

# GE Lighting Controls

## GE Aware™

### Ultrasonic Ceiling Low Voltage Occupancy Sensor

## CUS

#### Overview

GE ultrasonic ceiling sensors automatically control lighting and other electrical loads based on the presence (or absence) of people.

#### US Technology

The sensors produce a low-intensity, inaudible sound that detects changes in acoustic waves caused by motion such as walking into a room, reaching for a telephone or turning a swivel chair. The sensors do not respond to audible sound. When motion is detected, the relay in the connected GE Switchpack is closed and lights are turned on. If no motion occurs within a pre-set period of time, lights are turned off.

This full-line of stylishly-designed ultrasonic occupancy sensors can be used either individually or in combination to provide lighting and HVAC control throughout a building. These ultrasonic sensors provide complete no-gap coverage and the NEMA WD7 Guide robotic method was utilized to verify coverage patterns. Manual override switch turns lights on in case of sensor malfunction.

The advanced ultrasonic technology accurately ignores sources of continuous noise by self-adjusting which creates the first truly "wire to walk away" occupancy sensor. Its wide selection of interface options allows connection to virtually any Building Automation System for additional installation savings. The self-adjusting technology eliminates the need for sensitivity adjustments and time delays.

The CUS (-R) offers the most versatile connections available. When connecting the CUS (-R) to a BAS, any of the following may be used: (1) Form C relay output, (2) open collector output, and (3) direct BAS connection. See Power Requirements and Wiring Diagram.

#### Ordering

Product Code	Model	Color	Coverage	Field of View
63275	CUS-05-180	White	Up to 450 sq. ft.	180° (One way)
63276	CUS-05-180-R	White	Up to 450 sq. ft.	180° (One way)
63277	CUS-10-180	White	500 to 1,000 sq. ft.	180° (One way)
63278	CUS-10-180-R	White	500 to 1,000 sq. ft.	180° (One way)
63279	CUS-20-360	White	1000 to 2,000 sq. ft.	360° (Two way)
63280	CUS-20-360-R	White	1000 to 2,000 sq. ft.	360° (Two way)



**Technology:** Ultrasonic (US)

#### Electrical Ratings:

##### Input:

- 10-30VDC from GE Switchpack or GE System. Maximum current needed is 25mA per sensor.

##### Output:

- Open collector output to switch up to ten GE Switchpacks.
- Isolated Form C Relay (-R models)
- Isolated Form C Relay Ratings: 1A 30VDC/VAC

#### Operating Environment:

- Temperature: 60° F – 80° F (15° C – 26° C)
- Relative Humidity: up to 95% non-condensing
- For indoor use only

**Time Delays:** Self-Adjusting from 10 min. to 30 min.

#### Housing:

- Medium impact injection molded housing. ABS resin complies with UL 94V0. Paintable off-white.

#### Size:

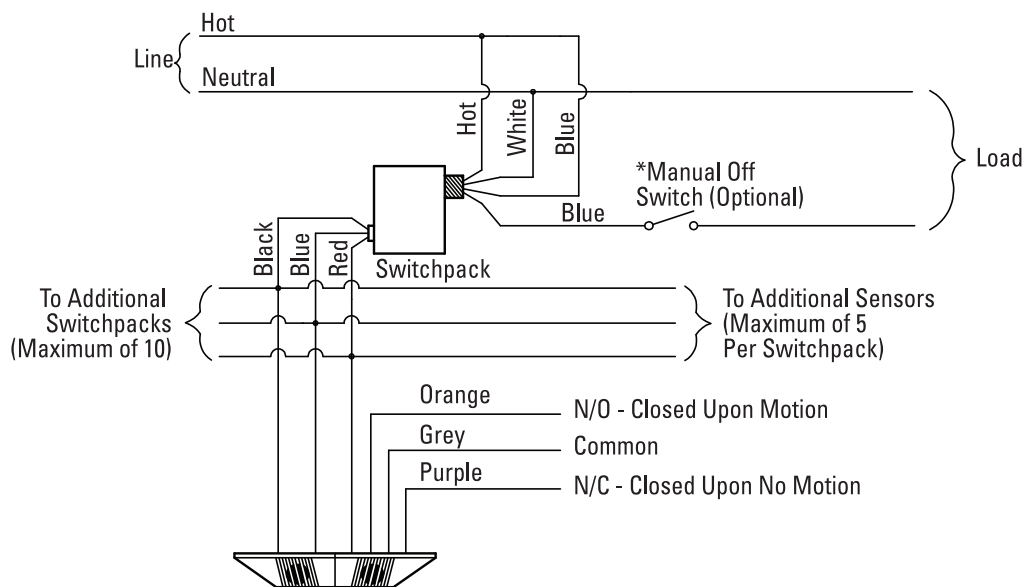
- **CUS-05 and CUS-10:**  
3.25"D x 4.75"W x 1"H (82.6mm x 120.7mm x 25.4mm)
- **CUS-20:**  
3.75"D x 6"W x 1"H (95.25mm x 152.4mm x 25.4mm)

**LED Indicators:** Amber LED (CUS-05) or Blue LED (CUS-10 and CUS-20) indicate US detection.



Wiring Diagram (consult instruction sheet for other wiring options)

**WARNING**  
 Risk of electric shock  
 • Turn power off before servicing  
 • Install per National Electric Code

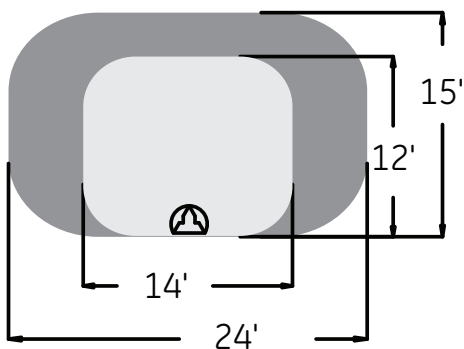


Coverage

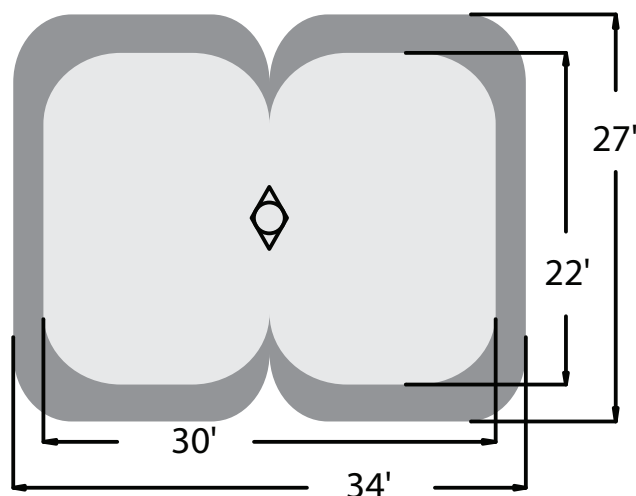
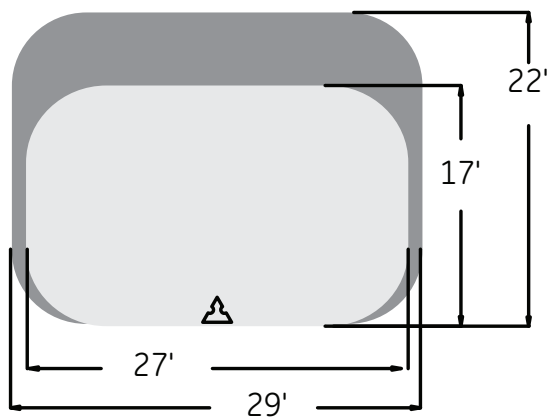
CUS-20-360

Minor Major

CUS-05-180



CUS-10-180



Settings

	1 On Mode	2 Lighting Sweep	3 Time Delay	4 Override
Position 2	Manual On	Enabled	30 minutes	Override
Position 1	Auto On	Not Enabled	Self Adjusting	Normal

