Shelly® 2.5

2 Circuit WiFi Relay Switch

USER GUIDE
WARRANTY & WARRANTY TERMS

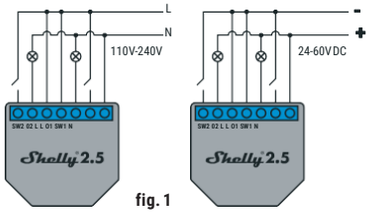


fig. 1

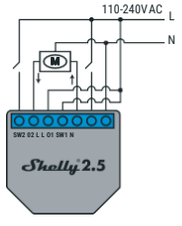


fig. 2

LEGEND:
N - Neutral input (110-230V AC); **+** Positive input (24-60V DC)
L - Line input (110-230V AC); **-** Negative input (24-60V DC)
O1 - Output 1;
O2 - Output 2;
SW1 - Switch 1 (input controlling O1);
SW2 - Switch 2 (input controlling O2).

The Shelly® Dual WiFi Relay Switch by Allterco Robotics is intended to be mounted into a standard in-wall console, behind power sockets and light switches in order to control and monitor the electric power through it, independent for each channel. Shelly may work as a standalone Device or as an accessory to a home automation controller.

Specification

Power supply:
110-230V ±10% 50/60Hz AC
12-24V DC
Max load per channel:
10A/230V, 50/60Hz
Complies with EU standards:
- *RE Directive 2014/53/EU*
- *LVD 2014/35/EU*
- *EMC 2004/108/WE*
- *RoHS2 2011/65/UE*

Working temperature:
– 40°C up to 40°C
Radio signal power:
1mW
Radio protocol:
WiFi 802.11 b/g/n
Frequency:
2400 – 2500 MHz;
Operational range (depending on local construction):
- *up to 50 m outdoors*
- *up to 30 m indoors*

Dimensions (HxWxL):
39 x 36 x 17 mm
Electrical consumption:
< 1 W

Technical Information

- Control through WiFi from a mobile phone, PC, automation system or any other Device supporting HTTP and/or UDP protocol.
- Microprocessor management.
- Controlled elements: 2 electrical circuits/appliances.
- Controlling elements: 2 relays.
- Shelly may be controlled by an external button/switch.

CAUTION! Danger of electrocution. Mounting the Device to the power grid has to be performed with caution.

CAUTION! Do not allow children to play with the button/switch connected the Device. Keep the Devices for remote control of Shelly (mobile phones, tablets, PCs) away from children.

Introduction to Shelly®

Shelly® is a family of innovative Devices, which allow remote control of electric appli-ances through mobile phone, PC or home automation system. 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. Shelly® 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 web site: **https://my.Shelly.cloud/**.

Installation Instructions

CAUTION! Danger of electrocution. The mounting/ installation of the Device should be done by a qualified person (electrician).

CAUTION! Danger of electrocution. Even when the Device is turned off, it is possible to have voltage across its clamps. Every change in the connection of the clamps has to be done after ensuring all local power is powered off/disconnected.

CAUTION! Do not connect the Device to appliances exceeding the given max load!

CAUTION! Connect the Device only in the way shown in these instructions. Any other method could cause damage and/or injury.

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! Use the Device only with power grid and appliances which comply with all applicable regulations. short circuit in the power grid or any appliance connected to the Device may damage the Device.

RECOMMENDATION: The Device may be connected to and may control electric circuits and appliances only if they comply with the respective standards and safety norms.

RECOMMENDATION: The Device may be connected with solid single-core cables with increased heat resistance to insulation not less than PVC T105°C.

Initial Inclusion

Before installing/mounting the Device ensure that the grid is powered off (turned down breakers).

Connect the Relay to the power grid and install it in the console behind the switch/power socket following the scheme that suites the desired purpose.

1.1. Connecting to the power grid and to 2 separately controlled devices (circuits) – **fig. 1**

2.2. Connecting to the power grid and to motor with 2 rotating directions and 1 button for controlling the directions of rotation (for electrical curtains, rollers, garage doors etc.) – **fig. 2**.

CAUTION! The controlled bidirectional electric motor must have built-in or additionally fitted restrictors (protectors), to turn the power off upon reaching the end point or protection against gripping. The anti-grip function helps in case the garage door encounters an obstacle, its' movement stops and the reverse motion is triggered to release the obstacle.

You may choose if you want to use Shelly with the Shelly Cloud mobile application and Shelly Cloud service. You can also familiarize yourself with the instructions for Management and Control through the embedded Web interface.

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:

https://shelly.cloud/compatibility/Alexa
https://shelly.cloud/compatibility/Assistant

Shelly cloud

MOBILE APPLICATION FOR MANAGMENT OF SHELLY®

Download on the App Store | GET IT ON Google Play

Shelly Cloud gives you 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.

To install the application please visit Google Play (Android - fig. 3) or App Store (iOS - fig. 4) and install the Shelly Cloud app.

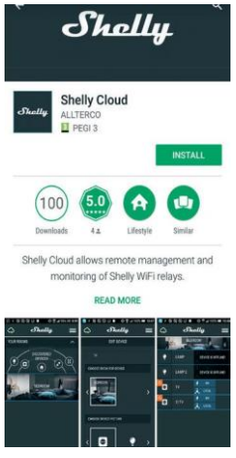


fig. 3

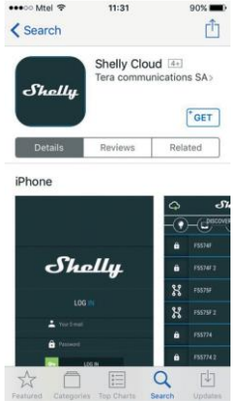


fig. 4

Registration

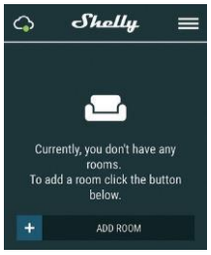
The first time you load the Shelly Cloud mobile app, you have to create an account which can manage all your Shelly® devices.

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 you type your e-mail address during the registration, as it will be used in case you forget your password.

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, install it to the power grid following the Installation Instructions included with the Device.

Step 1

After the installation of Shelly in the console behind the power socket/light switch and the power is turned on Shelly will create its own WiFi Access Point (AP).

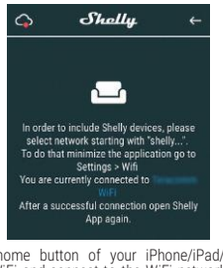
WARNING: In case the Device has not created its own WiFi network with SSID like **shelly- switch25-35FA58** check if you have connected Shelly correct- ly by the schemes described above. If you do not see an active WiFi network with SSID like **shellyswitch25-35FA58**, reset the Device. If the Device has been powered on, you have to restart by powering it off and on again. After turning the power on, you have one minute to press 5 consecutive times the button/ switch connected to either input (SW1/SW2). You have to hear the Relay trigger itself. After the trigger sound, Shelly should return to AP Mode. If you have physicall access to the device, you can press and hold the Reset button for 10 sec- ond, which is placed on the back of the device. Shelly should return to AP Mode. If not, please repeat or contact our customer support at: **support@Shelly.cloud**

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 iPhone/iPad/iPod. Open Settings > WiFi and connect to the WiFi network created by Shelly, e.g. **shellyswitch25-35FA58.**

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:

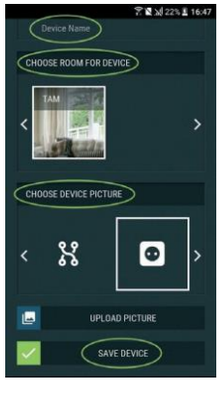
Approximately 30 seconds after discovery of any new Devices on the local WiFi network, a list will be displayed by default in the "Discovered Devices" room.

Step 5:

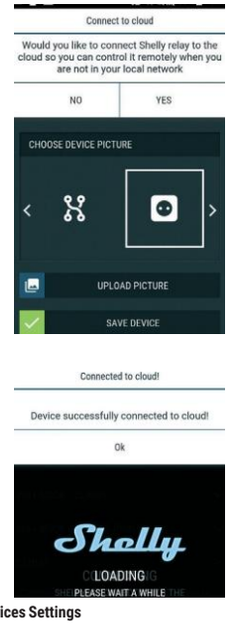
Enter Discovered Devices and choose the Device you want to include in your account.

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 to make 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 app, you can control it, change its settings and automate the way it works.
To switch the Device on and off, use the respective **Power** button. 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.

Timer

To manage the power supply automatically, you may use:

Auto OFF: After turning on, the power supply will automatically shutdown after a predefined time (in seconds). A value of 0 will cancel the timer.
Auto ON: After turning off, the power supply will be automatically turned on after a predefined time (in seconds). A value of 0 will cancel the timer.

Weekly Schedule

⚠ This function requires an Internet connection.
Shelly may turn on/off automatically at a predefined time.

Sunrise/Sunset

⚠ This function requires an Internet connection.
Shelly receives actual information about the time of sunrise and sunset in your area. Shelly may turn on or off automatically at sunrise/sunset, or at a specified time before or after sunrise/sunset.

Internet/Security

WiFi Mode - Client: Allows the device to connect to an available WiFi network. After typing the details in the respective fields, press Connect.

WiFi Mode - Acess Point: Configure Shelly to create a Wi-Fi Access point. After typing the details in the respective fields, press Create Access Point.

Cloud: Enable or Disable connection to the Cloud service.

Restrict Login: Restrict the web interface of Shely with a Username and Password. After typing the details in the respective fields, press Restrict Shelly.

Safety

Max Power Protection: Configure Shelly to turn off when a defined power consumption is reached. Range: 1-2300W. After typing the desired power consumption, press Save.

Settings

Power On Default Mode
This sets the default output state when Shelly is powered.
ON: Configure Shelly to turn ON, when it has power.
OFF: Configure Shelly to turn OFF, when it has power. **Restore Last Mode:** Configure Shelly to return to last state it was in, when it has power.

Firmware Update
Update the firmware of Shelly, when a new version is released.

Time Zone and Geo-location
Enable or Disable the automatic detection of Time Zone and Geo-location.

Factory Reset
Return Shelly to its factory default settings.

Device Information
Here you can see the:
- **Device ID** - Unique ID of Shelly
- **Device IP** - The IP of Shelly in your Wi-Fi network

Edit Device
From here you can edit:
- Device Name
- Device Room
- Device Picture

When you are done, press **Save Device.**

Additional settings in Roller Shutter mode

Power On Default State
- **Open:** When powered on, by default, the motor will be in OPEN state.
- **Close:** When powered on, by default, the motor will be in CLOSE state.
- **Stop:** When powered on, by default, the motor will not change its position.

OPEN/CLOSE Working Time
This setting allows you to set automatic halt of the movement Open/Close, after a predefined time (in seconds).

Cut Off Power: In Roller Shutter mode you can set automatic halt of movement if the pre-set current draw is exceeded (in Watts). Allowable power can be set up to 1840W.

Input Buttons Mode:
- **Any Button** - When you press either of the buttons for control the motor, it will go in the next step following the consequence: Open>Stop>Close>Stop>Open> ...
- **Open & Close Buttons** - Using separate buttons for Open and Close.

Reverse Controls: Allows you to change the Open/Close movement.

Some of the features of the Shelly Cloud mobile application are available at **https://my.shelly.cloud/** as well.

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 **Shellyswitch-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.

Installation/Initial inclusion

Step 1
Install Shelly to the power grid following the schemes described above and place it into the console. After turning the power on Shelly will create its own WiFi network (AP).

⚠ **WARNING:** If you do not see an active WiFi network with SSID like **shellyswitch25-35FA58**, reset the Device. If the Device has been powered on, you have to restart by powering it off and on again. After turning the power on, you have one minute to press 5 consecutive times the button/switch connected to either input (SW1/SW2). You have to hear the Relay trigger itself. After the trigger sound, Shelly should return to AP Mode. If you have physicall access to the device, you can press and hold the Reset button for 10 second, which is placed on the back of the device. Shelly should return to AP Mode. If not, please repeat or contact our customer support at: **support@Shelly.cloud**

Step 2
When Shelly has created an own WiFi network (own AP), with name (SSID) such as **Shellyswitch-35FA58**. Connect to it with your phone, tablet or PC.

Step 3
Type **192.168.33.1** into the address field of your browser to load the web interface of Shelly.

General - Home Page

This is the home page of the embedded web interface. Here you will see information about:
- Current electrical consumption
- Current state (on/off)
- Power Button
- Connection to Cloud
- Present time
- Settings

Safety

Max Power: You can limit the maximum power the socket will supply. If the pre-set current draw is exceeded, Shelly will turn the socket off. Allowable power can be set between 1 to 2300W.

Internet/Security

WiFi Mode - Client: Allows the device to connect to an available WiFi network. After typing the details in the respective fields, press Connect.
WiFi Mode - Acess Point: Configure Shelly to create a Wi-Fi Access point. After typing the details in the respective fields, press Create Access Point.

Cloud: Enable or Disable connection to the Cloud service.

Restrict Login: Restrict the web interface of Shely with a Username and Password. After typing the details in the respective fields, press Restrict Shelly.

Advanced - Developer Settings: Here you can change the action execution:
- Via CoAP (CoIOT)
- Via MQTT

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Settings

Device Type
Here you can set the device type of Shelly:
- **Relay** - Control over 2 independent circuits
- **Roller Shutter** - Control over a bi-directional motor

Time Zone and Geo-location
Enable or Disable the automatic detection of Time Zone and Geo-location.

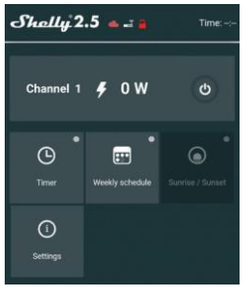
Firmware Update
Update the firmware of Shelly, when a new version is released.

Factory Reset: Return Shelly to its factory default settings.

Device Reboot: Reboots the Device.

Managing in Relay Mode

Channel 1/Channel 2 Screen
In this screen you can control, monitor and change the settings for turning the power on and off. You can also see the current status (electrical load/ power consumption) of the connected appliance to Shelly, Buttons Settings, On and OFF.



Timer

To manage the power supply automatically, you may use:

Auto OFF: After turning on, the power supply will automatically shutdown after a predefined time (in seconds). A value of 0 will cancel the automatic shutdown.

Auto ON: After turning off, the power supply will be automatically turned on after a predefined time (in seconds). A value of 0 will cancel the automatic power-on.

Weeklv Schedule

⚠ This function requires an Internet connection.
Shelly may turn on/off automatically at a predefined time.

Sunrise/Sunset

⚠ This function requires an Internet connection.
Shelly receives actual information about the time of sunrise and sunset in your area. Shelly may turn on or off automatically at sunrise/sunset, or at a specified time before or after sunrise/sunset.

Settings

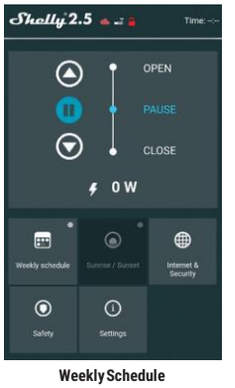
Power On Default Mode
This sets the default output state when Shelly is powered.
ON: Configure Shelly to turn ON, when it has power.
OFF: Configure Shelly to turn OFF, when it has power. **Restore Last Mode:** Configure Shelly to return to last state it was in, when it has power.
SWITCH: Configure Shelly to operate accordingly ti tge state of the switch (button).

Manual Switch Type
- **Momentary** – When using a button.
- **Toggle Switch** – When using a switch.
- **Edge Switch** – Shelly will change its state on every push.

Managing in Roller Shutter Mode

Roller Screen
In this screen you can control, monitor and change the settings for opening and closing the connected motor to Shelly.

To open the connected motor press **"OPEN".**
To close the connected motor press **"CLOSE".**
To stop the connected motor press **"STOP".**



Weekly Schedule

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Internet/Security

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Advanced - Developer Settings: Here you can change the action execution:
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- Via MQTT

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Safety

Max Power: You can limit the maximum power the socket will supply. If the pre-set current draw is exceeded, Shelly will turn the socket off. Allowable power can be set between 1 to 2300W.

Obstacle Detection
From here you can set obstacle detection:
- **Disabled** - this will disable obstacle detection
- While Opening
- While Closing
- While Moving

Obstacle Detection Action
You can select the action that is executed on obstacle detection:
- Stop
- Reverse

Obstacle Detection Treshold
You can set the power treshold on obstacle detection (in Watts).

Obstacle Detection Delay
You can set the delay for obstacle detection activation (in seconds).

When you are done, press **Save Device.**

Settings

Device Type
Here you can set the device type of Shelly:
- **Relay** - Control over 2 independent circuits
- **Roller Shutter** - Control over a bi-directional motor

Shelly Management Settings
Each Shelly can be configured individually. This lets you personalize each Device in a unique manner, or consistently, as you choose.

Power On Parameters
This sets the Devices' default state when powered from the power grid.
OPEN: By default when the Device is powered and the connected motor to it will be in OPEN state.
CLOSE: By default when the Device is powered and the connected motor to it will be in CLOSE state.
STOP: By default when the Device is powered and the connected motor to it will not change its state.

OPEN/CLOSE Working Time
This setting allows you to set automatic halt of the movement Open/Close, after a predefined time (in seconds).

Input Buttons Mode
- **One Button** – On press of the button for control of the motor, it will go in the next step following the consequence: Open>Stop>Close>Stop>Open
- **Open & Close Buttons** – Using separate buttons for Open and Close.

Button Type
- **Momentary** – When using a button.
- **Toggle** – When using a switch.

Reverse Control
Allows you to reverse the Open/Close movement.

Time Zone and Geo-location
Enable or Disable the automatic detection of Time Zone and Geo-location.

Firmware Update
Update the firmware of Shelly, when a new version is released.

Factory Reset: Return Shelly to its factory default settings.

Device Reboot: Reboots the Device.

Additional Features

Shelly allows control via HTTP from any other Device, home automation controller, mobile app or server.

For more information about the REST control protocol, please visit: **www.shelly.cloud** or send a request to **developers@shelly.cloud**

Manufacturer: *Allterco Robotics EOOD*
Address: *Sofia, 1407, 103 Cherni Vrah Blvd.*
Tel.: *+359 2 988 7435*
E-mail: *support@shelly.cloud*
http://www.Shelly.cloud

The Declaration of Conformity is available at:
https://Shelly.cloud/declaration-of-conformity/

Changes in the contact data are published by the Manufacturer at the official website of the Device:

http://www.shelly.cloud

The User is obliged to stay informed for any amendments of these warranty terms before exercising his/her rights against the Manufacturer.

CE RoHS COMPLIANT

2019/01/v01