

In-Wall Shutter

Fantem Technologies In-Wall Shutter is a Z-Wave power binary switch that controls your home lights or bulbs (on/off) and tracks real-time energy consumption or kWh energy usage over a period of time.

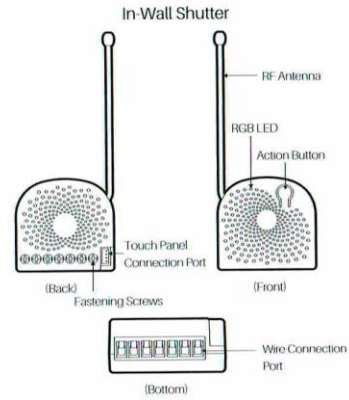
It can connect to 2 external manual switches to control the load (on/off) independently. Its surface has a pin socket, which can be used for connecting to the touch panel, so you can also use the touch panel to control the In-Wall Shutter.

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

It is a security Z-Wave plus device, so a security enabled controller is needed for take full advantage of all functionality for the In-Wall Shutter. It also supports the Over The Air (OTA) feature for the product's firmware upgrade.

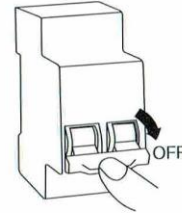
As soon as In-Wall Shutter is removed from a Z-Wave network it will be restored into default factory setting.

Used in this guide

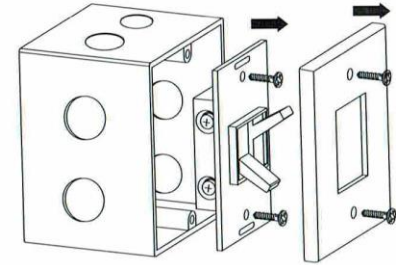


Quick start

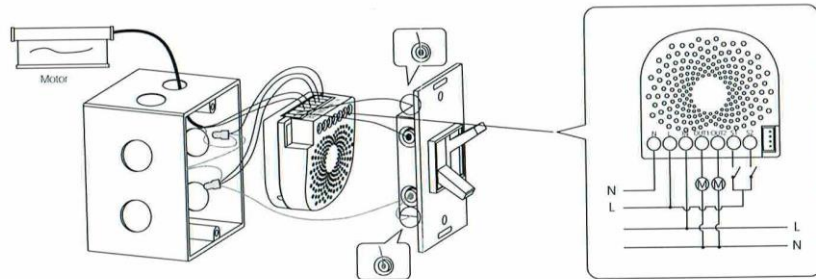
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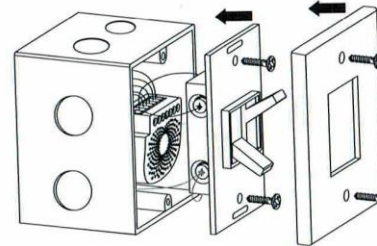
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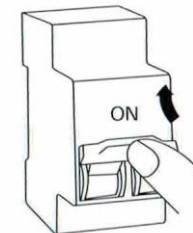
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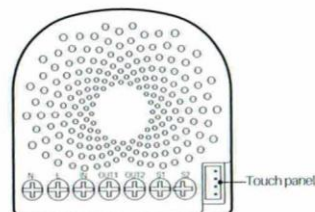
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5



Familiarize yourself with your In-Wall Shutter Interface



Notes for the wire connection ports:

N - Power input for neutral

L - Power input for live

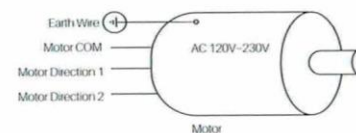
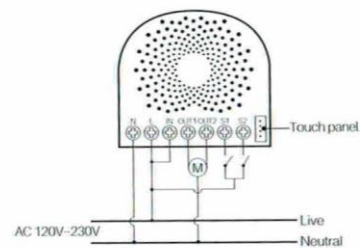
IN - Input for load power supply

OUT1 - Output for Motor direction 1

OUT2 - Output for Motor direction 2

S1 - External switch 1 control for Motor

S2 - External switch 2 control for Motor

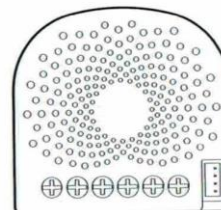


Specifications:

- Power Input: 120VAC to 240VAC, 50Hz to 60Hz
- Maximum current: 2.5A
- Standby: <0.8W
- Operating temperature: 0 °C - 40 °C
- Operating humidity: 20% - 80% RH
- Z-Wave range: 30m indoors
- Load type: Single-phase AC asynchronous motor
- Countries: US / AU / EU (908.42MHz / 921.42MHz / 868.42MHz)
- Size: 42 x 40 x 20mm
- Certification type:



In-Wall Shutter



Function of Action Button

Click one time

1. Send out a Node info.
2. Add In-Wall Shutter into a Z-Wave network:
 - a). Power on your In-Wall Shutter, the RGB LED will be colorful gradient status.
 - b). Put the primary controller into inclusion mode (If you don't know how to do this, refer to its manual).
 - c). Press the Action Button.
 - d). If the inclusion is successful, the LED will be solid. Otherwise, the LED will remain colorful gradient status, in which you need to repeat the process from step 2.

Quick press 2 times

Activate the automatic identification mode for external switch S1. The blue LED will blink quickly to indicate the In-Wall Shutter is in this mode.

Note:

When the In-Wall Shutter enters this mode, toggle the external switch S1 once and wait 2 seconds for the In-Wall Shutter to

detect the external switch type of S1.

Quick press 4 times

Activate the automatic identification mode for external switch S2. The green LED will fast blink to indicate the In-Wall Shutter is in this mode.

Note:

When the In-Wall Shutter enters this mode, toggle the external switch S2 once and wait 2 seconds for the In-Wall Shutter to detect the external switch type of S2.

Quick press 6 times

1. Send out a Node info.
2. Remove In-Wall Shutter from a Z-Wave network:
 - a). Power on your In-Wall Shutter, the LED will be solid.
 - b). Put the primary controller into remove mode (If you don't know how to do this, refer to its manual).
 - c). Quick press the Action button 6 times.
 - d). If the removal is successful, the LED will be colorful gradient status. If the LED is still solid, please repeat the process from step 2.

Safety and regulatory information

WARNING

CHOKING HAZARD

This device may contain small parts which may be a choking hazard to children under 3. Keep small parts away from children.

WARNING

RISK OF ELECTRIC SHOCK

- More than one disconnect switch may be required to de-energize the equipment before servicing (Applicable to all switches without plugs and Dimmer products).
- DO NOT use this device near water and do not expose it to rain or moisture. DO NOT attempt to dry device with a hair dryer or a microwave oven.
- DO NOT attempt to take apart, open, service, or modify the product, accessories, or power supply. Doing so could present the risk of electric shock or other hazard. Any evidence of any attempt to open and/or modify this device, including any peeling, puncturing, or removal of any of the labels, will void the Limited Warranty.
- DO NOT use any device in combination with a wall switch controlling a receptacle (Applicable to all switches without plugs and Dimmer products).
- Turn off main power at circuit breaker before installing or repairing before installing or servicing any In-Wall series products.

WARNING

RISK OF EXPLOSION

For devices that contain a built-in battery, improper use may result in explosion. Do not heat, open, puncture, mutilate, or dispose of the product in fire. Do not leave the device in direct sunlight for an extended period of time, which could cause melting or battery damage. The battery in these devices is not user-replaceable and should only be replaced by a factory or a Factory Authorized Service Provider. **RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.**

WARNING

AC ADAPTER SAFETY

Failure to take the following precautions can result in serious injury or death from electric shock or fire or in damage to the device. To select an appropriate power source for your device:

- Use only the power supply unit, plug adapters, and AC power cord that came with your device or that you received from an authorized Faitemor retailer.
- Do not use non-standard power sources, such as generators or inverters, even if the voltage and frequency appear acceptable. Only use AC power provided by a standard wall outlet.
- Do not overload your wall outlet, extension cord, power strip, or other electrical receptacle. Confirm that they are rated to handle the total current (in amps [A]) drawn by the device indicated on the power supply unit and any other devices that are on the same circuit.
- On devices where the AC prongs may be folded for storage, before plugging the AC adapter into a power outlet, make sure its prongs are fully extended.
- On devices where the AC prongs are removable and where the power supply uses a universal adapter, before plugging the AC adapter into a power outlet, make sure the prong assembly is of the proper configuration for the power outlet and fully seated into the adapter.

WARNING

CABLE AND CORD SAFETY

- Arrange all cables and cords so that people and pets are not likely to trip over or accidentally pull on them as they move around or walk through the area. Do not allow children to play with cables and cords. To avoid damaging the power cords and power supply:
- Protect the power cords from being walked on.
 - Protect cords from being pinched or sharply bent, particularly where they connect to the power outlet, the power supply unit, and the device.
 - Do not jerk, knot, sharply bend, or otherwise abuse the power cords.
 - Do not expose the power cords to sources of heat.
 - Keep children and pets away from the power cords. Do not allow them to bite or chew on them.
 - When disconnecting the power cords, pull on the plug – do not pull on the cord.
 - If a power cord or power supply becomes damaged in any way, stop using it immediately.
 - Unplug your device during lightning storms or when unused for long periods of time.
 - For devices with an AC power cord that connects to the power supply, always connect the power cord according to the following instructions:
 - Step 1: Plug the AC power cord into the power supply until it seats fully.
 - Step 2: Plug the other end of the AC power cord into the wall outlet.

WARNING

MAGNETS

Parts of some of the devices are magnetic. They may attract metallic materials. To reduce the

Press and hold 20 seconds

Reset In-Wall Shutter to factory default:

1. Make sure the In-Wall Shutter has been powered on.
 2. Press and hold the Action Button for 20 seconds.
 3. The green LED will be on for 2 seconds and then remain colorful gradient status, which indicates the reset is successful, otherwise please repeat from step 2.
- Note:
1. This procedure should only be used when the primary controller is missing or inoperable.
 2. Reset the In-Wall Shutter to factory default will exclude the In-Wall Shutter from Z-Wave network, clear the association settings, Scene configuration settings and restore the configuration settings to the default.

potential risk of sparks, verify the electrical connection area is free of metallic objects before interconnecting devices. In order to reduce the likelihood of magnetic fields interfering with compass readings, disrupting the proper operation of pacemakers, or computing magnetically stored data, do not place credit cards or other magnetic storage media or magnetically sensitive devices near this device.

NOTICE

IN-WALL SERIES DIMMERS AND SWITCHES

Install only in a UL Listed junction box sized 3x2x2.75 inch or larger, minimum volume: 14 in³ (230 cm³). Use copper conductors only.

Regulatory Warnings

FCC warnings

FCC Part 15.19 Warning Statement
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- 1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- 2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

FCC Part 15.21 Warning Statement

NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.
FCC Part 15.106 Warning Statement

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:

- 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

RGB LED indication when In-Wall Shutter is in RF Power Level Test Mode

Blue LED blinking quickly

Enter into the wireless power level test mode.

Green LED is switched to ON state for 2 seconds

Wireless power level is good.

Yellow LED is switched to ON state for 2 seconds

Wireless power level is acceptable but latency can occur.

Red LED is switched to ON state for 2 seconds

Wireless power level is insufficient.

Usage and Care

Read this guide for important safety and health information for the device that you have purchased. Keep all printed guides for future reference. Make sure that the product is installed and used correctly according to the instructions. Failure to follow instructions and properly set up, use, and care for this product can increase the risk of serious injury or death, or damage to the device or devices. In the cleaning process, please use dry wipes to wipe, do not use any detergent or chemical solvents.

connected.

—Consult the dealer or an experienced radio/TV technician for help.

RF warning statement

The device has been evaluated to meet general RF exposure requirements.

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

IC Warnings

This Class B digital apparatus complies with Canadian ICES 003.

This device complies with Industry Canada licence exempt RSS standards. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF warning statement

The device has been evaluated to meet general RF exposure requirements. To maintain compliance with RSS-102 — Radio Frequency (RF) Exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

Le présent appareil a été évalué à répondre des exigences générales d'exposition aux RF pour maintenir la conformité avec les directives d'exposition du RSS-102 — Radio Frequency (RF), ce matériel doit être installé et exploité à une distance minimale de 20 cm entre le radiateur et votre corps.

Disposal of waste batteries and electronic equipment

The symbol on the product or its batteries or its packaging means that this product and any batteries it contains must not be disposed of with your household waste. Instead, it is your responsibility to hand this over to an applicable collection point for the recycling of batteries and electrical and electronic equipment. This separate collection and recycling will help to conserve natural resources and prevent potential negative consequences for human health and the environment due to the possible presence of hazardous substances in batteries and electrical and electronic equipment, which could be caused by inappropriate disposal. For more information about where to drop off your batteries and electrical and electronic waste, please contact your local city/municipality office, your household waste disposal service, or the shop where you purchased this product.