



## **MS 301 Series Movement Sensor Switch**

Thank you for purchasing the Movement Sensor Switch MS 301 series. With this step towards energy efficiency you have joined the increasing number people who prefer green and smart living.

### **Package Contents:**

1. Movement Sensor Switch (MS-301 Series) - 1 No.
2. Protective rubber cap - 1 No.
3. Mounting Screws - 4 Nos.
4. Nylon wall plugs - 4 Nos.
5. Instruction Manual - 1 No.

## **Basic function of MS-301 Movement Sensor Switch**

One of the biggest energy saving that can be done is by switching off air conditioners in office when nobody is using the cabin and automatically switch it on as soon as someone walks into the room.

The MS-301 series Movement Sensor Switch is intended for use with heavy electrical loads like Air conditioners (or other heavy lighting etc) used in offices, industries etc.

## Product description

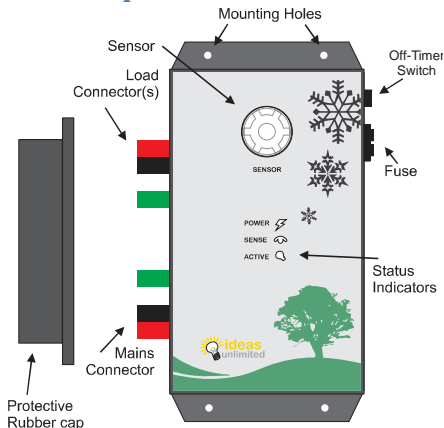





Figure 1: Product Description - MS 301 Series Movement Sensor

### Status Indicators:

	<b>Power (White)</b>
	<b>Sense (Blue)</b>
	<b>Load (Red)</b>

### Off Timer:

5 Minutes (or)  
10 Minutes.

### Load Connector:

**15A Maximum current**  
**2200 Watts Maximum**

### Mains Connector:

230V AC, 50Hz mains supply

### Fuse:

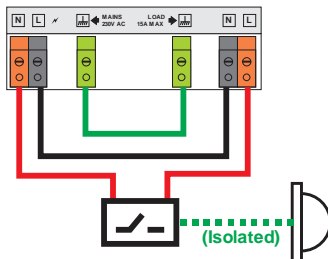
6A Glass fuse in socket

## Device Power Consumption

**Standby mode:** 50 mili-watts

**Active mode:** 950 mili-watts

## Internal Wiring reference



## Technical Specification

Parameter	Value
Sensor Range:	MS301-W15A: 20'X20' maximum
Operating Voltage	230V AC, 50Hz
Load Capacity:	2200 Watts Maximum
Unit Dimensions:	185 x 112 x 52 mm
Off Timer Options:	5 Minutes for areas with high activity 10 Minutes for areas with low activity
Power Consumption	Standby mode: 50-100 milli-Watts Active mode: 350-450 milli-Watts
Safety Features:	1) 15A Glass Fuse (user-replaceable) present to prevent short-circuit/overloading 2) Higher rating connectors and contacts for safety and reliability. 3) Safety rubber cap to cover connectors for both safety and aesthetics. 4) Shock proof (end user useable) connectors 5) Complete electrical isolation between Sensing and switching circuit

## Installation of the Movement Sensor

The illustrations below show the normal installation of an air conditioner and the electrical schematic for installing movement sensor switch to use with air conditioners.



Figure 2: Normal installation of air conditioners

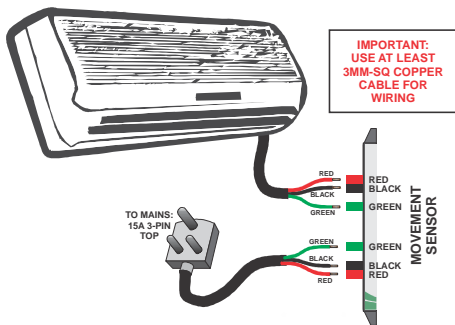


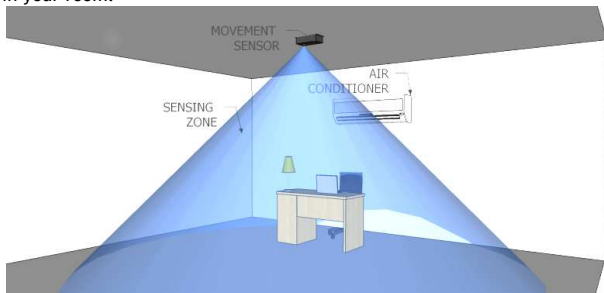
Figure 3: Electrical schematic to connect the Movement Sensor to Air Conditioner

**Note 1:** We recommend using at least 2.5 mm-Square copper wires for connecting to mains and air conditioners.

**Note 2:** Do not use any air conditioner or load that exceeds 2.2 kilo-Watts (2200W)

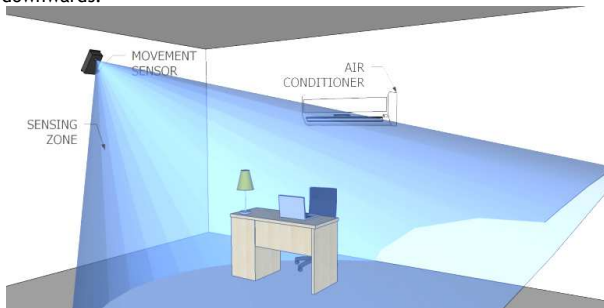
## Recommended Location of Sensor in a room

We recommend installing the sensor on the roof so that sensor gets a clear and unobstructed view of the room. You may have to draw 3 or 4 wires (depending on model/load) from the Sensor to the switch board in your room.



**Figure 4: Roof Installation: Recommended installation in a room**

In case due to various reasons, sensor cannot be mounted on roof, we recommend installing on the wall with a 30 degree incline, looking downwards.



**Figure 5: When mounting on the wall, mount inclined looking downwards, but as close to ceiling as possible for clear view**

**Note:** Avoid mounting the sensor on the wall. If mounting on the wall is inevitable, mount is close to the roof so that sensor has a clear and unobstructed view of the room.

## Timer Selection

Setting	Capacity
<b>5 Mins.</b>	Corridors or places used by many people., office room where lots of movement is present.
<b>10 Mins.</b>	Work areas, Office cubicles, very few people presence in the sensor zone (especially when person working on computers for long hours)


## Recommended Load Capacity

The table below specifies the load capacity of different models of Movement Sensor Switch.

Model	Sensor Type	Capacity
<b>MS301-W15A</b>	Wide	2200W (15A Maximum)

## Sensor coverage area

The sensor used is a passive sensor (Does not emit any light or any form of energy). It focuses Infra-red emitted by surroundings on to a IR sensitive photo cell. Based on the model of your unit, the range is specified below.

Sensor	Coverage Area	Illustration	Models
Wide	Wide area (20'X20' approx.) - basement, parking lots etc.		<b>MS301-W15A</b>

## Application Ideas

### Energy Saving:

1. Corridors of large buildings with less usage
2. Cubicle Areas, Cabins of offices
3. Conference rooms in office buildings, public buildings
4. Parking lots of Apartment complexes
5. Common Areas of Apartment complexes
6. Rest rooms and Washrooms in hotels, public buildings, office buildings
7. Basement areas of Apartments and basements
8. Basements and narrow corridors of Shopping centers
9. Lab Area, any kind of activity areas in large buildings, factories.

### Security:

1. Outdoor lighting in compounds of houses
2. Outdoor lighting in hotels, public buildings
3. In front of Basement door
4. Basements and narrow corridors of Shopping centers

### Elder Care/Child Care:

1. Switch on narrow corridor lights as soon as someone enters the zone
2. Switch on bathroom lights automatically on entry, conserve energy when not in use
3. Switch on lights outside the house as someone walks by within the compound
4. Switch on lights in bedroom when someone gets out of bed

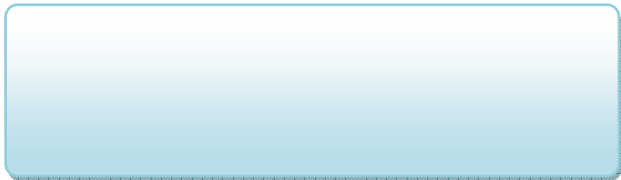
## Our Commitment

**Green:** Technologies that are environment friendly

**Economical:** Reduce cost of usage

**Smart Living:** Enhanced living experience

## Authorized Distributor/Dealer



Designed, Manufactured in India by:



111/V, Emerald Enclave, Hebbal Industrial Area

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