Minoston™

Smart Dimmer Toggle Switch Manual

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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 caus 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 bod
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 re.ues, notamment cellessusceptibles d'en perturber le fonctionnement.

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:MS13Z
Power: 120 VAC, 60 Hz.
Signal (Frequency): 908.42 MHZ.
Maximum Loads: 500W, 2-gang 400W or 3-gang 300W incandescent, 100W CFL/LED

Range: Up to 100 feet line of sight between the Wireless Controller and the closest Z-Wave receiver module.
Operating Temperature Range: 32-104° F (0-40° C)
For Ourdoor use
Specifications subject to change without notice due to continuing product improvement

WARNING

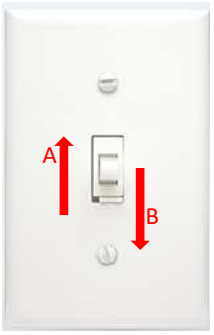
RISK OF FIRE
RISK OF ELECTRICAL SHOCK
RISK OF BURNS
CONTROLLING APPLIANCES:
EXERCISE EXTREME CAUTION WHEN USING Z-Wave DEVICES TO CONTROL APPLIANCES. OPERATION OF THE Z-Wave DEVICE MAY BE IN A DIFFERENT ROOM THAN THE CONTROLLED APPLIANCE, ALSO ANUNINTENTIONAL ACTIVATION MAY OCCUR IF THE WRONG BUTTON 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 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 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 netwc
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.
MS13Z 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 MS13Z is Dimmer power switch.
The Role Type of the MS13Z is Always On Slave Role Type

Kev Features:

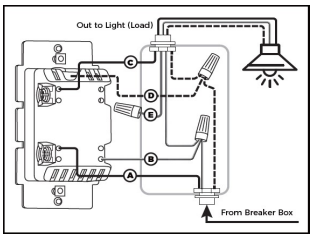
---Remote ON/OFF control via the Z-Wave controller
---Manual ON/OFF control with the front panel push button
---Support Association Group and Auto Report switch status
---Support firmware upgrades via Over-the-air (need Gateways support)
---Support Scenes



Product Overview:

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

MS13Z 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: Hold Dimmer Up or Dimmer Down
Function 3: Press the up or down button three times quickly to ADD and REMOVE
Function 4: Press the up or down button six times quickly to change Status LED Configuration
Function 5: When switch is off and quickly press UPPER paddle 2 times, switch turns on to 100% brightness
Function 6: Press click Z-Wave button 3 times quickly, and hold for at least 10 seconds at the third time to restore the device to the factory (Node:Please use this procedure only when the network primary controller is missing or otherwise inoperable.)
Function 7: Tap A(1x/2x/3x/4x/5x/Hold/Release) Activate the scene.
Function 8: Tap B(1x/2x/3x/4x/5x/Hold/Release) Activate the scene.

Led Indicate Function

1:Flash two times
When configuration parameter succeed LED flash two times
2:quickly flash
When inclusion or exclusion or reset, LED will quickly flash till operate complete

Z-Wave Remote Control

ADD or Remove the MS13Z 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 MS13Z to/from a Z-Wave Gateway with supporting Security.The MS13Z 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_MULTILEVEL,
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_SWITCH_MULTILEVEL,
COMMAND_CLASS_ASSOCIATION,
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION,
COMMAND_CLASS_ASSOCIATION_GRP_INFO,
COMMAND_CLASS_VERSION,
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 Always OFF
Value: 03 Always ON

3：Enable Auto Turn-OFF Timer
Paramter No: 3(0x03)，Size=1，Value=0 Auto Turn-OFF Timer Disabled (default);
Value=1 Auto Turn-OFF Timer Enabled

4：Count Down Configuration(Turn off the output by time）
Paramter No: 4(0x04) Size:4 Byte Value: xx xx Turn off Output
Value Scope :1----65535Minutes (default:00 3C no timer)

5：Enable Auto Turn-ON Timer
Paramter No: 5(0x05)，Size=1，Value=0 Auto Turn-ON Timer Disabled (default);
Value=1 Auto Turn-ON Timer Enabled

6：Count Down Configuration(Turn ON the output by time）
Paramter No: 6(0x06) Size:4 Byte Value: xx xx Turn ON Output
Value Scope :1----65535Minutes (default:00 3C no timer)

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：Dimmer Speed Parameter （Local Button）
Paramter No: 9(0x09) Size:1 Byte Value: 01(default) from 0x63 to 0x00 or from 0x00 to 0x63 need 1s
Value: 02 from 0x63 to 0x00 or from 0x00 to 0x63 need 2s
.....
Value: 99 from 0x63 to 0x00 or from 0x00 to 0x63 need 99s

10：Multilevel minimum value can be set（The minimum luminance value of the dimming）（Local Button）
Paramter No: 10(0x0A) Size:1 Byte Value: 00
Value: 01 (default)
.....
Value: 99

11：Multilevel maxmum value can be set（The maxmum luminance value of the dimming）（Local Button）
Paramter No: 11(0x0B) Size:1 Byte Value: 00 (default)
Value: 01
.....
Value: 99 `

12：when switch is off and quickly press UPPER paddle 2 times, switch turns on to x brightness （Local Button）
Paramter No: 12(0x0C) Size:1 Byte Value: 00 Turn ON to 99 (default)
Value: 01 turn on to the value relate with parameter 11

Notice:when parameter 12 value is 0,the parameter 11 can not be set , and the value always is 0

14: Double Tap Behavior
Paramter No: 14(0x0E)，Size=1，Default =0 Value=0 enable double tap to full brightness

(or max/custom brightness set in Par11/Par12), single tap to last brightness level
Value=1 disable double tap to full brightness, single tap to last brightness level
Value=2 disable double tap to full brightness, single tap always to full brightness
(or max/custom brightness set in Par11/Par12)

15: Enable or Disable local control
Paramter No: 15(0x0F)，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

MS13Z supports 2 association groups. Group 1 support 1 node ID,Group 2 Support 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 MS13Z Status change report,

1. MS13Z will trigger AUTO report function if the Switch status had been changed.

Association group_2:basic set command

When the output of the MS13Z is changed, The MS13Z will automatically send out a related basic set command.

Restoring Factory Defaults

MS13Z 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.

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.