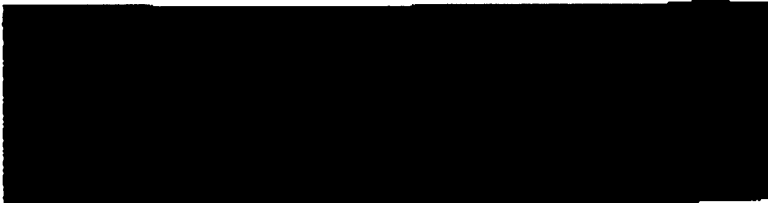


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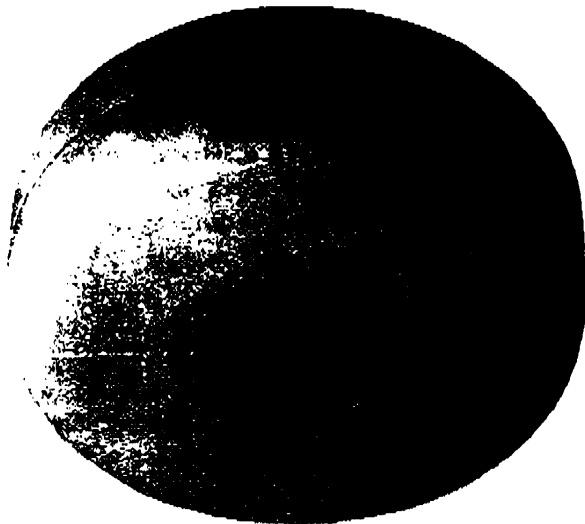


The OS-460 is an indoor, ceiling mounted passive infrared occupancy sensor designed to switch incandescent or fluorescent lamps on/off and ventilating and exhaust fans on/off, intermittently occupied spaces.

The OS-460 includes an ambient light sensor which can be adjusted to leave the lights off in the occupied space if there is sufficient daylight.

For use in:

Offices, conference rooms, motels, classrooms, kitchen home and lavatories.



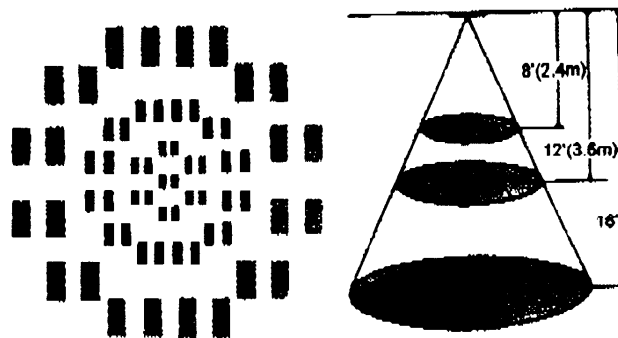
1 Selecting A Location

Since sensor in response to temperature changes, please avoid the following. Avoid directing the sensor toward areas or objects whose surfaces are highly reflective or are subject to rapid temperature change, such as pools.

- Avoid mounting the sensor near heat sources, such as heating vents air conditioners, dryer vents or lights
- Do not aim the sensor toward lights.

Technical Specifications.

- **Input Voltage:** 220V-240V 50HZ
- **LOAD:** 5A for incandescent light. (40w min.)
2.5A for fluorescent light (ELECTRONIC & MAGNETIC BALLASTS) 1/10HP for motor. (36W Min.)
- **TIMER:** Adjustable from about 10 seconds to 15 minutes.
- **LUX:** Adjustable "Ambient light level" control.
- **VIEW ANGLE:** 360°
- **OPERATING ENVIRONMENT TEMPERATURE:** -20°C TO 45°C
- **SIZE:** O.D. 110MM x 32MM HEIGHT
- **MODE OF OPERATION:** Test, Auto, Manual on (8 hours only)
- **NOT SUITABLE FOR SWITCHING COMPACT FLUORESCENT LAMPS.**



Peer-focused picture at 21' diameter from an 8' ceiling.

Data is accurate but drawing is not in proportion

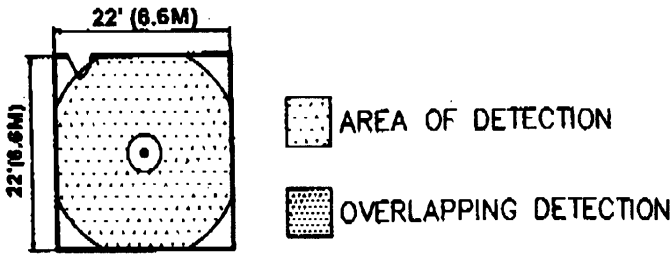
FIG.1

2

Installing Your Sensor

TYPICAL AREA COVERAGE

8' (2.4 M) CEILING



IF WALL PARTITIONS DO NOT EXCEED 60" IN HEIGHT, NO EXTRA SENSOR IS REQUIRED.

FIG. 2

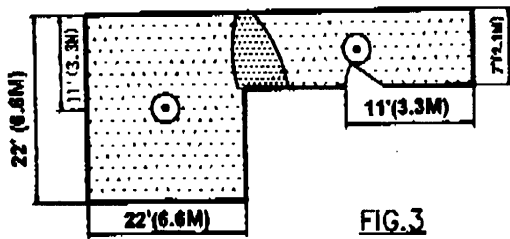


FIG. 3

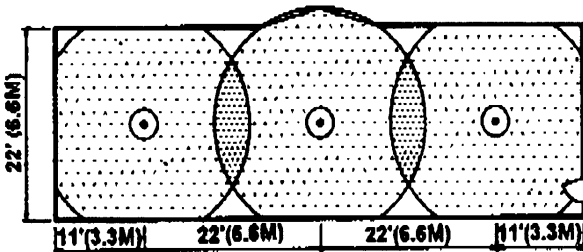
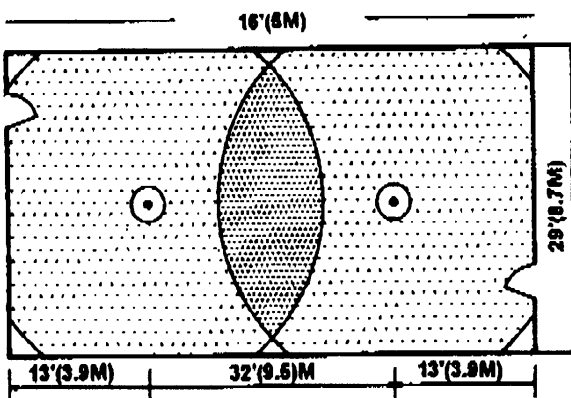


FIG. 4



20' CEILING HEIGHT - AUDITORIUM, CAFETERIA, ETC.

FIG. 5

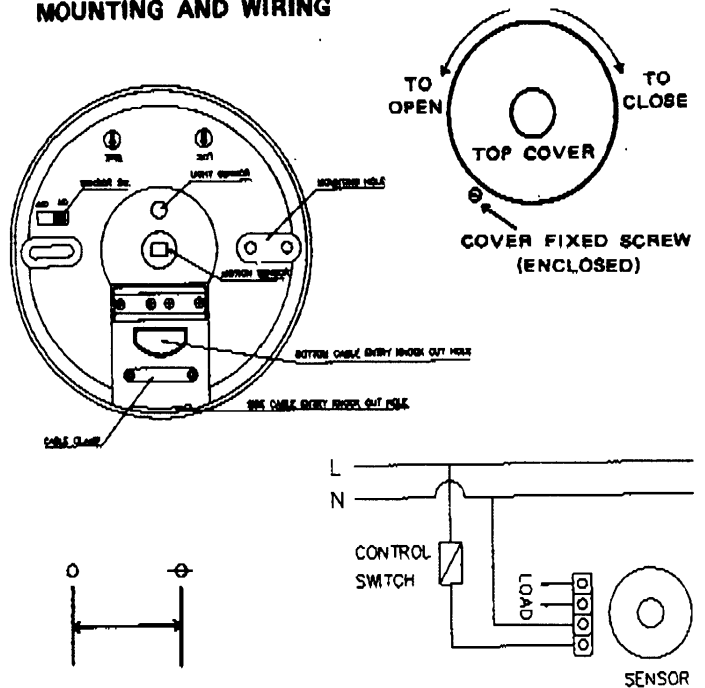
WHEN INSTALLING THIS PRODUCT...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced electrical service technician.
4. After installation is complete, check out product operation as provided in these instructions.

CAUTION

Disconnect external 230 Vac power supply before making wiring connections to prevent electrical shock or equipment damage.

MOUNTING AND WIRING



MOUNTING HOLE PITCH

MAX: 85 mm

MIN: 59 mm

WIRING DIAGRAM

1. After selected the ceiling place where the sensor will be installed, turn and open the lens cover of the sensor. Then, decide the cable is from the bottom or the side of the sensor case in to get through the entry hole of the cable.
2. Fix the sensor with 2 attached (3x27) screw on the ceiling.
3. Following the wiring cable instruction stucked in the sensor to wire.

- Note:**
- a. After wired, please be sure that the screw on terminal block has been fastened tightly.
 - b. If the side entry cable, after wired, press the cable by the enclosed cable clamp, then, fasten tightly with 2 (3x27) screws.

- Turn the sensor switch to ON position.
(The main function of the sensor switch is when the sensor isn't connected with manual switch and the unit controlled by the sensor, as lamp, is out of order and need replace, turn off the sensor first to avoid the danger.)
- At this moment, re-check the motion sensor element. If the window surface is dirty, wipe with a clean and dry cloth slightly to clear it.
- Cover the lens cover and turn clockwise to fasten it.
- Restore power

3

Walk test

The purpose of the walk test is to check and adjust the coverage pattern of sensor when power is first applied to the sensor. It will automatically provide a 4 minutes walk test period. During this period the sensor will operate in any ambient light level and will go off about 4 seconds after each detection.

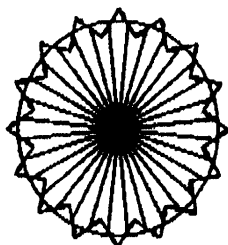


FIG. 6

- Follow fig. 6-start outside the pattern and walk across the pattern until the control unit go on and off, repeat it until you are satisfied with the coverage to conduct another walk test. Turn off the power for at least 5 seconds and turn it on again.

- Eliminating unwanted detection. To mask a lens segment, use only the mask supplied with the unit and cover only the lens segment which is viewing the potential problem area such as an open doorway, caution must be observed so that the lens is not scratched or damaged, after properly masking a lens segment, recheck by walk testing for proper detection.

4

Operation

The sensor will automatically turn into auto mode after "4 minutes test mode" This mode is for normal operation the "Time" & "Lux" adjustment can only working under auto mode.

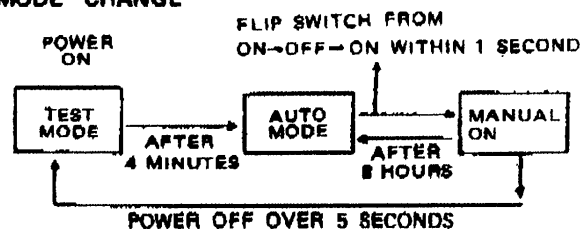
- Set the "time" control. The minimum setting is about 10 seconds, The maximum is about 15 minutes. This period starts after the movement in the detection coverage.
- Set the "Lux" control. Turn adjusting knob to () . The device only operates during the period of darkness. Turn adjusting knob to (☼) . The device will operates in any degree of brightness.

STAY ON

If you require the control unit to stay on, the sensor can be overridden by switching the indoor control switch from on to off than immediately on again.

The control unit now will remain on about 8 hours. Then automatically turn into "Auto mode", during "Stay on" period you still could turn sensor into "Auto mode" operation just turn control switch off, wait at least 5 seconds before switching on, the sensor will be into "TEST MODE", you can turn control switch off then immediately on again to get into AUTO MODE at once instead of 4 min.

MODE CHANGE



5

Trouble-Shooting

Each Sensor undergoes rigorous testing and quality control procedures before it leaves the factory. Malfunctions are most often due to incorred installation or aiming of the unit. See Section #1 & #3.

On - To - On

- Turn off power for a least 5 seconds, then on again. Remember, test period is only about 4 minutes long.
- Check that bulbs and fixtures work. Compare wiring to the wiring diagram. Check that power is on.
- Check that sensor LUX level.

Light On and Off Quality

- Heat from the lights will cause unsteady sensor performance.
- Make sure lights are not reflecting back into the sensor. Check for white or reflective surfaces in the protection pattern. Aim sensor and lights in different directions.

Light Do Not Turn Off

1. Check that the Time control knob on the bottom of the sensor is set to minimum.
2. Stay completely out of the protection pattern to avoid activating.
3. Make sure unit is not aimed at something that would cause a temperature change such as tree branches, a body of water, air conditioners or heating vents.
4. Make sure unit is not in "Manual Override" Mode. Turn power off for more than 5 seconds, then back on again to resume automatic operation.

Maintenance and Repair

Keep the lens area clean and free of obstructions. Do not attempt to open or repair the unit. There are dangerous voltages inside and no user serviceable parts. For repair service, follow your warranty.