

Minoston™

Smart On/Off Toggle Switch Manual

Federal Communications Commission (FCC) Statement

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

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. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

IC Caution:

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.

DECLARATION DE CONFORMITE D'INDUSTRIE CANADA

Ce périphérique a été testé et reconnu conforme aux limites spécifiées dans RSS-210.

Son utilisation est soumise aux deux conditions suivantes :

(1) il ne doit pas provoquer d'interférences gênantes et

(2) il doit tolérer les interférences reçues, notamment celles susceptibles d'en perturber le fonctionnement.

WARRANTY

Evalogik Products warrants this product to be free from manufacturing defects for a period of two years from the original date of consumer purchase. This warranty is limited to the repair or replacement of this product only and does not extend to consequential or incidental damage to other products that may be used with this product.

This warranty is in lieu of all other warranties, expressed or implied. Some states do not allow limitations on how long an implied warranty lasts or permit the exclusion or limitation of incidental or consequential damage, so the above limitations may not apply to you.

This warranty gives you specific rights, and you may also have other rights which vary from state to state. If the unit should prove defective within the warranty period.

SPECIFICATIONS

Model: MS12ZS

Power: 120 VAC, 60 Hz.

Signal (Frequency): 908.42 MHz.

Maximum load for outlet 15A, 960W Resistive

Maximum load for the Z-Wave™ controlled outlet:

600W Incandescent, ½ HP Motor or 600W Resistive

Range: Up to 100 feet line of sight between the Wireless Contro

and the closest Z-Wave™ receiver module.

Operating Temperature Range: 32-104° F (0-40° C)

Specifications subject to change without notice
due to continuing product improvement

Website: www.nie-tech.com



Smart On/Off Toggle Switch

WARNING

RISK OF FIRE

RISK OF ELECTRICAL SHOCK

RISK OF BURNS

CONTROLLING APPLIANCES:

EXERCISE EXTREME CAUTION WHEN USING Z-Wave™ DEVICES TO CONTROL

APPLIANCES. OPERATION OF THE Z-Wave™ DEVICE MAY BE IN A DIFFERENT

ROOM THAN THE CONTROLLED APPLIANCE, ALSO AN UNINTENTIONAL ACTIVATION

MAY OCCUR IF THE WRONG BUTTON ON THE REMOTE IS PRESSED. Z-Wave™ DEVICES

MAY AUTOMATICALLY BE POWERED ON DUE TO TIMED EVENT PROGRAMMING.

DEPENDENT UPON THE APPLIANCE, THESE UNATTENDED OR UNINTENTIONAL

OPERATIONS COULD POSSIBLY RESULT IN A HAZARDOUS CONDITION. FOR THESE

REASONS, WE RECOMMEND DO NOT RETURN THIS PRODUCT TO THE STORE

THE FOLLOWING:

DO NOT USE Z-Wave™ DEVICES TO CONTROL ELECTRIC

HEATERS OR ANY OTHER APPLIANCES WHICH MAY PRESENT

A HAZARDOUS CONDITION DUE TO UNATTENDED OR

UNINTENTIONAL OR AUTOMATIC POWER ON CONTROL.

Introduction:

This product can be operated in any Z-Wave network with other Z-Wave Plus™ certified devices from other manufacturers. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network. Each module is designed to act as a repeater, which will re-transmit a radio frequency (RF) signal by routing the signal around obstacles and radio dead spots to ensure that the signal is received at its intended destination. MS12ZS is a security enabled Z-Wave Plus™ device. A security Enabled Z-Wave Plus™ Controller must be used in order to fully utilize the product. The Device Type of the MS12ZS is on/off power switch.

The Role Type of the MS12ZS is Always On Slave Role Type

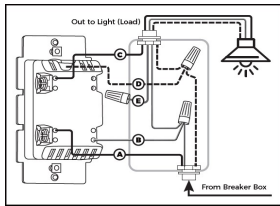
Key Features:

- Remote ON/OFF control via the Z-Wave™ controller
- Manual ON/OFF control with the front panel push button
- Support Association Group and Auto Report switch status
- Support firmware upgrades via Over-the-air (need Gateways support)
- Support Scenes

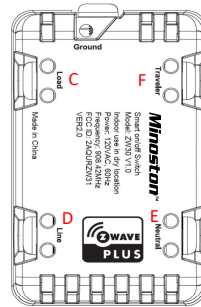
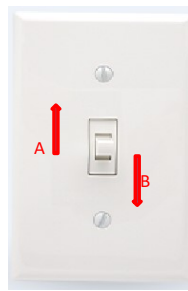
Product Overview:

- A. Up Push button
- B. Down Push button
- C. Load1 (Black)
- D. Lin (Black) - Line in
- E. Nin (White) - Nutral in
- F. 3-way (RED)

MS12ZS Installation Wiring Diagram



- A. LINE (Hot) – Black (connected to power)
- B. NEUTRAL – White
- C. LOAD – Black (connected to lighting)
- D. GROUND – Green/Bare
- E. TRAVELER – Red/Other (only in 3-way installations)



Key function description

- Function 1: Press the up or down button to turn the output ON or OFF
- Function 2: quickly press 3x upper paddle: inclusion (only if switch is not included in network) quickly press 3x lower paddle: exclusion
- Function 3: quickly press upper paddle 6x to change Status LED Configuration
- Function 4: Press and hold lower paddle for 10 seconds, then LED starts blinking, release paddle and within 2 seconds, click lower paddle 5 times
(Node: Please use this procedure only when the network primary controller is missing or otherwise inoperable.)
- Function 5: Tap A (1x/2x/3x/4x/5x/Hold/Release) Activate the scene.
- Function 6: Tap B (1x/2x/3x/4x/5x/Hold/Release) Activate the scene.

Adding Your Device To A Hub

The device support two methods of inclusion, When using a Z-Wave Plus™ certified controller choose Network Wide Inclusion or SmartStart, Network Wide Inclusion To A Z-Wave™ Network

- 1, Refer to your primary controller instructions to process the inclusion / exclusion setup procedure.
- 2, When prompted by your primary controller, click the Up or Down button three times in one second.

The device is compatible with SmartStart

SmartStart enabled products can be added into a Z-Wave™ network by scanning the Z-Wave QR Code found on the top of the outlet or the back of the box with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on and in the network vicinity.

QR CODE

the QR code are stucked to the side of the case, DSK is included in the QR code.

DSK

The DSK code can be found on the DSK label which is attached on the packaging box.



Z-Wave™ protocol Command Class Node Info

```
COMMAND_CLASS_ZWAVEPLUS_INFO_V2,  
COMMAND_CLASS_SWITCH_BINARY_V2,  
COMMAND_CLASS_CONFIGURATION_V4,  
COMMAND_CLASS_CENTRAL_SCENE_V3,  
COMMAND_CLASS_ASSOCIATION_V3,  
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3,  
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3,  
COMMAND_CLASS_TRANSPORT_SERVICE_V2,  
COMMAND_CLASS_VERSION_V3,  
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V1,  
COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1,  
COMMAND_CLASS_INDICATOR_V3,  
COMMAND_CLASS_POWERLEVEL_V1,  
COMMAND_CLASS_SECURITY_2,  
COMMAND_CLASS_SUPERVISION_V1,  
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V5
```

The Below listed Command Class are all supported the Security S2

COMMAND_CLASS_VERSION_V2,
COMMAND_CLASS_SWITCH_BINARY_V2,
COMMAND_CLASS_CONFIGURATION_V4,
COMMAND_CLASS_CENTRAL_SCENE_V3,
COMMAND_CLASS_ASSOCIATION_V3,
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3,
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3,
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V1,
COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1,
COMMAND_CLASS_INDICATOR_V3,
COMMAND_CLASS_POWERLEVEL_V1,
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V5

Z-Wave™ Configuration Parameters

You may use the below configuration parameters to change settings of the corresponding functionality.

1: Locally Button function

Parameter No: 1(0x01)	Size:1 Byte	
	Value: 00(default)	Up Button ON,Down Button OFF
	Value: 01	Up Button OFF,Down Button ON
	Value: 02	Up Button ON/OFF,Down Button ON/OFF

2: Status LED Configuration

Parameter No: 2(0x02)	Size:1 Byte	
	Value: 00(default)	Output and the LED are in the different state.
	Value: 01	Output and the LED are in the same state.
	Value: 02	LED Always OFF
	Value: 03	LED Always ON

3: Auto Turn-Off Timer

Parameter No: 3(0x03),	Size=4,	
	Values:0 (minutes) default;	
	Values: 1 - 65535 (minutes);	

5: Auto Turn-Off Timer

Parameter No: 5(0x05),	Size=4,	
	Values:0 (minutes) default;	
	Values: 1 - 65535 (minutes);	

8: Restores state after power failure

Parameter No: 8(0x08)	Size:1 Byte	
	Value: 00	Output OFF.
	Value: 01	Output ON.
	Value: 02 (default)	The state before a power outage.

11: Enable or Disable OutPut control

Parameter No: 11(0x0B),	Size=1, Default =1	
	Value=0	disable local button and External Switch control,enable Z-Wave™ control
	Value=1	enable local button and External Switch control,enable Z-Wave™ control
	Value=2	disable local button and External Switch control

12: external switch type

Parameter No: 12(0x0C)	Size:1,Default =0	
	Value: 0	toggle switch(device changes status when switch changesstatus)
	Value: 01	momentary switch
	Value: 02	electronic add-on switch

13: Behavior when Output control disabled

Parameter No: 13(0x0D)	Size:1,Default =0	
	Value: 0	Report on/off status and change LED indicator when upper or lower paddle is pressed and Parameter 11 is set to value 0 or 2 (output control disabled).
	Value: 01	DON' t report on/off status or change LED indicator when upper or lower paddle is pressed and Parameter 11 is set to value 0 or 2 (output control disabled).

14: LED Indicator Color

Parameter No: 14(0x0E)	Size:1,Default =1	
	Value: 0	White
	Value: 01	Blue
	Value: 02	Green
	Value: 03	Red

15: LED Indicator Brightness

Parameter No: 15(0x0F)	Size:1,Default =1	
	Value: 00	Bright (100%)
	Value: 01	Medium (60%)
	Value: 02	Low (30%)

16: Association reports

Parameter No: 16(0x10)	Size:1,Default =1	
	Value: 00	Z-Wave™ control: Binary switch report,Manual control: Basic set report
	Value: 01	Z-Wave™ control: Binary switch report,Manual control: Binary switch report

Support for Association Groups

MS12ZS supports 3 association groups. Group 1 supports 1 node ID,Group 2 and Group 3 Supports maximum of 5 node ID' s

Association group_1:Z-Wave™ Plus Lifeline

Association group_1 is default to associate with the primary controller (Gateway/Hub/Controller) for MS12ZS Status change report,

1. MS12ZS will trigger AUTO report function if the Switch status had been changed.

(ex.Switch Binary Report/Basic Report/Central Scene Notification/ Device Reset Locally Notification)

Association group_2:basic set command

When the output of the MS12ZS is changed, On (0xFF) or Off (0x00). The MS12ZS will automatically send out a related basic set command. On (0xFF) or Off (0x00) to its associated group.

Association group_3:basic set command

When the output of the MS12ZS is changed, On (0xFF) or Off (0x00). The MS12ZS will automatically send out a related basic set command. On (0xFF) or Off (0x00) to its associated group.

Restoring Factory Defaults

MS12ZS is removed from the network and will be restored to the factory setting

All Configuration Parameters values and Association information will be restored to factory default settings and excluded from the network.

Manual Reset:Press and hold lower paddle for 10 seconds, then LED starts blinking, release paddle and within 2 seconds, click lower paddle 5 times

Remark : All the setting and data will be permanently deleted.

Please use this procedure only when the network primary controller is missing or otherwise inoperable.