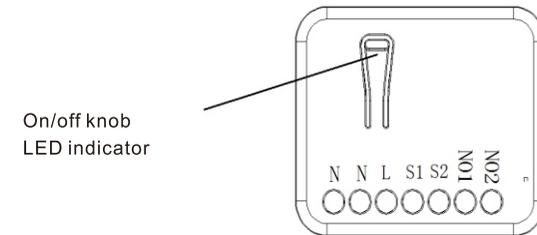


TZ75 Roller shutter controller



Note: This module must be “Included in the network” ,and suitable for where it will be permanently installed. The proper operation of this node in the mesh network is dependent on it knowing it’s location with respect to other nodes. You can not “test bench” configure this module, then install.

The in-wall Roller Shutter Controller is designed to switch rise/lower roller shutter connected to its terminals using radio waves, controllers and a push button directly connected to this Roller Controller.

The in-wall Roller Shutter Controller is a transceiver which is a Z-Wave™ enabled device and is fully compatible with any Z-Wave™ enabled network. Slim design let the Controller can easily hide itself into the wall box and that will be good for the house decoration.

The new smart relay calibration technology can reduce the inrush current caused by the load and let the module work perfectly with many kind of Roller Shutter. This in-wall Roller Shutter Controller is able to detect position of the Shutter by using the patterned power measuring method, so it can be remote controlled not only fully up or down , but also can be adjusted to ex. 30% or 50%. And when manual controlled by push button, the controller also can memorize the position and send the new shutter position to its controller (ex. IP-Gateway).

Adding to Z-Wave™ Network

In the front casing, there is an on/off button with LED indicator which is used to toggle switch on and off or carry out inclusion, exclusion, reset or association. When first power is applied, its LED flashes on and off alternately and repeatedly at 1-second intervals. It implies that it has not been assigned a node ID and can not work with Z-Wave enabled devices.

The table below lists an operation summary of basic Z-Wave functions. Please refer to the instructions for your Z-Wave™ certificated primary controller to access the setup function, and to include/exclude/associate devices.

Function	Description	LED Indication
No node ID	The Z-Wave Controller does not allocate a node ID to the Switch.	1-second on, 1-second off
Add	1. Have Z-Wave Controller entered inclusion mode.	Press on, for off Press off, for on
	2. Pressing On/Off button three times within 1.5 seconds will enter inclusion mode.	
Remove	1. Have Z-Wave Controller entered exclusion mode.	Press on, for off Press off, for on
	2. Pressing On/Off button three times within 1.5 seconds will enter exclusion mode.	
	Node ID has been excluded.	1-second on, 1-second off
Reset	1. Pressing On/Off button three times within 1.5 seconds will enter inclusion mode.	Press on, for on Press off, for off
	2. Within 5 second, press On/Off button again for 1 seconds until LED is off.	
	3. ID is excluded	1-second on, 1-second off
Association	1. Have Z-Wave Controller entered association mode. Or Pressing On/Off button three times within 1.5 seconds will enter association mode	Press on, for on Press off, for off
	2. There are two groups for the switch Each group can associate max five devices.	
<p>※Including a node ID allocated by Z-Wave controller means Add. Excluding a node ID allocated by Z-Wave controller means remove.</p> <p>※Failed or success in including/excluding the node ID can be viewed from the Z-Wave controller.</p> <p>※Association:it can be associated by Z-Wave devices with association</p> <p>※Use the“Reset” procedure only in the event that the network primary controller is missing or otherwise inoperable</p> <p>※ The group identifier is “Group 1”.</p> <p>Association group info report command class Profile:General lifeline (Profile MSB=0x00,Profile LSB=0x01) Association group name report command class Group 1:lifeline</p>		

LED Indication

To distinguish what mode the TZ75 is in, view from the LED for identification. No matter up or down, close or open, Led will flash every two seconds while Motor activate.

Under normal operation, when the TZ75 has not been allocated a node ID, the LED flashes on and off alternately at 1-second intervals. By pressing S1 S2 or Include button, it will stop flashing temporarily. However, after discon

-nect and reconnect the TZ75, the LED will flash on and off alternately at 1-second intervals.

When overload state occurs, the TZ75 is disabled of which LED flashes on and off alternately at 0.5 second intervals. Overload state can be cleared by disconnect and reconnect the TZ75 to the main power .

Installation and operation

1.put the in wall TZ75 into a wall box and connect the AC power wire L, N to TZ75 connector L, N.

2.Connect the wall switch to the TZ75 .

3.It is important to carry out a shutter calibration process before you control the shutter to move. Press inclusion button over 3 seconds and release before the 6th second, the roller shutter controller will start the shutter calibration process. The process is composed of three continue stages. The shutter move to the TOP in first stage, and move to the BOTTOM in second stage, and move to the TOP again in third stage. Then TZ75 will know the total range of UP and DOWN.

4.During the shutter calibration process, any emergencies happen you can press and release the include button to stop the process.

5.If user found the direction is reverse, this may because the wrong connection of NO1 and NO2 to the motor, please change NO1 and NO2 connection and execute calibration process again.

6.To manually switch up and down of the shutter, simply press S1 or S2 .

7.TZ75 built in meter function and can read the Watt , KWh, V(Voltage), I(Current) , PF(Power Factor) of the load by using Z-Wave command class.

8.TZ75 have overload protection function, and can help to prevent short circuit caused by load.

Z-Wave Configuration

Configuration Parameter	Function	Size (Byte)	Value	Unit	Dedault	Description
1	Watt Meter Report period	2	0x01-0x7FFF	5s	720	5*720s=3600s=1hour
2	KWH Meter Report period	2	0x01-0x7FFF	10min	6	6*1min=1hour
3	Threshold of Watt for load caution	2	10-1100	1Watt	1100	
4	Threshold of KWH for load caution	2	0-10000	Kwh	0	

Watt Meter Report Period:

If the setting is configured for 1 hour (set value =720), the TZ75 will report its instant power consumption every 1 hour to the node of correspond Group. The maximum interval to report its instant power consumption is 45 hours (5s*32767/3600=45hr). Default value is 1 hour

KWH Meter Report Period:

If the setting is configured for 1 hour (set value =6), the TZ75 will report its Accumulated Power Consumption (KW/h) every 1 hour to the node of correspond Group. The maximum interval to report its Accumulated Power Consumption (KW/h) is 227.55 days (10min*32767/1440=227.55 days). Default value=1 hour

Threshold of Watt for Load Caution

This is a warning when the wattage of load over the preset threshold value, If the setting value is 1100, when the load wattage over this value, TZ75 will send Watt Meter Report command to the node of correspond Group. Default value=1100W.

Threshold of KWh for Load Caution

This is a warning when the KWh of load over the preset threshold value, If the setting value is 10000, when the Accumulated Power Consumption of Relay1 or Relay2 over this value, TZ75 will send KWh Meter Report command to the node of correspond Group, minimum value is 1KWh and default value is 0kWh. It means no warning when the KWH of load over the preset threshold value and not send KWH Meter Report.

Z-Wave Supported Command Class

COMMAND_CLASS_SWITCH_BINARY
 COMMAND_CLASS_BASIC
 COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
 COMMAND_CLASS_VERSION
 COMMAND_CLASS_ASSOCIATION
 COMMAND_CLASS_METER_V3
 COMMAND_CLASS_CONFIGURATION
 COMMAND_CLASS_SWITCH_MULTILEVEL_V3

Troubleshooting

Sympton	Cause of failure	Recommendation
The TZ75 not working and LED off	1.The TZ75 is not connect to the Main power 2.The TZ75 break down	1.Check power connections 2. Don't open up the TZ75 and send it for repair.
The shutter move direction is reverse	Wrong connection of NO1 and NO2 to the motor	Swap the NO1 No2 connection
Tz75 LED light work fine But can not control	1. No association setting 2. Same frequency interference	1. Carry out association 2. Wait for a while to re-try

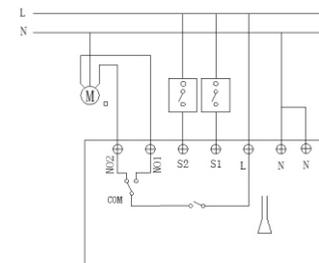
Specification

Operating Voltage	110~240VAC
Maximum Load	Resistive Load 1100W/600W(EU/US) max
Range	Minimum 40m in door 70m outdoor line of sight
Operating Temperature	0°C~40°C
Frequency Range	868.4MHz(EU) 908.42MHz(US) 921.42MHz(AUS)

Specifications subject to change without notice due to continuing product.

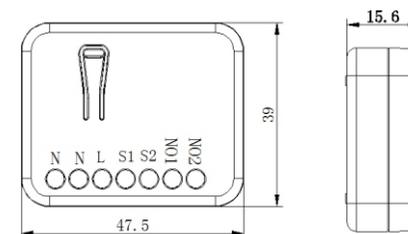


Wiring diagram



L: Line voltage input
 NO1,NO2: motor connector
 N: Line neutral
 S: Connect to wall switch input

Product size (mm)



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.
- If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.
- When replacing old appliances with new one, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.

Limited Warranty:

Product is warranted against defects in material and workmanship for one year. We will replace it free of charge and does not issue any refunds. This warranty extends only to wholesale customers who buy through our Corporation authorized distribution channels. Our Corporation does not warrant this product to consumers.

This warranty does not apply to:

- damage to units caused by accident, dropping or abuse in handling, or any negligent use.
- units which have been subject to unauthorized repair, taken apart, or otherwise modified.
- units not used in accordance with instruction.
- damages exceeding the cost of the product.
- transit damage, initial installation costs, removal cost, or reinstallation cost.