

Kaadas Z-Wave Keypad Deadbolt (KA251-Z) KA251-Z Manual

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Kaadas

Z-Wave Keypad Deadbolt (KA251-Z)

SKU: KA251-Z

ZWave+

Security V2

Quickstart

This is a
secure
Lock DT
for

Please make sure the internal battery is fully charged.

Important safety information

Please read this manual carefully. Failure to follow the recommendations in this manual may be dangerous or may violate the law.

The manufacturer, importer, distributor and seller shall not be liable for any loss or damage resulting from failure to comply with the instructions in this manual or any other material.

Use this equipment only for its intended purpose. Follow the disposal instructions.

Do not dispose of electronic equipment or batteries in a fire or near open heat sources.

What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section.

Z-Wave ensures a reliable communication by reconfirming every message (**two-way communication**) and every mains powered node can act as a repeater for other nodes (**meshed network**) in case the receiver is not in direct wireless range of the transmitter.

This device and every other certified Z-Wave device can be **used together with any other certified Z-Wave device regardless of brand and origin** as long as both are suited for the same frequency range.

If a device supports **secure communication** it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise it will automatically turn into a lower level of security to maintain backward compatibility.

For more information about Z-Wave technology, devices, white papers etc. please refer to www.z-wave.info.

Product Description

Lock and unlock your door anywhere and anytime by integrate your lock into your Z-Wave home automation or security system for ultimate convenience.

Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network it **must be in factory default state**. Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

Inclusion/Exclusion

On factory default the device does not belong to any Z-Wave network. The device needs to be **added to an existing wireless network** to communicate with the devices of this network. This process is called **Inclusion**.

Devices can also be removed from a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This

controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

Quick trouble shooting

Here are a few hints for network installation if things dont work as expected.

1. Make sure a device is in factory reset state before including. In doubt exclude before include.
2. If inclusion still fails, check if both devices use the same frequency.
3. Remove all dead devices from associations. Otherwise you will see severe delays.
4. Never use sleeping battery devices without a central controller.
5. Dont poll FLIRS devices.
6. Make sure to have enough mains powered device to benefit from the meshing

Association – one device controls an other device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, ...). In case the event happens all devices stored in the respective association group will receive the same wireless command wireless command, typically a 'Basic Set' Command.

Association Groups:

Group Number	Maximum Nodes	Description
1	5	
2	5	

Configuration Parameters

Z-Wave products are supposed to work out of the box after inclusion, however certain configuration can adapt the function better to user needs or unlock further enhanced features.

IMPORTANT: Controllers may only allow configuring signed values. In order to set values in the range 128 ... 255 the value sent in the application shall be the desired value minus 256. For example: To set a parameter to 200 it may be needed to set a value of 200 minus 256 = minus 56. In case of a two byte value the same logic applies: Values greater than 32768 may needed to be given as negative values too.

Parameter 1: Configure volume level

Configure volume level

Size: 1 Byte, Default Value: 2

Setting	Description
0	0

Parameter 2: Configure led

Enable/disable led

Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 3: Timed battery report

Configure timed battery report

Size: 2 Byte, Default Value: 1440

Setting	Description
0	0

Parameter 4: Association Group 2 Settings

Configure the Basic Set value

Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Technical Data

Hardware Platform	ZGM130S037HGN2 / ZGM130S037HGN1
Device Type	Lock DT
Network Operation	Listening Sleeping Slave
Firmware Version	HW: 33 FW: 01.04:01.27
Z-Wave Version	7.18.1
Certification ID	ZC14-23110361
Z-Wave Product Id	0x021D.0x0103.0x0321
Firmware Updatable	Updatable by Consumer by RF
Door Lock Type	Deadbolt
Security V2	S2_ACCESS_CONTROL
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Application Status
- Association Grp Info V3
- Association V2
- Basic V2
- Battery

- Configuration V4
- Device Reset Locally
- Door Lock Logging
- Door Lock V4
- Firmware Update Md V5
- Indicator V3
- Manufacturer Specific V2
- Multi Channel Association V3
- Notification V8
- Powerlevel
- Schedule V4
- Security
- Security 2
- Supervision
- Time
- Time Parameters
- Transport Service V2
- User Code V2
- Version V3
- Zwaveplus Info V2

Explanation of Z-Wave specific terms

- **Controller** — is a Z-Wave device with capabilities to manage the network.
Controllers are typically Gateways, Remote Controls or battery operated wall controllers.
- **Slave** — is a Z-Wave device without capabilities to manage the network.
Slaves can be sensors, actuators and even remote controls.
- **Primary Controller** — is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.
- **Inclusion** — is the process of adding new Z-Wave devices into a network.
- **Exclusion** — is the process of removing Z-Wave devices from the network.
- **Association** — is a control relationship between a controlling device and a controlled device.
- **Wakeup Notification** — is a special wireless message issued by a Z-Wave device to announces that is able to communicate.
- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.

References

- [User Manual](#)