



switch x1      +      wiring x1      screws x2

## Z-WAVE INTEROPERABILITY

This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-lifecycle operated nodes within the network will act as repeaters regardless of vendor to increase the reliability of the network.

The Device supports Lifeline Association group 11 supporting 1 node for Lifeline communication.

Devices that are assigned the Node ID of the primary controller where unsecured lifeline communication will be sent. The Z-Wave controller should set this association automatically after inclusion.

Lifeline Association only supports the "Device Reset Locally" function. Refer to the instructions of your controller for any available details on how this can be set.

| Contents                       |                                                                                                                                                           |                                |                                                                                                                                                                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Convention                     | Description                                                                                                                                               | Convention                     | Description                                                                                                                                                                                                                             |
| <b>Part 1: Introduction</b>    | <ul style="list-style-type: none"> <li>• Product introduction</li> <li>• Installation steps</li> </ul>                                                    | <b>Function Description</b>    | <ul style="list-style-type: none"> <li>• Locally button function</li> <li>• LED indicator</li> <li>• Auto Turn-Off Timer</li> </ul>                                                                                                     |
| <b>Part 2: Wiring Diagrams</b> | <ul style="list-style-type: none"> <li>• Wiring instructions</li> <li>• Single point &amp; 2-way wiring diagram</li> </ul>                                | <b>Part 3: Power Settings</b>  | <ul style="list-style-type: none"> <li>• Dimmer switch</li> <li>• Resets switch to power failure</li> <li>• Turn-on speed (ON/OFF Control)</li> <li>• Turn-on speed (set for hold area in a hold)</li> </ul>                            |
| <b>Part 3: Troubleshooting</b> | <ul style="list-style-type: none"> <li>• To Return the Device</li> <li>• To Return the Device to Factory Defaults</li> <li>• Association Group</li> </ul> | <b>Part 4: Troubleshooting</b> | <ul style="list-style-type: none"> <li>• Multilabel minimum value can be set</li> <li>• Multilabel maximum value can be set</li> <li>• Association Group</li> <li>• Locally Button Press function</li> <li>• Command classes</li> </ul> |
| <b>Part 4: Manual Control</b>  | <ul style="list-style-type: none"> <li>• LED indicator/ button function</li> <li>• Adding/ reset the device (Factory settings)</li> </ul>                 | <b>Part 5: Troubleshooting</b> | <ul style="list-style-type: none"> <li>• Solutions to common common problems</li> </ul>                                                                                                                                                 |



**Basic Operation**  
The connected light can be turned ON/OFF in two ways:  
1. Manually from the in-wall Switch  
2. Remotely with a Z-Wave Controller

**Manual Control**  
The Knob Switch allows the user to:  
Turn ON/OFF the connected fixture.

**✖ A Few Quick Reminders**

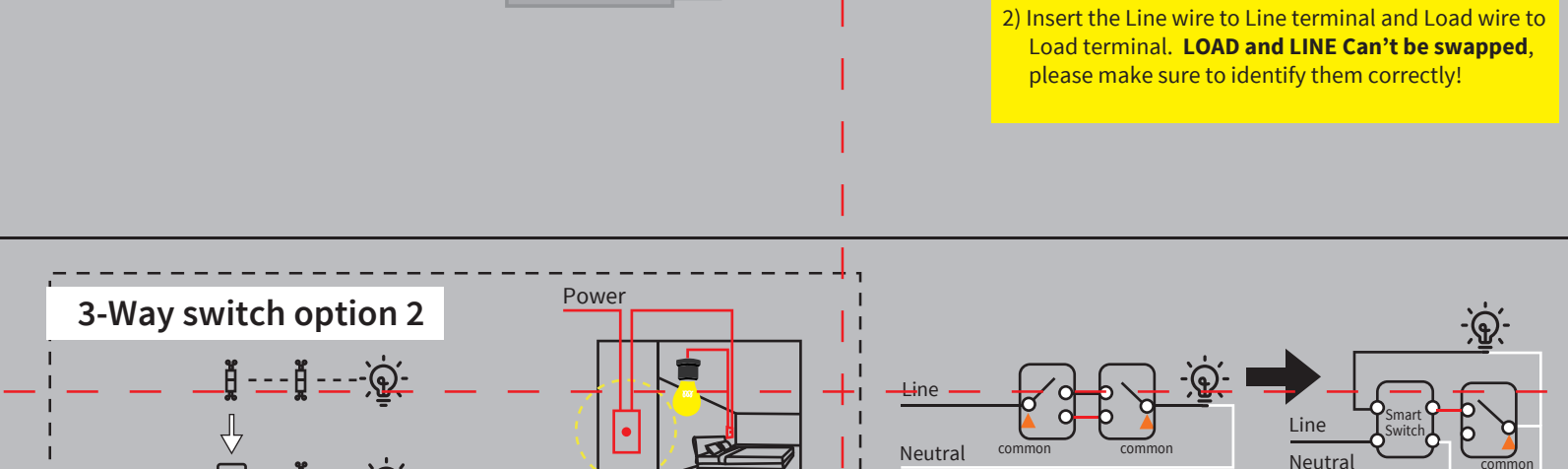
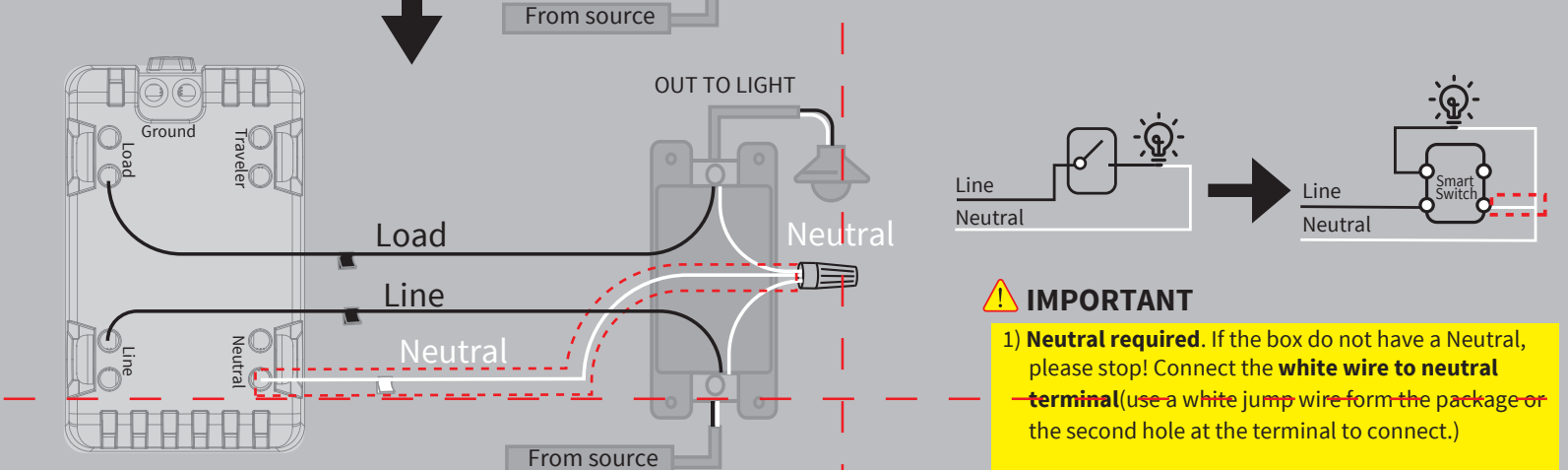
A quick note before we give out the wiring schematics. Please do not try installing this device if you are unsure of how electrical circuits operate within your home. As exciting as it is to have a smart switch installed, it can be dangerous and even life-threatening if you do not install this correctly. 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

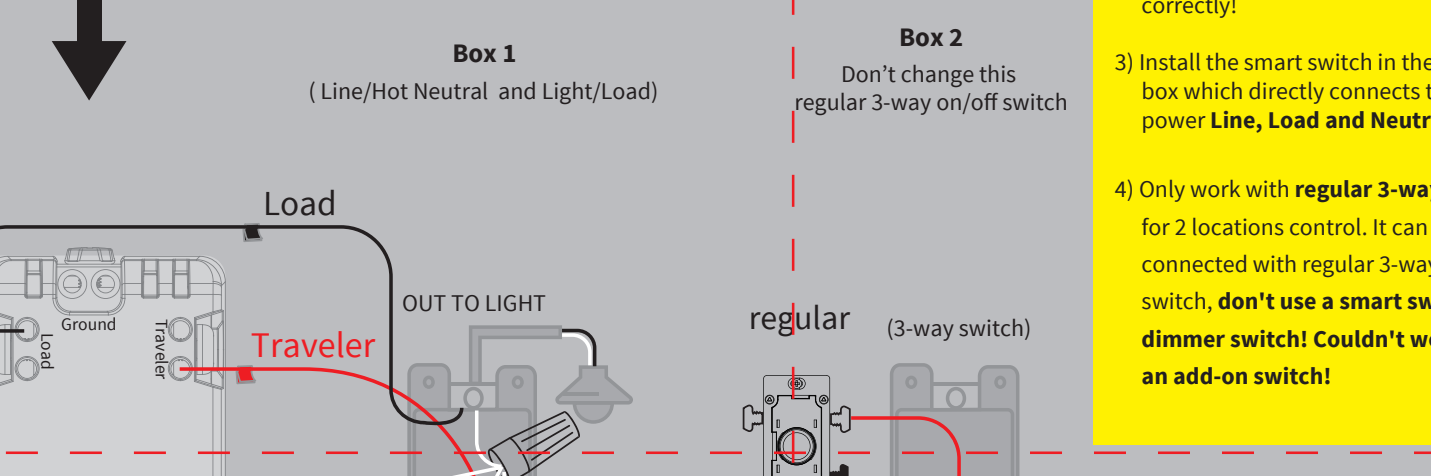
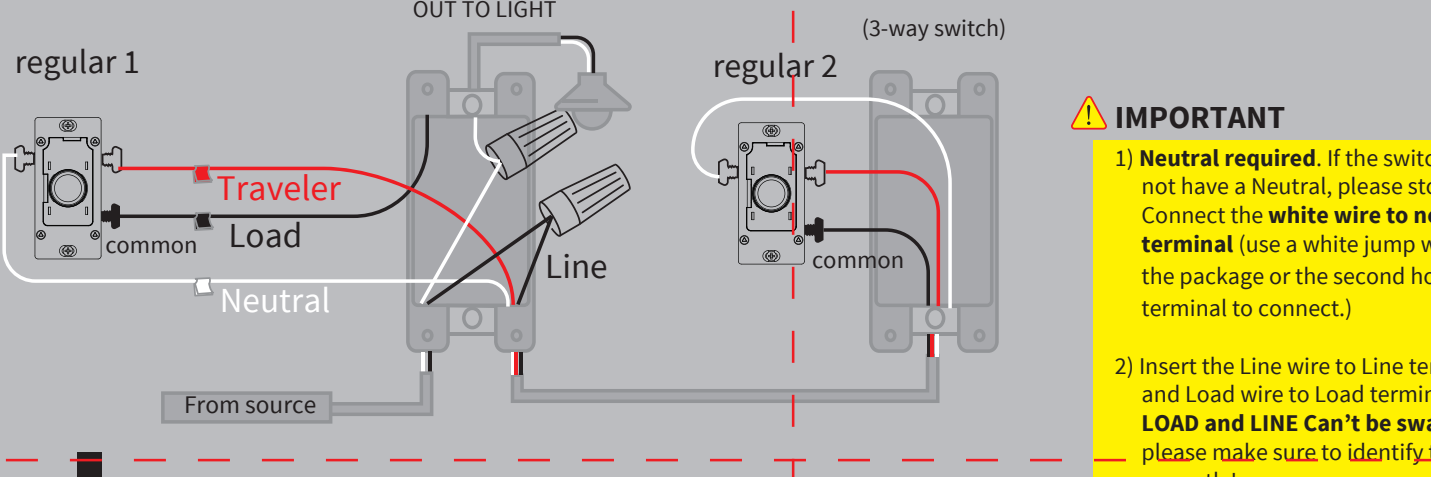
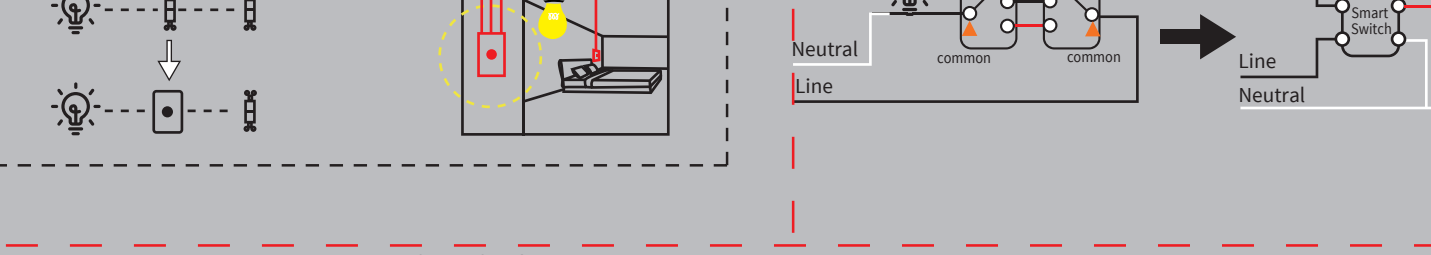
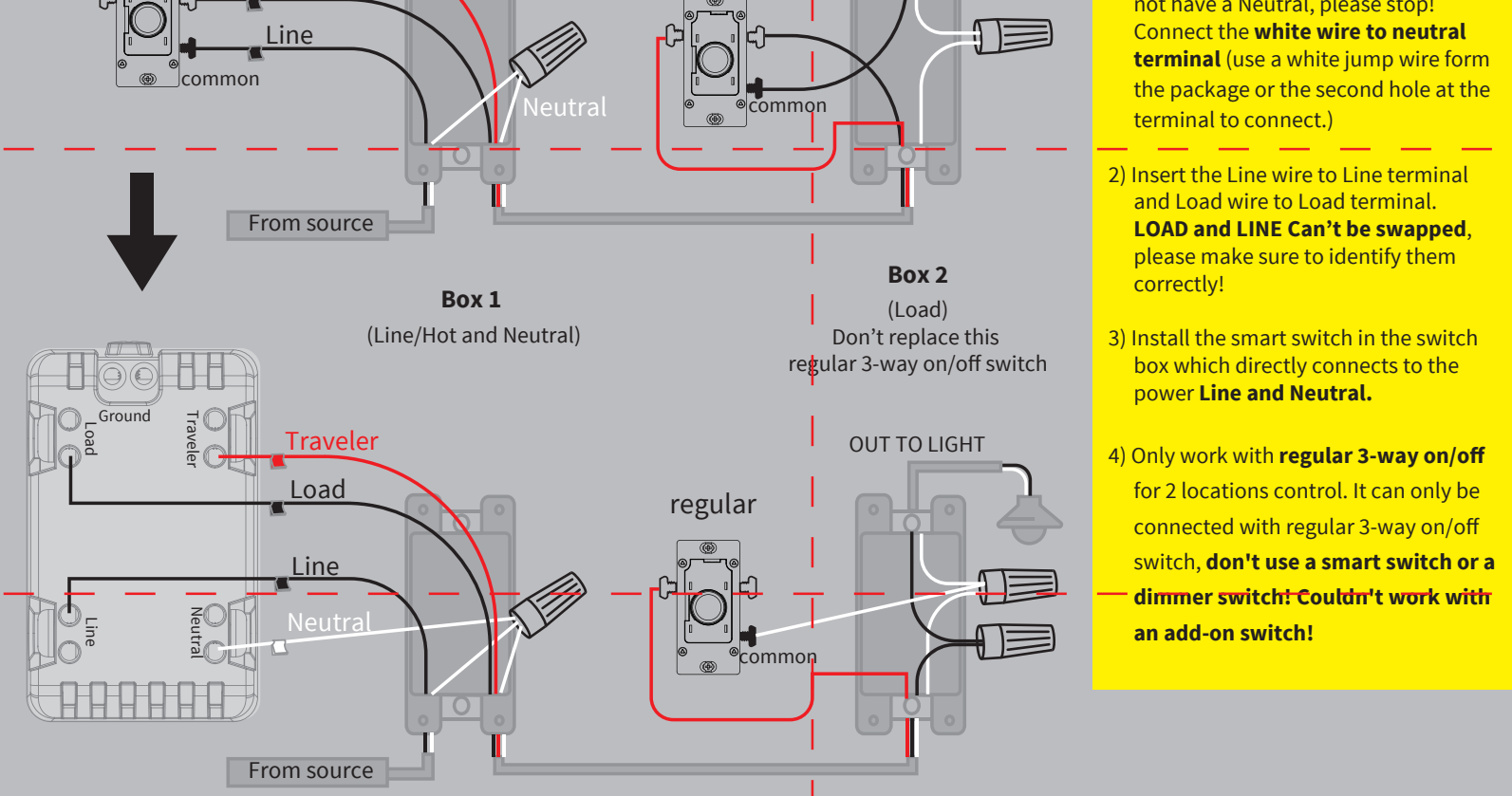
- 
- Ground
- Load
- Line
- Neutral
- Traveler
1. Unscrew: carefully turn the screw counter-clockwise to leave enough space for the wire to be inserted. Do not unscrew the screw completely.
2. Press down: once loosened, use your finger to push the wire into the thread.
3. Insert the wire: make sure the 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 wire is fully seated!
- Note: There are 2 holes for each terminal; be sure to connect the wire to the correct hole or the second hole is for the ground to be connected.
- Line (red) – black (connected to power)  
 Load – white  
 Load – black (connected to lighting)  
 Traveler – red/white  
 (only in 3-way installations)

- 1) The 2-Wire In-wall Smart Switch is designed to work with **150W LED, 500W Incandescent**.
- 2) Work with **regular 3-way on/off** for 3 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!
- 3) 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.
- 4) Please check your original 3-way wiring circuit in your home before installation, and then **follow the wiring diagram option 1 or 2 in the manual**.
- 5) Install the smart switch in the switch box which **directly connects to the power Line and Neutral**.
- 6) This switch **requires a Neutral for installation**, or the installation will not succeed.
- 7) Not recommended for fan.

- 
- regular**
- Load**
- Line**
- Neutral**
- OUT TO LIGHT**
1. Remove wallplate.
  2. Remove the switch mounting screws.
  3. Disconnect the wires and label them after remove the old switch. (Please use our sticker)
- |       |        |                       |
|-------|--------|-----------------------|
| Black | Green  | White                 |
| Hot   | Ground | Just for 3-way switch |
4. Carefully remove the switch from the switch box. (DO NOT disconnect wires)
  5. There are up to five screw terminals on the smart switch, these are marked: Please check <HOW TO INSTALL> We will send you a manual.
  6. Fit the wallplate with screws after wiring succeed. (Please use our screws).
  7. The Ground was excluded from the diagram to simplify the illustration. Please make sure all ground wires are connected to all switches respectively.



regular 2



100

- [illegible]

**To Remove The Device:**

Follow the instructions for your Z-Wave certified controller to remove a

**Works with Alexa & Google Assistant**

- device from the Z-Wave network.
- Once the controller is linked to your new device, press the "reset" button on the switch 10 times quickly.
- To Return the Device to Factory Defaults**
- Reset:** Click the switch button 10 times quickly then hold for at least 10 seconds.
- Test reset:** Remove it from the host connection and the device will factory reset. This should only be used in the event your network's primary controller is missing or otherwise inoperable.
- Association Group**
- LED flashes 2 times when the configuration parameter changes
- Group 2 supports mode ID, ID**
- Group 2 supports association of 5 node ID's**
- Association group 1: Z-Wave Plus Lifetime
- Association Group 2: Send Basic Set On / Off

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| KNOB DIRECTION | NUMBER |
|----------------|--------|
|----------------|--------|

|        |   |
|--------|---|
| Number | 1 |
| UP     | 2 |
| DOWN   | 3 |
| LEFT   | 4 |
| RIGHT  | 5 |

**Inclusion and Exclusion**

Press the **Inc** button three times to add the device into HUB or remove the device from HUB.

- **Inclusion:** BLUE led will flash.
- **Exclusion:** MAGENTA led will flash.
- **Success:** GREEN led indicate flashes for 3 seconds
- **Failure:** RED led indicate flashes for 3 seconds.

**Factory reset:**

Press the **Inc** twice and hold for 10 seconds (Tag → Tag → Press and hold for 10 seconds) to reset the device.

- **Indicator:** RED led will flash and then the GREEN led will be solid for 2 seconds.

| Age Group | Percentage |
|-----------|------------|
| 18-24     | 10%        |
| 25-34     | 20%        |
| 35-44     | 25%        |
| 45-54     | 20%        |
| 55-64     | 15%        |
| 65-74     | 10%        |
| 75-84     | 5%         |
| 85+       | 5%         |

- |                                                                                                                                                                                                                                                                                                                                          |           |         |           |         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|-----------|---------|
| <b>Locally Defined Function</b><br>An expression or action you set up that triggers an event when the event occurs. For example, you can set up a function to turn on the headlights when the ignition is turned on. You can also set up a function to turn on the headlights when the ignition is turned on and the headlights are off. |           |         |           |         |
| <b>1. Setting the indicator behavior for forward</b>                                                                                                                                                                                                                                                                                     |           |         |           |         |
| <b>LSD indicator behavior</b>                                                                                                                                                                                                                                                                                                            | Indicator | Forward | Indicator | Forward |
|                                                                                                                                                                                                                                                                                                                                          | Indicator | Forward | Indicator | Forward |
|                                                                                                                                                                                                                                                                                                                                          | Indicator | Forward | Indicator | Forward |
| <b>2. Setting the indicator color for forward</b>                                                                                                                                                                                                                                                                                        | Indicator | Forward | Indicator | Forward |
|                                                                                                                                                                                                                                                                                                                                          | Indicator | Forward | Indicator | Forward |
|                                                                                                                                                                                                                                                                                                                                          | Indicator | Forward | Indicator | Forward |
| <b>LSD indicator color</b>                                                                                                                                                                                                                                                                                                               | Indicator | Forward | Indicator | Forward |
|                                                                                                                                                                                                                                                                                                                                          | Indicator | Forward | Indicator | Forward |
|                                                                                                                                                                                                                                                                                                                                          | Indicator | Forward | Indicator | Forward |
| <b>3. Setting the indicator brightness</b>                                                                                                                                                                                                                                                                                               |           |         |           |         |
| <b>LSD indicator brightness</b>                                                                                                                                                                                                                                                                                                          | Indicator | Forward | Indicator | Forward |
|                                                                                                                                                                                                                                                                                                                                          | Indicator | Forward | Indicator | Forward |
|                                                                                                                                                                                                                                                                                                                                          | Indicator | Forward | Indicator | Forward |
| <b>4. Setting the max range of the knob</b>                                                                                                                                                                                                                                                                                              | Knob      | Size    | Knob      | Size    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Size    | Knob      | Size    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Size    | Knob      | Size    |
| <b>5. Setting the value when sliding the knob up</b><br>NOTE: This parameter will be invalid when PARAM22 value is 0 or 1.                                                                                                                                                                                                               |           |         |           |         |
| <b>Value of knob up</b>                                                                                                                                                                                                                                                                                                                  | Knob      | Up      | Knob      | Up      |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Up      | Knob      | Up      |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Up      | Knob      | Up      |
| <b>6. Setting the value when sliding the knob down</b><br>NOTE: This parameter will be invalid when PARAM21 value is 0 or 1.                                                                                                                                                                                                             |           |         |           |         |
| <b>Value of knob down</b>                                                                                                                                                                                                                                                                                                                | Knob      | Down    | Knob      | Down    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Down    | Knob      | Down    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Down    | Knob      | Down    |
| <b>7. Setting the value when sliding the knob left</b><br>NOTE: This parameter will be invalid when PARAM41 value is 0 or 1.                                                                                                                                                                                                             |           |         |           |         |
| <b>Value of knob left</b>                                                                                                                                                                                                                                                                                                                | Knob      | Left    | Knob      | Left    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Left    | Knob      | Left    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Left    | Knob      | Left    |
| <b>8. Setting the value when sliding the knob right</b><br>NOTE: This parameter will be invalid when PARAM42 value is 0 or 1.                                                                                                                                                                                                            |           |         |           |         |
| <b>Value of knob right</b>                                                                                                                                                                                                                                                                                                               | Knob      | Right   | Knob      | Right   |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Right   | Knob      | Right   |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Right   | Knob      | Right   |
| <b>9. Behavior when pressing the knob</b><br>NOTE: This parameter only defines the control logic for this.                                                                                                                                                                                                                               |           |         |           |         |
| <b>Behavior of knob press</b>                                                                                                                                                                                                                                                                                                            | Knob      | Press   | Knob      | Press   |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Press   | Knob      | Press   |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Press   | Knob      | Press   |
| <b>10. Behavior when sliding the knob up</b><br>NOTE: When value 0 is set, you can push the knob down to brightness adjustment by pressing.                                                                                                                                                                                              |           |         |           |         |
| <b>Behavior of knob up</b>                                                                                                                                                                                                                                                                                                               | Knob      | Up      | Knob      | Up      |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Up      | Knob      | Up      |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Up      | Knob      | Up      |
| <b>11. Behavior when sliding the knob down</b><br>NOTE: When value 0 is set, you can push the knob down to brightness adjustment by pressing.                                                                                                                                                                                            |           |         |           |         |
| <b>Behavior of knob down</b>                                                                                                                                                                                                                                                                                                             | Knob      | Down    | Knob      | Down    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Down    | Knob      | Down    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Down    | Knob      | Down    |
| <b>12. Behavior when sliding the knob left</b><br>NOTE: When value 0 is set, you can push the knob left to brightness adjustment by pressing.                                                                                                                                                                                            |           |         |           |         |
| <b>Behavior of knob left</b>                                                                                                                                                                                                                                                                                                             | Knob      | Left    | Knob      | Left    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Left    | Knob      | Left    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Left    | Knob      | Left    |
| <b>13. Behavior when sliding the knob right</b><br>NOTE: When value 0 is set, you can push the knob right to brightness adjustment by pressing.                                                                                                                                                                                          |           |         |           |         |
| <b>Behavior of knob right</b>                                                                                                                                                                                                                                                                                                            | Knob      | Right   | Knob      | Right   |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Right   | Knob      | Right   |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Right   | Knob      | Right   |
| <b>14. Behavior when sliding the knob up</b><br>NOTE: When value 0 is set, you can push the knob up to brightness adjustment by pressing.                                                                                                                                                                                                |           |         |           |         |
| <b>Behavior of knob up</b>                                                                                                                                                                                                                                                                                                               | Knob      | Up      | Knob      | Up      |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Up      | Knob      | Up      |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Up      | Knob      | Up      |
| <b>15. Behavior when sliding the knob down</b><br>NOTE: When value 0 is set, you can push the knob down to brightness adjustment by pressing.                                                                                                                                                                                            |           |         |           |         |
| <b>Behavior of knob down</b>                                                                                                                                                                                                                                                                                                             | Knob      | Down    | Knob      | Down    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Down    | Knob      | Down    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Down    | Knob      | Down    |
| <b>16. Behavior when sliding the knob left</b><br>NOTE: When value 0 is set, you can push the knob left to brightness adjustment by pressing.                                                                                                                                                                                            |           |         |           |         |
| <b>Behavior of knob left</b>                                                                                                                                                                                                                                                                                                             | Knob      | Left    | Knob      | Left    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Left    | Knob      | Left    |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Left    | Knob      | Left    |
| <b>17. Behavior when sliding the knob right</b><br>NOTE: When value 0 is set, you can push the knob right to brightness adjustment by pressing.                                                                                                                                                                                          |           |         |           |         |
| <b>Behavior of knob right</b>                                                                                                                                                                                                                                                                                                            | Knob      | Right   | Knob      | Right   |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Right   | Knob      | Right   |
|                                                                                                                                                                                                                                                                                                                                          | Knob      | Right   | Knob      | Right   |
| <b>18. External control type</b><br>NOTE: When the external switch is set to a momentary function, you can use the light by pressing and holding the button.                                                                                                                                                                             |           |         |           |         |
| <b>External switch type</b>                                                                                                                                                                                                                                                                                                              | External  | Switch  | External  | Switch  |

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- [illegible]

**⚠ MEDICAL EQUIPMENT**  
Please DO NOT use this switch to control Medical or Life Support equipment.

- may be used in a separate room and if functional behavior occurs such as a device turning on or off, either intentionally via schedules, or unintentionally via interaction with the environment, it is not a condition. For these reasons, please note the following suggestions:
- Do not include 2-Wire devices in Groups or Series if they control appliances.
  - Do not include 2-Wire devices to control electrical heaters, or any other appliances which may present a hazardous condition due to unintended, unintentional, or automatic power loads.
- CAUTION - PLEASE READ!**
- This device is intended for installation in accordance with the National Electrical Code (NEC) of the United States, or the Canadian Electrical Code and local regulations in Canada. If you are unsure or
- equipment. 2-Wire devices should never be used to control a system of Medical and/or Life Support equipment.
- WARRANTY**
- Our Products warrants this product to be free from manufacturing defects in material and workmanship for a period of one year from the original date of purchase. This warranty is limited to the repair or replacement of this product only and does not extend to consequential or incidental damage to other products or property. This product and its warranty is in full of all other warranties, expressed or implied. Some states do not allow limitations on how long an implied warranty lasts or permit the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific rights, and you may also

**WARNING - SHOCK HAZARD**

- WARNING: THE POWER TO THIS ELECTRICAL BOX MUST BE DEENERGIZED BY TURNING OFF 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 Fire
  - ⚡ Risk of Electrical Shock
  - ⚡ Risk of Burns

| Possible Problem | Possible Cause | Solution |
|------------------|----------------|----------|
|------------------|----------------|----------|

|                                                                                      |                                                    |                                                                  |
|--------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------------|
| 1. The connected LED is flashed too bright when set to the minimum brightness level. | LED brightness minimum setting is incorrect.       | Please set the minimum brightness level according to the manual. |
| 2. Couldn't pair with huiyao/hu can't recognize the device.                          | The device needs to be reinitiated before pairing. | Please reset the device according to the manual.                 |
| 3. The device couldn't turn lights on/off manually.                                  | Wiring error                                       | Please check the wiring diagram on the manual.                   |
| 4. The smart switch is working and the 3-way switch does not.                        | 3-way wiring error                                 | Please check the wiring diagram on the manual.                   |