TZ75 Roller shutter controller

On/off knob
LED indicator

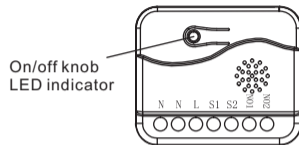N N L S1 S2

Note: This module must be"Included in the network" , and suitable forwhere 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 Controlle r.

The in-wall Roller Shutter Controller is a transceiver which is a Z-Wave™ enabled device and is ully 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 fu nction, and to inclu d e/exclu d e/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.	

function	Description	LED Indication
	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. IDs are excluded.	1-second on,1-second off
Association	1. Have Z-Wave controller entered associaton 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 only one group for the switch (it can associate max five devices)	

※ Including a node ID allocated by Z-Wave controller means Add. Excluding a node ID allocated by Z-Wave controller means Remove.
※ Failed or success in including/excluding the node ID can be viewed from the Z-Wave controller.
※ Association: it can be associated by Z-Wave devices with association
※ Use the"Rese" procedure only in the event that the network primary controller is missing or otherwise inoperable

LED Indication

To distinguish what mode the T275 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 T275 has not been allocated a node ID,the LED flashes on and off alternately at I-second intervals. By pressing S1 S2 0r Include button, it will stop flashing tempora rily. However, after discon-nect and reconnect the TZ75, the LED will flash on and off alternately at Isecond 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 an 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 befo re 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 S1or S2 .
7. TZ75 built in meter fu nction 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	Default	Description
1	Watt Meter Report period	2	0x01-0x7FFF	5s	720	5*720s=3600s =1 hour
2	KWH Meter Report period	2	0x01-0x7FFF	10min	6	6*1min=1 hour
3	Threshold of Watt for load caution	2	10-1100	1 Watt	1100	
4	Threshold of KWH for load caution	2	0-10000	Kwh	0	

Watt Meter Report Period:

If the setting is config red for I 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 configu red for lhour (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 Relayl or Relay2 over this value, TZ75 will send K\Nh Meter Report command to the node of correspond Group, minimum value is 1 KWh and default value is okWh.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_GLASS MANUFACTURER SPECIFIC_V2
COMMAND_CLASS VERSION
COMMAND_CLASS ASSOCIATION
COMMAND_CLASS METER_V3
COMMAND_CLASS CONFIGURATION
COMMAND_CLASS SWITGH_ MULTILEVEL_V3

Troubleshooting

| Symptom	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℃~40℃
Frequency Range	868.4MHz(EU) 908.42MHz(US) 921.42MHz(AUS)

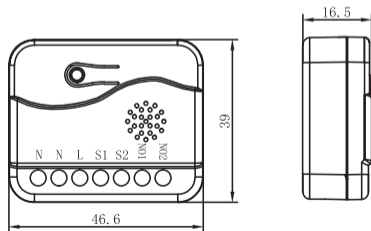Specifications are subject to change and improvement without notice.

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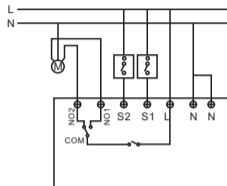
L: Line voltage input
NO1,NO2: motor connector
N: Line neutral
S: Connect to wall switch input

Product size (mm)

16. 5

39

46. 6

Warning:

1. Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.
2. Contact your local government for information regarding the collection systems available.
3. 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.
4. 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.

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