

Touch Panel Dimmer

MH-P511-US

Introduction

Touch Panel Dimmer is a wall switch with built-in Z-Wave module. It supports basic command class, association command class, which can control all associated devices synchronously. 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: 120VAC, 60Hz

Z-Wave frequency: 908.42MHz (US), 921.4MHz (AH) or other frequency customized

Max output: 1*2.5A

Installation Instructions

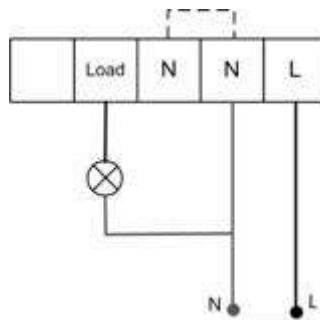
IMPORTANT:

- 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

Step1 Preparing

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

Step2 Wiring (standard strip length: 6-8mm)



1. Separate the device into two parts: the touch panel and the bottom.
2. Connect Hot Line to “L” on the bottom.
3. Connect Neutral Line to “N”.
4. Connect Load wire to “Load”.
5. Secure the bottom onto the junction box with two screws, and then mount the touch panel back.

Operation

INCLUDING the device into Z-Wave network:

1. Set the controller into INCLUSION mode. Follow instructions provided by controller manufacturer.
2. Press the key on the panel 3 times in quick succession (within approx 1.5sec).

Note: Check the controller or gateway to see whether inclusion is successful.

EXCLUDING the device from Z-Wave network:

1. Set the controller into EXCLUSION mode. Follow instructions provided by controller manufacturer.
2. Press the key on the panel 3 times in quick succession (within approx 1.5sec).

Note: Check the controller or gateway to see whether exclusion is successful.

The exclusion will delete all association data.

Turning on/off/Dimming the device:

The device can be controlled by:

- Pressing the key on panel will turn on/off the light.
- Holding the key on panel will dim up then dim down.
- Sending commands through controller or gateway. (the command classes which support this function are Basic Command Class, Multilevel Switch Command Class, and Scene Activation Command Class)

Association Group:

The device supports 3 association groups(AG):

1st AG: reports device's dimming state. It supports only one Node ID. A controller/gateway SHOULD be associated to this AG.

2nd AG: to control the associated devices synchronously. When S1's state changes, it will send "Basic Set Command" to these devices. It supports upto 5 Node IDs.

3rd AG: to control the associated devices synchronously. When S1's state changes, it will send "Multi-level Set Command" to these devices. It supports upto 5 Node IDs.

Note: Please refer to table "Parameters Setting" for the detail configurations for AGs.

Setting & Activating Scene:

As a Scene device, it supports "Scene Activation CC" and "Scene Actuator Conf CC", which make the device can be added into any scene, and supports 255 Scene ID.

Meanwhile, it can work as a scene controller to activate Scenes. By configuring the parameters of S1, 3 different scenarios can be realized. The "Scene Activation CC" can be sent to AG1 (gateway) by "one click", "double click" or "hold" external button S1. Pls refer to the following table items 19, 20&21 for more details in configuration.

Parameters Setting:

Add	Function	Byte	Options	Default	Remark
1	Dimmer state saved or not when power down	1	0x00 not saved, Dimmer will be off when powered again 0x01 saved, Dimmer will keep the same state when powered again	0x01	
2	Beep	1	0x00 Beep disabled 0x01 Beep enabled	0x01	
3	LED Backlit brightness level	1	0x00 LED disabled 0x01~0x0A Min level-Max level	0x0A	
4	ALL ON/ALL OFF	1	0x00 forbid ALL ON, forbid ALL OFF 0x01 forbid ALL ON, allow ALL OFF 0x02 allow ALL ON, forbid ALL OFF 0xFF allow ALL ON, allow ALL OFF	0xFF	
5	Minimum brightness level	1	1~98 percentage brightness level	0x01	The max level should always higher than min level
6	Maximum brightness level	1	2~99 percentage brightness level	0x63	
7	Single dimming step time(Manual)	2	Max 2.55s, in 10ms steps	0x03 (30ms)	Manual control realized by holding external button
8	Single dimming step size(Manual)	1	1~99 percentage value (modification isn't recommended)	0x01	
9	Single dimming step time (Auto)	2	Max 2.55s, in 10ms steps	0x03 (30ms)	Auto control realized by: - one click; - double click of external button; - send Z-Wave CC
10	Single dimming step size (Auto)	1	1~99 percentage value (modification isn't recommended)	0x01	
11	Timer function (Auto-off)	2	0x00 function disabled 0x0001~0x00FF 1s~255s	0x00	
12	Reserved				
13	One click of S1	1	0x00 switch between Off and last saved brightness level 1~99 percentage value switch between Off and the set value	99 (0x63)	
14	Double click of S1	1	0x00 function disabled 0x01 reach max brightness level	0x01	

15	Operation report from Switch1 to Association Group 2 & 3	1	bit 6:0 0x00 report all operation to AG2&3 0x01 only report when switching OFF 0x02 only report when switching ON bit7 (valid for AG3 during dimming only) 0 not report during dimming 1 report during dimming	0x00	Device send Basic Set to AG2; Send Multilevel Set to AG3.
16	Operation report from Switch1 to Association Group 2	1	0x00 When sent Basic Set On, carried Value is 0xFF 0x01 When sent Basic Set On, carried Value is Current Dimmer Value	0x01	
17	EMPTY				
18	EMPTY				
19	Scene ID sent to AG1 when one click of S1	1	0 Scene Activation disabled 1~255 send Activation CC to AG1 with specified Scene ID	0x00	
20	Scene ID sent to AG1 when double click of S1	1	0 Scene Activation disabled 1~255 send Activation CC to AG1 with specified Scene ID	0x00	For momentary button only
21	Scene ID sent to AG1 when hold S1	1	0 Scene Activation disabled 1~255 send Activation CC to AG1 with specified Scene ID	0x00	For momentary button only
255	Factory setting	1	0x55 restore factory setting		write only

SAFETY NOTICE

1. Flush-mount only into a UL/ETL/CE certified plastic junction box and switch panel cover. The minimum size should be 90*60*50mm, minimum Volume is 270cm³.
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.

FCC Warning (Part 15.21) (USA only)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Interference Statement (Part 15.105 (b)) (USA only)

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 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.

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.