Shutter panel Switch

MH-C421

Introduction

Shutter Panel Switch is a wall panel built-in with Z-Wave Plus module. With its stylish design and stable performance, the panel can be used to wire roller shutter which controlled by AC motor (with limit). It supports basic command class，multi channel command class and multi channel association command class, also works as a repeater in a Z-Wave network. This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from any other manufacturers.

Specifications

- Power supply: 85~260VAC, 50/60Hz
- Output: 2*Max 3.5A
- Z-Wave frequency: 868.42MHz (EU), 865.2MHz (IN) or other frequency customized
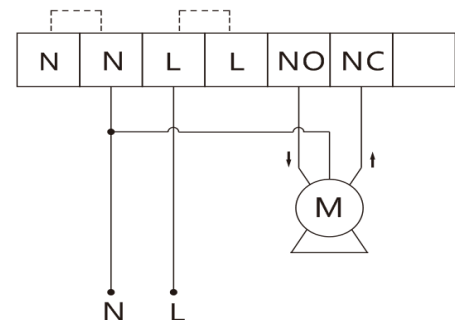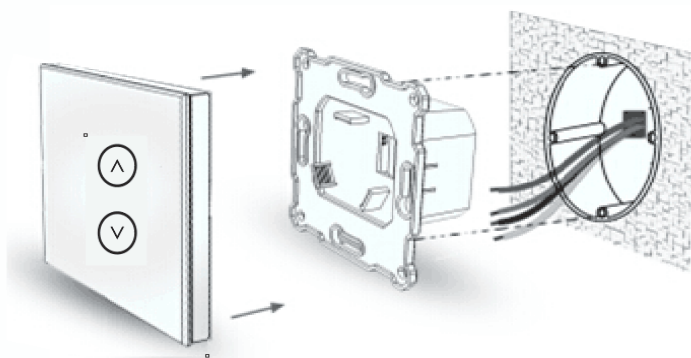
Installation Instructions

IMPORTANT:
- A qualified electrician with the understanding of wiring diagrams and knowledge of electrical safety should complete the installation inside the main circuit box (normally outside your house).
- Read all instructions and documentation and save for future reference.

CAUTION: Cut off power supply at circuit breaker or fuse before installation to avoid fire, shock or death!

Installation   **Wiring** (standard strip length: 6-8mm)

Step 1: Separate the device into two parts: the touch panel and the bottom..
Step 2: Insert all wires into the right terminals by following the wiring diagrams as below.
Step 3: Push the whole device into junction box.
Step 4: Confirm the device is well mounted, power on and it is ready to operate.

Operation

Exclusion / Inclusion：

1. Power the panel on, if LEDs flick 4 times, it shows the device is not in any Z-Wave network. If LEDs turns to orange directly, the panel is in a network already.
2. Set controller into Include/Exclude mode, and press 8 seconds or 3 clicks on "UP" or "DOWN" button to add/remove. If succeed, green LED flicks 4 times.

Manual Operation：

1. When powered on, touch "UP/DOWN" button and release, the shutter starts to move up or down.
2. When shutter moves up, press UP button again can stop the moving.
3. When shutter moves down, press DOWN button again can stop the moving.

Calibration (on the panel)：

Important:

● Make sure the shutter is not reaching its bottom limit before calibration.
● During calibration, any touches on buttons will quit the calibration without success.

Press 4 times on "UP" button, its green LED flicks; and then press 4 times on "DOWN" button, green LED flicks, to show the calibration starting automatically.

1.   A demo trip which help to read motor data will start as follow:
    -- Shutter starts moving down.
    -- After a while the shutter stops, all LEDs turn off.
    -- Wait for 2 sec without any button touch; two green LEDs flick 4 times, the demo trip finished.
2. Then shutter moves up until upper limit.
3. Shutter moves down until bottom limit.
4. Then shutter moves up again until upper limit.

At this time, two green LEDs flick 4 times to show calibration succeed.

Calibration (on a controller)：

Refer to parameter table for more details:

Write Parameter 07 with 0X01: activate demo trip only.

Write Parameter 09 with 0X01: activate demo trip and calibration together.

Write Parameter 0A with 0x01: activate calibration only.

Shutter open/close level setting:

Note: To set the levels, please operate the calibration first.

1. The min level of shutter close (down movement):

Manual：Make sure the shutter is not at its bottom limit. Press 6 times of the Down button, the shutter starts moving down. Then press the Down button once to stop the movement where you want. The shutter will stop here when close from now on.

Parameter：Item 0x0B; Range 0x00-0x62.

2. The max level of shutter open (up movement):

Manual：Make sure the shutter is not at its upper limit. Press 6 times of the Up button, the shutter starts moving up. Then press the Up button once to stop the movement where you want. The shutter will stop here when open from now on.

Parameter：Item 0x0C; Range 0x01-0x63.

Energy Consumption Monitoring:

When requested by controller, the panel will report voltage, current and power consumption (the command class which support this function is Meter Command Class).

Association Group:

    The device supports 1 association group (AG), which is suggested to be associated with a controller. And it will report devices' state to the controller if any changes happen. The command "COMMAND_CLASS_ ASSOCIATION" can be used to set the AG.

Parameters Setting:

Add	Function	Byte	Options	Default	Remark
0x01	Watt Meter Report period	2	0x01-0x7fff	0x02D0	. Unit 5sec 5*720S=3600S= 1hour
0x02	KWH Meter Report period	2	0x01-0x7fff	0x06	Unit 10min 6*10min=1 hour
0x05	Level Report Mode	1	**0x01:** Report destination level in 5s period when requested by the gateway; And then report current level after 5s. **0x02:** Report every 10% level change while running	0x02	
0x07	Demo trip	1	**0x01:** activate demo trip only	0x00	
0x08	LED Backlit brightness level	1	**0x00** LED disabled **0x01~0x0A** Min level-Max level **>0x0A** same level as 0x0A	0x0A	
0x09	Demo trip and calibration	1	**0X01:**activate demo trip and calibration	0x00	
0x0A	Auto calibration	1	**0x01:**activate calibration	0x00	
0X0B	Min level of the shutter close	1	**0X00-0x62**	0X00	
0X0C	Max level of the shutter open	1	**0X01-0x63**	0X63	
FF	Factory setting	1	**0x55** restore factory setting		write only

Restore Factory setting

Press 10 times of UP or DOWN button or exclude the device from Z-Wave network, then cut off the main power. The factory setting will be restored.

SAFETY NOTICE

1. Flush-mount only into a UL/ETL/CE certified plastic junction box and switch panel cover. The minimum size should be 65*65*45mm, minimum Volume is 190cm^3.

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.

1-year Limited Warranty

We warrant this product to be free from defects in material and workmanship under normal and proper use for one year from purchase date of the original purchaser. We will, at its option, either repair or replace any part of its products that prove defective by reason of improper workmanship or materials. THIS LIMITED WARRANTY DOES NOT COVER ANY DAMAGE TO THIS PRODUCT THAT RESULTS FROM IMPROPER INSTALLATION, ACCIDENT, ABUSE, MISUSE, NATURAL DISASTER, INSUFFICIENT OR EXCESSIVE ELECTRICAL SUPPLY, ABNORMAL MECHANICAL OR ENVIRONMENTAL CONDITIONS, OR ANY UNAUTHORIZED DISASSEMBLY, REPAIR OR MODIFICATION. This limited warranty shall not apply if: (i) the product was not used in accordance with any accompanying instructions, or (ii) the product was not used for its intended function. This limited warranty also does not apply to any product on which the original identification information has been altered, obliterated or removed, that has not been handled or packaged correctly, that has been sold as second-hand or that has been resold contrary to Country and other applicable export regulations.