

Dual Technology Ceiling Mount Sensor



The LOS-CDT Series ceiling-mount dual-technology sensors can integrate into Lutron systems or function as stand-alone controls using a Lutron power pack. The technology eliminates manual sensitivity and timer adjustments during installation and over the life of the product.

Features

- Intelligent, continually adapting sensor
- Ultrasonic (US) combined with passive infrared (PIR) sensing provide high sensitivity, high noise immunity, and excellent false tripping immunity
- Suited for complex environments that are difficult to control with single-technology sensors
- Snap-locks to ceiling-mounted cover plate
- Non-Volatile Memory: settings saved in protected memory are not lost during power outages
- 500 to 2,000 sq.ft. (46 to 186 m²) coverage when mounted on an 8 - 12 ft. (2.4 to 3.7 m) ceiling; 180° and 360° field of view
- Affords choice of turning lights off or dimming to a preset level in the unoccupied state when integrated with a Lutron system.

Models Available

Cat. No.	Color	Coverage	Field of View
LOS-CDT-500-WH	White	500 sq.ft. (46 m ²)	180°
LOS-CDT-500R-WH	White	500 sq.ft. (46 m ²)	180°
LOS-CDT-1000-WH	White	1,000 sq.ft. (93 m ²)	180°
LOS-CDT-1000R-WH	White	1,000 sq.ft. (93 m ²)	180°
LOS-CDT-2000-WH	White	2,000 sq.ft. (186 m ²)	360°
LOS-CDT-2000R-WH	White	2,000 sq.ft. (186 m ²)	360°

Self-Adaptive Feature

The LOS-CDT Series ceiling-mount occupant sensors combine both (US) motion detection for maximum sensitivity and passive infrared (PIR) motion detection for false triggering immunity. The self-adapting internal microprocessor analyzes the composite sum of both signals to eliminate time-consuming adjustments and callbacks found in non-intelligent sensors.

Job Name:	Model Numbers:
Job Number:	

Specifications

Timer Adjustment

- Automatic mode: Continually adapting sensor automatically adjusts settings to the space
- Manual mode: 8 to 30 minutes
- Test mode: 8 seconds

LED Lamp

- Red: infrared motion detected
- Green: ultrasonic motion detected

Housing

- Rugged, high-impact, injection-molded plastic
- Color-coded leads 6 in. (15 cm)

Power

- Operating voltage: 20 - 24 V $\overline{=}$, PELV (Class 2: USA) low-voltage
- Operating current: 33 mA nominal
- Control output: 20 - 24 V $\overline{=}$ active high logic control signal with short-circuit protection, open collector when unoccupied

Operating Environment

- Temperature: 32 to 104 °F (0 to 40 °C)
- Relative humidity: less than 95%, non-condensing
- For indoor use only

Adaptive Functions

- Installation: 60 minutes
- Learning: 4 weeks for response to error conditions, air current adaptation, and timer optimization
- Post-learning occupancy periods
 - 24-hour circadian occupancy periods learned
 - Weekly occupancy periods learned
- Adjustments in post-learning period
 - Generally occupied periods (threshold = high-sensitivity mode)
 - Generally unoccupied periods (threshold = miser mode)

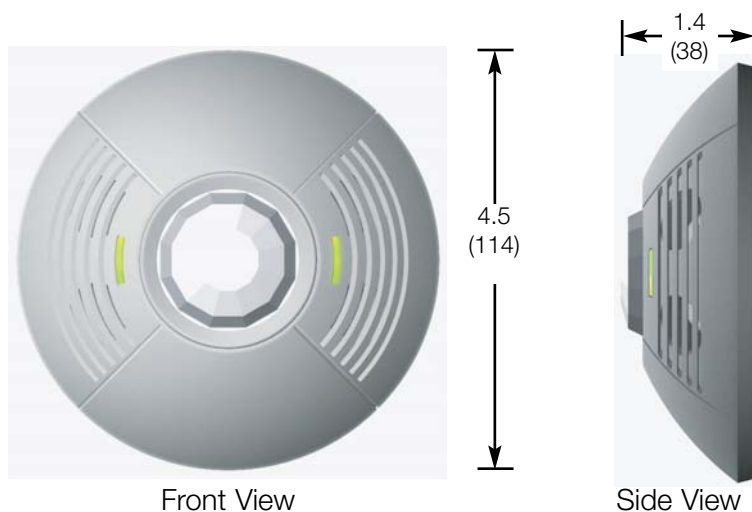
Contact Rating (R Models only)

- SPDT 500 mA rated at 24 V $\overline{=}$ isolated relay

Photo Cell (R Models only)

- Prevents light from turning on when there is sufficient natural light
- Sensitivity: 0 - 1,000 LUX adjustable

Dimensions



Measurements are in inches (mm)

Job Name:

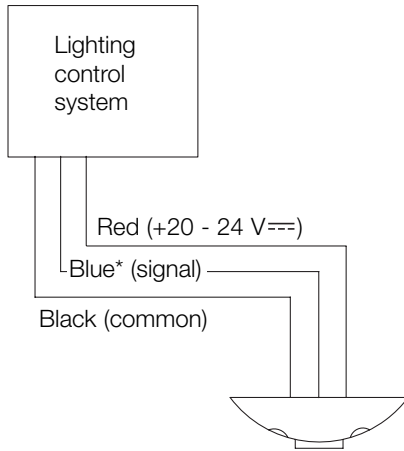
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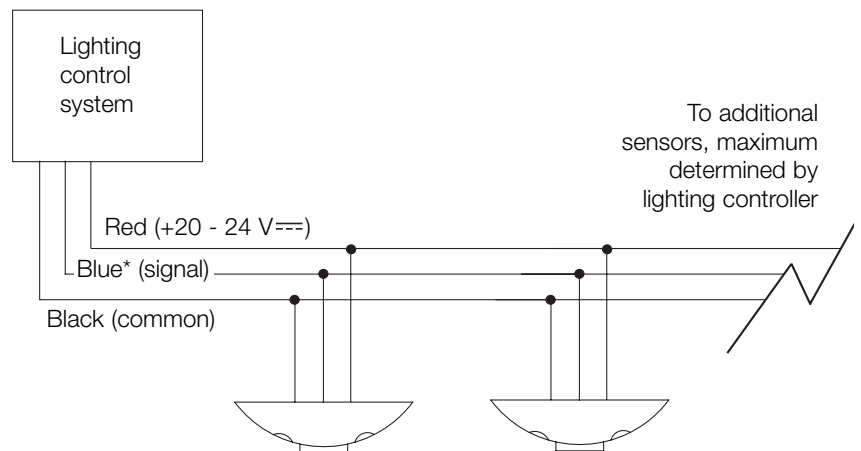
Wiring

Note: Power pack may be required when interfaced to lighting control system; see below.

Single Sensor to System



2 or More Sensors to System



*Note: Use gray wire for -R model.

Power Supply Options

Lutron Lighting Control System

Digital microWATT™

EcoSystem®

GRAFIK 5000 / 6000 / 7000™

GRAFIK Eye® 3000 / 4000

HomeWorks®

LCP128™

microWATT®

RadioRA®

RadioTouch®

Softswitch128®

Power Pack Required?

No

No

No, when used with *seeTouch*® wallstations with occupant sensor connections.

Yes

Yes

No, when used with *seeTouch* wallstations with occupant sensor connections.

No

Yes

No

No, when used with *seeTouch* wallstations with occupant sensor connections.

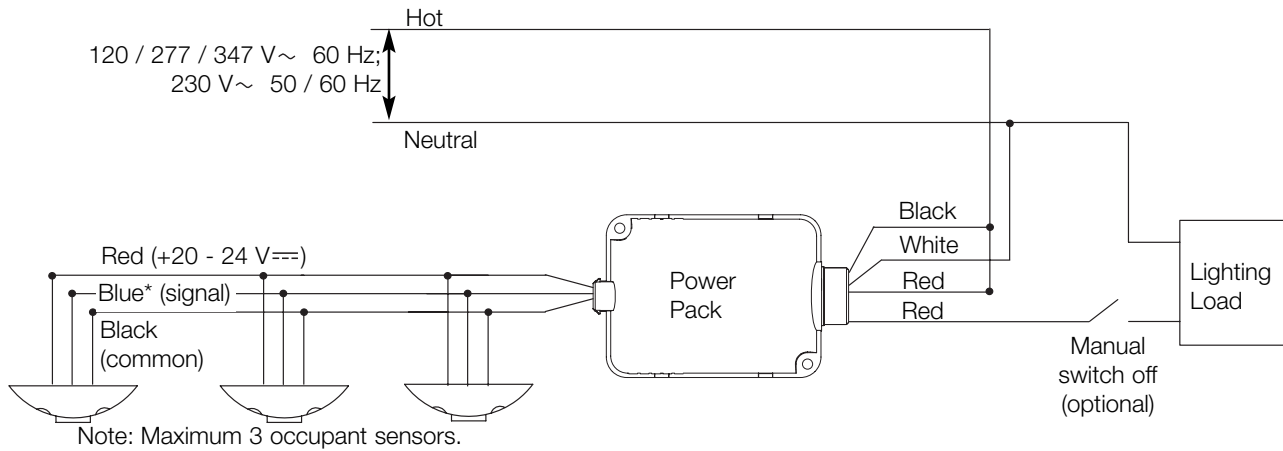
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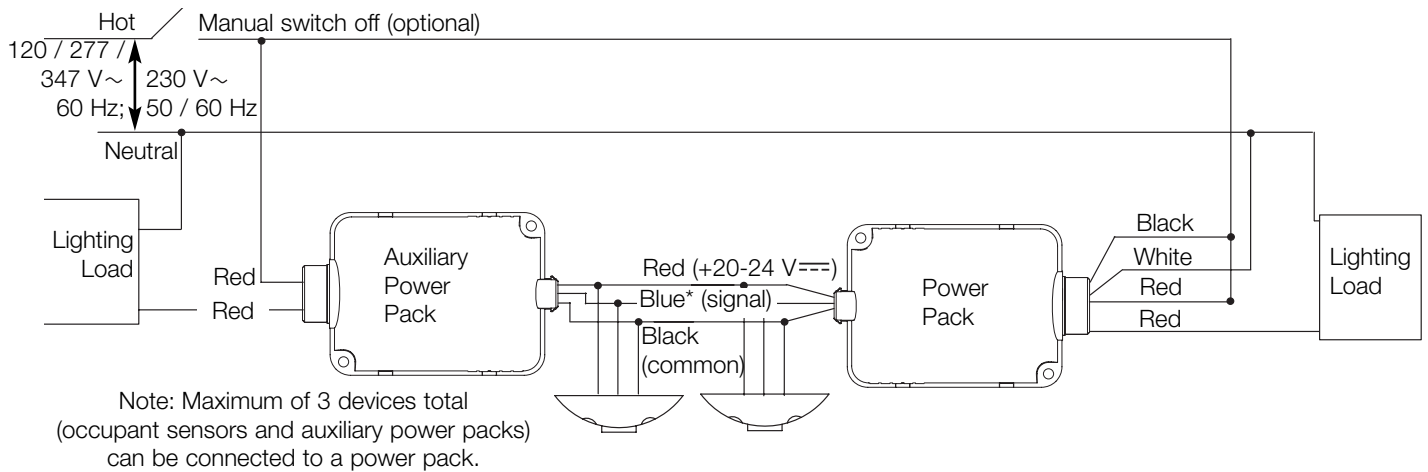
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Wiring: Stand-Alone Control

1 to 3 Sensors with Power Pack



Switching Multiple Loads with Auxiliary Power Packs



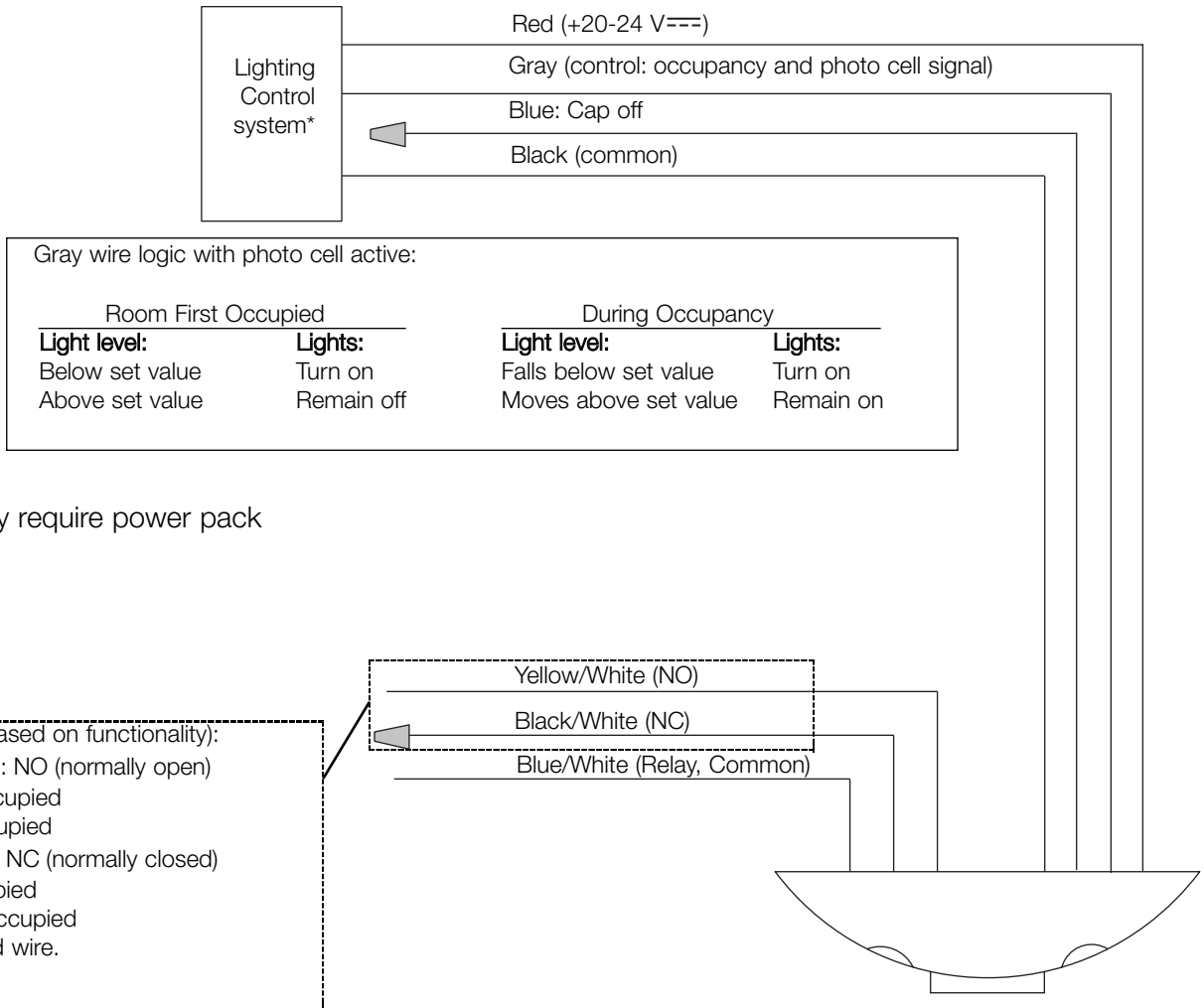
*Note: Use gray wire for -R model.

Job Name:	Model Numbers:
Job Number:	

Wiring

Relay Model Option

LOS-CDT-xxxxR only



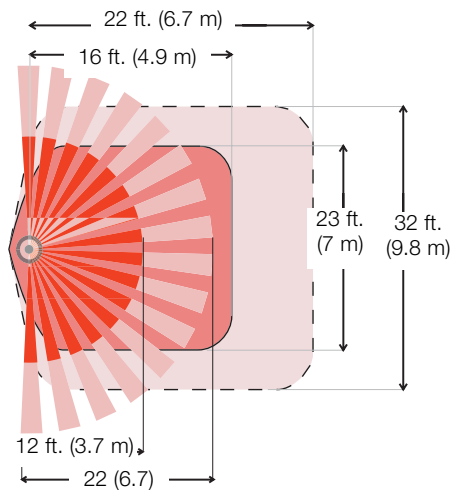
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Installation

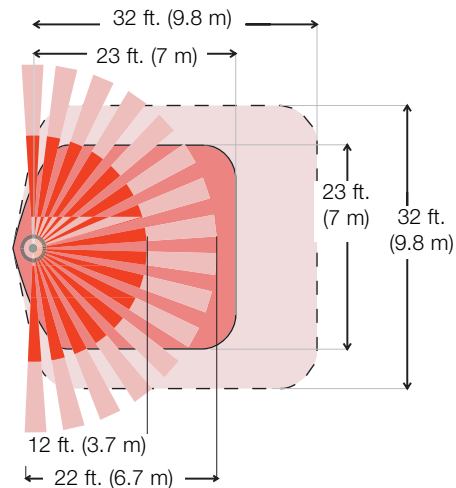
Sensor Placement

- The occupant sensor must have an unobstructed view of the room. Do not mount behind or near tall cabinets, shelves, indirect hanging fixtures, etc.
- Keep the occupant sensor away from air flow from ventilation outlets, windows, fans, etc.
- If installing a 180° occupant sensor (500 and 1000 models), place the sensor on the same wall as the doorway so that traffic in a hallway will not affect the sensor; otherwise, place in center of room.
- Closely follow the diagrams shown concerning major and minor motion coverage. The sensor can detect major motion (such as a person taking a half-step) at a greater distance than it can detect minor motion (such as writing or typing at a desk).
- Decrease total coverage area by 15% for “soft” rooms (for example, heavy draperies or heavy carpeting).

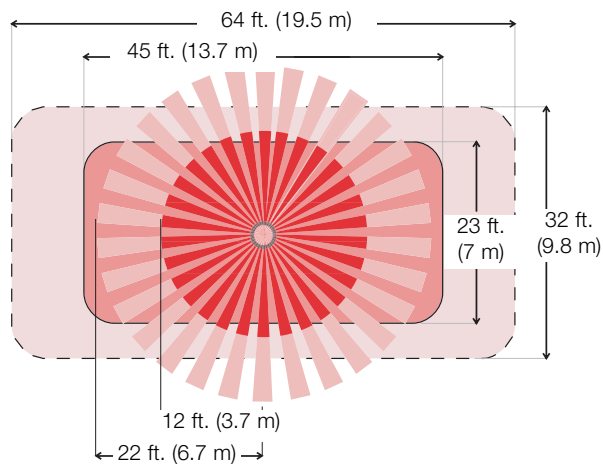
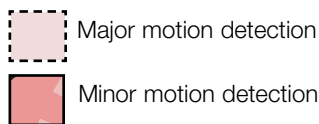
Range Diagrams



LOS-CDT-500



LOS-CDT-1000



LOS-CDT-2000

Job Name:

Model Numbers:

Job Number:

