

# Motion's Sensor. User's Guide.



ASSA ABLOY



Read carefully the instruction given, before installing and using the motion sensor and hold it for future references.



**GENERAL WARNINGS AND INSTRUCTION GUIDE:**

In order to ensure the correct operation of the product in your installation is necessary to carry the following safety regulations out:

1. The installation and the use of the product must be done according to the technical operating conditions explained below.
2. The good use of the application is client's responsibility.
3. After reception of the goods, check the packaging and the existing material in case there is any damage. Check as well, that the reception is complete (accessories, papers, etc).
4. If packaging is damaged during delivery or it is suspicious of being damaged or having a failure, do not put the unit on. In that case please contact us.
5. The installation and handling of our product has to be done by authorized personnel. Mainly the electrical connections must be done only by qualified experts.
6. Do not try to repair any material after a failure or damage and put it working again. In this case it is highly important to contact us.
7. There will not be accepted any responsibility for damages caused by a wrong use.

Ensure that the top and the low caps are unified and correctly screwed before starting the unit up.



**ASSA ABLOY**

TALLERES DE ESCORIAZA, S.A.U.  
Barrio Ventas, 35  
E-20305 Irun (España)

Web: [www.tesa.es](http://www.tesa.es)  
Teléfono: +34 943 669 100  
Fax: +34 943 633 221

---

INDEX:

1. INTRODUCTION .....	4
1.1 Brief description.....	4
1.2 Shipment content .....	4
2. INSTALLATION .....	5
2.1 Dimensions .....	6
2.2 Installation process .....	6
3. OPERATION .....	7
3.1 saving mode .....	7
4. MAINTENANCE AND CLEANING .....	8
4.1 Battery replacement .....	8
5. TECHNICAL DATA.....	9
6. TIPPS FOR PROTECTING THE ENVIRONMENT .....	9

## 1. INTRODUCTION

### 1.1 Brief description

The MOTION SENSOR is a passiv infrared detector device that detects people movement through the room. In addition, it features a thermostat that measures room temperature. It has a wireless communication with the lswitch energy saver and sends movement information and the room temperature to the energy saver. The energy saver enables connect or disconnect the room devices depending on the information sent by the motion sensor. The MOTION SENSOR is standalone and is operated by 3 batteries of 1.5 V LR3 AAA (non rechargeable).



### 1.2 Shipment content

- MOTION SENSOR
- Screw box (2 screws and 2 number five plugs to fix it in the ceiling. 1 side screw to close the cap.)
- User's and starting up user's guide.

## 2. INSTALLATION

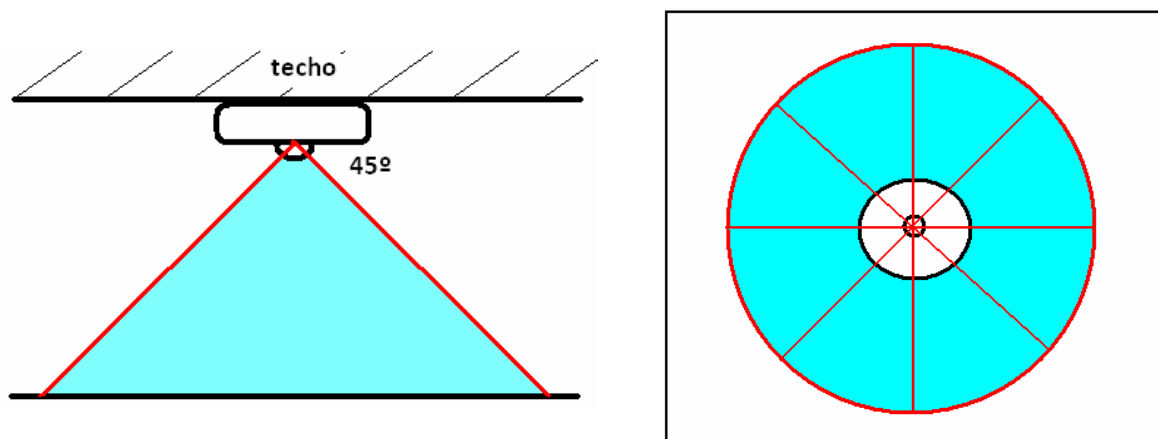
The MOTION SENSOR will be always overhead mounted.

The MOTION SENSOR'S installation is made through 2 screws and 2 plugs. It is required to drill 2 holes of 5 mm thick in the wall, introduce the plugs inside the holes and screw the top cover to the ceiling.

The sensor's cover is released by turning the lower part slightly anticlockwise.



The SENSOR installation position must be taken into consideration. Following is explained the detection coverage for locating it. It may require more than one sensor per room, depending on the room structure.



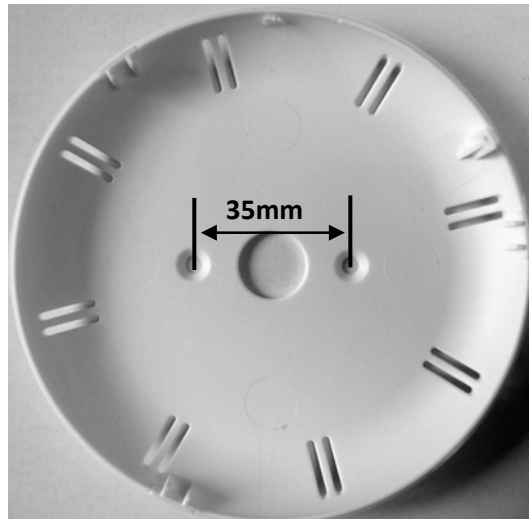
The shaded parts show the motion sensor's detection area.

It belongs to the round area on the floor with a diameter equal to the sensor installation Height.

***Detection  $\varnothing$  = Mounting height***

## 2.1 Dimensions

The dimensions and assembly points are shown in the picture below.



## 2.2 Installation process

The MOTION'S SENSOR installation must be done as follows:

1. Mark two holes on the ceiling with a 35mm distance between them.
2. Drill two holes of 5mm thick with M5 drillbit.
3. Place it including the plugs in the holes.
4. Dismantle the SENSOR by separating the top part from the lower part. Turn it slightly anticlockwise.
5. Place the top cover in the ceiling and screw it using two fixing screws.
6. **SENSOR AND ISWITCH SYNCHRONIZING (Energy saver)...**  
Introduce the **Sensor Synchronizing card** in the energy saver, thus the energy saver will be on synchronizing mode till the new card is removed.  
While the card is in the energy saver, push the inner button of the energy saver with the hand. The red pilot will go on.  
Then the sensor and the energy saver will try to synchronize. The synchronizing will be correct when the sensor blinks red quickly that last around five seconds. Finally the red pilot must go off.

Repeat it with all the sensor of the same room that must be synchronized with the same energy saver.

Remove the card from the energy saver once synchronized all the sensor of the room.

Repeat it with the rest of the rooms.

7. Place back the lower sensor cover on the top cover turning it clockwise. Make sure that the holes for the side screw coincide.
8. Screw the side screw to lock the top and lower cover.

#### **Note ( Sensor desynchronization)**

The sensor desynchronization with an energy saver is made by introducing a sensor deleting card in the energy saver. The energy saver deletes the list of the synchronized sensors.

The desynchronization will be necessary in the following situations:

- One it is desired to delete one of the room sensors.
- One a sensor is damaged and is changed by a new one.

After the desynchronization, it is always necessary to synchronize the room sensor with the new energy saver.

The desynchronization is NOT necessary in the following cases:

- When the sensor's batteries are changed.
- When a new sensor is added to the room.

### **3. OPERATION**

The MOTION SENSOR is connected wirelessly to the ISWITCH energy saver.

The operation modes are the following:

#### **3.1 saving mode**

The MOTION SENSOR is detecting continuously movement inside the room whereas the client card is introduced in iSWITCH the energy saver. If during the configuration time no movement is detected within the room, the iswitch disconnects the relay 2 that is usually connected to the air conditioning or to other high consuming device.

#### 4. MAINTENANCE AND CLEANING

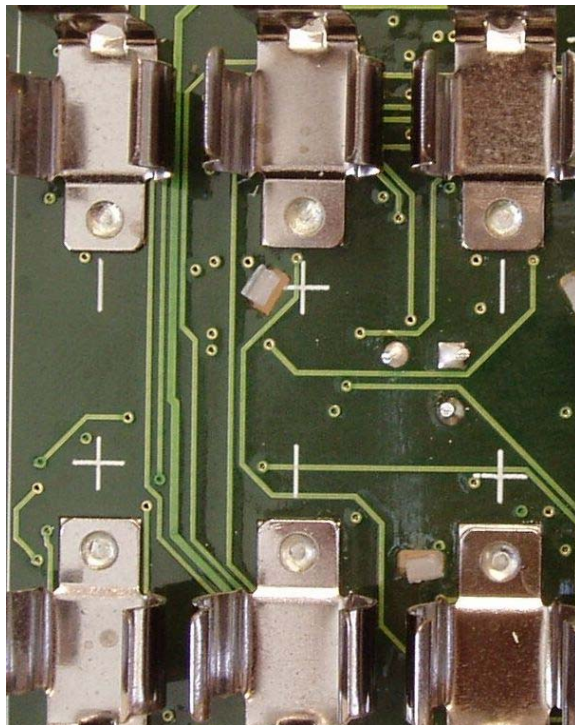
For a long lasting device, please follow these instructions:  
Make sure the optic is clean and there is no object glued to it.  
Replace the batteries every two years or when the sensor asks by red blinking.

##### 4.1 Battery replacement

When the batteries are about to run out, the sensor warns the users to change them.  
The optic's pilot makes **three red blinkings every eight seconds showing low battery.**

In order to replace the batteries, please follow the next steps:

- Let loose the side screw that locks the sensor's cover.
- Hold the low part of the cover and turn it anticlockwise.
- Once you have the lower cover at your hand replace the 3 AAA batteries. Replace it with batteries of the same supplier. Caution: make sure that batteries with the same polarity are used.



- Place again the lower cover on the front cover by turning it clockwise. Keep in mind to coincide the holes for the side screw.
- Screw the side screw.



## 5. TECHNICAL DATA

<b>DESCRIPTION</b>	Wireless motion sensor for the energy saver
<b>REFERENCE</b>	SVOTI*S
<b>POWER SUPPLY</b>	3 batteries of AAA LR3 1,5 V
<b>AUTONOMY</b>	2 years ( Average consumption 30uA, max. 20mA )
<b>COMUNICATIONS</b>	Wireless 2,4 GHz , IEEE 802.15.4
<b>COMMUNICATIONS COVERAGE</b>	10m ( Max. distance to the energy saver)
<b>INTERFACE</b>	Red led
<b>TEMPERATURE RANGE</b>	-10° to 50°
<b>TECHNOLOGY</b>	Infrared passive detector. Fresnel lens
<b>DETECTION COVERAGE</b>	Ø3m if 3m height mounted (coverage depending on the mounting height )
<b>MOUNTING HEIGHT</b>	Between 2,5 -4m
<b>THERMOSTAT ACCURACY</b>	±2° (-10° to 50°)
<b>DIMENSIONS</b>	Ø 111mm x 40mm
<b>WEIGHT</b>	120gr.

## 6. TIPS FOR PROTECTING THE ENVIRONMENT



The batteries can be damaging if they are not disposed adequately. Protect the environment by throwing the run out batteries in an authorized collecting point.  
For long lasting batteries, when low battery is detected, do change all the batteries.