Manuals+ — User Manuals Simplified.

Minoston MS12ZS Smart Toggle Switch User Manual

Contents

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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.

WARRANTY

Minoston 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 Control 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**

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 ANUNINTENTIONAL 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. DEPENDING UPON THE APPLIANCE, THESE UNATTENDED OR UNINTENTIONAL OPERATIONS COULaD 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 Plug™ certified devices from other manufacturers. All non-battery operated nodes within the network willact 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)
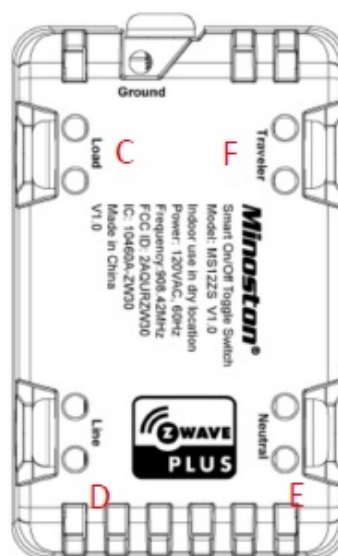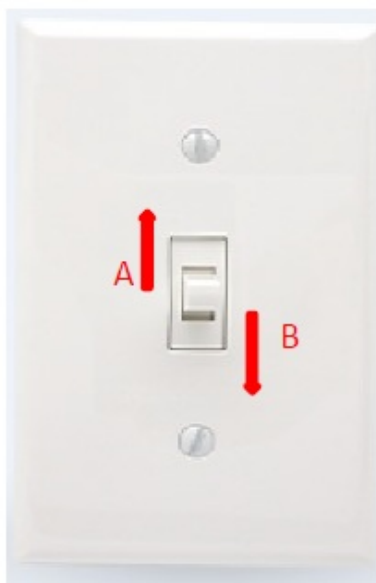
MS12ZS Installation Wiring Diagram
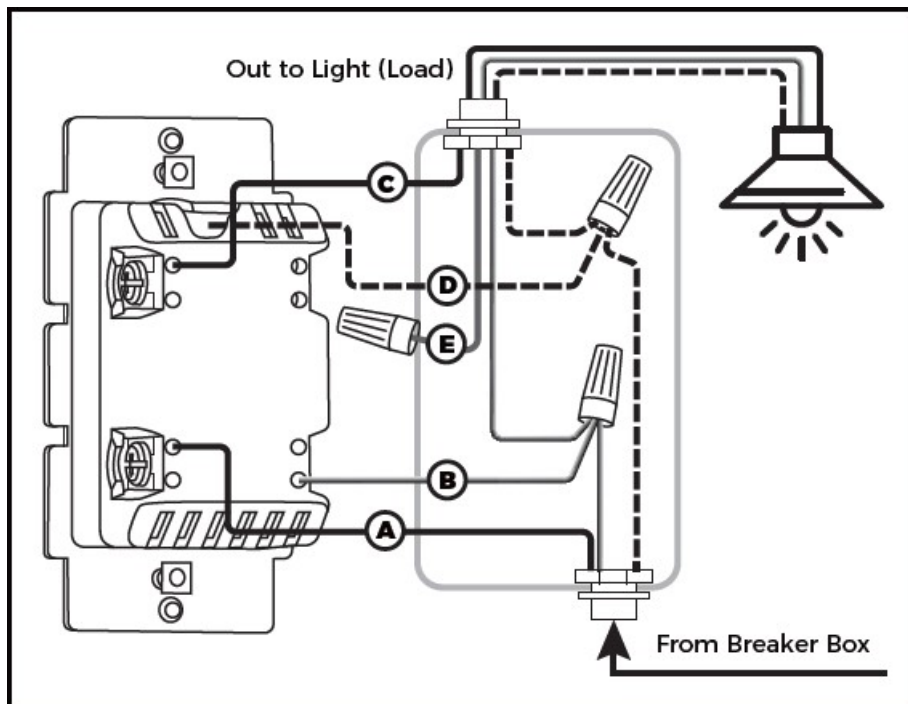
A. LINE (Hot) — Black (connected to power)
B. NEUTRAL — White
C. LOAD — Black (connected to lighting)
D. GROUND — Green/Bare
E. TRAVELER — Red/Other (only in 3-way installations)

Key function description

Function 1: Press the up or down button to turn the output ON or OFF
Function 2: Press the up or down button three times quickly to ADD and REMOVE
Function 3: Press the up or down button six times quickly to change Status LED Configuration
Function 4: Press click Z-Wave button3 times quickly,and hold the third time for at least 10 seconds. to restore the device to the factory .
(Note: 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.

Z-Wave Remote Control

ADD or Remove the MS12ZS from the existing Z-Wave home control network with your primary controller.

- Refer to your primary controller instructions to process the inclusion/exclusion setup procedure.
- When prompted by your primary controller, click the Up or Down button three times in one second. Include MS12ZS to/from a Z-Wave Gateway with supporting Security. The MS12ZS can support the Primary Controller that implemented the security S2.
  Notice: Including a node ID allocated by Z-WaveTM Controller means "Add" or "Inclusion". Excluding a node ID allocated by Z-WaveTM Controller means "Remove" or "Exclusion".

Z-Wave protocol Command Class Node Info

- COMMAND_CLASS_ZWAVEPLUS_INFO,
- COMMAND_CLASS_SWITCH_BINARY,

- COMMAND_CLASS_ASSOCIATION,
- COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION,
- COMMAND_CLASS_ASSOCIATION_GRP_INFO,
- COMMAND_CLASS_TRANSPORT_SERVICE,
- COMMAND_CLASS_VERSION,
- COMMAND_CLASS_MANUFACTURER_SPECIFIC,
- COMMAND_CLASS_DEVICE_RESET_LOCALLY,
- COMMAND_CLASS_POWERLEVEL,
- COMMAND_CLASS_CONFIGURATION,
- COMMAND_CLASS_CENTRAL_SCENE,
- COMMAND_CLASS_SECURITY_2,
- COMMAND_CLASS_SUPERVISION
- COMMAND_CLASS_FIRMWARE_UPDATE_MD

The Below listed Command Class are all supported the Security S2

- COMMAND_CLASS_VERSION,
- COMMAND_CLASS_SWITCH_BINARY,
- COMMAND_CLASS_ASSOCIATION,
- COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION,
- COMMAND_CLASS_ASSOCIATION_GRP_INFO,
- COMMAND_CLASS_MANUFACTURER_SPECIFIC,
- COMMAND_CLASS_DEVICE_RESET_LOCALLY,
- COMMAND_CLASS_CENTRAL_SCENE,
- COMMAND_CLASS_CONFIGURATION,
- COMMAND_CLASS_POWERLEVEL
- COMMAND_CLASS_FIRMWARE_UPDATE_MD

Z-Wave Configuration Parameters

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

1. **Locally Button function**

   Paramter 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**

   Paramter 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. **Enable Auto Turn-Off Timer**

   Paramter No: 3(0x03) Size:1 Byte Default =0

   Value=0 timer disabled

Value=1 timer enabled

4. **Auto Turn-Off Timer 60 (minutes) – default setting**

   Paramter No: 4(0x04) Size=4 Values: 1 – 65535 (minutes);

5. **Enable Auto Turn-ON Timer**

   Paramter No: 5(0x05) Size:1 Byte Default =0

   Value=0 timer disabled

   Value=1 timer enabled

6. **Auto Turn-ON Timer 60 (minutes) – default setting**

   Paramter No: 6(0x06) Size=4 Values: 1 – 65535 (minutes);

7. **Association Setting Parameter**

   Paramter No: 7(0x07) Size:1 Byte Value: 00 None Value: 01 Local

   Value: 02 3-way Value: 03 3-way&Local

   Value: 04 Z-Wave hub Value: 05 Z-Wave hub&Local

   Value: 06 Z-Wave hub&3-way Value: 07 Z-Wave hub&Local&3-way

   Value: 08 Timer Value: 09 Timer&Local

   Value: 10 Timer&3-way Value: 11 Timer&3-way&Local

   Value: 12 Timer&Z-Wave hub Value: 13 Timer&Z-Wave hub&Local

   Value: 14 Timer&Z-Wave hub&3-way Value: 15 All(Defaul)

8. **Restores state after power failure**

   Paramter No: 8(0x08) Size:1 Byte Value: 00 Output OFF.

   Value: 01 Output ON.

   Value: 02 (default) The state before a power outage.

9. **Enable or Disable local control**

   Paramter No: 10(0x0A) Size=1 Default =1

   Value=0 disable (when paddle pressed switch will not turn light on or off BUT it will still control the light via z-wave and it will change LED indicator status depending if light is turned on or turned off)

   Value=1 enable (normal operation like now)

Support for Association Groups
MS12ZS supports 2 association groups. Group 1 supports 1 node ID,Group 2 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.

   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.

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 click Z-Wavebutton3 times quickly, and hold the third time for at least 10 seconds. to restore
the device to the factory.
Remark: All the settings and data will be permanently deleted. Please use this procedure only when the network
primary controller is missing or otherwise inoperable.

Documents / Resources

Minoston MS12ZS Smart Toggle Switch [pdf] User Manual
MS12ZS, Smart Toggle Switch, MS12ZS Smart Toggle Switch, Toggle Switch, Switch