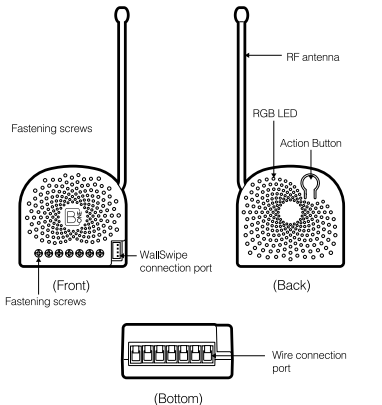


Dual Relay

B1DR01-ZW-IN

Warning: Risk of electrical shock. The main circuit breaker or fuse must be shut off during installation. Only a licensed electrician with knowledge and understanding of electrical systems and safety should complete the installation.

Used in this guide.



Important safety information.

Please follow the instructions carefully. Failure to follow the recommendations set forth by Blaze Automation Services Pvt Ltd may be dangerous or cause a violation of the law. The manufacturer, importer, distributor, and / or reseller will not be held responsible for any loss or damage resulting from not following any instructions in this guide or in other materials.

Warning: Risk of electrical shock. The main circuit breaker or fuse must be shut off during installation. A licensed electrician with knowledge and understanding of electrical systems and safety should complete the installation.

The maximum amperage rating for Dual Relay is 5 amps per load.

Pre-installation checks.

Dual Relay only works when installed with a neutral wire. If no neutral wire is available, a professional electrician will be required to wire a neutral at the installation location.

It can connect to two external manual switches to control the load ON/OFF independently. Its surface has a pin socket, which can be used for connecting to WallSwipe, so you can also use WallSwipe to control Dual Relay.

Quick start.

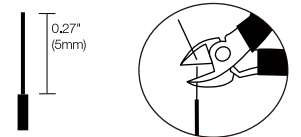
The following will step you through installing Dual Relay and connecting it to your Z-Wave network.

1. Turn off electricity to Switch at circuit breaker and ensure the wires are not short circuited during the installation which will cause damage to the Dual Relay.

Note: Your home's main circuit breaker must support the overload protection for safety.

2. Prepare connection wires.

- 14 AWG power wires for Input/Output.
- 18 AWG copper wires for external manual switch.
- Use the wire stripper cut the metallic part of the connection wire and make sure the length of the metallic part is about 5mm.

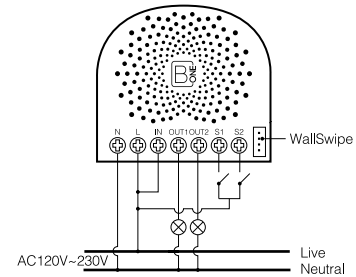


Measure exposed wire and determine length for 5mm

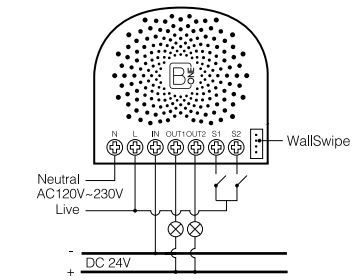
Note: All connection wires need to be flexible cables.

When Dual Relay uses 2-Way or momentary button switches as the external manual switch for a 2-Way connection, here are the different wiring diagrams based on the power inputs and the loads.

Wiring diagram of AC120V/230V power input.

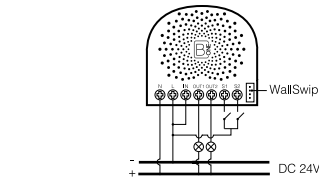


Under AC120V/230V power input, when the loads only work with DC24V :

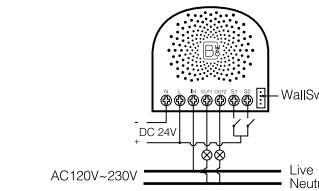


Note: The "IN" terminal should be connected to the "-" of DC 24V input.

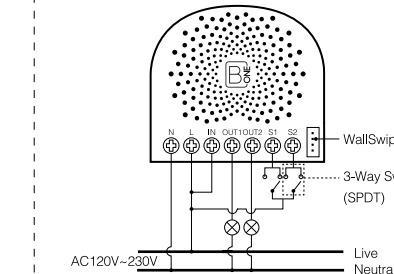
Wiring diagram of DC24V power input.



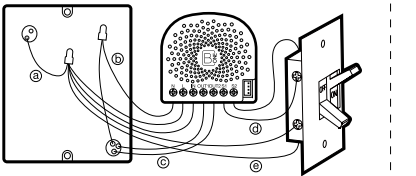
Under DC24V power input, when the loads only work with AC120V or AC230V:



When Dual Relay uses the SPDT (Single-Pole Double-Throw) switches as the external manual switch for a 3-Way connection, here is the wiring diagram.

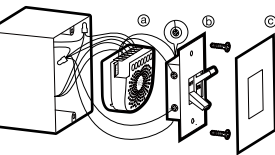


3. Install Dual Relay to the gang box.
 - a. Live/Hot wire connection: Connect the Live/Hot wire to the “L” terminal on Dual Relay.
 - b. Neutral wire connection: Connect the Neutral wire to the “N” terminal on Dual Relay.
 - c. Load wire connection: Connect the 2 Load wires to the “OUT1” and “OUT2” on Dual Relay.
 - d. External/manual Switch connection: Connect 2x18AWG wires to the “S1” and “S2” on Dual Relay.
 - e. External/manual Switch connection: Connect 2x18AWG wires from the 2 terminals on the External/manual Switch to the Live wire.



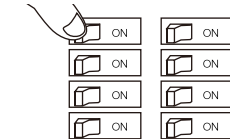
Note: This is the physical connection diagram with AC120V/230V power input

4. Mounting the gang box.
 - a. Organize all wires to provide room for the device.
 - b. Place Dual Relay very much inside of the gang box with the antenna towards the back of the box and away from all other wires.
 - c. Replace the cover to the gang box.



Note:

- 1) The gang box should be sized 3x2x2.75 inch/ 75x50x70 mm or larger, minimum volume 14 in³ / 230cm³.
 - 2) Use flexible copper conductors only.
5. Turn on electricity to Switch at circuit breaker or fuse.



6. Set your Z-Wave gateway into its ‘add device’ mode in order to connect Dual Relay to your Z-Wave system. Refer to the gateway’s manual if you are unsure of how to perform this step.
7. Press Action Button on Dual Relay or toggle the external manual switch once, the green LED (pairing indication) will blink to indicate the Dual Relay is entering into pairing mode.
8. When Dual Relay successfully joins your Z-Wave network, its LED will show a solid colour. Should LED turn red for 2 seconds and then alternate through a rainbow of colours, it fails to join your Z-Wave network; repeat steps 6 to 7 and please contact us for further support if needed.

Dual Relay is now a part of your Z-Wave home control system. You can configure it and its automations via your Z-Wave system; please refer to your software’s user guide for precise instructions.

Note: If you come across different wiring situations, please ask help from a professional electrician or from us.

Get help & learn more.

Should you encounter any problem with Dual Relay, visit www.b1hub.com or contact our support team via support@blazeautomation.com.

Disposal guidelines and WEEE. B.One devices may contain batteries; remove when not in use. Do not dispose of device as unsorted municipal waste, use separate collection facilities. Contact your local government for further information.

One-Year Limited Warranty. Blaze Automation Services Pvt Ltd warrants included B.One branded hardware device when purchased new and delivered in new condition and in its original container against defects in materials and workmanship for one year from the date of original purchase from an authorized reseller when purchased and used in the region of original export. In line with the terms of sales between Blaze Automation Services Pvt Ltd and the authorized importer / reseller of this device, any claims against the foregoing warranty are to be handled by the authorized distributor / reseller directly. The foregoing warranty is subject to the proper installation, operation, and maintenance of the device in accordance with installation instructions and the operating manual supplied to customer and further documentation made available digitally. Liquid damage, including, but not limited to, internal liquid damage caused by improper use, closure or affixing of the hardware, is not covered by this warranty. Splash, water, and dust resistance are not permanent conditions and resistance might decrease as a result of normal wear. Not warranted for damage from open flames and heat, and exposure to sun. Not warranted for battery leak damage; always remove all batteries from products that not being used. Blaze Automation Services Pvt Ltd does not warrant against normal wear and tear, nor damage caused by accident or abuse. Please be sure to read this device’s support notes, digital materials, and quick start guide fully. Subject to the full terms of obtaining service within 30 days of the manifestation of a problem, if you submit a valid claim under this warranty, Blaze Automation Services Pvt Ltd shall provide further information in obtaining warranty services from the authorized importer and / or seller of this device.

FCC Notice. The edition of this device made and certified for the US market and marked as such 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 undesired operation. 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. 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: (1) Reorient or relocate the receiving antenna. (2) Increase the separation between the equipment and receiver. (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. (4) Consult the dealer or an experienced radio/TV technician for help (5) Ensure this device and its antenna(s) are not be co-located or operating in conjunction with any other antenna or transmitter.

RF Exposure Statement. The device has been evaluated to meet FCC/CE general RF exposure requirement. The device can be used without restriction.

California Proposition 65. WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Use only for intended purposes. Do not use for other purposes including, but not limited to, the consumption of food and drinks.

