2TMD042200D0021 | 13.12.2023

Product manual

Busch-Welcome® IP

H8131.P.-.-03 Mini video outdoor station
H8136.P.-.-03 Mini video outdoor station

BUSCH-JAEGER

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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. Busch-Jaeger 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 Busch-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 Busch-Jaeger devices

All packaging materials and devices from Busch-Jaeger 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.

Busch-Jaeger 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)

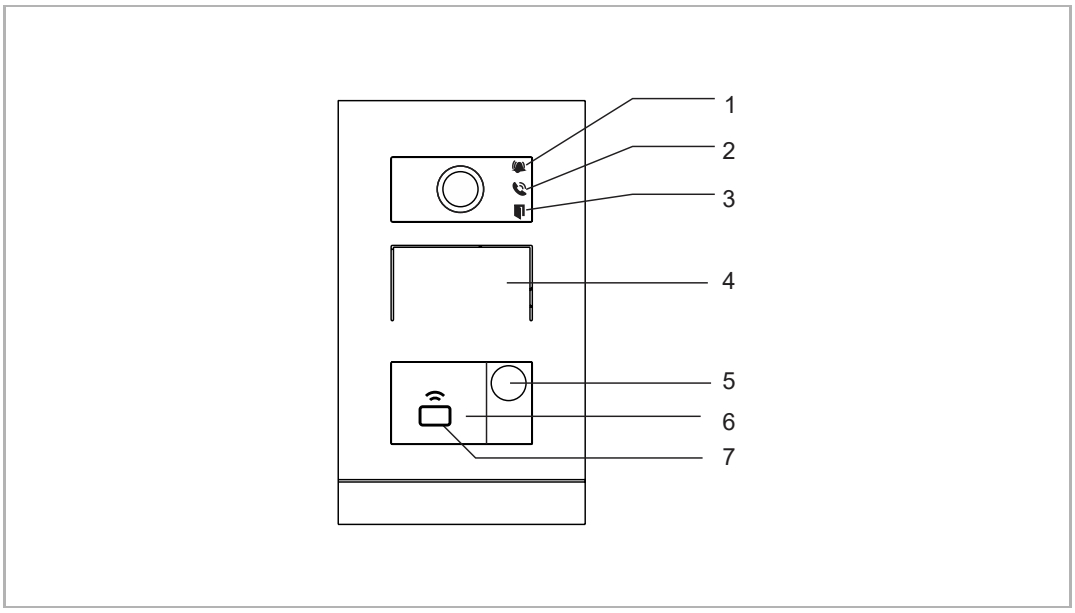
(EU-REACH ordinance and law for the implementation of the ordinance (EG) No.1907/2006)

5 Product description

5.1 Device type

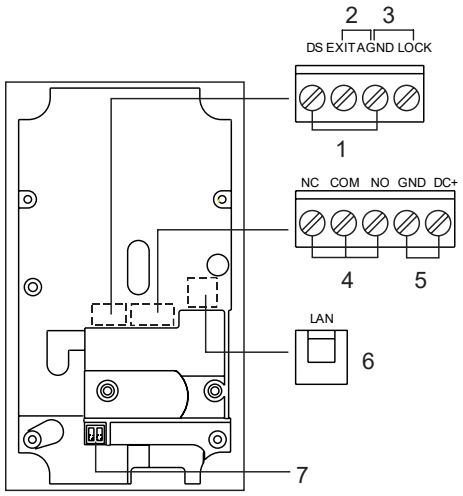
Article number	Product ID	Product name	Colour	Size (HxWxD) Unit: mm
H81313P1-A-03	2TMA130010A0003	Mini video outdoor station, 1 gang, ID, SM	Aluminum alloy	99 x 168 x 26
H81313P2-A-03	2TMA130010A0006	Mini video outdoor station, 2 gang, ID, SM	Aluminum alloy	99 x 168 x 26
H81363P1-A-03	2TMA130010A0009	Mini video outdoor station, 1 gang, ID,FM	Aluminum alloy	105 x 180 x 43
H81363P2-A-03	2TMA130010A0012	Mini video outdoor station, 2 gang, ID, FM	Aluminum alloy	105 x 180 x 43
H81364P1-A-03	2TMA130010A0015	Mini video outdoor station, 1 gang, FM	Aluminum alloy	105 x 180 x 43
H81316P1-A-03	2TMA130010A0016	Mini video outdoor station, 1 gang, IC/DESFire, SM	Aluminum alloy	99 x 168 x 26
2TMA130010A0017	H81316P2-A-03	Mini video outdoor station, 2 gang, IC/DESFire, SM	Aluminum alloy	99 x 168 x 26
2TMA130010A0018	H81366P1-A-03	Mini video outdoor station, 1 gang, IC/DESFire, FM	Aluminum alloy	105 x 180 x 43
2TMA130010A0019	H81366P2-A-03	Mini video outdoor station, 2 gang, IC/DESFire, FM	Aluminum alloy	105 x 180 x 43

5.2 Control elements



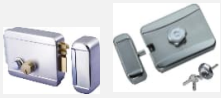
No.	Description
1	**Ring indicator** Indicator flashes slowly: ringing Indicator flashes quickly: busy line
2	**Call indicator**
3	**Unlock indicator**
4	Speaker and microphone integration
5	Call button
6	Label field
7	Integrated ID card reader

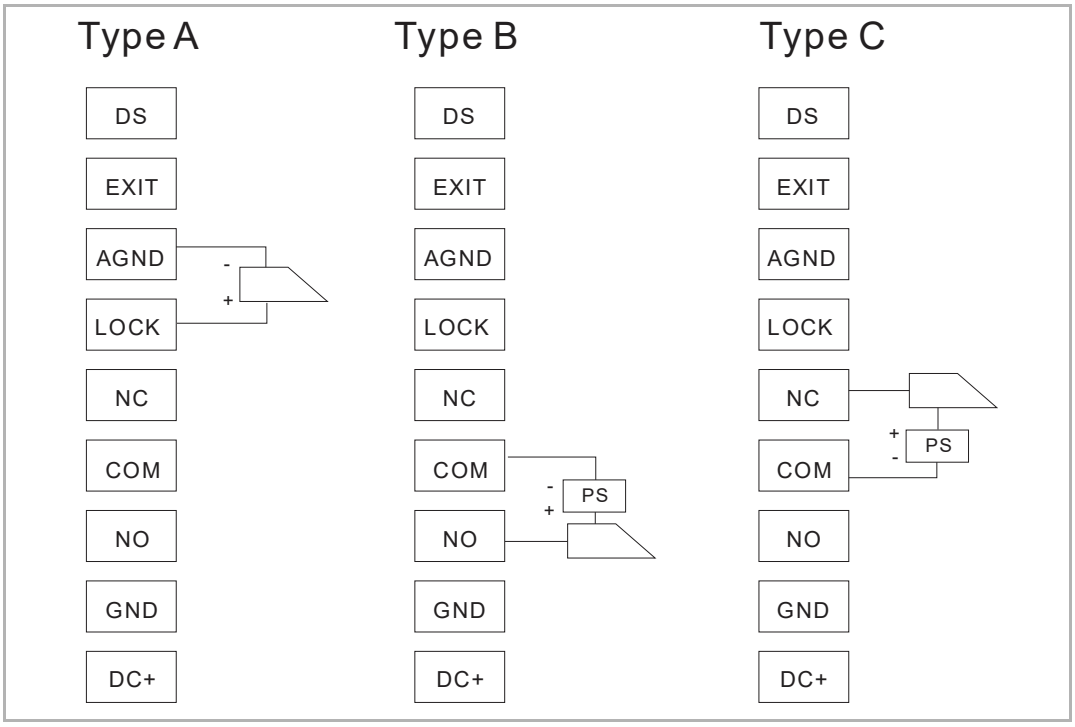
5.3 Terminal description



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 ⎓/~	Type A/B
Electrical strike lock, 24V		Power on to open	24 V ⎓/~	Type B
Electrical rim lock, 12 V		Power on to open	12 V ⎓	Type A/B
Electrical mortise lock		Power off to open	12 V ⎓	Type C
Magnetic lock		Power off to open	12/24 V ⎓	Type C



6 Technical data

Designation	Value
Rating voltage	24 V ⎓
Operating voltage range	20-27 V ⎓
Rating current	27 V ⎓, 310 mA 24 V ⎓, 350 mA
Operating temperature	-40 °C…+55 °C
Product dimensions	99 mm x 168 mm × 26 mm (H8131.P.-.) 105 mm x 180 mm × 43 mm (H8136.P.-.)
Camera type	CMOS
Camera viewing angle	104°
Power supply for door opener	15 V ⎓, 4A impulse, max. 250 mA holding
Floating output for door opener	30 V ⎓, 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.

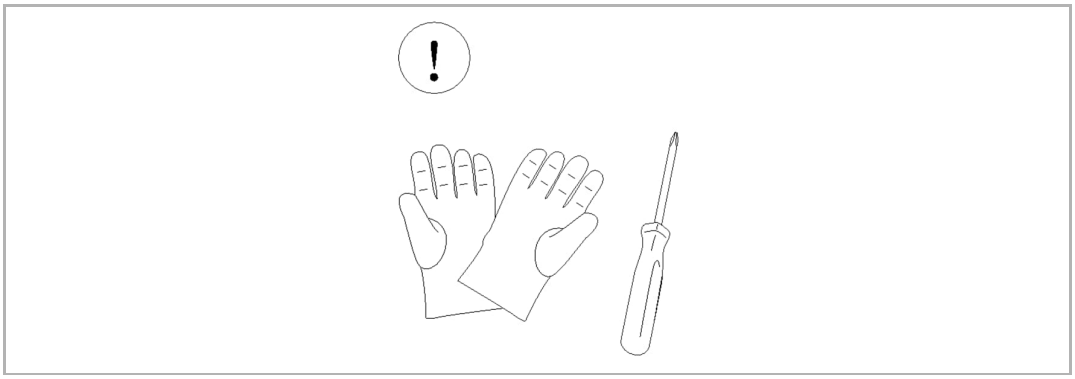
The minimum necessary expert knowledge and requirements for the installation are as follows:

– 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.).

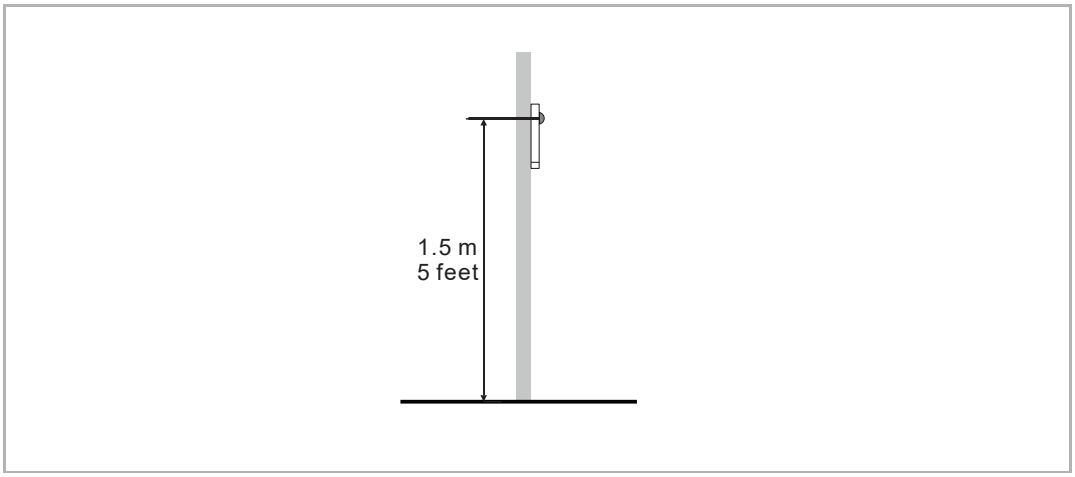
7.2 Mounting

7.2.1 Preparation

Use gloves to protect yourself against cuts.



7.2.2 Installation height



7.2.3 Installation situation

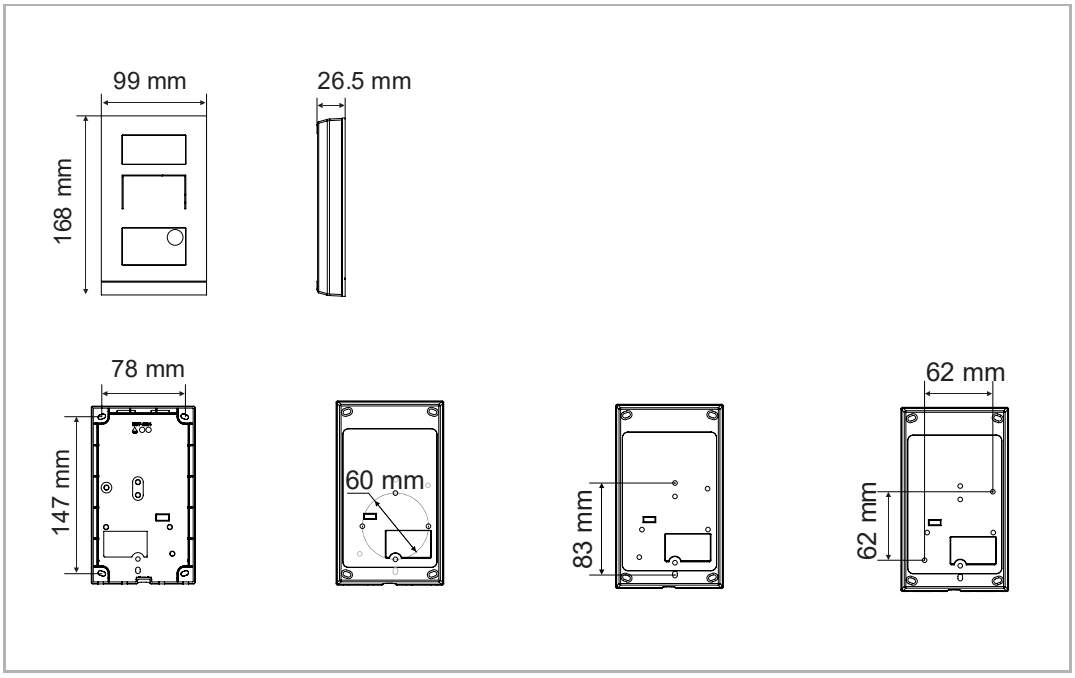
Note

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

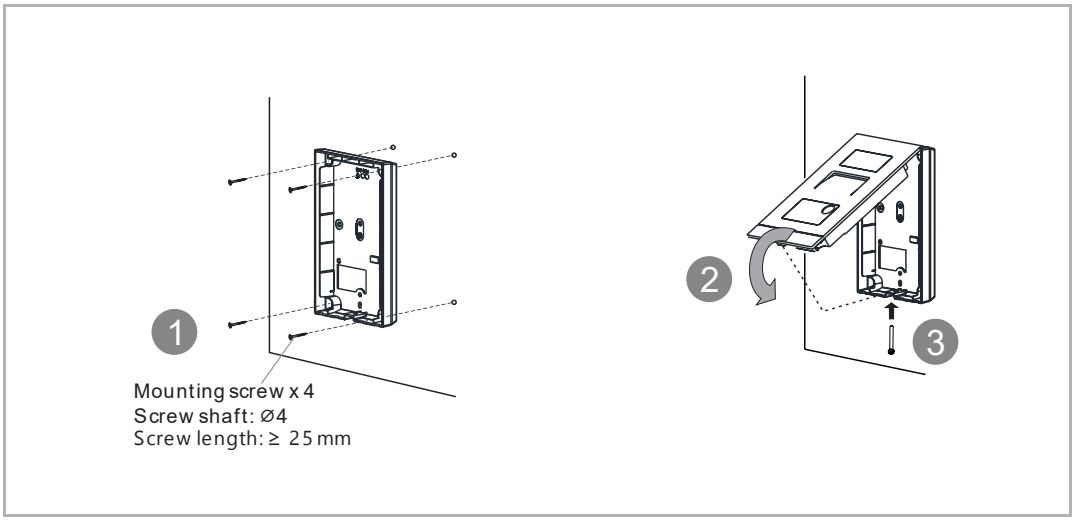
- Direct light
- Direct sunlight
- Extremely bright picture background
- Highly reflective walls on the opposite side of the door station

7.2.4 Surface-mounted installation

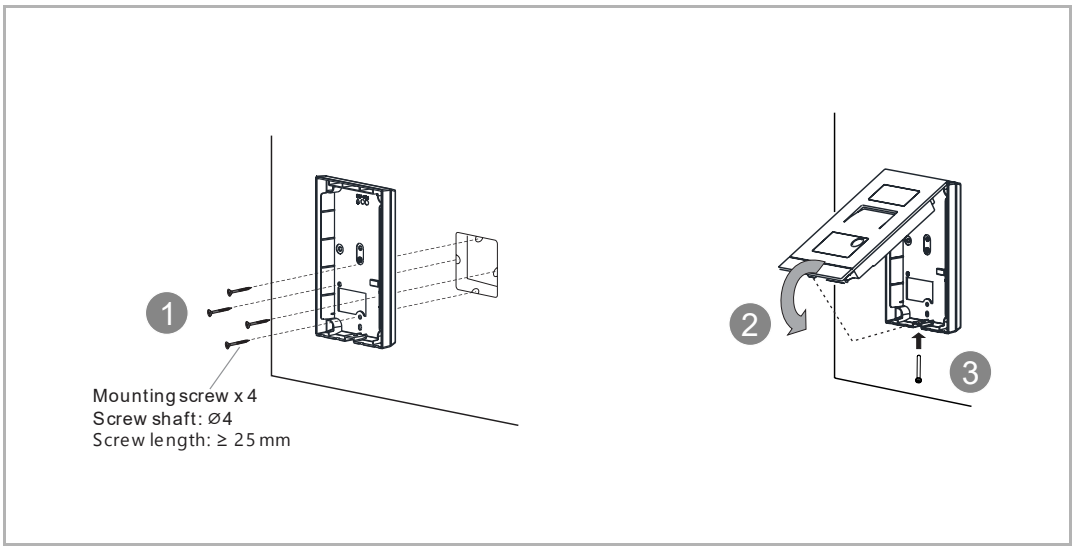
Product dimension



Surface-mounted on the wall

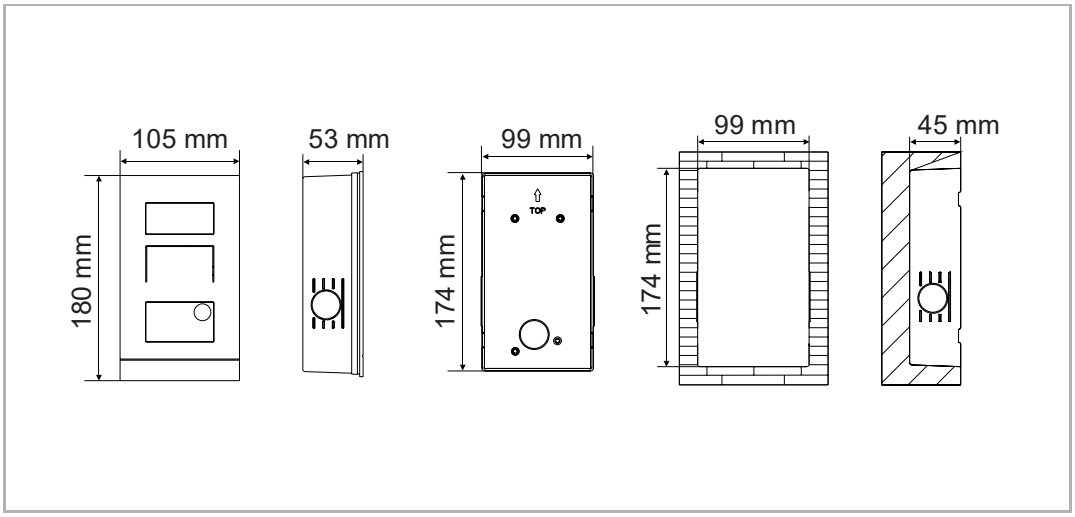


Surface-mounted on the box (e.g. VDE box)

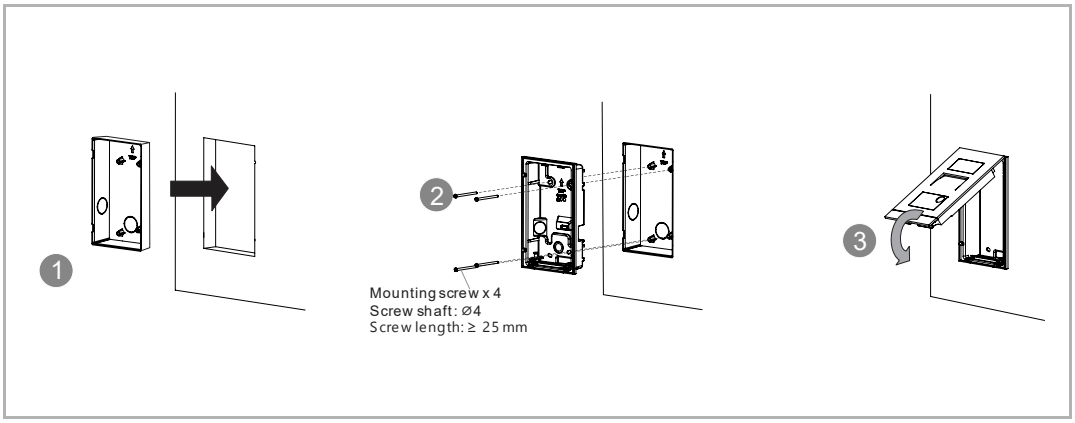


7.2.5 Flush-mounted installation

Product dimension

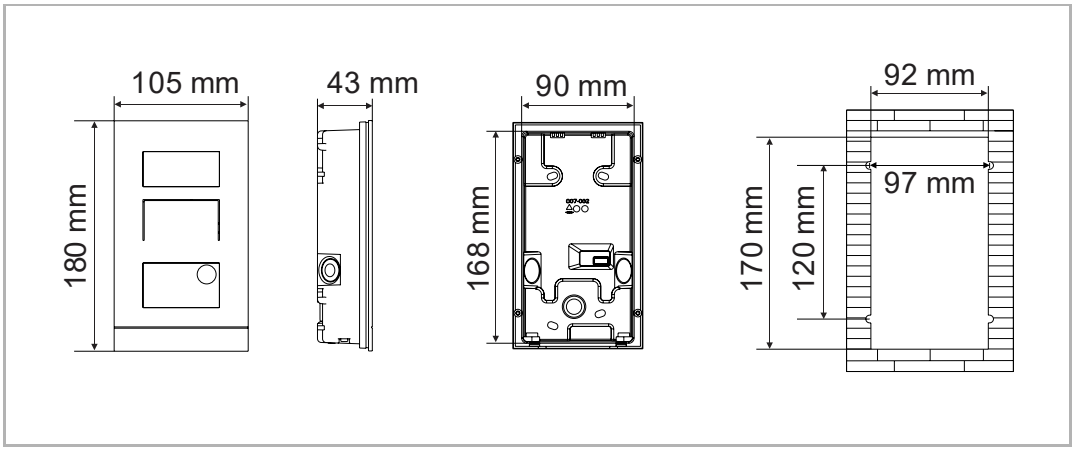


Flush-mounted with pre-installation box

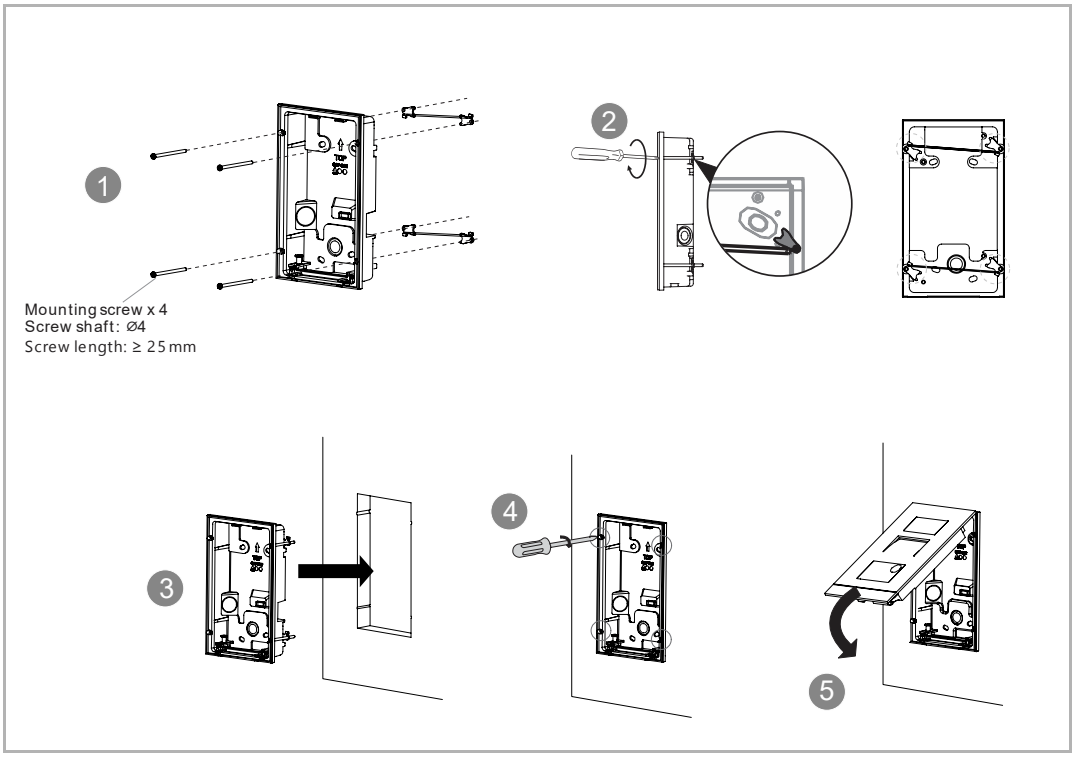


7.2.6 Cavity wall installation

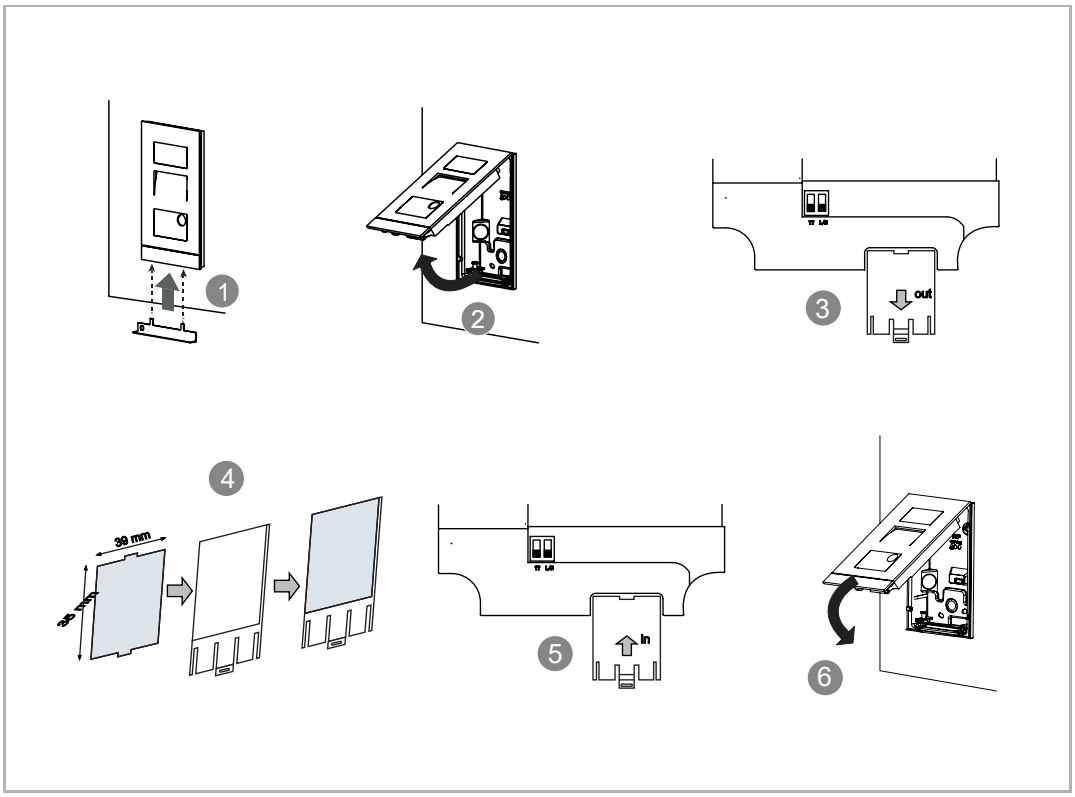
Product dimension



Mounting



7.2.7 Replacing the nameplate

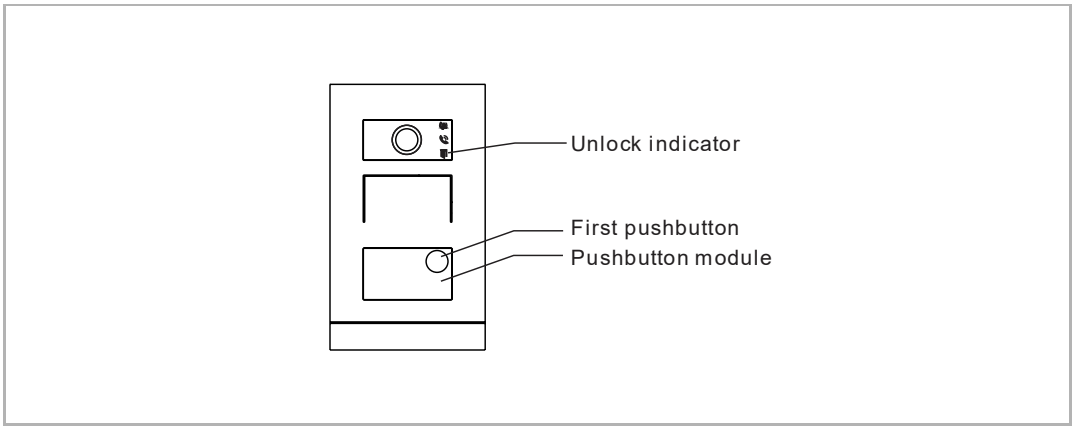


8 Commissioning

8.1 Configure the settings on indoor station

8.1.1 Enter engineering mode of outdoor station

Note
The mini outdoor station must be on the same network as the indoor station.

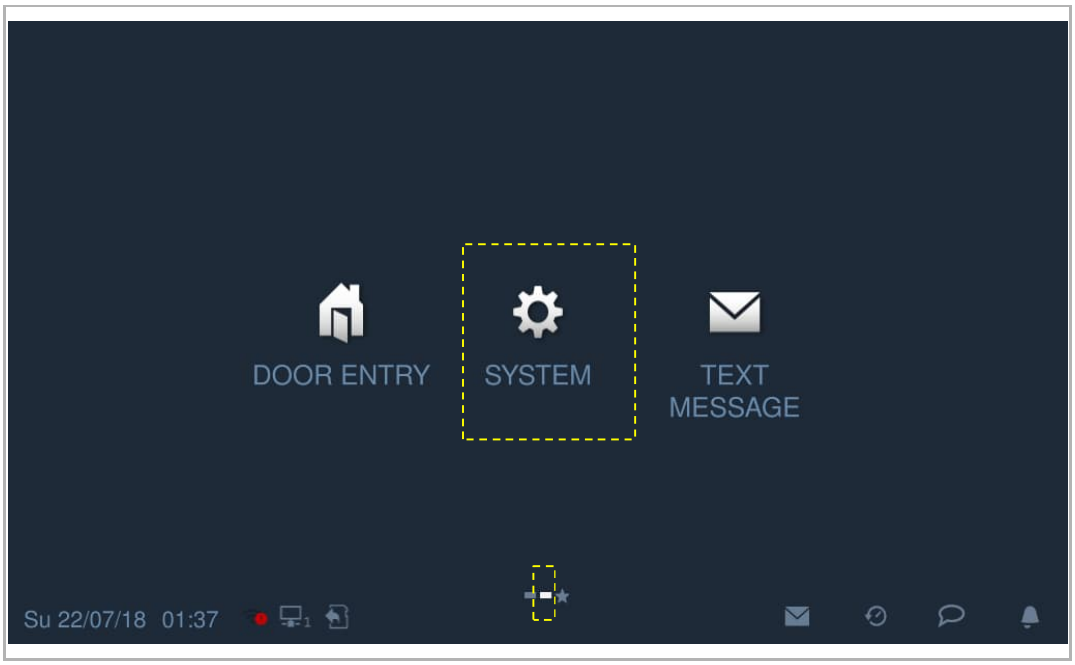


Please follow the steps below,

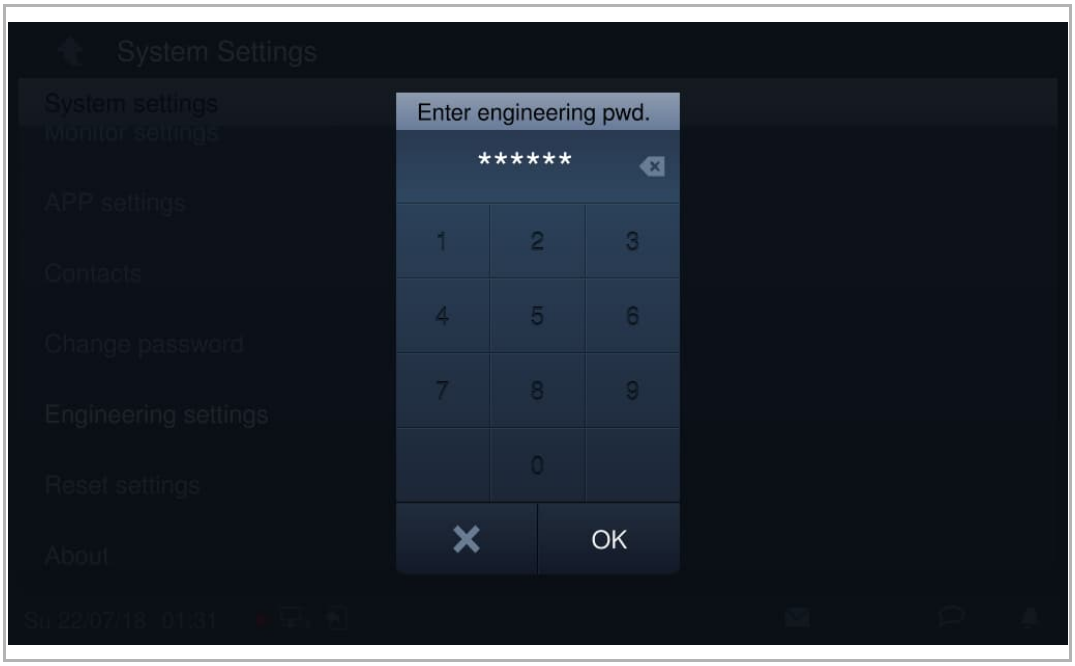
- Power up the mini outdoor station, the three indicators light up green.
- After a period of time, the three indicators go out.
- Press and hold the first pushbutton for 5 s.
- When the pushbutton module and the three indicators are flashing green at the same time, the mini outdoor station enters engineering mode.

8.1.2 Enter outdoor station through an indoor station

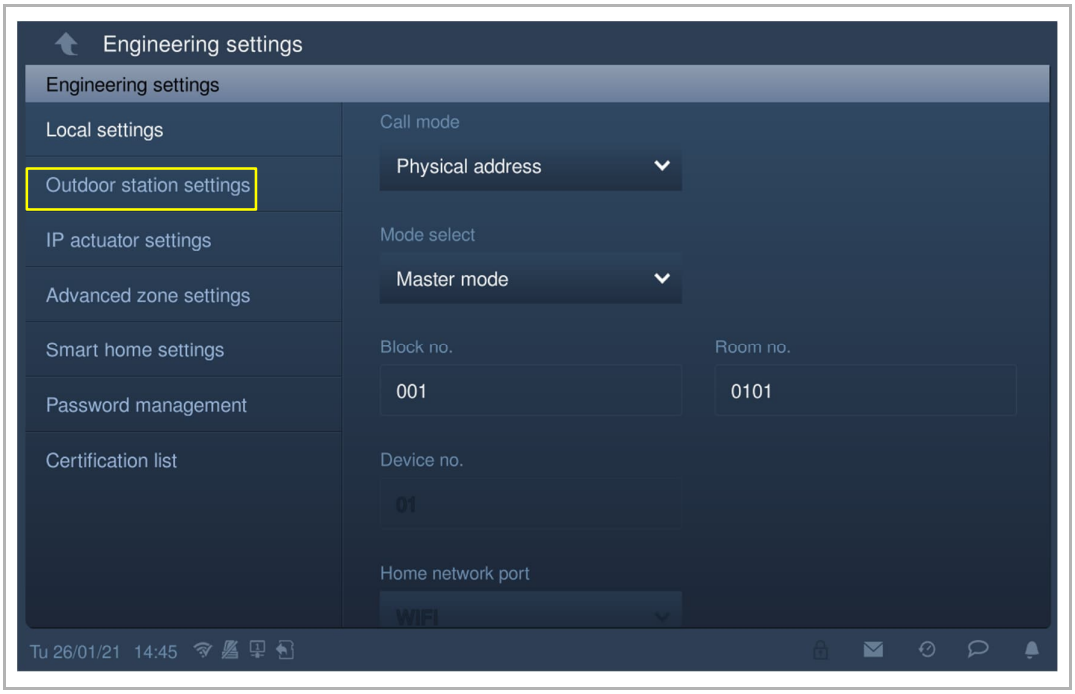
On the extra screen of indoor station, click "System" to access the corresponding screen.



On the "System settings" screen, click "Engineering settings", enter the engineering password to access the corresponding screen.



On the "Engineering settings" screen, tap "Outdoor station settings" to access the corresponding screen.



8.1.3 Device type settings

1. Device type = OS (outdoor station)

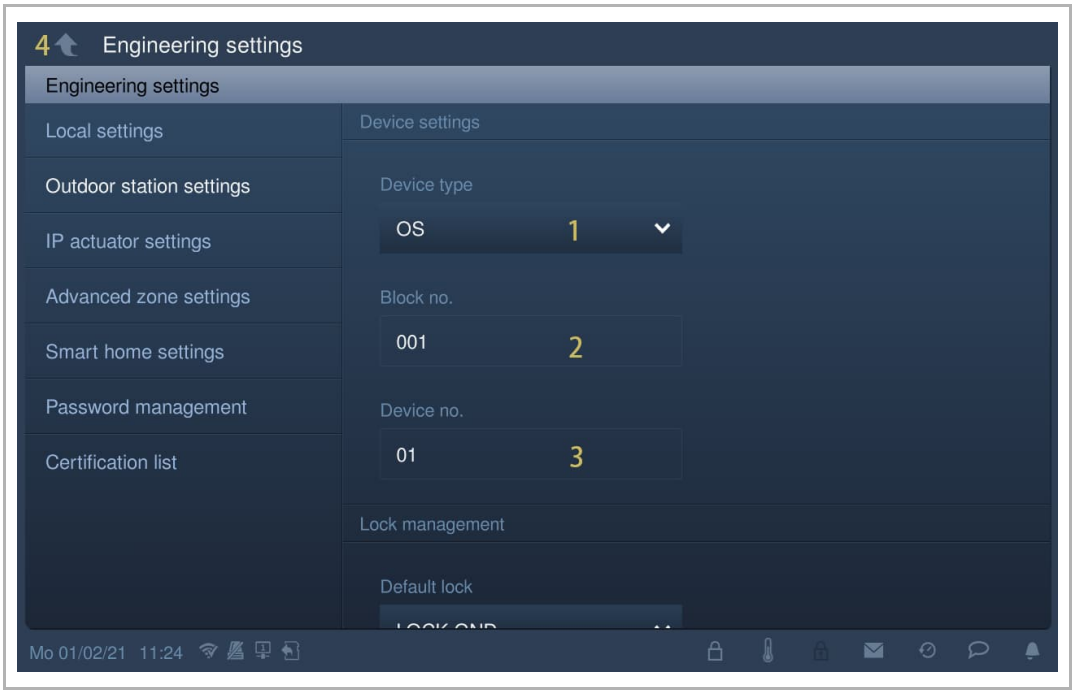
Please follow the steps below:

[1] On the "Outdoor station settings" screen, select "OS" from the drop-down list.

[2] Enter the block number (1…999).

[3] Enter the device number (1…64).

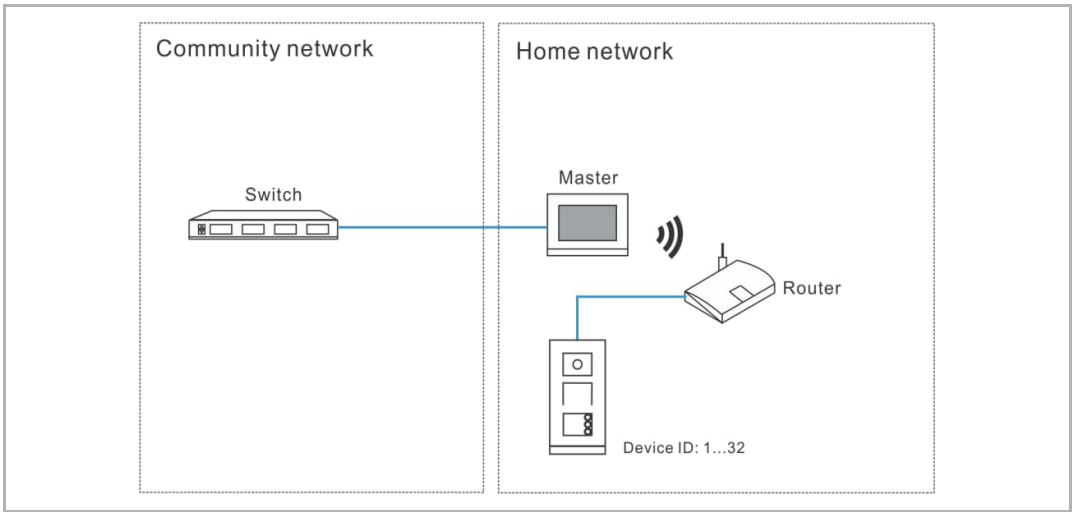
[4] Tap " " to exit the setting, tap "OK" to save the settings.



2. Device type = 2nd OS (2nd confirmed outdoor station)

Location of IP gateway = Internal

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



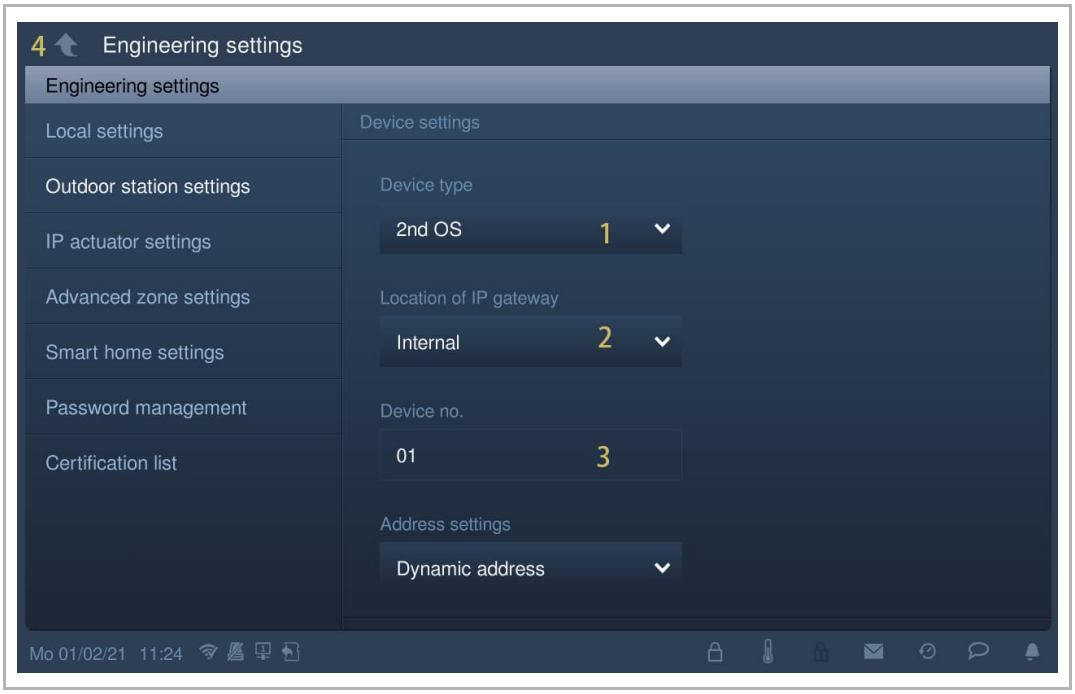
Please follow the steps below:

[1] On the "Outdoor station settings" screen, select "2nd OS" from the drop-down list.

[2] Select "Internal" from the drop-down list.

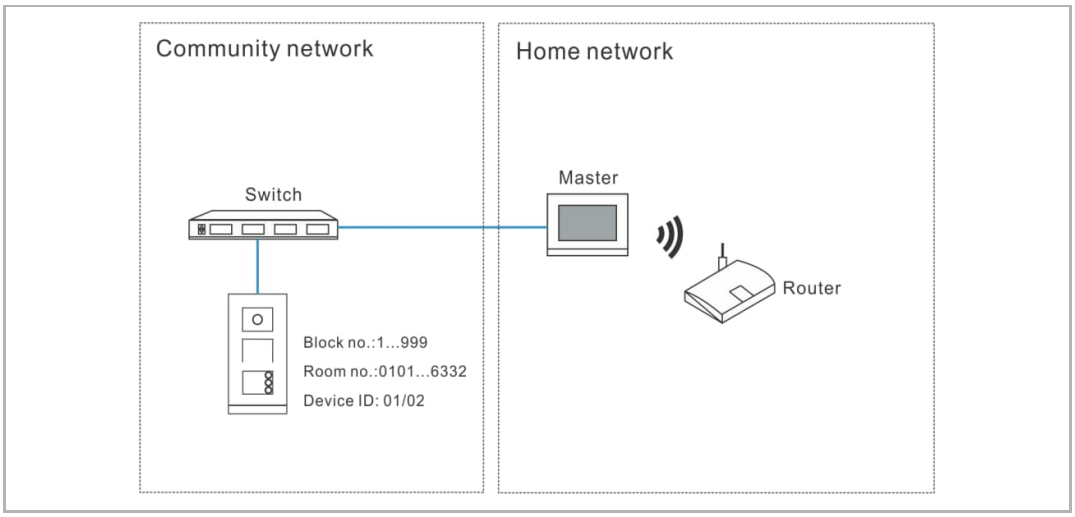
[3] Enter the device number (1…32).

[4] Tap " " to exit the setting, tap "OK" to save the settings.



Location of IP gateway = External

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



Please follow the steps below:

[1] On the "Outdoor station settings" screen, select "2nd OS" from the drop-down list.

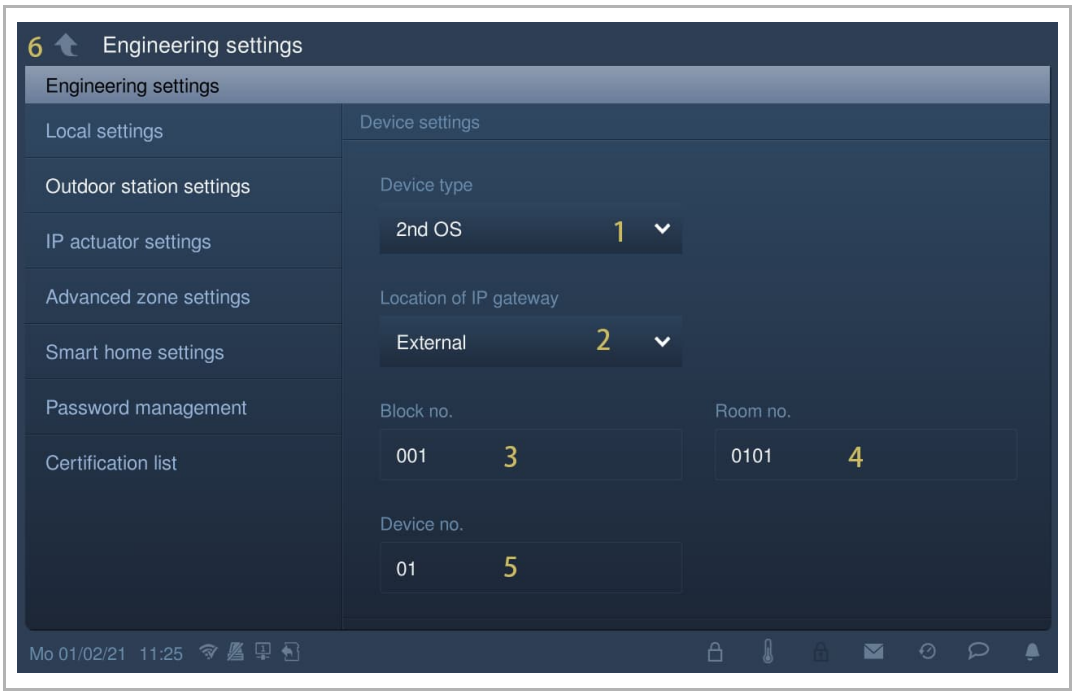
[2] Select "External" from the drop-down list.

[3] Enter the block number (1…999).

[4] Enter the room number (01…63 + 01…32 e.g. 0101).

[5] Enter the device number (1…2).

[6] Tap " " to exit the setting, tap "OK" to save the settings.



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

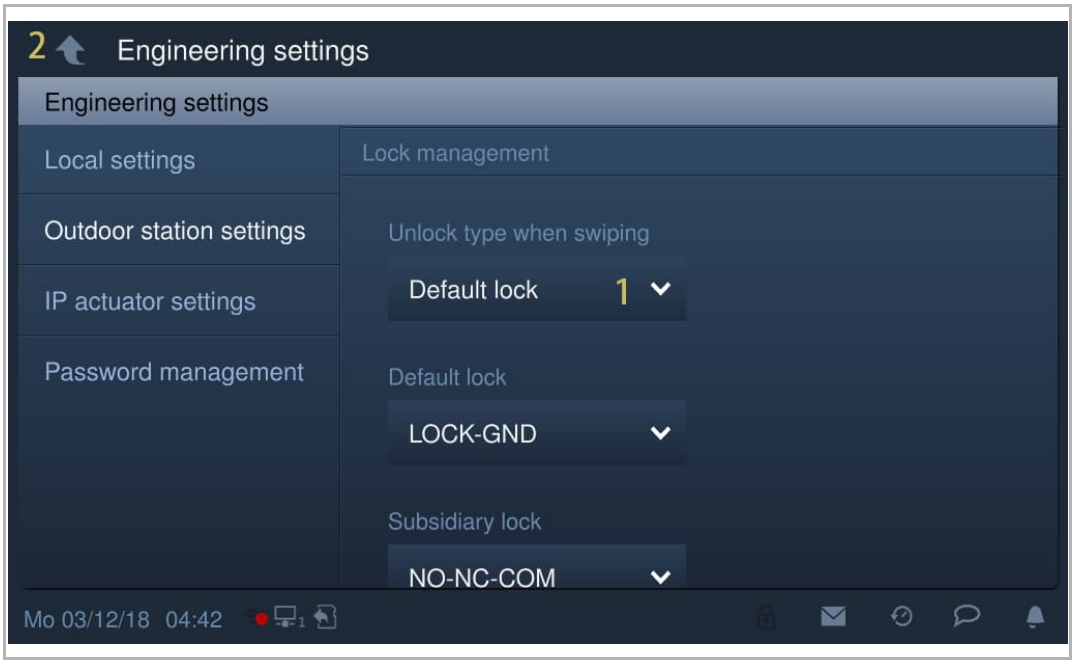
8.1.4 Unlock type when swiping setting

This setting applies to pushbutton outdoor stations with card reader only.

Please follow the steps below:

[1] On the "Outdoor station settings" screen, select unlock type from the drop-down list. It can be set to "Default lock" or "Subsidiary lock".

[2] Tap " " to exit the setting, tap "OK" to save the settings.



8.1.5 Default lock setting

Please follow the steps below:

[1] On the "Outdoor station settings" screen, select the lock type from the drop-down list. It can be set to "Lock-GND", "NO-NC-COM" or "IP Actuator".

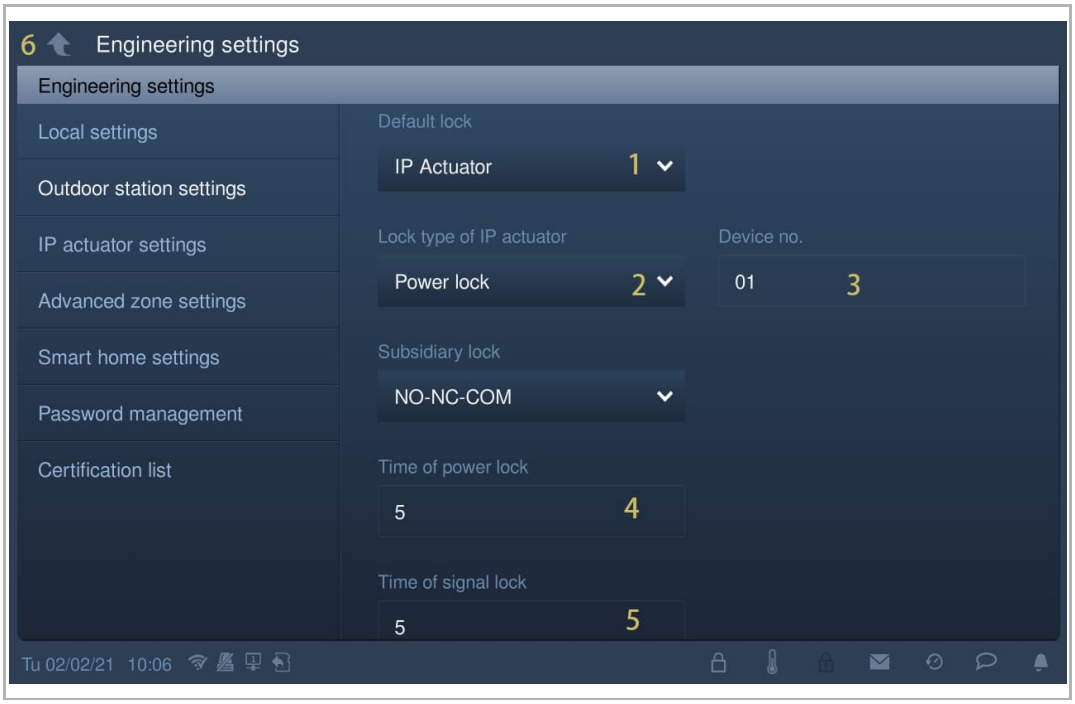
[2] If lock type = "IP actuator", you need to set the lock type from the drop-down list. It can be set to "Power lock" or "Relay lock" (optional).

[3] If lock type = "IP actuator", you need to set the device number of the IP actuator (optional).

[4] Enter the unlock time for the power lock (default 5 seconds).

[5] Enter the unlock time for the signal lock (default 5 seconds).

[6] Tap " " to exit the setting, tap "OK" to save the settings.



8.1.6 Subsidiary lock setting

Please follow the steps below:

[1] On the "Outdoor station settings" screen, select lock type from the drop-down list. It can be set to "Lock-GND", "NO-NC-COM" or "IP Actuator".

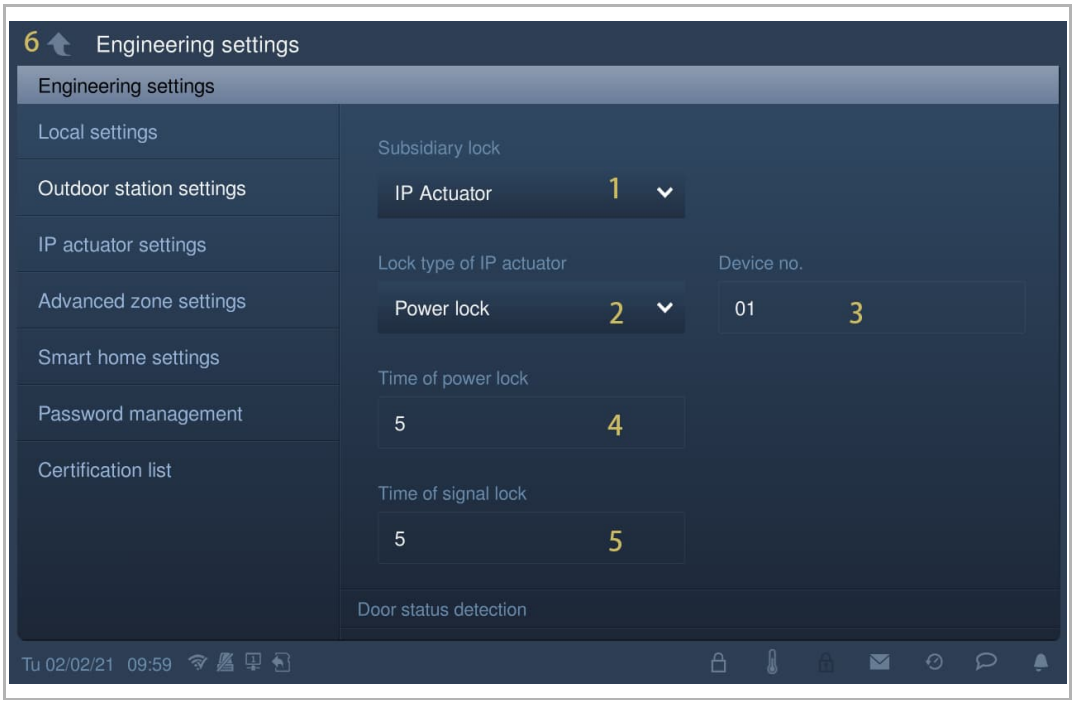
[2] If lock type = "IP actuator", you need to set the lock type from the drop-down list. It can be set to "Power lock" or "Relay lock" (optional).

[3] If lock type = "IP actuator", you need to set the device number of the IP actuator (optional).

[4] Enter the unlock time for the power lock (default 5 seconds).

[5] Enter the unlock time for the signal lock (default 5 seconds).

[6] Tap " " to exit the setting, tap "OK" to save the settings.



8.1.7 Door status detection setting

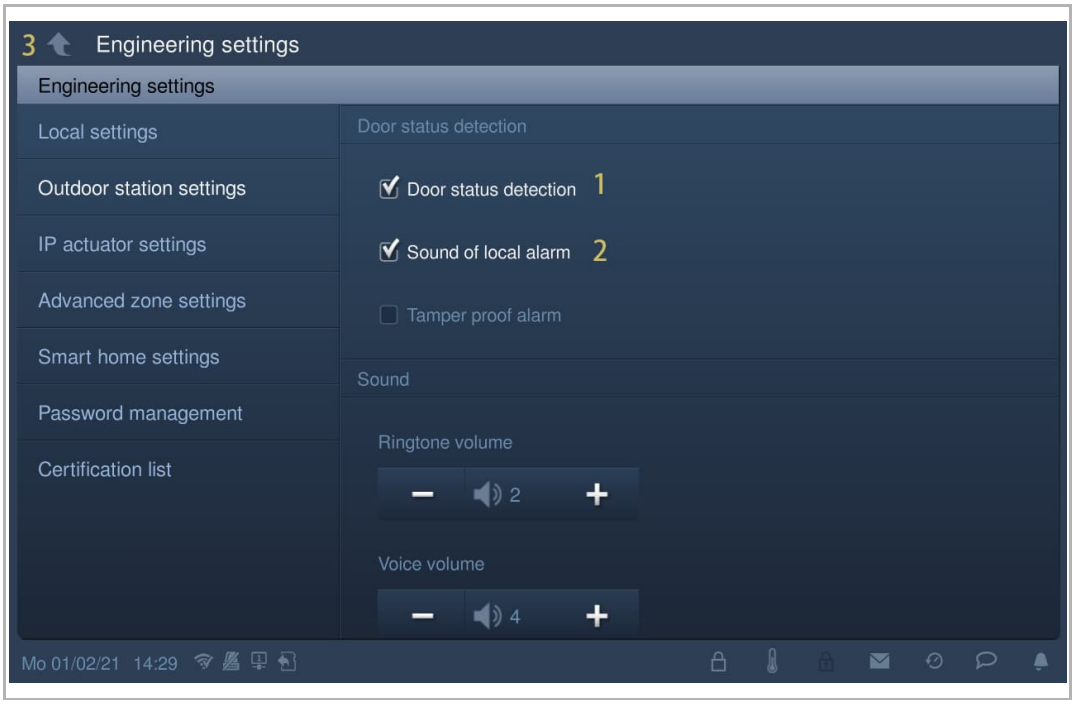
If this function is enabled, the IP touch will send an alarm to the management software when the door is open longer than 120 s (a sensor should first be connected to the outdoor station).

Please follow the steps below:

[1] On the "Outdoor station settings" screen, select the check box "Door status detection" to enable the function.

[2] If the function "Sound of local alarm" is enabled, the IP touch also sounds an alarm locally.

[3] Tap " " to exit the setting, tap "OK" to save the settings.



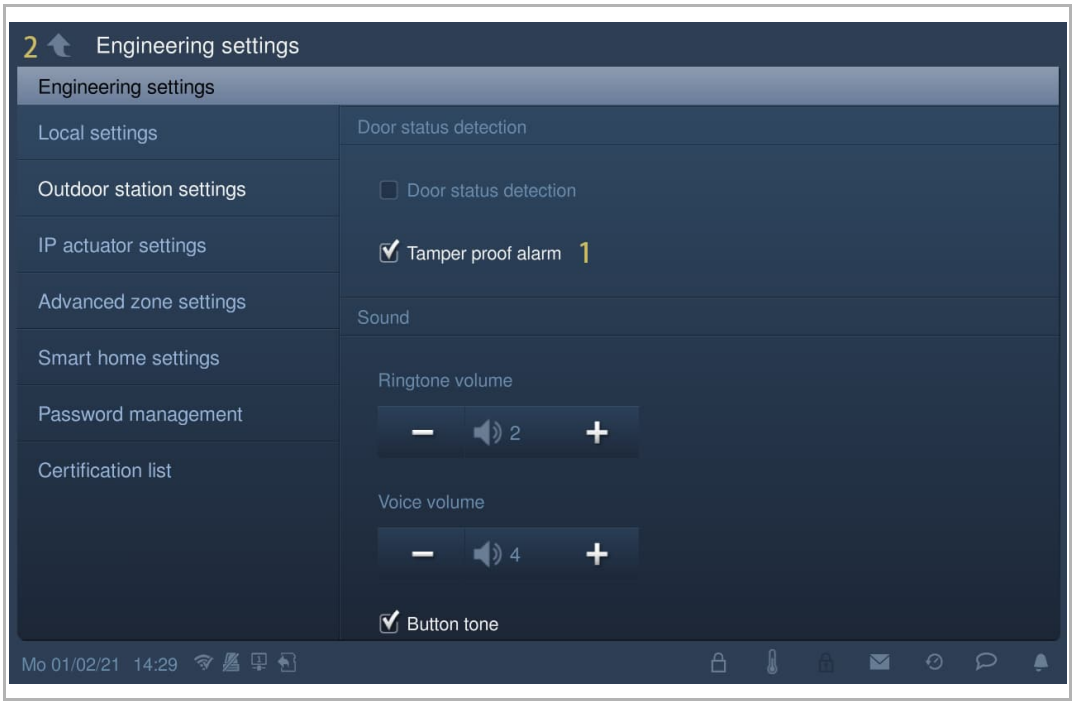
8.1.8 Tamper proof alarm setting

If this function is enabled, the IP touch will send an alarm to the management software if the outdoor station is removed from the wall.

Please follow the steps below:

[1] On the "Outdoor station settings" screen, select the check box "Tamper proof alarm" to enable the function.

[2] Tap " " to exit the setting, tap "OK" to save the settings.

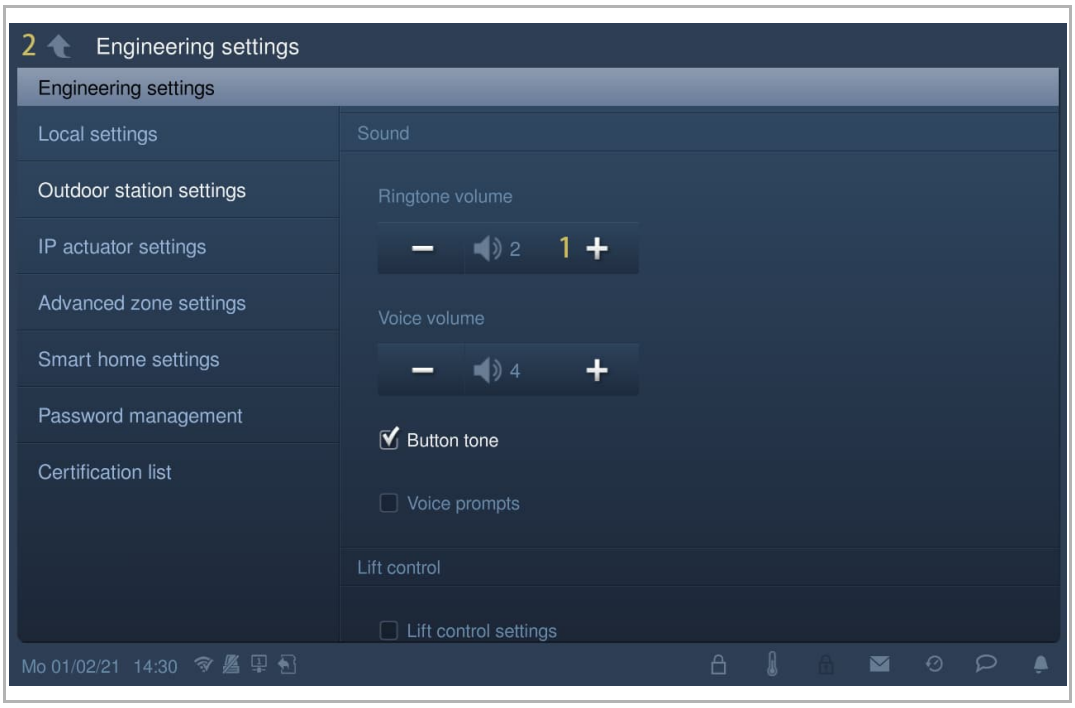


8.1.9 Ringtone volume setting

Please follow the steps below:

[1] On the "Outdoor station settings" screen, tap "+" or "-" to adjust the ringtone volume.

[2] Tap " " to exit the setting, tap "OK" to save the settings.



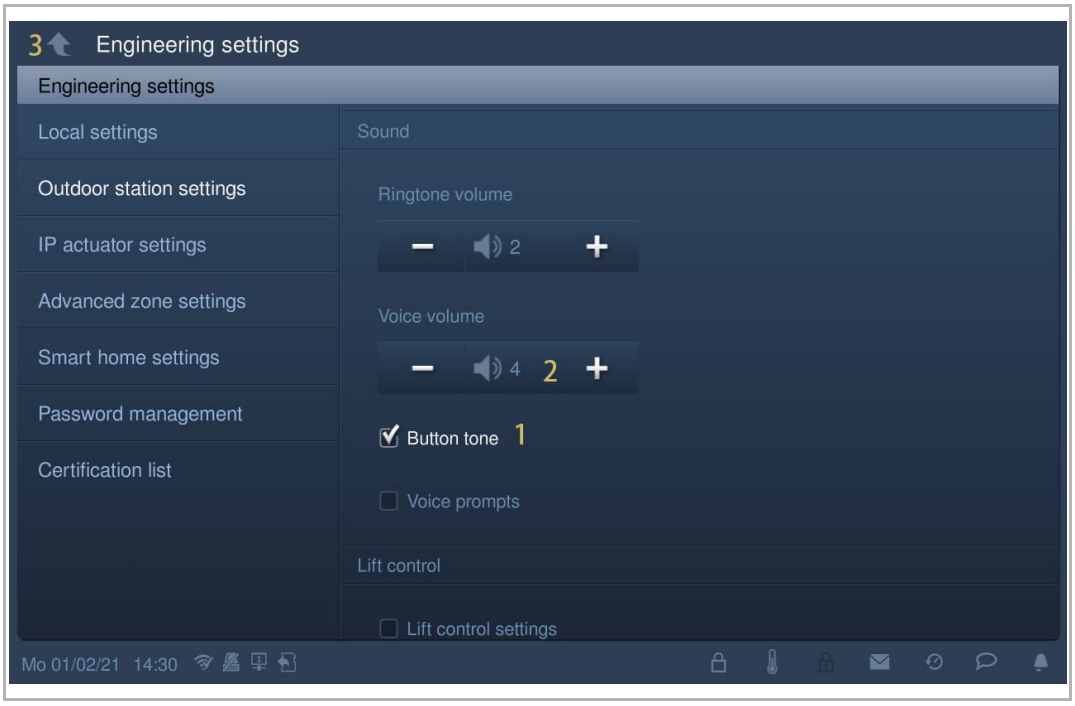
8.1.10 Button tone setting

Please follow the steps below:

[1] On the "Outdoor station settings" screen, tick the check box "Button tone" to enable the function.

[2] Tap "+" or "-" to adjust the voice volume.

[3] Tap " " to exit the setting, tap "OK" to save the settings.



8.1.11 Voice prompts setting

If this function is enabled, the outdoor station will play the sound for "Call in progress" during the operation.

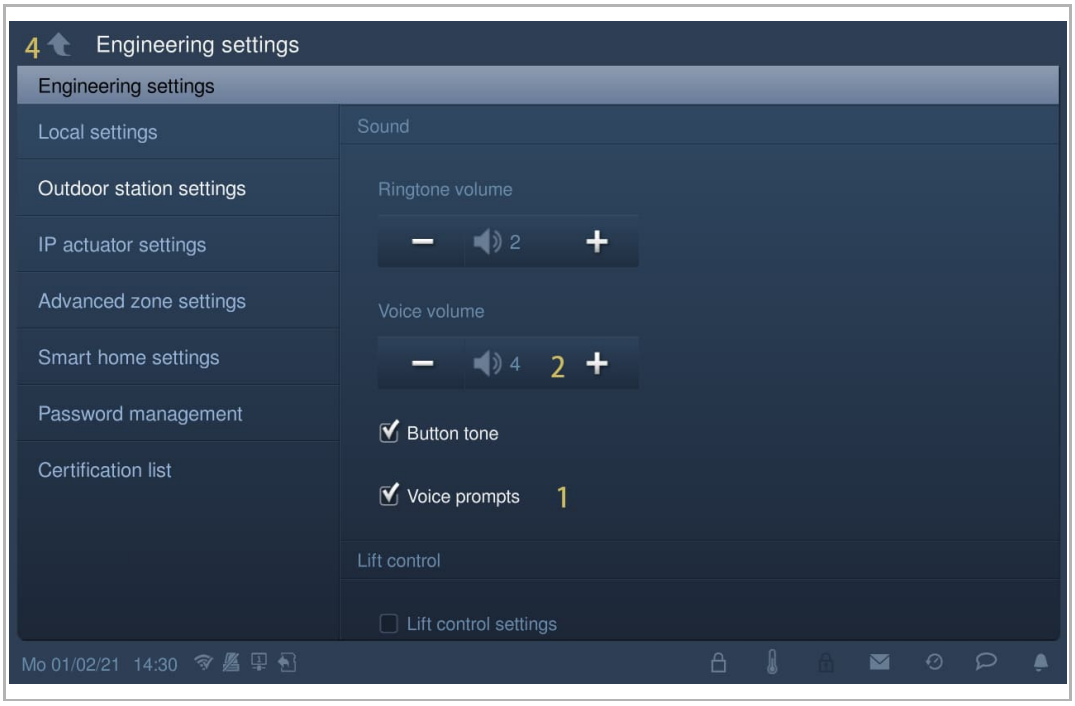
Please follow the steps below:

[1] On the "Outdoor station settings" screen, tick the check box "Voice prompts" to enable the function.

[2] Tap "+" or "-" to adjust the voice volume.

[3] The language of the voice prompt will be the same as the language setting.

[4] Tap " " to exit the setting, tap "OK" to save the settings.

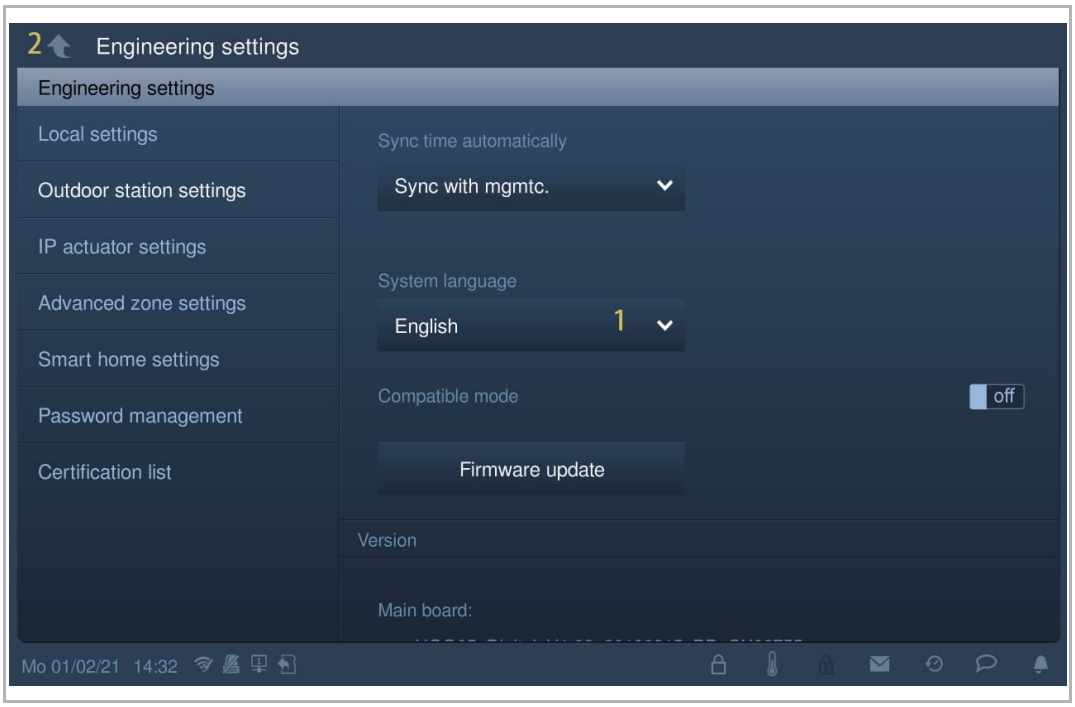


8.1.12 Language setting

Please follow the steps below:

[1] On the "Outdoor station settings" screen, select a language from the drop-down list.

[2] Tap " " to exit the setting, tap "OK" to save the settings.

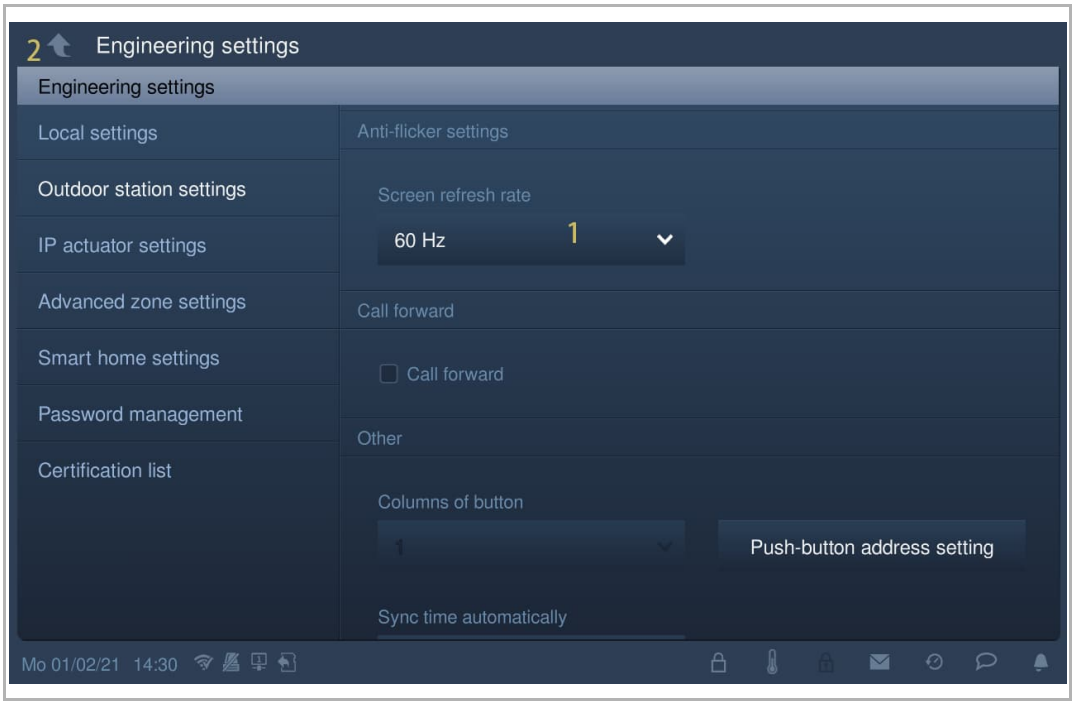


8.1.13 Anti-flicker setting

Please follow the steps below:

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

[2] Tap " " to exit the setting, tap "OK" to save the settings.



8.1.14 Call forward setting

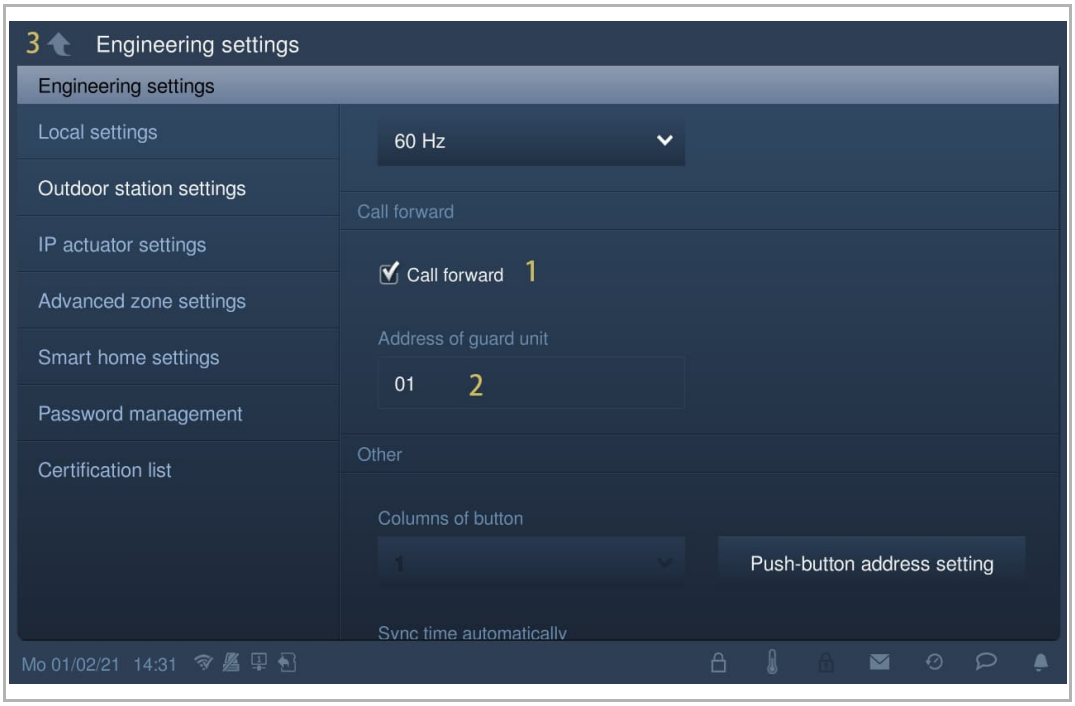
This setting is available when the device type of outdoor station is set to "OS" or "GS". If this function is enabled, each incoming call from this outdoor station will be transferred to the designated guard unit.

Please follow the steps below:

[1] On the "Outdoor station settings" screen, select the check box "Call forward" to enable the function.

[2] Enter the address of the designated guard unit (1…32).

[3] Tap " " to exit the setting, tap "OK" to save the settings.

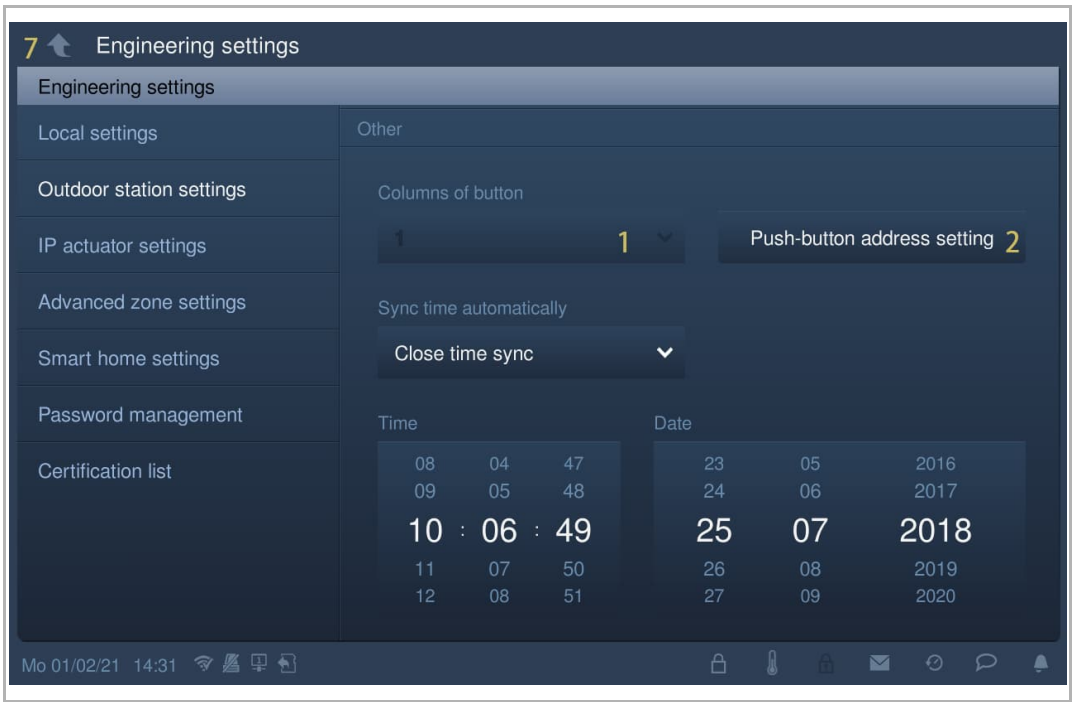


8.1.15 Push-button setting

Please follow the steps below:

[1] On the "Outdoor station settings" screen, select the columns of button from the drop-down list. This setting is only available when detecting the bar push-button module on the outdoor station. It can be set to "1" or "2" (optional).

[2] Tap "Push-button address setting".



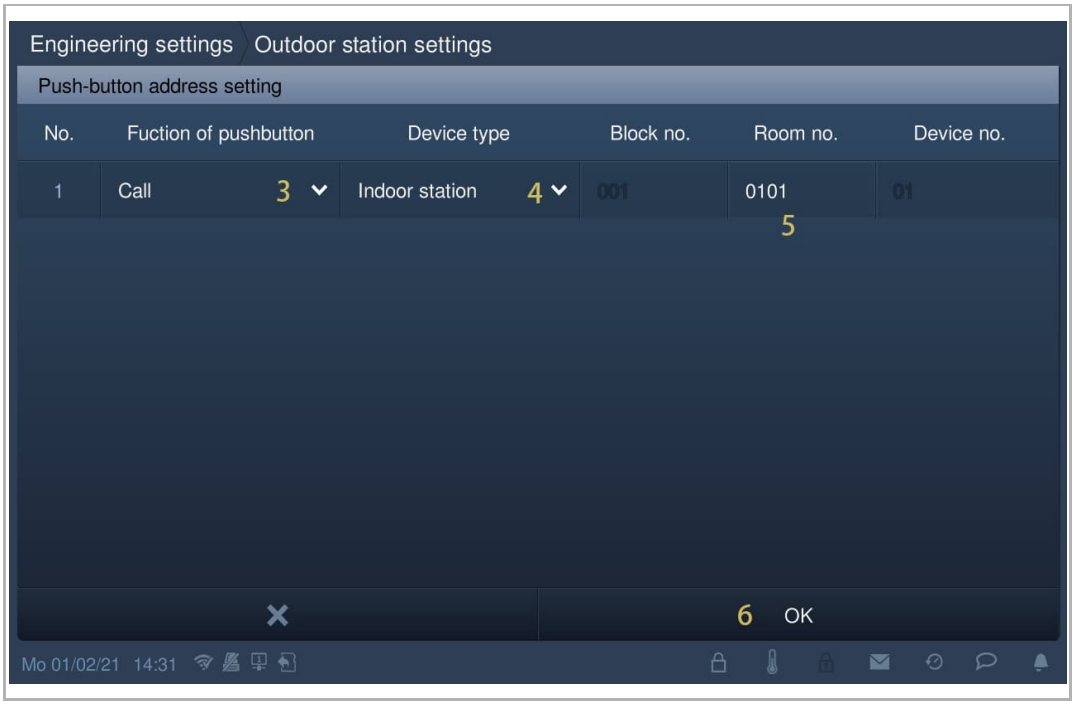
[3] Select the function from the drop-down list. It can be set to "Call", "Turn on the light" or "None".

[4] Select the device type from the drop-down list. It can be set to "Indoor station" or "Phone guard unit".

[5] Enter the address according to the device type.

[6] Tap "OK".

[7] Tap " " to exit the setting, tap "OK" to save the settings.



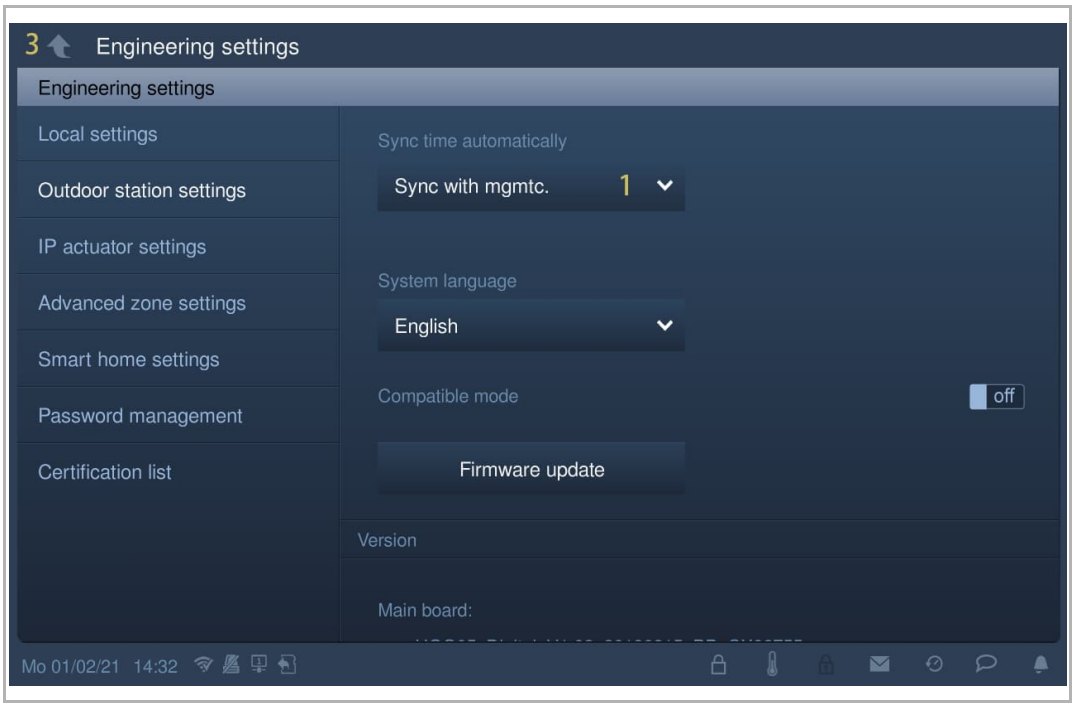
8.1.16 Time sync setting

Please follow the steps below:

[1] On the "Outdoor station settings" screen, select the sync time method from the drop-down list. It can be set to "Sync with mgmtc." or "Close time sync". If "Sync with mgmtc." is selected, the outdoor station will sync the time from the management software.

[2] If "Close time sync" is selected, the time and date need to be set manually (optional).

[3] Tap " " to exit the setting, tap "OK" to save the settings.



8.1.17 Compatible mode setting

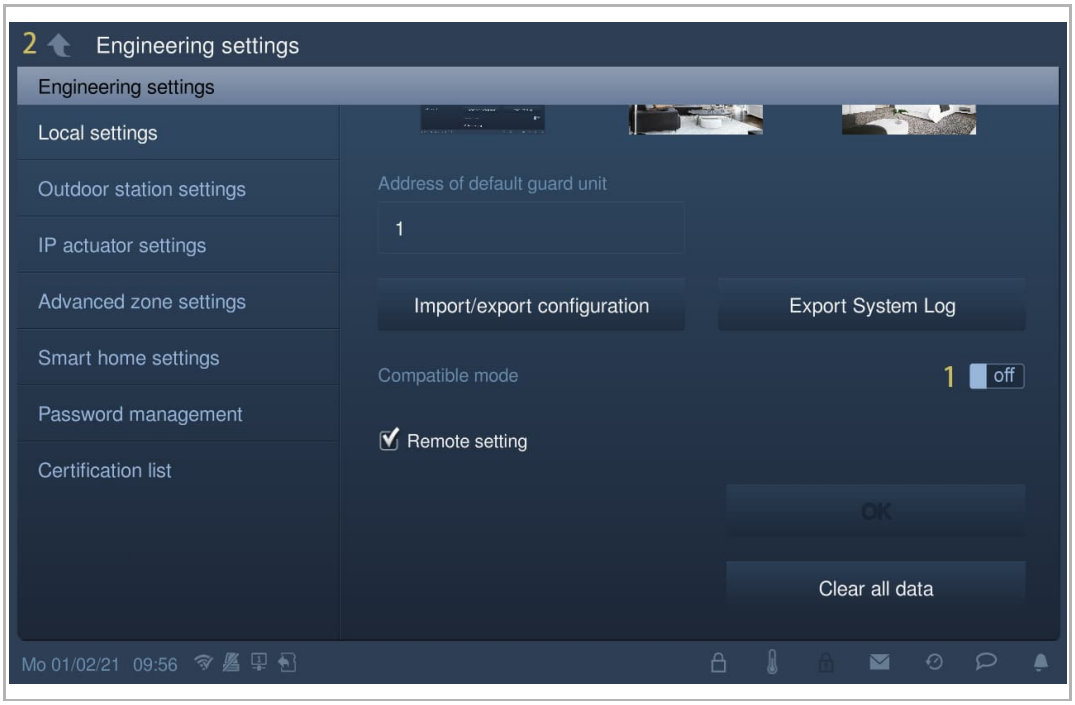
The outdoor station works in security mode to guarantee high security ("Compatible mode" is disabled by default).

It is suggested that compatible mode is only used when the devices need to communicate with previous generation products. In this mode, data transmission between devices is not encrypted, may lead to data leaks and has the risk of attacks.

Please follow the steps below:

[1] On the "Outdoor station settings" screen, tap the slider "Compatible mode" to switch on/off the function.

[2] Tap " " to exit the setting, tap "OK" to save the settings.



8.1.18 Updating the firmware

Note

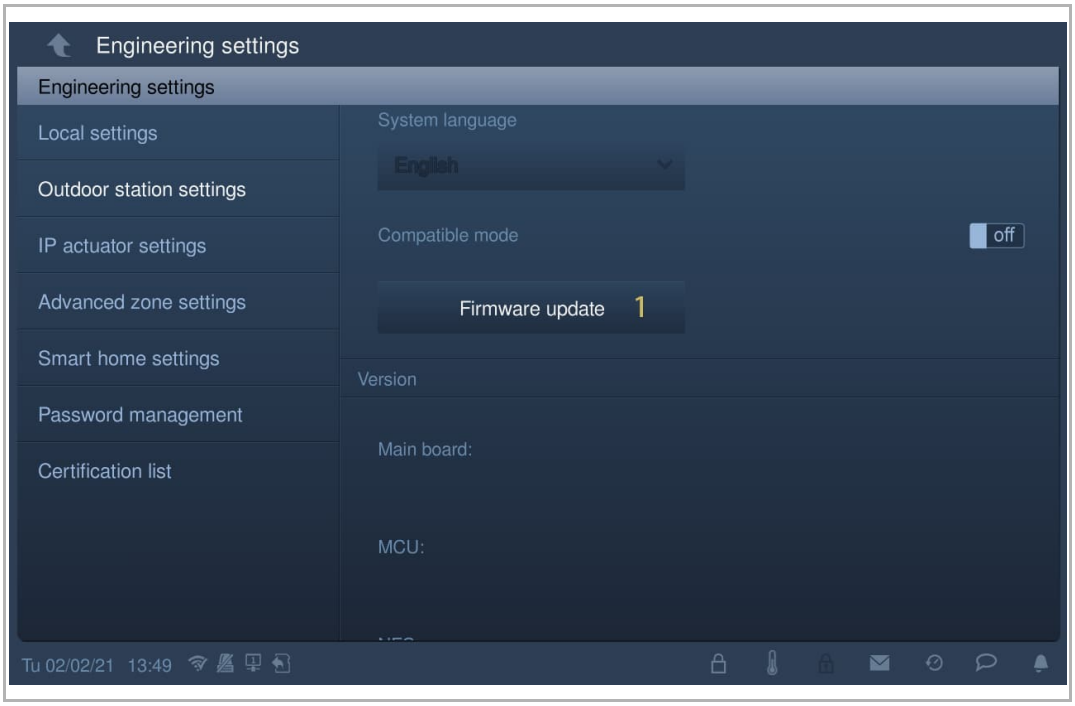
The outdoor station must exit engineering mode before the firmware is upgraded.

If the gate station (device type = GS) needs to update the firmware, a gate station (device ID =1) must be used before updating.

If the building outdoor station (device type = OS) needs to update the firmware, a building outdoor station (device ID =1) must be used before updating.

Please follow the steps below:

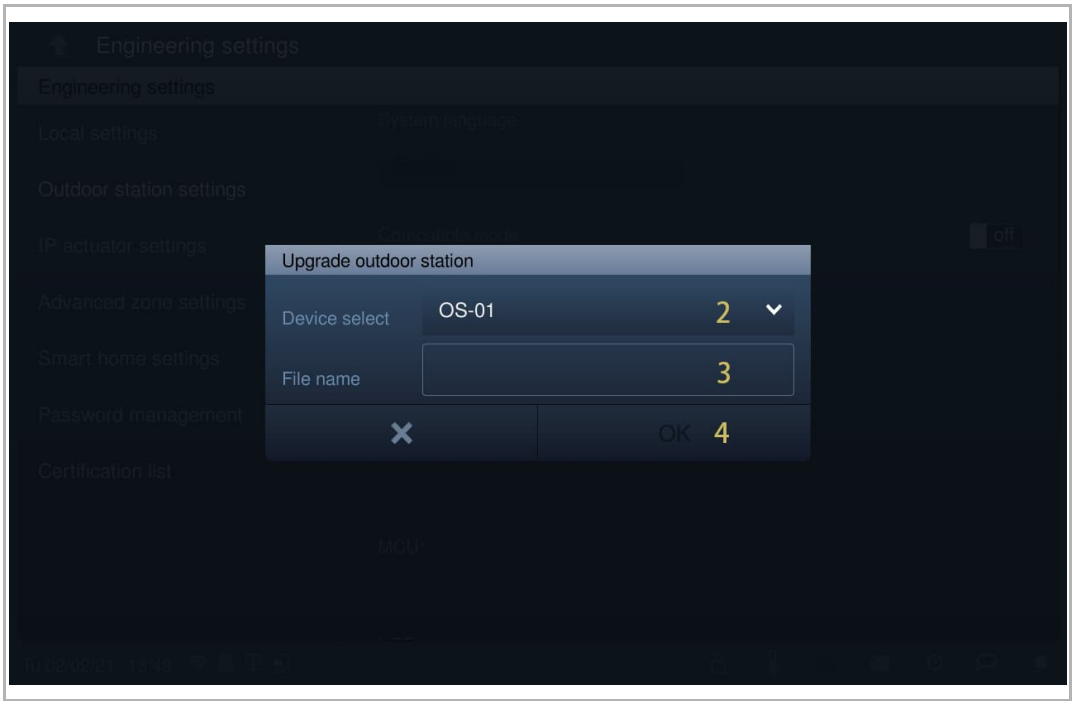
[1] On the "Outdoor station settings" screen, tap "Firmware update".



[2] Select the designated outdoor station from the drop-down list.

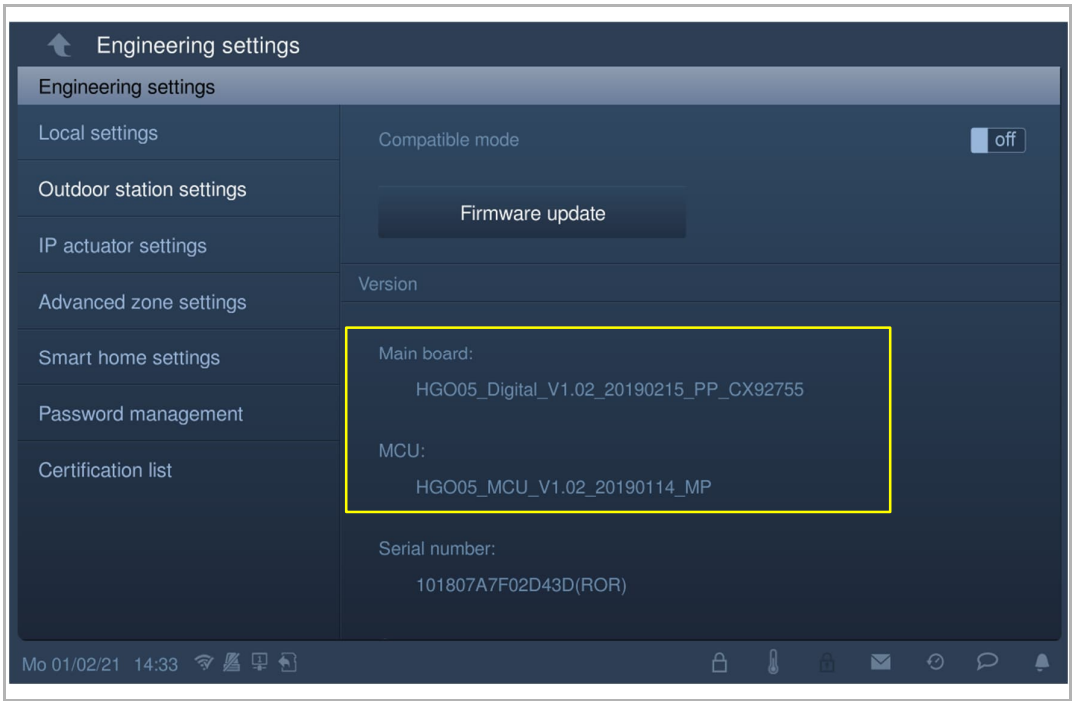
[3] Select the upgrade file from the SD card.

[4] Tap "OK" to update the firmware.



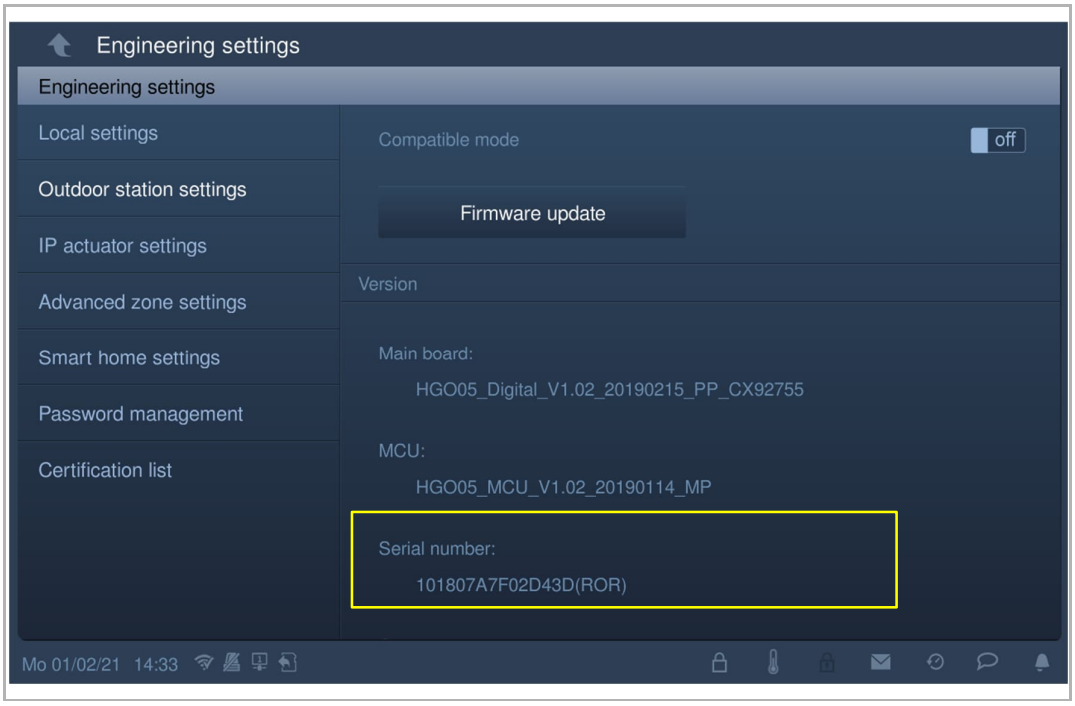
8.1.19 Viewing the version

On the "Outdoor station settings" screen, view the version information.



8.1.20 Viewing the serial number

On the "Outdoor station settings" screen, view the serial number.



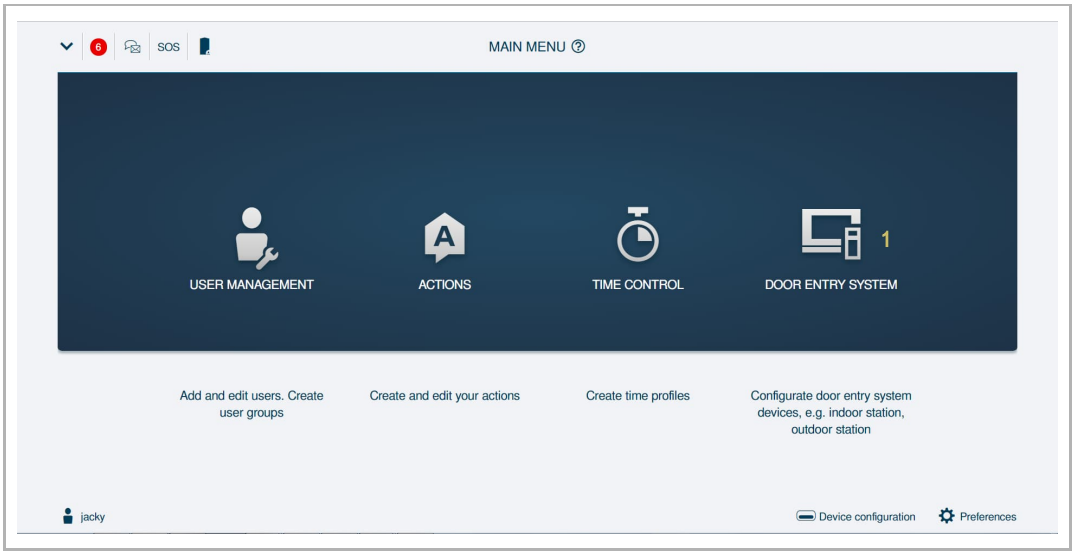
8.2 Configure the settings on "Smart Access Point"

8.2.1 Adding mini outdoor station

Note
Only a mini outdoor station without a certificate can be added by SmartAP. This mini outdoor station will lose its certificate if its physical address is changed.
The mini 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 "Second-confirm station" from the drop down list.

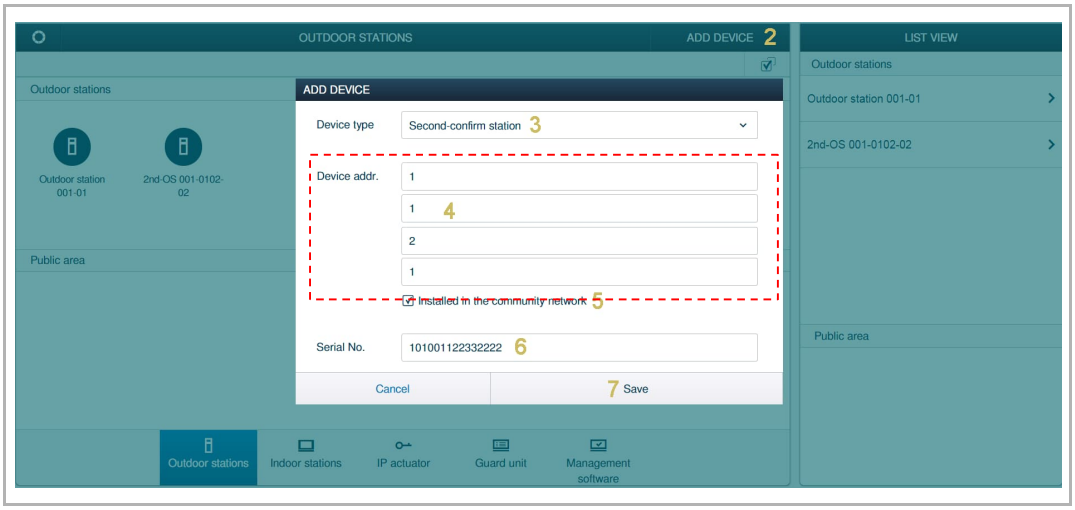
[4] Enter the device address,

- block number
- floor number
- room number
- device number

[5] If the mini outdoor station is installed in the community network, "Installed in the community network" should be enabled.

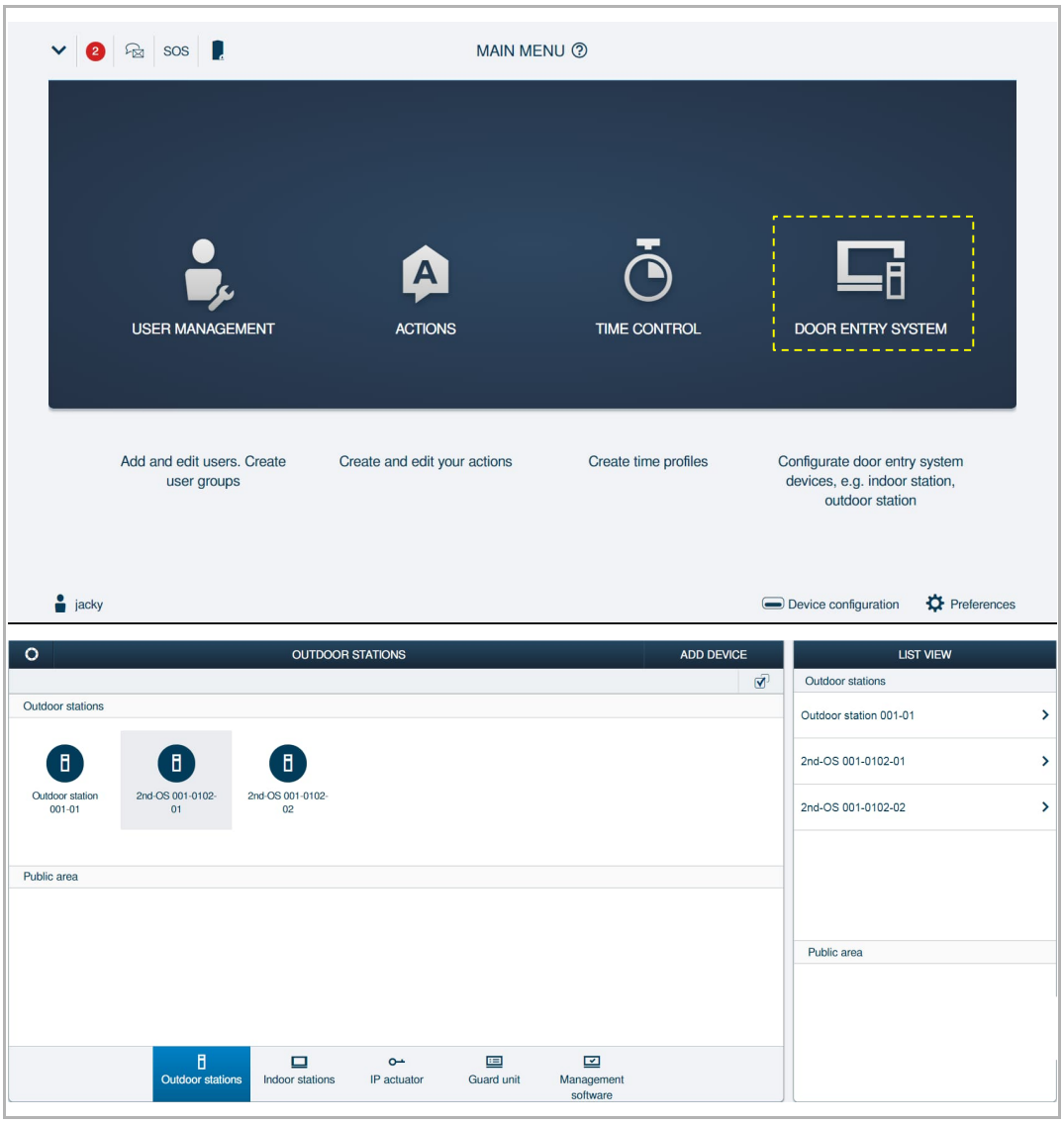
[6] Enter the serial number.

[7] Click "Save".

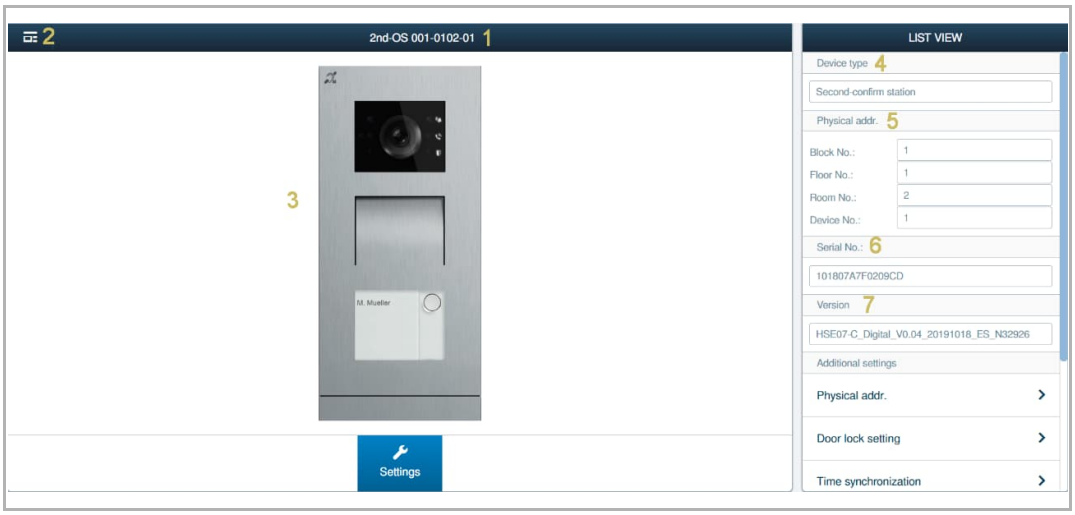


8.2.2 Configure the settings

On the configuration screen, click "Door entry system", "Outdoor stations", then click a mini outdoor station to access the settings.

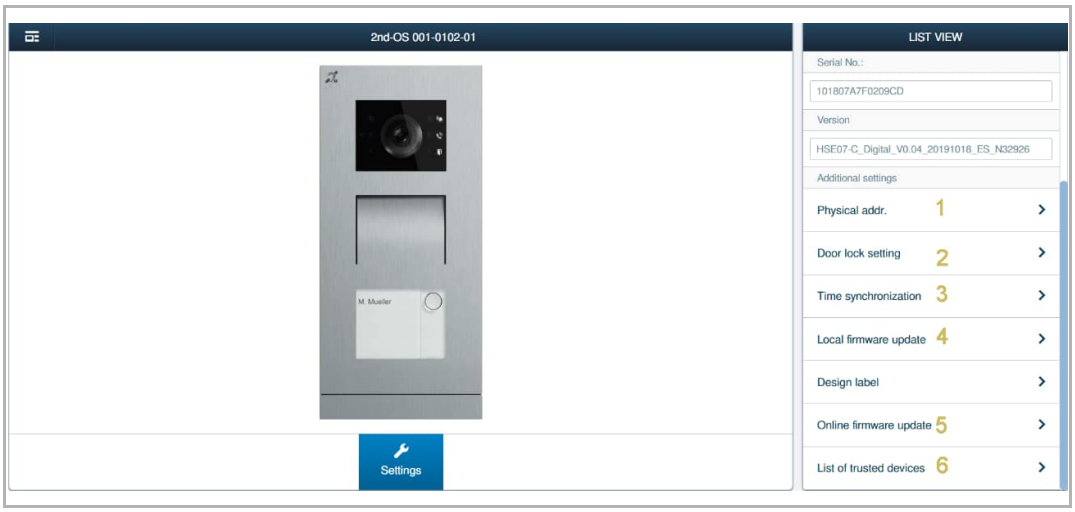


Basic information



No.	Function
1	Device ID
2	Click the icon to return to the previous screen
3	Overview of the outdoor station
4	Device type of the outdoor station
5	Display the address of the outdoor station
6	Display the serial number of the outdoor station
7	Display the firmware version of the outdoor station

Additional settings



No.	Function
1	Set the physical address for the outdoor station.
2	(1) Unlock setting
3	Enable or disable the time synchronization with the management software.
4	Update the firmware via local PC.
5	Update the firmware via the external website.
6	(2) Manage the trusted devices

(1) Unlock setting

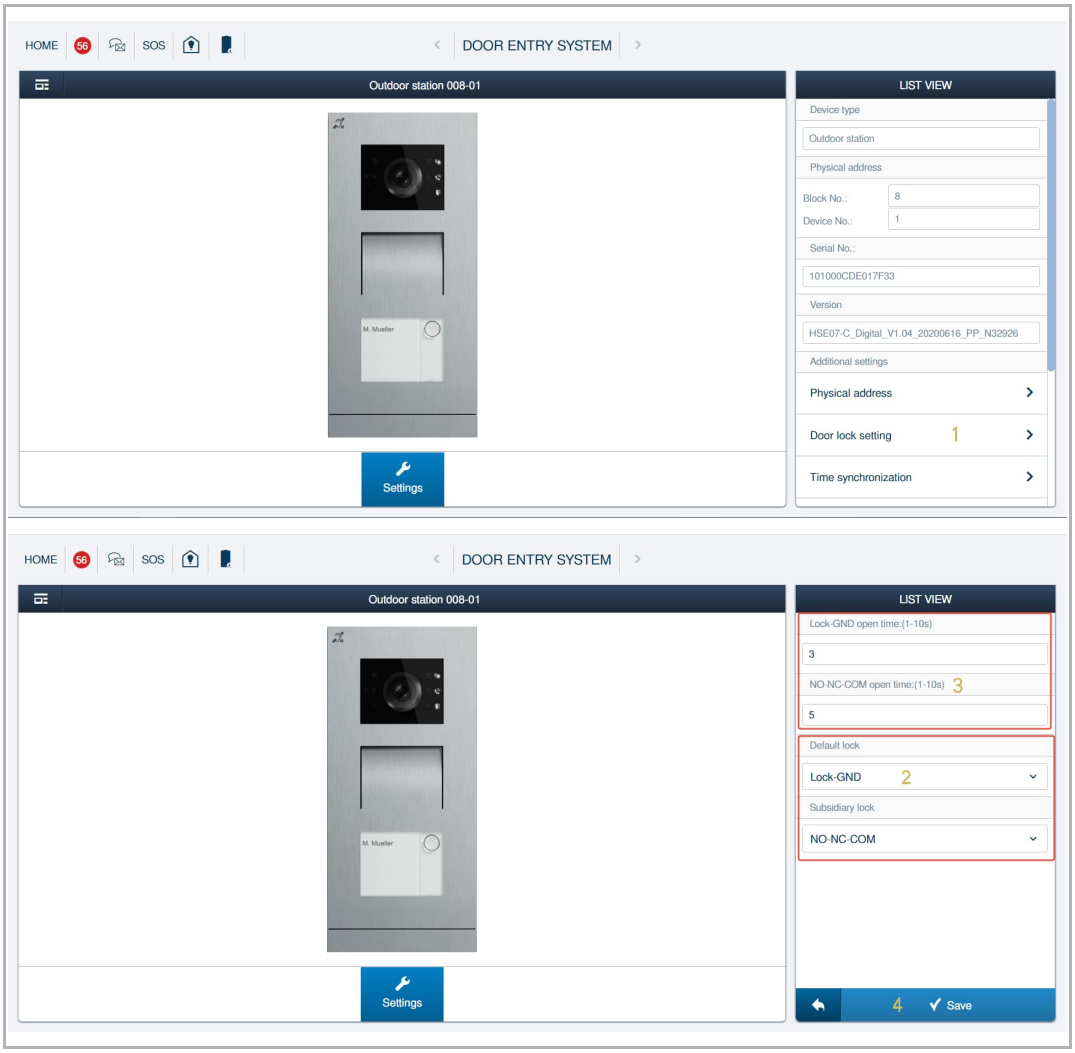
Please follow the steps below:

[1] On the designated outdoor station screen, click "Door lock setting".

[2] Set the lock type for the locks, it can set to "Lock-GND", "NO-NC-COM" or "IP actuator".

[3] Set the unlock time for the locks (1...10 seconds).

[4] Click "√" to save.

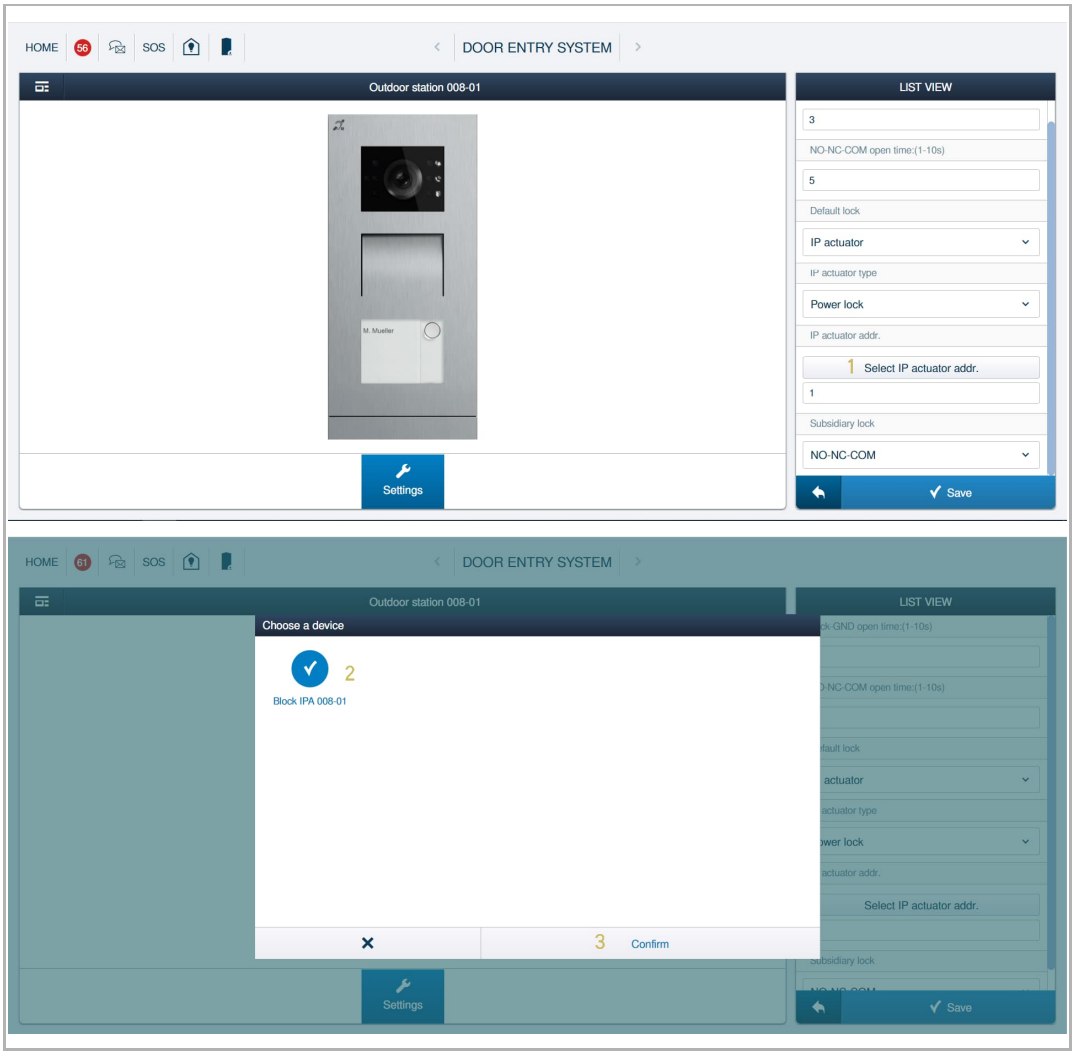


If lock type is set to "IP actuator", please follow the steps below;

[1] Click "Select IP actuator addr.".

[2] Select the designated IP actuator.

[3] Click "Confirm".



(2) Manage the trusted device

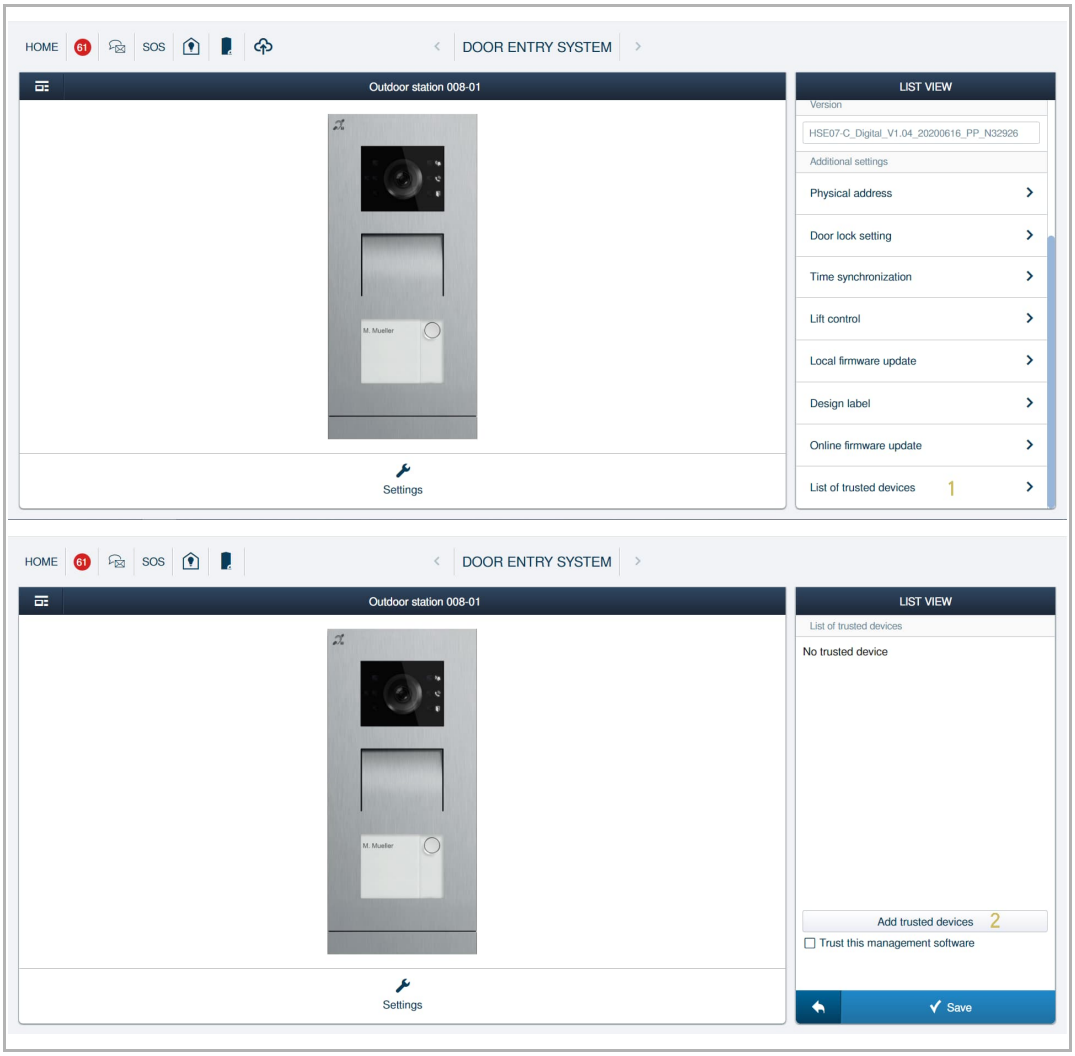
If you want to release the lock on the mini outdoor station, you need to check:

- 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 mini outdoor station.

Please follow the steps below to add the trusted device:

[1] On the designated mini outdoor station screen, scroll down the list and click "List of trusted devices".

[2] Click "Add trusted devices".

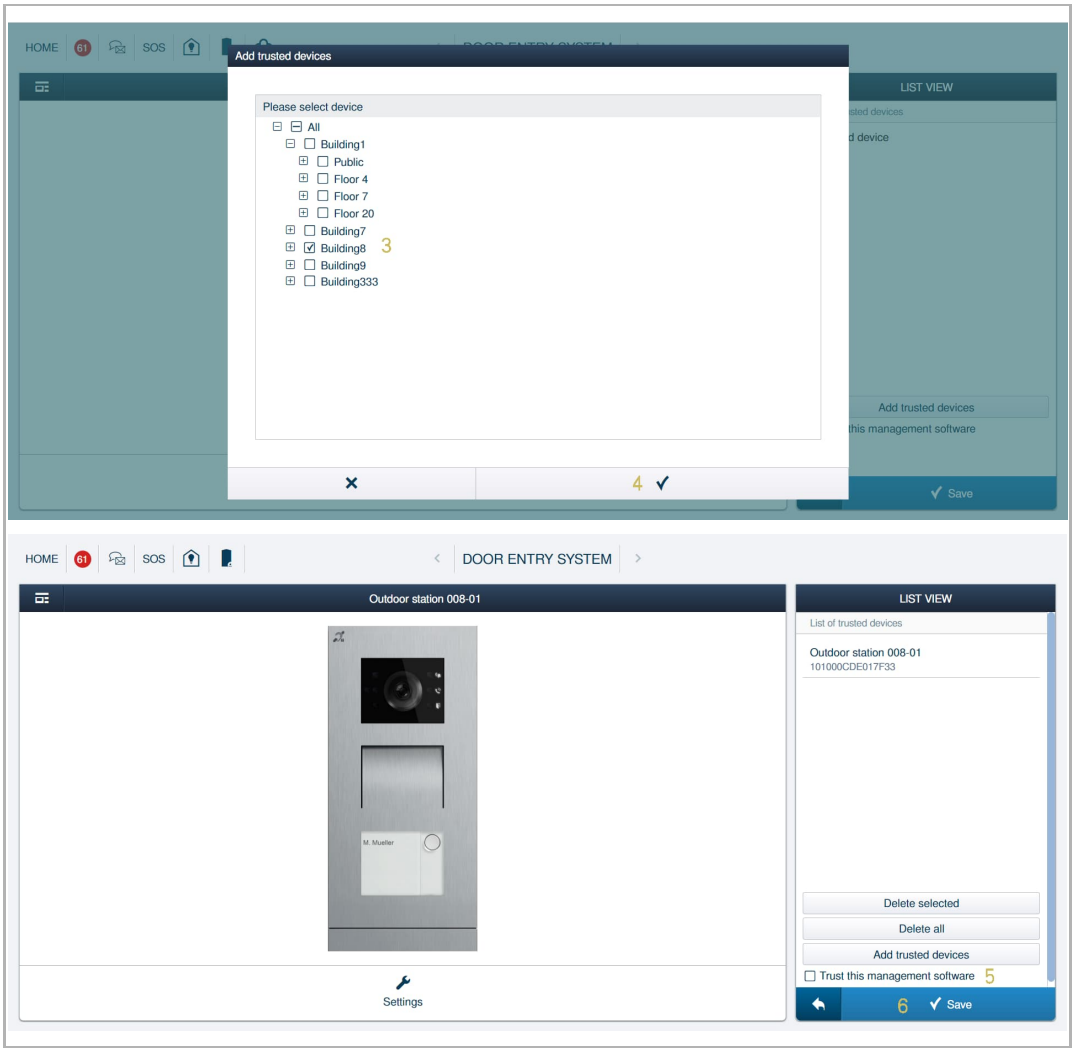


[3] Select the designated indoor stations to trusted list.

[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".



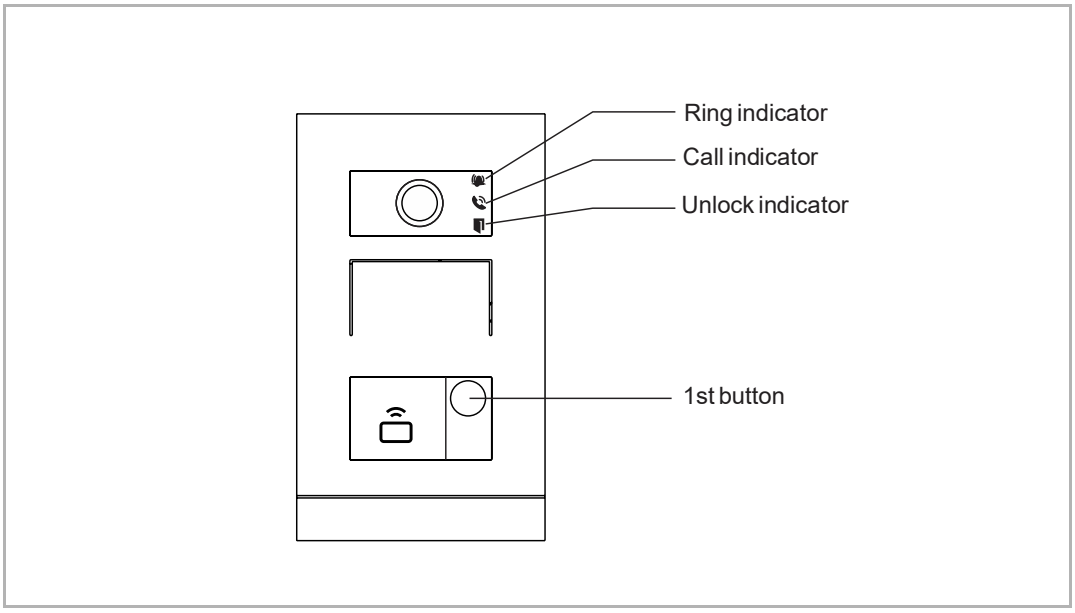
8.3 Card management

The chapter applies to the mini outdoor station integrated with ID card reader.

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

1. Card management on local outdoor station

Programming



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 60s will be as the admin card.

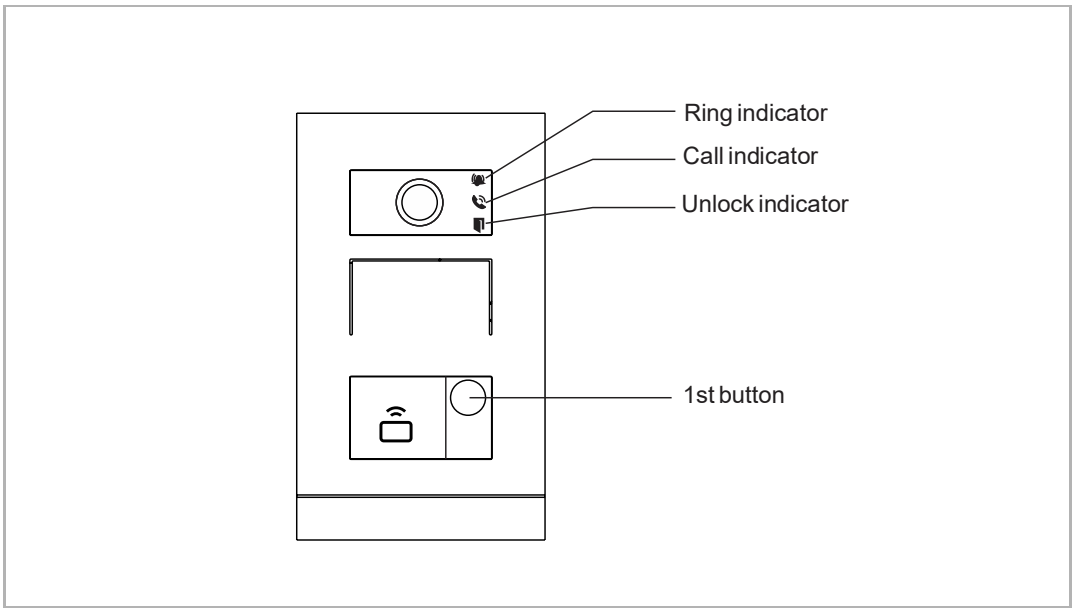
Function	Action	Unlock indicator
Create admin card	Swipe card 1x	Green

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

8.4 Restoring to factory default



Please follow the steps below:

[1] Power on the device and wait a while 3 LED indicators will turn off.

[2] Then press and hold the 1st button for 3 seconds within 30 seconds until 3 LED indicators begin to flash green at the same time to indicate the device entering configuration mode.

[3] Press and hold the 1st button for 10 seconds until the 3 LED indicators turn off.

[4] The device will reboot automatically and the unlock indicator will flash red, green and orange repeatedly.

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. Busch-Jaeger 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 Busch-Jaeger 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 Busch-Jaeger can be accepted.

10 Notice

We reserve the right to at all times make technical changes as well as changes to the contents of this document without prior notice.

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