User manual

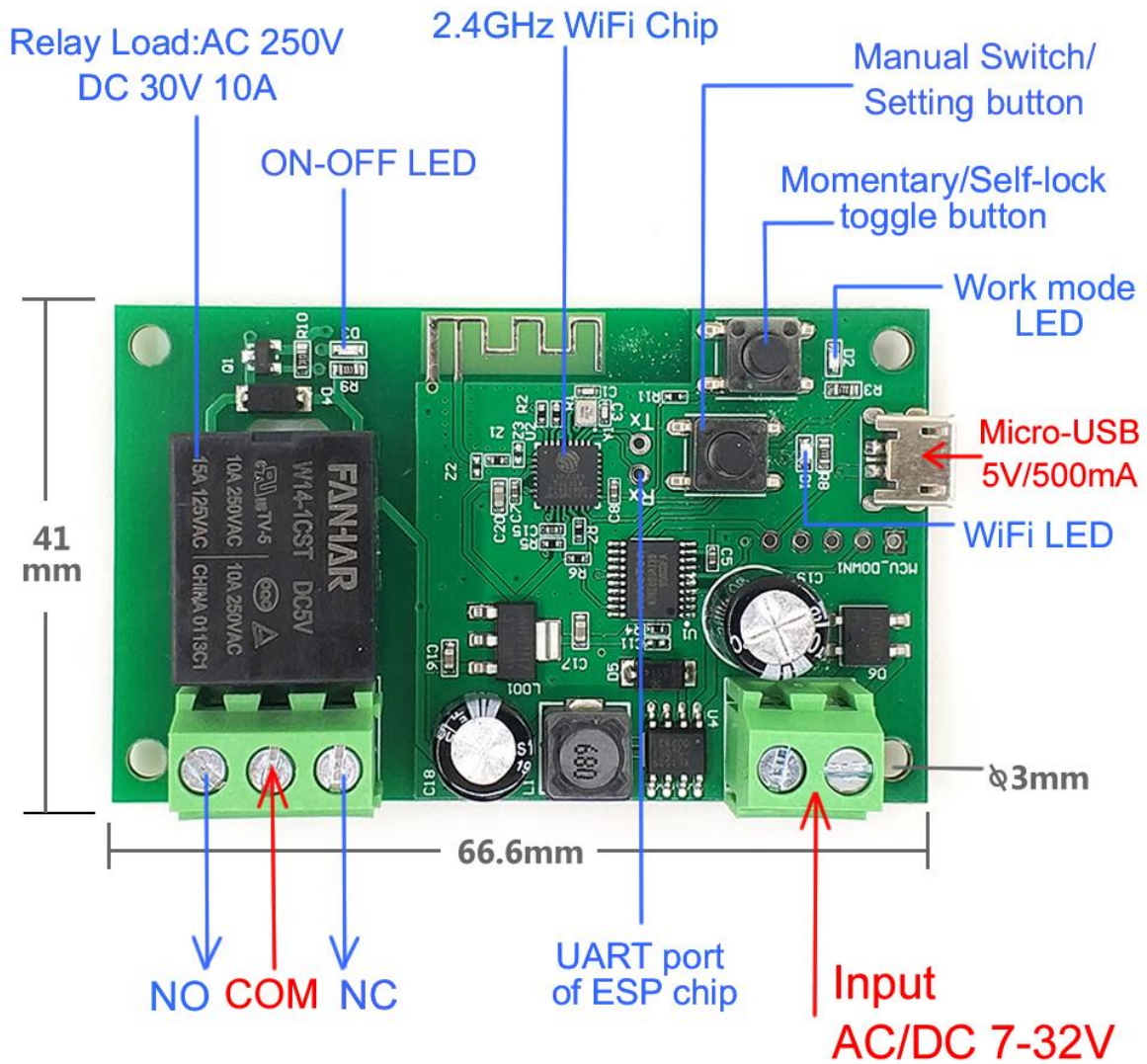## 5V - 32V Wi-Fi Smart Relays

SmartWise 5V-32V WiFi
1-gang smart relay

Product overview

SmartWise 5V-32V 1-gang smart relay, WiFi version

Relay Load:AC 250V
DC 30V 10A

2.4GHz WiFi Chip

Manual Switch/
Setting button

ON-OFF LED

Momentary/Self-lock
toggle button

Work mode
LED

Micro-USB
5V/500mA

41
mm

WiFi LED

φ3mm

66.6mm

NO COM NC

UART port
of ESP chip

Input
AC/DC 7-32V

Size : 67mm(L)*41mm(W)*20mm(H)

Preparation, download and install eWeLink app, create user account

SmartWise devices is compatible with **eWeLink** app, compatible with Apple (iOS) and Android smart phones. Use eWeLink app to pair the smart device with your phone and configure Wi-Fi network data for the smart device. After initial configuration, you can also use the app to monitor on/off status and remotely switch the smart devices via the internet, add and edit scheduled on/off and change device settings.

In case you have not used eWeLink app before with a Sonoff or SmartWise device, and you do not have eWeLink app installed, follow to below steps to install the app to your phone.

1. Download "eWeLink" app and install to phone

Make a search for "eWeLink" in Apple AppStore or in case of an Android phone in Google Play, and download and install „**eWeLink – Smart Home**" app just as do with any other smart phone app.
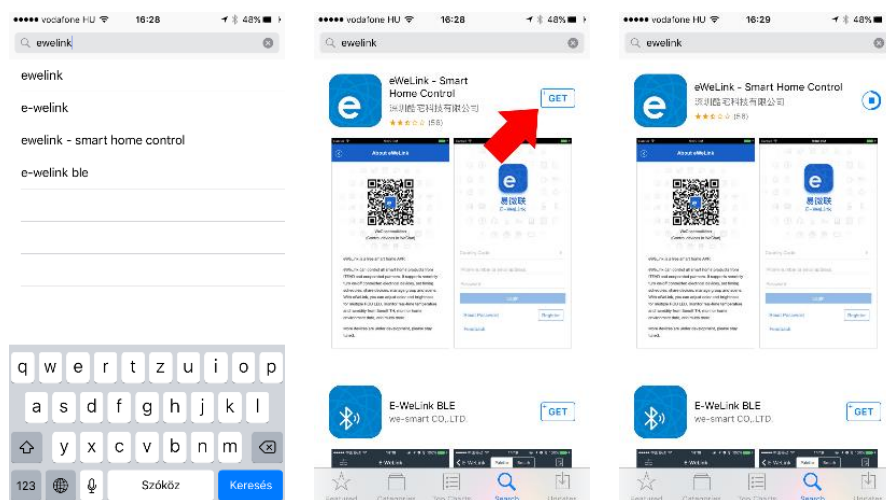
2. Create a user account

At first use the phone may ask you if you allow displaying notifications from eWeLink. We suggest allowing notifications by choosing „ALLOW". It is required to later get phone notifications from the app about smart device events in case we turn such a notification on for this or another Sonoff or SmartWise device.
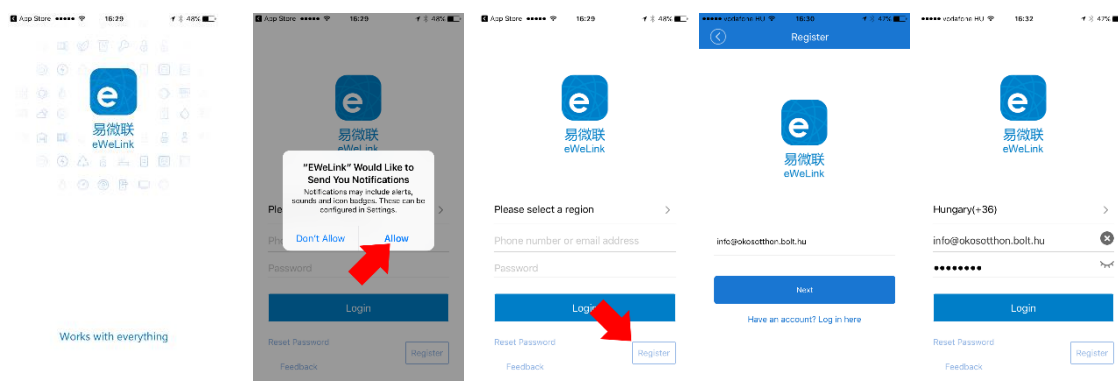
At first use, you will need to create a user account in eWeLink app. Choose „REGISTER". You only need to provide an email address, no other personal information is asked.

Type in a valid email account you can access, because the system would send a short PIN code to the email address to verify email validity. Type in the numeric code in eWeLink app within 30 min. to activate the account.

In case you do not receive the verification code shortly, we suggest you check your spam email folder.

After entering your verification code, add the required eWeLink account password.

We suggest to follow the general security principle of using different passwords for all systems and add a password here which you are not using yet for other accounts.

Enter the email address and password to log in into the eWeLink app.

Reinstalling app or installing app to a second phone
In case you change your phone in the future or want to access eWeLink in multiple phones, skip account creating and just log in with your existing account. All devices will become available immediately.

Note: eWeLink current SW version only lets you log in with the same username from one phone and logs you out on all other phones for security reasons. In case of using eWeLink on multiple phones frequently, consider creating a separate account for other phones and share device access with the other account.

Pairing smart device with phone, configure Wi-Fi (at first use only)

1. **Connect 5V or 7V-32V DC power for the smart relay operations.**
   See next chapter about wiring for details.

2. **Connect your smart phone to that 2.4 GHz Wi-Fi network, which you want to connect the smart relay to.**

In order to make sure that your phone connects to the same Wi-Fi network access point (with the strongest signal) which the smart relay would also connect, we suggest to first turn off Wi-Fi on your phone, then turn on a few moments later. This will make the phone to find and connect the strongest signal Wi-Fi network at the location of smart relay installation. This is specially important when Wi-Fi repeaters are used in the network.

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3. **Make sure that eWeLink app has access to your phone location, this is a must for device pairing.**

4. Push the Wi-Fi pairing button (or any channel ON/OFF button) (depending on type) on the smart device and keep it pushed for 5-8 seconds till the device enters pairing mode. In pairing mode, the Wi-Fi status LED will blink 3 times then pause, 3 blinking then pause again...

5. Open eWeLink app on your phone and touch the "**+**" button at the bottom of the screen, and add the device following the below steps.
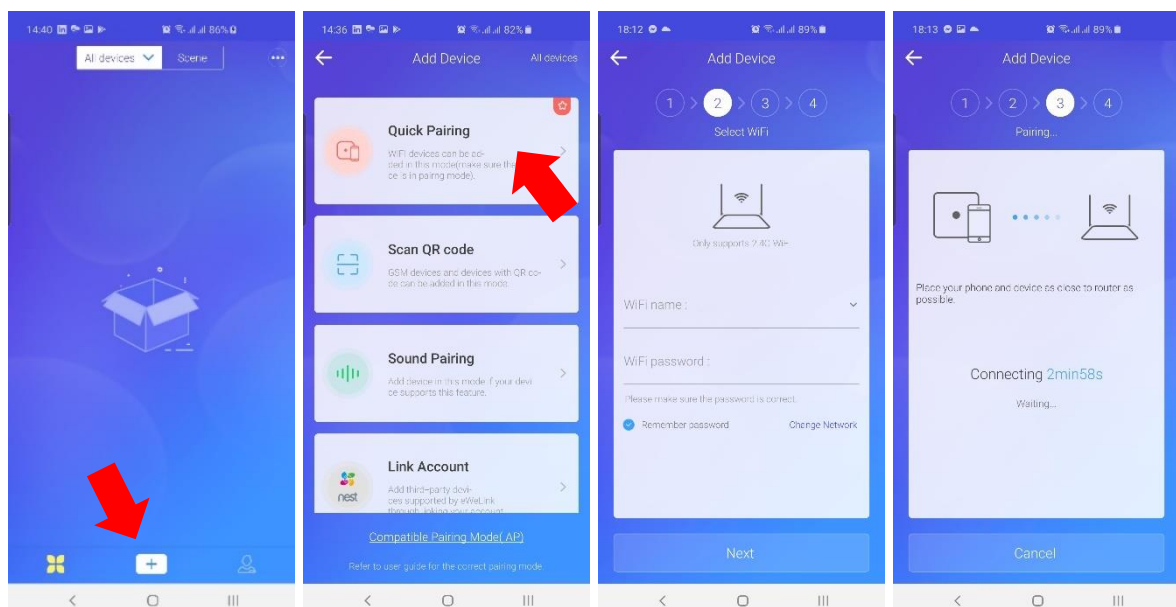
① Pairing method

Choose „**Quick Pairing**" method and touch „NEXT" button.

② Enter your Wi-Fi password

Normally eWeLink would not ask for Wi-Fi network id (SSID), because it would use the actual Wi-Fi connection's ID. You only need to add password. You may choose to „remember password" if you add several devices so that you do not need to enter password again and again.

If you have a separate Guest network or dedicated smart home device subnetwork at home, you may want to add smart home devices to that subnetwork.

Note: smart home device only supports 2.4 GHz Wi-Fi networks. If your phone has connected to a 5GHz network, pairing will fail.

## ③ Put the phone next to the smart device and start pairing.

App will start an automatic search for compatible devices (looking for Wi-Fi APs operated by the eWeLink devices only in pairing mode), configuring them to connect to the specified Wi-Fi network and then register device to your eWeLink account.

App allows3 minutes for this process to complete, so a 180 sec. a countdown is started. Normally 1 min. should be enough for this process to complete. After finishing configuration, your smart device reboots, connects to the Wi-Fi network and appears in eWeLink app.

If paring fails:
1. *Check if phone is connected to a 2.4 GHz network and not a 5GHz Wi-Fi network.*
2. *You may try pairing by „Compatible Mode" instead of Quick Pairing method.*
3. *Firewalls may also prevent device registration to eWeLink cloud. To find out if a firewall is the problem, try to pair the smart devices by connecting it to another phone's Wi-Fi hotspot instead of the home Wi-Fi network. If connection via a smart phone Wi-Fi hotspot works, check networks settings and firewall settings of your home router or firewall.*
4. *eWeLink devices may have connection problems with iOS 13.x Apple phones (due to an iOS 13.x OS limitation), you may want to try an Android phone just for the pairing and configuration process.*

④ Enter a name for the smart device to appear in the smart device list in the app. If you use multiple SmartWise and Sonoff devices, choose a good name to identify the device.
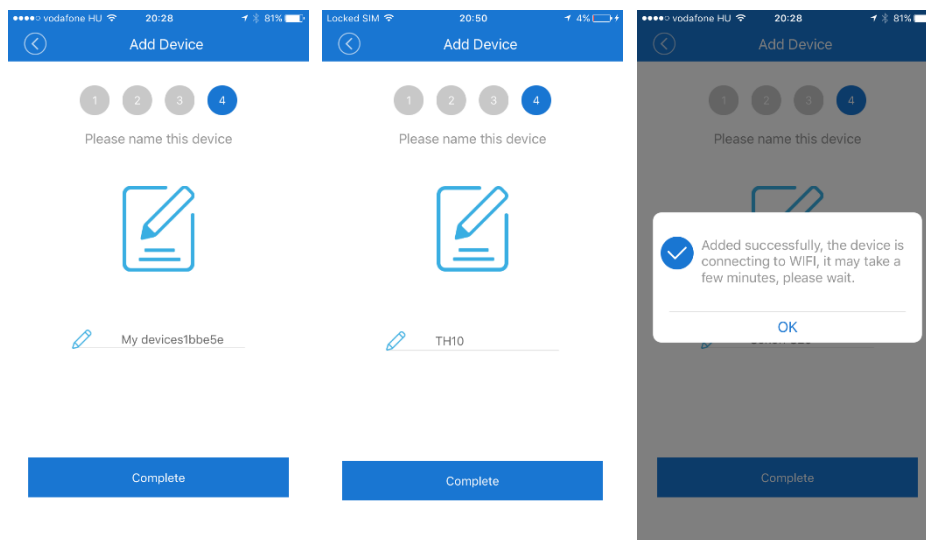
Please note that after Wi-Fi configuration the smart device may need a few second to reboot, so be patient to see it appearing online after the configuration.

After successful configuration, the Wi-Fi status LED on the device will stop blinking and will give a solid continuous light.

Wiring

Wiring steps

Installation of this smart relay requires basic electrical skills. Electricity is dangerous, only install it yourself if you know what you are doing! Otherwise, ask an electrician to install it for you. Proper installation is the responsibility of the installer!

FOR PERSONAL SAFETY: remove house fuse or open circuit breaker before beginning installation. Before installation, verify if wires and not under electricity.

1. Power input for relay operations

In SmartWise 5V-32V Wi-Fi smart relay the power needed for relay and Wi-Fi operations is independent from the relay gangs.

For relay operations you have two power input options:

a) 5V standard microUSB power

You may user a standard 5V (min 250mA) USB power adapter (not accessory) plugged into a standard 230V AC wall plug and a microUSB cable (not accessory).

b) 7V-32V AC / DC power

Alternatively, you can connect the relay to DC power between 7-32V in the other power input slot.

2. Relay gangs

The relay gang(s) work independently from the power input of the relay.

You are free to use the relay to switch AC (max. 250V AC) or DC (max. 30V) power or use (voltage free) dry contact switching. For example, a typical motorized garage door or gate opener requires dry contact switch which is easy to implement with this smart switch.

Therefore, you can use this switch to operate and control 230V AC lights or household electronic devices, as well as operate low voltage engines or a PC power input or use it for voltage free dry contact switching.

(For each gang) you can choose between „NO" and „NC" type switching:

Relay ports:

- use „COM" port as an input for the required voltage, common for NO and NC switching,
- and use „NO", for „Normally Open" or
- „NC" for „Normally Closed" switching.

Using NO and COM: the gang (electric circuit) will be open normally, and when switching the relay, it will become closed (under voltage). Use this to operate electronic devices.

Using NC and COM: the gang (electric circuit) will be closed normally, that is under voltage, and when switching the relay, it will become open (not under voltage). Use this in special cases when you need to turn off a gang for operation for example an electronic door.

Setting the mode of operation

SmartWise 5V-32V smart relays has an **Operation mode button** on the board to set the mode of operation:

- **self-locking mode** means the standard mode of operation: when turned on, stays turned on until switched off.
- **momentary mode** = turns off after 1 second, only gives a short momentary switch when operated, useful for example for gate and garage door operation.
- **interlock mode** *(in case of 2 and 4 gang versions only)* = when one gang of the smart relay is turned on, all other gangs turn off automatically, only one gang can be turned on at once. This security feature needs to be activated when operating for example 2-way engines (roller shutter, shaders, 2-way motors) etc to prevent operation of both directions at the same time.

Wiring examples

For 1-gang relay:
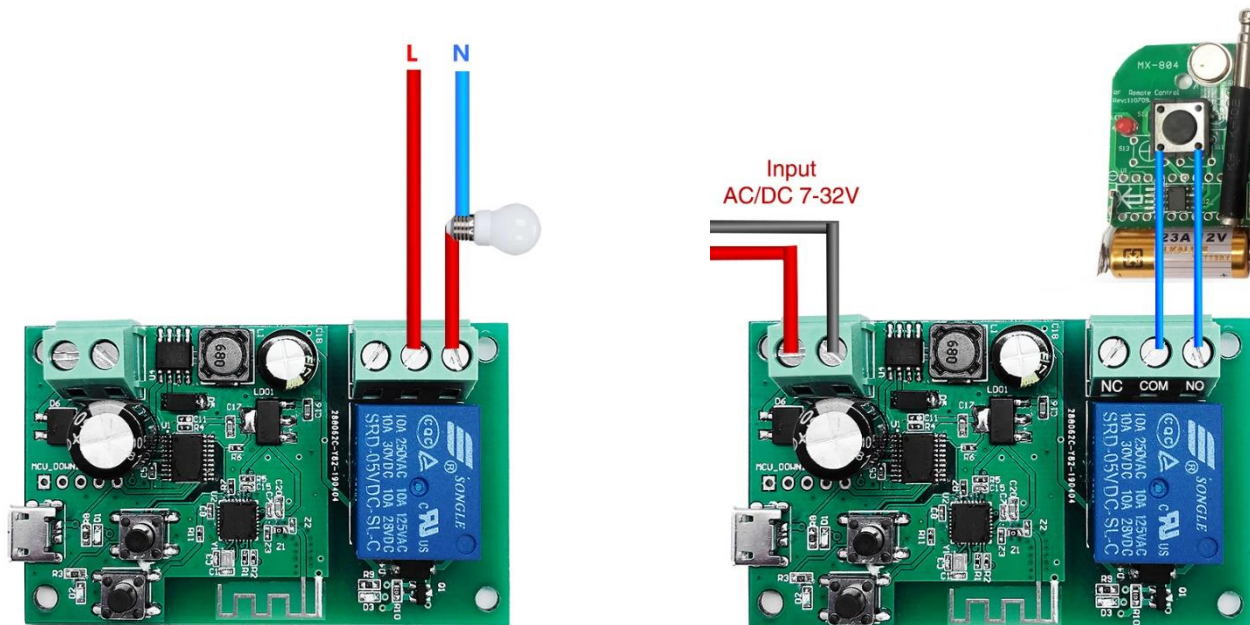
Operating a SmartWise smart relay:

Turn on/off

You can turn on/off a relay gang in eWeLink app using the standard on/off button. Alternatively, you can also turn on/off device with the physical on/off button on the board (depending on the type, not all versions have physical buttons).

Firmware update

Manufacturers and eWeLink platform developer regularly releases software upgrade for eWeLink supported devices.

We advise to regularly check and update device firmware in eWeLink app with a few clicks in the Settings menu.