

# 3-Way Wi-Fi Smart Dimmer Switch

• WF31 •

## Meet your new smart switch!



Power: 120V AC, 60Hz Wireless Frequency: 2.4GHz Wireless Standard: IEEE802.11b/g/n Maximum Load: 150W LED, 500 W incandescent

Minimum Load: 5W for LED bulbs Range: Up to 100 feet line of sight

wallplate x1 wiring x1 screws x2 For indoor use.

| Contents                  |  |                                  |   |  |
|---------------------------|--|----------------------------------|---|--|
| Convention                | Description  | Convention                       | Description   |  |
| Part 1.<br>Installation   | Pre-installation preparation     Installation steps  | Part 5.<br>Network Configuration | Adding your device to Wi-Fi network   |  |
| Part 2.<br>Wiring Diagram | Wiring Instructions     single pole and 3-way wiring diagram   |                                  | Function description • LED Indicator Status Setting   |  |
| Part 3.<br>Manual Control | LED Indicator/ Button function     Adding / reset the device ( Factory setting)     Min & Max Brightness Value Setting | Part 6.<br>Parameter Settings    | <ul><li>Restore State after Power Failure</li><li>Light Off State Setting</li><li>Button Function Setting</li></ul>                     |  |
| Part 4. APP Connection    | If you cannot configure it by the default mode   | If you hav                       | For more detials, please refer to the manual parts.  If you have any questions during installation,  Please contact us ask@nie-tech.com |  |
|                           | successfully, try to connect by AP mode.   | l                                |   |  |

### Part 1. Installation



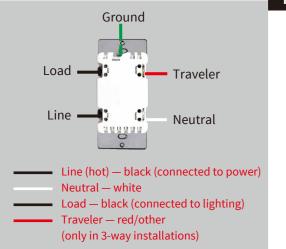
#### CHANGING THE COLOR OF THE PADDLE(OPTIONAL)

- This step is optional. Before you start you may want to change the color of the paddle to match your wallplate or decor.
- 1. Push side tabs in on one side and then the other to release paddle. Lift the cover up and off.
- 2. Simply put the new paddle onto the switch by side tabs and snap securely into place. Once this step has been completed please proceed to part 2 wiring.

The "air gap switch" will cut power to the device if it's pulled up. It's located right below the main switch itself, often next. to the LED. Pull up for Bulb replacement, push down for normal use.

### **%** A Few Quick Reminders

A quick note before we give out the wiring schematics. Please do not try installing this device if you are unsure of how electrical circuits operate within your home. As exciting as it is to have a smart switch installed, it can be dangerous and even life-threatening if you do not install this correctly. Please consult a qualified electrician if necessary. With that said, here are a few other warnings we'd like to point out for your safety:



## **HOW TO INSTALL THE WIRES**





- 1. Unscrew: carefully turn the screw counterclockwise to leave enough space for the wire to be inserted. Do not unscrew the screws completely.
- 2. Press down: Once loosened, use your finger so it catches the thread.
- 3. Insert the wire: make sure the wire is completely straight, then insert it into the terminal while holding down the screw. Do not wrap the wire around the screw!
- **4. Tighten:** Turn the screw clockwise to tighten the wire. Make sure the wires are locked!

Note: There are 2 holes for each terminal can be used in the connection. You can use a jump wire or the second hole at the terminal to connect.

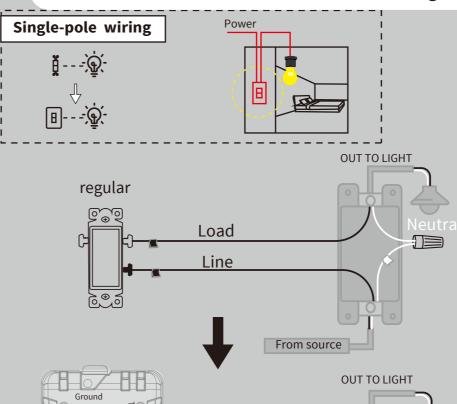


## Note before installation

- 1) The Wi-Fi In-wall Smart Switch must not exceed 150W LED, 500W incandescent.
- 2) The switch box required: 1-gang U.S. wall box. 3½ in deep recommended, 2¼ in deep minimum. (The switch is designed only for use with permanently installed fixtures.)
- 3) Work with regular 3-way on/off for 2 locations control. It can only be connected with regular 3-way on/off switch, don't use a smart switch or a dimmer switch! Couldn't work with an add-on switch!
- 4) The colors of your wires may not match the ones in our diagrams so please make sure you've **identified all wires correctly** based on their source, not color only.
- 5) Please check your original 3-way wiring circuit in your home before installation, and then **follow the wiring diagram option 1 or 2** in
- 6) Install the smart switch in the switch box which directly connects to the power Line and Neutral.
- 7) This switch **requires a Neutral for installation**, or the installation will not succeed.
- 8) Not recommended for fan.

If you have any questions, please contact us at ask@nie-tech.com

# **Part 2. Wiring Diagram**



Load

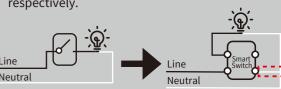
- 1. Tool: Please prepare a flat head screwdriver.
- 2. Turn power OFF at circuit breaker or fuse box.



- 3. Remove wallplate.
- 4. Remove the switch mounting screws.
- 5. Disconnect the wires and label them after **remove the old switch**.(Please use our sticker)

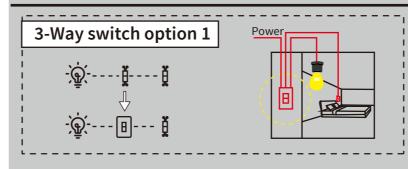


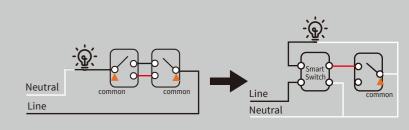
- 6. Carefully remove the switch from the switch **box.** (DO NOT disconnect the wires.)
- 7. There are up to five screw terminals on the smart switch, these are marked (Please check <HOW TO INSTALL THE WIRES>)
- 8. Fix the wallplate with screws after wiring succeed. (Please use our screws.)
- 9. The Ground was excluded from the diagram to simplify the illustration. Please Make sure all ground wires are connected to all switches respectively.

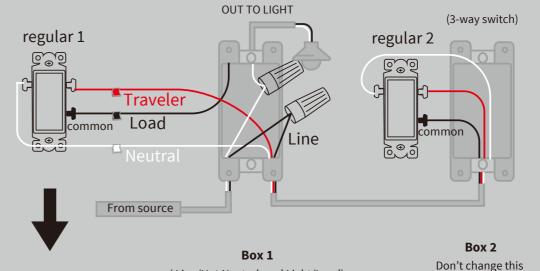


#### **!** IMPORTANT

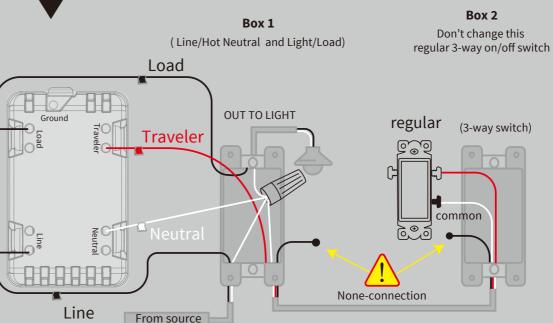
- 1) Neutral required. If the box do not have a Neutral, please stop! Connect the white wire to neutral terminal(use a white jump wire form the package or the second hole at the terminal to connect.)
- 2) Insert the Line wire to Line terminal and Load wire to Load terminal. LOAD and LINE Can't be swapped, please make sure to identify them correctly!





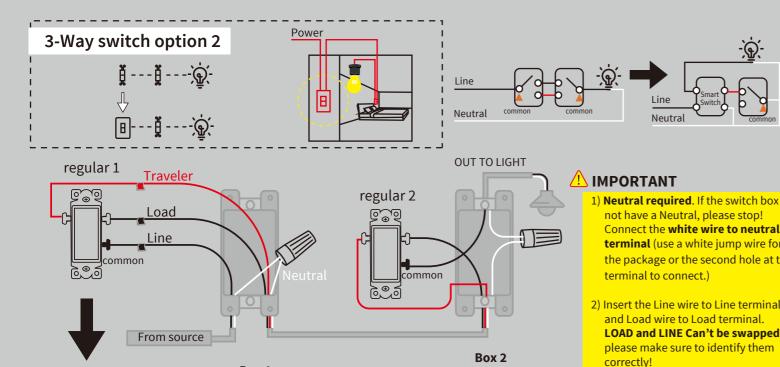


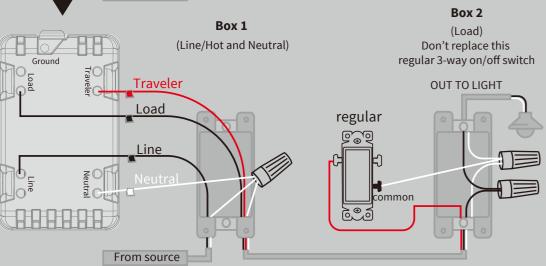
From source



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- 2) Insert the Line wire to Line terminal and Load wire to Load terminal. LOAD and LINE Can't be swapped, please make sure to identify them correctly!
- 3) Install the smart switch in the switch box which directly connects to the power Line, Load and Neutral.
- 4) Only work with regular 3-way on/off for 2 locations control. It can only be connected with regular 3-way on/off switch, don't use a smart switch or a dimmer switch! Couldn't work with an add-on switch!





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#### Part 3. Manual Control



#### **LED Indicator:**

Red: Network failure Blue: Normal Network configuration mode Orange: Light status indicator Purple: AP Network configuration mode

- 1) Tap 1( Up button): turn on the light (the last brightness level) Press and hold (Up button): add brightness
- 2) Tap 1(Down button): turn off the light Press and hold ("down" button): reduce brightness.
- 3) Adding your device to Wi-Fi network:

Please make sure the switch is on the "OFF" position. Hold the "down" button more than 10s until the light bulb flashes and the blue LED blinks rapidly to inituate App-configured Mode.

- 4) If you need to reset the device (Factory setting) Network reset
- 1.Turn off the light(when the light is on)
- 2.Hold the "down" button until the light bulb flashes (the blue LED blinks rapidly)

### **Minimum Brightness Value Setting**

- --- (indicator flashes 3 times after setting successfully)
- 1: Press the "down" button 5 times quickly, the orange LED breathing flash into the minimum brightness setting mode.
- 2: Press and hold the "up/down" button to adjust the brightness of the bulb, and select the appropriate brightness to set the minimum brightness.
- 3: After selecting, press the "down" button 5 times to confirm, the orange indicator flashes 3 times after confirmed.
- 4: After that, the brightness of the bulb will automatically be adjusted from the set min brightness to the max brightness, then from the max brightness to the min brightness, finally stays at the set min brightness.
- 5: The minimum brightness setting is completed.

#### Maximum brightness value setting

- --- (indicator flashes 3 times after setting successfully)
- 1: Press the "Up" button 5 times, the orange LED breathing flash into the maximum brightness setting mode.
- 2: Press and hold the "up or down" button to adjust the brightness of the bulb, and select the appropriate brightness to set the maximum brightness.
- 3: After selecting, press the "up" button 5 times to confirm, the orange indicator flashes 3 times after confirmed.
- 4: After that, the brightness of the bulb will automatically be adjusted from the set max brightness to the min brightness, then from the min brightness to the max brightness, finally stays at the set max brightness.
- 5: The maximum brightness setting is completed.

### Part 4. APP Connection

- · Make sure the device is connecting to your 2.4GHz network, and get the password of your network. Cannot connect without a password, set network password first.
- · Make sure that the light is turned " OFF" before network configuration(in the case of 3-way installation, 2 switches must be in the "off" state).
- Please complete operation within 30s when "BLUE" LED indicator blinks rapidly.
- If you failed to connect with Wi-Fi network, please try to operate several times more. If you still can't connect, try AP mode (refer to the APP connection--AP
- 1. Please scan the QR code to download the application "Smart Life".
- 2. If you cannot download Smart Life app, please search "Smart Life" on Google Play (for Android phone) or Apple Store (for iOS phone) to download.
- After you download the Smart Life App and register a new account, please follow the instructions below to set up your smart switch.
- he smart switch can be also used with Amazon Echo and Google Home. Please scan the QR code below and follow the instructions you have any trouble pairing with them.



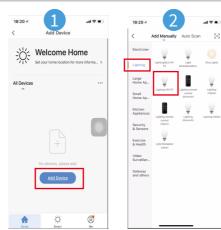
OR code











Step 1: Tap '+' to add a device in your app

Step 2:Select "Lighting "-"Lighting (Wi-Fi)"

#### **Part 4. APP Connection**



Step 3: Enter the Wi-Fi Password (Your phone should have connected to the same Wi-Fi first).



Step 4: Hold the "down" button more than 10s until the light bulb flashes and "BLUE" LED blinks rapidly. Please make sure the switch is on the









Step 5: Reconfirm

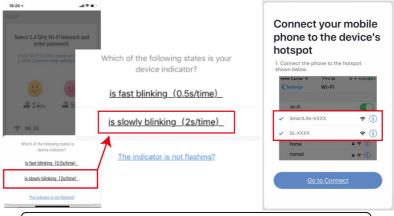
Step 6: Select "is fast blinking(0.5s/time)"

Step 7: Wait for the app to connect to your Wi-Fi until it's 100%

Step 8: Click and edit the name of your new smart switch! you can start using it now.

#### If you cannot configure it by the default mode successfully, try to connect by AP mode

- 1) When the blue LED indicator flashes quickly, press and hold the down button for more than 5s until the bulb flashes twice to enter the AP mode, and the purple LED indicator flashes quickly.
- 2) Click on "is slowly blinking(2s/time)" in the upper right corner.
- 3) Click "Confirm light flashes."
- 4 ) Enter Wi-Fi network password.
- 5) Open wireless LAN settings with "SmartLife-xxxx/SL-xxxx".
- 6) Back in the application, continue adding devices and wait for the connection to complete.



if you have any questions, Please contact us at ask@nie-tech.com

## Part 5. Network Configuration

old the "down" button until the light bulb flashes (blue LED blinks rapidly). Please make sure the switch is on the "OFF" position.

- Guidelines for switching between AP Network configuration mode and Normal Network configuration mode:
- Normal Network configuration mode to AP Network configuration mode: When the blue LED indicator flashes quickly, press and hold the "down" button for more than 5s until the bulb flashes twice to enter the AP Network configuration mode, and the purple LED indicator flashes quickly.
- AP Network configuration mode to Normal Network configuration mode: When the purple LED indicator flashes quickly, press and hold the "down" button for more than 5s until the bulb flashes 1 time to enter normal mode, and the blue LED indicator flashes quickly.

#### Part 6. Parameter Settings

The LED indicator flashes 3 times after each parameter setting successfully.) • LED Indicator Status Setting (This parameter can access you to choose the led indicator to be on when the switch (light) is on/off, or LED indicator remains on/off all times.)

Value=1 (default) LED is On when the switch (light) Off and LED is Off when the switch (light) On.

LED is On when switch (light) On and LED is Off when Value=2 the switch (light) Off.

LED is always Off. Value=3

Value=4 LED is always On.

Operation: Quickly press "down" button 10 times.

Please note: the switching of each value is in order, a quick press ""down" button 10 times will switch once. eg: Switching from value1 to value 4 needs 3 switchings.

• Restores State after Power Failure (This parameter can access you to set the switch to be on/off after power failure.)

Value=1 (default) Memory state before power failure This switch will be return to state prior to the power failure after power is restored.

Value=2 The switch is off regardless of the state prior to power

failure Value=3 The switch is off regardless of the state prior to power

failure. Operation: Quickly press "up" button 10 times.

Please note: the switching of each value is in order, a quick press "up" button 10 times will switch once. eg: Switching from value1 to value 3 needs

• Light off State Setting (This parameter can access you to set the light fade out or off immeditaly

Value=1 (default) Fade out Instantaneous off Value=2

Operation: Quickly press "up" button 8 times Please note: the switching of each value is in order, a quick press "up" button 8 times will switch once. eg: Switching from value1 to value 2 needs

• Button Function Setting (This parameter can access you to set the "up" button to turn the light on/off.)

Value=1 (default) The "up" button turn the light on and "down" button turn lights off. Value=2 The "up" button turn the light off and "down" button

turn lights on.

**Operation:** Quickly press "down" button 8 times Please note: the switching of each value is in order, a quick press "down" button 8 times will switch once. eg: Switching from value1 to value 2 needs 1

This device complies with part 15 of the FCC and Industry Canada license-exempt RSS standard(s). Operation is subjected to the following two conditions:

(1) this device may not cause harmful interference, and (2) this dévice must accept any interference received, including interference that may cause undesired operation.

**FCC NOTE:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to

operate the equipment. Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from
- that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help NOTE: This equipment has been tested and found to comply with

the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

**Important note:** To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.



### **CAUTION - PLEASE READ!**



This device (WF31) is intended for installation in accordance with the National Electric Code and local regulations in the United States, or the Canadian Electrical Code and local regulations. tions in Canada. If you are unsure or uncomfortable about performing this installation consult a qualified electrician.



**WARNING - SHOCK HAZARD** 

**TURN OFF THE POWER** to the circuit for the switch and lighting fixture at the service panel (circuit breaker) prior to installation.

ALL WIRING CONNECTIONS MUST BE MADE WITH THE POWER **OFF** to avoid personal injury and/or damage to the switch.



**OTHER WARNINGS** 



Risk of Electrical Shock Risk of Burns