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Operating Instructions

ABB-Welcome IP

Video outdoor station

H8137xPx-S

H8137xK-S



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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.

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 110-240 V supply system to be performed only by specialist staff!

3 Intended use

Building outdoor station with display, transponder and keypad serves as end device for communication with the indoor station or guard unit. Support door communication, call guard unit, unlock by passwords / cards and other functions. Suitable for flush-mounted installation.

Villa outdoor station with transponder and push-button(s) serves as end device for communication with the indoor station or guard unit. Support door communication, call guard unit, unlock by passwords / cards and other functions. Suitable for flush-mounted installation

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 2002/96/EG WEEE and 2002/95/EG RoHS)

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

5 Product description

5.1 Control elements

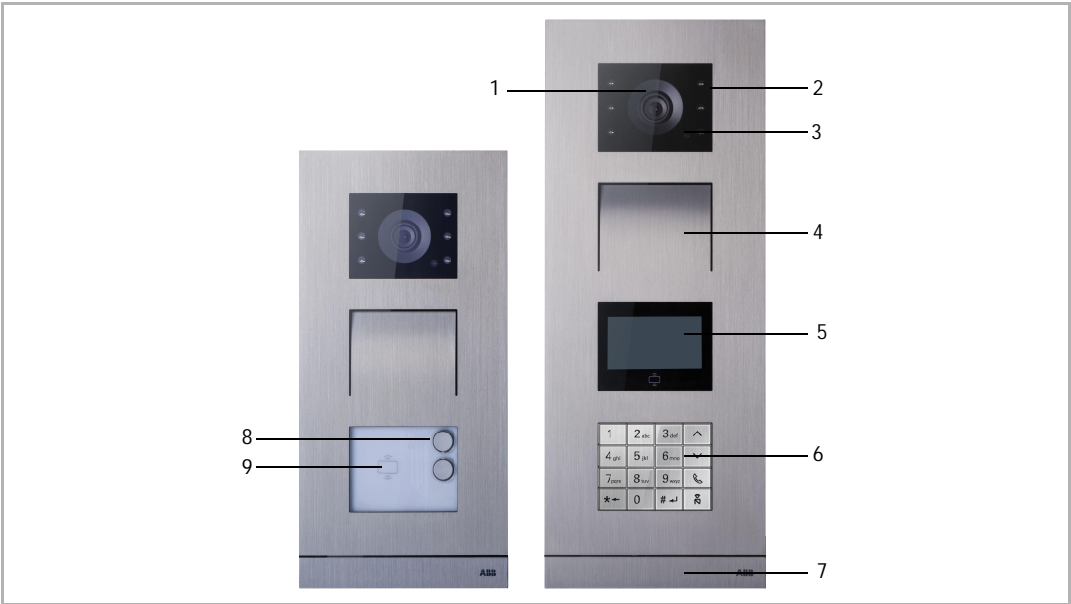


Fig. 1: Control elements

No.	Function
1	Camera
2	White LED (total 6 pcs)
3	Light sensor
4	Speaker and microphone integration
5	Display module with ID/IC card reader
6	Keypad
7	End strip
8	Round push-button
9	Nameplate (this silk-screen means built-in ID/IC card reading function)

Tab.1: Description

5.2 Feature

- 3 mm stainless steel frame
- Scratch and fire resistant finish
- 1m pixel high definition camera with wide detection angle (H 86°,V 67°, D 130°)
- Anti-fog design camera with built-in heater
- Built-in lighting and automatic backlight ensure a clear view at night
- Support 802.3af POE and directly stand-alone power supply
- Open the door with public/private password
- Open the door with card
 - For building outdoor station, 2,000 cards for outdoor station and 40,000 for gate station
 - For villa outdoor station, 300 cards
- 2 options for built-in RFID proximity reader: ID card or IC/NFC card
- Support of Wiegand output to integrate with 3rd party access control system
- Support of 2 locks connection
- Support of door status detection
- Support of exit button to release the lock
- Support of elevator calling after door is released
- Forward all the calls to guard unit in security mode
- Customized welcome message on outdoor station display

5.3 Terminal description

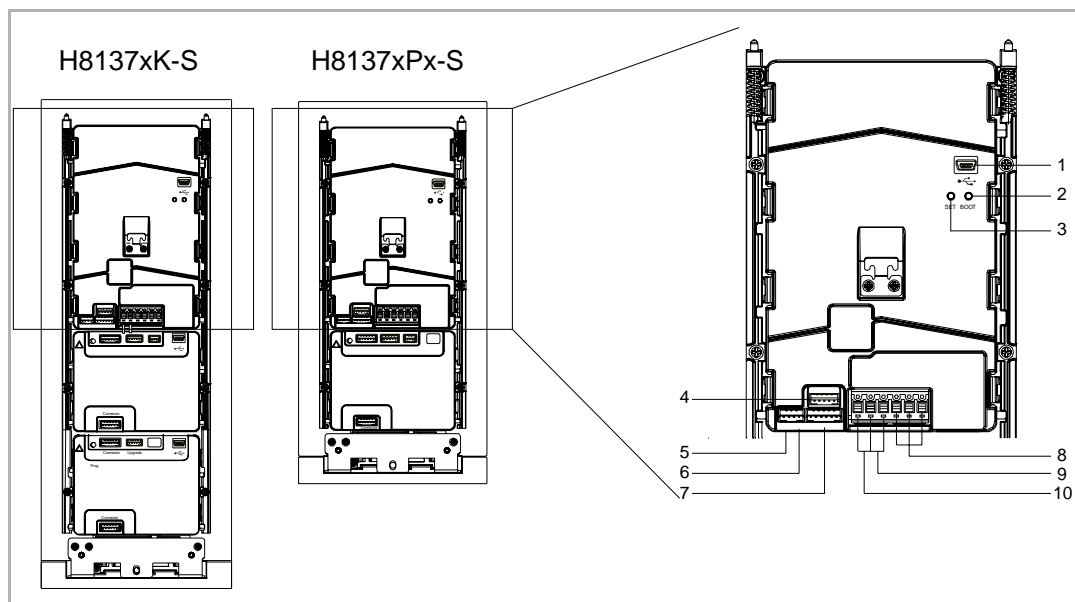


Fig. 2: Terminal description of audio part

No.	Function
1	USB connector for software updating from PC.
2	Boot button Press and hold this button for 3 s to enter upgrading mode when the power is on.
3	Set button Press and hold this button for 3 s to enter configuration mode when the power is on. And press and hold this button for 5 s to restore to factory setting after the power is on.
4	Connector for software updating of this module
5	Connector for sensor used for door status detection
6	Connector for exit push-button
7	Connector for next module
8	Plug-in clamps (COM-NC-NO) for floating output, door opener (30 VAC/DC 1A)
9	Plug-in clamps (LOCK-GND) for door opener (18V 4A impulsive, 250 mA holding)
10	Plug-in clamps (DC+-GND) for standalone power supply

Tab.2: Description

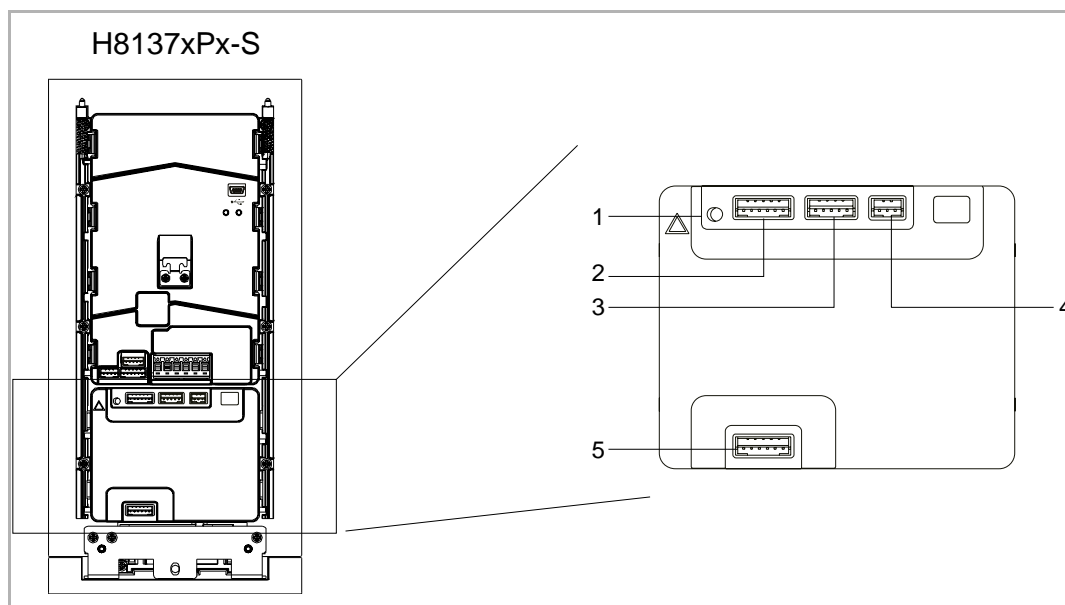


Fig. 3: Terminal description of pushbutton module

No.	Function
1	Program button
2	Connector for previous module
3	Connector for software updating of this module
4	Connector for Wiegand output It supports 26 bits (default) and 34 bits.
5	Connector for next module

Tab.3: Description

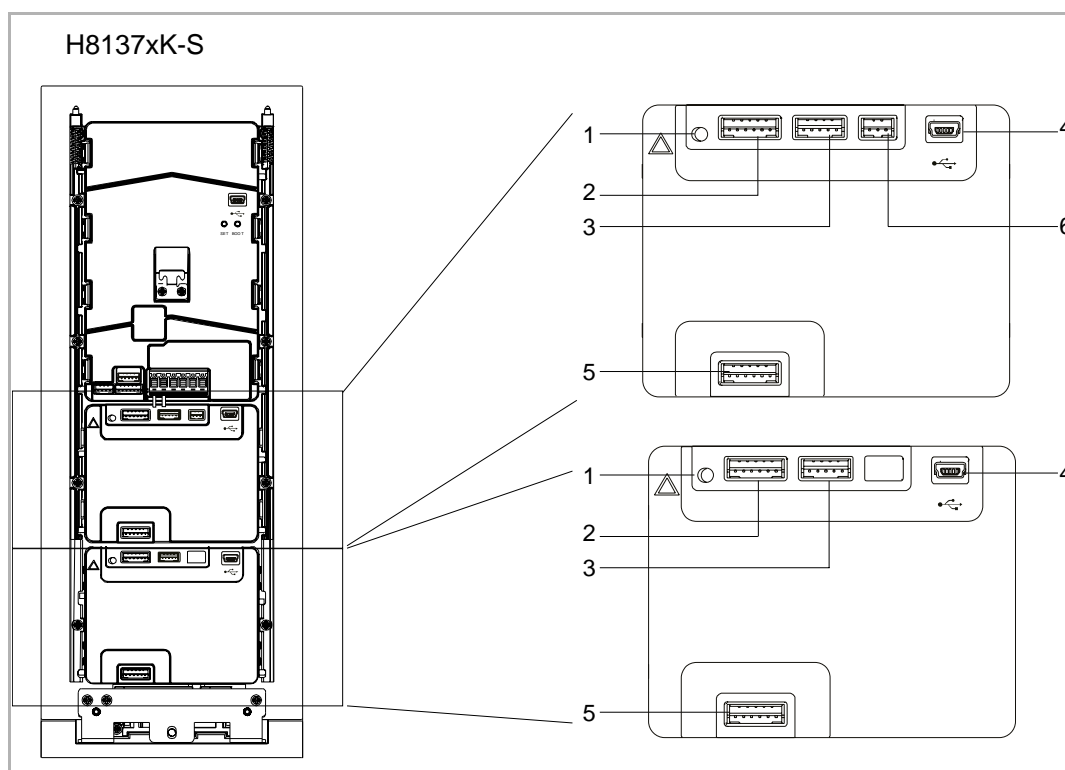


Fig. 4: Terminal description of display and keypad module

No.	Function
1	Program button
2	Connector for previous module
3	Connector for software updating of this module
4	USB connector (reserved)
5	Connector for next module
6	Connector for Wiegand output It supports 26 bits (default) and 34 bits.

Tab.4: Description

5.4 Lock type and connection

Lock type	Operation type	Voltage	Wiring type
Electrical strike lock, 12 V	Power on to open	12 VDC/AC	Type A Type B
Electrical strike lock, 24 V	Power on to open	24 VDC/AC	Type B
Electrical rim lock, 12 V	Power on to open	12 VDC	Type A Type B
Electrical mortise lock	Power off to open	12 VDC	Type C
Magnetic lock	Power off to open	12/24 V DC	Type C

Tab.5: Lock type

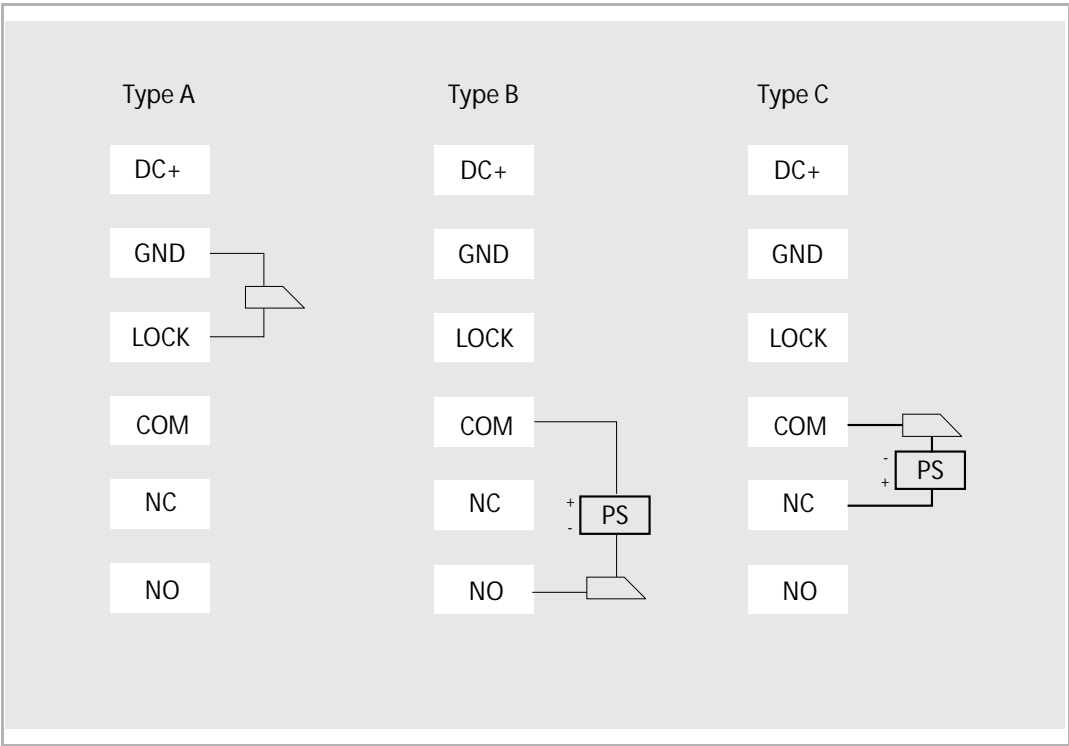


Fig. 5: Lock connection

6 Technical data

Designation	Value
Operating temperature	-40 °C - +70 °C
Protection (cover frame assembled)	dustproof and waterproof as IP 54, vandal proof as IK 07
Power supply, door opener (Lock-GND)	18 V 4 A impulsive, 250 mA holding
Floating supply, door opener (COM-NC-NO)	30 VAC/DC 1A
Working voltage	27 VDC
Dimension	H8137xPx-S: 273.8 mm x 135 mm x 48.5 mm H8137xK-S: 346.8 mm x 135 mm x 48.5 mm

Tab.6: Technical data

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 110-240 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

Use gloves to protect yourself from being cut.

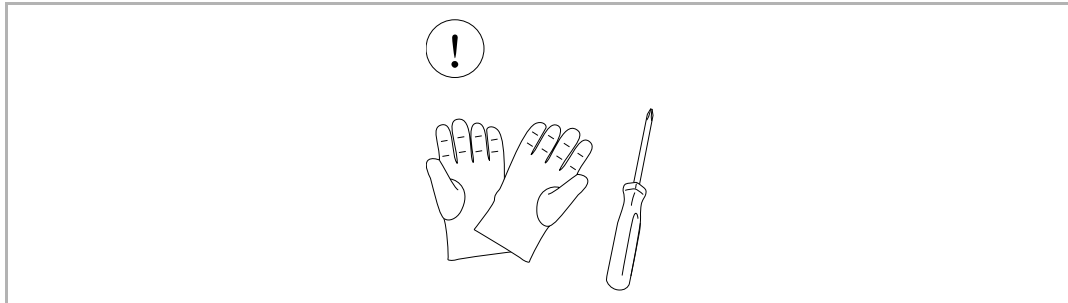


Fig. 6: Preparation

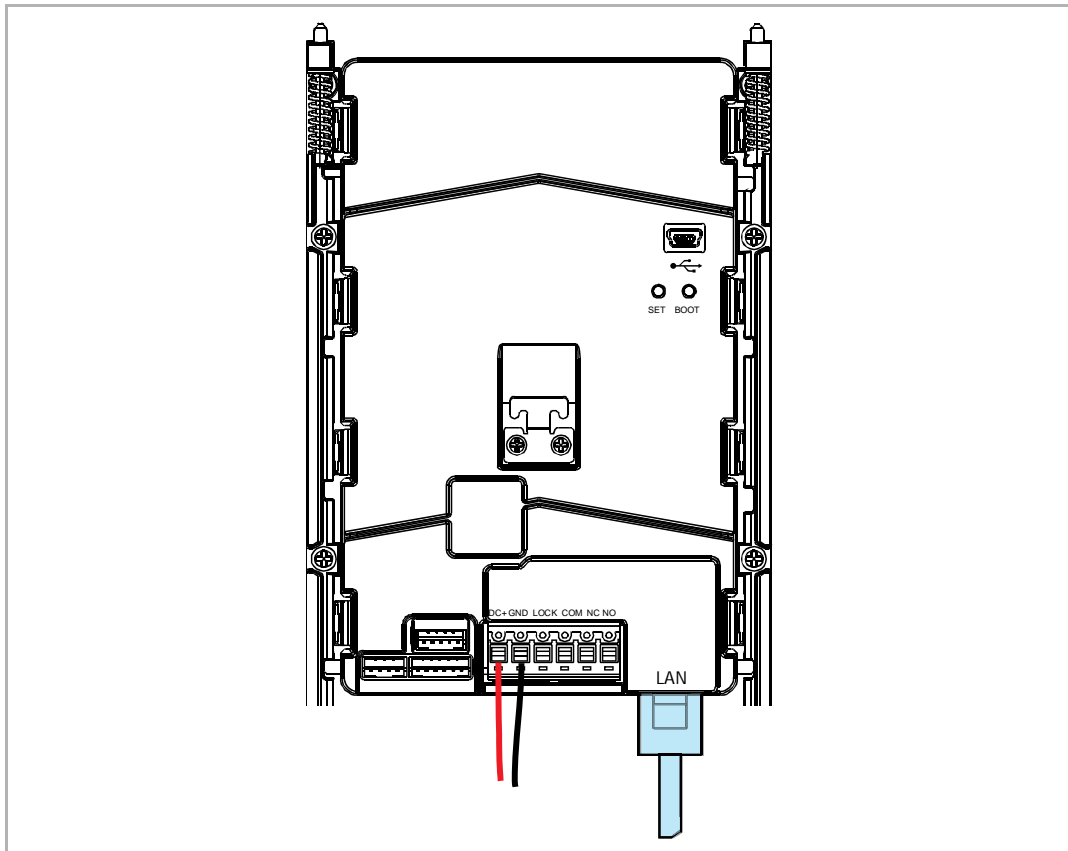


Fig. 7: Wiring

7.2.1 Flush-mounted installation

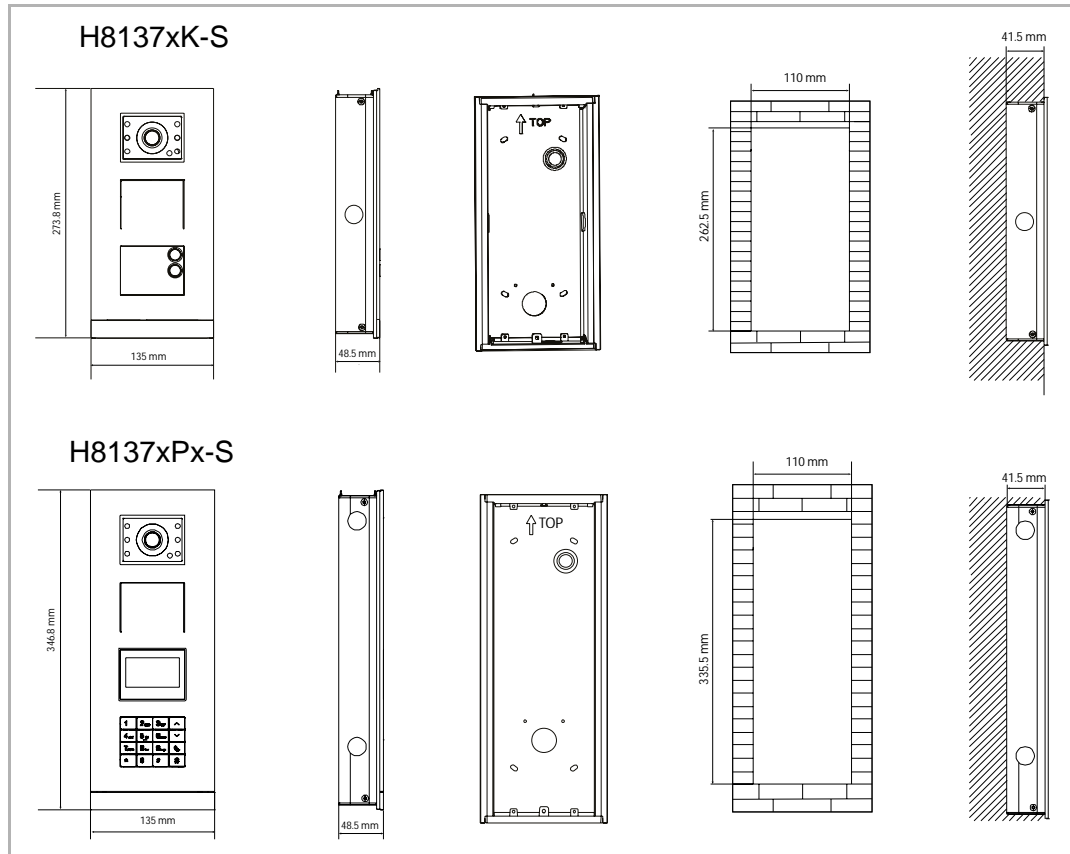


Fig. 8: Product dimension

H8137xK-S
H8137xPx-S

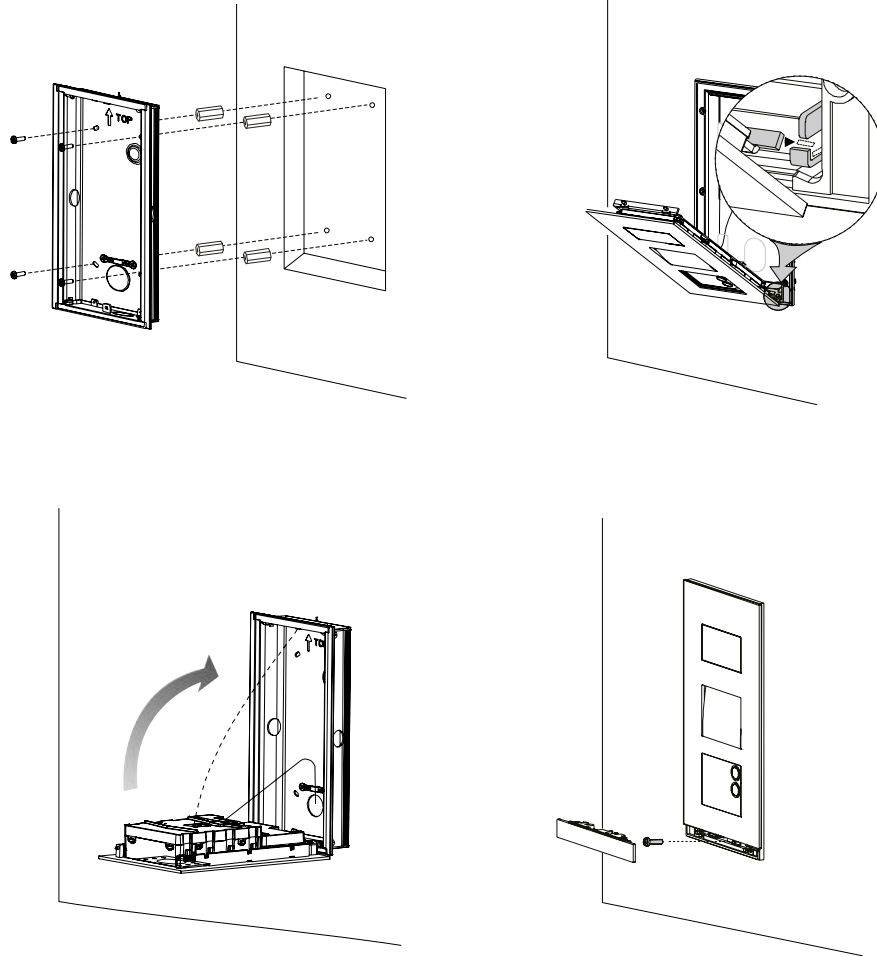


Fig. 9: Flush-mounted installation

7.2.2 Replacing the nameplate

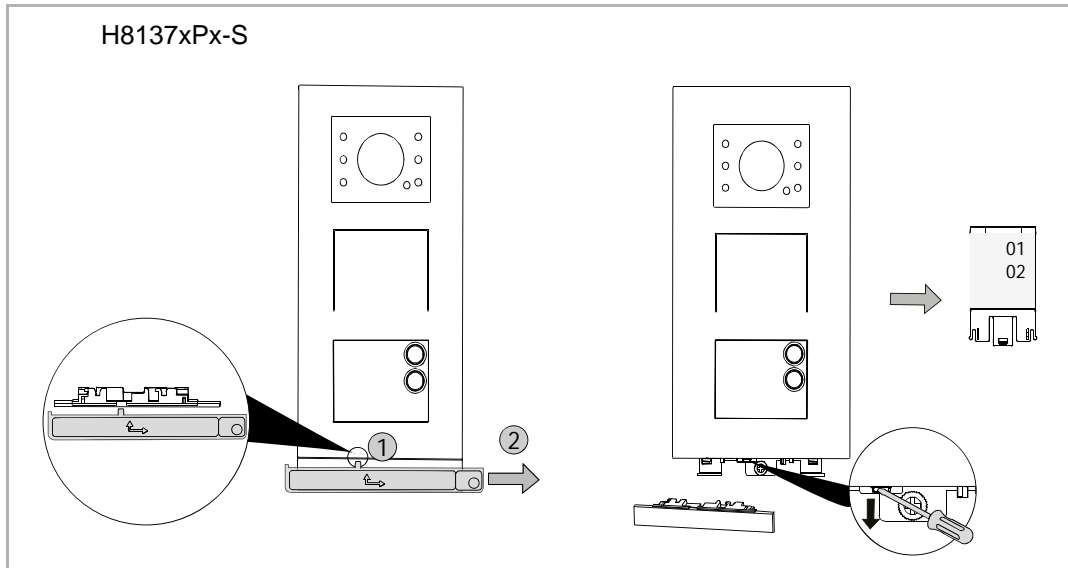


Fig. 10: Replace the nameplate

7.2.3 Installation situations

**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
- Lamps or direct light sources

8 Commissioning

8.1 Building outdoor station

8.1.1 Enter system setting of building OS

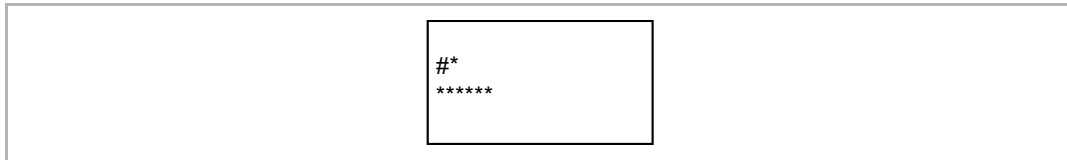


Fig. 11: Enter system setting

On standby mode, press [#*] + system code + [#] to enter the system setting.

Default system code is "345678".

8.1.2 Engineering setting

Set device type

OS = outdoor station, GS = gate station

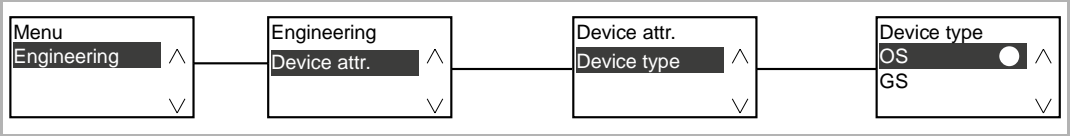


Fig. 12: Set device type

Set device number

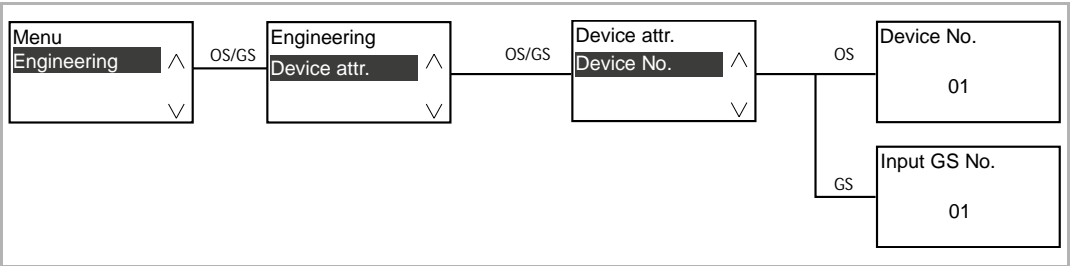


Fig. 13: Set device number

Set block information

If GS, set block digits here; if OS, set block number here.

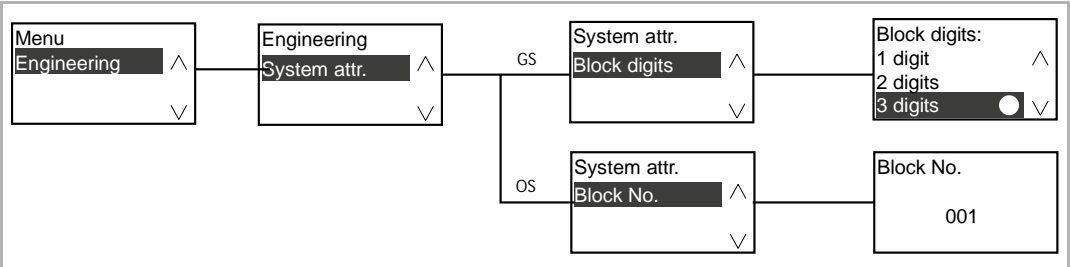


Fig. 14: Set block information

Set IS digits

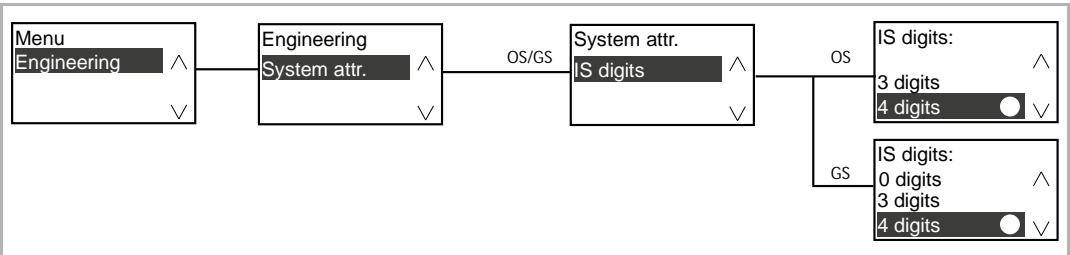


Fig. 15: Set IS digits

Set default GU

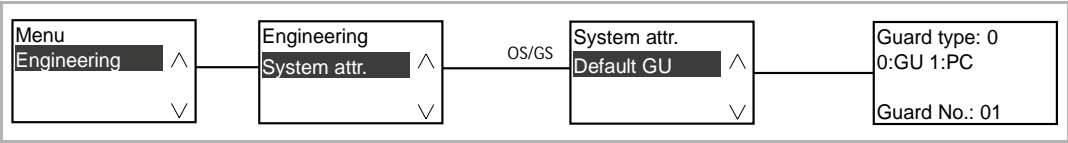


Fig. 16: Set default GU

Set system password

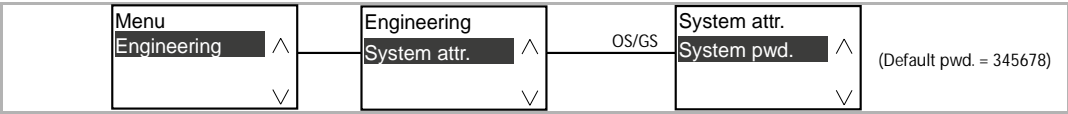


Fig. 17: Set system password

8.1.3 Access control setting

Access control password setting

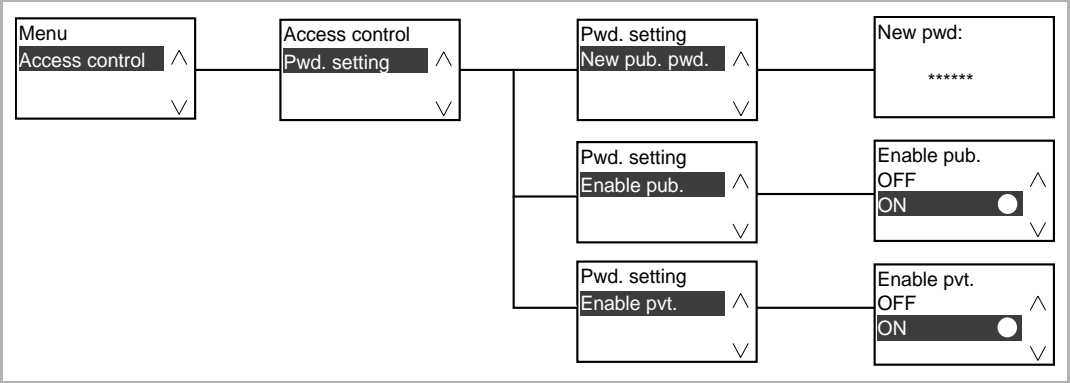


Fig. 18: Access control password setting

Card mode setting

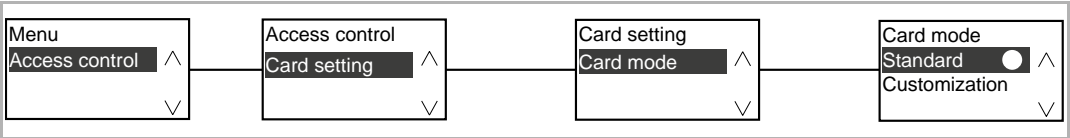


Fig. 19: Card mode setting

User card management

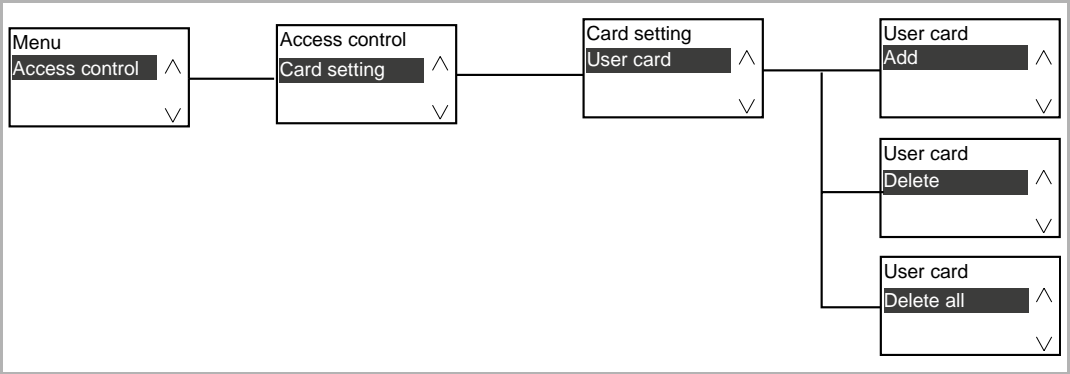


Fig. 20: User card management

Patrol card management

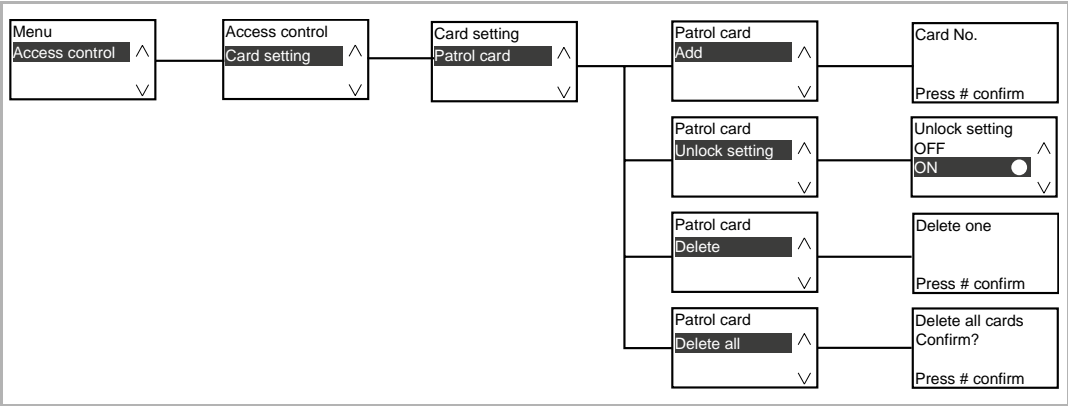


Fig. 21: Patrol card management

Card information copy to other outdoor station

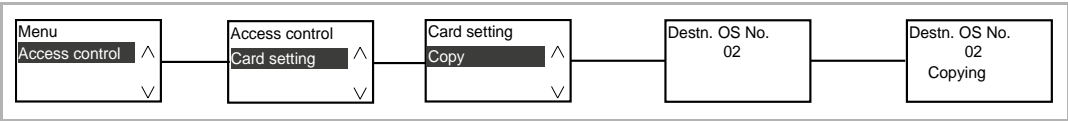


Fig. 22: Card information copy to other outdoor station

8.1.4 System setting

Set volume

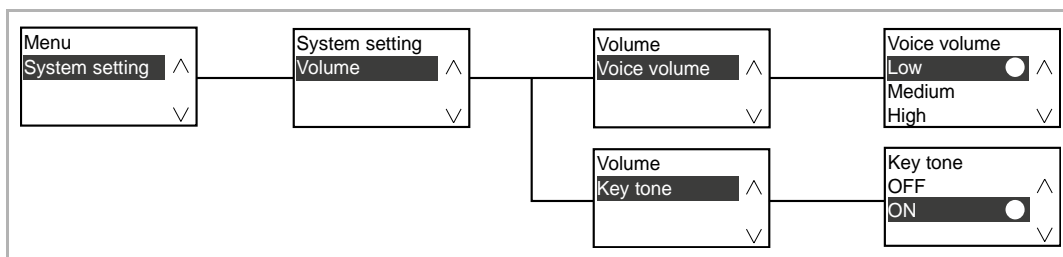


Fig. 23: Set volume

Set date and time

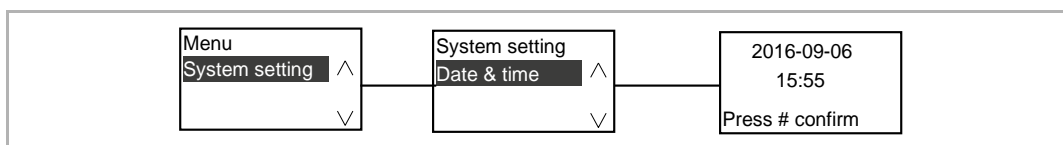


Fig. 24: Set date and time

Set languages

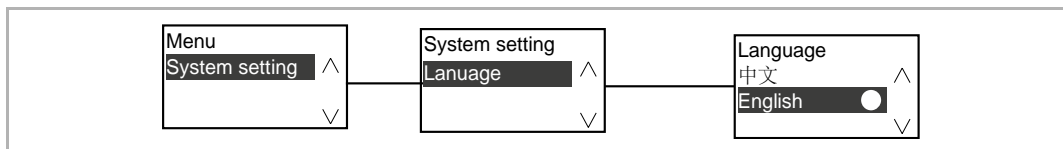


Fig. 25: Set languages

Set Wiegand

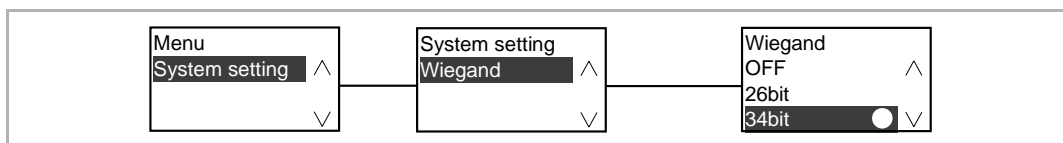


Fig. 26: Set Wiegand

Choose default lock

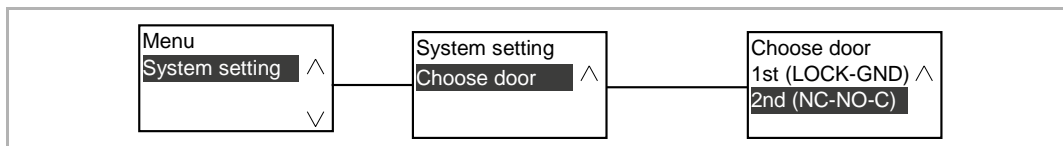


Fig. 27: Choose default lock

Set unlock time

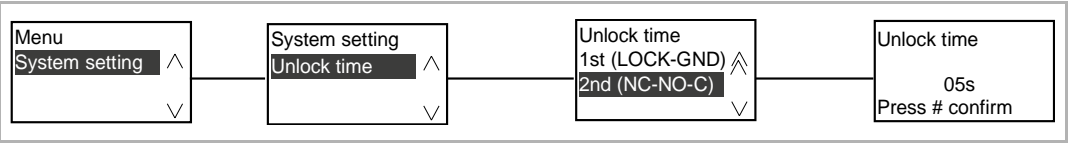


Fig. 28: Set unlock time

Set door alarm

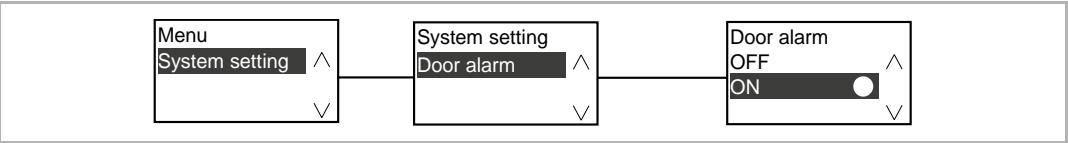


Fig. 29: Set door alarm

Set temper alarm

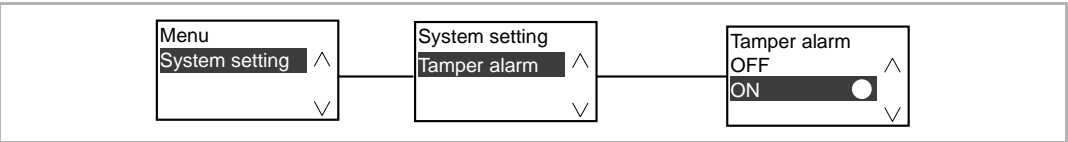


Fig. 30: Set temper alarm

Set lift control

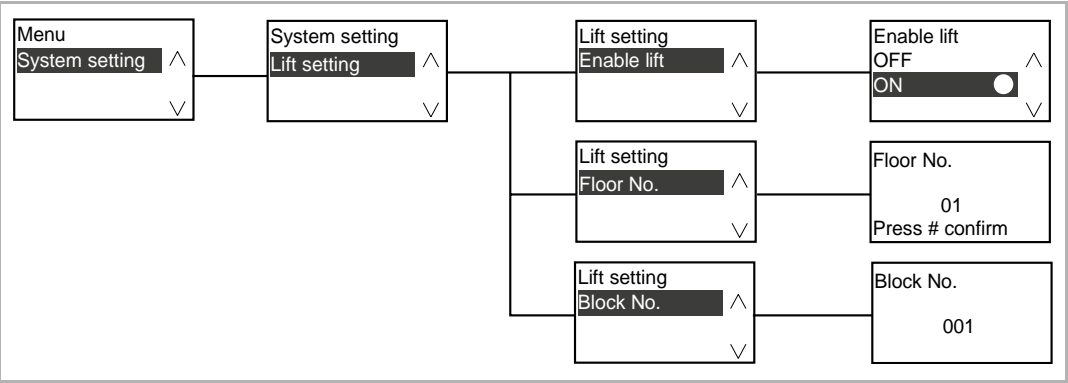


Fig. 31: Set lift control

Set anti-flicker

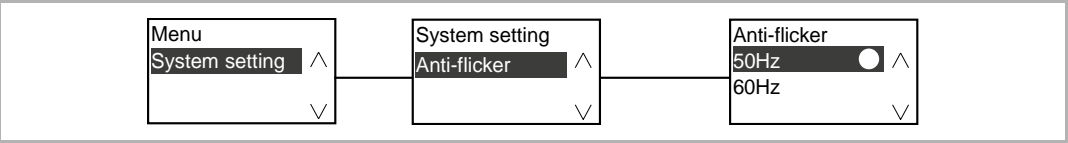


Fig. 32: Set anti-flicker

Restore system setting

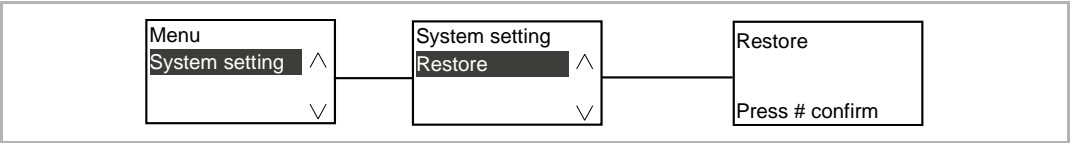


Fig. 33: Restore system setting

Guide and version

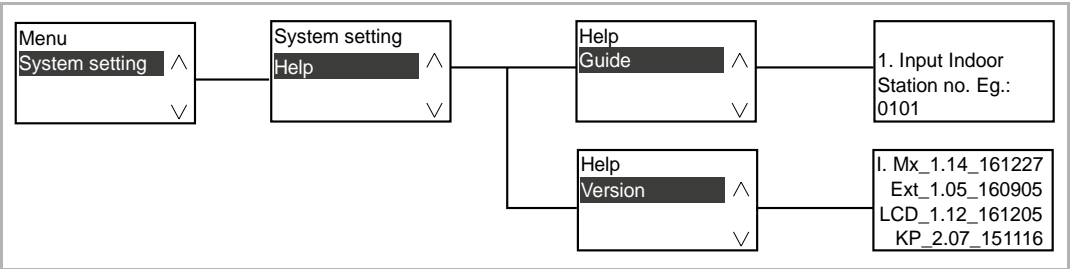


Fig. 34: Guide and version

Forward to GU

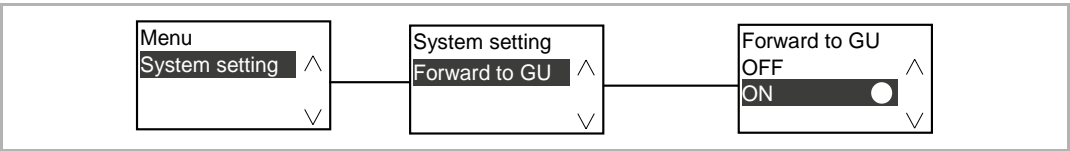


Fig. 35: Forward to GU

8.2 Villa outdoor station

Please find details in the system manual.

9 Operation

9.1 Calling a resident

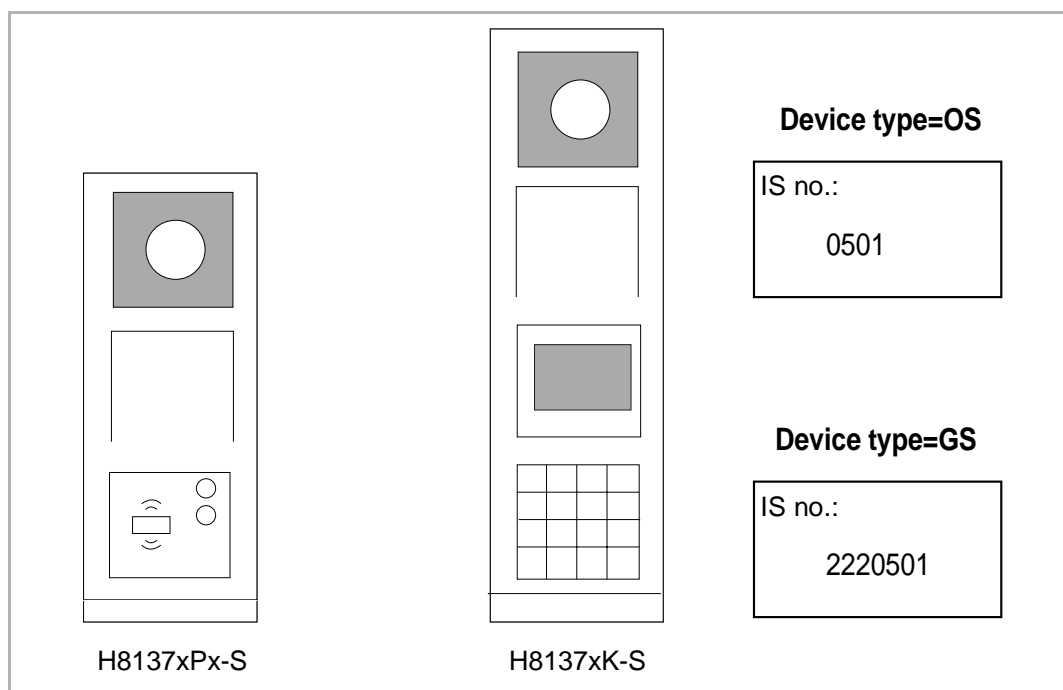


Fig. 36: Calling a resident

Villa outdoor station H8137xPx-s

Press the first button to start a call. Press again to end the call.

If there is no answer from the resident within 30 s, the call ends automatically.

Building outdoor station H8137xK-S

If the device is set as OS (outdoor station), enter the room number and press the call button.

If the device is set as GS (gate station), enter the building number + room number and press the call button.

Press * to end the call.

If there is no answer from the resident within 30 s, the call ends automatically.

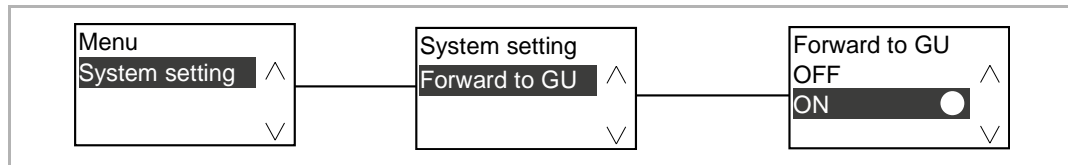
Forward to GU (only available for H8137xK-S)

Fig. 37: Forward to GU

If the device enables the function "Forward to GU", all the calls from the visitors will be transferred to the guard unit.

9.2 Calling a guard unit

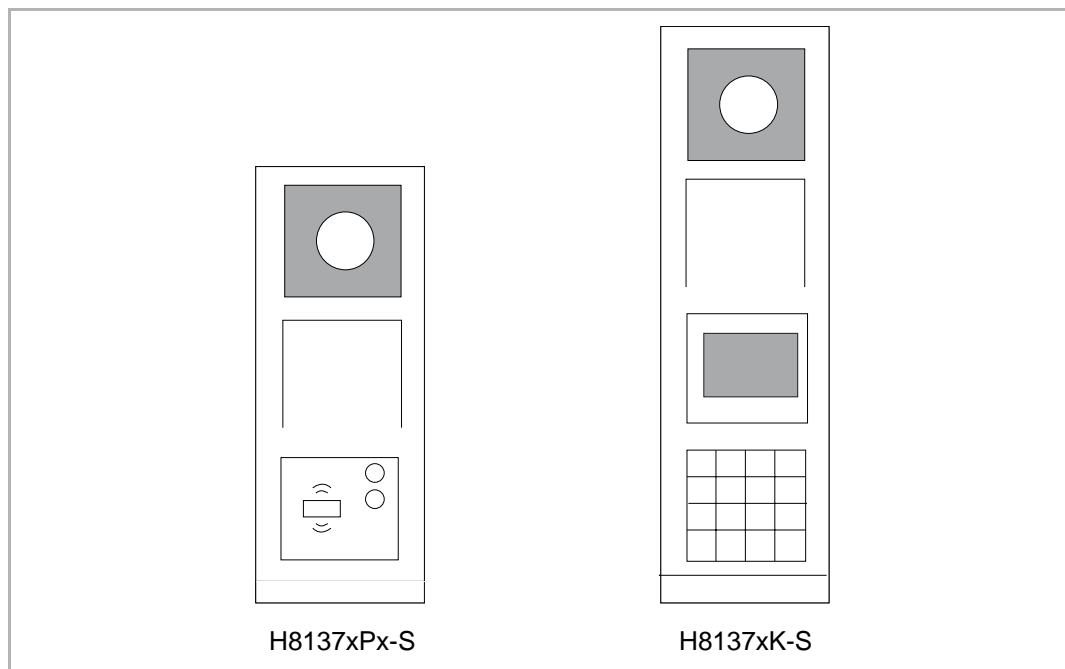


Fig. 38: Calling a guard unit

Villa outdoor station H8137xPx-S

Press the second button to call the guard unit. Press again to end the call.

If there is no answer from the guard unit within 30 s, the call ends automatically.

The second button can be set as calling PC guard through the indoor station.

Building outdoor station H8137xK-S

Press **2** to call the guard unit. Press * to end the call.

If there is no answer from the resident within 30 s, the call ends automatically.

9.3 Unlocking

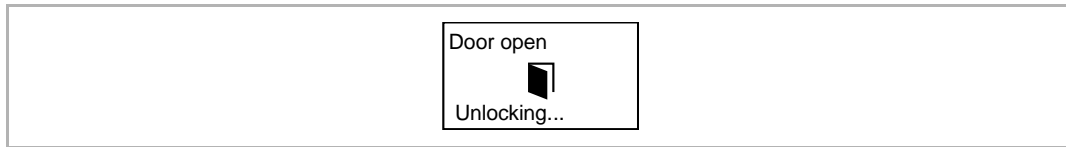


Fig. 39: Unlocking

Unlock by swiping a card

Swiping a registered ID/IC card near the card zone to unlock.

Unlock by pushing the button

Press an exit button to unlock if "Exit" port of outdoor station is connected to the exit button.

Unlock by public password

[#] + public password + [#] (Default public password is "201007".)

This function is disabled by default. See chapter "Access control setting" to enable the function.

See product manual of indoor station to change the password.

Unlock by user password:

Device type = OS

[*] + room number + [#] + user password + [#]

(Default user password is "123456", this is only used to set a new password at the first time)

Device type = GS

[*] + building number + [#] + room number + [#] + user password + [#]

This function is disabled by default. See chapter "Access control setting" to enable the function.

See product manual of the indoor station to change the password.

9.4 Manage ID/IC cards on indoor station



Note

Please assign the outdoor station to a specific apartment first before configuring the ID/IC card.

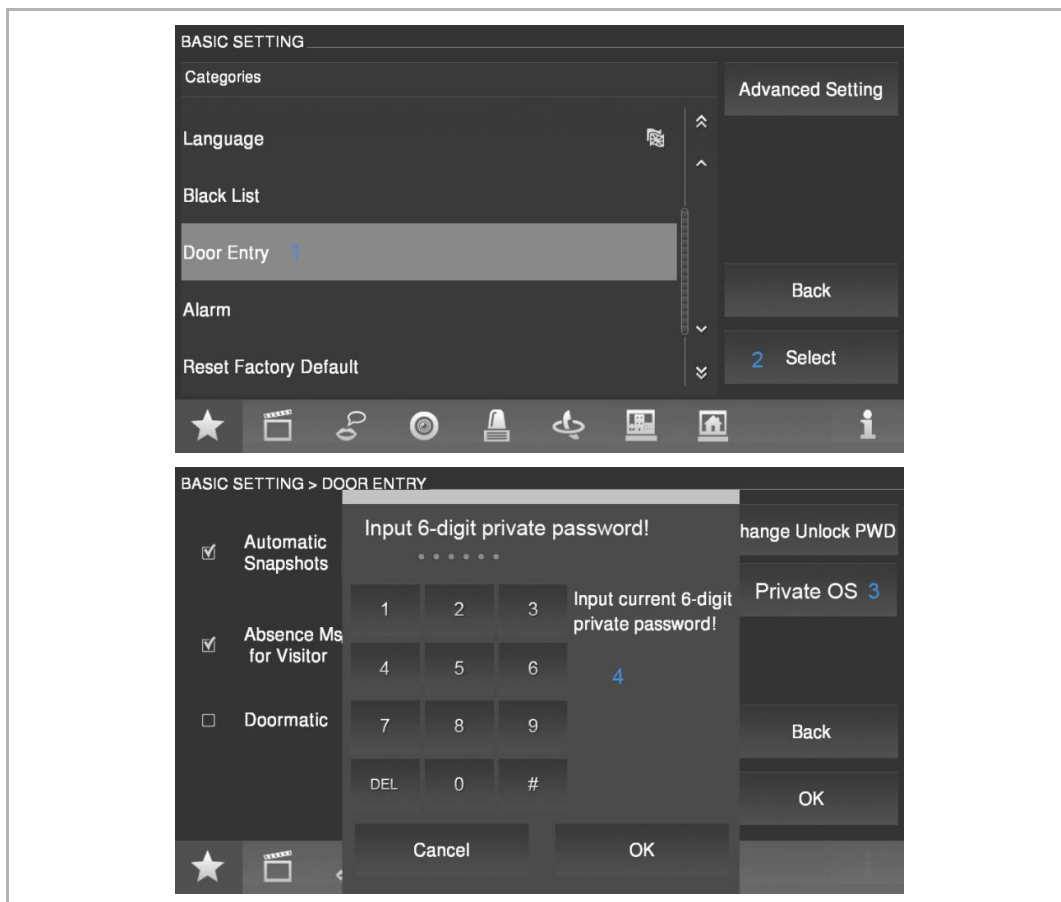



Fig. 40: Manage ID/IC cards on indoor station

- Press  on the indoor station
- Click "Door Entry" then click "Select".
- Click "Private OS" and enter the 6-digit private password. (Default is "123456".)

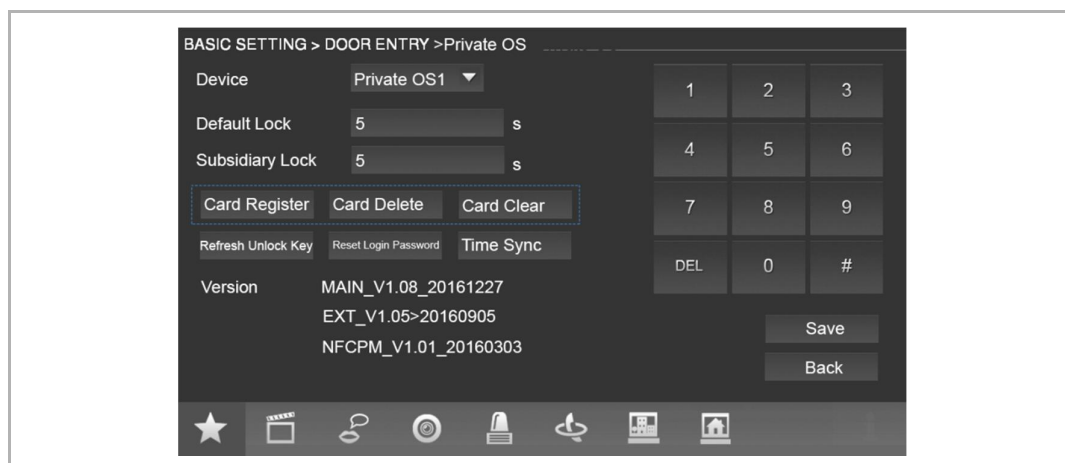


Fig. 41

Register new ID/IC cards

During the process, the push-button module lights up yellow, swipe the ID/IC cards to register; if successful, the pushbutton module lights up green.

Delete existing ID/IC cards

During the process, the push-button module flashes yellow, swipe the ID/IC cards to delete; if successful, the push-button module lights up green.

Delete all existing ID/IC cards

Click to delete all existing ID/IC cards. If successful, the push-button module lights up green.

During the process of card registering or card deletion, the push-button module will light up or flash. You can press the 1st round push-button to quit the process.

Technical data of ID card

Work frequency	Standard	Support ID card protocol
125KHz	ISO18000-2	EM4100, EM4205, EM4305, EM4450, TK4100, T5567/T5577

Table 7

Technical data of IC card

Designation	Value
Work frequency	13.56 MHz
Standard	ISO14443A
Support card	Mifare One S50/S70, etc.
Output format	Wiegand 26/34 bit
Support NFC device	Mostly NFC mobile. (Test is required before using)

Table 8

9.5 Use of app to open door

Push-button module with NFC can be used for opening the door. Programming is carried out on the indoor station. Additional devices are not required for commissioning.

To the play store

(https://play.google.com/store/apps/details?id=com.abb.allegro3_nfcdooropener&hl=en)

- [1] Download and install the ABB door opener app from the Google Play Store.
- [2] Turn on the NFC function of your mobile device.
- [3] Enter the setting mode of the round push-button module.
- [4] Start using the NFC app on your mobile device.
- [5] Set up your mobile device as a new user card.
- [6] Configure your personal settings.

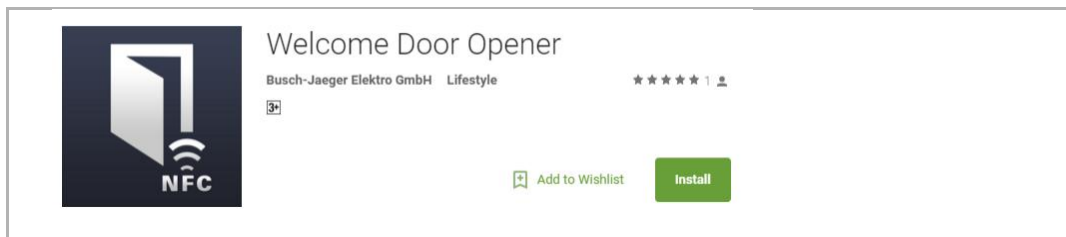


Fig. 42: Download APP

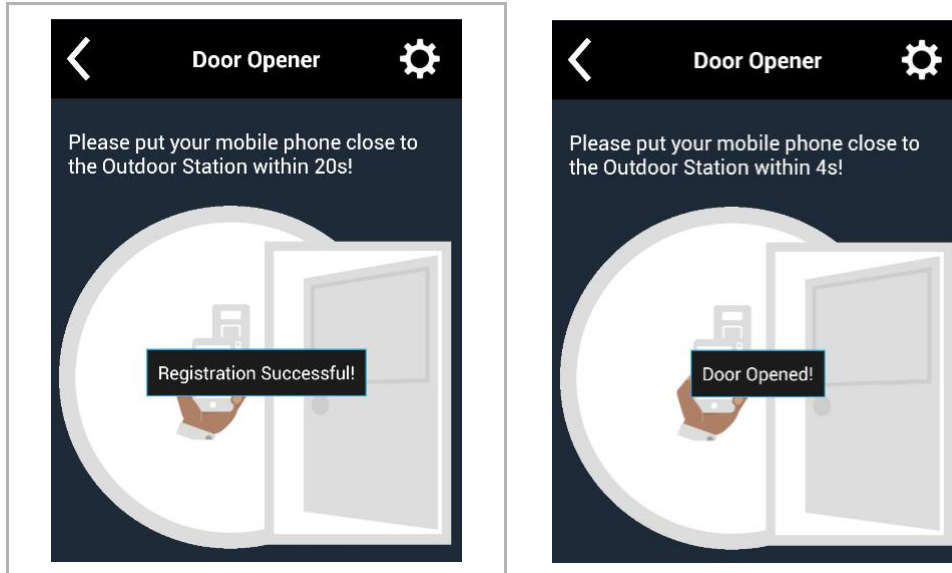


Fig. 43: Registration

Notice

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