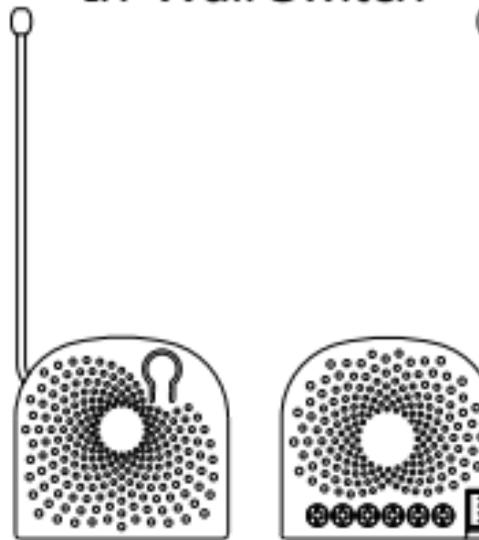


OOMI

In-Wall Switch

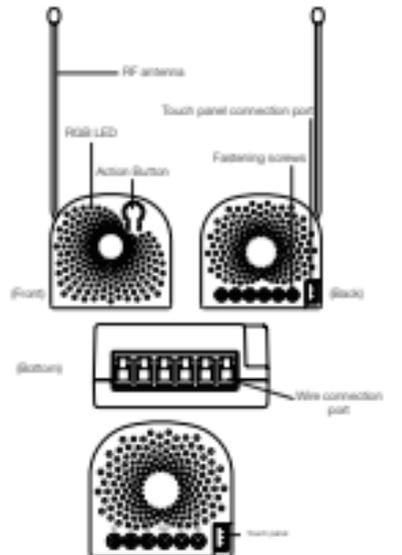


1 Oomi by Fantem In-Wall Switch.

Oomi In-Wall Switch is a low-cost Z-Wave Switch specifically used to enable Z-Wave command and control (on/off) of any wall switches. It can report immediate wattage consumption or kWh energy usage over a period of time. In the event of power failure, non-volatile memory retains all programmed information relating to the unit's operating status. 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 Switch.

The In-Wall Switch is also a security Z-Wave plus device and supports Over The Air (OTA) feature for the products firmware upgrade.

2 Familiarize yourself with your In-Wall Switch.

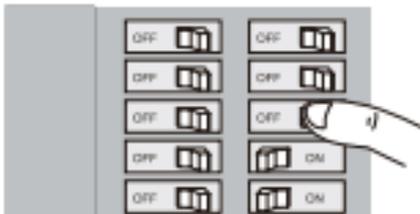


Notes for the wire connection ports:
N – Power input for neutral
L – Power input for live
IN – Input for load power supply
OUT – Output for load
S1 – External switch control for load
S2 – External switch control for load

Install the In-Wall Switch.

Important: A licensed electrician with knowledge and understanding electrician systems and electrical safety should complete the electrical installation.

1. Shut off the main circuit breaker of your home for safety during the installation and ensure the wires are not short circuited during the installation which will cause damage to the In-Wall Switch.



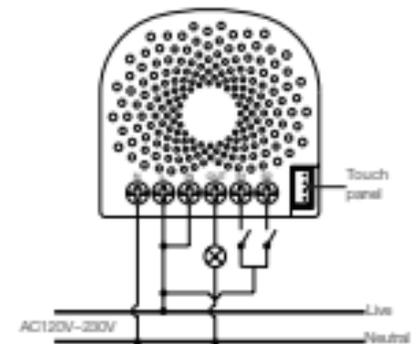
Note: Your home's main circuit breaker must support the overload protection for safety.

2. Preparing connection wires

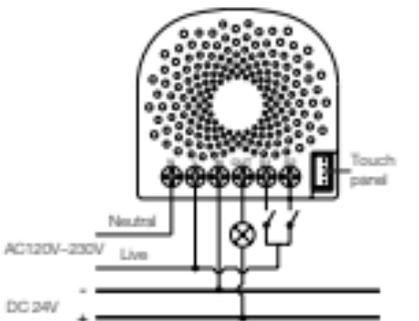
14 AWG power wires for Input/ Output.
18 AWG copper wires for external manual switch.
Use the wire stripper cut the metallic part of the connection wire and make sure the length of the metallic part is about 5mm.



Note: All connection wires needs to be flexible cable.
Wiring diagram of AC120V/230V power input

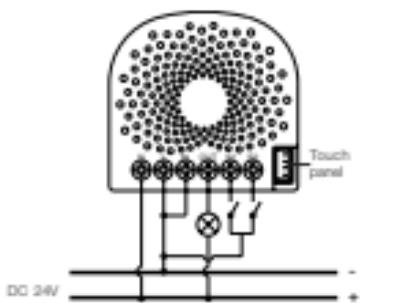


In some cases, you may have some loads just only can be used on the voltage of DC24V and hope that it still can be controlled by the In-Wall Switch, so please refer to the following diagram to achieve this:

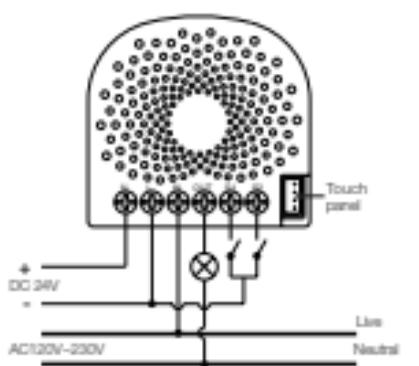


Note: The "IN" terminal should be connected to the "-" of DC 24V input.

Wiring diagram of DC24V power input
Since the In-Wall Switch also supports the DC24V power input, so you can use it to control the loads that powered by DC24V.



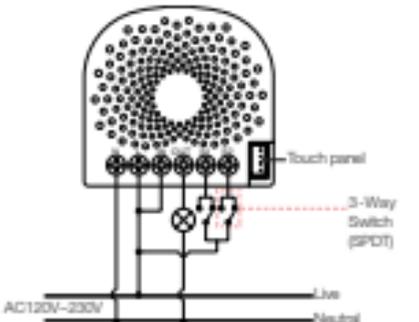
If the output loads should be only powered by AC120V or AC230V, you can change the wire connection as below:



Note: The "IN" terminal should be connected to the "-" of AC 120V/230V power wire.

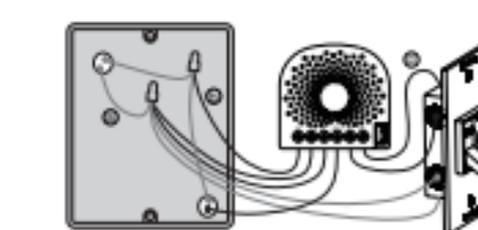
All above wiring diagrams show that the In-Wall Switch uses 2-Way or momentary button switches as the external manual switch for 2-Way connection.
The below diagram will show you that the In-Wall Switch uses the SPDT (Single-Pole Double-Throw) switches as the external manual switch for 3-Way connection.

Wiring diagram of 3-Way connection for the external manual switch



3. Install In-Wall Switch to the gang box.

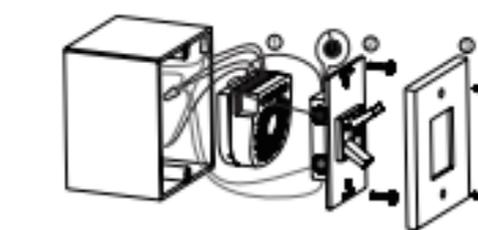
- a. Live/Hot wire connection: Connect the Live/Hot wire to the "L" terminal on the In-Wall Switch.
- b. Neutral wire connection: Connect the Neutral wire to the "N" terminal on the In-Wall Switch.
- c. Load wire connection: Connect the Load wire to the "OUT" on the In-Wall Switch.
- d. External/manual Switch connection: Connect 2 18AWG wires to the "S1" and "S2" on the In-Wall Switch.
- e. External/manual Switch connection: Connect 2 18AWG wires from the 2 terminals on the External/manual Switch to the Live wire.



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

4. Mounting the gang box.

- a. Position all wires to provide room for the device. Place the In-Wall Switch inside the gang box towards the back of the box.
- b. Position the antenna towards the back of the box, away from all other wiring.
- c. Reinstall the In-Wall Switch to the gang box.
- d. Reinstall the cover onto 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. Restore Power.

Restore power at the circuit breaker or fuse.



3 Quick start.

Adding your In-Wall Switch to a Z-Wave network.

After your In-Wall Switch is installed and powered on, you are now able to manually control the In-Wall Switch to turn it On/Off directly via pressing your In-Wall Switch's Action Button, it is time to add your In-Wall Switch to the Z-Wave network. To set your Z-Wave gateway/controller into pairing mode, please refer to the respective section within your controller instruction manual.

1. Set your Z-Wave controller into pairing mode.
2. Press the Action Button on the In-Wall Switch or toggle the external manual switch once, the green LED (non-secure indication) will blink to indicate the In-Wall Switch is entering into pairing mode.
3. If the In-Wall Switch has been successfully added to your Z-Wave network, its RGB LED will be solid. If the pairing was unsuccessful, the red LED will be on for 2 seconds and then remain a colourful gradient, repeat the instructions above from step 1.

With your In-Wall Switch now working as a part of your smart home, you'll be able to configure it from your home control software/phone application. Please refer to your software's user guide for further instructions on configuring In-Wall Switch to your needs.

4 Removing In-Wall Switch from a Z-Wave network.

Your In-Wall Switch can be removed from your Z-Wave network at any time. You'll need to use your Z-Wave network's main controller. To set your Z-Wave controller/gateway into removal mode, please refer to the respective section within your controller instruction manual.

1. Set your Z-Wave controller into removal mode.
2. Press the Action Button on the In-Wall Switch or toggle the external manual switch 3 times in fast succession.
3. If the In-Wall Switch has been successfully removed from your Z-Wave network, its RGB LED will remain colourful gradient. If the removal was unsuccessful, the RGB LED will still be solid (following the state of the output load), repeat the instructions above from step 1.

5 Advanced functions.

Changing mode on the External Switch/Button Control.

The In-Wall Switch can be controlled via 2-state (flip/flop) external/manual switch, momentary push button or the 3-way switch. To automatically detect and set the mode to the appropriate type of manual switch wired into In-Wall Switch, toggle the button on the manual switch once and wait 2 seconds for the In-Wall Switch to detect the type of manual switch.

You can also set the external switch mode through Configuration Command Class. Parameter 120 [1 byte dec] is the parameter that will set one of the 3 different modes for external switch S1. If you set this configuration to:

- (i) Unknown mode
- (1) 2-state switch mode
- (2) 3-way switch mode
- (3) Momentary push button mode
- (4) Enter automatic identification mode. (The blue LED will fast blink)

The parameter 121 [1 byte dec] is the parameter that will set one of the 3 different modes for external switch S2. If you set this configuration to:

- (i) Unknown mode
- (1) 2-state switch mode
- (2) 3-way switch mode
- (3) Momentary push button mode
- (4) Enter automatic identification mode. (The green LED will fast blink)

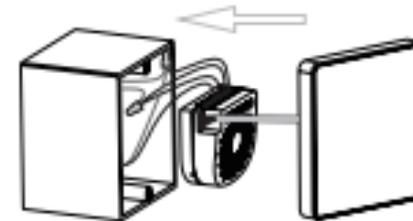
Note: You can also use the Action Button of In-Wall Switch to activate the automatic identification mode, as below:

1. Quick press the Action Button 4 times, which will activate the automatic identification mode for external switch S1, you will see the blue LED fast blinks.
2. Quick press the Action Button 6 times, which will activate the automatic identification mode for external switch S2, the green LED will fast blink.

When the In-Wall Switch enters automatic identification mode, it has 20 seconds before timeout for detecting the manual switch.

Touch panel control

As you can see that the In-Wall Switch's surface has a pin port, this port is used to connect the Touch panel. When you have already connected it to the In-Wall Switch, you will be possible to control the In-Wall Switch through the Touch panel directly.



Monitoring Energy Consumption.

The In-Wall Switch can report wattage energy usage or kWh energy usage to a Z-Wave control point when requested. If this function is supported by the control points, the energy consumption will be displayed in the user interface of the control points. (The specific Z-Wave commands supporting energy monitoring are the Meter Command Class. Automatic reports are sent to association group 1, which is setup via the Association Command Class.) Please consult the operation manual for these control points for specific instructions on monitoring the In-Wall Switch.

Note: The model FT139 In-Wall Switch does not have the ability to monitor energy consumption. The model FT116 In-Wall Switch supports the energy metering feature and you can see the words "with Energy Metering" on its packaging box.

Security or Non-security feature of your In-Wall Switch in Z-Wave network.

Including In-Wall Switch as a non-secure device:

If you want your In-Wall Switch as a non-secure device in your Z-Wave network, press the Action Button once on In-Wall Switch when you pair it to your gateway. If inclusion is successful, the green LED will be on for 2 seconds, and then return to a solid indication. If inclusion is unsuccessful,

the red LED will be on for 2 seconds and then return to a colourful gradient.

Including In-Wall Switch as a secure device:

In order to take full advantage of the In-Wall Switch, you will want your In-Wall Switch as a security device that uses encrypted messages to communicate in your Z-wave network. A security enabled controller/gateway (or Z-Wave Plus controller) is required.

1. Set your Z-Wave Plus controller into pairing mode.
2. Press the Action Button 2 times within 1 second on the In-Wall Switch, the blue LED (secure indication) will blink to indicate the In-Wall Switch is entering into secure pairing mode.
3. If the In-Wall Switch has been successfully added to your Z-Wave network, its RGB LED will be solid. If the pairing was unsuccessful, the red LED will be on for 2 seconds and then remain a colourful gradient, repeat the instructions above from step 1.

NFC function of your In-Wall Switch.

Your In-Wall Switch has inbuilt a NFC module. In order to take full advantage of the NFC feature, the Oom's Touch panel is needed. When you take the Touch panel near to the NFC point of In-Wall Switch, you will see light purple LED dims on and then off, at the same time, the product information is read out from In-Wall Switch via NFC communication and then displayed on the Touch panel's screen.

If your In-Wall Switch is powered, it will send out a Node information frame to start the inclusion/exclusion when the Touch panel touches your In-Wall Switch. The Touch panel's screen will pop up a notification message to let you know whether the inclusion/exclusion is successful or not. If the In-Wall Switch is included into your Touch panel, you will see the switch ON/OFF icons displayed on the Touch panel.

Reset your In-Wall Switch.

If at some stage, your primary controller is missing or inoperable, you may wish to reset all of your In-Wall Switch's settings to their factory defaults. To do this, press and hold the Action Button for 20 seconds and then release it. Your In-Wall Switch will now be reset to its original settings, and the green LED will be solid for 2 seconds and then remain the colourful gradient status as a confirmation.

Technical specifications.

Model number: FT116/FT139

Max standby power: 0.8W.

Operating temperature: 0°C to 40°C/32°F to 104°F.

Relative humidity: 8% to 80%.

NFC operating distance: Maximum 30mm.

Operating distance: Up to 492 feet/150 meters outdoors.

AC power supply:

Version	Input/output	Working band
AJ	230V 50Hz, Max: 10A	921.42MHz
BR	230V 60Hz, Max: 10A	921.42MHz
CN	220V 50Hz, Max: 10A	868.42MHz
EU	230V 50Hz, Max: 10A	868.42MHz
IL	230V 50Hz, Max: 10A	868.42MHz
IN	230V 50Hz, Max: 10A	865.22MHz
UK	230V 50Hz, Max: 10A	868.42MHz
US	120V 60Hz, Max: 15A	908.42MHz

Warranty.

If you are in need of any technical support during or subsequent to your products' warranty, please get in touch with our support team via <http://oom.com/support>. The Company you bought this product from has also guaranteed to assist you with any of your support needs, and you can also contact them for accordingly.

This guarantee made by the company who you purchased the product from includes the transfer of Fantem full warranty to that Company. They've guaranteed that they'll be able to assist you, the Customer, with all technical support and repair needs on our behalf.

Fantem warrants to the original purchaser of Products, that is the Company who you have purchased from, that for the Warranty Period (as defined below), the Products will be free from material defects in materials and workmanship. The foregoing warranty is subject to the proper installation, operation and maintenance of the Products in accordance with installation instructions and the operating manual supplied. Warranty claims must be made to the Company who you have purchased from in writing within thirty (30) days of the manifestation of a problem.

Fantem sole obligation under the foregoing warranty is, at Fantem option, to repair, replace or correct any such defect that was present at the time of delivery, or to remove the Products and to refund the purchase price to Company.

The Warranty Period begins on the date the Products is delivered and continues for 12 months. Any repairs under this warranty must be conducted by an authorized Fantem service representative and under Fantem RMA policy. Any repairs conducted by unauthorized persons shall void this warranty.

Excluded from the warranty are problems due to accidents, acts of God, civil or military authority, civil disturbance, war, strikes, fires, other catastrophes, misuse, misapplication, storage damage, negligence, electrical power problems, or modification to the Products or its components.

Fantem does not authorize any person or party to assume or create for it any other obligation or liability in connection with the Products except as set forth herein. Fantem will pass on to Company all manufacturers' Material warranties to the extent that they are transferable, but will not independently warrant any Material. Company will assist Customer with all warranty, repair, return and technical support needs, Company must prepay shipping and transportation charges for returned Products, and insure the shipment or accept the risk of loss or damage during such shipment and transportation. Fantem will ship the repaired or replacement products to Company freight prepaid. Customer and Company shall indemnify, defend, and hold Fantem, affiliates, shareholders, directors, officers, employees, contractors, agents and other representatives harmless from all demands, claims, actions, causes of action, proceedings, suits, assessments, losses, damages, liabilities, settlements, judgments, fines, penalties, interest, costs and expenses (including fees and disbursements of counsel) of every kind (i) based upon personal injury or death or injury to property to the extent any of the foregoing is proximately caused either by a defective product (including strict liability in tort) or by the negligent or willful acts or omissions of Customer or its officers, employees, subcontractors or agents, and/or (ii) arising from or relating to any actual or alleged infringement or misappropriation of any patent, trademark, mask work, copyright, trade secret or any actual or alleged violation of any other intellectual property rights arising from or in connection with the products, except to the extent that such infringement exists as a result of Fantem manufacturing processes.

IN NO EVENT SHALL FANTEM BE LIABLE FOR ANY INDIRECT, INCIDENTAL, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, OR DAMAGES FOR LOSS OF PROFITS, REVENUE, OR USE INCURRED BY CUSTOMER, COMPANY OR ANY THIRD PARTY, WHETHER IN AN ACTION IN CONTRACT, OR TORT, OR OTHERWISE EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. FANTEM LIABILITY AND CUSTOMER'S EXCLUSIVE REMEDY FOR ANY CAUSE OF ACTION ARISING IN CONNECTION WITH THIS AGREEMENT OR THE SALE OR USE OF THE PRODUCTS, WHETHER BASED ON NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY, BREACH OF AGREEMENT, OR EQUITABLE PRINCIPLES, IS EXPRESSLY LIMITED TO, AT FANTEM OPTION, REPLACEMENT OF, OR REPAYMENT OF THE PURCHASE PRICE FOR THAT PORTION OF PRODUCTS WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. ALL CLAIMS OF ANY KIND ARISING IN CONNECTION WITH THIS AGREEMENT OR THE SALE OR USE OF PRODUCTS SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING WITHIN THIRTY (30) DAYS FROM FANTEM DELIVERY, OR THE DATE FIXED FOR DELIVERY IN THE EVENT OF NONDELIVERY. THE INDEMNITY AND WARRANTY IN ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER INDEMNITIES OR WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

FCC NOTICE (for USA)

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.

STORE INDOORS WHEN NOT IN USE. SUITABLE FOR DRY LOCATIONS. DO NOT IMMERSE IN WATER. NOT FOR USE WHERE DIRECTLY EXPOSED TO WATER.

UL NOTICE (For USA)

1. Install only in a UL listed junction box sized 3x2x2.75 inch (75x50x70 mm) or larger, minimum volume 14 in³ (230 cm³).
2. Use Copper Conductors Only.
3. "CAUTION - Risk of Electric Shock - More than one disconnect switch may be required to de-energize the equipment before servicing".
4. "WARNING - This device shall not be used in combination with a wall switch controlling a receptacle."

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 undesired operation. 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 connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

Certifications (regional):



Z-Wave and Z-Wave Plus are registered trademarks of Sigma Designs and its subsidiaries in the United States and other countries.
FCC ID: 2AKHBFT101
IC: 22199-FT101



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 15.105 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 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 requirement. 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 Warning:

This device complies with Industry Canada licence-exempt RSS standard(s). 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 requirement. 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 dispositif de a été évalué à répondre général rf exposition exigence. pour maintenir la conformité avec les directives d'exposition du RSS-102 - Radio Fréquence (RF), ce matériel doit être installé et exploité à une distance minimale de 20 cm entre le radiateur et votre corps.

Association information

5.3 Association Command Class

In-Wall Switch supports 4 association groups and Max 5 nodes for every group.

Association Group	Nodes	Send Mode	Send commands
Group 1	[1,5]	Single Cast	When the state of Nano Switch (turn on/off the load) is changed: 1. Set Configuration parameter 80 to 0. Reserved (Default). 2. Set Configuration parameter 80 to 1. Send Hal CC. 3. Set Configuration parameter 80 to 2. Send the Basic Report. 4. Set Configuration parameter 80 to 3. Send the Basic Report when using the manual switch to change the load state.
Group 2	[1,5]	Single Cast	Forward the Basic Set, Switch All, Scene Activation Set to associated nodes in Group 2 when the Nano Switch receives the Basic Set, Switch All, Scene Activation Set commands from main controller. (E.g. Send/forward Basic Set to control the other nodes in association Group 2)
Group 3	[1,5]	Single Cast	Send Basic Set (enabled by Configuration parameter 0x51) to the associated nodes in Group 3 when the external switch S1 is operated. Note The Switch Mode of external switch S1 should be identified successfully, which means that the value of Configuration parameter 0x78 should be non-zero, then the Basic Set can be sent to the associated nodes in Group 3 via triggering the S1 switch.
Group 4	[1,5]	Single Cast	Send Basic Set (enabled by Configuration parameter 0x52) to the associated nodes in Group 4 when the external switch S2 is operated. Note The Switch Mode of external switch S2 should be identified successfully, which means that the value of Configuration parameter 0x78 should be non-zero, then the Basic Set can be sent to the associated nodes in Group 4 via triggering the S2 switch.

Configuration parameters information

Parameter Number Hex / Decimal	Description	Default Value	Size
0x03 (3)	Over current protection. Output load will be closed after 30 seconds if the current exceeds 100A. 0 = Disabled 1 = Enabled	1	1
0x04 (4)	Over heat protection. Output load will be closed after 30 seconds if the temperature inside the product exceeds 100°C. 0 = Disabled 1 = Enabled	0	1
0x14 (20)	Configure the output load status after re-power on 0 = The last status before the power outage. 1 = Always on 2 = Always off	0	1
0x00 (0)	To get which notification would be sent to the associated nodes in association group 1 when the state of output load is changed. 0 = Nothing 1 = Hal CC 2 = Basic Report CC 3 = Hal CC when using the external switch to switch the loads. Note When just only one channel load state is changed, the report message Hal CC or Basic Report CC would be Multi Channel encapsulated.	3	1

0x51 (81)	To get which notification would be sent to the associated nodes in association group 3 when using the external switch 1 to switch the loads. 0 = Send Nothing 1 = Basic Set CC.	1	1
0x52 (82)	To get which notification would be sent to the associated nodes in association group 4 when using the external switch 2 to switch the loads. 0 = Send Nothing 1 = Basic Set CC.	1	1
0x53 (83)	Configure the state of LED when it is in 3 modes below: 0 = Energy mode. The LED will follow the status (on/off). 1 = Momentary indicate mode. When the state of Switch's load changed, the LED will follow the status (on/off) of its load, but the LED will turn off after 5 seconds if there is no any switch action. 2 = Night light mode. The LED will remain ON state.	0	1
0x54 (84)	Set the ON/OFF time of the LED when it is in high light mode. Value1 = ON (hour) Value2 = ON (minute) Value3 = OFF (hour) Value4 = OFF (minute)	Value1=0x12 Value2=0x80 Value3=0x80 Value4=0x80	4

0x00 (0)	Set the ON time of output load. Value1 = 0, disable or *1, enable. Value2 = ON (day, bit0 - bit5 represent Mon to Sun) Value3 = ON (hour) Value4 = ON (minute)	Value1=0x00 Value2=0x3F Value3=0x12 Value4=0x00	4
0x01 (1)	Set the OFF time of output load. Value1 = 0, disable or *1, enable. Value2 = OFF (day, bit0 - bit5 represent Mon to Sun) Value3 = OFF (hour) Value4 = OFF (minute)	Value1=0x00 Value2=0x3F Value3=0x17 Value4=0x00	4
0x04 (4)	Enable/disable the parameter 81 and 82 below 0 = Disable 1 = Enable	0	1
0x55 (85)	The value here represents minimum change in voltage (in terms of voltage) to induce a Meter Report (available range 0-80000).	20 (0%)	2
0x5C (92)	The value here represents minimum change in voltage percent (in terms of percentage) to induce a Meter Report (available range 0-100).	5 (%)	1
0x64 (100)	Set 101-109 to default.	N/A	1
0x65 (101)	To get which report would be sent in Report group 1 (See flags in table below).	0x00 00 00 00	4
0x66 (102)	To get which report would be sent in Report group 2 (See flags in table below).	0x00 00 00 00	4
0x67 (103)	To get which report would be sent in Report group 3 (See flags in table below).	0x00 00 00 00	4
0x68 (110)	Set 111-113 to default.	N/A	1
0x6F (111)	The time interval of sending Report group 1.	0x00 00 00 00	4
0x70 (112)	The time interval of sending Report group 2.	0x00 00 00 00	4
0x71 (113)	The time interval of sending Report group 3.	0x00 00 00 00	4

0x78 (120)	Set the external switch mode of S1 0 = automatic identification mode. 1 = 2 state switch mode 2 = 3-way switch mode 3 = push button mode. Note When the switch mode of S1 is determined or identified or configured, this mode value will not be reset after exclusion.	0	1
0x79 (121)	Set the external switch mode of S2 0 = automatic identification mode. 1 = 2 state switch mode 2 = 3-way switch mode 3 = push button mode. Note When the switch mode of S2 is determined or identified or configured, this mode value will not be reset after exclusion.	0	1
0x7A (122)	Set the control destination for external switch 1 = control the output loads of itself. 2 = control the other nodes. 3 = control the output loads of itself and other nodes.	3	1
0x7C (28)	Enable/Disable Configuration Locked (0=disable, 1 = enable).	0	1
0x7F (318)	1. Value = 0xFFFFFFFF. Default = 1. Size = 4 Reset to factory default settings and removed from the system network. 2. Value = 0. Default = 1. Size = 1 Reset all configuration parameters to factory default settings.	N/A	4
		N/A	1

Configuration Values for parameter 101-106	7	6	5	4	3	2	1	0
configuration Value 1 (M50)	Reserved							
configuration Value 2	Reserved							
configuration Value 3	Reserved							
configuration Value 4 (M5)	meter	meter	meter	meter	Auto send Meter REPORT (Current)	Auto send Meter REPORT (Voltage)	Auto send Meter REPORT (Watt)	Auto send Meter REPORT (Power)

