



ABUS

Hometec Z-Wave Door Lock

SKU: ABUECFA3010



Quickstart

This is a **secure Door Lock for Europe**. To run this device please insert fresh **4 * AA** batteries. Please make sure the internal battery is fully charged. Push the two arrow buttons for 3 seconds until the left green LED lights up. This indicates the management mode. Clicking on the 'Lock' button includes the device. The right green LED indicates readiness to include. Clicking the 'unlock' button will terminate the inclusion mode and also the management mode. The device supports the Security S2 framework with Access Control network keys. **Please note that your gateway/controller MUST support S2 in order to use this product. If you own a legacy controller without Support for S2 please enable fallback to S0 security as described in Section 'Installation'**. The device also supports Smart Start. Please scan the QR code on the outlet cover of the device and your controller will add the device automatically when powered up.

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

The HomeTec Z-Wave wireless door lock actuator is system designed for retrofitting to doors that open inwards to provide motorised locking and unlocking functions. The door can be electronically operated using local buttons and any Z-Wave device capable to control door locks. For the wireless door lock actuator to work, the cylinder must project 7-12 mm on the inside of the door (plus the thickness of the fitting or collar). Because the actuator operates with a key permanently inserted in the lock, the cylinder must have an "emergency" feature where the door can be opened with a key from the outside even when another key is inserted on the inside. In addition, the door lock must be a profile cylinder compliant with DIN 18252.

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.

Reset to factory default

This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

- Enable management mode by holding down `<` and `>` for 3 seconds. Green left LED will light up to confirm management mode.
- Move in this menu by pushing `<` or `>` Arrows. The left LED will change its color to indicate different menu items. left LED = green: Learn Mode, left LED = red: Reset Mode
- Enter the menu, where left LED is RED, by pushing `<` or `>` Arrows.
- Hit `Enter` (door close button). The right LED will change its color to indicate different reset options. right LED = green: Reset only Lock, right LED = yellow: Reset only Z-Wave, right LED = red: Reset Lock and Z-Wave
- Using the keys `<` and `>` you can change the setting. Change the setting to be YELLOW (Reset Lock and Z-Wave)
- Push the Enter-button for 3 seconds until both LEDs are flashing.
- Push the Enter-button again for 3 seconds to confirm the reset to factory default.

All settings are deleted.

Safety Warning for Batteries

The product contains batteries. Please remove the batteries when the device is not used. Do not mix batteries of different charging level or different brands.

Installation

A particular plus point is that the device can be built in without needing to use a special cylinder. So you can integrate it into an existing locking system. The only requirement is that the door cylinder must be a cylinder with an emergency and danger function. This function is extremely important. As it ensures that you can unlock your front door with your normal house key, when required. In addition, there should be a cylinder projection of at least 7 to max. 12 millimetres on the inside so that the HomeTec Pro can be built in quickly without any problems.

Enable Fallback to S0 Security

The device will not allow legacy security S0 on default. If you like to operate the device with a controller not supporting S2 security you need to enable fallback into S0.

- Enable management mode by holding down '<' and '>' for 3 seconds. Green left LED will light up to confirm management mode.
- Again pushing '<' and '>' for 3 seconds to enter Menu mode. Green left LED will blink to confirm.
- Move in this menu by pushing '<' or '>' Arrows. The left LED will change its color to indicate different menu items. left LED = yellow: Speed settings, left LED = green: Power settings, left LED = red: Z-Wave Security
- Enter the menu, where left LED blinks RED, by pushing '<' or '>' Arrows.
- Hit 'Enter' (door close button). Now you will see the actual status of S0 fallback: right LED = red: S2+S0, right LED = green: S2 only
- Using the keys '<' and '>' you can change the setting. Change the setting to be RED (S2 + S0)
- Confirm selection with 'Enter' (door close button)
- Leave the menu by clicking 'door open'. Leave the management mode by clicking 'door open' again

Physical installation on the door

more information from ABUS Homotec original manual.

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

Inclusion

- Enable management mode by holding down '<' and '>' for 3 seconds. Green left LED will light up to confirm management mode.
- Move in this menu by pushing '<' or '>' Arrows. The left LED will change its color to indicate different menu items. left LED = green: Learn Mode, left LED = red: Reset Mode
- Enter the menu, where left LED is GREEN, by pushing '<' or '>' Arrows.
- Hit 'Enter' (door close button).
- Right LED will flash GREEN indicating readiness to include

Clicking the 'unlock' button, when Learn Mode is started, will terminate the inclusion mode and also the management mode.

Exclusion

- Enable management mode by holding down '<' and '>' for 3 seconds. Green left LED will light up to confirm management mode.
- Move in this menu by pushing '<' or '>' Arrows. The left LED will change its color to indicate different menu items. left LED = green: Learn Mode, left LED = red: Reset Mode
- Enter the menu, where left LED is GREEN, by pushing '<' or '>' Arrows.
- Hit 'Enter' (door close button).
- Right LED will flash GREEN indicating readiness to exclude

Clicking the 'unlock' button, when Learn Mode is started, will terminate the exclusion mode and also the management mode.

Product Usage

This door lock can be operated by a central Z-Wave enabled controller (using e.g. mobile phone), a dedicated Z-Wave remote control and from local buttons. Once installed. The Home Tec can turn the door lock to open and close. In parallel legacy operation using a key from the outside remains possible. The local buttons 'door open' and 'door close'. accessible from the inside allow convenient locking and unlocking the key. Its possible to just close the the door and really lock it up moving the dead bolt into the 'close' position.

The device sends the following notifications to the central controller:

- Lock Jammed (0x06 - 0x0B)
- Hardware Failure (0x09 - 0x01)

- Motor Overcurrent (0x08 - 0x06)
- Replace batteries (0x08 - 0x0B)

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

Firmware-Update over the Air

This device is capable of receiving a new firmware 'over the air'. The update function needs to be supported by the central controller. Once the controller starts the update process, perform the following action to confirm the firmware update:

- LEDs will blink, indicating "wait fo confirmation"
- Push the Enter-button for 3 seconds until both LEDs are flashing yellow to confirm the Firmware update procedure.

If/when completed successfully (Frmware Update procedure might take up to 10 minutes) the LEDs will blink GREEN and return to normal operation.

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	Lifeline

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: Latch Hold Time

This parameter defines how long the latch is hold open when the door hall be opened.

Size: 1 Byte, Default Value: 3

Setting	Description
1 - 20	seconds

Parameter 2: Latch Torque

This parameter defines the torque of the latch.

Size: 1 Byte, Default Value: 2

Setting	Description
1	Torque of the latch is high (max.)
2	Torque of the latch is medium
3	Torque of the latch is low (min.)

Parameter 3: Acoustic Feedback

This parameter defines Acoustic Feedback signals.

Size: 1 Byte, Default Value: 3

Setting	Description
1	Acoustic signal is inactive
2	Acoustic signal only at the beginning of the lock travel
3	Acoustic signal when reaching the position of the event
4	Acoustic signal when reaching the position Locked
5	Acoustic signal when reaching each end position

Parameter 4: Travel Time

This parameter defines the travel path of the Lock.

Size: 1 Byte, Default Value: 1

Setting	Description
1	Automatic/Normal
2	Multiple turns for one Open/Close action
3	Travel from Tilted Position is turned on

Parameter 5: Touch Panel Settings

This parameter defines Touch Panel settings

Size: 1 Byte, Default Value: 1

Setting	Description
1	Touch Panel is active
2	Only Touch Panel Control Buttons are active
3	Touch Panel is inactive
4	Touch Panel Trap is inactive

Parameter 6: Motor Force

This parameter defines the motor force, when turning the lock.

Size: 1 Byte, Default Value: 1

Setting	Description
1	Automatic / Normal force
2	Maximum force

Technical Data

Dimensions	138 x 51 x 66 mm
Weight	260 gr
Hardware Platform	ZM5101
IP Class	IP 20
Battery Type	4 * AA
Device Type	Door Lock
Network Operation	Listening Sleeping Slave
Firmware Version	00.01
Z-Wave Version	06.01
Z-Wave Product Id	0409.0005.0003

Supported Command Classes

- Basic (s2 Access+s0)
- Door Lock (s2 Access+s0)
- Alarm (s2 Access+s0)
- Association Grp Info (s2 Access+s0)
- Device Reset Locally (s2 Access+s0)
- Configuration (s2 Access+s0)
- Manufacturer Specific (s2 Access+s0)
- Powerlevel (s2 Access+s0)
- Firmware Update Md (s2 Access+s0)
- Battery (s2 Access+s0)
- Association (s2 Access+s0)
- Version (s2 Access+s0)
- Multi Channel Association (s2 Access+s0)

- Transport Service (unsec)
- Zwaveplus Info (unsec)
- Supervision (unsec)
- Security
- Security 2

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 announce that it is able to communicate.
- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.