



# Thinka | HomeKit for Z-Wave™ User Manual

V1.2, August, 2021

This document is provided to you by Thinka BV, Amsterdam.  
In case of questions or feedback, please contact [support@thinka.eu](mailto:support@thinka.eu)



## Introduction to Thinka

A carefree and comfortable smart home system starts with a home control network protocol. An agreed upon language that all devices understand, so they are able to cooperate together within one network. Z-Wave™ is a proven wireless home automation protocol, especially developed and optimised for use in and around the home. Z-Wave is a world-wide standard and devices are guaranteed to work together via certification.

Thinka is the controller in your Z-Wave network and is responsible for controlling the devices in the network, also known as nodes.

Nodes/products can be sensors, switches, thermostats etc. Nodes can be mains or battery powered. All mains operated nodes (always on) are used as repeaters, to increase the reach and the reliability of the network.

All of these products are bridged, by Thinka, to Apple HomeKit (and/or Google or Amazon).

In this way the home owner and her family can use the Apple Home App to control her smart home via iPhone, iPad and/or Smart Watch and can add the HomeKit smart home functionalities and Apps to her smart home

Thinka is certified by the Z-Wave alliance and proven to cooperate with over 3000 different smart home devices. Thinka can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers.



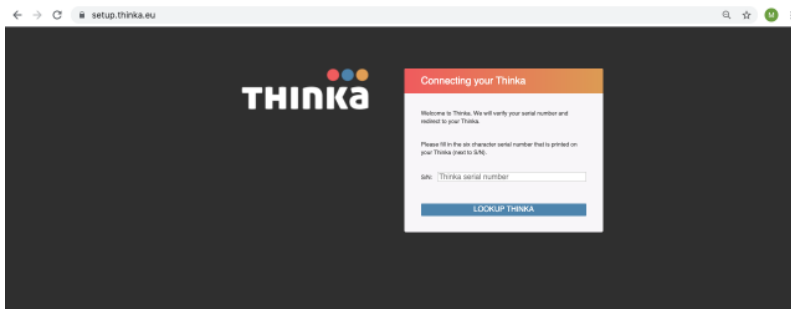
## Set up Thinka

### Connect your Thinka

Connect Thinka to a power outlet and ethernet router with the included cable and power supply.

### Register your Thinka

Go to [setup.thinka.eu](http://setup.thinka.eu) and follow the instructions.



### Add a device

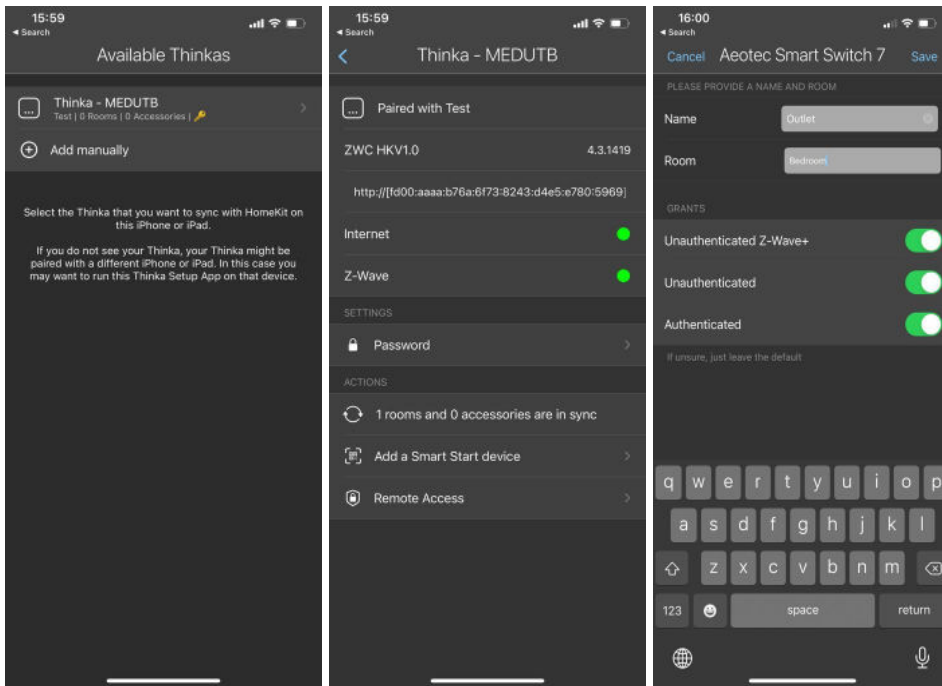
Make sure you know how to include your (new) device. Read the product manual. Most often it requires triple clicking a button on the device you are going to include to put it in inclusion mode. Your device will be included securely if it is supported.

Adding a device can be done in three ways: with SmartStart QR code, SmartStart Provisioning or manually.

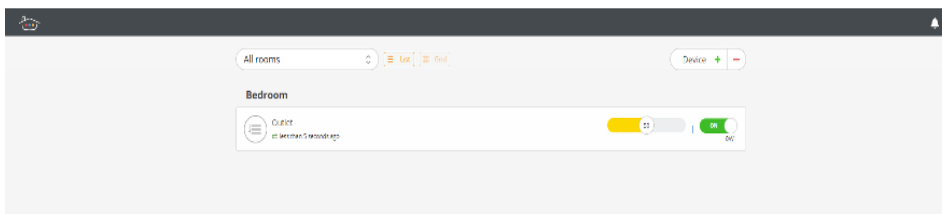
#### 1. SmartStart QR code

If you have bought a device that supports SmartStart, you'll find a QR code on the box and/or device. Download [Thinka Setup app](#) available from the AppStore.

Open it on your iPhone or iPad, select your Thinka, and choose Add a SmartStart device. Scan the QR code on the box and/or device by the application.



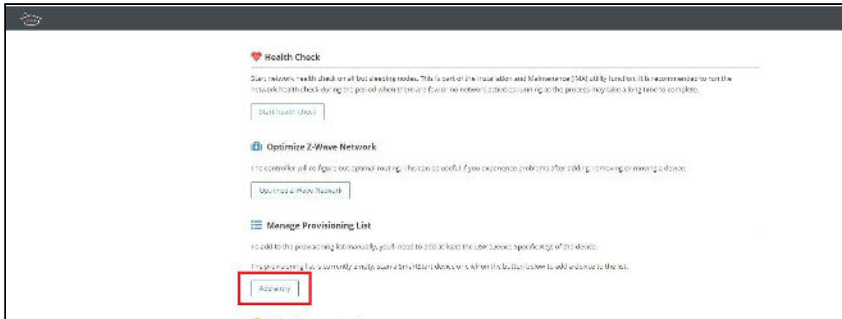
Thinka will recognize your device and add it automatically within 10 minutes after it is turned on. The new device will then appear on Thinka Web Client UI.



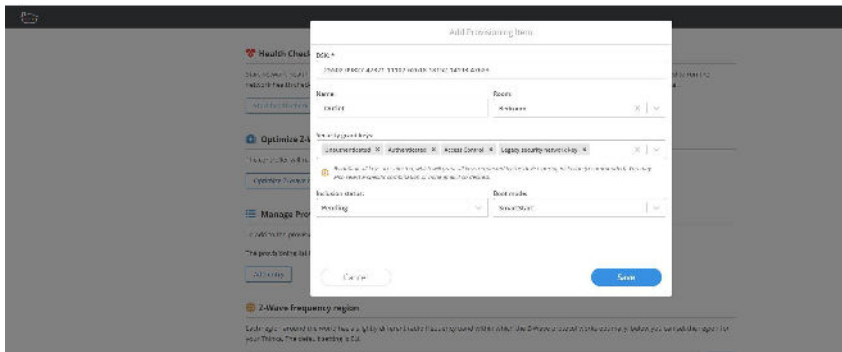
Besides being recognized by the app, the device scanned is put in the 'Provisioning list'. This is list available on the 'Manage Provisioning List' section under the [Z-Wave settings](#). Here the entry can be edited or deleted.

## 2. SmartStart Provisioning

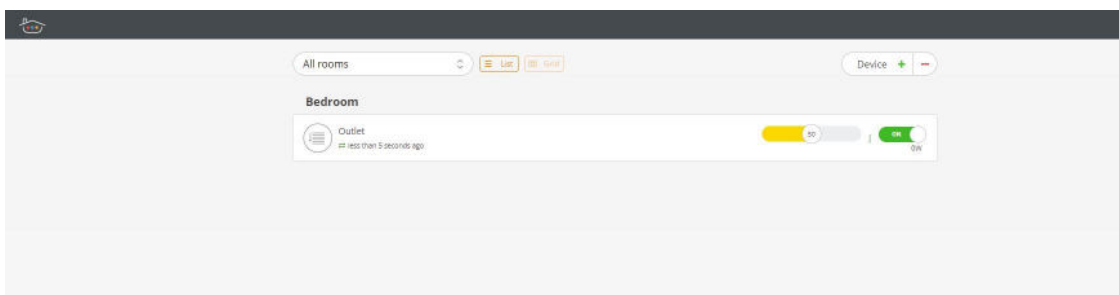
Instead of scanning the QR code, you can enter the same information manually. Besides the SmartStart QR code, you'll find a 40 digit number (the DSK) on the box and/or device. This number can be added to the provisioning list on the 'Manage Provisioning List' section under [Z-Wave settings](#). Provide the DSK and select the grants that you want supported. You can provide a Name and Room for the device.



Thinka will recognise your device and add it automatically within 10 minutes after it is turned on.



Thinka will recognise your device and add it automatically within 10 minutes after it is turned on.



### 3. Manually


Alternatively you can add the device yourself from the [Overview page](#) of this Thinka. Click <Add Device> at the top of the page, and follow the instructions. You can see the screenshots of the instructions for a *sample device* as follows. These steps might differ from device to device.

ADD A DEVICE

### Include a Z-Wave device into your network

Make sure you know how to include your (new) device. Most often it means triple-clicking a button on the device you're going to include.

Your device will be included securely if it's supported.




Cancel Start

ADD A DEVICE

### Scanning for devices

Set your device to learn (inclusion) mode. Most often it means triple-clicking a button on the device.



*N.B. If you're having trouble including your device it may be you need to exclude it first. Click the device — button on the overview to exclude.*

Cancel

ADD A DEVICE

### Grant keys

Select required security keys

- Unauthenticated** ⓘ  
A lower form of S2 security, also tick Authenticated if available.
- Authenticated** ⓘ  
Highest level S2 security, not accessible from less secure devices.
- Access Control** ⓘ  
Allows control of access control devices, highest level S2 secured.
- Legacy security network key** ⓘ  
S0, a previous security framework, superseded by S2.

Cancel Submit

Depending on the device you may have to provide a 5 number pin code and choose to grant security levels.

ADD A DEVICE

### We need a PIN

Please enter the 5 digit PIN you can find directly on the device, it is also the first 5 digits of the DSK, the long 30 digit code.


2 5 5 0 2

XXXXX-09827-47371-11107-62618-18152-14193-47623

Cancel Provide PIN

ADD A DEVICE

### Successfully added device



**Aeotec Smart Switch 7** has been added to your network. You can set the device name and location now, or you can enter details later.

Set name and room

Done

The device has been added successfully. After setting you the name and the room, the device is ready to use.

ADD A DEVICE

### Set name and room

Set the name of the device and assign it to a room. You can pick one of your existing rooms or create a new one.

z Outlet

🏠 Bedroom x ▾

Cancel Done



## Pair with Apple HomeKit

To pair your Thinka with Apple Homekit download the [Thinka setup app](#), open it on your smartphone, select your Thinka, tap choose a home then select the home you'd like to add the Thinka to and you're all set.

A device or instance will not show up in homekit unless both name and location are set. Device/instance name and location need to be set up either during inclusion, under the information tab or using the Thinka setup app if adding your device with SmartStart.

## Pair with Alexa

Go to the webclient of your Thinka ([setup.thinka.eu](http://setup.thinka.eu) and enable Thinka Cloud. Thinka Cloud allows you to securely connect to Amazon. It is necessary if you want to use Amazon as smart home assistants. Click the enable button below and wait until the indicator above goes green and says "enabled".

Now Thinka has set up a connection to Amazon via the secured Thinka cloud you can click the "pair" button and copy the generated token. Next find the Thinka skill on the [Alexa site](#). We advise you to use the web page instead of the app. That way you can easily paste the pairing token that your Thinka generated.

When this is done you can add your Thinka devices via "DISCOVER DEVICES".

## Pair with Google

Go to the webclient of your Thinka ([setup.thinka.eu](http://setup.thinka.eu) and enable Thinka Cloud. Thinka Cloud allows you to securely connect to Google. It is necessary if you want to use Google as smart home assistants. Click the enable button below and wait until the indicator above goes green and says "enabled".

Now Thinka has set up a connection to Google via the secured Thinka cloud you can click the "pair" button and copy the generated token. On your smartphone, start the Google Home app, create a Home, and click on add. Next choose "Set up device" and choose "Works with Google ". Find "Thinka " in the list of devices and select it. Then use the generated token to pair with Google Home.





## Manage Thinka

### Remove a device

You remove a device from the [Overview page](#) of this Thinka. Click the Remove device at the top of the page, and follow the instructions. The manual that is available for this device will have instructions on how to exclude this device. Most of the time you will have to triple click the "B" button.

### Rediscover a troubled device

When a device is showing incorrect or incomplete information, you can ask Thinka to interview the device again and rediscover its capabilities. Rediscover takes a while and your device needs to be awake. When your device works on batteries you need to wake it up manually. Interviewing will try to rediscover the product information, such as manufacturer and product name, as well as its capabilities and instances. In case this does not work, you may try to 'Add' this device again, without 'Removing' it.

You can perform the rediscovery process, by clicking 'Update device' on the 'Z-Wave' tab of the details page of the device.

### Remove a failed device

When a device is not working properly anymore you can remove it from the network. When removing normally (see [Remove a device](#)) above does not work, please go to the details page of the device and go to the 'Z-Wave' tab. Click the Remove failed device.

### Restart Thinka

In order to restart a Thinka press the button on the Thinka for about ten seconds until the LEDs start flashing orange. Release the button and press it briefly and release. The Thinka will restart.

### Reset Thinka to Factory Settings

Make sure you have a backup and you are certain that you want to reset the Thinka, as this is an action that can not be undone. Resetting to factory settings is typically done when moving or selling your Thinka.

In order to reset a Thinka to its factory settings, press the button on the Thinka for about ten seconds until the LEDs start flashing orange. Release the button



and press it again for about ten seconds until the LEDs turn off. The Thinka will reboot and reset to factory settings.

If this controller is the primary controller for your network, resetting it will result in the nodes in your network being orphaned and it will be necessary after the reset to exclude and re-include all of the nodes in the network.

## Joining an existing Z-Wave network

To add this Thinka to an existing Z-Wave network, please refer to 'Join an existing Z-Wave network' on the [settings page](#) of this Thinka for further instructions. Note that you can only join another network when Thinka has no devices connected.

## Leaving an existing Z-Wave network

To remove this Thinka from an existing Z-Wave network, please refer to 'Leave an existing Z-Wave network' on the [settings page](#) of this Thinka for further instructions. These instructions will only appear when Thinka has joined a network.

## Copying network information to another controller

Controller Replication is the process of updating (copying) network information from a primary controller to secondary controllers, such as node list and routing information. These steps are usually not required unless you have a multiple controller network.

To initiate this process, start the 'Add device' on this Thinka and the Learn Mode on the secondary controller. All Z-Wave network relevant information will be copied to the secondary controller.

If your secondary controller is a Thinka, please refer to 'Join an existing Z-Wave network' on the settings page of that Thinka for further instructions.

If your secondary controller is not a Thinka, please refer to the documentation of the secondary controller on how to initiate its 'Learn Mode'.

## Transferring primary role to Thinka

In order to make this Thinka the primary controller and benefit from all its features, please refer to 'Join an existing Z-Wave network' on the [settings page](#) of this Thinka for further instructions. Note that you can only join another network when Thinka has no devices connected.



## Transferring primary role to another controller

You can not migrate the primary role to another controller.

## Command classes

The various devices can be controlled by their functionalities, or in Z-Wave terms their Command Classes. A Command Class is a group of commands that belong together, such as On/Off or a Percentage. Below you'll find descriptions of these classes, so you can find out how to control or view the state of your device.

Below the CommandClasses are grouped as they are presented in the tabs for device details

### Information

- [The Binary Switch Command Class](#)
- [The Multilevel Switch Command Class](#)
- [The Binary Sensor Command Class](#)
- [The Multilevel Sensor Command Class](#)
- [The Thermostat Mode Command Class](#)
- [The Thermostat Setpoint Command Class](#)
- [The Doorlock Command Class](#)
- [The Notification \(aka Alarm\) Command Class](#)
- [The Meter Command Class](#)
- [The Basic Command Class](#)
- [The Battery Command Class](#)

### Configuration

- [The Configuration Command Class](#)

### Groups

- [The Association \(or Groups\) Command Class](#)

### Security

- [The Security Command Class](#)
- [The Security2 Command Class](#)

### Z-Wave

- [The Manufacturer Specific Command Class](#)

- The Version Command Class
- The Z-Wave Plus Info Command Class
- The Indicator Command Class
- The Device Reset Locally Command Class
- The Firmware Update Metadata Command Class
- The WakeUp Command Class
- The Powerlevel Command Class
- The Protection Command Class
- The Central Scene Command Class

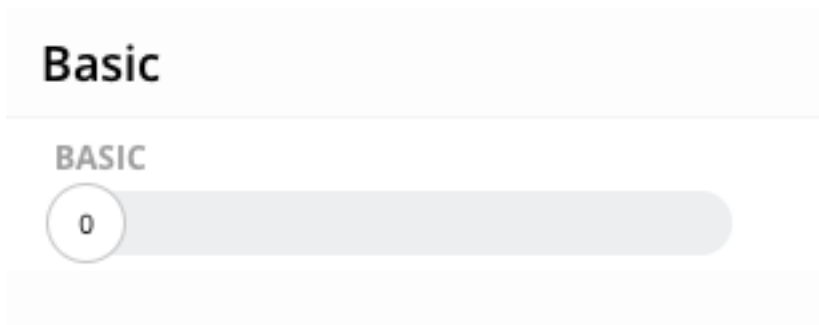
### More instances

- The Multi Instance Command Class

## Basic Command Class

When a device supports the Basic Command Class, we only expose it when there are no other ways to control it.

The value can be set from 0 to 255. 0 is typically Off, 255 On. The behaviour of these values depends on the device.



## Battery Command Class

When a device supports the Battery Command Class, we show the battery status as above.

## Battery

<b>BATTERY LEVEL</b>	<b>LOW BATTERY</b>
100 %	No

## Central Scene Command Class

When a device supports the Central Scene Command Class, we show its values. This can be found under the 'Z-Wave' tab of a device.

### Central Scene

<b>scene Count</b>	<b>sameKA</b>	<b>buttons</b>	<b>slow refresh</b>
4	Yes	0, 1, 2	Yes

## Configuration Command Class

When a device supports the Configuration Command Class, we show its parameters and values. This can be found under the 'Configuration' tab of a device. The configuration will be fetched the first time you open this tab and can be retrieved manually if you wish.

Parameters	Values
1. Notification type	<div style="border: 1px solid #ccc; padding: 2px;">Notification report <span style="float: right;">⌵</span></div> <small>Set Notification type.</small>
2. Led indication	<div style="border: 1px solid #ccc; padding: 2px;">On <span style="float: right;">⌵</span></div> <small>Set Led indication.</small>

## Device Reset Locally Command Class

When a device supports the Device Reset Locally Command Class, we show whether it's supported. It can be found under the 'Z-Wave' tab of a device.

## Device Reset Locally

Factory Reset  
supported

## Door Lock Command Class

When a device supports the Door Lock Command Class, we show a button to Open it and a button to close it.

The current and target state of the door lock is shown as well.

### Door Lock

<b>CURRENT</b>	<b>TARGET</b>	<b>OPEN</b>	<b>CLOSE</b>
Unlocked	Unlocked	<input type="button" value="open"/>	<input type="button" value="close"/>
Door closed, Latch open, Bolt open			

## Firmware Update Metadata Command Class

When a device supports the Firmware Update Metadata Command Class, we show its values. This can be found under the 'Z-Wave' tab of a device.

### Firmware Update Meta Data

Manufacturer	Firmware ID	Checksum	Upgradeable
134	0	14569	Yes

## Associations Command Class

When a device supports the Associations Command Class, we show its associations. This can be found under the 'Groups' tab of a device. The Groups will be fetched the first time you open this tab and can be retrieved manually if you wish.

Your Thinka has one Association Group, called Lifeline for one node maximum. The Associations Command Class is sent to the Lifeline before performing a factory reset.

**Lifeline**

- Group 1, max. 1
- Battery, Notification V 8, Sensor Binary, Basic, Device Reset Locally

UZB Z-Wave USB Adapter (1) | Static Controller (0) x | v

[save](#)

## Indicator Command Class

When a device supports the Indicator Command Class, we show its state. If the device supports it, we switch the Indicator On and Off. When the Indicator Command Class is version 3 or higher, you can also send a (predefined, flash 3 times) sequence.

### Indicator

Indicator



[Identify Device](#)

## Manufacturer Specific Command Class

When a device supports the Manufacturer Specific Command Class, we show its values. This can be found under the 'Z-Wave ' tab of a device. Based on this information the Device is identified:

**Device**

FIBARO Wall Roller Shutter

FIBARO Walli Roller Shutter is a smart wall switch designed to control motors of roller blinds, awnings, venetian blinds and other single phase, AC powered devices via Z-Wave network.



[See the manual](#)

## Manufacturer Specific

Manufacturer	Product Type	Product	Serial number
270	9	1	b760b8befcc4

## Meter Command Class

When a device supports the Meter Command Class, we show its state. If the device supports it, we allow the Meter to reset.

### Meter

#### ENERGY

0.01 kWh

*about 1 hour ago*

#### POWER

0 W

*43 minutes ago*

[reset meter](#)

## Multi Instance Command Class

When a device supports the Multi Instance Command Class, we show an extra Tab (More instances) to list the instances (also called endpoints) of the device.

The first instance is the Common instance, the others can be individually named. When named they will appear on the Overview as well.

Instances without a name are NOT exposed to HomeKit, Alexa or Google.

### Multi Instance

This device has 2 instances (Thermostat, Temperature) and a *Common* or Root instance, that contains information that is for the device itself, and thus shared between instances.

Currently you are looking at the instance named *Common*

Currently you are looking at the Common instance. It is there for shared settings, and will not be published to HomeKit, Alexa or Google.

The other instances are:

- [Thermostat](#)
- [Temperature](#)



## Notification Command Class

When a device supports the Notification Command Class also known as Alarm, we show its state. We show all the types it supports (such as Home Security) and its events. Events that are triggered are indicated in red, and visible on the Overview page.

### Notification

---

**HOME SECURITY**

*Supported events:*

Tampering, product covering removed

Motion detected

*3 minutes ago*

## Power Level Command Class

When a device supports the Power Level Command Class, we show its values. This can be found under the 'Z-Wave' tab of a node.

Level	Timeout	Test node	Status	Frames
0 dBm	0 s	1	Success	3

## Protection Command Class

When a device supports the Protection Command Class, we show its values. This can be found under the 'Z-Wave' tab of a node.

## Protection

### Local protection

Unprotected



## Security2 Command Class

When a device supports the Security2 Command Class, we show its values. This can be found under the 'Security' tab of a device.

### Security 2

Valid	DSK	Grant Keys
Yes	07065-65287-17152-56787-43681-05953-44590-19918	Unauthenticated, Authenticated, legacy security network key (Unauthenticated)

## Security Command Class

When a device supports the Security Command Class, we show its values. This can be found under the 'Security' tab of a device.

## Security

### Security

Z-Wave+, S2, Included securely

## Binary Sensor Command Class

When a device supports the Binary Sensor Command Class, we show its state.

For visualisation and voice control purposes, you may choose to show its type when we can not determine it. You may choose a SmokeSensor, LeakSensor, MotionSensor, OccupancySensor or ContactSensor.

## Binary Sensor

### FACTORY DEFAULT SENSOR

No

*about 8 hours ago*

You may change the device type:

## Multilevel Sensor Command Class

When a device supports the Multilevel Sensor Command Class, we show its state.

Multilevel Sensor			
TEMPERATURE	LUMINANCE	HUMIDITY	ULTRAVIOLET
24.5 °C	160 Lux	44 %	0 UV
<i>10 minutes ago</i>	<i>5 minutes ago</i>	<i>5 minutes ago</i>	

## Binary Switch Command Class

When a device supports the Binary Switch Command Class, we show a toggle switch to turn it Off or On.

For visualisation and voice control purposes, you may choose to show it as Switch, Light Bulb or Fan.

## Binary Switch

---

ON/OFF



*12 minutes ago*

*You may change the device type:*

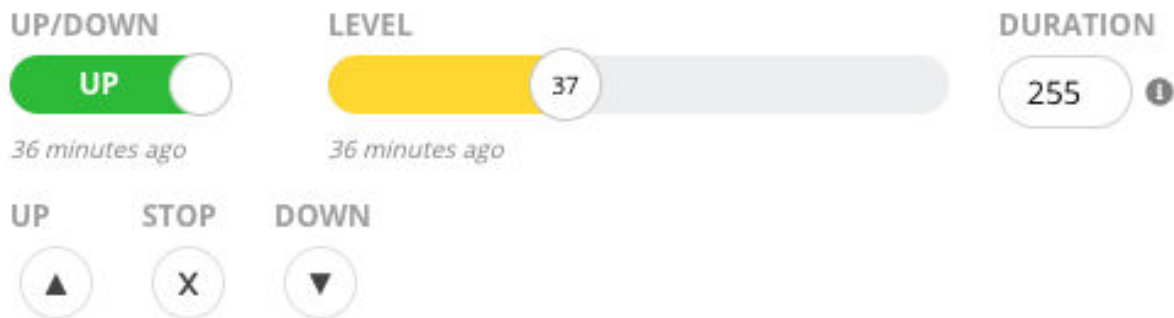


## Multilevel Switch Command Class

When a device supports the Multilevel Switch Command Class, we show a number of ways to control the level. We show a toggle switch to turn it Up or Down. Or On/Off, Open/Close depending on the device. Up (or ON, Open) means back to the previous state. Alternatively you may choose to set the level as a percentage from 0 to 100% by means of the Slider. 0% means closed (no light), 100% means open (all the light). Furthermore you may choose to move the level and stop it.

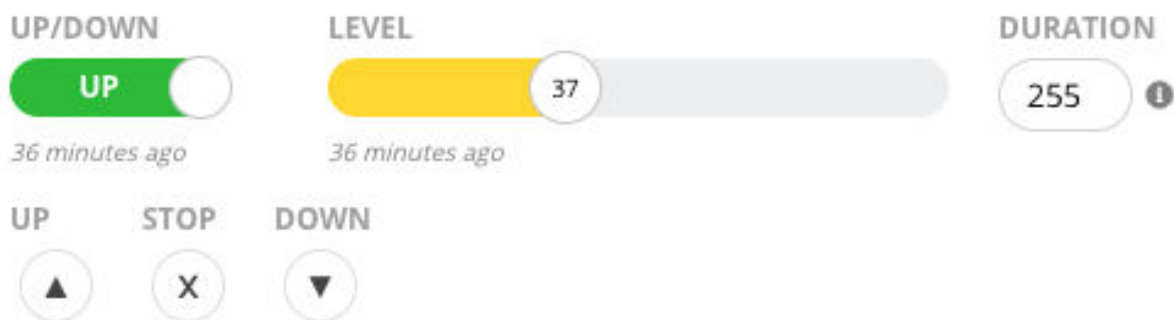
In case the device is not a motor controlled device (so probably a light), you may choose to determine the (dimming) speed by specifying its duration. The number 255 means default, as determined by the device manufacturer. 0 is immediate. 1-127 means seconds, 128-254 means 1-127 minutes.

## Multilevel Switch



The interface shows three main controls: 'UP/DOWN' with a green 'UP' toggle and '36 minutes ago' text; 'LEVEL' with a yellow slider set to 37 and '36 minutes ago' text; and 'DURATION' with a value of 255 and an information icon. Below these are three buttons: 'UP' with an upward arrow, 'STOP' with an 'X', and 'DOWN' with a downward arrow.

## Multilevel Switch

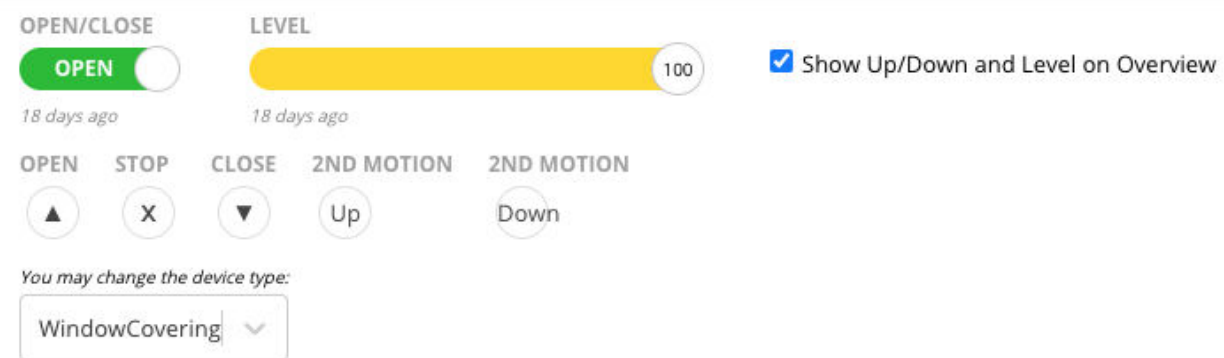


This interface is identical to the one above, showing 'UP/DOWN' (UP toggle, 36 minutes ago), 'LEVEL' (slider at 37, 36 minutes ago), 'DURATION' (255, info icon), and 'UP', 'STOP', 'DOWN' buttons.

When the device supports secondary motion, it will be shown as additional controls. Secondary motion can be the slat position of venetian blinds, for example. In case the level can not be set (the device is not calibrated), you may choose not to expose the Up/Down and level control on the Overview page.

For visualisation and voice control purposes, you may choose to show or hide the multilevel switch. For example if the level switch controls a color or night light mode. This choice is available when the device can also be controlled as a binary switch.

## Multilevel Switch



## Thermostat Mode Command Class

When a device supports the Thermostat Mode Command Class, we show its current mode and the possibility to change it.

The different modes depend on the device's capabilities.

### Thermostat Mode



## Thermostat Setpoint Command Class

When a device supports the Thermostat Setpoint Command Class, we show its current value and the possibility to change it.

Apple Homekit needs an additional current temperature to present a Thermostat. That's why we offer the possibility to select a temperature sensor to accompany the setpoint.

### Thermostat Setpoint



### Temperature Sensor



## Version Command Class

When a device supports the Version Command Class, we show its values. This can be found under the 'Z-Wave' tab of a device.

### Version

Z-Wave Library Type	Z-Wave Protocol Version	Application Version
6	4.05	0.08

## WakeUp Command Class

When a device supports the WakeUp Command Class, we show its value. You can change the value by means of the slider. This can be found under the 'Z-Wave' tab of a device.

### Wake Up

Wakeup Interval



## Z-Wave Plus™ Info Command Class

When a device supports the ZWavePlusInfo Class, we show its values. This can be found under the 'Z-Wave' tab of a node.

### Zwaveplus Info

Version	Node type	Role type	Installer icon	User icon
1	ZWave+ Node	Sleeping Reporting Slave	3079	3079



## Supported Command Classes

### UNSECURE

APPLICATION\_STATUS v1  
CRC\_16\_ENCAP v1  
INCLUSION\_CONTROLLER v1  
MULTI\_CMD v1  
SECURITY\_2 v1  
SECURITY v1  
SUPERVISION v1  
TIME v2  
TRANSPORT\_SERVICE v2  
ZWAVEPLUS\_INFO v2

### SECURE

ASSOCIATION v3  
ASSOCIATION\_GRP\_INFO v3  
DEVICE\_RESET\_LOCALLY v1  
FIRMWARE\_UPDATE\_MD v5  
INDICATOR v3  
MANUFACTURER\_SPECIFIC v2  
MULTI\_CHANNEL\_ASSOCIATION v4  
NETWORK\_MANAGEMENT\_BASIC v2  
NETWORK\_MANAGEMENT\_INCLUSION v3  
NETWORK\_MANAGEMENT\_INSTALLATION\_MAINTENANCE v2  
NETWORK\_MANAGEMENT\_PROXY v3  
NODE\_PROVISIONING v1  
POWERLEVEL v1  
VERSION v3

## Controlled Command Classes

ASSOCIATION v2  
ASSOCIATION\_GRP\_INFO v3  
BASIC v2  
BATTERY v3  
CENTRAL\_SCENE v3  
CONFIGURATION v4





DEVICE\_RESET\_LOCALLY v1  
DOOR\_LOCK v4  
FIRMWARE\_UPDATE\_MD v7  
INDICATOR v3  
MANUFACTURER\_SPECIFIC v2  
METER v5  
MULTI\_CHANNEL v4  
MULTI\_CHANNEL\_ASSOCIATION v4  
NOTIFICATION v8  
POWERLEVEL v1  
PROTECTION v2  
SECURITY\_0 v1  
SECURITY\_2 v1  
SENSOR\_BINARY v2  
SENSOR\_MULTILEVEL v11  
SWITCH\_BINARY v2  
SWITCH\_MULTILEVEL\_ v4  
THERMOSTAT\_MODE v3  
THERMOSTAT\_SETPOINT v3  
VERSION v3  
WAKE\_UP v2  
ZWAVE\_PLUS\_INFO v2

## Association Group Information

The controller has one Association Group, called Lifeline for one node maximum. The CC is sent to the Lifeline before performing a factory reset.