

LINE VOLTAGE ULTRASONIC FIXTURE INTEGRATED OCCUPANCY SENSOR

FS-505/FS-505C



PRODUCT OVERVIEW

The FS-555 and FS-555C occupancy sensors switch lighting between on and off, or on and low level, based on occupancy. The sensors mount inside lighting fixtures and use ultrasonic occupancy detection technology. They operate at 120/277 VAC.

Time Delay sets the time interval that lights remain on after motion ceases to be detected. A time delay of 30 minutes, the maximum allowable by ASHRAE 90.1, is recommended for most applications. Select shorter time delays by adjusting DIP switch settings on the sensor.

Adjustable sensitivity optimizes coverage in the space. Turning the trim pot

clockwise increases sensitivity; turning trim pot counterclockwise decreases sensitivity.

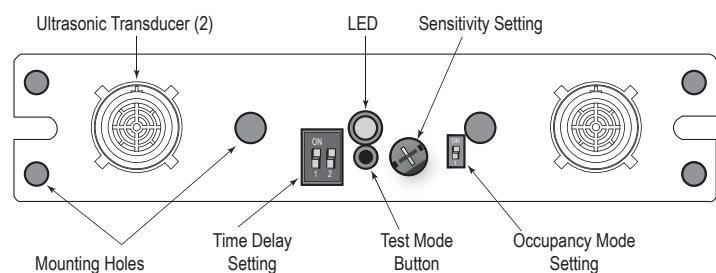
The Test Mode button enables installers to quickly verify the sensor's coverage area without waiting for a lengthy time delay. A temporary state, Test Mode sets the time delay to five seconds and provides a five minute test period. After this period, the sensor reverts to the selected time delay.

The Occupancy Mode switch establishes the default lamp setting for instances when power is removed from the sensor. By default, the occupancy mode is switched to off to ensure lights remain on if the sensor is disconnected from power.

Time Delay sets the time interval that lights remain ON after motion ceases to be detected. A time delay of 30 minutes, the maximum allowable by ASHRAE 90.1, is recommended for most applications. Select shorter time delays by adjusting DIP switch settings on the sensor.

The **Test Mode** button enables installers to quickly verify the sensor's coverage area without waiting for lengthy time delay. A temporary state, Test Mode sets the time delay to five seconds and provides a five minute test period. After this period, the sensor reverts to the selected time delay.

The **Occupancy Mode** switch establishes the default lamp setting for instances when power is removed from the sensor. When using the FS-505 or FS-505C in luminaires, set the switch to OFF to ensure lights remain on if sensor is disconnected.



FS-555 features and controls.

Adjustable sensitivity optimizes coverage in the space. Turning the trim pot clockwise increases sensitivity; turning the trim pot counterclockwise decreases sensitivity.

MODELS

FS-555
FS-555C

SPECIFICATIONS & FEATURES

Operating Voltage: 120/277 VAC; 50/60Hz
Load Ratings @ 120/277VAC:
E-Ballast, Tungsten, CFL - 4.9A (NO), 4.9A (NC)
Ballast, LED Driver - 5A (NO), 5A (NC)
Motor - 1/10hp

Power Consumption: 43mA @ 24VDC

Dimensions:

Sensor body: 5.19" L x 1.27" D x 0.73" W
(131.8mm x 32.6mm x 18.5mm)

Mounting base: 6.11" x 1.27" (155.2mm x 32.6mm)

Mounting hole centers: 5.72" x 0.79"
(145.3mm x 20.1mm)

Weight: FS-555= 3.8 oz/ 107.7 g

FS-555C= 3.805 oz/ 107.8 g

Operating conditions: 32°F to 131°F (0°C to 55°C); 5% to 95% RH, non condensing

Adjustable time delay: 5, 10, 15, or 30 minutes
(test mode: 5 second delay for 5 minutes)

LED indicator of occupancy detection

72-hour lamp burn-in feature

UL and cUL listed

Indoor use only

Five year warranty

MATERIALS

ABS, Flame retardant

Meets materials restrictions of RoHS

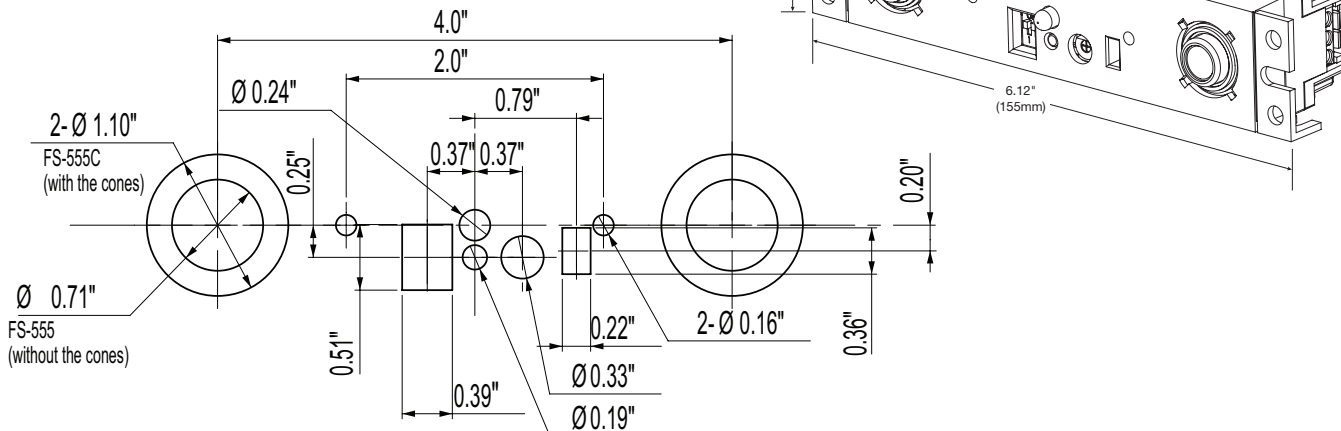
FACTORY DEFAULTS

Time Delay: 15 minutes

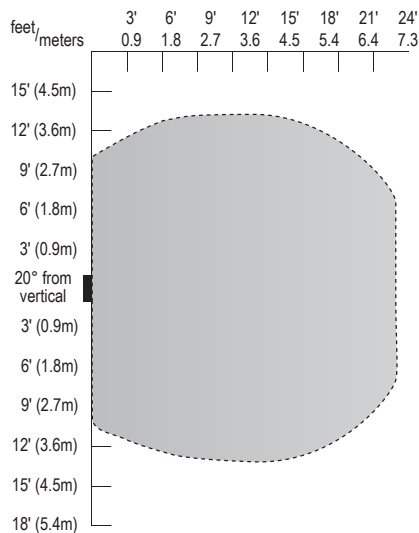
Sensitivity: 75%

DIMENSIONS

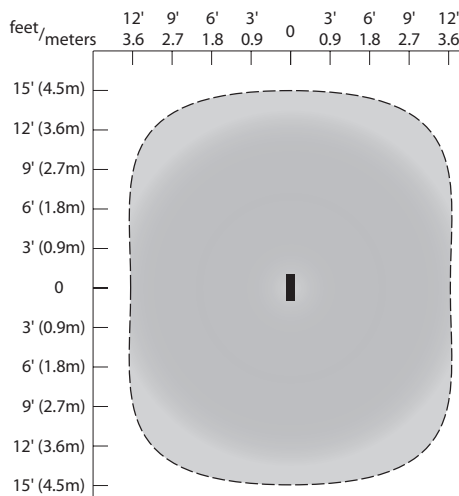
FS-555 and -555C dimensions and dimensions for cut-out on fixture.



COVERAGE



FS-505 coverage.



FS-505C coverage.

The coverage pattern is determined by sensor model, mounting height and the angle of the sensor relative to the floor in the covered area. The coverage shown represents full-step walking motion in a carpeted area, with no barriers or obstacles at a mounting height of 8 to 10 feet. Mounting above or below this range significantly affects coverage patterns.

Obstacles such as furniture or partitions, wall, ceiling and floor treatments can cause the coverage area to be less or more than the sensing distances shown in the coverage pattern. This

must be considered when planning the number of sensors and their placement.

Place sensors at least 6 feet away from air supply ducts and other obstructions that may decrease sensing capabilities.

For complete coverage in open areas, install multiple sensors to provide a 20% overlap with each adjacent sensor's coverage area.

INSTALLING THE FS-555/FS-555C SENSOR IN A LIGHT FIXTURE

1. Determine an appropriate mounting location inside the light fixture.
2. See template for dimensions to determine cut-out and mounting hole locations in the fixture.
3. Attach the sensor to the inside of the fixture using screws.
4. Connect wires to load or to ballast.
5. Restore power from the circuit breaker.

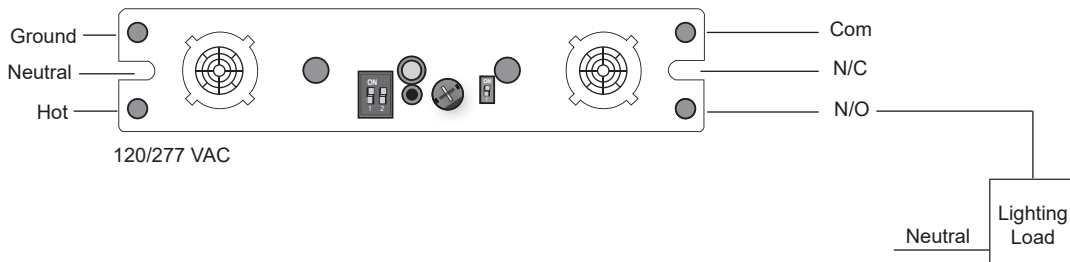
Burn In

Some lamp and ballast manufacturers recommend running lamps at full output for the first 72 hours of operation.

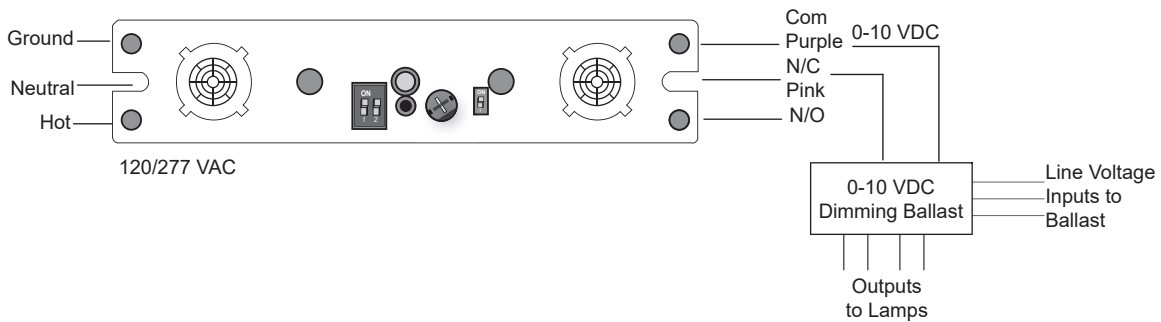
The burn-in function initiates a 72-hour burn-in period. To start the burn-in process, push and hold the button for 5 seconds. The lamps will stay on for 72 hours continuously regardless of occupancy status. After 72 hours, the sensor returns to normal function. To indicate the sensor is in burn-in mode, the LED flashes rapidly and continuously for the full 72 hours. To turn off the burn-in mode, momentarily push the button again.

WIRING DIAGRAMS

FS-555 wired for On/Off control.



FS-555 wired for High/Low control.

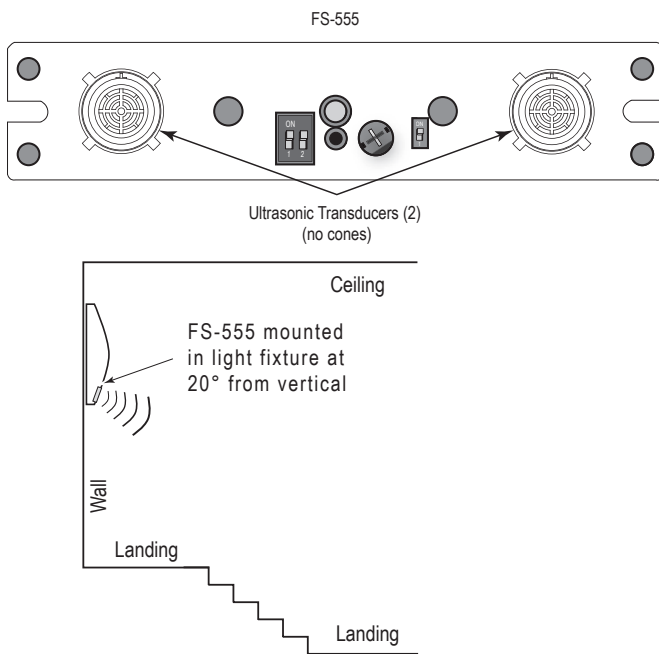


NOTE: Per UL, the 0-10V negative dimming wire color has been changed from gray to pink.

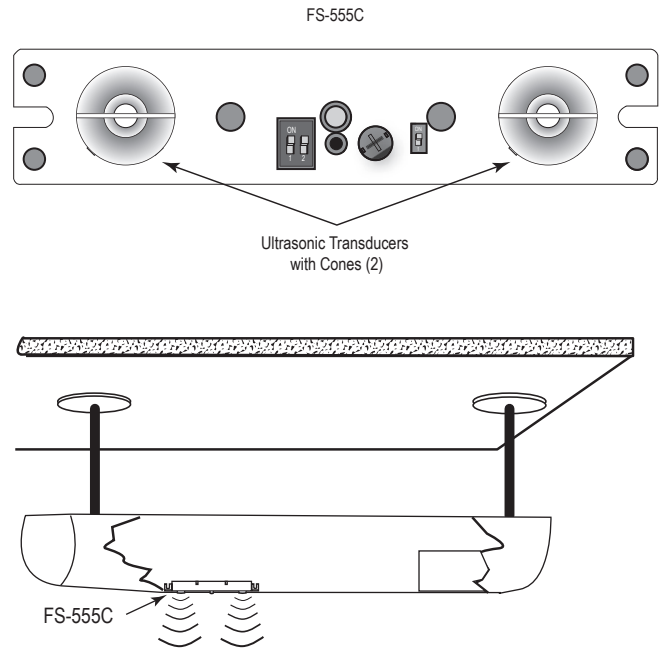
APPLICATIONS

The FS-555 is designed for use in wall-mounted lighting fixtures where the transducers face away from the wall at an angle of approximately 20° from vertical. It is particularly well suited for use in stairwell applications as well as in other wall mount applications.

The FS-555C includes directional cones over the transducers and is designed for use in suspended light fixtures where the cones face downward over the coverage area. This gives the FS-555C a large rectangular-shaped coverage pattern



FS-555 installed in wall-mounted fixture.



FS-555C installed in ceiling-mounted fixture.

ORDERING INFORMATION

Catalog #	Master Pack Details				
	Master Pack Quantity	Case dimensions (inches)			Weight (pounds)
		Length	Width	Height	
FS-555	100	19.1	14.4	13.7	37.4
FS-555C	100	19.1	14.4	13.7	37.4

Inner Pack Quantity	Case/Bag dim. (inches)				Weight (pounds)
	Case/Bag dim. (inches)			Weight (pounds)	
	Length	Width	Height		
N/A	N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	N/A	

Catalog #	Color	Description	Input Voltage
<input type="checkbox"/> FS-555	White	Fixture mount, line voltage ultrasonic occupancy sensor with adjustable sensitivity and time delay	120/277 VAC, 60 Hz
<input type="checkbox"/> FS-555C	White	Fixture mount, line voltage ultrasonic occupancy sensor with adjustable sensitivity and time delay, two directional cones	120/277 VAC, 60 Hz

Information supplied above is subject to change.
 Harmonization code: 8538908080. Country of origin: China.

27836r1 Rev 07/2021