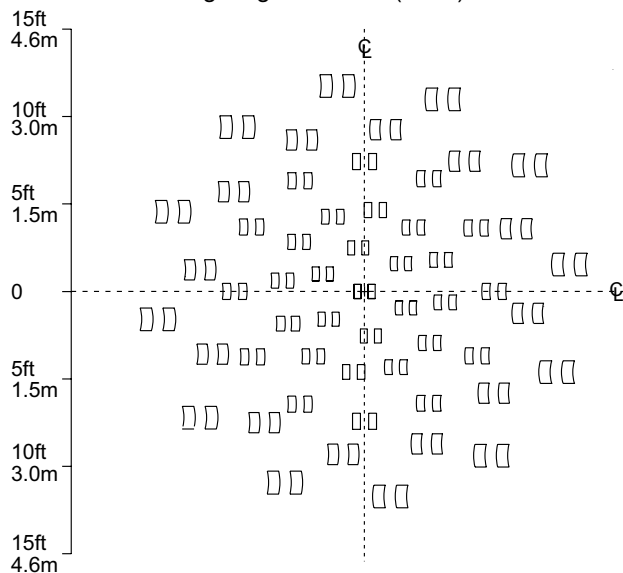
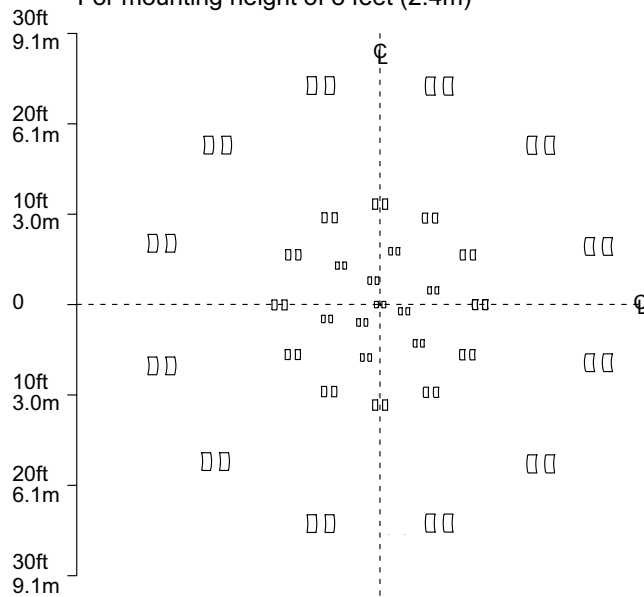
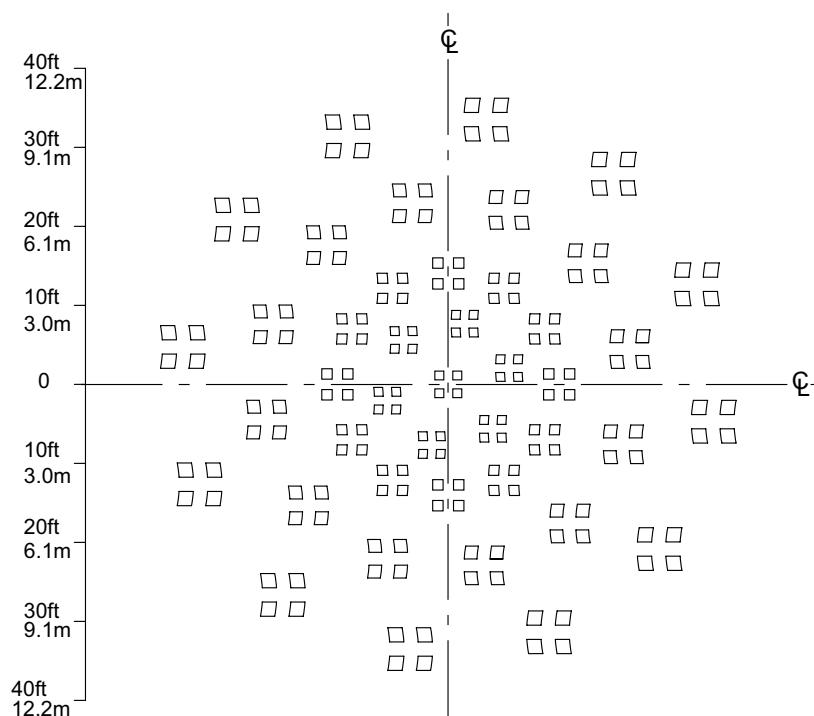
## MEDIUM BALLROOM



## CEILING MOUNT COVERAGE PATTERNS



## FLOOR COVERAGE PATTERNS

**Small Room Floor Coverage**  
For mounting height of 8 feet (2.4m)**Large Room Floor Coverage**  
For mounting height of 8 feet (2.4m)**High Ceiling Floor Coverage**  
For mounting height of 30 feet (12.2m)

## PHYSICAL

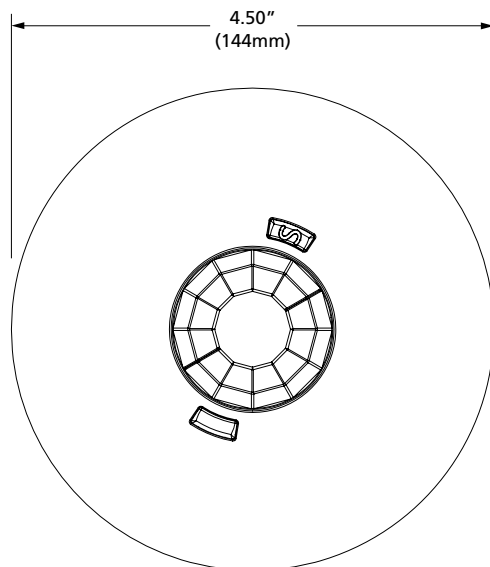
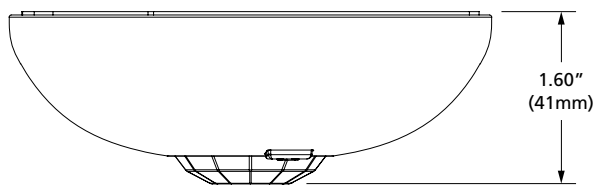
## Sensor Dimensions\*

MODEL	DIAMETER		DEPTH	
	in	mm	in	mm
EOCC	4.50	144	1.60	41
EVAC	4.50	144	1.60	41

## Sensor Weights\*

MODEL	WEIGHT		SHIPPING WEIGHT	
	oz	g	oz	g
EOCC	4	111	8	224
EVAC	4	111	8	224

\*Weights and dimensions typical



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