Scene Button

User's Manual

V1.0

Introduction

The Scene Button is a wireless switch designed to control other associated devices through the Z-Wave controller. After receiving the signals emitted by the Scene Button, the Z-Wave controller can then give commands or operate according to its own settings. Its great compatibility with Z-Wave products makes it suitable for Z-Wave smart home gateway.

Different scene device actions can be triggered by clicking, double-clicking, or holding the button. The Scene Button can be conveniently mounted on any surface and in any position or location at home, e.g. beside the bed or on the desk.

The Scene Button is also a security Z-Wave device and supports the Over-The-Air (OTA) feature for the product's firmware upgrade. If you want it to be a security device that use secure/encrypted message to communicate in a Z-Wave network, then a security enabled Z-Wave controller is needed.

Package Contents

- Scene Button x 1
- User Manual x 1
- 3M Double-sided tape x 1
- Screw x 2

Command Class

Z-Wave Scene Button Command Class Supported

COMMAND_CLASS_ZWAVEPLUS_INFO_V2
COMMAND_CLASS_SUPERVISION_V1
COMMAND_CLASS_BATTERY_V1
COMMAND_CLASS_WAKE_UP_V2
COMMAND_CLASS_TRANSPORT_SERVICE_V2
COMMAND_CLASS_SECURITY_V1
COMMAND_CLASS_SECURITY_2_V1
COMMAND_CLASS_VERSION_V3
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V4
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V1
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1
COMMAND_CLASS_POWERLEVEL_V1
COMMAND_CLASS_CENTRAL_SCENE_V2
COMMAND_CLASS_CONFIGURATION_V1

Security

COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V1
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1
COMMAND_CLASS_POWERLEVEL_V1
COMMAND_CLASS_ CENTRAL_SCENE_V2
COMMAND_CLASS_CONFIGURATION_V1
COMMAND_CLASS_BATTERY_V1
COMMAND_CLASS_WAKE_UP_V2
COMMAND_CLASS_VERSION_V3
COMMAND_CLASS_SUPERVISION_V1
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V4

Scene Button Device Information

Basic Device Class: ROUTING_SLAVE
Generic Device Class: SENSOR_NOTIFICATION
Specific Device Class: NOTIFICATION_SENSOR

Detailed description of each Command Class

[COMMAND_CLASS_ZWAVEPLUS_INFO]
The Z-Wave Plus Info Get Command is used to get additional information of the Z-Wave Plus device in question.

[COMMAND_CLASS_SUPERVISION]
The Supervision Command Class allows a sending node to request application-level delivery confirmation from a receiving node. The delivery confirmation includes relevant application-level status information in the confirmation message. The Supervision Command Class MAY be used for solitary commands such as Set and unsolicited Report commands.
The Supervision Command Class MUST NOT be used for session-like command flows such as Get←→Report command exchanges or firmware update.

[COMMAND_CLASS_BATTERY]
The Battery Command Class is used to request and report battery levels for a given device.

[COMMAND_CLASS_WAKE_UP]
The Wake Up Command Class version 2 enables read back of the Wake Up Interval capabilities in a node.
The Z-Wave Scene Button wakes up by wake up timer or presses the physical button once, it will send Wakeup Notification Command to the node ID that requires to be reported and stay awake for 10 seconds, if no WAKE_UP_NO_MORE_INFORMATION command is received.

[COMMAND_CLASS_TRANSPORT_SERVICE]
The Transport Service Command Class supports the transfer of datagrams larger than the Z-Wave frame.

[COMMAND_CLASS_SECURITY]
The Security Command Class create the foundation for secure application communication between nodes in a Z-Wave network. The security layer provides confidentiality, authentication and replay attack robustness through AES-128.

[COMMAND_CLASS_SECURITY_2]
The Security 2 Command Class is a framework for allowing nodes to communicate securely in a Z-Wave network. The Security 2 Command Class provides backwards compatibility to nodes implementing the Security 0 Command Class. Security 2 Command Class also defines a new encapsulation format, new Security Classes and a new KEX Scheme 1, which together offers a number of advantages over the Security 0 Command Class. Security 2 Command Class is scalable and allows more KEX Schemes, Security Classes and encapsulation formats to be introduced in the future if necessary.

[COMMAND_CLASS_VERSION]
The Version Command Class, version 3 allows supporting nodes to advertise capabilities related to the Version Command Class and optionally provide a detailed list of information regarding implementation on the Z-Wave chip.

[COMMAND_CLASS_FIRMWARE_UPDATE_MD]
The Firmware Update Meta Data Command Class may be used to transfer a firmware image to a Z-Wave device.

[COMMAND_CLASS_ASSOCIATION]
The Association Command Class is used to manage associations to Node ID destinations. A Node ID destination may be a simple device or the Root Device of a Multi Channel device.

[COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION]
The Multi Channel Association Command Class is used to manage associations to Multi Channel End Point destinations as well as to Node ID destinations.

[COMMAND_CLASS_ASSOCIATION_GRP_INFO]
The Association Group Information (AGI) Command Class allows a node to advertise the capabilities of each association group supported by a given application resource. Controllers and installer tools SHOULD use AGI information to support controller-assisted button-to-button association and GUI-based drag-and-drop association in a plug-and-play fashion.
Centralized gateway-based deployments may create a single association from the lifeline association group to a central management application.

Group	Name	Description
1	Lifeline	Lifeline group, association with 5 nodes.

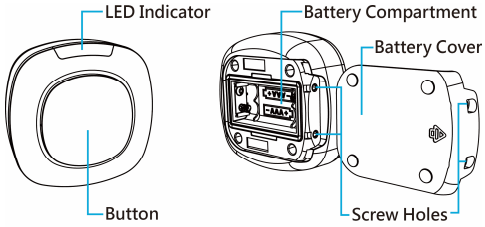
[COMMAND_CLASS_MANUFACTURER_SPECIFIC]
Manufacturer Specific Command Class, version 2 adds a set of commands to communicate unique identification, e.g. the serial number, of the product. Commands not mentioned here remain unchanged as specified for Manufacturer Specific Command Class, Version 2.

[COMMAND_CLASS_DEVICE_RESET_LOCALLY]
The Device Reset Locally Command Class is used to notify central controllers that a Z-Wave device is resetting its network specific parameters.

[COMMAND_CLASS_POWERLEVEL]
The Powerlevel Command Class defines RF transmit power controlling Commands useful when installing or testing a network. The Commands makes it possible for supporting controllers to set/get the RF transmit power level of a node and test specific links between nodes with a specific RF transmit power level.

[COMMAND_CLASS_CENTRAL_SCENE]
The Central Scene Command Class is used to communicate central scene activations to a central controller using the lifeline concept.

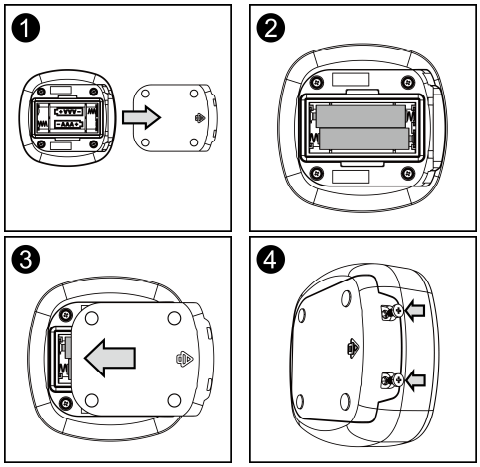
Product Overview



Product Installation

Battery Installation

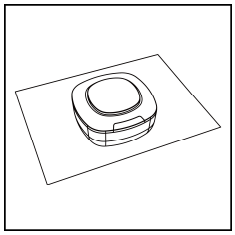
1. Slide the battery cover on the bottom of the product to separate it from the main body.
2. Insert 2 AAA alkaline batteries into the battery compartment and make sure that the positive and negative polarity of the battery is correct.
3. Slide the battery cover back to the main body.
4. Lock the 2 screws into the screw holes to ensure that the battery cover is tightly integrated with the main body.



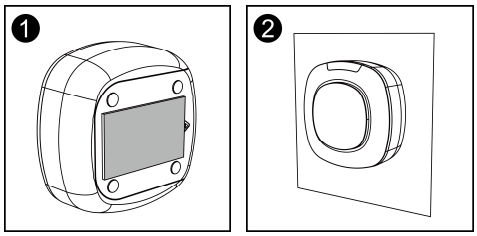
Note: The package contents do not contain alkaline batteries and must be purchased by the user.

Scene Button Installation

1. Place the Scene Button on your desktop.



2. Using the double-sided tape: first peel one side of the tape and place the sticky side onto the battery cover of the Scene Button. Then peel the other side of the tape and attach it onto a proper location on the wall.



Product Operation

Function	Operation
Inclusion	Put the Z-Wave Controller into inclusion mode, and press the button three times in 1.5 seconds to include the device.
Exclusion	Put the Z-Wave Controller into exclusion mode, and press the button three times in 1.5 seconds to exclude the device.
Reset	1. Remove the battery of the Scene Button first. 2. Power on the Scene Button by reinserting the battery and operate step 3 within 5 seconds. 3. Press the button three times in 1.5 seconds and press and hold the button for more than 5 seconds at the 3rd time. 4. The device is excluded and restores to factory default setting, and the device will be restored to the unpaired status. **Note:** Please use this procedure only when the network primary controller is missing or otherwise inoperable.
Send action to trigger a scene	Button pressed 1 time
	Button pressed 2 times
	Button held down
	Button released

LED Indicator

LED Signal	Status
LED off	1. Scene Button is not powered. 2. Scene Button is in standby mode.
Red blinking once every 2 seconds for 30 seconds	When Scene Button is powered and has not been added to the Z-Wave network.
Solid Red for 5 seconds	When Scene Button is powered and has been added to the Z-Wave network.
Red blinking 1 time	Button pressed 1 time successfully.
Red blinking 2 times	Button pressed 2 times successfully
Red blinking 3 times	1. Inclusion process success 2. Exclusion process success 3. Parameter setting success 4. Button held down successfully
Red blinking 6 times	Low battery

Product Specification

Item	Description
Power Supply	DC 3V, AAA Alkaline Battery x 2
RF Protocol	Z-Wave
RF Frequency	EU:868.40MHz US:908.40 MHz JP: 922.50 MHz KR: 920.9MHz
Data Rate	9.6kbps/40kbps/100kbps
Operation Range	100 feet (About 30M)
LED Indicator	RED
Button	x1 (Inclusion/ Exclusion/ Trigger/ Reset)
Waterproof Level	IPX4
Operation Temperature	-10℃ ~ 40℃
Regulatory Approvals	CE/ FCC/ TELEC / Z-Wave® Plus
Dimensions (L*W*H)	80 x 80 x 40.5 mm

*Specification is subjective to change without prior notice.

Regulatory Compliance

CE Caution

Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1,000 MHz frequency range with power levels ranging up to 500 mW; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive.

FCC Caution

This device complies with Part 15 of the FCC rules standard. 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with

minimum distance 20cm between the radiator & your body. 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.

WEEE Information

For EU (European Union) member users: According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country.

For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product

Z-Wave Plus

This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

This device must be used in conjunction with a Security Enabled Z-Wave Controller in order to fully utilize all implemented functions.

This device is a security enabled Z-Wave Plus product that is able to use encrypted Z-Wave Plus messages to communicate to other security enabled Z-Wave Plus products. Note: A "Security Enable Z-Wave Controller" must be used in order to fully utilize this function.

Security S2

Security S2 is supported with the Authenticated and UnAuthenticated levels of security. The Authenticated level requires the user to enter the PIN code or QR code printed on the box of the in wall switch. The UnAuthenticated level does not require the PIN code. Both security levels will encrypt nearly all communication using AES-128 encryption to ensure reliable and secure communication.

SmartStart

SmartStart enabled products can be added into a Z-Wave network by scanning the Z-Wave QR Code present on the product 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 in the network vicinity. The pin code is printed on the back of device along with the QR code. Simply enter the PIN code or scan the QR code with a compatible device. Each QR code is unique for every device. SmartStart uses the latest Security S2 encryption technology for all radio communication. It is completely backwards compatible with non-SmartStart systems if your home automation system doesn't support it yet.

About Pin code or QR code example:

Z-Wave DSK
57727-12360-
03007-26183-
57849-43276-
09166-34707

Please save the QR code or PIN code carefully.

If both the DSK representation on the product and any DSK provided in the product packaging were to fade, rub off, or be lost, the device would not be able to be added to a Z-Wave network.