



ID Lock

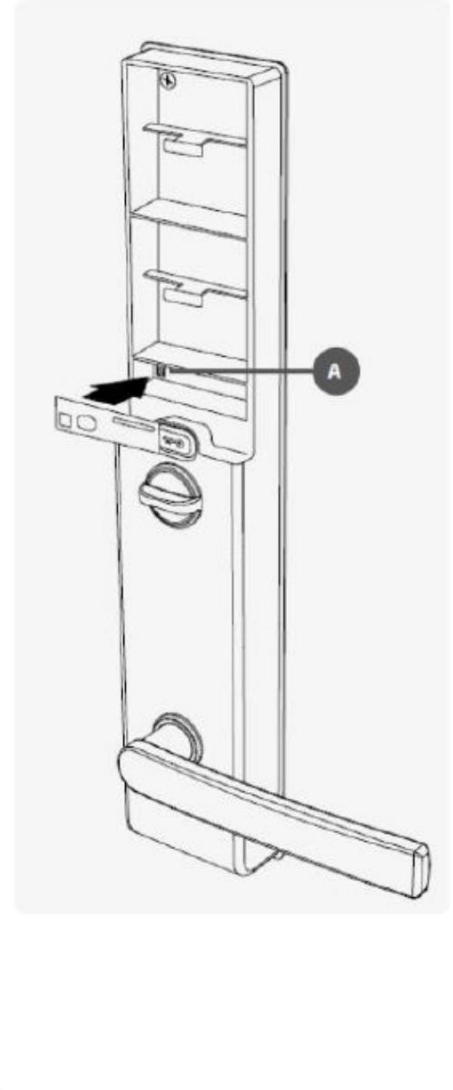






Operational Manual for
ID Lock 101 with
Z-Wave Module 01A



Operational Manual - Z-Wave module board 01A - For ID Lock -101 series Door locks

v1.3 English released – 08.05.2017

Getting started...

	<p>IMPORTANT: Batteries must be removed prior to removing or inserting the interface module.</p> <p>Inclusion – (Puts your device in inclusion mode)</p> <ul style="list-style-type: none">• Push and hold  button until all LEDs on keypad activates. (with ID Lock in an unlocked state)• Release  button and press “8” on keypad. Inclusion mode starts immediately. LED indicator below logo signals this by flashing blue. <p>Exclusion – (Puts your device in exclusion mode)</p> <ul style="list-style-type: none">• Push and hold  button until all LEDs on keypad activates. (with ID Lock in an unlocked state)• Release  button and press “8” on keypad. Exclusion mode starts immediately. LED indicator below logo signals this by flashing blue. <p>Device reset – (This will reset RF interface module to factory default settings)</p> <p>Warning: Please do only proceed with the following reset procedure, if primary network controller is missing or otherwise inoperable.</p> <ul style="list-style-type: none">• Push and hold  button until all LEDs on keypad activates. (with ID Lock in an unlocked state)• Release  button and press “0” on keypad. Exclusion mode starts immediately. LED indicator below logo signals this by flashing blue.
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SUPPORTED COMMAND CLASSES

Non Secure mode	COMMAND_CLASS_ZWAVEPLUS_INFO_V2	5E
	COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2	72
	COMMAND_CLASS_SECURITY_V1	98
	COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1	5A
	COMMAND_CLASS_BATTERY_V1	80
	COMMAND_CLASS_POWERLEVEL_V1	73
	COMMAND_CLASS_CONFIGURATION_V1	70

Secure Mode	COMMAND_CLASS_VERSION_V2	86
	COMMAND_CLASS_DOOR_LOCK_V2	62
	COMMAND_CLASS_USER_CODE_V1	63
	COMMAND_CLASS_ASSOCIATION_V2	85
	COMMAND_CLASS_ASSOCIATION_GRP_INFO_V1	59
	COMMAND_CLASS_NOTIFICATION_V4	71
	COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2	7A

CONFIGURATON PARAMETER

These configuration parameter number and values are specific for application.

COMMAND_CLASS_CONFIGURATION

Name	Parameter Number	Size	Description
Configuration Set parameter	1	1	Door Lock Mode
	2	2	RFID Registration Mode
	3 ~ 9		Reserved (For later use)

Door Lock Mode(s):

Auto lock Mode, Manual lock mode, Activate Away Mode, Deactivate Away Mode

Default Value: 1 (Disable Away / Auto Lock Mode)

Name	Parameter Number	Size	Value	Description
Door Lock Mode	1	1	0	Disable Away Manual Lock
	1	1	1	Disable Away Auto Lock
	1	1	2	Enable Away Manual Lock
	1	1	3	Enable Away Auto Lock

RFID Registration Configuration:

ID Lock can use up to 50 RFID cards. In order to use a RFID, RFID has to be registered by Z-Wave configuration command class.

Configuration Set in case of starting to register from backend side (Ex. App)

Name	Parameter Number	Size	Value1	Value2	Description
RFID Register	2	2	0x01	0x00	Begin RFID Registering mode on the door lock
	2	2	0x07	0x00	RFID Database clear
	2	2	0x08	0x00	RFID Registering mode stop

- Configuration Report regarding Configuration Set

According to the process of registration RFID, these configuration reports are transmitted to the gateway.

Name	Parameter Number	Size	Value1	Value2	Description
RFID Register Mode	2	2	0x02	0x00	Fail Registration new RFID was fail
	2	2	0x03	RFID Index Number	Success Registration new RFID was Successful RFID Index : 10 ~ 59
	2	2	0x04	0x00	Finished Registration mode finished and end
	2	2	0x05	0x00	Not In Progress RFID Registration mode not in progress
	2	2	0x06	0x00	In Progress RFID Registration mode in progress



RETRIVE RFID INFORMATION:

Configuration Get (for retrieving RFID information)

Name	Parameter Number	Description
Get RFID Information	10 ~ 59	RFID Information registered Parameter Number means RFID index. 10 = RFID index 1 59 = RFID index 50

Configuration Report for retrieving the RFID information

For example: RFID index is 1 and information is 0xFDBEC2DE

Name	Parameter Number	Size	Para1	Para2	Para3	Para4
Get RFID information	10	4	0xFD	0xBE	0xC2	0xD2

NOTIFICATION PARAMETERS

These Notification parameters (types and levels) are specific for application.

ID Lock supports the Notification Class (V4) to report events of ID Lock.

The type and event are specific for IDLock and defines are as below.

COMMAND CLASS NOTIFICATION(V4):

Notification Type	Event	Event Parameter	Description
Access Control (0x06)	Manual Lock Operation (0x01)		
	Manual Unlock Operation (0x02)		
	RF Unlock Operation (0x04)	RFID Index Info.	Unlock by RFID
	Keypad Unlock Operation	User ID of User	User ID = 1 (Master)



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	(0x06)	Code Report	PIN) User ID =2 (Service PIN) User ID =0 (Remote Unlock)
	Unlock By RF with invalid user code (0x14)	Unknown Credential information	Unknown PIN Code Or Unknown RFID
Home Security(0x07)	Tampering, Product covering Removed (0x03)		Door Forced Open
Emergency (0x0A)	Contact Fire Service (0x2)		Fire Sensor

Use Case of Manual Lock Notification

Example: Lock the door by Manual or RFID / Keypad

Notification Type	Notification Event	Para Length
0x06	0x01	0

Use Case of Manual Unlock Notification

Example: Unlock the door by thumb turn switch or open/close button

Notification Type	Notification Event	Para Length
0x06	0x02	0

Use case of RF Unlock Operation

Example: Unlock the door by RFID Card (Ex. RFID Index is 10)

Notification Type	Notification Event	Para Length	Para1
0x06	0x04	0x01	0x0A

Use case of Keypad Unlock Operation

Example: Unlock the door by Keypad using PIN Code

The value of para1 means User ID of Master PIN (User ID = 1)



Notification Type	Notification Event	Para Length	Para1
0x06	0x06	0x01	0x01

The value of para1 means User ID of Service PIN (User ID = 2)

Notification Type	Notification Event	Para Length	Para1
0x06	0x06	0x01	0x02

If the door is unlocked by remote side from mobile Application, in order to know the status, the value of para1 means remote User ID (application specific value = 0)

Notification Type	Notification Event	Para Length	Para1
0x06	0x06	0x01	0x00

Use case of Unlock by RF with invalid user code

Example: Invalid PIN code Notification Report

PIN Type is 1 value and Invalid PIN code is 785469

Notification Type	Notification Event	Para Length	Para1	Para2	Para3	Para4
0x06	0x14	4	0x01	0x78	0x54	0x69

Example : Invalid PIN code Notification Report

RFID Type is 2 value and Invalid RFID is 0x89AE939C

Notification Type	Notification Event	Para Length	Para1	Para2	Para3	Para4	Para4
0x06	0x14	5	0x02	0x89	0xAE	0x93	0x9C

Use case of Tampering (Door Forced Open)

Example: When the door is opened forcibly (Alarm)

Notification Type	Notification Event	Para Length
0x07	0x03	0x00



Use case of Emergency (Fire Sensor)

Example: The fire is detected by fire sensor of door lock

Notification Type	Notification Event	Para Length
0x0A	0x02	0x00

Manufacture Parameter

ID Lock supports the Manufacture Specific Command Class with following parameters.

COMMAND_CLASS_MANUFACTURE_SPECIFIC_V2

Name	Value	Description
Manufacture ID	0x0230	
Product Type ID	0x03	PRODUCT_TYPE_ID_ZWAVE_PLUS
Product ID	0x01	PRODUCT_ID_DoorLockKeyPad

ID Lock supports the Door Lock Command Class Version 2 by the following parameters.

COMMAND_CLASS_VERSION_V2

Name	Value
Z-Wave Protocol Library Type	0x03
Z-Wave Protocol Version	0x04
Z-Wave Protocol Sub version	0x05
Firmware 0 Version	0x01
Firmware 0 Sub Version	0x00
Hardware Version	0x01



Association & Association Group Parameter

ID Lock supports 1 association group with 5 devices.

Notification Reports are sent out unsolicited to device included in the association group.

- Grouping identifier : 1
- Name : Lifeline

User Code Parameter

ID Lock have 2 pin codes (Master PIN and Service PIN) that are 4 -10 digit in length.

- Master PIN : User Identifier 1
- Service PIN: User Identifier 2