

# Shelly Motion Sensor WiFi Detector Installation Guide

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#### SHELLY MOTION WIFI SENSOR

Shelly Motion Sensor is a universal Wi-Fi multi-sensor. Along with detecting motion and light intensity. The sensor has a built-in accelerometer to detect any tampering of the device.

Shelly Motion Sensor is battery powered device and designed to be installed quickly and easily on any surface. The LED indicator signals motion, network status, and user actions. Shelly Motion supports fast charging, you can recharege it through battery or solar panel.

### **Specification**

- Working temperature -10 ÷ 50°C
- Radio protocol WiFi 802.11 b/g/n
- Frequency 2400 2500 MHz
- Operational range (depending on local construction) up to 50 m outdoors or up to 30 m indoors

### Visual indications

The Motion Sensor is equipped with a LED diode, signaling sensor's operating modes, and alarms.

#### **Network state**

• AP mode – Blue color present all the time not flashing

- Factory reset Green/Blue/Red sequence of 3 times (100ms each color)
- Settings change 1 time short Blue light.

#### **Motion detected**

- · Red motion is detected and the device is Active
- Green motions is detected device is inactive
- Blinking time 30 sec 100ms

# **Tamper Alarm**

Green/Blue/Red sequence when accelerometers detect tamper alarm. 100ms each.

#### **Vibration Alarm**

- Sensitivity 120 Levels
- Green/Blue/Red

#### **Button user interaction**



- Short press (AP mode) wake-up from AP sleep mode (AP is only for 3 minutes and device power OFF, battery save transportation mode)
- Short press (STA MODE) send status
- Long press 5 sec (STA mode) AP mode
- Long press 10 sec (STA mode) Factory reset

#### Introduction to Shelly

Shelly® is a family of innovative Devices, which allow remote control of electric appliances through mobile phones, PC or home automation systems. Shelly® uses WiFi to connect to the devices controlling it. They can be in the same WiFi network or they can use remote access (through the Internet).

Shelly® may work standalone, without being managed by a home automation controller, in the local WiFi network, as

well as through a cloud service, from everywhere the User has Internet access. Shelly® has an integrated web server,

through which the User may adjust, control, and monitor the Device. Shelly® has two WiFi modes – access Point (AP) and Client mode (CM). To operate in Client Mode, a WiFi router must be located within the range of the Device. helly® devices can communicate directly with other WiFi devices through HTTP protocol. An API can be provided by the Manufacturer. Shelly® devices may be available for monitor and control even if the User is outside the range of the local WiFi network, as long as the WiFi router is connected to the Internet. The cloud function

could be used, which is activated through the web server of the Device or through the settings in the Shelly Cloud mobile application.

The User can register and access Shelly Cloud, using either Android or iOS mobile applications, or any internet browser

and the website: https://my.shelly.cloud/

#### **Installation Instructions**

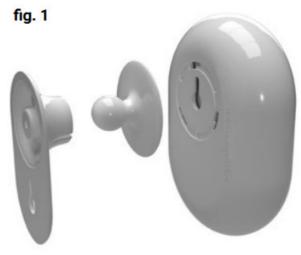
△CAUTION! Before beginning the installation please read the accompanying documentation carefully and completely.

Failure to follow recommended procedures could lead to malfunction, danger to your life, or violation of the law. Allterco Robotics is not responsible for any loss or damage in case of incorrect installation or operation of this device.

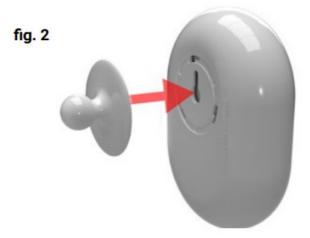
**△CAUTION!** Do not allow children to play with the device, especially with the Power Button. Keep the devices for remote control of Shelly (mobile phones, tablets, PCs) away from children.

# How to assemble and mount the Shelly Motion

1. In your package as seen in fig. 1 you will find the body of the Shelly Motion, ball arm plate, and wall plate.



2. Place the ball arm plate onto the body of Shelly Motion as seen in fig. 2



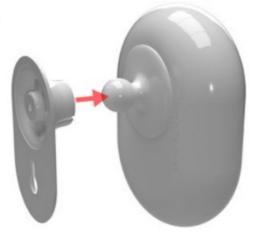
3. Twist the ball arm plate in a counter clock-wise direction as seen in fig. 3

fig. 3



4. Place the wall plate into the ball arm plate - fig 4

fig. 4



5. The assembled Shelly Motion sensor should look like fig. 5

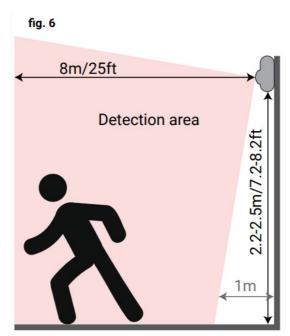
fig. 5



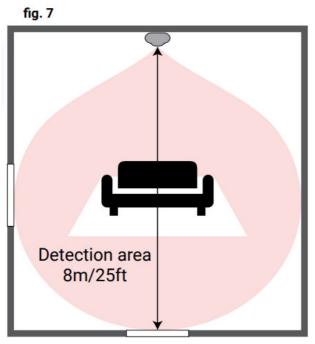
6. Use the locking dowel provided in this package to mount your Shelly Motion onto the wall.

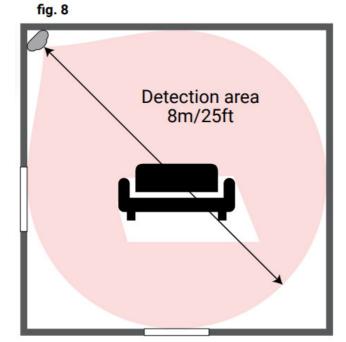
# **Shelly Motion area of detection**

Shelly Motion has a range of 8m or 25ft. The optimal height for mounting is between 2,2 and 2,5m/7,2 and 8,2ft.  $\triangle$  CAUTION! Shelly Motion has a "No detection" area one meter in front of the sensor – fig. 6



 $\triangle$ **CAUTION!** Shelly Motion has "No detection" area one meter behind solid objects(sofa, closet, etc.) – fig. 7 and fig. 8





**△CAUTION!** Shelly Motion cannot detect movement through transparent objects. **△CAUTION!** Direct sunlight or close heating sources can trigger false motion detection.

# **Declaration of conformity**

Hereby, Allterco Robotics EOOD declares that the radio equipment type Shelly Motion is in compliance with Directive

 $2014/53/EU,\,2014/35/EU,\,2004/108/WE,\,2011/65/UE.\,The\,full\,text\,of\,the\,EU\,declaration\,of\,conformity\,is\,available\,Algorithm and the extra conformity and the extra conformi$ 

at the following internet address: <a href="https://shelly.cloud/declaration-of-conformity/">https://shelly.cloud/declaration-of-conformity/</a>

**Manufacturer:** Allterco Robotics EOOD **Address:** Sofia, 1407, 103 Cherni vrah Blvd.

Tel.: +359 2 988 7435

E-mail: <a href="mailto:support@shelly.cloud">support@shelly.cloud</a>
Web: <a href="mailto:http://www.shelly.cloud">http://www.shelly.cloud</a>

Changes in the contact data are published by the Manufacturer at the official website of the Device <a href="http://www.shelly.cloud">http://www.shelly.cloud</a> The User is obliged to stay informed of any amendments of these warranty terms

before exercising his/her rights against the Manufacturer.

All rights to trademarks She® and Shelly®, and other intellectual rights associated with this Device belong to Allterco Robotics EOOD.

#### **INITIAL INCLUSION**

First step is to charge your Shelly Motion with usb charger.

When it is connected the red LED will shines.

△WARNING! Before beginning the installation please read the accompanying documentation carefully and completely. Failure to follow recommended procedures could lead to malfunction, danger to your life or violation of the law. Allterco Robotics is not responsible for any loss or damage in case of incorrect installation or operation of this device!

**AWARNING!** Do not allow children to play with the device, especially with the Power Button.

Keep the devices for remote control of Shelly (mobile phones, tablets, PCs) away from children.

### **CONTROL YOUR HOME WITH YOUR VOICE**

All Shelly devices are compatible with Amazon Echo and Google Home. Please see our step-by-step guide on: <a href="https://shelly.cloud/compatibility">https://shelly.cloud/compatibility</a>

**SHELLY APPLICATION** 



https://shelly.cloud/app\_download/?i=shelly\_generic

Shelly Cloud gives you the opportunity to control and adjust all Shelly® Devices from anywhere in the world. You only need an internet connection and our mobile application, installed on your smartphone or tablet. Registration

The first time you load the Shelly Cloud mobile app, you have to create an account that can manage all your Shelly® devices.

### **Forgotten Password**

In case you forget or lose your password, just enter the e-mail address you have used in your registration. You will then receive instructions to change your password.

△WARNING! Be careful when ou type your e-mail address during the registration, as it will be used in case you forget your password.

First steps After registering, create your first room (or rooms), where you are going to add and use your Shelly devices. Shelly Cloud gives you opportunity to create scenes for automatic turning on or off of the Devices at predefined hours or based on other parameters like temperature, humidity, light etc. (with available sensor in Shelly Cloud).

Shelly Cloud allows easy control and monitoring using a mobile phone, tablet or PC.



#### **Device Inclusion**

To add a new Shelly device following the Installation Instructions included with the Device.

#### Step 1

After the installation of Shelly following the Installation Instructions and the power is turned on, Shelly will create its own WiFi Access Point (AP).

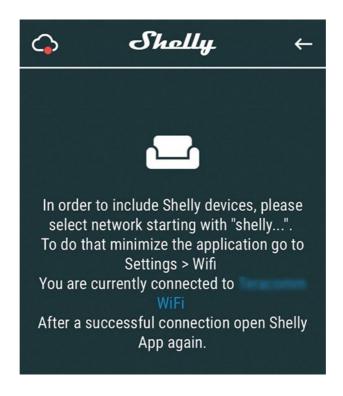
△WARNING! In case the Device has not created its own AP WiFi network with SSID like shell motion-35FA58, please check if the Device is connected accordingly to the Installation Instructions. If you still don't see an active WiFi network with SSID, or you want to add the Device to another Wi-Fi network, reset the Device. Use pin as shown in the multilanguage leaflet to reset the device. If reset was failed please repeat or contact our customer support at <a href="mailto:support@shelly.cloud">support@shelly.cloud</a>

### Step 2

Choose "Add Device". In order to add more Devices later, use the app menu at the top right corner of the main screen and click "Add Device". Type the name (SSID) and password for the WiFi network, to which you want to add the Device.



**Step 3**If using iOS you will see the following screen:



Press the home button of your iOS device. Open Settings > WiFi and connect to the WiFi network created by Shelly, e.g.

shell motion-35FA58. If using Android your phone/tablet will automatically scan and include all new Shelly Devices in the WiFi network that you are connected to.



Upon successful Device Inclusion to the WiFi network you will see the following pop-up



### Step 4

Approximately 30 seconds after the discovery of any new Devices on the local WiFi network, a list will be displayed by default in the "Discovered Devices" room.



**Step 5**Enter Discovered Devices and choose the Device you want to include in your account.

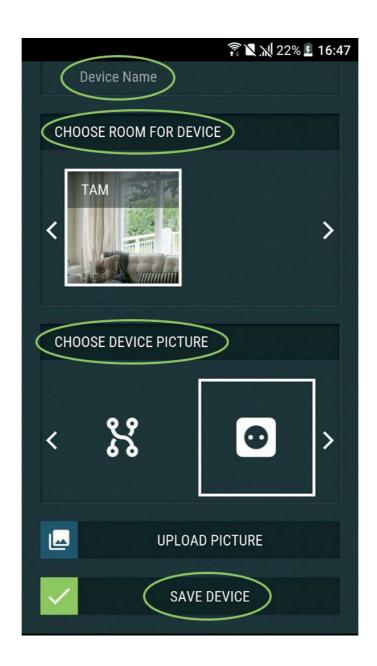


# Step 6

Enter a name for the Device (in the Device Name field).

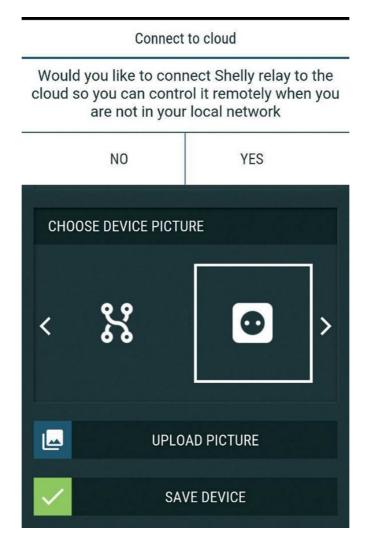
Choose a Room, in which the Device has to be positioned.

You can choose an icon or add a picture tomake it easier to recognize. Press "Save Device".



# Step 7

To enable connection to the Shelly Cloud service for remote control and monitoring of the Device, press "YES" on the following pop-up.



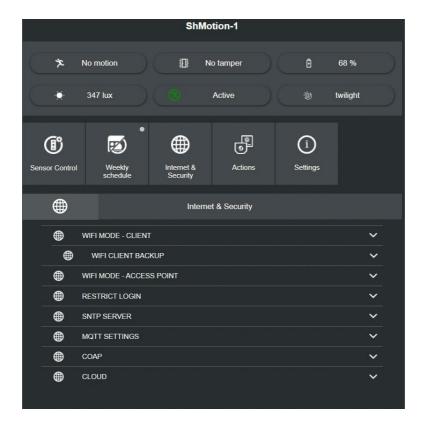
### Shelly devices settings

After your Shelly device is included in the application, you can control it, change its settings and automate the way it works.

To enter at the details menu of the respective Device, simply click on it's name. From the details menu you may control the Device, as well as edit its appearance and settings.

### **Internet & Security**

- WiFi mode Client connect the Shelly device to an existing WiFi Network
- Wifi mode Access point Configure Shelly device to create WiFi Access Point and you can connect to its network
- Restrict Login Restrict the web interface of the Shelly device with "Username" and "Password" SNTP Server
- Advanced Developer Settings
- COAP
- Cloud Connecting your Shelly to its cloud allows you to control it remotely, receive notifications and updates about your devices.



# **Settings**

- Disable LED lights
- Firmware Update
- Time Zone and Geo-Location
- Device name
- · Factory Reset
- Device Reboot
- Device Discoverable
- · Device Info

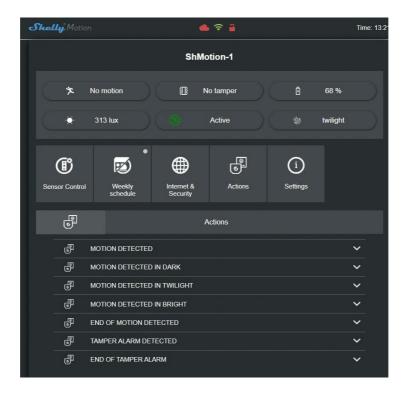


#### **Actions**

 Motion Detected – when movement is detected it will send a command. Separate command can be send when the movement cease.

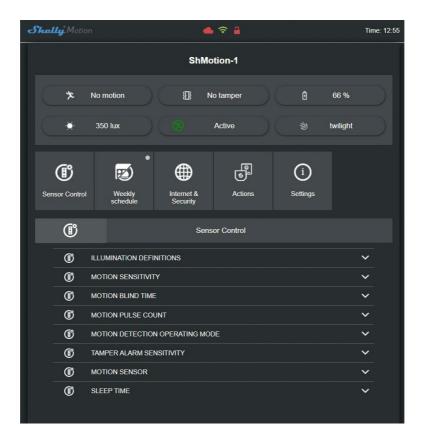
Blind time is the setting for the command-free period between motion ceasing and another motion detected.

- Motion Detected in dark motion detected in dark conditions
- Motion Detected in Twilight motion detected in twilight conditions
- Motion Detected in Bright motion detected in bright conditions
- End of Motion Detected the sensor stopped detecting movements and the blind time has elapsed after the last movement.
- Tamper Alarm Detected when vibration or an attempt to remove the sensor from the wall is detected.
- End of Tamper Alarm no vibration is detected since the tamper alrm is activated.



#### **Sensor Control**

- Set dark and twilight illumination
- Motion Sensitivity motion detection threshold (from 1 to 256), lower value sets higher sensitivity.
- Motion Blind Time blind time in minutes (from 1 to 5) after last detected motion.
- Motion Pulse Count number of consecutive movements (from 1 to 4) to report motion.
- Motion Detection Operating Mode any, dark, twilight or bright
- Tamper Alarm Sensitivity tamper alarm threshold (from 0 to 127).
- Motion Sensor enable or disable Sleep time



#### THE EMBEDDED WEB INTERFACE

Even without the mobile app, Shelly can be set and controlled through a browser and WiFi connection of a mobile phone, tablet or PC.

#### **Abbreviations used**

**Shelly ID** – the unique name of the Device. It consists of 6 or more characters. It may include numbers and letters, for

example 35FA58.

SSID - the name of the WiFi network, created by the Device, for example shellymotion-35FA58.

**Access Point (AP)** – the mode in which the Device creates its own WiFi connection point with the respective name (SSID).

Client Mode (CM) – the mode in which the Device is connected to another WiFi network.

When Shelly has created an own WiFi network (own AP), with name (SSID) such as shellymotion-35FA58. Connect to it with your phone, tablet or PC. Type 192.168.33.1 into the address field of your browser to load the web interface of Shelly.

△WARNING! If you don't see the WiFi please fallow the step 1 from the device inclusion section of the guide.

#### **General – Home Page**

This is the home page of the embedded web interface. If it has been set up is correctly, you will see information about:

- Settings menu button
- Current state (on/off)
- · Present time

#### **Settings**

General Settings In this menu, you can configure the Shelly device's work and connection modes.

### WiFi Settings

- Access Point (AP) Mode allows the Device to operate as a WiFi access point. The User can change the name (SSID) and the password to access the AP. After you have entered the desired settings, press Connect.
- WiFi Client Mode (CM) allows the Device to connect to an available WiFi network. In order to switch to this
  mode, the User must enter the name (SSID) and the password to connect to a local WiFi network. After

entering the correct details, press Connect.



# **Documents / Resources**



<u>Shelly Motion Sensor WiFi Detector</u> [pdf] Installation Guide Motion Sensor WiFi Detector

### References

- Shelly Shelly
- Shelly Cloud
- Shelly Shelly

Manuals+,