

2TMD041900D0015 | 26.12.2024

Product manual

ABB-Welcome IP

H8131.P.-. Mini Video OS

H8136.P.-. Mini Video OS



1	Notes on the instruction manual	4
2	Safety	4
3	Intended use.....	4
4	Environment	5
4.1	ABB devices.....	5
5	Product description.....	6
5.1	Device type	6
5.2	Control elements	7
5.3	Terminal description.....	8
5.4	Lock type and connection	9
6	Technical data	10
7	Mounting/Installation	11
7.1	Requirement for the electrician	11
7.2	Mounting	12
7.2.1	Preparation	12
7.2.2	Installation height.....	12
7.2.3	Installation situation	13
7.2.4	Surface-mounted installation	14
7.2.5	Flush-mounted installation	16
7.2.6	Cavity wall installation	17
7.2.7	Replacing the nameplate	18
8	Commissioning.....	19
8.1	Configure the settings on Indoor Station	19
8.1.1	Enter engineering mode of Outdoor Station	19
8.1.2	Accessing the "Outoodr Stations" screen	20
8.1.3	Configuring the device type	21
8.1.4	Configuring the lock.....	26
8.1.5	Configuring the "Door alarm" function	28
8.1.6	Configuring the "Anti-flicker" function	29
8.1.7	Configuring the language	30
8.1.8	Configuring the ringtone volume	31
8.1.9	Configuring the "Button tone" function	32
8.1.10	Configuring the "Voice prompts" function.....	33
8.1.11	Configuring the push buttons	34
8.1.12	Configuring the "Time sync" function	36
8.1.13	Configuring call forward	37
8.1.14	Configuring Card mode	38
8.1.15	Viewing the information	39
8.1.16	Updating the firmware	40
8.2	Configure the settings on "Smart Access Point"	42
8.2.1	Adding the Outdoor Station.....	42
8.2.2	Accessing the designated Outdoor Station screen.....	44
8.2.3	Viewing the serial number	45

8.2.4	Viewing the version	46
8.2.5	Configuring the physical address	47
8.2.6	Configuring the IP address	49
8.2.7	Configuring the lock.....	50
8.2.8	Configuring the card mode.....	51
8.2.9	Configuring the "Time sync" function	52
8.2.10	Configuring the trusted devices	53
8.2.11	Updating the firmware	55
8.3	Card management	58
8.4	Restoring to factory default	61
9	Cyber security	62
9.1	Disclaimer	62
9.2	Performance and service	62
9.3	Deployment guideline.....	63
9.4	Upgrading	63
9.5	Backup/Restore.....	63
9.6	Malware prevention solution	63
10	Notice	64

1 Notes on the instruction manual

Please read through this manual carefully and observe the information it contains. This will assist you in preventing injuries and damage to property and ensure both reliable operation and a long service life for the device.

Please keep this manual in a safe place. If you pass the device on, also pass on this manual along with it. ABB accepts no liability for any failure to observe the instructions in this manual.

2 Safety



Warning

Electric voltage!

Dangerous currents flow through the body when coming into direct or indirect contact with live components.

This can result in electric shock, burns or even death.

- Disconnect the mains power supply prior to installation and/or disassembly!
- Permit work on the 100-240 V supply system to be performed only by specialist staff!

3 Intended use

As part of the ABB-Welcome IP system, this device can only be used with accessories from that system.

4 Environment



Consider the protection of the environment!

Used electric and electronic devices must not be disposed of with household waste.

- The device contains valuable raw materials that can be recycled. Therefore, dispose of the device at the appropriate collecting facility.

4.1 ABB devices

All packaging materials and devices from ABB bear the markings and test seals for proper disposal. Always dispose of the packing materials and electric devices and their components via an authorized collection facility or disposal company.

ABB products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU-Directive 2012/19/EU WEEE and 2011/65/EU RoHS)

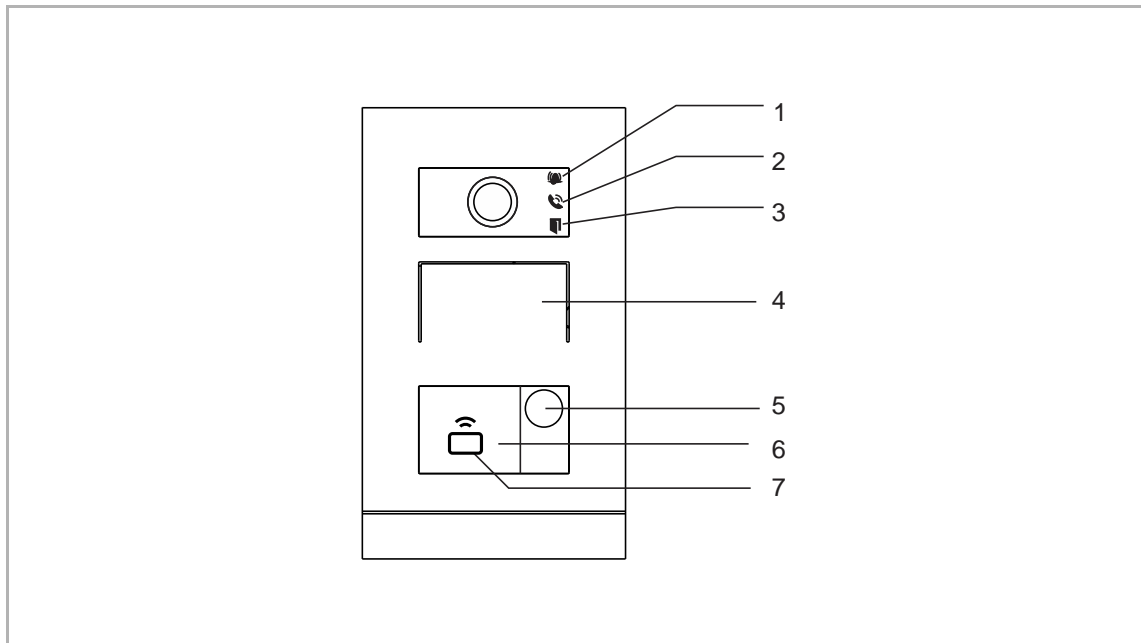
(EU-REACH ordinance and law for the implementation of the ordinance (EG) No.1907/2006)

5 Product description

5.1 Device type

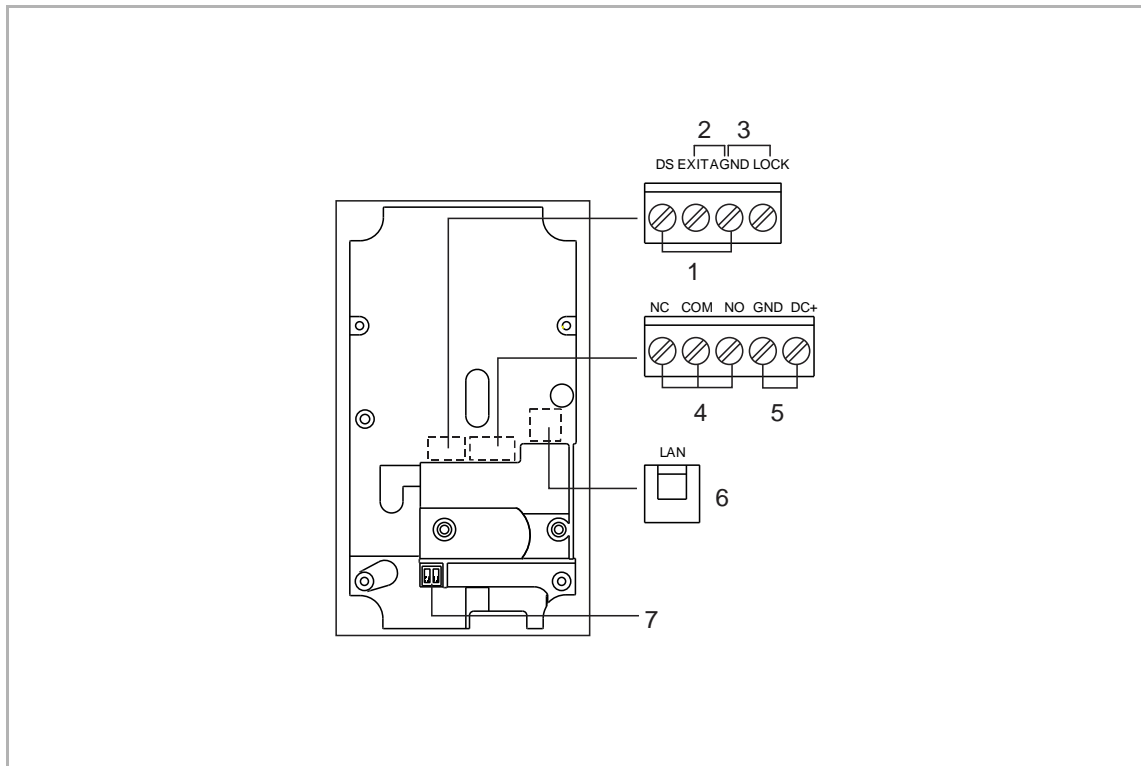
Article number	Product ID	Product name	Colour	Size (HxWxD) Unit: mm
H81313P1-A	2TMA130010A0001	Mini video outdoor station, 1 gang, ID, SM	Aluminum alloy	99 x 168 x 26
H81313P2-A	2TMA130010A0004	Mini video outdoor station, 2 gang, ID, SM	Aluminum alloy	99 x 168 x 26
H81363P1-A	2TMA130010A0007	Mini video outdoor station, 1 gang, ID, FM	Aluminum alloy	105 x 180 x 43
H81363P2-A	2TMA130010A0010	Mini video outdoor station, 2 gang, ID, FM	Aluminum alloy	105 x 180 x 43
H81364P1-A	2TMA130010A0013	Mini video outdoor station, 1 gang, FM	Aluminum alloy	99 x 168 x 26
H81316P1-A	2TMA130011A0003	Mini video outdoor station, 1 gang, IC/DESFire, SM	Aluminum alloy	99 x 168 x 26
H81316P2-A	2TMA130011A0004	Mini video outdoor station, 2 gang, IC/DESFire, SM	Aluminum alloy	105 x 180 x 43
H81366P1-A	2TMA130011A0005	Mini video outdoor station, 1 gang, IC/DESFire, FM	Aluminum alloy	105 x 180 x 43
H81366P2-A	2TMA130011A0006	Mini video outdoor station, 2 gang, IC/DESFire, FM	Aluminum alloy	105 x 180 x 43

5.2 Control elements








No.	Description
1	Ring indicator Indicator flashes slowly: ringing Indicator flashes quickly: busy line
2	Call indicator
3	Unlock indicator
4	Speaker and microphone integration
5	Call button
6	Label field
7	Integrated ID card reader

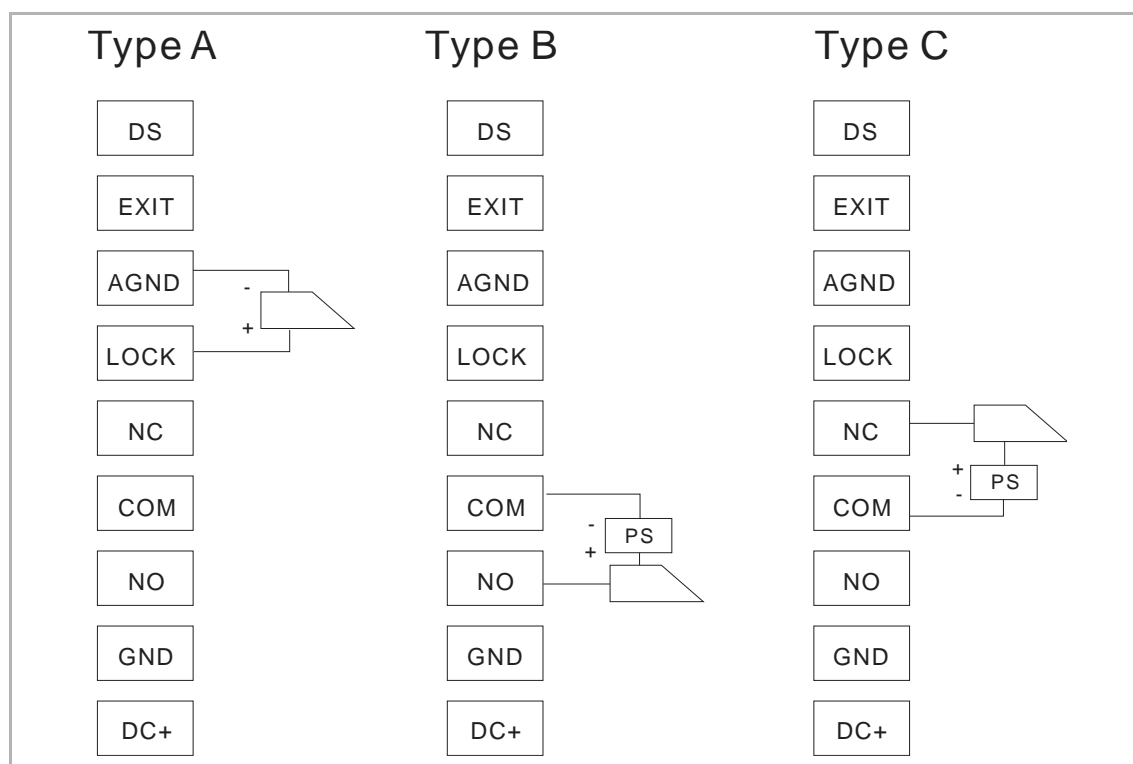
5.3 Terminal description



No.	Description
1	Connector for the sensor used for door status detection
2	Connector for exit button
3	Plug-in clamps (LOCK...AGND) for door opener
4	Plug-in clamps (COM...NC...NO) for floating output
5	Plug-in clamps (DC+...GND) for standalone power supply
6	LAN (PoE)
7	N/A

5.4 Lock type and connection

Lock type	Pic	Operation type	Voltage	Wiring type
Electrical strike lock, 12V		Power on to open	12 V \equiv / ~	Type A/B
Electrical strike lock, 24V		Power on to open	24 V \equiv / ~	Type B
Electrical rim lock, 12 V		Power on to open	12 V \equiv	Type A/B
Electrical mortise lock		Power off to open	12 V \equiv	Type C
Magnetic lock		Power off to open	12/24 V \equiv	Type C



6 Technical data

Designation	Value
Rating voltage	24 V $\overline{\text{AC}}$
Operating voltage range	20-27 V $\overline{\text{AC}}$
Rating current	27 V $\overline{\text{AC}}$, 310 mA 24 V $\overline{\text{AC}}$, 350 mA
Operating temperature	-40 °C...+55 °C
Product dimensions	99 mm x 168 mm x 26 mm (H8131.P.-.) 105 mm x 180 mm x 43 mm (H8136.P.-.)
Camera type	CMOS
Camera viewing angle	104°
Power supply for door opener	15 V $\overline{\text{AC}}$, 4A impulse, max. 250 mA holding
Floating output for door opener	30 V $\overline{\text{AC}}$, 3 A
IP level	IP 54
IK level	IK 07
Network connection standard	IEEE802.3, 10/100 Mbps, auto MDI/MDI-X

7 Mounting/Installation



Warning

Electric voltage!

Dangerous currents flow through the body when coming into direct or indirect contact with live components.

This can result in electric shock, burns or even death.

- Disconnect the mains power supply prior to installation and/or disassembly!
- Permit work on the 100-240 V supply system to be performed only by specialist staff!

7.1 Requirement for the electrician



Warning

Electric voltage!

Install the device only if you have the necessary electrical engineering knowledge and experience.

- Incorrect installation endangers your life and that of the user of the electrical system.

- Incorrect installation can cause serious damage to property, e.g. due to fire.

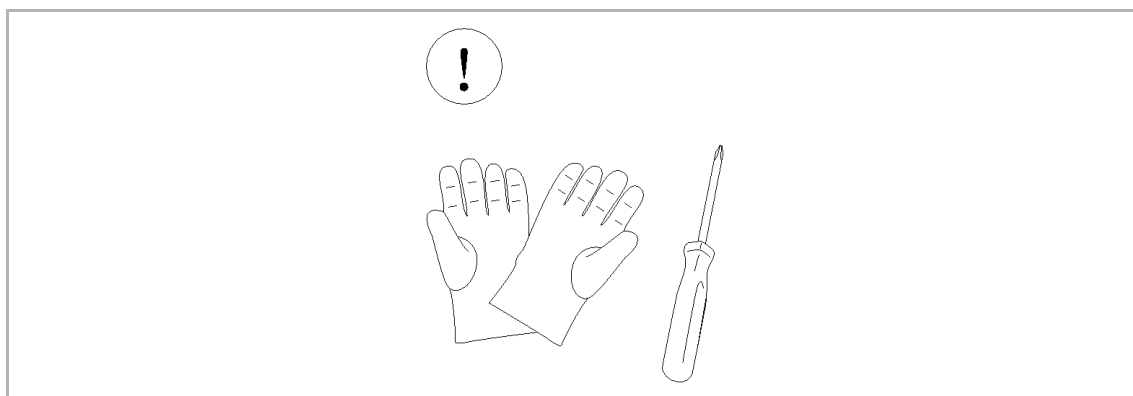
The minimum necessary expert knowledge and requirements for the installation are as follows:

- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
 1. Disconnect
 2. Secure against being re-connected
 3. Ensure there is no voltage
 4. Connect to earth and short-circuit
 5. Cover or barricade adjacent live parts.
- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the type of supply network (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective grounding, necessary additional measures, etc.).

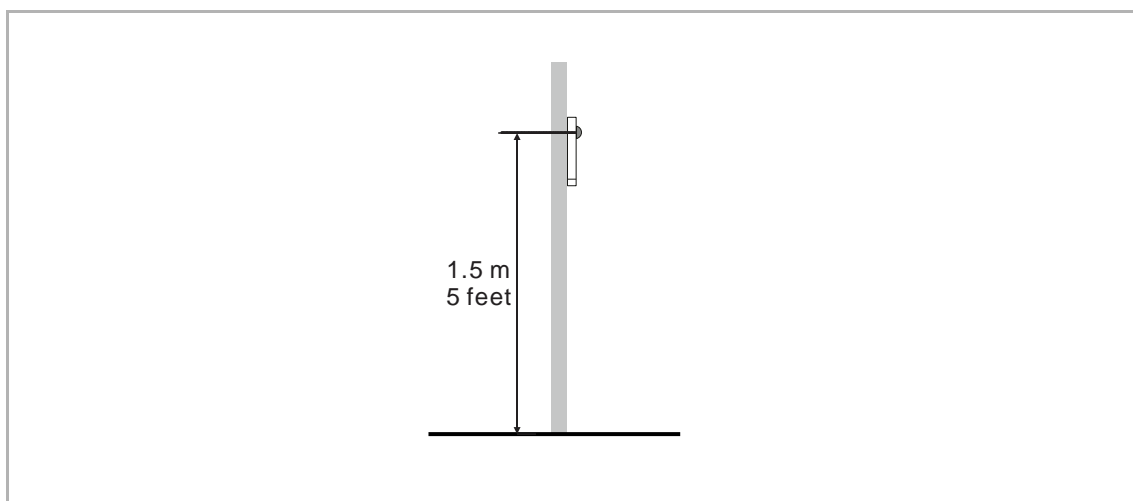
7.2 Mounting

7.2.1 Preparation

Use gloves to protect yourself against cuts.



7.2.2 Installation height



7.2.3 Installation situation

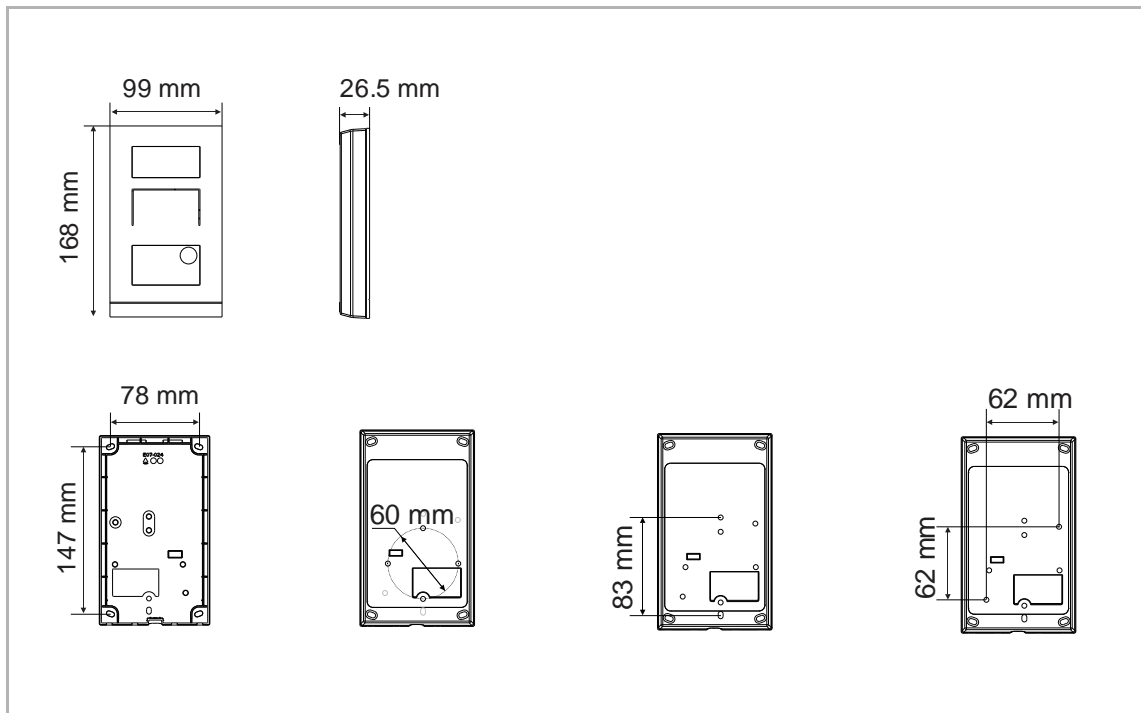
**Note**

The following installation situations must be avoided without fail to ensure picture quality:

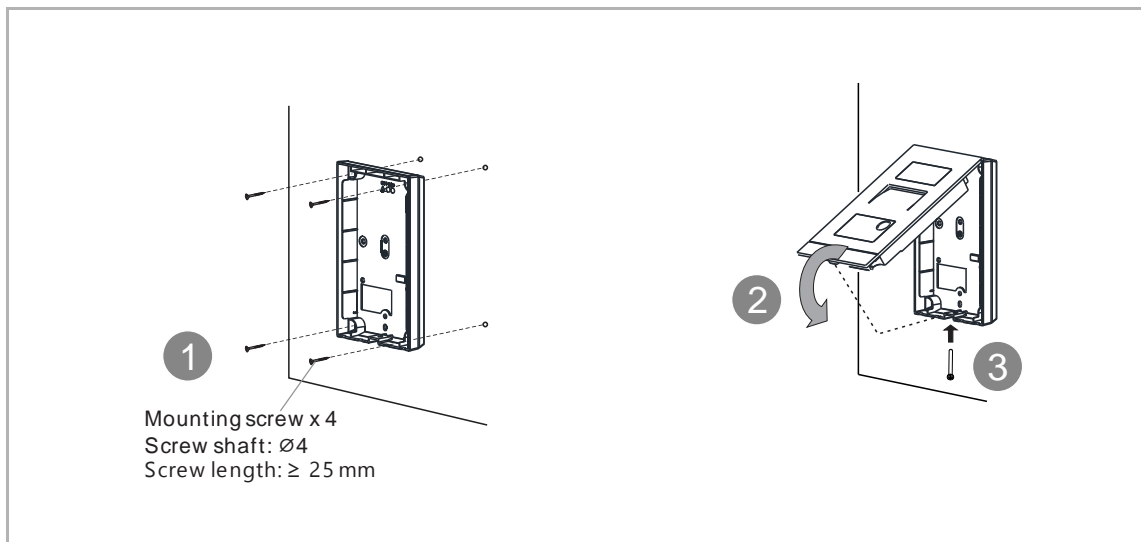
- Direct light
- Direct sunlight
- Extremely bright picture background
- Highly reflective walls on the opposite side of the door station

7.2.4 Surface-mounted installation

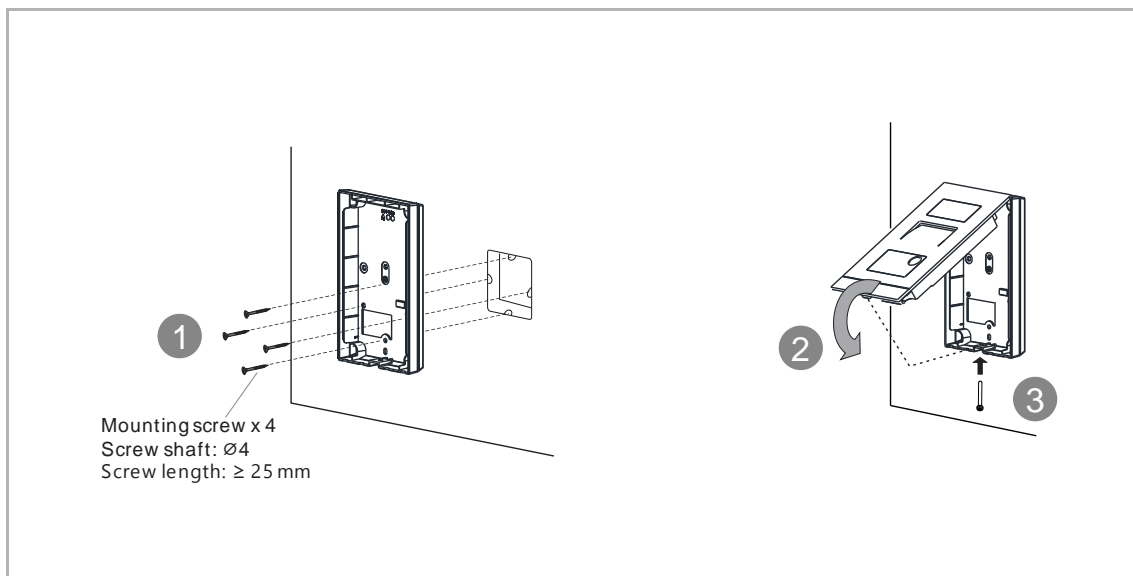
Product dimension



Surface-mounted on the wall

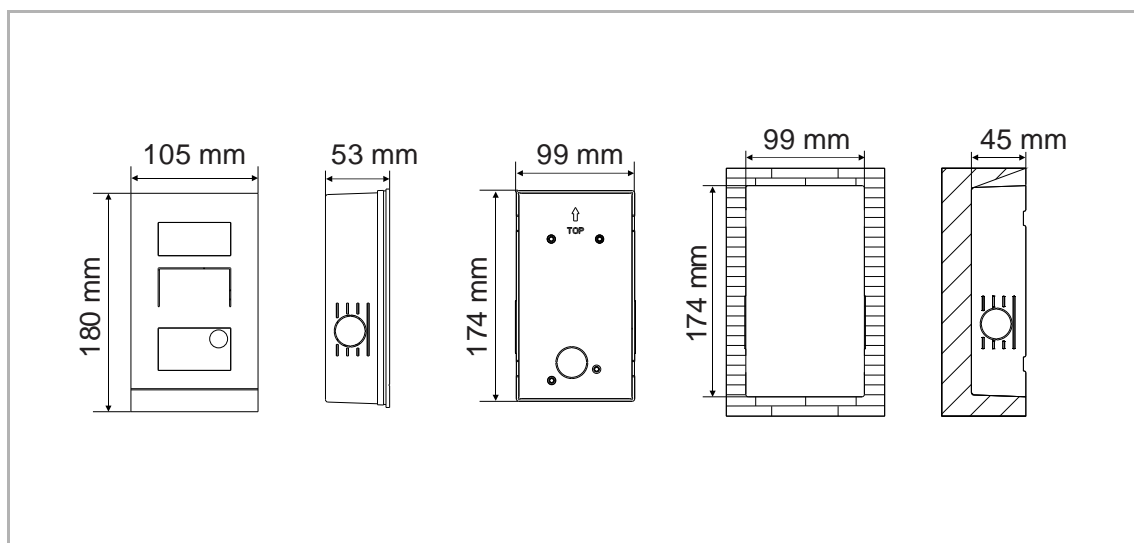


Surface-mounted on the box (e.g. VDE box)

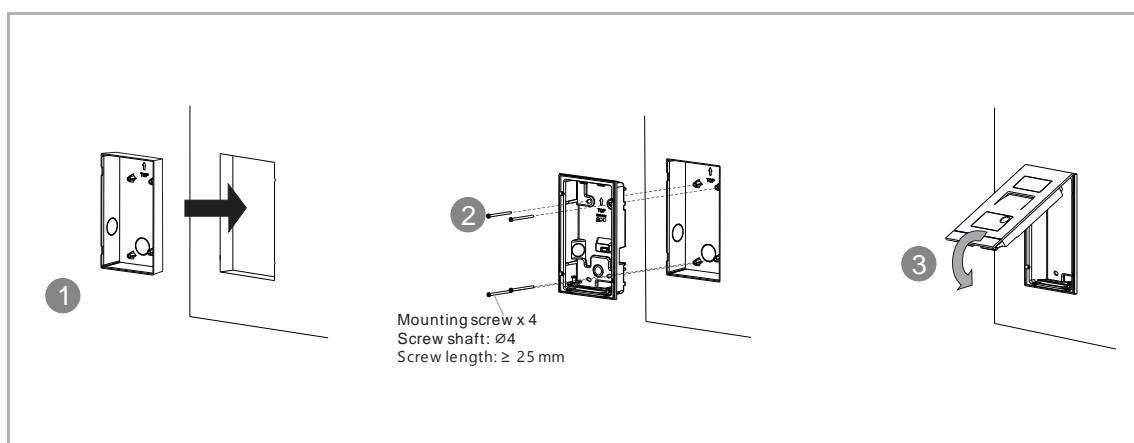


7.2.5 Flush-mounted installation

Product dimension

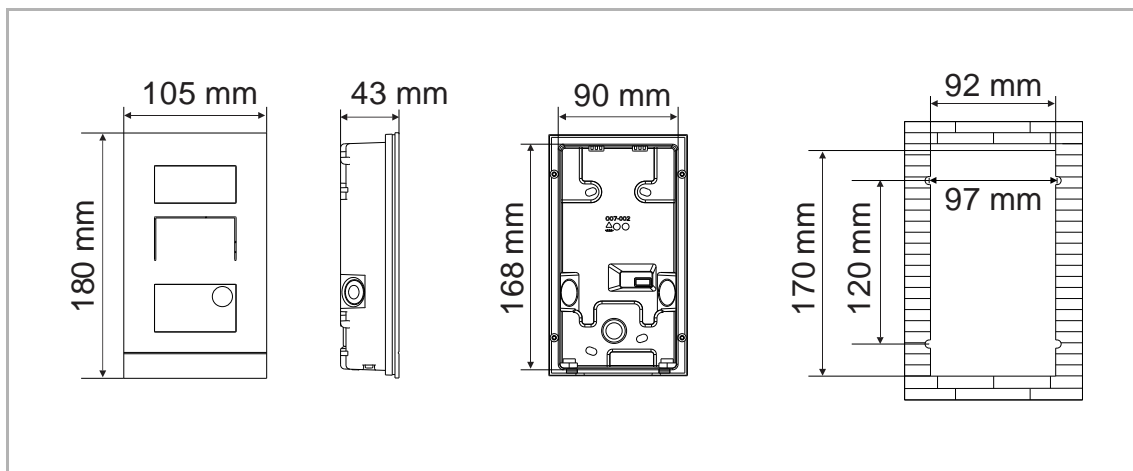


Flush-mounted with pre-installation box

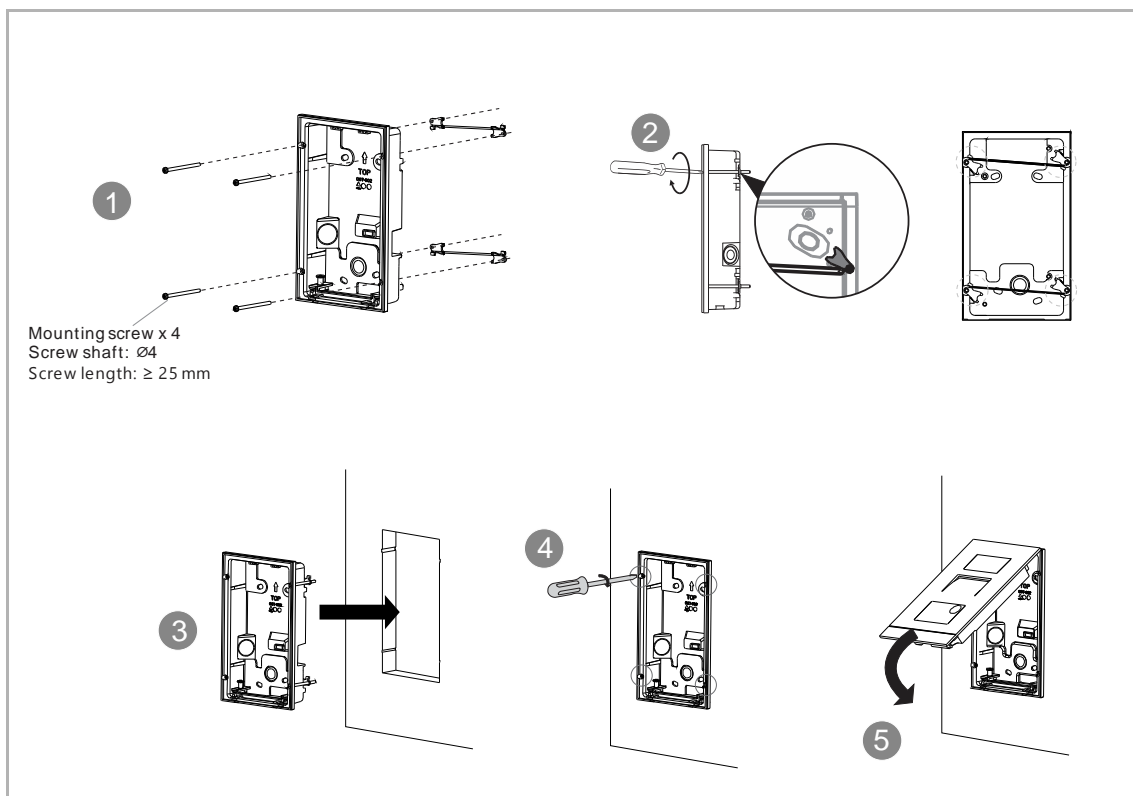


7.2.6 Cavity wall installation

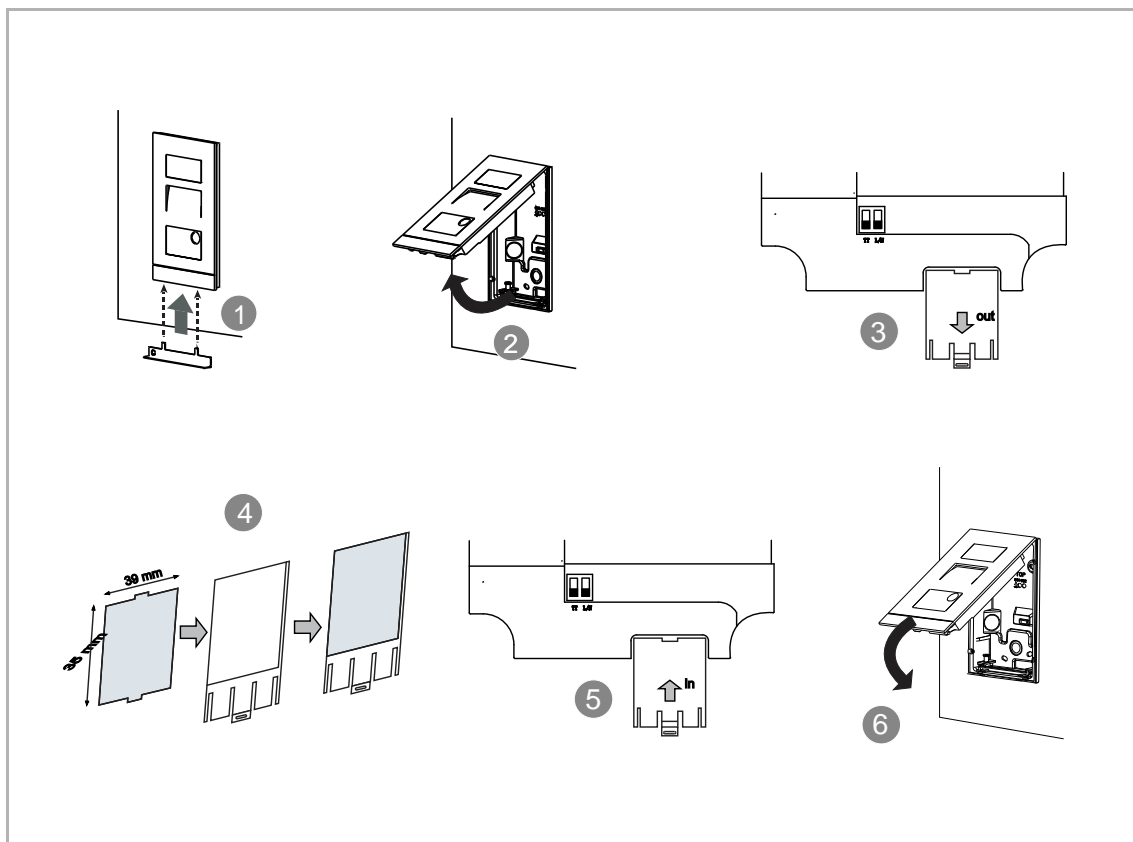
Product dimension



Mounting



7.2.7 Replacing the nameplate



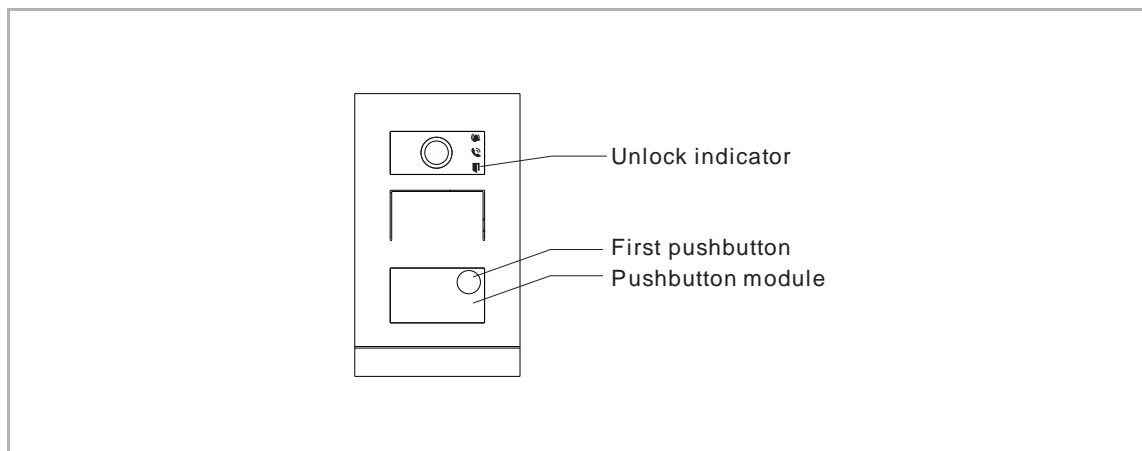
8 Commissioning

8.1 Configure the settings on Indoor Station

8.1.1 Enter engineering mode of Outdoor Station

**Note**

The Outdoor Station must be on the same network as the Indoor Station.



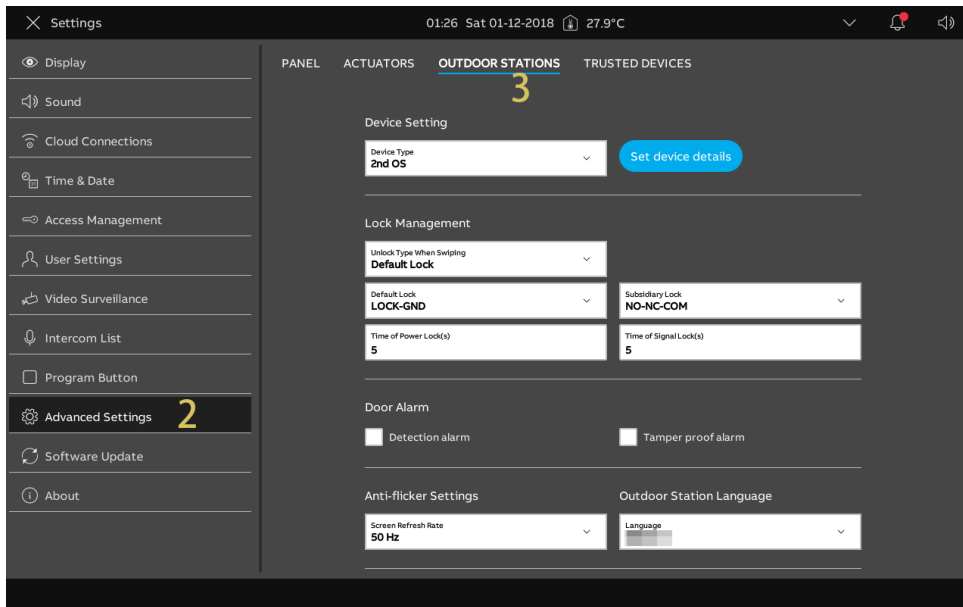
Please follow the steps below:

- [1] Power on the Outdoor Station, wait until all 3 LED indicators go out.
- [2] Press and hold the first pushbutton for 5 seconds until all 3 LED indicators flash.

8.1.2 Accessing the "Outoodr Stations" screen

Please follow the steps below:

- [1] Ensure that the Outdoor Station is in engineering mode.
- [2] On the "Settings" screen of the panel, tap "Advanced Settings".
- [3] Tap "Outdoor Stations" to access the corresponding screen.



Note

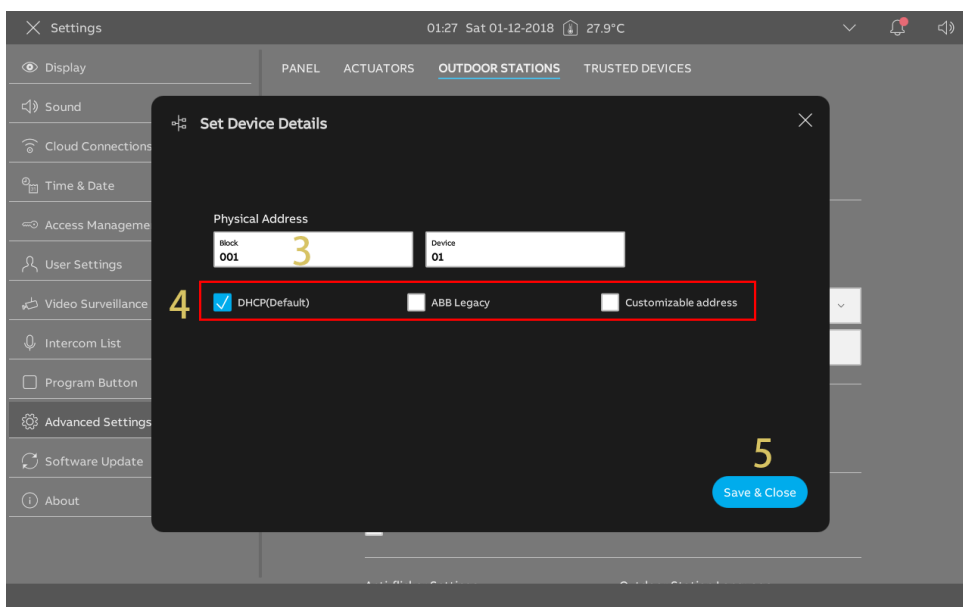
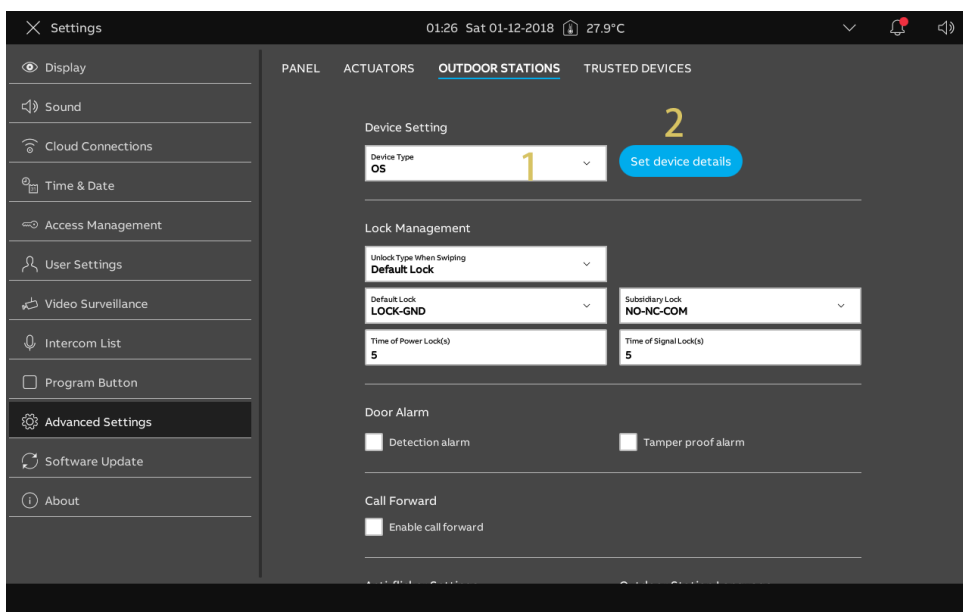
The Outdoor Station will exit engineering mode if no operation is carried out for 5 minutes.

8.1.3 Configuring the device type

Configuring the Outdoor Station

Please follow the steps below:

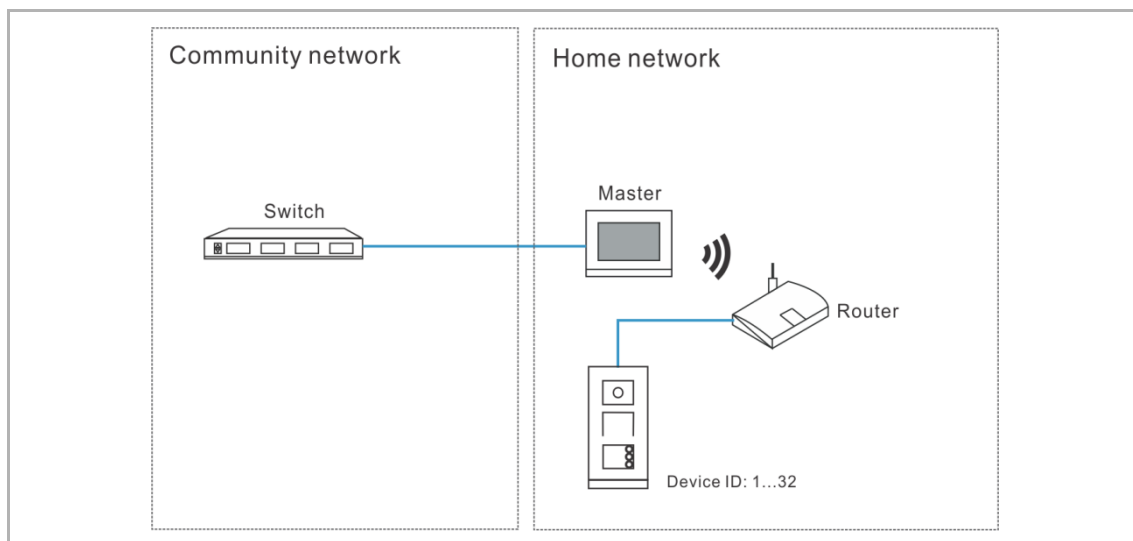
- [1] On the "Outdoor Stations" screen, go to the "Device setting" section.
- [2] Select "OS" from the drop-down list.
- [3] Tap "Set device details".
- [4] Enter the block number (001...999) and the device number (01...64).
- [5] Select the network type, it can set to "DHCP", "Customizable address" or "ABB Legacy".
 - If "ABB Legacy" is selected, IP address will be "10.0.x.x".
- [6] Tap "Save & Close".



Configuring the 2nd Outdoor Station

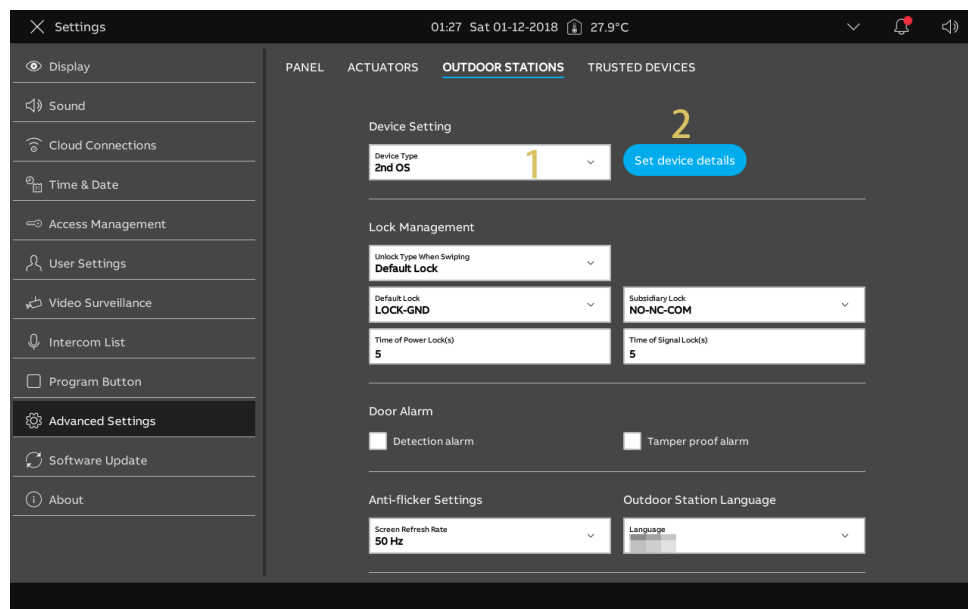
1. Location of IP Actuator = Internal

In this case, the 2nd OS is connected to the router in the apartment (see the diagram below).

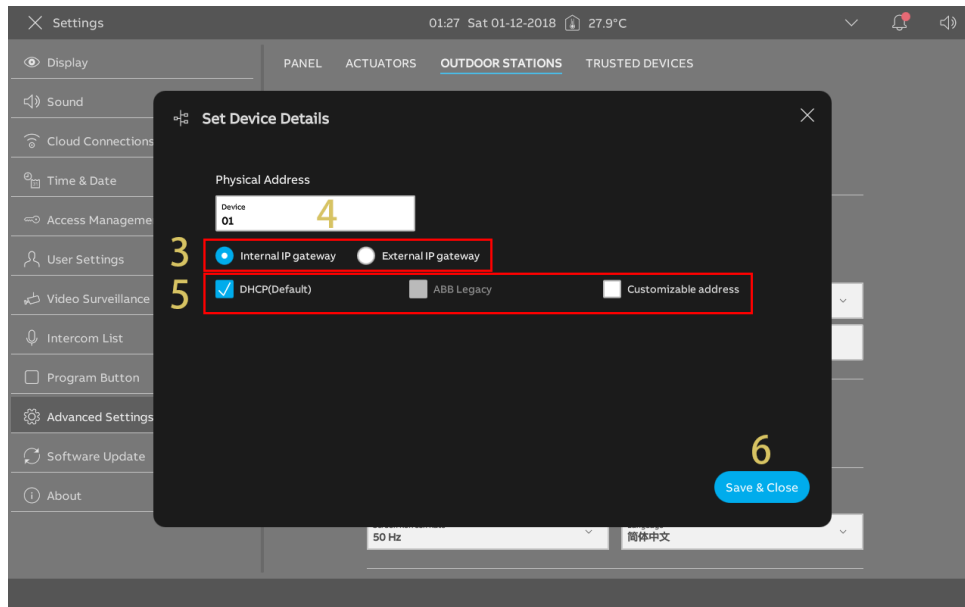


Please follow the steps below:

- [1] On the "Outdoor Stations" screen, go to the "Device setting" section, select "2nd OS" from the drop-down list.
- [2] Tap "Set device details".

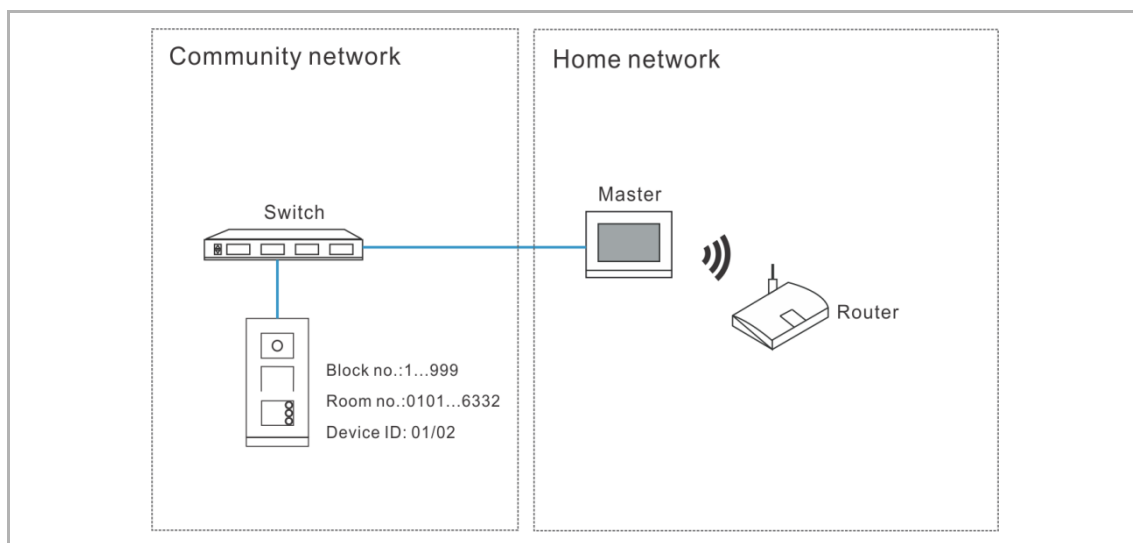


- [3] Select "Internal IP gateway".
- [4] Enter the device number (1...32).
- [5] Select the network type, it can set to "DHCP", "Customizable address" or "ABB Legacy".
 - If "ABB Legacy" is selected, IP address will be "10.0.x.x".
- [6] Tap "Save & Close".



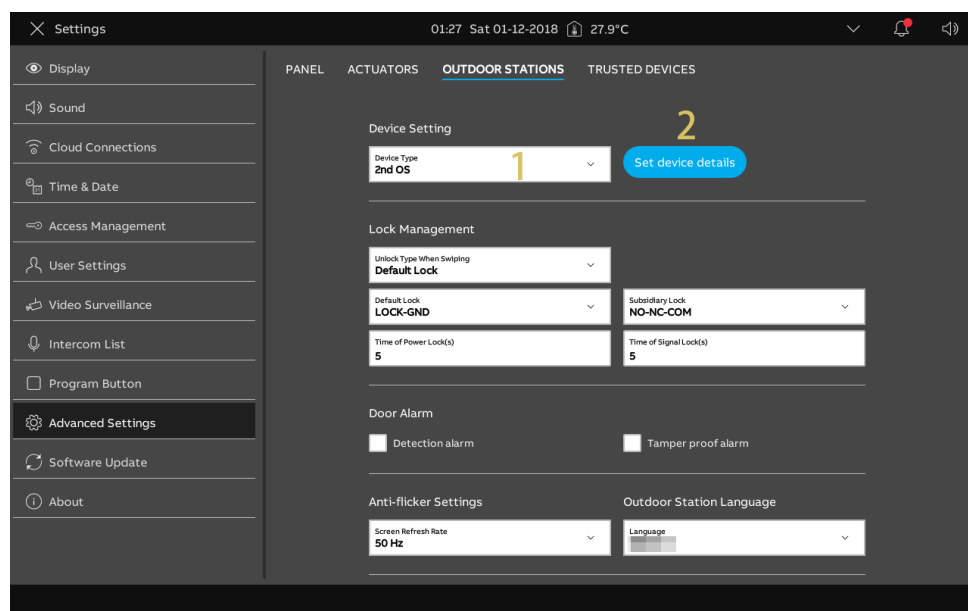
2. Location of IP Actuator = External

In this case, the 2nd OS is connected to the switch outside the apartment (see the diagram below).

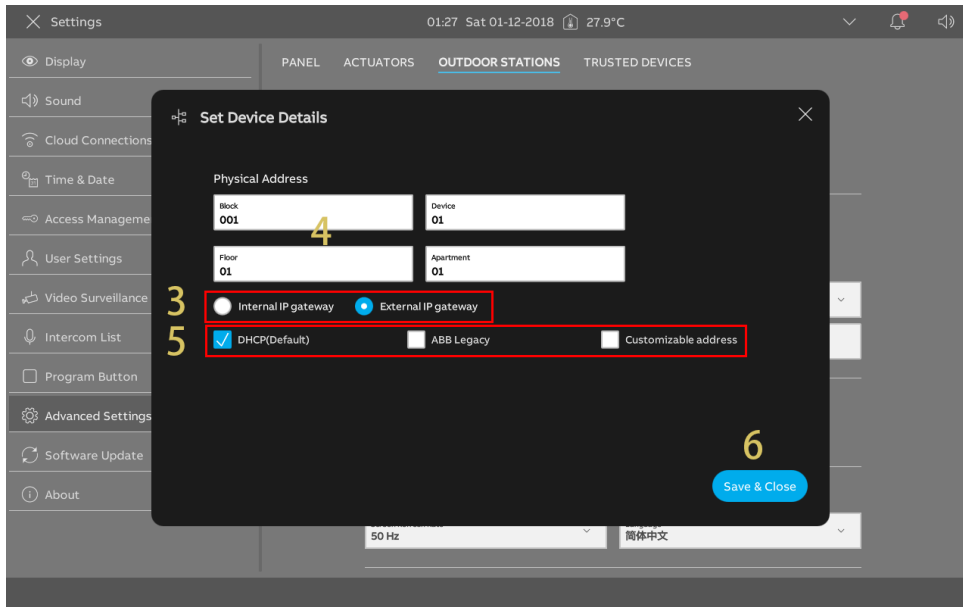


Please follow the steps below:

- [1] On the “Outdoor Stations” screen, go to the “Device setting” section.
- [2] Select “2nd OS” from the drop-down list.
- [3] Tap “Set device details”.



- [4] Select "External IP gateway".
- [5] Enter the block number (001...999), floor number (01...63), apartment number (01...32) and device number (01...02).
- [6] Select the network type, it can set to "DHCP", "Customizable address" or "ABB Legacy".
 - If "ABB Legacy" is selected, IP address will be "10.0.x.x".
- [7] Tap "Save & Close".



Note

The external and internal types cannot be used in mixed scenarios in the same apartment.

8.1.4 Configuring the lock

1. Configuring the default lock

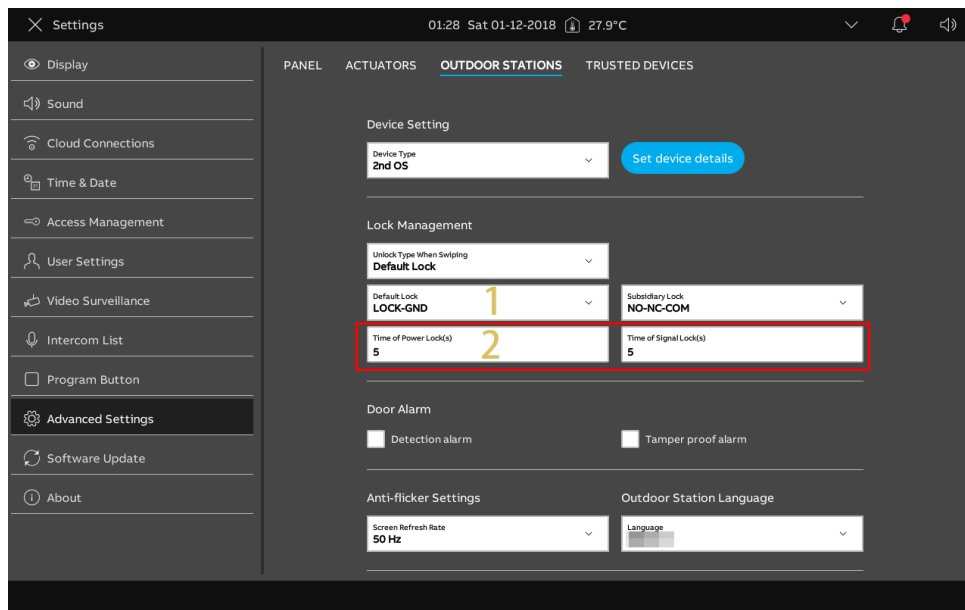
Please follow the steps below:

[1] On the "Outdoor Stations" screen, go to the "Lock Management" section, select the lock type from the drop-down list.

- It can be set to "Lock-GND", "NO-NC-COM" or "IP Actuator".
- If the lock type is set to "IP Actuator", you need to select the lock type from the drop-down list. It can be set to "Power lock" or "Relay lock".

[2] Enter the unlock time.

- If lock type = "Lock-GND" or "Power lock", you need to set the time for the power lock.
- If lock type = "NO-NC-COM" or "Relay lock", you need to set the time for the signal lock.



2. Configuring the subsidiary lock

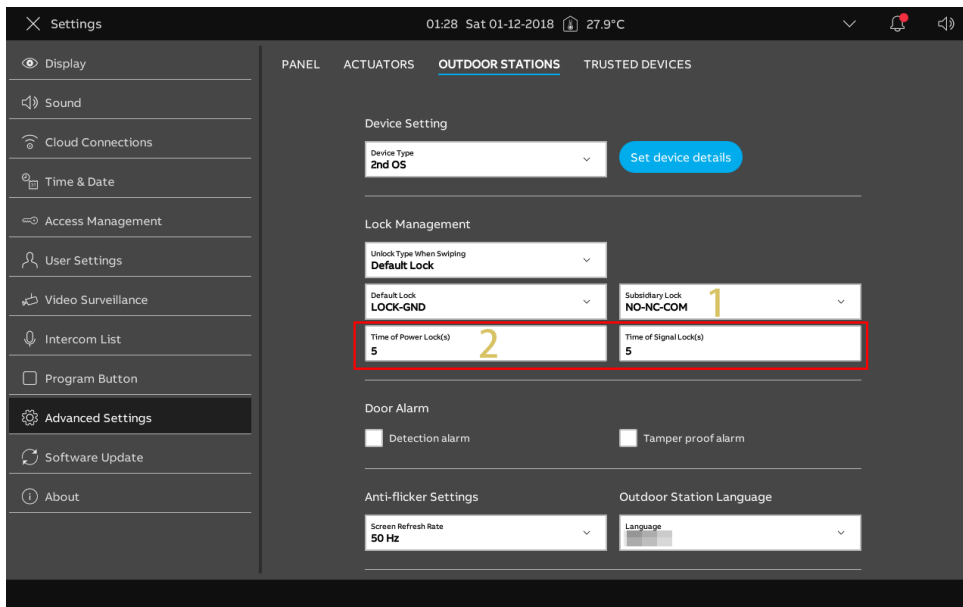
Please follow the steps below:

[1] On the "Outdoor Stations" screen, go to the "Lock Management" section, select the lock type from the drop-down list.

- It can be set to "Lock-GND", "NO-NC-COM" or "IP Actuator".
- If the lock type is set to "IP Actuator", you need to set the lock type from the drop-down list. It can be set to "Power lock" or "Relay lock".

[2] Enter the unlock time.

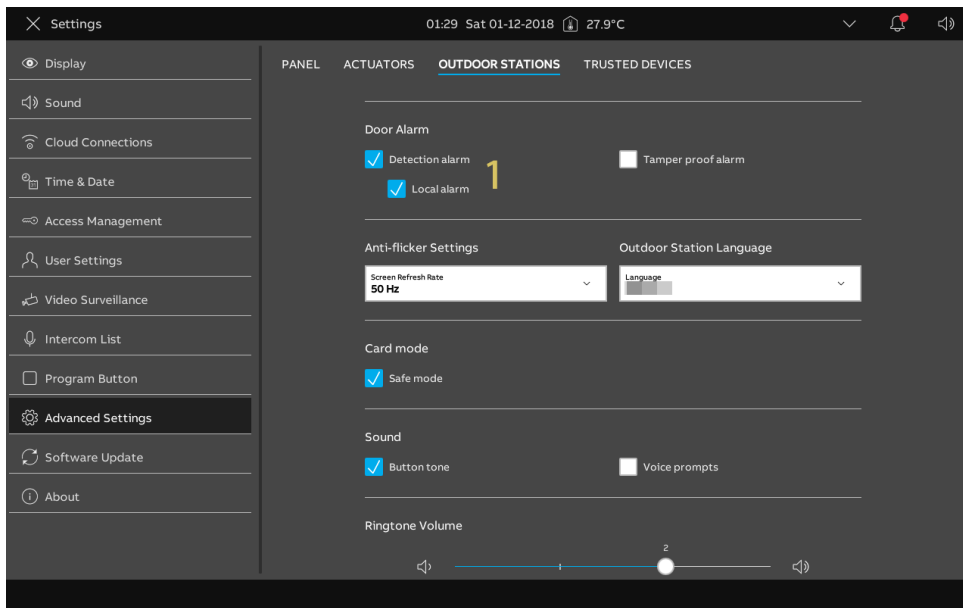
- If lock type = "Lock-GND" or "Power lock", you need to set the time for the power lock.
- If lock type = "NO-NC-COM" or "Relay lock", you need to set the time for the signal lock.



8.1.5 Configuring the "Door alarm" function

Please follow the steps below:

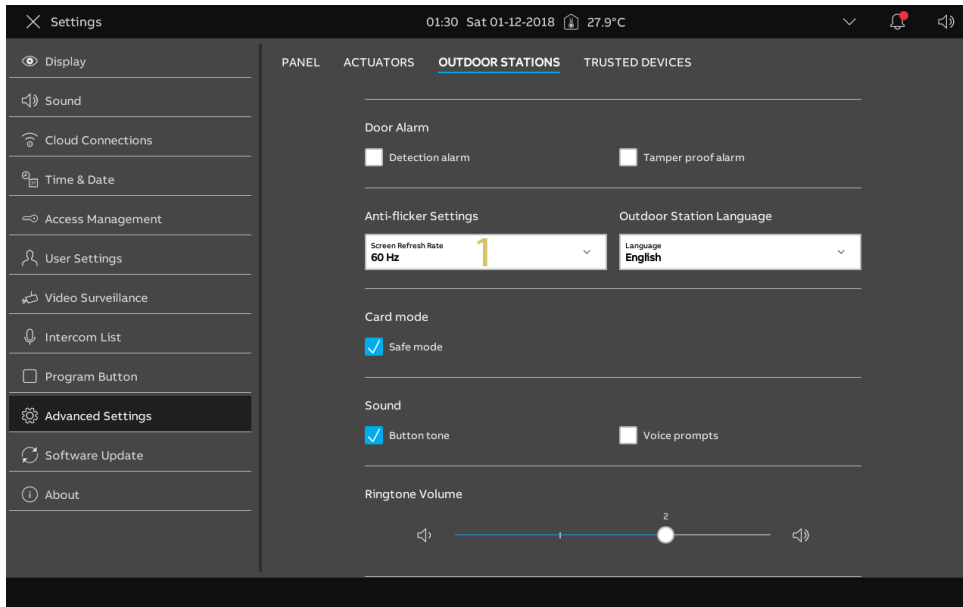
- [1] On the "Outdoor Stations" screen, go to the "Door Alarm" section, tick the check box to enable the functions.
 - If the "Detection Alarm" function is enabled, the panel will send an alarm to SmartAP when the door is open for longer than 120 seconds (a sensor should first be connected to the Outdoor Station).
 - If the "Local Alarm" function is enabled, the panel also sounds an alarm locally.
 - If the "Tamper proof Alarm" function is enabled, the panel will send an alarm to SmartAP if the Outdoor Station is removed from the wall.



8.1.6 Configuring the "Anti-flicker" function

Please follow the steps below:

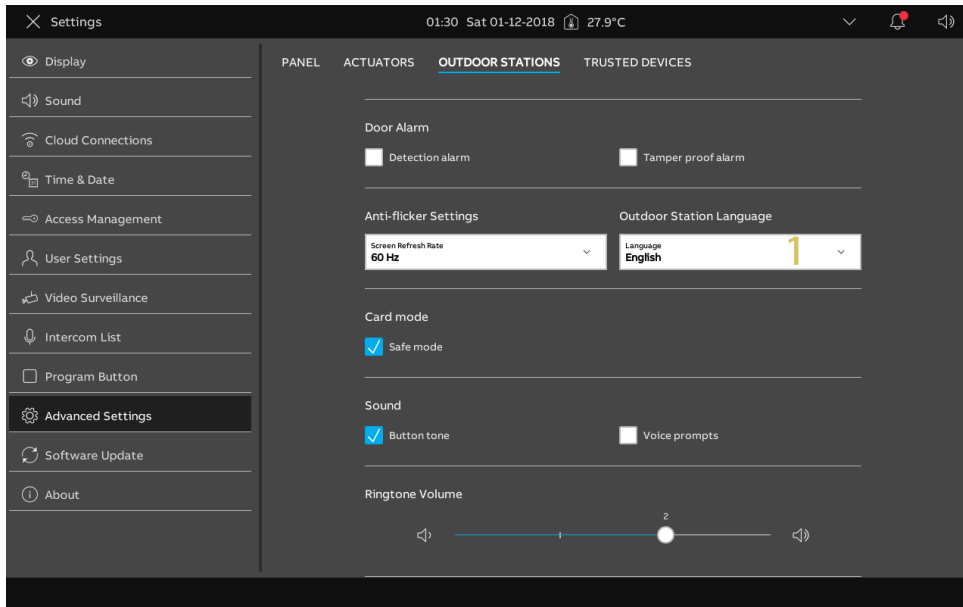
- [1] On the "Outdoor Stations" screen, go to the "Anti-flicker settings" section, select the refresh rate from the drop-down list. It can be set to "60 Hz" or "50 Hz".



8.1.7 Configuring the language

Please follow the steps below:

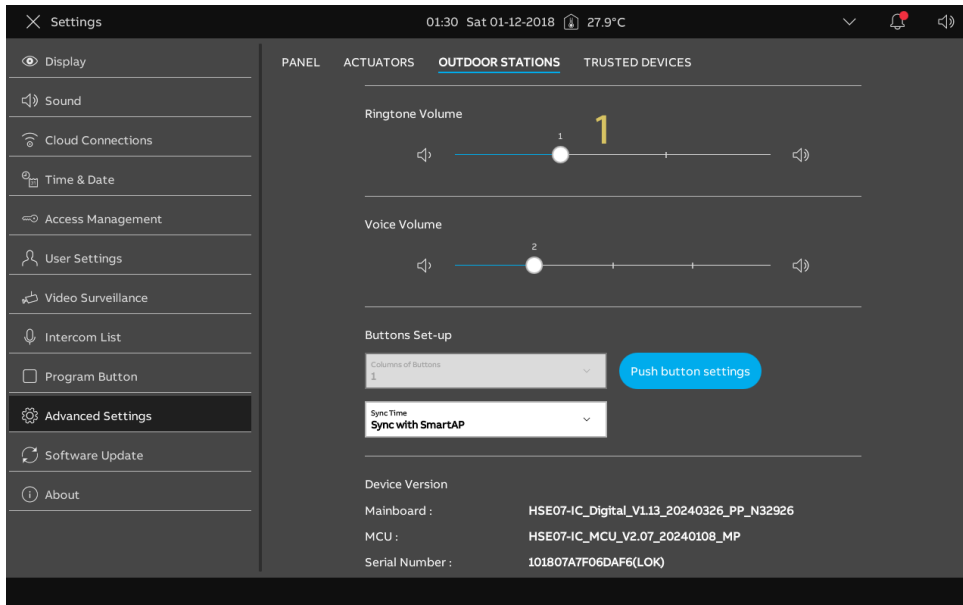
- [1] On the "Outdoor Stations" screen, go to the "Outdoor Station Language" section, select the language from the drop-down list.



8.1.8 Configuring the ringtone volume

Please follow the steps below:

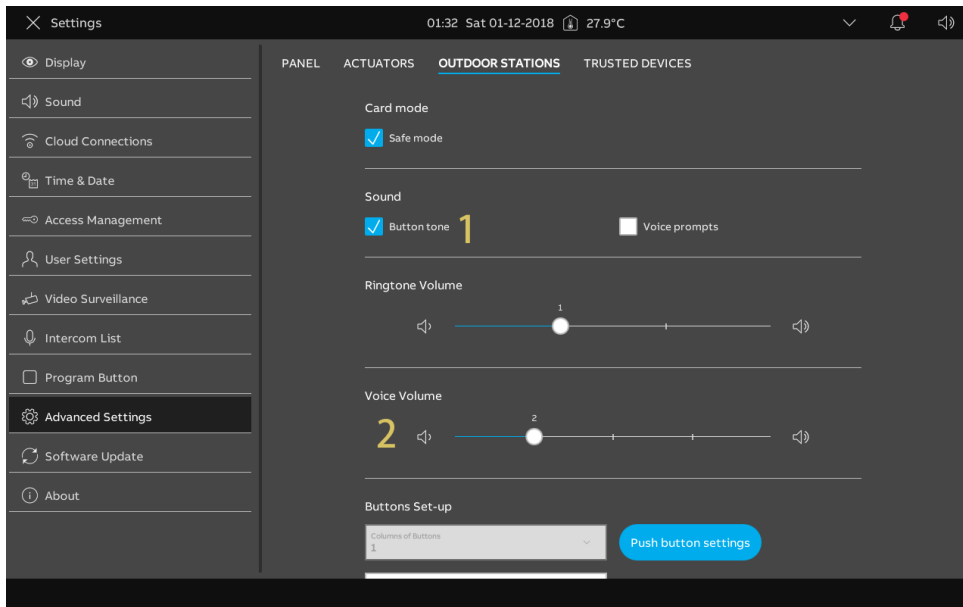
- [1] On the "Outdoor Stations" screen, go to the "Ringtone volume" section, select the ringtone volume (1...3)



8.1.9 Configuring the "Button tone" function

Please follow the steps below:

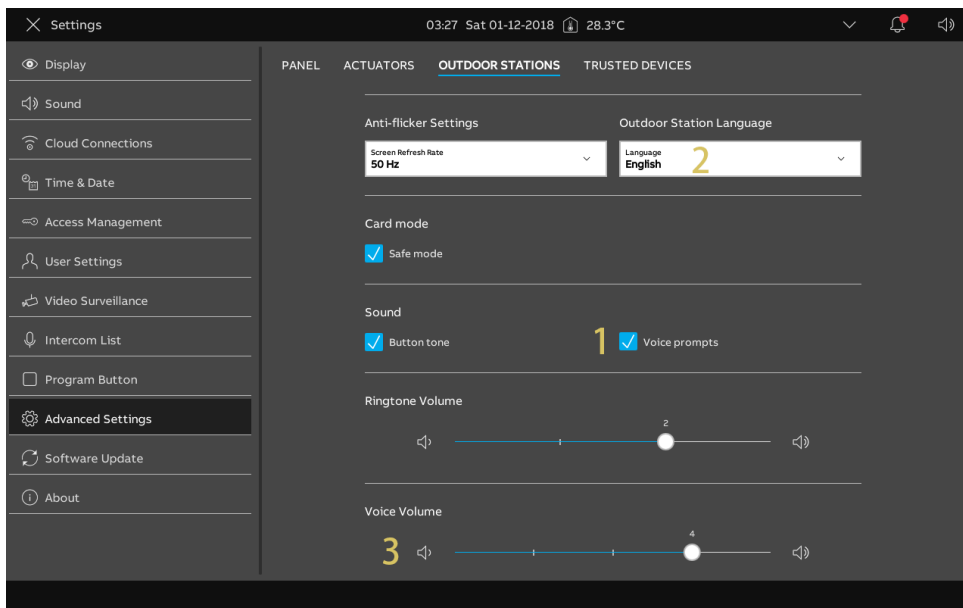
- [1] On the "Outdoor Stations" screen, go to the "Sound" section, tick the check box to enable the function.
- [2] Go to the "Voice Volume" section, select the voice volume (1...5).



8.1.10 Configuring the "Voice prompts" function

Please follow the steps below:

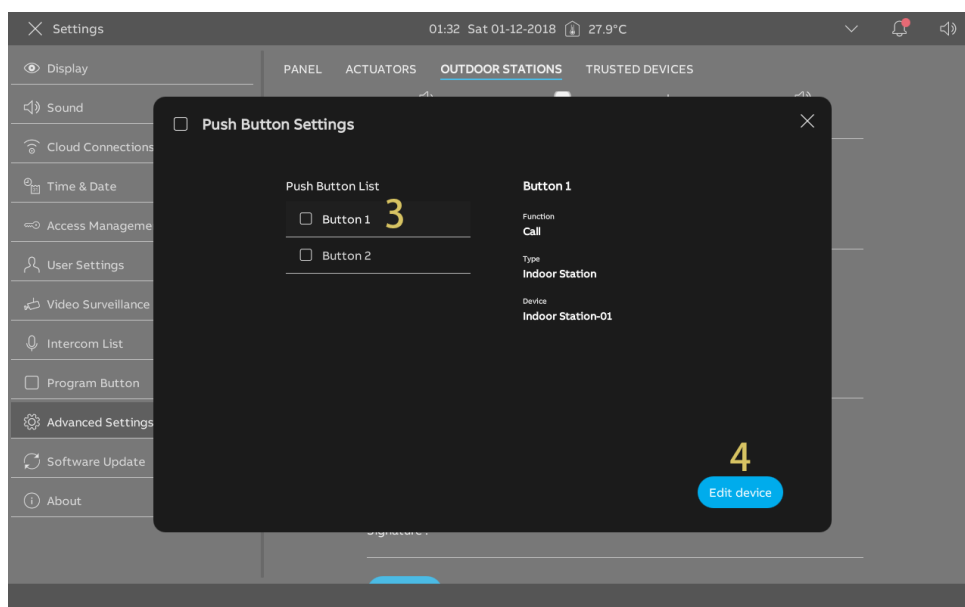
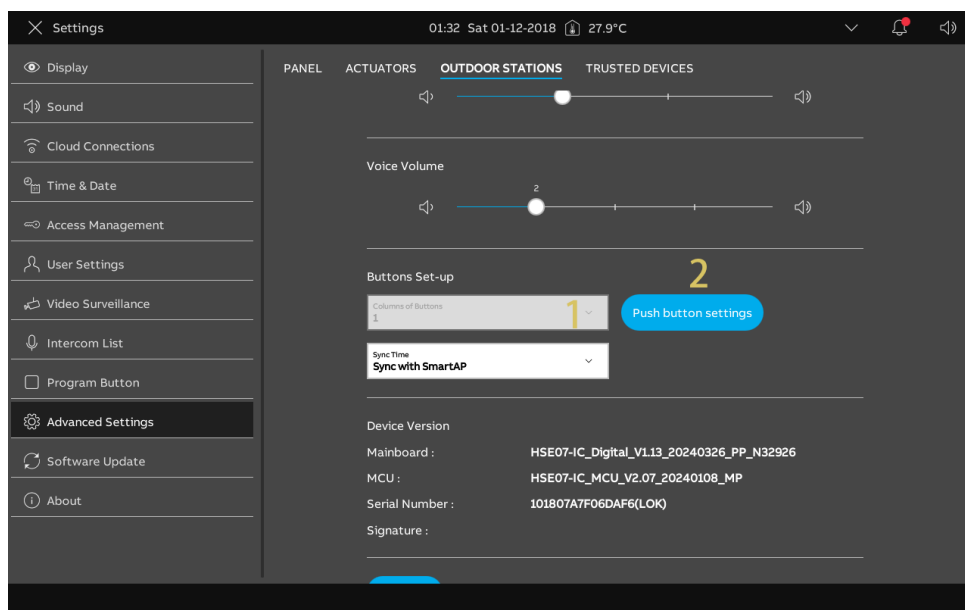
- [1] On the "Outdoor Stations" screen, go to the "Sound" section, tick the check box to enable the function.
- [2] Go to the "Outdoor Station Language" section, select the language.
- [3] Go to the "Voice Volume" section, select the voice volume (1...5).



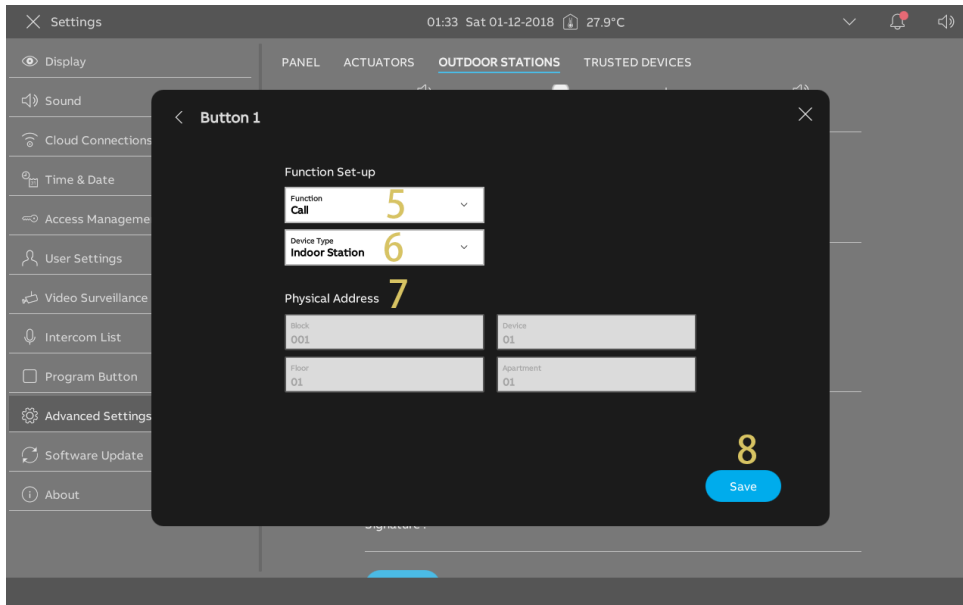
8.1.11 Configuring the push buttons

Please follow the steps below:

- [1] On the "Outdoor Stations" screen, go to the "Buttons set-up" section, select the column number. This setting is only available when detecting the bar push-button module on the Outdoor Station. It can be set to "1" or "2".
- [2] Tap "Push button settings".
- [3] Tap the relevant push button.
- [4] Tap "Edit device".



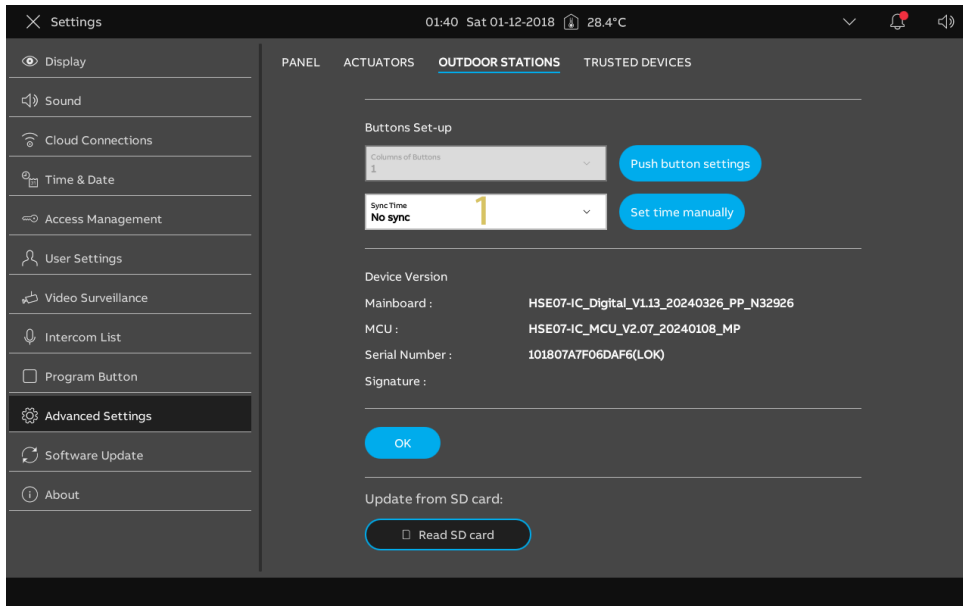
- [5] Select the function from the drop-down list. It can be set to "Call", "Turn on the light" or "None".
- [6] Select the device type from the drop-down list. It can be set to "Indoor Station" or "Phone Guard Unit".
- [7] Enter the address according to the device type.
- [8] Tap "Save".



8.1.12 Configuring the "Time sync" function

Please follow the steps below:

- [1] On the "Outdoor Stations" screen, go to the "Buttons set-up" section, select the sync time method from the drop-down list.
 - If "Sync with SmartAP" is selected, the Outdoor Station will sync the time from the management software.
 - If "No sync" is selected, tap "Set time manually" to enter the time and date manually.

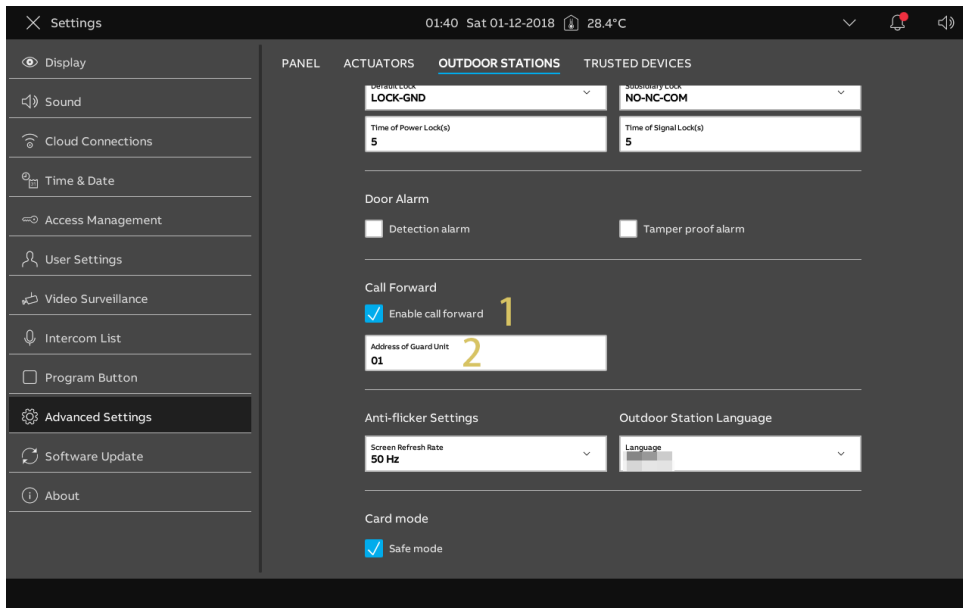


8.1.13 Configuring call forward

This function can be available only when "Device type" is set to "OS".

Please follow the steps below:

- [1] On the "Outdoor Stations" screen, go to the "Call Forward" section, tick the check box to enable the function.
- [2] Enter the address of default Guard Unit.



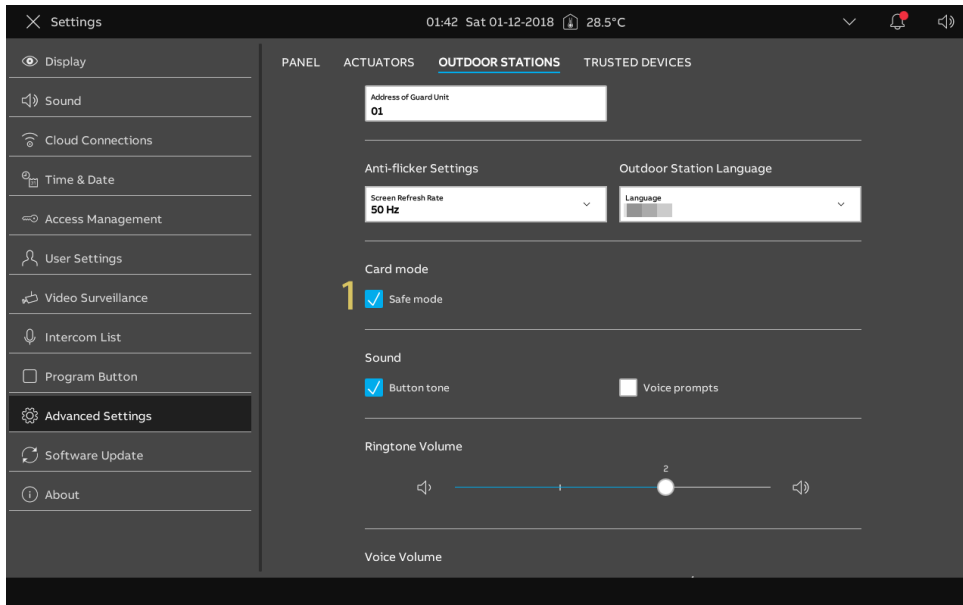
8.1.14 Configuring Card mode

This chapter applies to the Outdoor Station which supports IC cards.

If "Safe mode" is enabled, when you register an IC card on the Outdoor Station, a security key will be written to the IC card to achieve higher security.

Please follow the steps below:

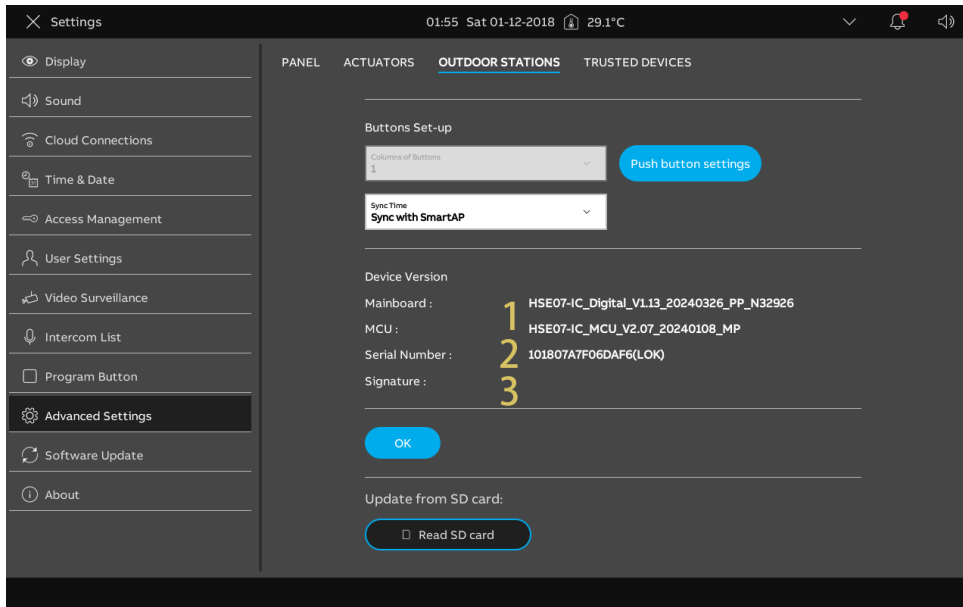
- [1] On the "Outdoor Stations" screen, go to "Card mode" section, tick the check box to enable the function.



8.1.15 Viewing the information

Please follow the steps below:

[1] On the “Outdoor Stations” screen, scroll down to view the information.



No.	Description
1	Mainboard version and MCU version
2	Serial number
3	Signature

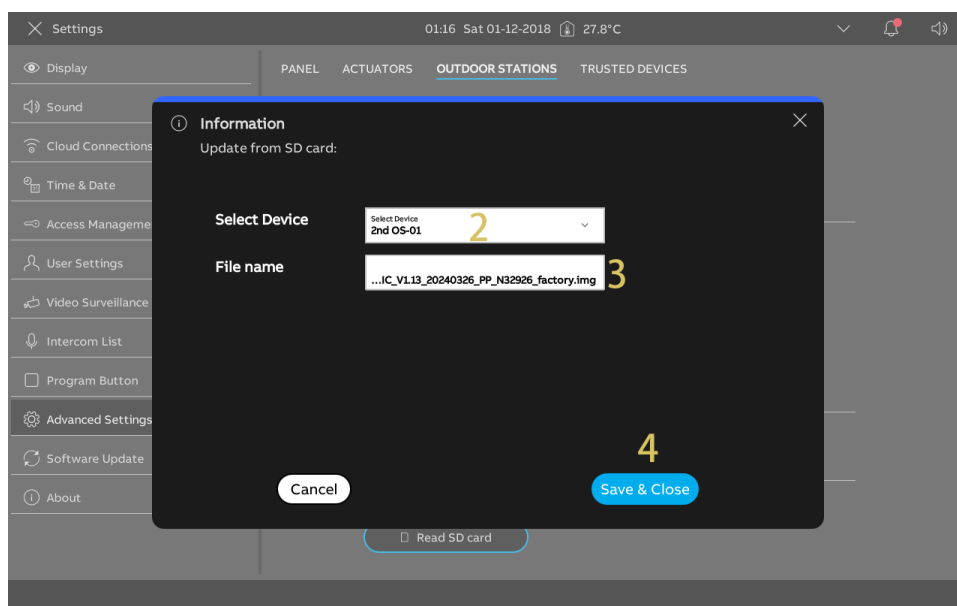
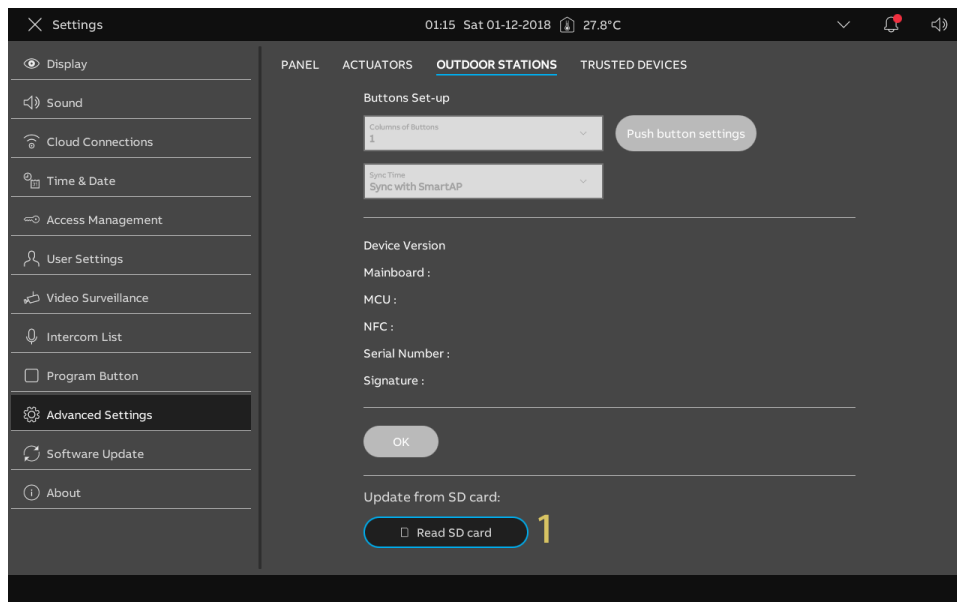
8.1.16 Updating the firmware

- The Outdoor Station can update the firmware via the Indoor Station which supports micro SD card.
- The Outdoor Station must exit engineering mode before the firmware is upgraded.

Updating the firmware via the Indoor Station

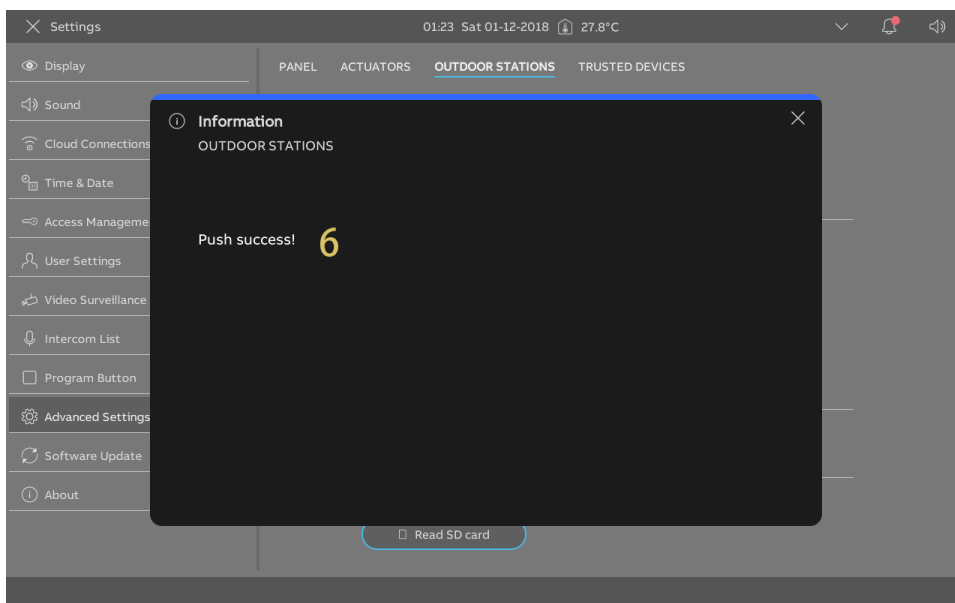
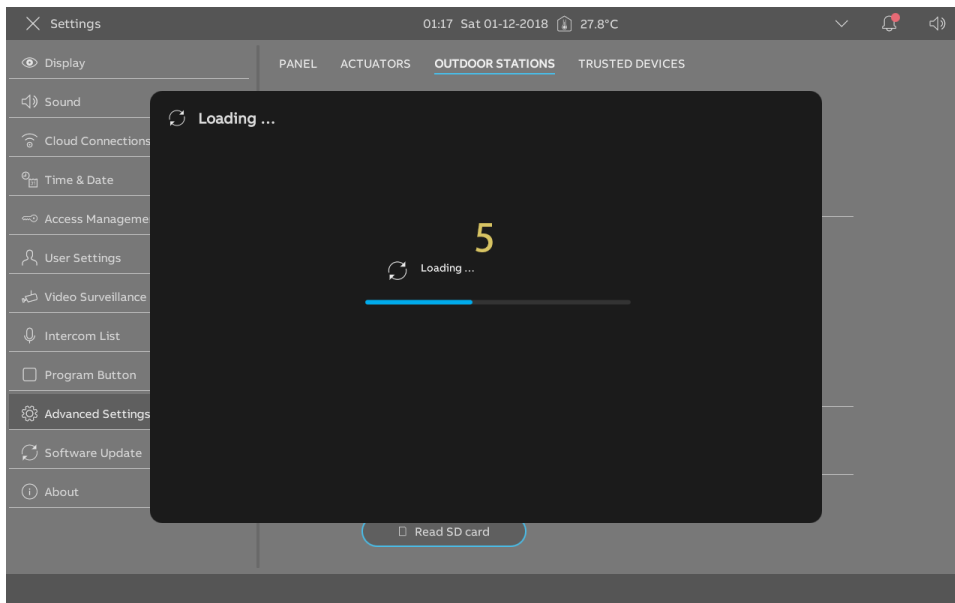
Please follow the steps below:

- [1] On the "Outdoor Stations" screen of the panel, tap "Read SD card".
- [2] Select the designated Outdoor Station.
- [3] Select the updating file from SD card.
- [4] Tap "Save & Close".



[5] "Loading..." will be displayed to indicate that the upgrade is in progress.

[6] "Push success!" will be displayed if the upgrade is successful.



8.2 Configure the settings on "Smart Access Point"

8.2.1 Adding the Outdoor Station



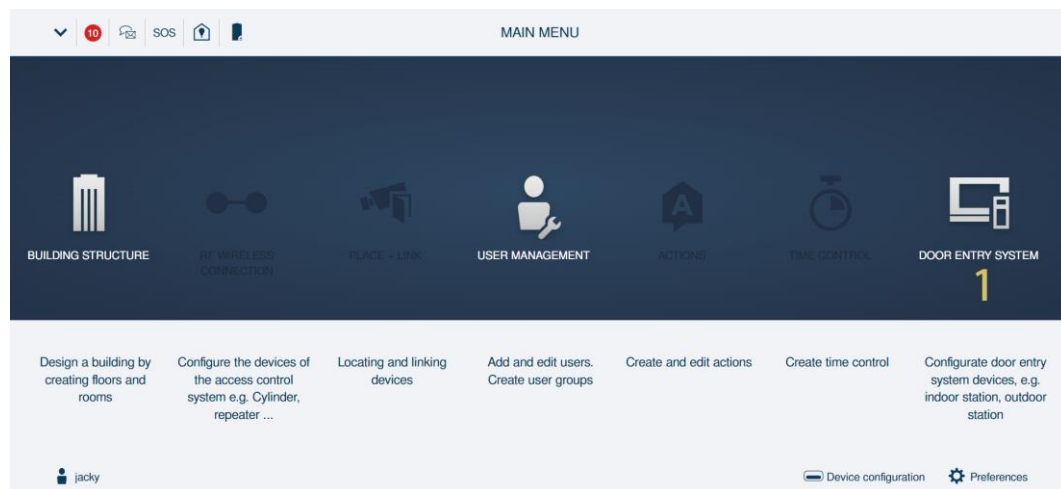
Note

Only an Outdoor Station without a certificate can be added by SmartAP. This Outdoor Station will lose its certificate if its physical address is changed.

The Outdoor Station needs to be powered on before being added.

On the "Smart Access Point" configuration screen, follow the steps below,

[1] Click "Door Entry System".



- [2] Click "Add device".
- [3] Select the device type from the drop-down list. It could be set to "Outdoor station" or "Second-confirm station".
- [4] Enter the device address,
- [5] This function is available only when device type is set to "Second-confirm station".
 - If the Outdoor Station is installed in the community network, "Installed in the community network" should be enabled.
- [6] Enter the serial number.
- [7] Click "Save".

HOME 10 SOS

< DOOR ENTRY SYSTEM >

OUTDOOR STATIONS ADD DEVICE

LIST VIEW

Outdoor stations

Public area

ADD DEVICE

Device type: Second-confirm station

Device addr.: 1 1 1 1

☒ Installed in the community network

Serial No.: 101807A7F06DAF6

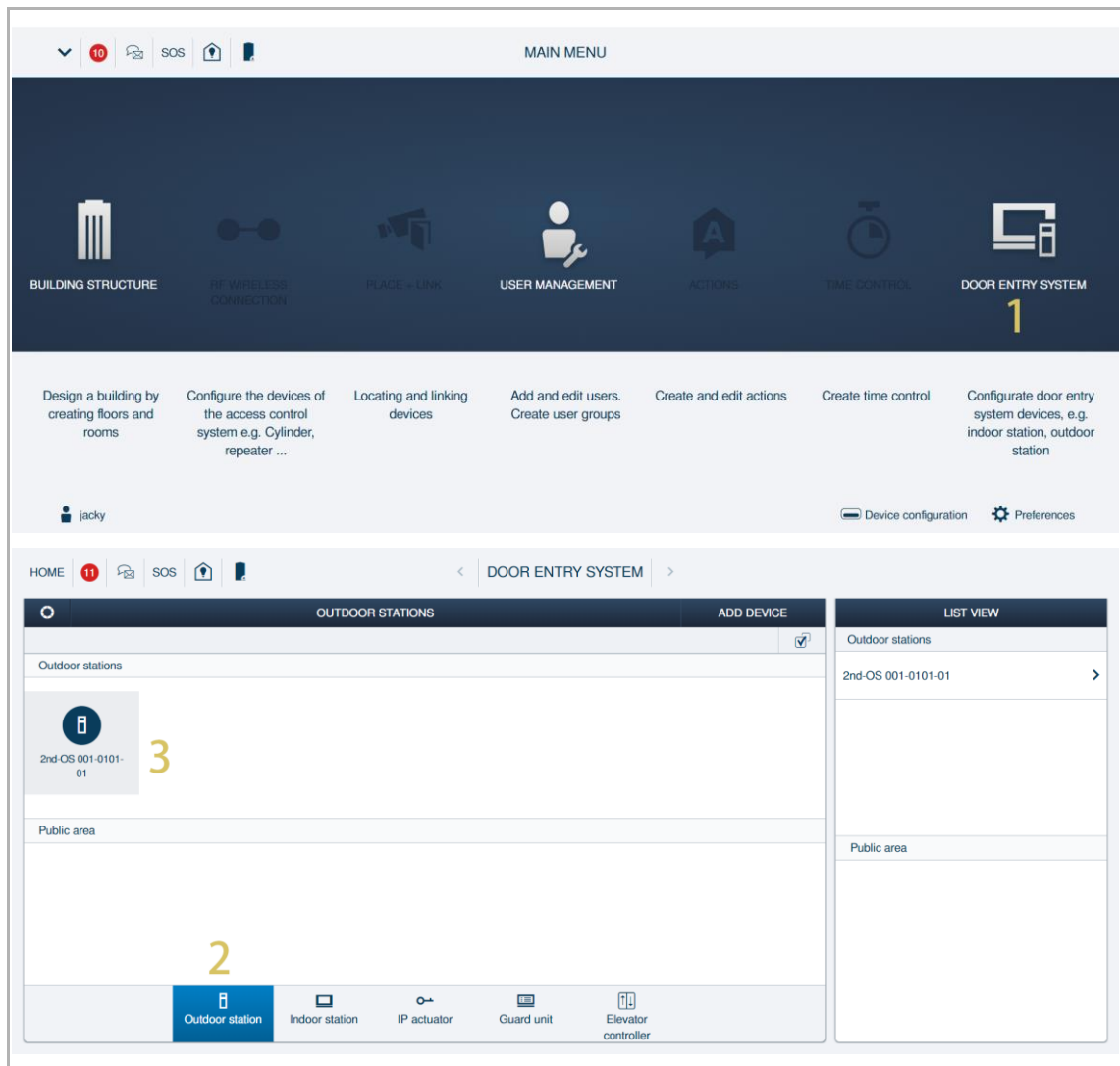
Cancel Save

Outdoor station Indoor station IP actuator Guard unit Elevator controller

8.2.2 Accessing the designated Outdoor Station screen

Please follow the steps below:

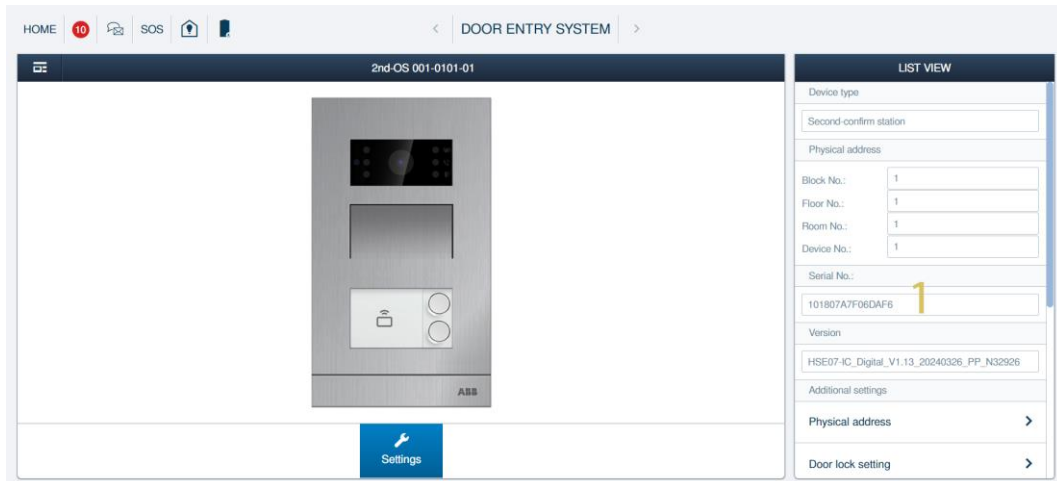
- [1] On the "Main Menu" screen, click "Door Entry System".
- [2] Click "Outdoor Station".
- [3] Click the designated Outdoor Station to access the corresponding screen.



8.2.3 Viewing the serial number

Please follow the steps below:

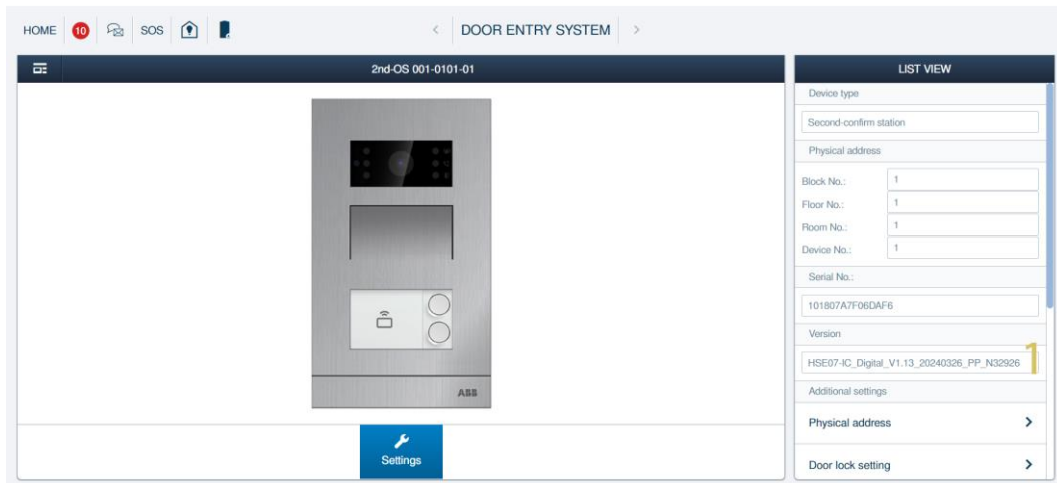
- [1] On the designated Outdoor Station screen, go to the "Serial No." section to view the serial number.



8.2.4 Viewing the version

Please follow the steps below:

- [1] On the designated Outdoor Station screen, go to the "Version" section to view the firmware version.

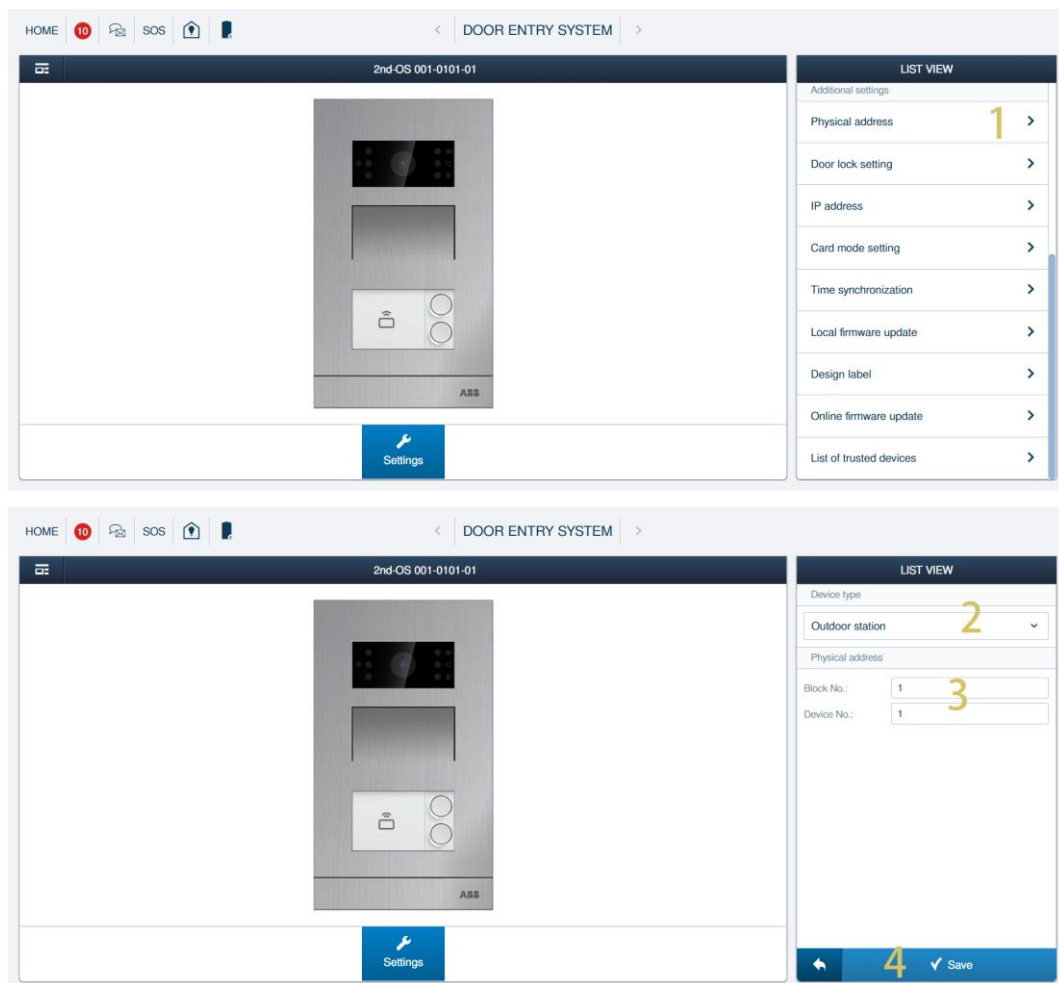


8.2.5 Configuring the physical address

1. Outdoor Station

Please follow the steps below:

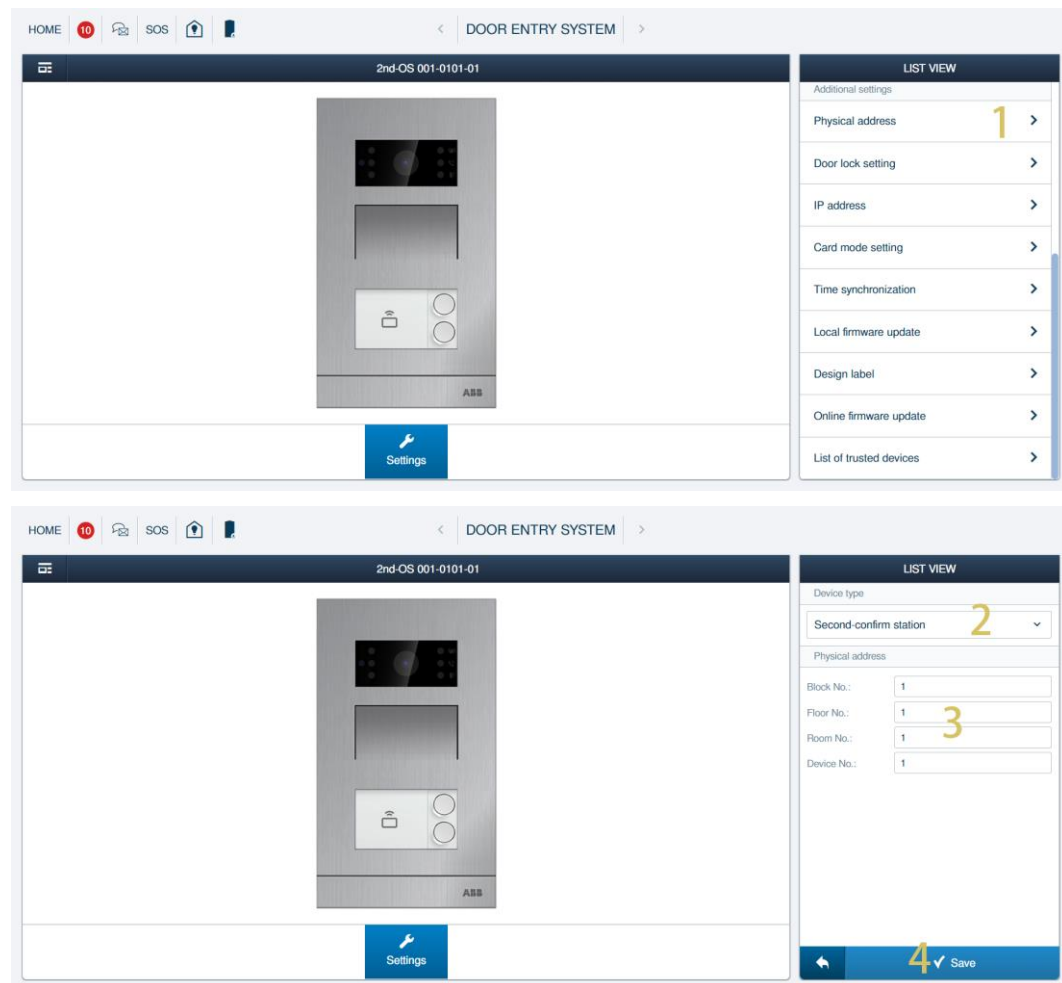
- [1] On the designated Outdoor Station, go to the "Additional settings" section, click "Physical address".
- [2] Go to the "Device type" section, select "Outdoor Station".
- [3] Enter the block number (001...999) and the device number (01...64).
- [4] Click "Save".



2. Second-confirm Station

Please follow the steps below:

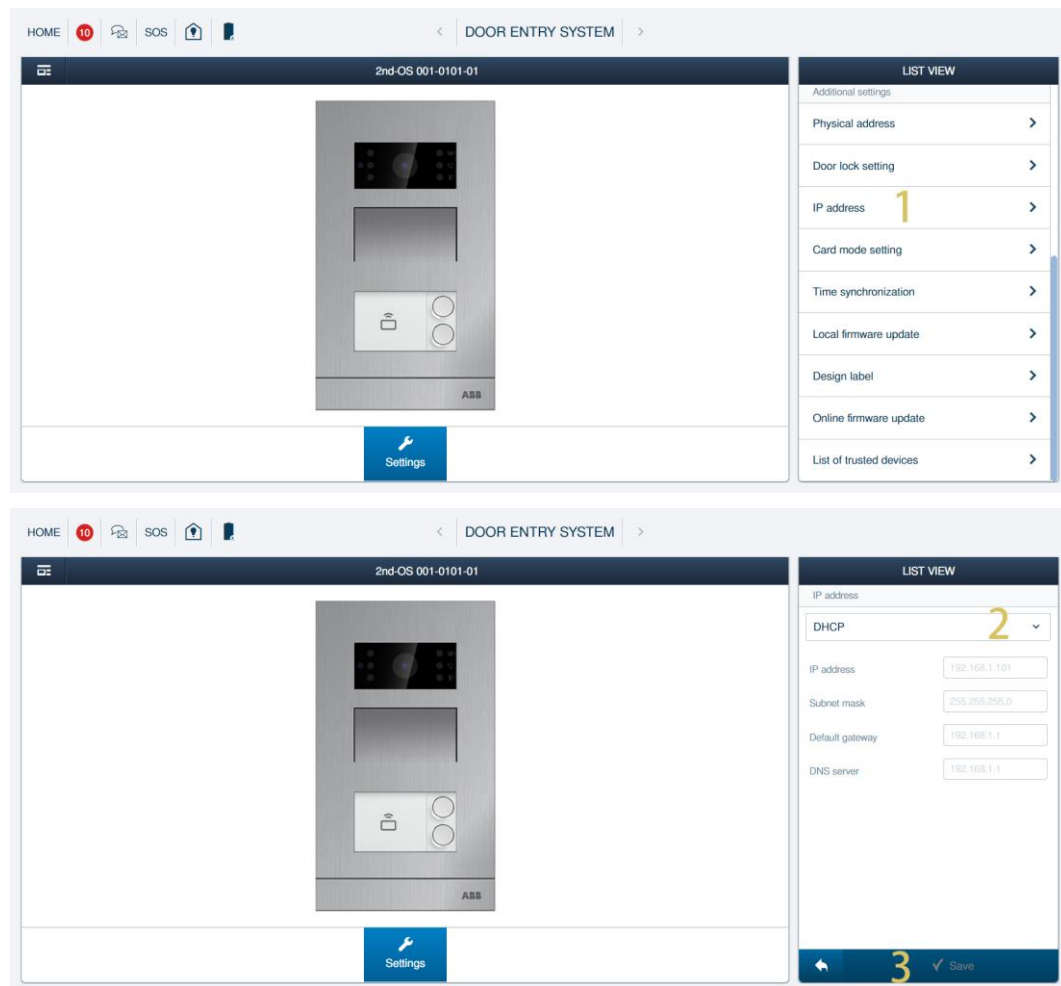
- [1] On the designated Outdoor Station, go to the "Additional settings" section, click "Physical address".
- [2] Go to the "Device type" section, select "Second-confirm Station".
- [3] Enter the physical address.
- [4] Click "Save".



8.2.6 Configuring the IP address

Please follow the steps below:

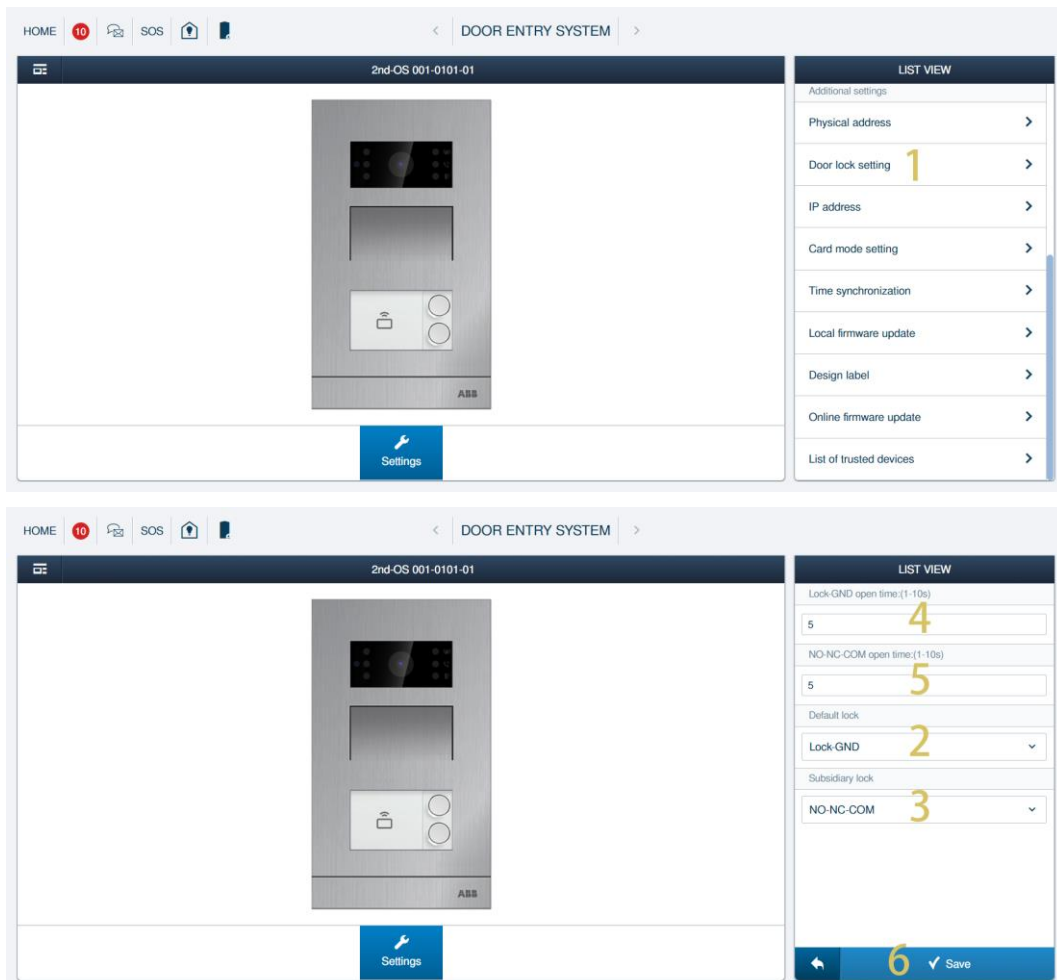
- [1] On the designated Outdoor Station screen, go to the "Additional settings" section, click "IP address".
- [2] Select the network type, it can set to "DHCP" or "Static address".
 - If "Static address" is selected, you need to enter the IP address manually.
- [3] Click "Save".



8.2.7 Configuring the lock

Please follow the steps below:

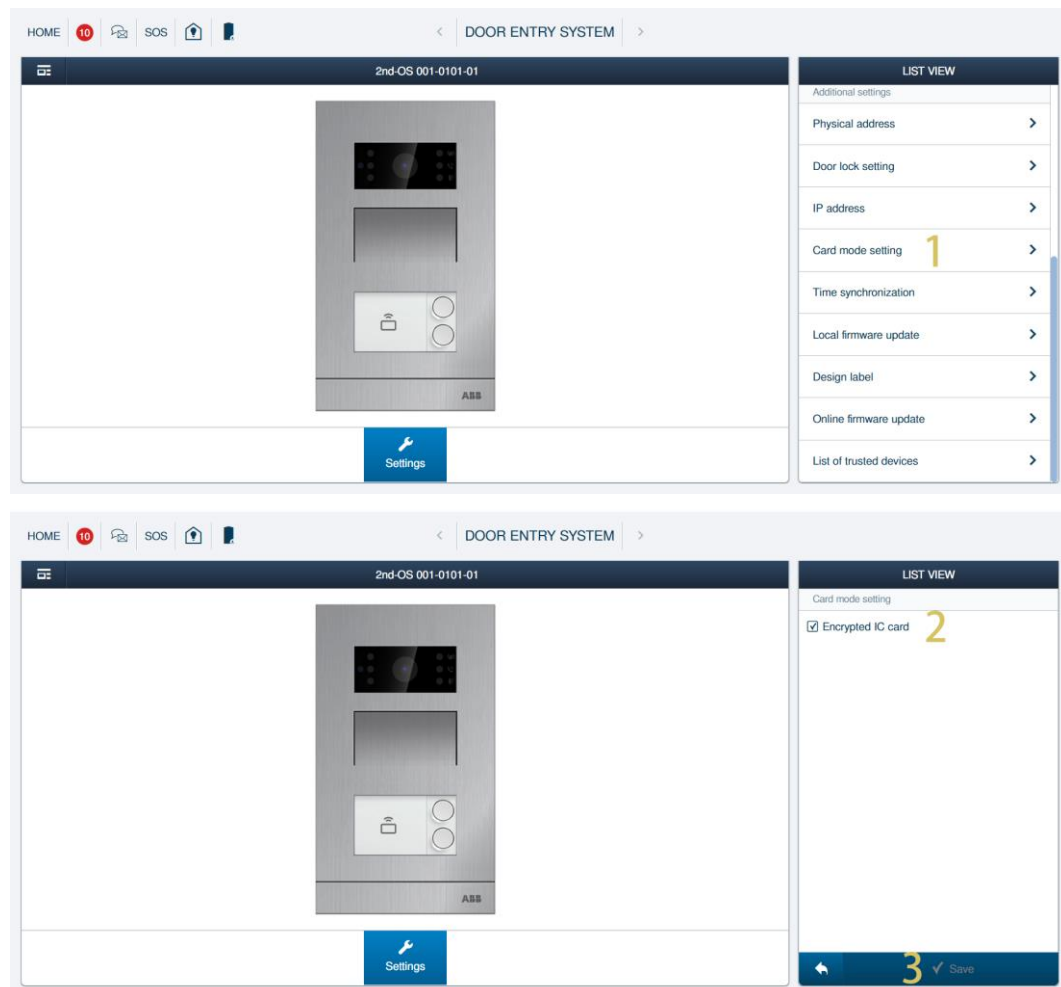
- [1] On the designated Outdoor Station screen, go to the "Additional settings" section, click "Door lock setting".
- [2] Set the lock type of default lock, it can be set to "Lock-GND", "NO-NC-COM" or "IP Actuator".
 - If "IP Actuator" is selected, you need enter the device number of IP Actuator or select the designated IP Actuator.
- [3] Set the lock type of subsidiary lock, it can be set to "Lock-GND", "NO-NC-COM" or "IP Actuator".
 - If "IP Actuator" is selected, you need enter the device number of IP Actuator or select the designated IP Actuator.
- [4] Set the unlock time for "Lock-GND".
- [5] Set the unlock time for "Relay lock".
- [6] Click "Save".



8.2.8 Configuring the card mode

Please follow the steps below:

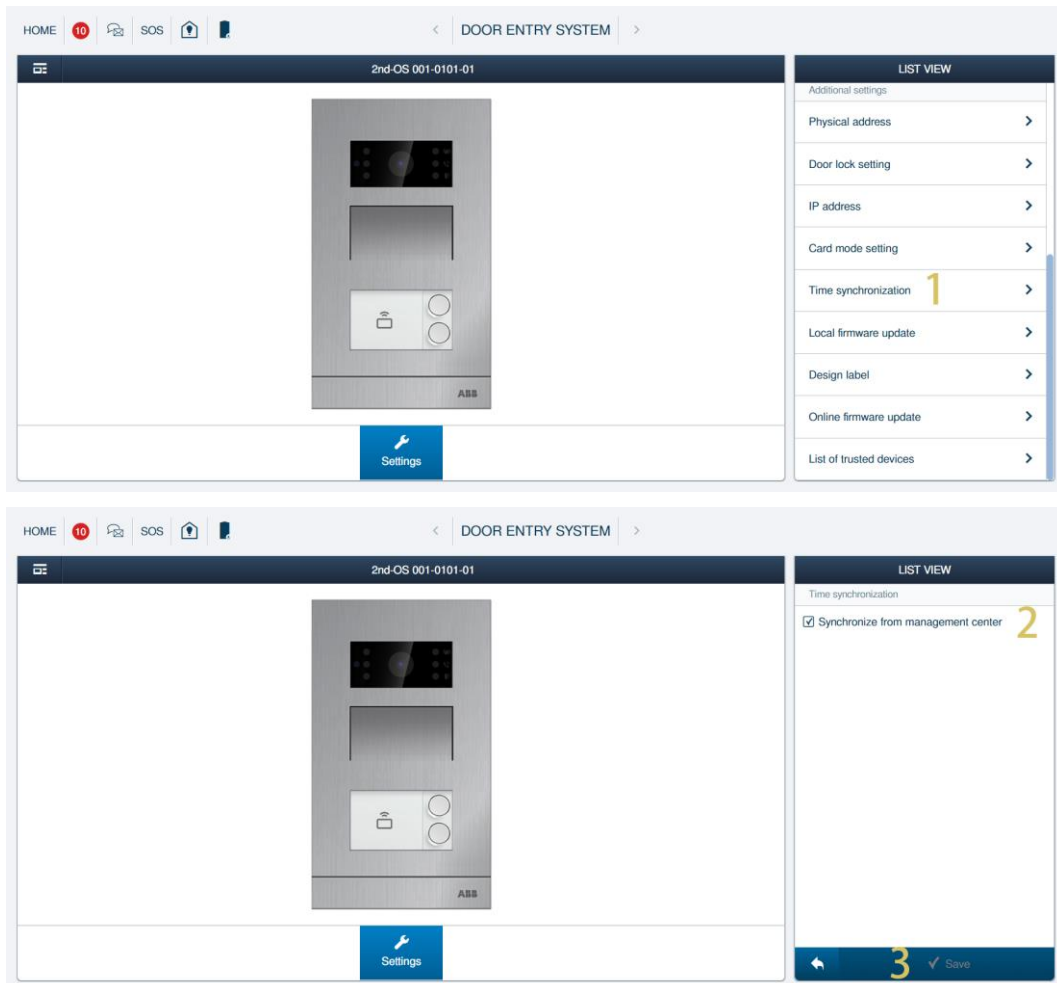
- [1] On the designated Outdoor Station screen, go to the "Additional settings" section, click "Card mode setting".
- [2] Tick/untick the check box to enable/disable the function.
 - If the function is enabled, when you register an IC card on the Outdoor Station, a security key will be written to the IC card to achieve higher security.
- [3] Click "Save".



8.2.9 Configuring the "Time sync" function

Please follow the steps below:

- [1] On the designated Outdoor Station screen, go to the "Additional settings" section, click "Time synchronization".
- [2] Tick/untick the check box to enable/disable the function.
 - If the function is enabled, the Outdoor Station will sync the time from the management software.
- [3] Click "Save".



8.2.10 Configuring the trusted devices

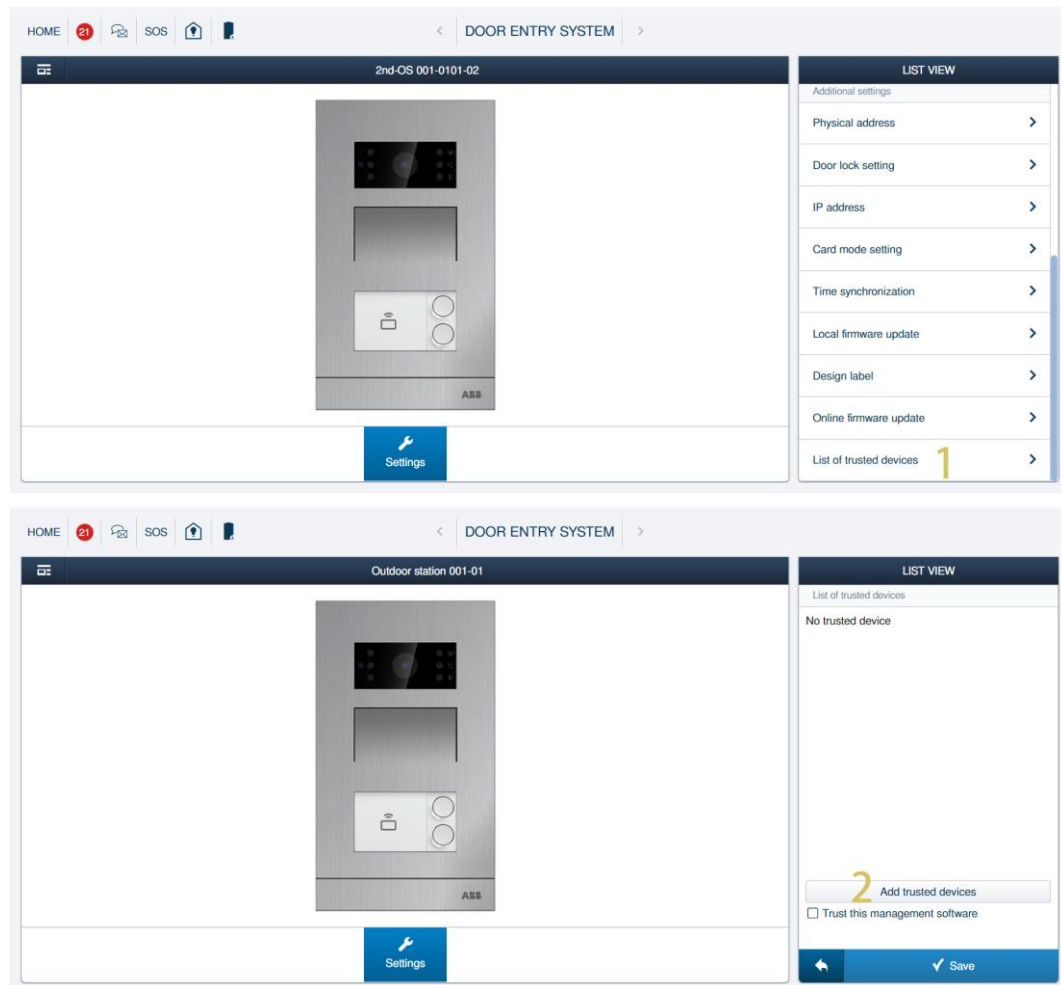
If you want to release the lock on the Outdoor Station, you need to check:

- The Indoor Station and the Outdoor Station have been signed on "Smart Access Point".
- The Indoor Station has been added on the trusted list on the Outdoor Station.

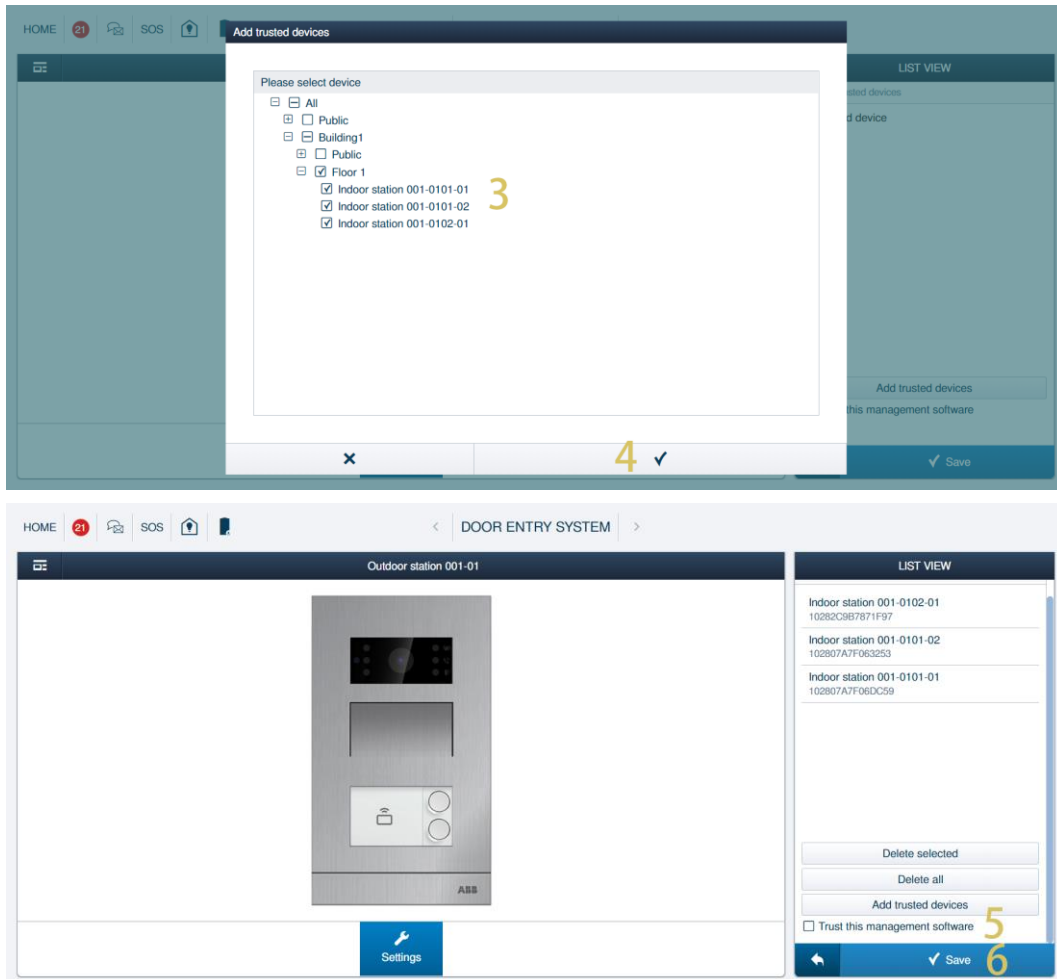
Please follow the steps below to add the trusted device:

[1] On the designated Outdoor Station screen, go to the "Additional settings" section, click "List of trusted devices".

[2] Click "Add trusted devices".



- [3] Select the designated Indoor Stations to trusted list.
- [4] Click "✓" to confirm.
- [5] [Optional] You need to enable the "Trust this management software" function if you want this Outdoor Station to unlock in the event of an emergency.
- [6] Click "Save".

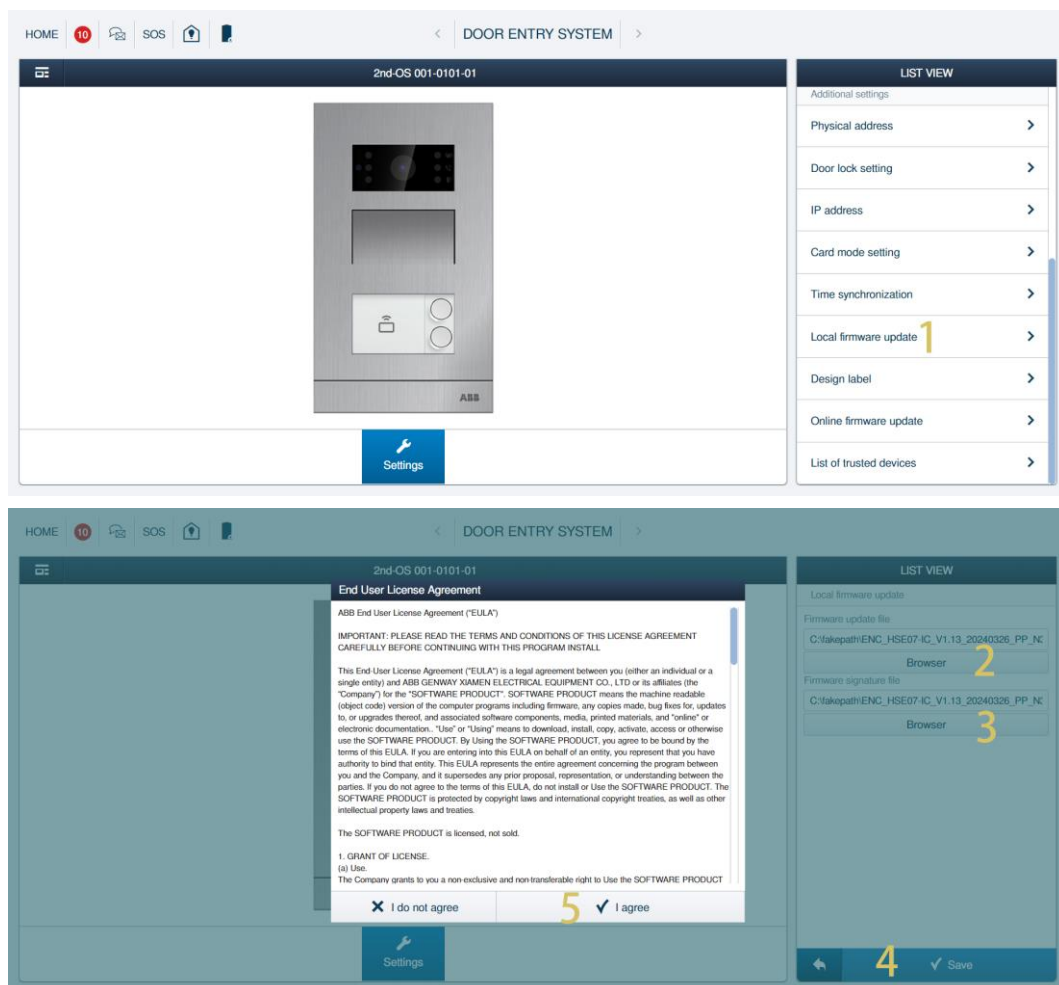


8.2.11 Updating the firmware

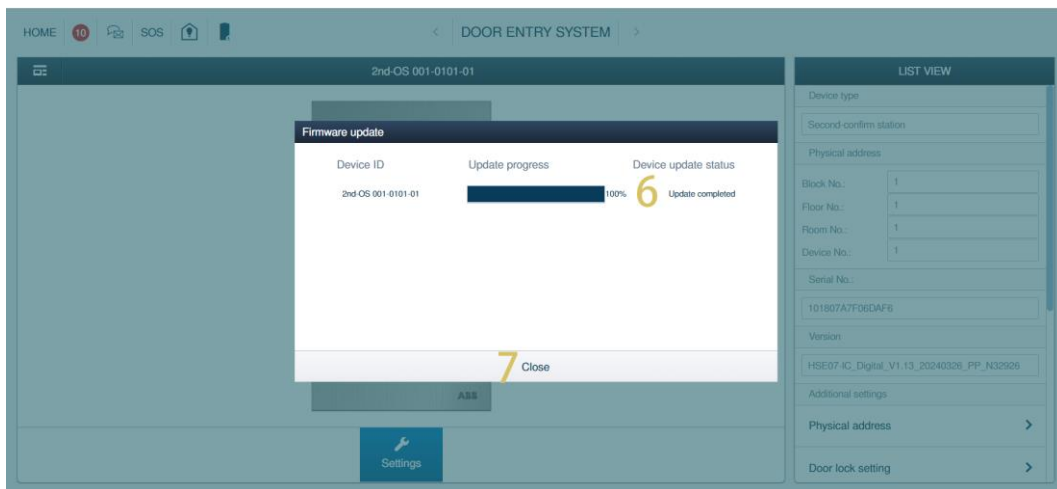
1. Local firmware update

Please follow the steps below:

- [1] On the designated Outdoor Station screen, click "Local firmware update".
- [2] Click "Browser" to select the update file (.img).
- [3] Click "Browser" to select the signature file (.sig).
- [4] Click "Save".
- [5] Click "I agree" to accept the end user license agreement.



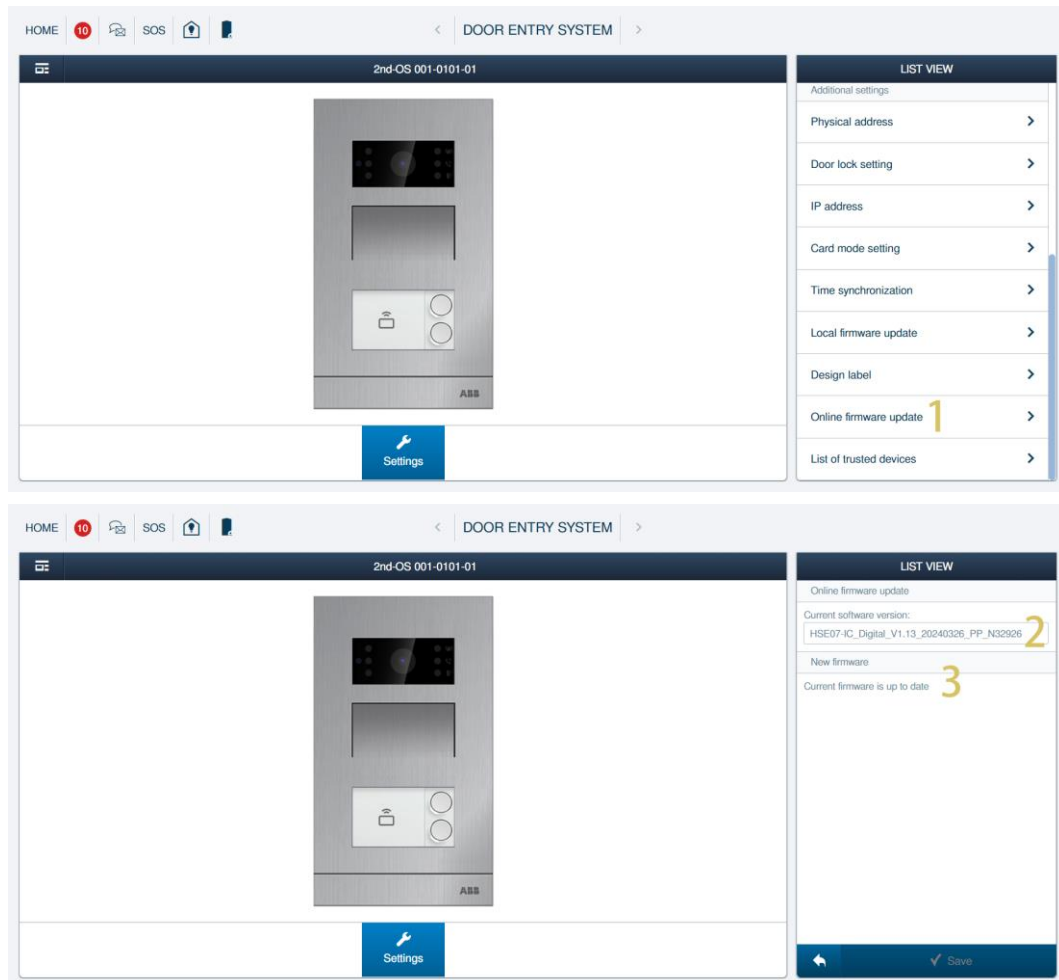
- [6] Update status will be displayed.
- [7] Click "Close" when the update is completed.



2. Online firmware update

Please follow the steps below:

- [1] On the designated Outdoor Station screen, click "Online firmware update".
- [2] Current firmware version will be displayed.
- [3] "Current firmware is up to date" will be displayed if no newer version is available.



8.3 Card management

The chapter applies to the Outdoor Station integrated with ID or IC card reader.

**Note**

It is recommended that ID or IC cards are created and maintained using local outdoor station or management software only.

1. Card management on local outdoor station

Initiate status

When the device is powered on the first time, all 3 indicators flash in red, orange & green.

Create admin card

The first card swiped after powering up the device within 60 seconds will be as the admin card.

Function	Action	Unlock indicator
Create admin card	Swipe card 1x	Green

Enter settings

In standby status, swipe the admin card once to enter the settings.

Function	Action	Unlock indicator
Enter settings	Swipe admin card 1x	Orange

Normal settings

After entering the settings, following functionalities can be implemented:

Function	Action	Unlock indicator
Enrol user	Swipe admin card 1x	Orange flashes 1x
	Swipe user card 1x	Green
Delete user	Swipe admin card 2x	Orange flashes 2x
	Swipe user card 1x	Green
Enrol new admin	Swipe admin card 3x	Orange flashes 3x
	Swipe new admin card 1x	Green
Delete admin	Swipe admin card 4x	Orange flashes 4x
	Swipe other admin card 1x	Green
Delete all users	Swipe admin card 5x	Orange flashes quickly
	Swipe admin card 1x	Green

During setting, please swipe the same admin card.

Function	Action	Unlock indicator
Exit settings	Swipe admin card 1x or no cards swiped within 15 seconds	--

Function	Action	Unlock indicator
Open a door	Swipe the enrolled keycard	Green

Technical data of ID card

Used frequency	Standard
125KHz	EM4100, EM4205, EM4305, EM4450, TK4100, T5567/T5577

Technical data of IC card

Operating frequency	13,56 MHz
Standard	ISO 14443A
Support card	Mifare one S50/S70, Mifare desfire EV1/EV2
Output format	Wiegand 26/34 bit

**Note**

A maximum of 64 ID cards can be supported.

A maximum of 64 IC cards can be supported.

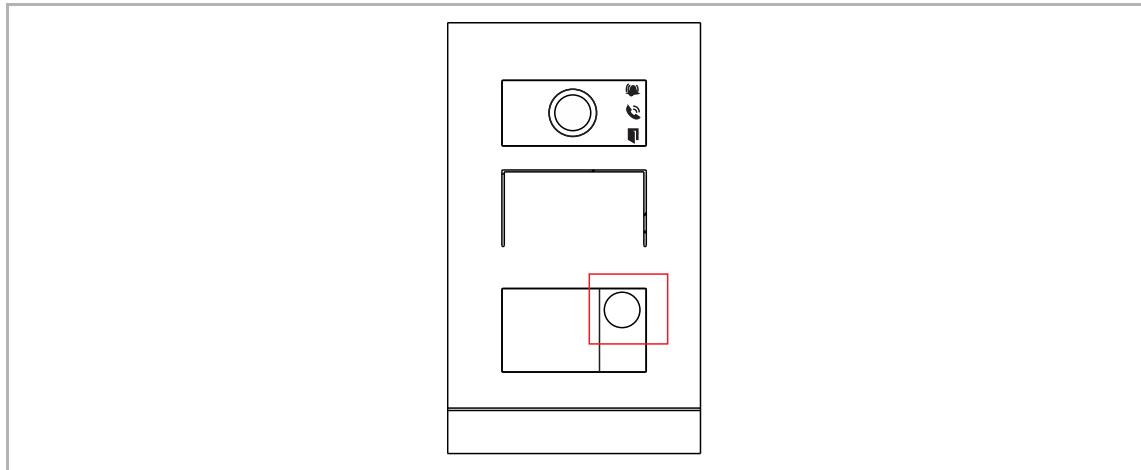
2. Card management on management software

Please see the "Management software" product manual for more details.

8.4 Restoring to factory default

Please follow the steps below:

- [1] Power on the Outdoor Station, wait until all 3 LED indicators go out.
- [2] Within 2 minutes of powering on the Outdoor Station, press and hold the first pushbutton for 5 seconds until all 3 LED indicators flash.
- [3] Press and hold the first pushbutton again for the 10 seconds until the Outdoor Station emit a "di" sound and 3 LED indicators go out.



9 Cyber security

9.1 Disclaimer

These products are designed to be connected and to communicate information and data via a network interface, which should be connected to a secure network. It is customer's sole responsibility to provide and continuously ensure a secure connection between the product and customer's network or any other network (as the case may be) and to establish and maintain appropriate measures (such as but not limited to the installation of firewalls, application of authentication measures, encryption of data, installation of antivirus programs, etc.) to protect the product, the network, its system and interfaces against any kind of security breaches, unauthorized access, interference, intrusion, leakage and/or theft of data or information. ABB and its affiliates are not liable for damages and/or losses related to such security breaches, unauthorized access, interference, intrusion, leakage and/or theft of data or information.

Although ABB provides functionality testing on the products and updates that we release, you should institute your own testing program for any product updates or other major system updates (to include but not limited to code changes, configuration file changes, third party software updates or patches, hardware change out, etc.) to ensure that the security measures that you have implemented have not been compromised and system functionality in your environment is as expected.

9.2 Performance and service

Network performance

Type	Value
Ethernet	24 Mbps (37,449 packets/sec)
ARP	12 Mbps (18,724 packets/sec)
ICMP	22 Mbps (34,328 packets/sec)
IP	22 Mbps (34,328 packets/sec)

Port and service

Port	Service	Purpose
5070	UDP	To be used by SIP client.
7777	TCP/UDP	To be used for device management.
10777	TLS	Secure channel for device management
7005	TCP	To be used for connectivity detection when this feature is enabled.
8887	TCP	To be used for firmware update.

9.3 Deployment guideline

All devices need to work in security mode by default and. all devices in one system shall be signed by a public CA at commissioning stage, normally management software acts as CA.

It's suggested that compatible mode only to be used when device needs to communicate with previous generation products. In this mode, data transmission between devices are not encrypted, it may lead to data leaks and has the risk of being attacked.

When user decide to remove the device from system, user shall reset the device to factory setting in order to remove all the configuration data and sensitive data in the device. This will prevent sensitive data leak.

It is recommended to apply "MAC filter" and "Rate limiter" in the switch to prevent DOS attack.

9.4 Upgrading

Device supports firmware updates via management software, a signature file will be used to verify the authentication and integrity of firmware.

9.5 Backup/Restore

None.

9.6 Malware prevention solution

The device is not susceptible to malware, because custom code cannot be executed on the system. The only way to update the software is via firmware upgrades. Only firmware signed by ABB can be accepted.

10 Notice

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