

LEDLUX A_SH104

LEDLUX SH104 Mini Wi-Fi Smart Switch Module User Manual

Model: A_SH104

1. INTRODUCTION

The LEDLUX SH104 Mini Wi-Fi Smart Switch Module is a compact device designed to integrate traditional electrical switches into a smart home system. It enables remote control of lighting and other appliances via Wi-Fi, RF 433MHz, and voice commands through compatible smart assistants. This manual provides essential information for safe installation, setup, and operation of your smart switch module.

2. PRODUCT FEATURES

- **Wi-Fi Connectivity:** Operates on 2.4 GHz Wi-Fi protocol for remote control via smartphone applications.
- **High Power Rating:** Supports up to 10A and 2500W at 220V, suitable for various household appliances.
- **Multiple Control Options:** Control via physical button (N.O.), RF 433 MHz remote, Wi-Fi app (Tuya or Smart Life), and voice assistants.
- **Voice Assistant Compatibility:** Seamlessly integrates with Amazon Alexa and Google Home for convenient voice control.
- **Compact Design:** Small dimensions (53 x 48 x 18 mm) allow for easy installation within standard electrical boxes (e.g., 503 type).
- **Timer Function:** Schedule devices to turn on or off automatically at specified times.

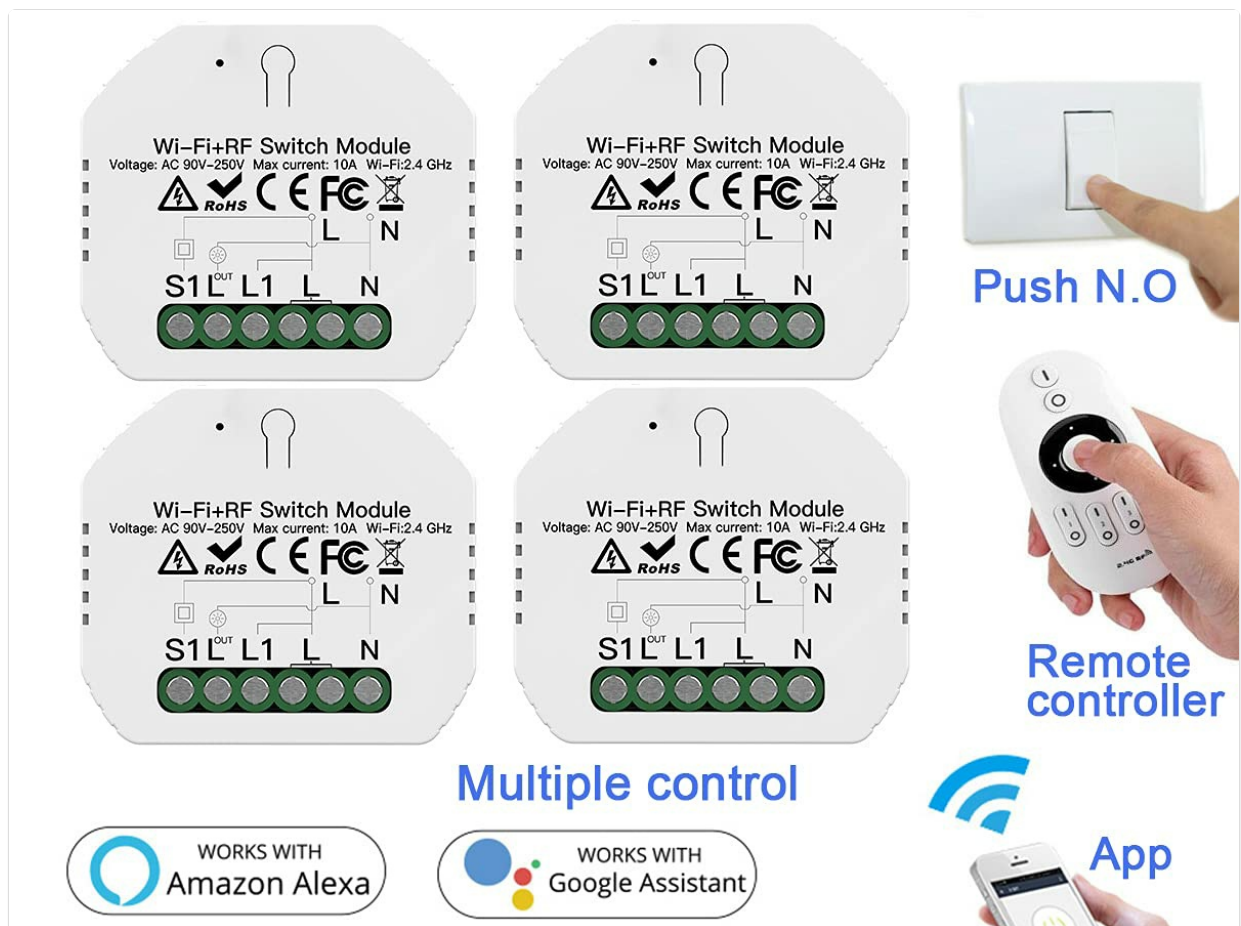


Figure 2.1: Overview of the LEDLUX SH104 Mini Wi-Fi Smart Switch Module, illustrating its compact size and various control methods including app, remote, and voice assistants.

3. SAFETY INFORMATION

Please read this section carefully before installation and use. Failure to follow these instructions may result in electric shock, fire, or other hazards.

- **Electrical Safety:** This device operates at 220V. Always disconnect power at the circuit breaker before performing any electrical work.
- **Professional Installation:** If you are unsure about electrical wiring, consult a qualified electrician.
- **Indoor Use Only:** This device is designed for indoor use in dry environments. Do not expose it to moisture or extreme temperatures.
- **Load Capacity:** Do not exceed the maximum load of 10A / 2500W. Overloading can cause damage to the device and create a fire hazard.
- **Ventilation:** Ensure adequate ventilation around the module when installed in an electrical box to prevent overheating.

4. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x LEDLUX SH104 Mini Wi-Fi Smart Switch Module
- 1 x User Manual (this document)

5. INSTALLATION AND WIRING

Important: Ensure the main power supply is turned off at the circuit breaker before beginning installation.

1. **Disconnect Power:** Locate the circuit breaker controlling the switch you intend to automate and turn it off. Verify that the power is off using a voltage tester.
2. **Prepare Wiring:** Remove the existing wall switch from its electrical box. Identify the Live (L) wire, Neutral (N) wire, and the Load (L1/OUT) wire connected to your light fixture or appliance. If using an external switch, identify the switch wire (S1).
3. **Connect the Module:** Refer to the wiring diagram below and connect the wires to the corresponding terminals on the SH104 module.
 - **L:** Connect the Live wire from the mains power supply.
 - **N:** Connect the Neutral wire from the mains power supply.
 - **S1:** Connect one wire from your external push-button switch (N.O. type). The other wire from the push-button switch should connect to the Live (L) terminal.
 - **L1/OUT:** Connect the Load wire leading to your light fixture or appliance.
4. **Secure the Module:** Carefully place the SH104 module into the electrical box, ensuring wires are not pinched. Its compact size allows it to fit behind most standard wall switches.
5. **Restore Power:** Reinstall the wall switch cover plate and turn the power back on at the circuit breaker.



Figure 5.1: Detailed wiring diagram for the SH104 module, showing connections for Live (L), Neutral (N), external switch (S1), and Load (L1/OUT).

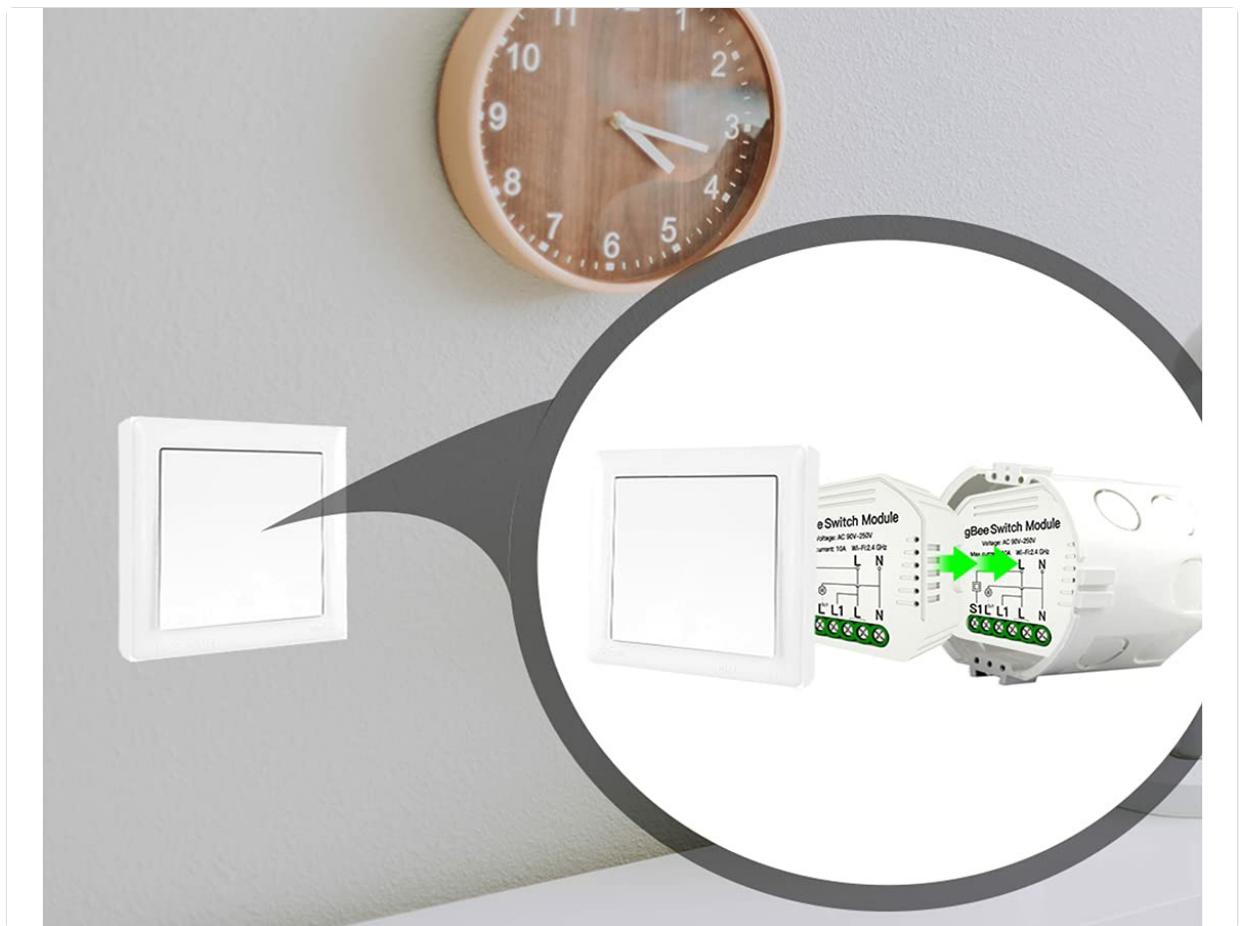


Figure 5.2: Illustration of the SH104 module's compact installation behind a standard wall switch in an electrical box.

6. SETUP AND PAIRING

6.1 App Installation and Wi-Fi Pairing

1. **Download App:** Download the "Tuya Smart" or "Smart Life" app from your smartphone's app store (iOS or Android).
2. **Register/Login:** Open the app and register for a new account or log in with an existing one.
3. **Enter Pairing Mode:** After power-up, the module should automatically enter pairing mode (indicated by a rapidly blinking LED, if present). If not, press and hold the physical button on the module for 5-10 seconds until the LED blinks rapidly.
4. **Add Device:** In the app, tap the "+" icon (usually in the top right corner) to add a new device. Select "Electrical Switch" or "Switch (Wi-Fi)".
5. **Connect to Wi-Fi:** Follow the on-screen instructions to connect the module to your 2.4 GHz Wi-Fi network. Ensure your phone is also connected to the same 2.4 GHz network during pairing.
6. **Completion:** Once successfully paired, the device will appear in your app, and you can rename it for easier control.

Wireless Remote Control

Remotely turn your lights on via Smart Life App wherever you are and turn it off manually on the same switch when at home.



Figure 6.1: Example of the Smart Life app interface used to control the SH104 module remotely.

6.2 RF 433MHz Remote Pairing

To pair an RF 433MHz remote control (not included) with the SH104 module:

1. **Enter RF Pairing Mode:** Briefly press the physical button on the SH104 module twice. The module's indicator light will typically blink slowly to indicate it's ready for RF pairing.
2. **Press Remote Button:** Within a few seconds, press the desired button on your RF 433MHz remote control that you wish to associate with the module.
3. **Confirmation:** The module's indicator light will usually stop blinking or flash quickly to confirm successful pairing.

6.3 Voice Assistant Integration (Alexa/Google Home)

To enable voice control, link your Tuya Smart or Smart Life account to your Amazon Alexa or Google Home app:

1. **Open Voice Assistant App:** Open the Amazon Alexa app or Google Home app on your smartphone.
2. **Add Skill/Service:**
 - For Alexa: Go to "Skills & Games" and search for "Tuya Smart" or "Smart Life". Enable the skill.
 - For Google Home: Go to "Works with Google" and search for "Tuya Smart" or "Smart Life". Link the service.
3. **Link Accounts:** You will be prompted to log in with your Tuya Smart/Smart Life account credentials.
4. **Discover Devices:** Once accounts are linked, ask Alexa to "Discover devices" or use the "Discover devices" option in the Google Home app. Your SH104 module will appear and can be controlled by voice.

7. OPERATING INSTRUCTIONS

The LEDLUX SH104 module offers several ways to control your connected appliances:

- **Manual Control:** Use the connected physical push-button switch (N.O. type) to toggle the appliance on or off.
- **App Control:** Open the Tuya Smart or Smart Life app on your smartphone. Tap on the device icon to turn the appliance on or off. You can also set schedules and timers within the app.
- **RF Remote Control:** If an RF 433MHz remote is paired, press the assigned button on the remote to control the appliance.
- **Voice Control:** Use voice commands with Amazon Alexa or Google Home. For example, "Alexa, turn on [Device Name]" or "Hey Google, turn off [Device Name]".
- **Timer Function:** Within the Tuya Smart or Smart Life app, navigate to the device settings to set up countdown timers, schedules, or scene automations for your connected appliance.

8. MAINTENANCE

The LEDLUX SH104 Mini Wi-Fi Smart Switch Module requires minimal maintenance.

- **Cleaning:** Ensure the device is disconnected from power before cleaning. Wipe the exterior with a soft, dry cloth. Do not use liquid cleaners or solvents.
- **Environment:** Keep the module in a dry environment, away from direct sunlight, high humidity, and extreme temperatures.
- **Firmware Updates:** Periodically check the Tuya Smart or Smart Life app for available firmware updates for the device. Updates can improve performance and add new features.

9. TROUBLESHOOTING

If you encounter issues with your LEDLUX SH104 module, refer to the following common solutions:

Problem	Possible Cause / Solution
Device does not power on.	Ensure power is restored at the circuit breaker. Check wiring connections (Live, Neutral, Load) for proper contact. Verify the power supply voltage is within the specified range (220V).
Cannot connect to Wi-Fi / App pairing fails.	Ensure your Wi-Fi network is 2.4 GHz. The module does not support 5 GHz Wi-Fi. Verify your Wi-Fi password is correct. Move the module closer to your Wi-Fi router to improve signal strength. Ensure the module is in pairing mode (rapidly blinking LED). If not, reset it by holding the physical button for 5-10 seconds. Restart your router and try pairing again.
Device frequently disconnects from Wi-Fi.	Check your Wi-Fi signal strength at the module's location. Ensure there are no strong sources of interference (e.g., other wireless devices, large metal objects). Update the module's firmware via the app if available.
RF 433MHz remote does not work.	Ensure the remote is properly paired with the module (refer to Section 6.2). Check the battery in the RF remote control. Ensure the remote is within range of the module.

Problem	Possible Cause / Solution
Voice control not responding.	<p>Verify that your Tuya Smart/Smart Life account is correctly linked to Amazon Alexa or Google Home (refer to Section 6.3).</p> <p>Ensure the device name in the voice assistant app matches the name you are using in your commands.</p> <p>Check your internet connection.</p>
Device turns on/off unexpectedly.	<p>Check for any active schedules or timers set in the app.</p> <p>Ensure there are no other smart home automations or scenes triggering the device.</p> <p>Investigate potential radio frequency interference if using RF control.</p> <p>Perform a factory reset (consult app for specific instructions, usually involves holding the button for an extended period).</p>

10. SPECIFICATIONS

Parameter	Value
Model Number	A_SH104
Brand	LEDLUX
Input Voltage	AC 90-250V (typically 220V for this model)
Max Current	10 A
Max Power	2500 W
Wi-Fi Standard	Wi-Fi 2.4 GHz
RF Frequency	433 MHz
Operating Mode	ON-OFF-ON
Contact Type	Normally Open (N.O.)
Connector Type	Screw Terminal
Material	Plastic
Product Dimensions (L x W x H)	30 x 60 x 60 mm (approx. 3 x 6 x 6 cm)
Product Weight	50 grams
App Compatibility	Tuya Smart / Smart Life
Voice Assistant Compatibility	Amazon Alexa, Google Home

11. WARRANTY AND SUPPORT

Specific warranty information for the LEDLUX SH104 Mini Wi-Fi Smart Switch Module is not provided in this manual.

Please refer to the retailer or your point of purchase for warranty details.

For technical support or further assistance, please contact LEDLUX customer service or visit the official LEDLUX website.