Shelly® 2LED

Smart WiFi LED Controller
USER GUIDE

Fig.1

LEGEND:

Input:
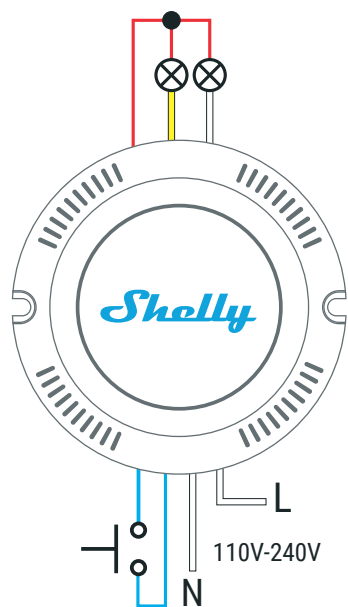Power Supply
Button/Switch

Output:
+ Power
Channel 1
Channel 2

The LED Smart WiFi Controller Shelly® by Allterco Robotics is intended to be installed directly to a LED strip/light in order to turn on/off and dim the light.
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
Output power:
• 2 x 20W/ 90Vx250mA
Dimming:
From 0 to 100%
Complies with EU standards:
• RE Directive 2014/53/EU
• LVD 2014/35/EU
• EMC 2004/108/WE
• RoHS2 2011/65/UE
Working temperature:
From -10°C to 50°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 40 m outdoors
• up to 20 m indoors
Dimensions (HxWxL):
89 x 89 x 31 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: multiple LED diods.
• 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 to and may control electric circuits and light sockets only if they comply with the respective standards and safety norms.

Initial Inclusion

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

Connect the Shelly to the power grid following the wiring scheme above (fig.1)

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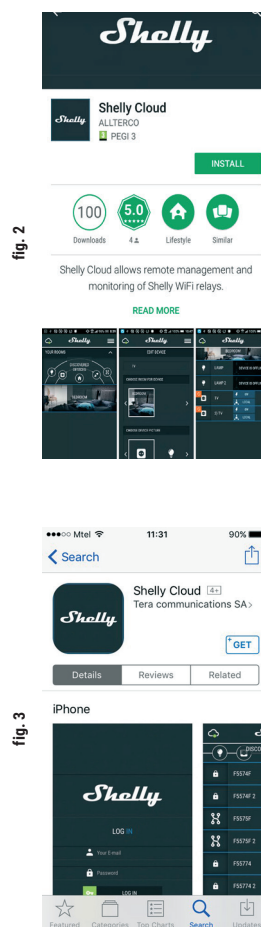**https://shelly.cloud/compatibility/Assistant**

Shelly cloud

MOBILE APPLICATION FOR MANAGMENT OF SHELLY®

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. 2) or App Store (iOS - fig. 3) and install the Shelly Cloud app.
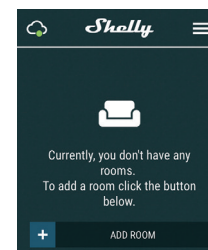

fig. 2

fig. 3

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 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 **shelly2led-35FA58** check if you have connected Shelly correctly by the schemes described above. If you do not see an active WiFi network with SSID like **shelly2led-35FA58**, reset the Device. To restart - press and hold for 10 seconds the button/switch connected to Shelly. Shelly will start blinking, then it 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
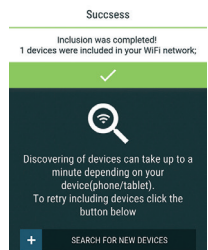
If using iOS: you will see the following screen:

Press the home button of your iPhone/iPad/iPod. Open Settings > WiFi and connect to the WiFi network created by Shelly, e.g. **shelly2led-35FA58.**
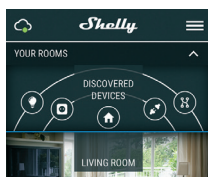
If using Android: your phone/tablet will automatically scan and include all new Shelly Devices in the WiFi network that you are connected to.

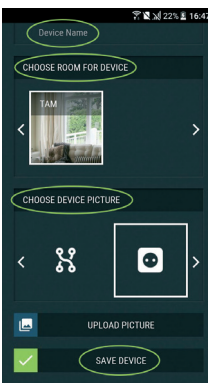Upon successful Device Inclusion to the WiFi network you will see the following pop-up:

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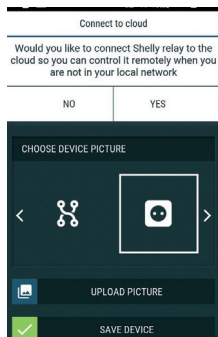
Step 5:
Enter Discovered Devices and choose the Device you want to include in your account.

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.

Connect to cloud

Would you like to connect Shelly relay to the cloud so you can control it remotely when you are not in your local network

NO | YES

CHOOSE DEVICE PICTURE

UPLOAD PICTURE

SAVE DEVICE

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 ON/OFF 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.

EDIT DEVICE – allows you to change the Device's name, room and picture.

DEVICE Settings – allows you to change settings. For example, with Restrict login you may enter a username and password to restrict access to the embedded web interface in Shelly. You may automate the Device operations from this menu as well.

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.

Power On Default Mode
This setting controls whether the Device will supply power or not the output as a default whenever it is receiving power from the grid:

ON: When the Device is powered, by default the socket will be powered.

OFF: Even if the Device is powered, by default the socket will not be powered.

Restore Last Mode: When power is restored, by default, the appliance will return to the last state it was in before the last power off/shutdown.

Sunrise/Sunset
⚠ This function requires an Internet connection. To use Internet, a Shelly Device has to be connected to a local WiFi network with a working Internet connection.

Shelly receives actual information through the Internet 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.

Weekly Schedule
⚠ This function requires an Internet connection. To use Internet, a Shelly Device has to be connected to a local WiFi network with working internet connection.

Shelly may turn on/off automatically at a predefined 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 **shelly2led-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.

Initial inclusion
Step 1
Install Shelly to the power grid following the schemes described above and urn it on. Shelly will create its own WiFi network (AP).

Step 2
When Shelly has created an own WiFi network (own AP), with name (SSID) such as **shelly2led-35FA58**. Connect to it with your phone, tablet or PC.
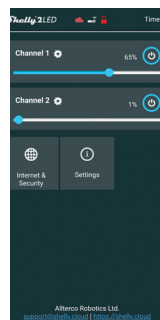
Step 3
Type **192.168.33.1** into the address field of your browser to load the web interface of Shelly.

General - Home Page
This is the home page of the embedded web interface. If it has been set up is correctly, you will see information about:
• Channel 1/2 status and dimmer slider
• Connection to Cloud
• Present time - if connected to the Cloud

Internet & Security
WiFi Mode - Client: 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**.

WiFi Mode - Access Point (AP): 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**.

⚠ **ATTENTION!** If you have entered incorrect information (wrong settings, usernames, passwords etc.), you will not be able to connect to Shelly and you have to reset the Device.

⚠ **WARNING:** In case the Device has not created its own WiFi network with SSID like **shelly2led-35FA58** check if you have connected Shelly correctly by the schemes described above. If you do not see an active WiFi network with SSID like **shelly2led-35FA58**, reset the Device. To restart - press and hold for 10 seconds the button/switch connected to Shelly. Shelly will start blinking, then it should return to AP Mode. If not, please repeat or contact our customer support at: **support@Shelly.cloud**

Restrict Login: Access to the Device
Enable Authentication – you can turn authentication on or off
This is where you can set username and password for your Shelly device. You must enter a username and password, then press **Save** to save the changes.

Cloud: you can turn the connection between the Shelly device and Shelly Cloud on or off.

Settings
In this menu, you can configure the Shelly device.

Firmware Update: Shows present firmware version. If a newer version is available, officially announced and published by the Manufacturer, you can update your Shelly Device. Click Upload to install it to your Shelly Device.
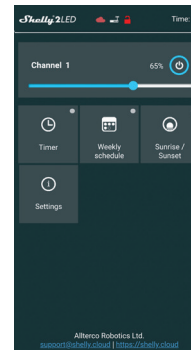
Factory reset: Return Shelly to its factory settings, removes it from your WiFi network and your account.

Device Reboot: Reboots the Device.

Managing the Shelly Device
Channel 1/2 Screen
In this screen you can control, monitor and change the settings for turning the light on and off. You can also see the current status (on/off) of the connected light to Shelly, Buttons Settings, ON and OFF, Schedules and Timer.

To control Shelly press Channel 1/2:
To turn Shelly on press "Turn ON".
To turn Shelly off press "Turn OFF"

Shelly Management Settings
This lets you personalize each Device in a unique manner, or consistently, as you choose.

Timer
Automatic power on/shutdown of Shelly 2LED:

Auto OFF: After turning on, the power supply will be automatically shut down 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 start.

Sunrise/Sunset hours
⚠ This function requires an Internet connection. To use Internet, a Shelly Device has to be connected to a local WiFi network with a working Internet connection.

Shelly receives actual information through the Internet 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.

On/Off schedule
⚠ This function requires an Internet connection. To use Internet, a Shelly Device has to be connected to a local WiFi network with working internet connection.

Shelly may turn on/off automatically at a predefined time.

Power On Default State
This sets Shellys' default state when powered on from the power grid.

ON: By default when the Device is powered and the connected ight to it will be powered as well.
OFF: By default the Device and any connected ight will not be powered, even when it is connected to the grid.
Restore Last State: By default the Device and the connected ight will be returned to the last state they occupied (on or off) before the last power off/shutdown.

CE RoHS COMPLIANT

2018/04/v01