

# **INTERMATIC IOS-DSIF Occupancy Sensor Switch Instruction** Manual

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**INTERMATIC IOS-DSIF Occupancy Sensor Switch** 



# Ratings:

Input Voltage: 120 VAC, 60 Hz
Electronic Ballast (LED): 500 VA
Tungsten (Incandescent): 500 W

• Fluorescent / Ballast: 500 VA

• Motor: 1/8 HP

Time Delay: 15 Sec – 30 Min
Light Level: 30 Lux – Daylight

Operation Temperature: 32° – 131° F / 0° – 55° C No minimum load required

# WARNING Risk of Fire, Electrical Shock or Personal Injury

- Turn OFF power at circuit breaker or fuse and test that the power is OFF before wiring.
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are not sure about any part of these instructions, consult a qualified electrician.
- Use this device only with copper or copper clad wire.
- INDOOR USE ONLY

#### **INSTALLATION INSTRUCTIONS**

### **Description**

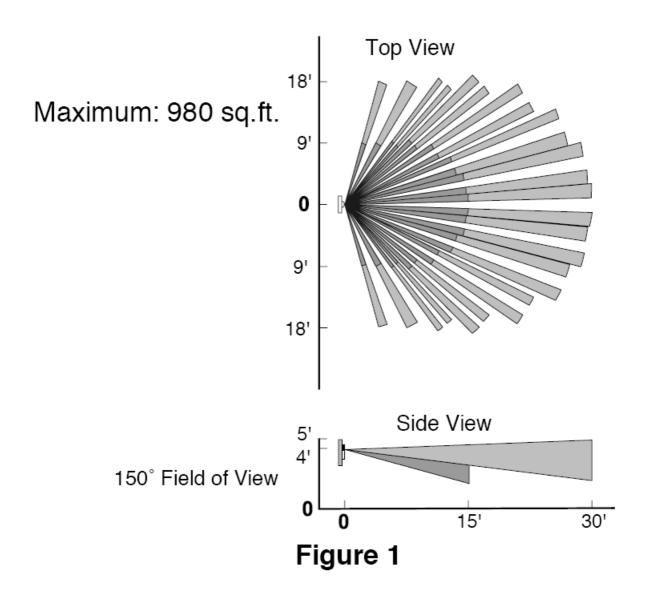
The passive infrared sensors work by detecting the difference between heat emitted from the human body in motion and the background space. The sensor switch can turn a load ON and hold it as long as the sensor detects occupancy. After no motion is detected for the set time delay, the load turns OFF automatically. The sensor switch has one relay (equal to single pole switch), it also includes Ambient Light Level Sensor.

#### **Coverage Area**

The coverage range of the sensor switch is specified and illustrated in Figure 1. Large objects and some transparent barriers like glass windows will obstruct the sensor's view and prevent detection, causing the light to turn off even though someone is still in the detection area.

#### LOCATION/MOUNTING

Since this device responds to temperature changes, care should be taken when mounting the device. DO NOT mount directly above a heat source, in a location where hot or cold drafts will blow directly on the sensor, or where unintended motion will be within sensor's field-of-view.

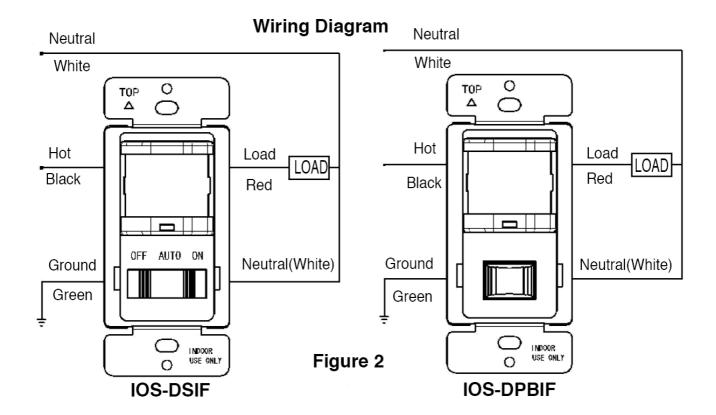


#### **INSTALLATION**

- 1. Connect lead wires as shown in WIRING DIAGRAM (see Figure 2): Black lead to Line (Hot), Red lead to Load wire, White Lead to Neutral wire, Green lead to Ground.
- 2. Gently position wires in wall box, attach sensor switch to the box.
- 3. Mount device "TOP" up.
- 4. Restore power at circuit breaker or fuse, wait one minute.
- 5. Remove the small cover plate. (Illustrated as Figure 3.)
- 6. Locate the adjustment knobs on the control panel to perform test and adjustments. (Illustrated as Figure 4.)
- 7. Replace the small cover plate after testing and adjusting.

# 8. Attach the wallplate.

**NOTE:** If twist on wire connector is provided, use to join one supply conductor with one 16 AWG device control lead.



## **ADJUSTMENT**

# **Time Delay Knob**

Default position: 15 Seconds (Test mode)

Adjustable: from 15 Seconds to 30 Minutes (clockwise)

# **Sensor Sensitivity Range Knob**

Default position: Center at 65%

Adjustable: 30% (Position 1) to 100% (Position 4)

Note: Turn clockwise for larger rooms. Turn counter clockwise to avoid false alerts in smaller rooms or near

doorway or heat source.

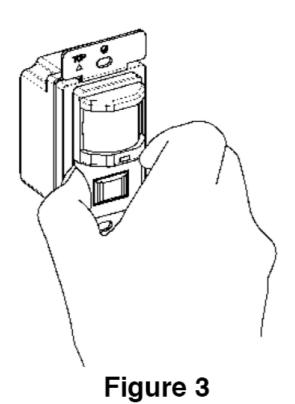
Ambient Light Level Knob: Default position: Daylight (100% at position 4)

Adjustable: Daylight to 30 Lux (Counter clockwise)

#### **OPERATION**

**Band Switch** 

Mode	Position	Description
OFF	LEFT	Circuit is permanently opened (switched off)
AUTO	Center	Occupancy Mode:  Automatic ON when occupancy is detected. Automatic OFF after the set tim e delay.
ON	RIGHT	Load stays ON always.



TEST TIME RANGE 1 LIGHT

Figure 4

# **Push-button:**

As illustrated in Figure 5, the Load stays OFF when the button is pushed in and locked. (switched OFF) As illustrated in Figure 6, the Load turns ON after the button is pressed and released. The sensor switch stays at the AUTO Mode until the button is pressed OFF next time.

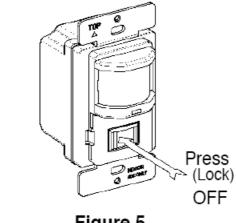


Figure 5

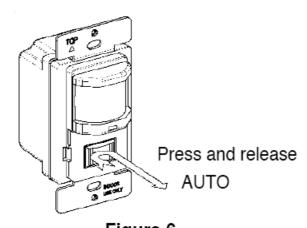


Figure 6

#### **TROUBLESHOOTING**

For proper operation, the Sensor Switch has to consume power from hot and Neutral. Therefore, a Secured Neutral Wire is required.

#### Initial run

The Sensor Switch needs initial run within one minute. During the initial run, the load might turn On and Off several times.

The Time Delay knob is set to 15 seconds default, do not adjust until initial run is finished and proper operation function is confirmed. The load is flashing frequently.

- 1. It can take up to one minute for initial run.
- 2. Check the wiring connections, especially the Neutral Wire.

# The Load does not turn ON without LED flashing or LED flashing regardless of motion.

- 1. Verify the Mode is set to On (for IOS-DSIF); push and release the button (for IOS-DPBIF). If the load does not turn On go to step 2.
- 2. Verify the Sensitivity Range is on high.
- 3. Check the wiring connections.

# The Load does not turn ON while LED is flashing and motion is detected

1. Check if Ambient Light Level is enabled by covering the lens by hand.

- 2. Verify the Mode is set to ON (for IOS-DSIF); push and release the button (for IOS-DPBIF). If the load does not turn On go to step 3.
- 3. Verify the Sensitivity Range is on high.
- 4. Check the wiring connections.

#### The Load does not turn Off

- 1. Verify that the Mode is ON. (for IOS-DSIF)
- 2. There can be up to a 30 minute time delay after the last motion is detected. To verify proper operation, turn the Time Delay Knob to 15s (Test Mode), make sure there is no motion (no LED flashing). The Load should turn Off in 15 seconds.
- 3. Check if there is a significant heat source mounted within six feet (two meters), that may cause false detection such as, high wattage light bulb, portable heater or HVAC device.
- 4. Check the wiring connections.

#### The Load turns On unintentionally

- 1. Mask the Sensor Switch's lens to eliminate unwanted coverage area.
- 2. Turn the Sensitivity Level knob counter-clockwise to avoid false alerts in smaller rooms or near doorway.

NOTE: If problems continue, consult a qualified electrician.

# **LIMITED WARRANTY**

Warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased or (b) completing a warranty claim online at <a href="https://www.intermatic.com">www.intermatic.com</a>. This warranty is made by: Intermatic Incorporated, 1950 Innovation Way, Suite 300, Libertyville, IL 60048. For additional product or warranty information go to: <a href="https://www.intermatic.com">http://www.intermatic.com</a> or call 815-675-7000.

#### **Documents / Resources**



INTERMATIC IOS-DSIF Occupancy Sensor Switch [pdf] Instruction Manual IOS-DSIF, IOS-DSIF Occupancy Sensor Switch, Occupancy Sensor Switch, Switch

# References

Intermatic timers and manuals

Manuals+.