ABB

ABB Welcome®

M25102xC
M25102xA-x-
M25102xPx.
M25102xK-x.
M25102xCR.
5102xDN
5101xPx
Outdoor station

Module family

Camera module

Audio module

Audio module

Audio module

Nameplate module

Round pushbutton
1 button

Round pushbutton
2 button

Round pushbutton
3 button

Pushbutton
3/6 button

Pushbutton
4/8 button

Round pushbutton
1 button, with NFC/IC

Round pushbutton
2 button, with
NFC/IC

Round pushbutton
3 button, with
NFC/IC

Keypad (3 versions)
Stainless steel
Aluminum
White

Display with ID
Display with IC

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1   Safety

⚠ **Warning**

Electric voltage!
Direct or indirect contact with live components can cause dangerous
currents to flow through the body, which may result in electric shock,
burns or even death.
  − Always disconnect the main power supply prior to installation and/or
    disassembly.
  − Work on the 110 V - 240 V supply system must be performed only
    by qualified personnel.

2   Intended use

The outdoor station is an integral part of the ABB Welcome door entry system and operates exclusively with components from this system.
The device must only be used with suitable ABB flush-mounted installation sockets and rain hood.

3   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
    and should be disposed of at an appropriate recycling facility.

3.1   ABB devices

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

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4 Terminal description

4.1 Audio module
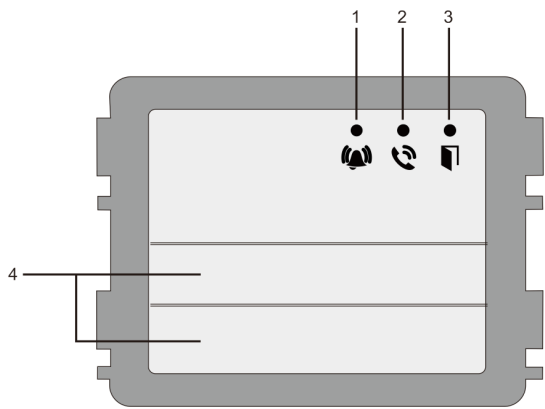
No.	Function
1	LED flashes slowly, indicating a call has been established
	LED flashes fast, indicating that the system is busy
2	LED illuminates, indicating possible communication
3	LED illuminates, indicating the door is unlocked
4	Call pushbuttons

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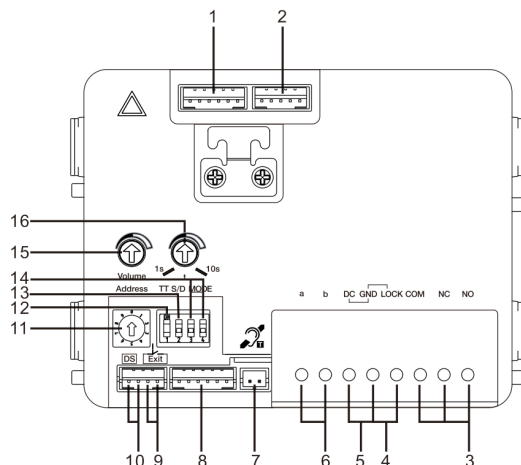
| No.	Functions
1	Connector for camera module
2	Connector for device software update
3	Plug-in clamps (COM-NC-NO) for floating output, door opener (30 V AC/DC, 1 A)
4	Plug-in clamps (Lock-GND) for door opener (18 V 4 A, 12 V 250 mA)
5	Plug-in clamps (DC-GND) for additional power supply
6	Plug-in clamps (a-b) for bus connection
7	Connector for induction loop module
8	Connector for next module
9	Connector for exit pushbutton
10	Connector for sensor for monitoring door status
11	Rotary switch for setting the address of OS (1-9)
12	Set feedback tones for pushbuttons and for outdoor station when making a call: ON or OFF
13	Configure pushbuttons in a single column or double column mode (ON=double column; OFF=single column) This only affects the bar pushbutton, not the round pushbutton.
14	Configure functions of the first and second pushbuttons 3->OFF, 4->OFF=call indoor station and call indoor station 3->ON, 4->OFF=switch on lighting and call indoor station 3->OFF, 4->ON=call guard unit and call indoor station 3->ON, 4->ON=switch on lighting and call guard unit
15	Adjust the loudspeaker volume
16	*Adjust the door lock release time, 1-10 seconds (available for the lock connected with the default lock)

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*Default lock (first lock): Released by "unlock" button of the indoor station. Factory setting is LOCK-GND.

a	
b	
DC	
GND	
LOCK	
COM	
NC	
NO	
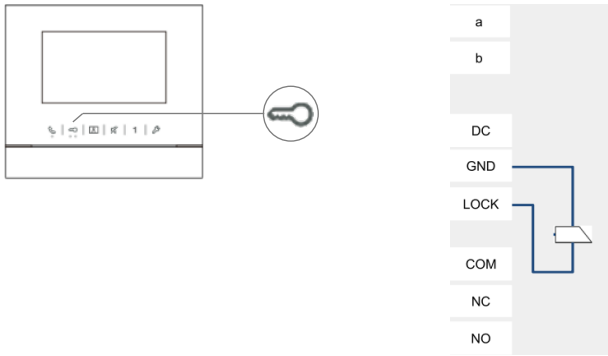
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Second lock: Released by programmable button "1" of the indoor station. Factory setting is COM-NC-NO.
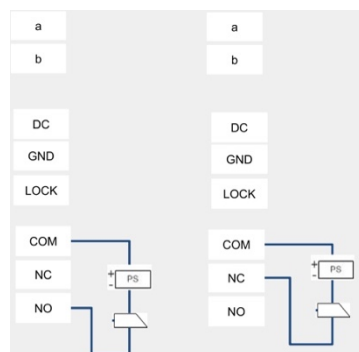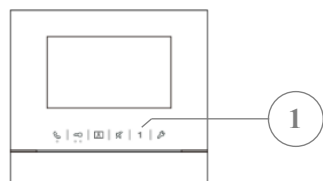
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Change default lock

Default lock can be set at either "Lock-GND" or "NO-NC-COM"

1

Set outdoor station address ="0"

Short circuit the "**Exit**" two terminals for 3 seconds to enter the setting mode
 (3 LED flashes green to show the setting mode for aluminum outdoor station)
(prompt tone "di" for stainless outdoor station)

Tones for indication:
Lock 1 (LOCK-GND) = default lock
Lock 2 (NC-NO-COM) = default lock

Short circuit "Exit" terminal on outdoor station to switch the default lock

30 seconds time available to save the setting and exit the programming mode

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Set the lock time of the default lock
Set the time by the potentiometer, from 1-10 seconds

Set the lock time of the second lock

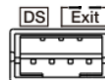| |
|---|
| Set outdoor station address ="0" |

Short circuit the "**DS**" two terminals for 3 seconds to enter the setting mode *(3 LED flashes green to show the setting mode for aluminum outdoor station)* *(Beep tone sounds for stainless outdoor station)*

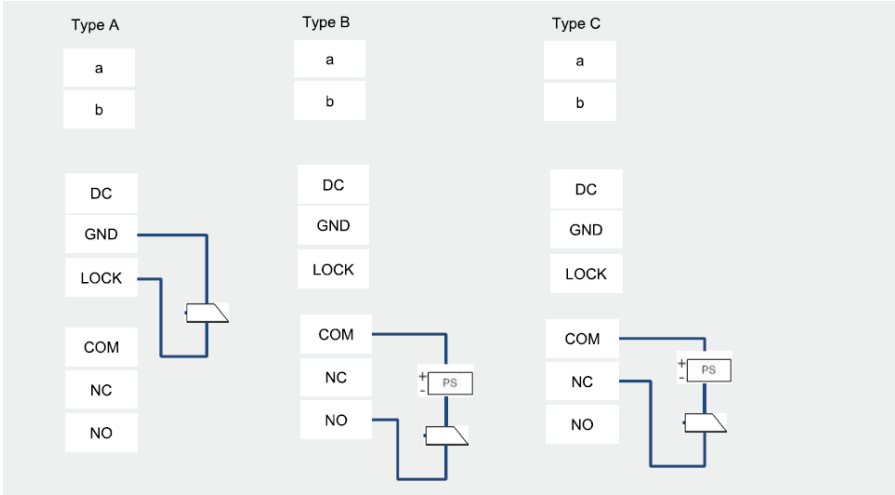| |
|---|
| Record the time for first lock

Then set the time for second-Lock from 1-10 seconds |

30 seconds time available to save the setting and exit the programming mode At last set the time back for 1st-Lock

Reset the time to the original time for first lock

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4.1.1   Lock connected with terminals 3 and 4

Lock type	Pic	Operation type	Voltage	Wiring
Electric Strike Lock, 12V		Power supply to open.	12V DC/AC	Type A Type B
Electric Strike Lock, 24V		Power supply to open.	24V DC/AC	Type B
Electric Rim Lock, 12V		Power supply to open.	12VDC	Type A Type B
Electric mortise lock		Power on to close.	12VDC	Type C
Magnetic lock		Power on to close.	12/24VDC	Type C

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4.2 Camera module
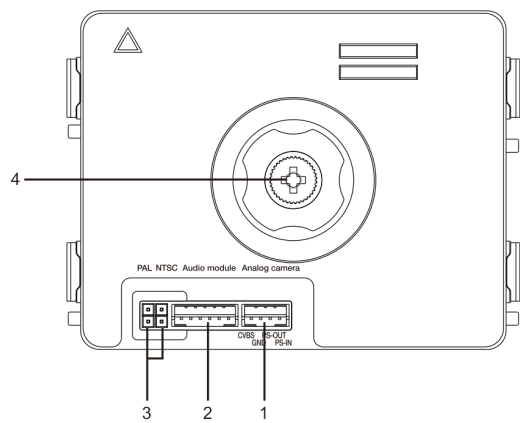
No.	Functions
1	Connector for additional analog camera
2	Connector for audio module
3	Jumper for setting the video format: PAL or NTSC
4	Adjust the camera view area

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4.2.1   Analog camera connected with terminal 1

All the cameras with the video output of 1Vp-p 75Ω,CVBS (composite video broadcast signal) can be connected with the camera module.
Generally, the transmission distance from the analog camera to the outdoor station can reach up to 164 ft. by coax cables or about 33 ft. by other types of cables.
Two types of connections:
Option 1: The analog camera is powered on all the time.
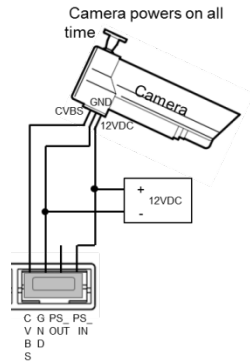
Option 2: The analog camera is powered on only during working hours.

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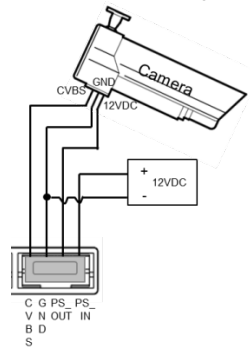
4.2.2   Detached camera connection

Camera module can be used as a detached camera. Wiring is shown below.
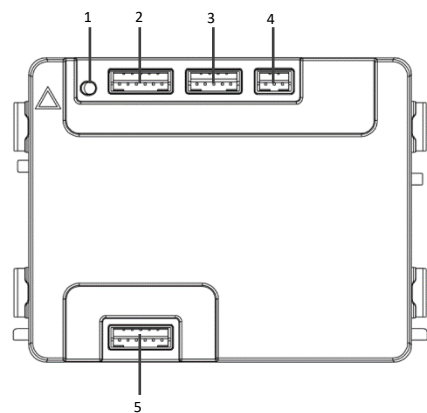
3 pairs 2-wire bus
together
Max:10 metres

a   b

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4.3 Round pushbutton module

No.	Functions
1	Program button
2	Connector for previous module
3	Connector for device software update
4	Connector for Wiegand output Default format is 26 bits; it can also be extended to 34 bits.
5	Connector for next module

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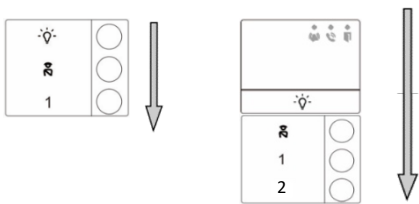
No.	Functions
1	Regardless of the structure of the pushbutton module, button numbers are listed from top to bottom.
2	Lighting switch and call guard unit function is always assigned to the first and second button, which is set by audio module.
3	User names can be printed by using the labeling tool of the ABB Welcome configuration software.
4	The round pushbutton module with NFC/IC card reader supports the NFC/IC card. A mobile phone with NFC function is acceptable. ("Door Open" App required.)

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4.4 Pushbutton module
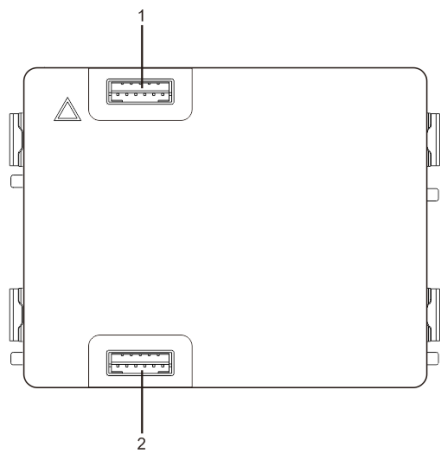
No.	Functions
1	Connector for previous module
2	Connector for next module

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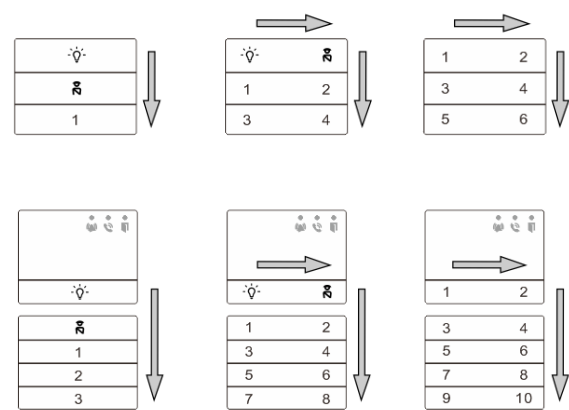
No.	Functions
1	Regardless of the structure of the pushbutton module, the button numbers are listed from top to bottom and from left to right (in the double column mode).
2	Lighting switch and call guard unit function is always assigned to the first and second button.
3	User names can be printed by the using the labeling tool of the ABB Welcome configuration software.
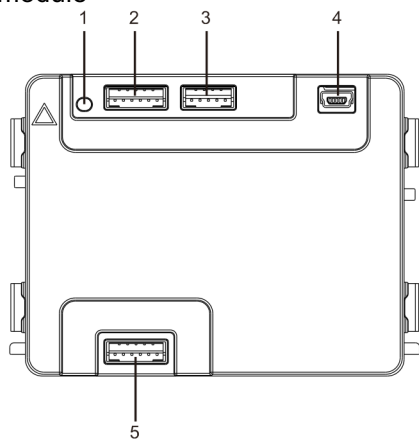
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4.5 Keypad module

No.	Functions
1	Program button
2	Connector for previous module
3	Connector for device software update
4	USB connector for connection to a PC: Download/upload the configuration.
5	Connector for next module

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No.	Functions
1	Call resident A visitor inputs an indoor station number (001) or apartment number (*e.g.*, 0101, programmed in advance) to call a resident. *Also, the visitor can select a resident name with the ⌃ or ⌄ buttons of the accompanying display module to make a call. Pressing the [*-] button will cancel the call. ***This function is only available in Fig. 1.***
2	Calling the guard unit A visitor can call a guard unit by pressing the 🔔 button if the guard unit is available in the system.
3	Unlocking by password Press " [#↵] + password+ [#↵] " to release the default lock to the audio module. Press " [#↵] +2 + [#↵] + password + [#↵] " to release the 2nd lock connected to the audio module. The initial password is 123456. Residents can set their own customized password with indoor stations.
4	System engineering configuration Press " [#↵] + [*-] + system password + [#↵] " to enter the system engineering configuration menu. The initial system password is 345678, and it can be modified by the administrator.

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4.6 Display and card reader module
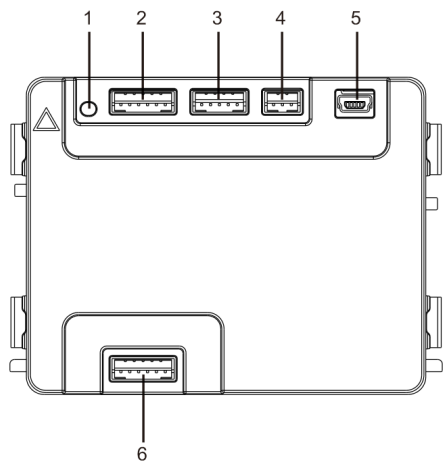
No.	Functions
1	Program button
2	Connector for previous module
3	Connector for device software update
4	Connector for Wiegand output
5	USB connector for connecting to a PC: Download/upload the configuration.
6	Connector for the next module

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No.	Functions
1	LCD display
2	Support ID or IC card. Swipe the registered card to release the door lock. The card can be programmed through the module itself, or by using a PC to download the program file. (M251021CR is accompanied by an ID card reader, while the M251022CR is accompanied by an IC card reader.)
3	Support Wiegand output. The default Wiegand format is 26 bits, but it can also be extended to 34 bits.

*The display module must be connected after the audio module.

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M251021CR: Display module with ID card reader

Work frequency	125 kHz
Standard	ISO18000-2
Support card	EM4100, EM4205, EM4305, EM4450, TK4100, T5567
Output format	Wiegand, 26-bit, 34-bit

M251022CR: Display module with IC card reader

Work frequency	13.56 MHz
Standard	ISO 14443A
Support card	Mifare® One S50/S70, etc.
Output format	Wiegand, 26-bit, 34-bit

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4.7 Nameplate module

No.	Functions
1	Connector for previous module
2	Connector for next module
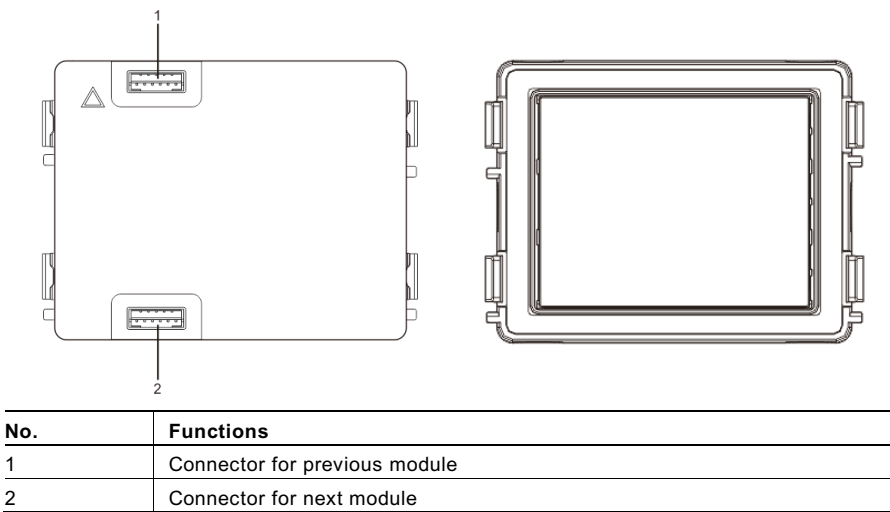
Labeling of the nameplate module can be printed by using the labeling tool of the ABB Welcome configuration software.

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5 Operation

5.1 Pushbutton outdoor station
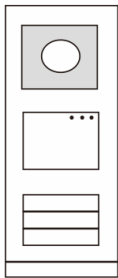
5.1.1 Addressing

1. Configure functions of the first and second pushbuttons
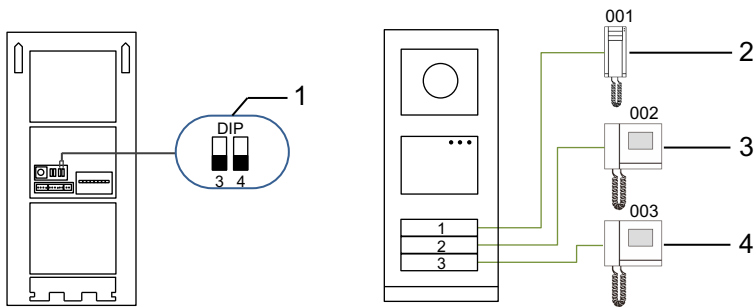
No.	Functions
1	3->OFF, 4->OFF
2	Call apartment 01.
3	Call apartment 02.
4	Call apartment 03.

ABB Welcome®
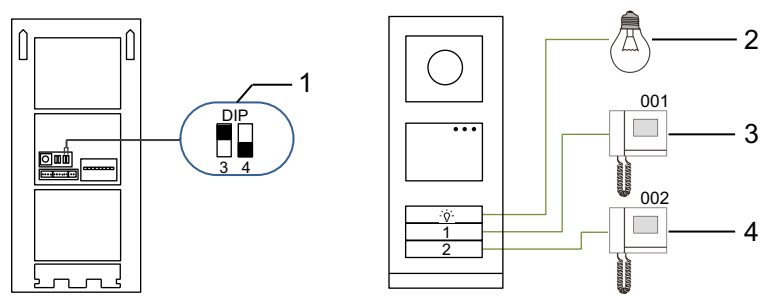
No.	Functions
1	3->ON, 4->OFF
2	Switch on light. The light is connected with a switch actuator. The address of the switch actuator must be the same as the address of this outdoor station.
3	Call apartment 01.
4	Call apartment 02.

ABB Welcome®
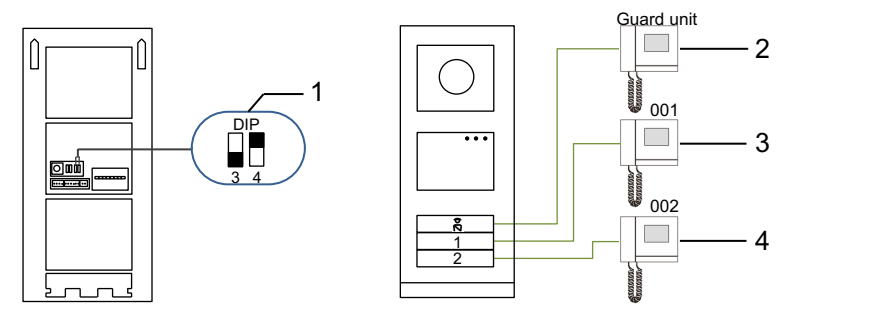
No.	Functions
1	3->OFF, 4->ON
2	Call the guard unit. If there are multiple guard units in the same section, all guard units will ring at the same time when a visitor presses the button "call guard unit."
3	Call apartment 01.
4	Call apartment 02.
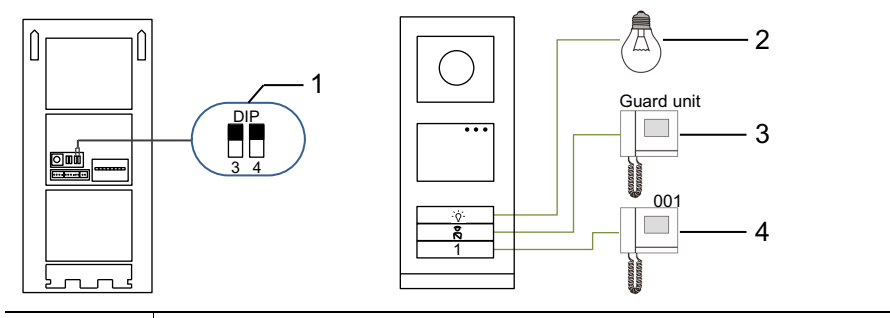
No.	Functions
1	3->ON, 4->ON
2	Switch on lights.
3	Call guard unit.
4	Call apartment 01.

2. Configure pushbutton in single or double column modes

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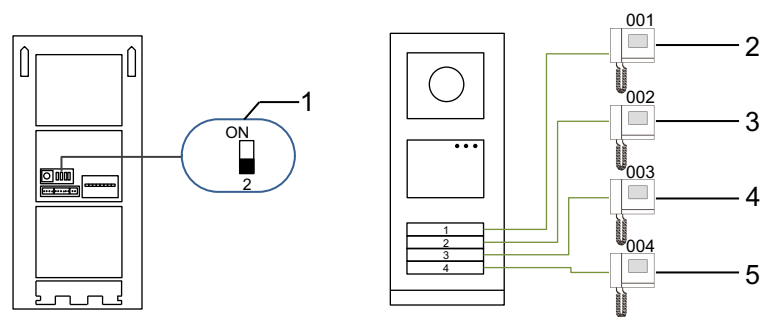
No.	Functions
1	2->OFF
2	Call apartment 01.
3	Call apartment 02.
4	Call apartment 03.
5	Call apartment 04.

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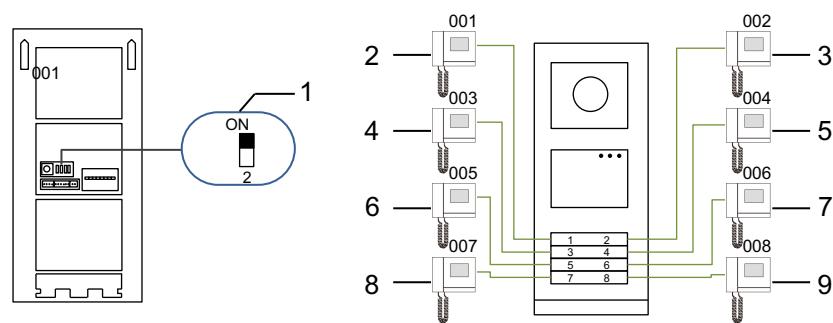
No.	Functions
1	2->ON
2	Call apartment 01.
3	Call apartment 02.
4	Call apartment 03.
5	Call apartment 04.
6	Call apartment 05.
7	Call apartment 06.
8	Call apartment 07.
9	Call apartment 08.

ABB Welcome®
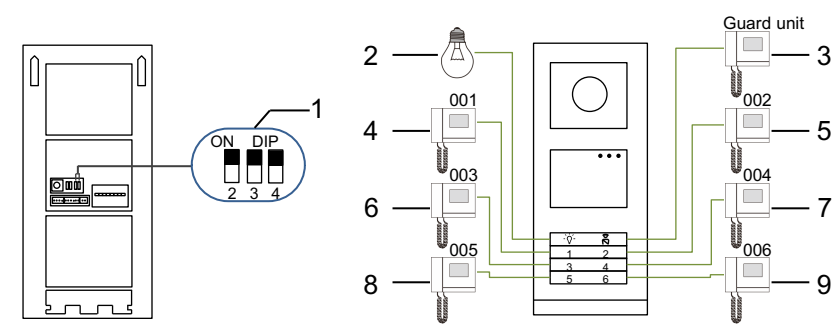
No.	Functions
1	2->ON, 3->ON, 4->ON
2	Switch on lights.
3	Call the guard unit.
4	Call apartment 01.
5	Call apartment 02.
6	Call apartment 03.
7	Call apartment 04.
8	Call apartment 05.
9	Call apartment 06.

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5.1.2   Setting the language for voice messages (if the audio module has a speech synthesis function)

For the audio module with a speech synthesis function (M251024A-.), the local language can be set.

Set outdoor station address as "0" and hold the first button for 3 seconds to play the voice message.

Click on this button to select the language. After choosing the language, hold this button to save and exit the setting.

Single column   Double column

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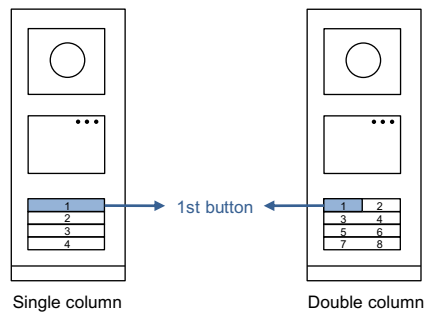
Pushbutton outdoor station used as gate station

If pushbutton outdoor station is set as a gate station, a gateway must be used, and it must be configured in floor gateway mode.

Outdoor station
Left building

Outdoor station
Gate entrance

Outdoor station
Right building
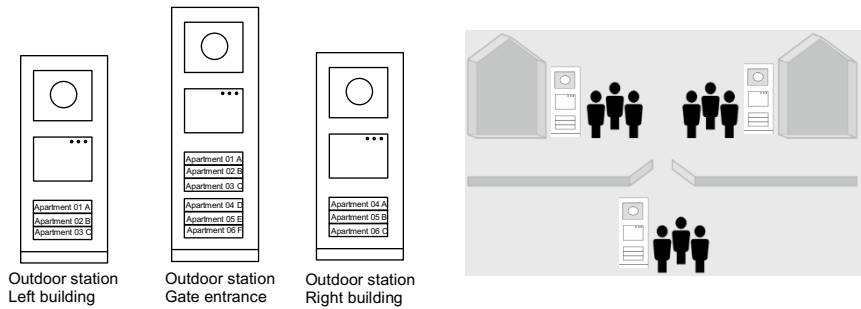
For detailed information, please refer to the Gateway User Manual, floor gateway chapter.

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5.2   Pushbutton outdoor station with display module

The display and card reader module can be assembled with a pushbutton outdoor station. The user can swipe cards to open the door. For this combination, a master card is needed for an electrician to manage this outdoor station.

Register a master card or deactivate a master card. (We recommend that this work be carried out by specialized personnel.)
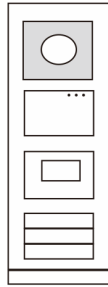
1.   Disconnect the power supply.
2.   Reconnect the power.
3.   Within 30 seconds, hold the "program button" for 5 seconds to enter the "program master card" interface within 30 seconds.
4.   Any card swiped by the reader during this time will be designated as the new master card. The prompt "Register master card successfully" will appear on the screen.
Please note that if you swipe this same card again, the information will be deleted, and the prompt "Delete master card successfully" will appear on the screen.
Only one master card can be registered at a time.

Enter system setting using master card:

1.   Swipe the master card to enter the setting menu. Three LEDs will turn on.
2.   Six options are available:
   –   Program card
   –   Language
   –   Wiegand output
   –   Choose door
   –   Date and time
   –   Back

   There is a 5-second countdown for each option.
3.   Swipe the master card again within 5 seconds to change to the next option.
   Or, after 5 seconds has elapsed, the current option will be chosen.
4.   After 30 seconds elapsed time, you will automatically be exited from the setting menu.

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Swipe the master card

```
Menu_____05
Program Card  ∧
Language
Wiegand Output ∨
```

==> ¦ ==>

After 5 seconds of elapsed time, the current option will be chosen

```
Menu_____√
Program Card  ∧
Language
Wiegand Output ∨
```

==>

Swipe the master card, enter the setting

```
Proximity Card  05
Register  Card  ∧
Delete Card
Delete All      ∨
```

Swipe the master card within 5 seconds to move to next option.

==>

```
Menu_____05
Program Card  ∧
Language
Wiegand Output ∨
```

Swipe the master card within 5 seconds to move to next option

==>

```
Menu_____05
Program Card  ∧
Language
Wiegand Output ∨
```

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5.3 Pushbutton outdoor station with keypad module

The keypad module can be assembled with a
pushbutton outdoor station, and users can enter the
password to open the door.
Users can enter the system settings menu by using the
following steps. (Press **#** to confirm and ***** to cancel. The
default system password is 345678.)
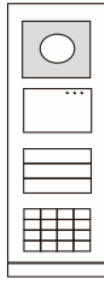
1. Set the device as an outdoor station or a gate
    station.
    Outdoor station:
     #* system password # =>
    1 # => **1 #**
    Gate Station:
     #* system password # =>
    1 # => **2 #**

2. Modify "system password"
    #* system password # =>
    2 # => **Enter new password (6-8 characters) #** => **Enter the password again #**

3. Modify "door open code"
    #* system password # =>
    3# => **Enter new door open code (3-8 characters) #** => **Enter the code again #**

4. Set the voice message
    If the audio module with the speech synthesis function (M251024A-.) is assembled, the local language can be set.
    #* system password # =>
    4# => **Press** ⌃ **or** ⌄ **to choose the language** => **#**

5. Enable or disable access control function
    Enable access control function:
    #* system password # =>
    5# => **1 #**
    Disable access control function:
    #* system password # => **5#** => **2 #**

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*Reset the system password of the keypad module:

It is possible to reset the system password to the factory setting if you have forgotten it.

The restoration of default factory settings does not delete the rest of the information programmed on the system, such as user names or other settings.

1. Disconnect the power supply.
2. Reconnect the power.
3. Within 30 seconds hold the "program button" for 5 seconds.
4. A beep tone will sound and the system password will be reset to the default (345678).

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5.4 Round pushbutton outdoor station with IC or NFC

Enroll the cards

For the round pushbutton module with NFC or IC card reader, cards can be enrolled or deleted. A maximum of 500 cards can be supported.

Programming

Function	Command	LED
Create admin card	Swipe card 1x	Green
Enter settings	Swipe admin card 1x	Orange

The system will designate the first card swiped within 60 seconds after

powering up the system as the admin card.

After entering settings, the following functionalities can be implemented:

Function	Command	LED
Enroll user	Swipe admin card 1x	Orange flash 1x
	Swipe card (new user) 1x	Green
Delete user	Swipe admin card 2x	Orange flash 2x
	Swipe card (user x) 1x	Green
Enroll new admin	Swipe admin card 3x	Orange flash 3x
	Swipe card (new admin) 1x	Green
Delete admin	Swipe admin card 4x	Orange flash 4x
	Swipe card (admin x) 1x	Green
Delete all users	Swipe admin card 5x	Orange flash quickly
	Swipe admin card 1x	Green

During setting, please swipe the same admin card.

Function	Command	LED
Exit settings	Swipe admin card 1x or no cards swiped within 15 seconds	——

Open a door

Function	Command	LED
Open a door	Swipe the enrolled keycard or mobile phone with "Door Open" App installed.	Green

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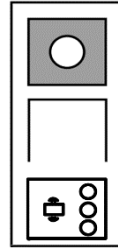
Reset to factory default

Function	Command	LED
Reset to factory default	Disconnect the power supply. Reconnect the power supply. Within 60 seconds, long-press the "program" button for 5 seconds. Finish reset.	—— White Red, green, orange cycle ——

Technical specifications for round pushbutton module with IC orNFC:

Work frequency	13.56 MHz
Standard	ISO 14443A
Support card	MIFARE One S50/S70, etc.
Output format	Wiegand, 24-bit, 34-bit
Supported NFC devices	Most NFC mobile. (Not all; testing is needed before using this function.)

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Set the Wiegand format

1. Swipe admin card to enter system setting. (Orange LED is on.)
2. Short press first button to change the Wiegand format to 26-bit or 34-bit. (Default is 26-bit.)
   The different format is indicated by the LED and sound feedback.

26-bit, green LED flash *1

34-bit, green LED flash *2

Switch off validation

In some case, users only register cards as a third party and not on the outdoor station. When users swipe these cards at the outdoor station, the door will open, but an unnecessary warning indication will be displayed on display module. To eliminate this unnecessary warning, validation needs to be switched off so it will not appear on the display module.

1. Swipe admin card to enter system setting. (Orange LED is on.)
2. Long press first button for 3 seconds to switch validation on/off. (Default validation is "on.")
   The on or off status is indicated by the LED and sound feedback.

Switch on validation, green LED flash*1

Switch off validation, green LED flash*2
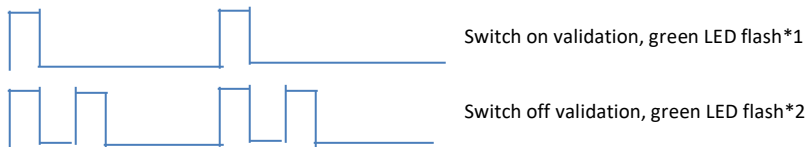
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Use app to open door

The round pushbutton module with NFC can be used for opening doors. Programming is performed directly on the module or via a web browser (requires IP Gateway 83342-500). Additional devices are not required for commissioning.

Access the Google 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 Google Play Store.
2. Turn on the NFC function of your device.
3. Enter the setting mode of your round pushbutton module.
4. Start the app on your device.
5. Set up your device as a user.
6. Configure your personal settings.

ABB Welcome®
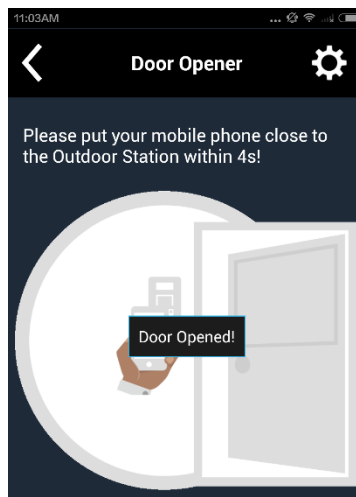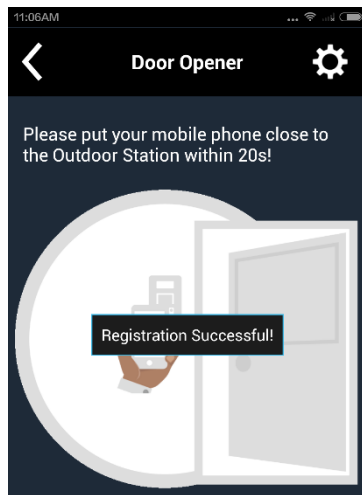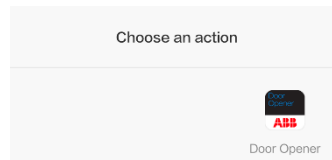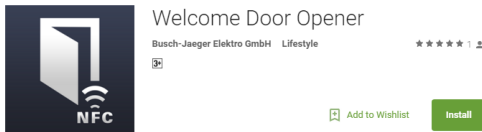
5.5 Keypad outdoor station
5.5.1 Call a resident (three types)

1. Physical address

The physical address is the internal code that the outdoor station will send through the bus connection to indoor stations or other devices in the system. For each apartment, the physical address means the address of an indoor station that is installed in the apartment. For each building, the physical address means the address of a gateway that is installed for each building. It is also called the building number.

In standby mode, a visitor can press the physical address corresponding to the residence (from 001 to 250).

For a complex building, a visitor needs to press the building number (01- 60) plus the physical address (001 - 250), or make a call in the gate station.
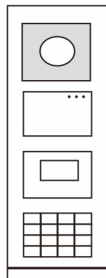
```
Enter Physical
Add.:
      01 001
```

2. Logical address

The logical address is a code that a visitor can press to make a call. The code must be assigned first and then associated with the physical address.

Apartment numbers, which are easy for users to remember, are typically set as the logical addresses, but other special codes can also be used.

Set the logical address by following these steps:

Assign the logical address:

#* system password # => **system setting** =>

Contact => **Add** => **Logic Add.**

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```
Physical Add.:
        001
Logical Add.:
       0101
```

Turn on the "Logical address" call mode
#* system password # => **system setting** =>
Configurations => **Call Mode**

```
Call Mode_____
Physical Add.      ∧
Logical Add.
                   ∨
```
==>
```
No. of digit:
        4
    (1-8 Digits)
```

3. Resident name

(Note: This function is only available for the outdoor station with keypad module (M251021K-.)

In standby mode, press the ⌃ or the ⌄ button to display resident names. Use the ⌃ and ⌄ buttons to search for the desired residential station and press the 📞 to make a call.

A visitor can also enter the resident name using the keypad to make a call.

Resident names must be assigned first and then associated with the physical address.

#* system password # => **system setting**

=> **Contact** => **Add** => **User Names**

```
Physical Add.:
       01001
User Name:
      Federico
```

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5.5.2   Call the guard unit

Press the ⏹ button to make a call to a guard unit.

Accept the call

30 s 🔔		120 s 📞
Guard Unit	==>	Guard Unit
"*" to Cancel		"*" to Cancel
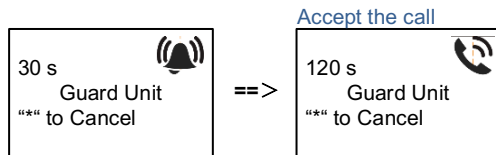
5.5.3   If an indoor station is in "leave home mode"

If an indoor station has been set in "leave home mode," a visitor can record a message for the resident after entering the following interface.

Playing the message...   After a beep tone, visitor
                                can record a message

30 s 🔔		120 s 📞		001 s 📞
Andy	==>	Andy	==>	Recording...
"*" to Cancel		"*" to Cancel		"*" to Cancel

ABB Welcome®
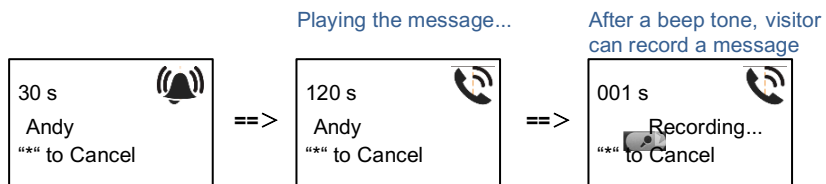
5.5.4 If a guard unit is in "intercept mode"

If a guard unit I set in "intercept mode," a call from an outdoor station to an indoor station will be intercepted by the guard unit. Once the caller's identity has been confirmed, the guard unit can forward the call to the indoor station.

Call from an outdoor station to an indoor station
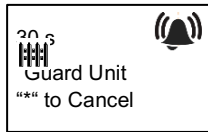
Guard unit accepts the call

Guard unit transfers the call to an indoor station

ABB Welcome®
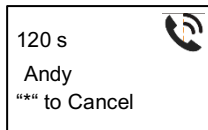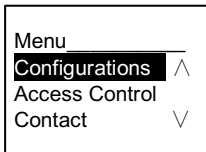
5.5.5   System settings

In settings, press "#" to confirm and "*" to cancel. The default system password is 345678.

1.   Enter the system settings menu

   #* system password #

```
Menu_____
Configurations   ∧
Access Control
Contact          ∨
```

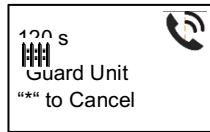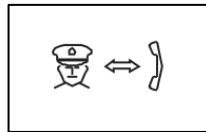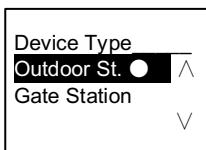2.   Configurations

   (1)   Set the device as an outdoor station or a gate station.

   Outdoor station:

   #* system password # =>

   Configurations # => Device Type # => Outdoor St.   # (Default)
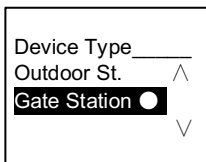
```
Device Type_____
Outdoor St. ●    ∧
Gate Station
                 ∨
```

   Gate station:

   #* system password # =>

   Configurations # => Device Type # => Gate station #

```
Device Type_____
Outdoor St.      ∧
Gate Station ●
                 ∨
```

   (2)   Set the call mode: Make a call by a physical address or a logical code.

   Set the call mode by Physical Address:

   #* system password # =>

   Configurations # => Call mode # => Physical Address #

```
Call mode_____
Physical Add.●
Logic Add.:
```

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Set the call mode by a Logical Code (1-8 digits).

#* system password # =>

Configurations # => **Call mode #** => **Logical Code #**

```
┌─────────────────────┐
│ Call Mode_____   │
│ Physical Add.    ∧  │
│ Logical Add.: ●     │
│                  ∨  │
└─────────────────────┘
```

(3)   System password setting

Modify the system password

#* system password # =>

Configurations # => **System code #** => **Modify #**

```
┌──────────────┐        ┌──────────────┐        ┌──────────────┐
│ New Password:│        │ Re-enter:    │        │              │
│   ******     │  ==>   │   ******     │  ==>   │    Done!     │
│              │        │              │        │              │
│              │        │              │        │              │
└──────────────┘        └──────────────┘        └──────────────┘
```

Reset the system password

#* system password # =>

Configurations # => **System code #** => **Reset #**

```
┌──────────────┐        ┌──────────────┐
│ Reset System │        │              │
│ Code?        │  ==>   │    Done!     │
│ "#" to Confirm│       │              │
│ "*" to Cancel│        │              │
└──────────────┘        └──────────────┘
```

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3. Access control

   (1) Door open code

The password can be set using 3-8 digits. The default door open password is "123456" and it can be changed at an outdoor station.

Users can set their own passwords at the indoor stations. A total of 6,000 passwords can be stored.

Set the door open password ON/OFF (default: 123456)

#* system password # =>

Access Control # => **Door open code #** => **Enable/disable #**

```
Door Open Code__
Disable          ∧
Modify
Reset            ∨
```
==>
```
Done!
```
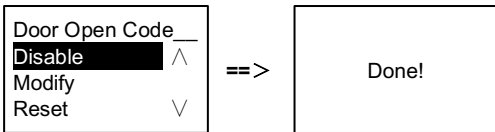
Modify the door open password

#* system password # =>

Access control # => **Door open code #** => **Modify #**

```
New Password:
      ******
```
==>
```
Re-enter:
      ******
```
==>
```
Done!
```
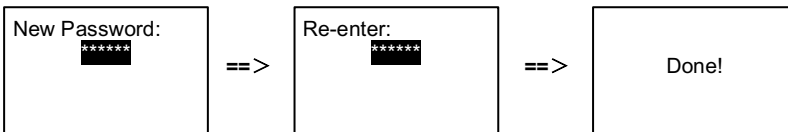
Reset the door open password

#* system password # =>

Access control # => **Door open code #** => **Reset #**

```
Reset Door Open
Code?
"#" to Confirm
"*" to Cancel
```
==>
```
Done!
```
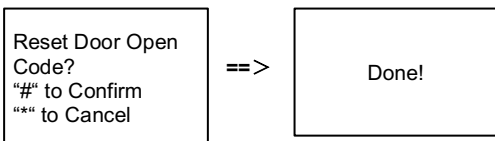
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(2) Proximity card (3,000 cards can be registered for outdoor station.)

Register cards:

#* system password # =>

Access control # => **Proximity card #** => **Register card #**

Enter Card No.: 0123456 Or Swipe the Card	==>	Enter Card No.: 0123456 Or Done! Swipe the Card
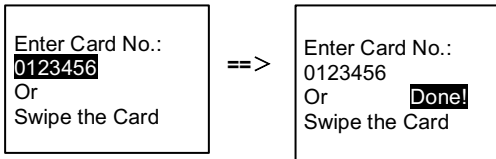
Delete cards:

#* system password # =>

Access control # => **Proximity card #** => **Delete card #**

Enter Card No.: 0123456 Or Swipe the Card	==>	Enter Card No.: 0123456 Or Done! Swipe the Card
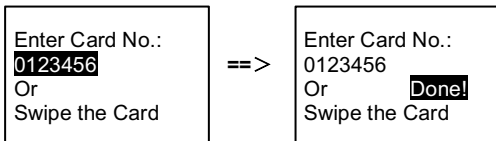
Delete all cards

#* system password # =>

Contact # => **Proximity card #** => **Delete All #**

Delete All Cards? "#" to Confirm "*" to Cancel	==>	Done!
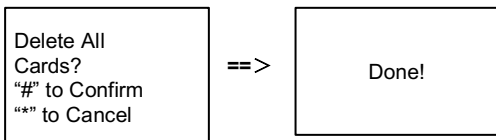
4. Contact (3,000 names using a combination of 24 alphanumeric characters)

(1) Add

Add the contact by user names

#* system password # =>

Contact # => **Add #** => **User Names #**

Physical Add.: 001 User Name: Alexander.G

Resident names must be associated with a physical address.

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Add the contact by logical address

#* system password # =>

Contact # => **Add #** => **Logic add. #**

```
Physical Add.:
001
Logical Add.:
0101
```

Logical address must be associated with a physical address.

(2) Modify

Modify contact by user names

#* system password # =>

Contact # => **Modify #** => **User Names #**

```
Alexander.G      ∧
Bodin.K
Christian.G      ∨
```

Modify the resident names with the corresponding physical address.

Modify contact by logical address
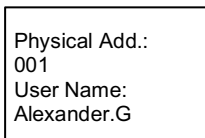
#* system password # =>

Contact # => **Modify #** => **Logic add. #**

```
Enter Logical
Add.:
0101
```

Modify the logical address and its corresponding physical address using the alphanumeric keypad.

(3) Delete

Delete the contact by user name

#* system password # =>

Contact # => **Delete #** => **User Names #**

```
Alexander.G      ∧
Bodin.K
Christian.G      ∨
```

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Delete the contact by logical address

#* system password # =>

Contact # => **Delete #** => **Logic add. #**

```
Enter Logical
Add.:
0101
```

(4) Clear all

#* system password # =>

Contact # => **Clear all #**

```
Delete All Names?

"#" to Confirm
"*" to Cancel
```
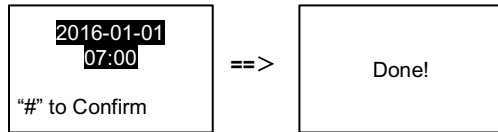==>
```
Done!
```

Clear all lists, including resident names and logical address entries, from this menu.

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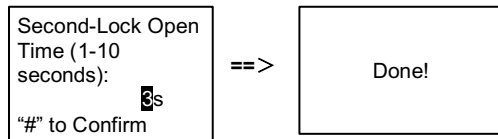5. System setting

   (1) Date and time

#* system password # =>

Settings # => **Date & time #** => **Enter time and date** => **#**

```
┌─────────────────┐        ┌─────────────────┐
│   2016-01-01    │        │                 │
│     07:00       │   ==>  │     Done!        │
│                 │        │                 │
│ "#" to Confirm  │        │                 │
└─────────────────┘        └─────────────────┘
```

   (2) Door open time for second lock

#* system password # =>

Settings # => **Door Open Time #** => **Time 1-10s** (default: 3s) => **#**

```
┌─────────────────┐        ┌─────────────────┐
│ Second-Lock Open│        │                 │
│ Time (1-10      │        │                 │
│ seconds):       │   ==>  │     Done!        │
│            3s   │        │                 │
│ "#" to Confirm  │        │                 │
└─────────────────┘        └─────────────────┘
```
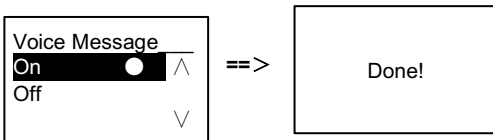
   (3) Setting the voice message on or off

If you are using the audio module with speech synthesis function (M251024A-.), the speech synthesis function can be enabled or disabled. The logical language can also be chosen.

#* system password # =>

Settings # => **Voice message #**

```
┌─────────────────┐        ┌─────────────────┐
│ Voice Message   │        │                 │
│ On          ●  ∧│   ==>  │     Done!        │
│ Off             │        │                 │
│             ∨   │        │                 │
└─────────────────┘        └─────────────────┘
```

If your audio module does not have a speech synthesis function, this will be indicated when you enter the menu.

```
┌─────────────────┐
│ This function is│
│ not Available.  │
│                 │
│                 │
└─────────────────┘
```
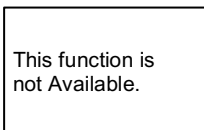
ABB Welcome®

(4) Select language

#* system password # =>

Settings # => **Language #**

```
Language
English      ●    ∧
Français
Italiano          ∨
```

(5) Welcome Message

#* system password # =>

Settings # => **Welcome Msg. #**

```
New Message:
ABB Welcome!          ==>        Done!
"#" to Confirm
"*" to Cancel
```

A total of 64 characters can be entered.

(6) Setting the Wiegand output digits

#* system password # =>

Settings # => **Wiegand Output #**

```
Wiegand Output
26-bit !     ●    ∧
34-bit !
                  ∨
```

(7) Set the related door lock when swiping the card

#* system password # =>

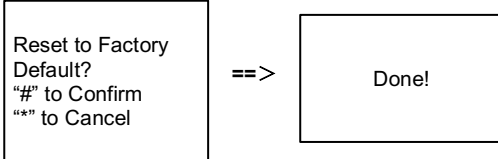**Settings #** =>**Choose Door #**

```
Choose Door
First-Lock
∧
Second-Lock
                  ∨
```

Choose the lock to be released when the registered card is swiped:

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(8) Reset

#* system password # =>

Settings # => **Reset #** => **#**

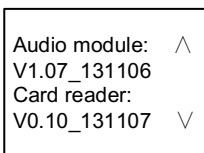|		
Reset to Factory Default? "#" to Confirm "*" to Cancel	**==>**	Done!

Reset all settings to factory settings, but other information, *e.g.*, user names, logical addresses and card information, will not be reset.

(9) Information

#* system password # =>

Settings # => **Information #**

Audio module: ∧
V1.07_131106
Card reader:
V0.10_131107   ∨

View the software information of each module of the outdoor station.

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*Reset the system password for the keypad module:

It is possible to reset the system password to factory settings if you have forgotten it.

The restoration of default factory settings does not delete the other information programmed on the system, such as user names or other settings.

1. Disconnect the power supply.
2. Reconnect the power.
3. Within 30 seconds, hold the "program button" for 5 seconds.
4. A beep tone will sound, and the system password will be reset to the default (345678).

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5.6 Keypad outdoor station without display (camera + audio + keypad)
5.6.1 Calling a resident by inputting physical address

In standby mode, a visitor can enter the physical
address corresponding to the residence to call
directly, from 001 to 250.
For a complex building, the visitor needs to press the
building number (01-60) plus physical address (001-
250) to make a call from a gate station.
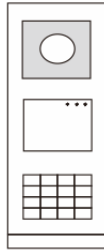
5.6.2 Call guard unit
Press the ⌨ button to make a call to a guard unit.

5.6.3 System settings
Users can enter the system settings by following these steps. (In settings, press "#" to confirm, press "*" to cancel. The default system
password is 345678.)

1. Set the device as an outdoor station or a gate station.

   Outdoor station:
   #* system password # =>
   1 # => **1 #**
   Gate station:
   #* system password # =>
   1 # => **2 #**

2. Modify the "system password"
   #* system password # =>
   2 # => **Enter new password (6-8 digits) #** => **Enter the password again #**

3. Modify the "door open code"
   #* system password # =>
   3# => **Enter new door open code (3-8 digits) #** => **Enter the code again #**

4. Setting the voice message
   If you are using the audio module with speech synthesis function (M251024A-.),
   the local language can be set.
   #* system password # =>
   4# => **Press** ⌃ or ⌄ **to choose the language** => **#**

5. Enable or disable the access control function
   Enable access control function:
   #* system password # =>
   5# => **1 #**
   Disable access control function:
   #* system password # =>
   5# => **2 #**

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***Reset the system password for the keypad module:**

It is possible to reset the system password to the factory setting if you have forgotten it.

The restoration of default factory settings does not delete the other information programmed on the system, such as user names or other settings.

1. Disconnect the power supply.
2. Reconnect the power.
3. Within 30 seconds, hold the "program button" for 5 seconds.
4. A beep tone will sound, and the system password will be reset to the default (345678).

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6   Advanced configuration

Connect to a PC to configure the keypad or display.

ABB Welcome®
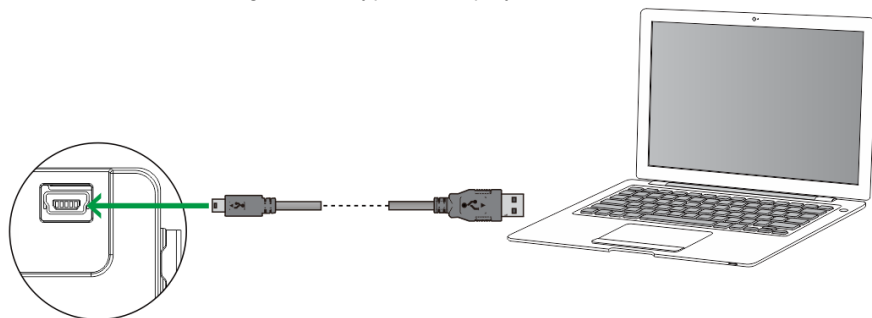
7　　Technical data

Designation	Value
Operating temperature	-40 °F to +158 °F
Protection (cover frame assembled)	IP 54
Power supply, door opener (Lock-GND)	18V, 4 A impulsive, 250 mA holding
Floating output, door opener (COM-NC-NO)	30 V AC/DC 1A
Single-wire clamps	2 x 22 AWG - 2 x 18 AWG
Fine-wire clamps	2 x 22 AWG - 2 x 18 AWG
Bus voltage	20 V - 30 V

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8   Mounting and installation

Warning

Electric voltage!

Direct or indirect contact with live components can cause dangerous currents to flow through the body, which may result in electric shock, burns or even death.

– Always disconnect the main power supply prior to installation and/or disassembly.
– Work on the 110 V - 240 V supply system must be performed only by qualified personnel.

8.1   Requirements for the electrician

Warning

Electric voltage!

Install the device only if you have the necessary qualifications.

– Incorrect installation endangers your life and that of the user of the electrical system.
– Incorrect installation can cause serious damage to property, e.g., 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 from power source
    2.   Secure against being re-connected
    3.   Ensure that there is no voltage
    4.   Connect to the earth
    5.   Cover or barricade adjacent live parts
– Wear 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.).

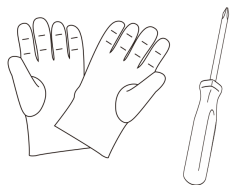# ABB Welcome®

8.2   General installation instructions

− Terminate all branches of the wiring system via a connected bus device (e.g., indoor station, outdoor station, system device).

− Do not install the system controller directly next to the bell transformer or other power supplies (to avoid interference).

− Do not install the wires of the system bus together with 100 V - 240 V wires.

− Do not use common cables for the connecting wires of the door openers and wires of the system bus.

− Avoid bridges between different cable types.

− Use only two wires for the system bus in a four-core or multi-core cable.

− When looping, never install the incoming and outgoing bus inside the same cable.

− Never install the internal and external bus inside the same cable.

The following installation situations must be avoided:

− Direct light
− Direct sunlight
− Extremely bright picture background
− Highly reflective walls on the opposite side of the door station
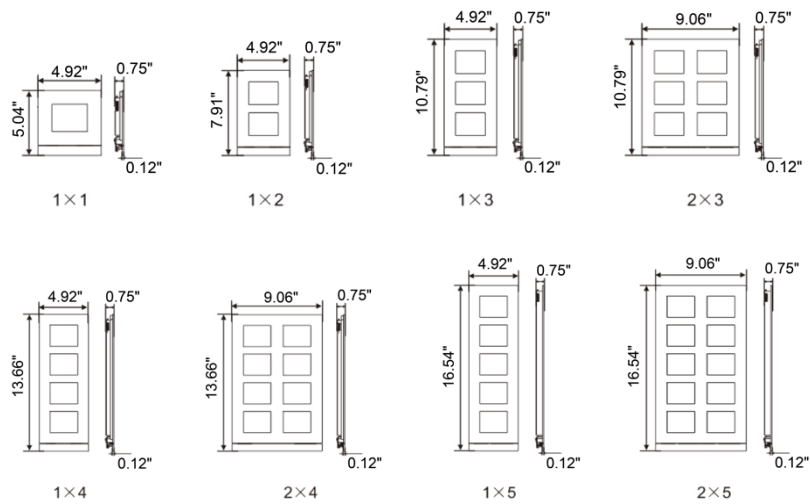− Lamps or direct light sources

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8.3 Mounting
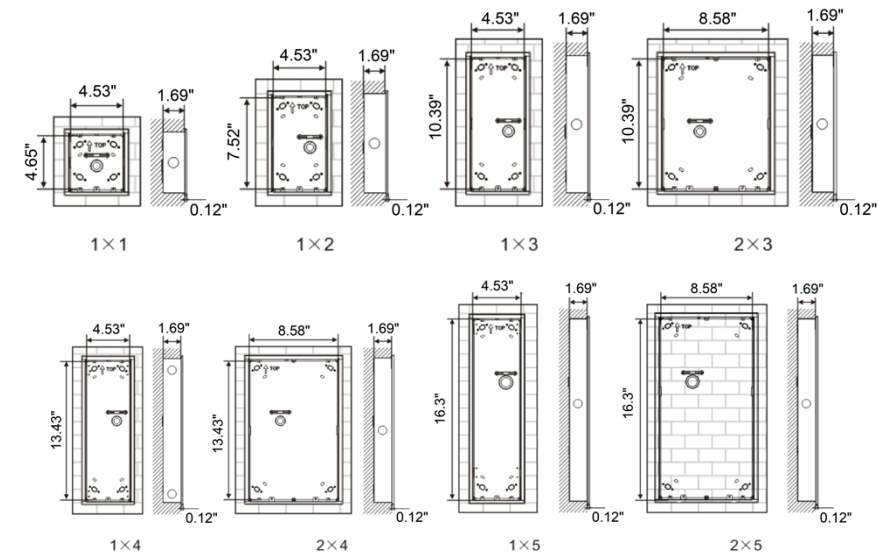
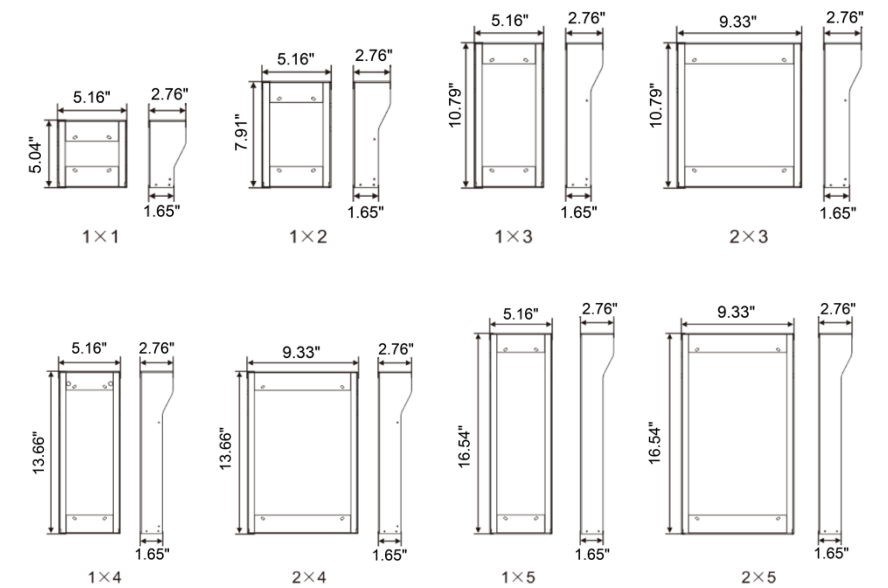Wear gloves to protect your hands from possible laceration.

Dimension

Audio module

3.82"   0.98"
2.83"

Camera module

3.82"   1.22"
2.83"

Nameplate module

3.82"   1.22"
2.83"

Pushbutton module

3.82"   1.50"
2.83"

Keypad module

3.82"   1.61"
2.83"

Display and card reader module

3.82"   0.94"
2.83"

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Cover frame

1×1	1×2	1×3	2×3

1×4	2×4	1×5	2×5

Flush-mounted

1×1	1×2	1×3	2×3

1×4	2×4	1×5	2×5

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Rain hood

Dimensional drawings showing rain hood sizes:

- 1×1 — 5.16" × 5.04", depth 2.76" / 1.65"
- 1×2 — 5.16" × 7.91", depth 2.76" / 1.65"
- 1×3 — 5.16" × 10.79", depth 2.76" / 1.65"
- 2×3 — 9.33" × 10.79", depth 2.76" / 1.65"
- 1×4 — 5.16" × 13.66", depth 2.76" / 1.65"
- 2×4 — 9.33" × 13.66", depth 2.76" / 1.65"
- 1×5 — 5.16" × 16.54", depth 2.76" / 1.65"
- 2×5 — 9.33" × 16.54", depth 2.76" / 1.65"

Components of the outdoor station
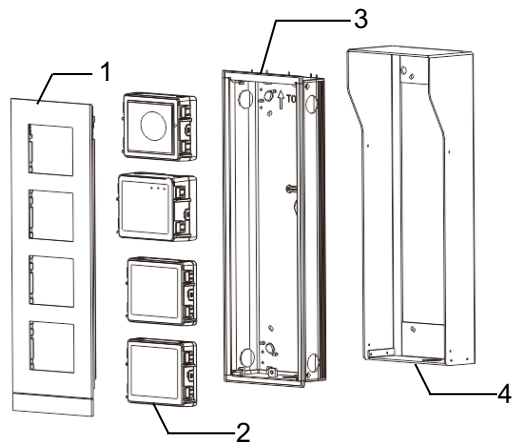
No.	Functions
1	Cover frame
2	Modules
3	Flush-mounted box
4	Rain hood

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Mount each module in the cover frame
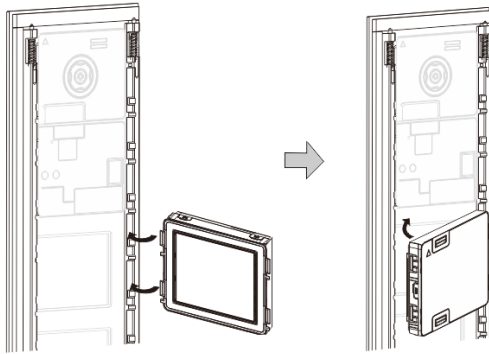
1. Insert each module into the cover frame from behind until it clicks into place. All modules can be inserted, *e.g.*, the camera module, audio module, pushbutton module, keypad module, display and card reader module, nameplate module.
2. Pay special attention to the top-to-bottom orientation of each module.

Module wiring
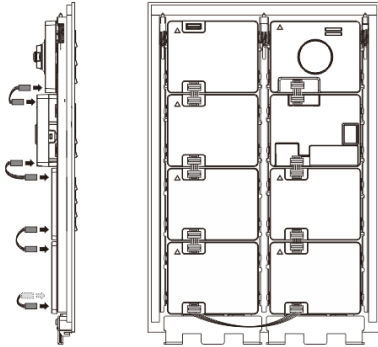
1. Use cables to connect the modules together one by one.
2. Ensure that the audio module is connected next to the camera module.

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The distance zones for the installation of the outdoor station
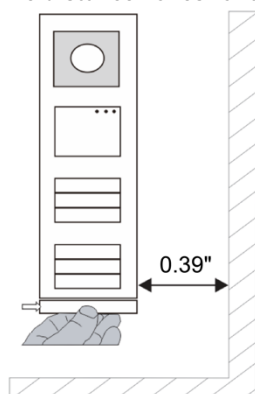
When selecting the installation site, ensure that the minimum distance to the right side is adhered to for removal of the end strip.

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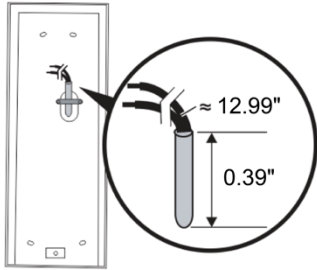
Wires

1. Prepare the installation box.
2. Strip the wires.
   – The insulated section of the cable end must not be longer than .039".

Assemble the frame into the flush-mounted box
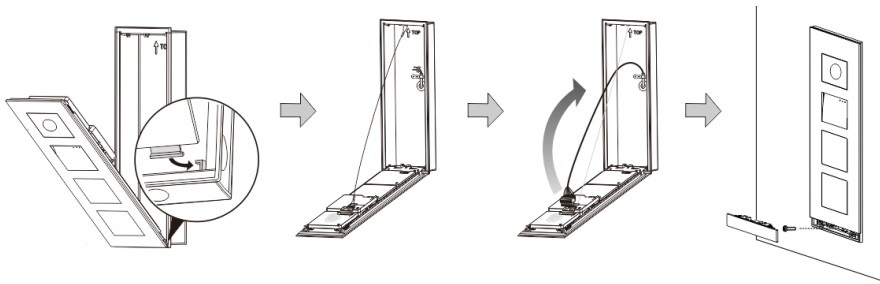
1. Hang the device in the installation box.
2. Fasten the safety loop.
3. Connect the wires into the enclosed clamp, and plug the clamp onto the contact pins. Fold the device and shut it until it audibly snaps in.
4. Screw on the front of the device.

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Four types of installation

Option 1: Flush mounted with only flush-mounted box
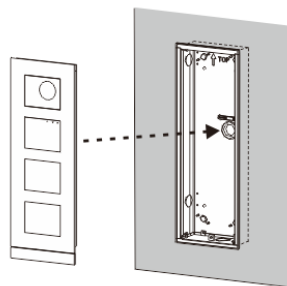
Option 2: Flush mounted with a rain hood
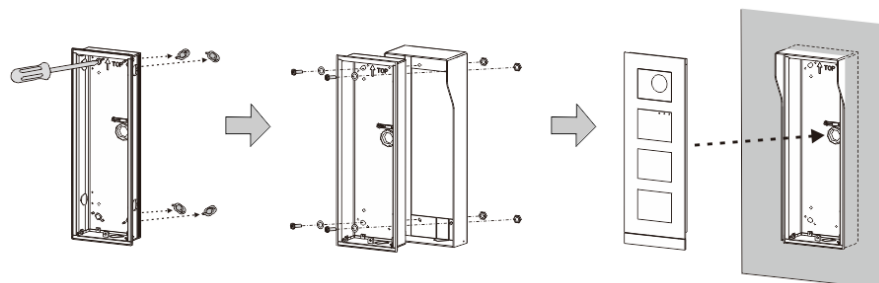
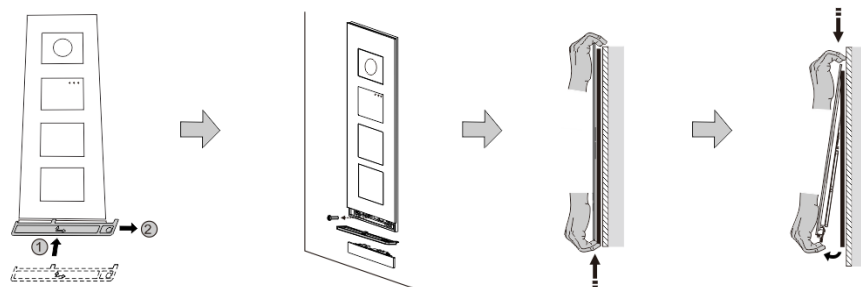**Option 3: Surface mounted with a rain hood**

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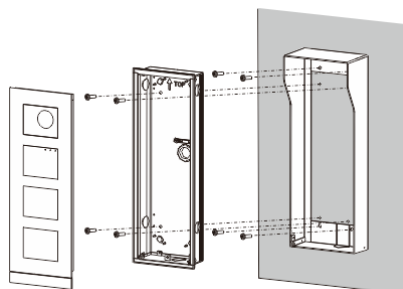
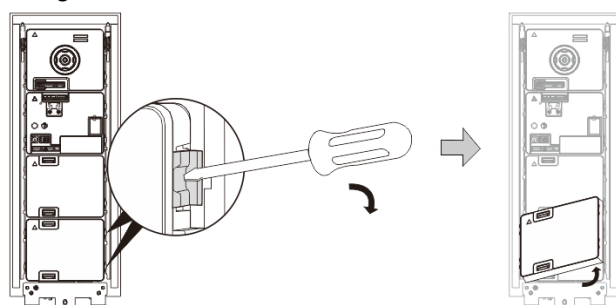**Option 4: Cavity wall installation**

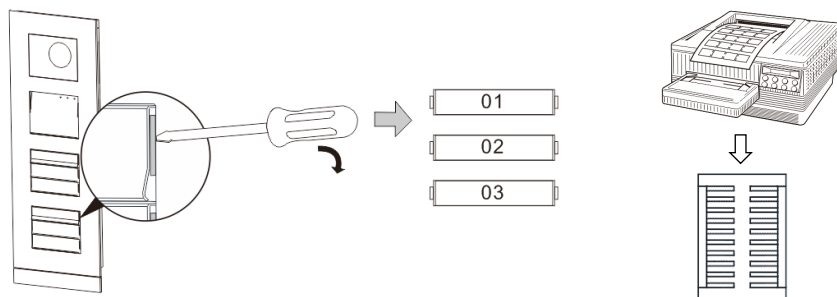# ABB Welcome®
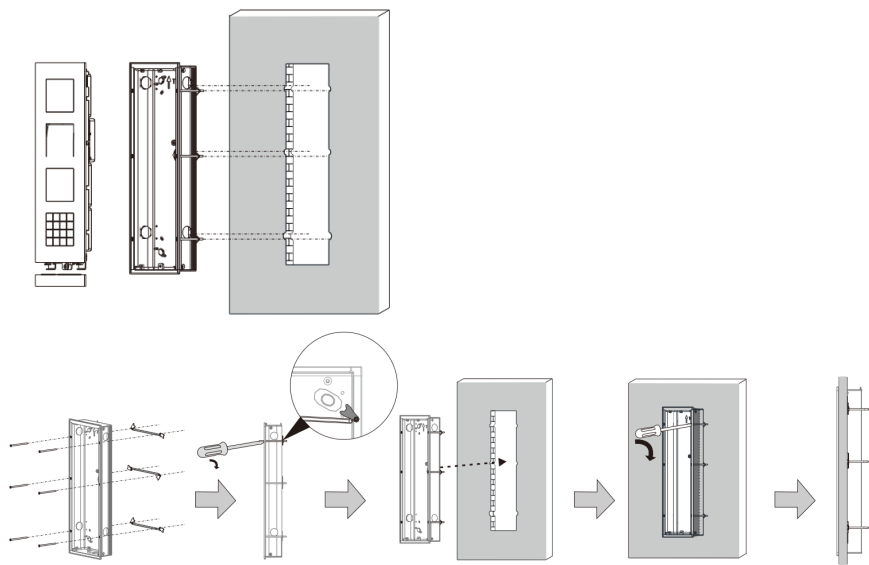
Dismounting the outdoor station

1. Use the enclosed mounting tool to remove the end strip.
2. Remove the screw that is used to affix the cover frame.
3. Push up and pull out the outdoor station on the bottom of the cover frame.
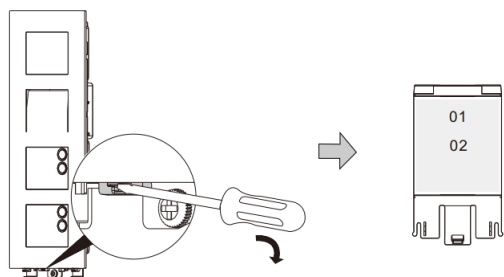
Dismounting the modules

1. Dismount the module from one side of the frame.
2. Remove the modules.

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Replacing the nameplates

1. Remove the pushbutton cover and write the user names on the labels.
2. Use a labeling sheet with appropriate software to correctly format and print the labels.

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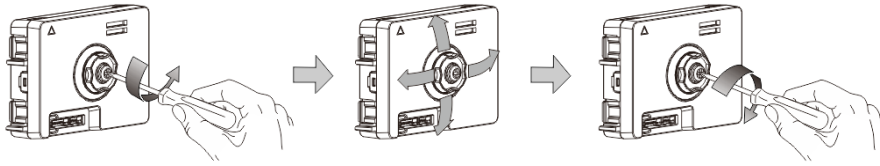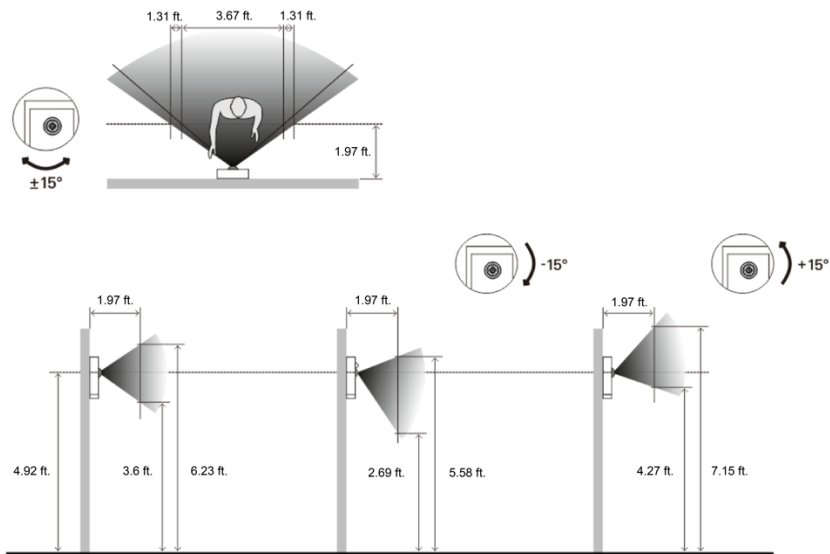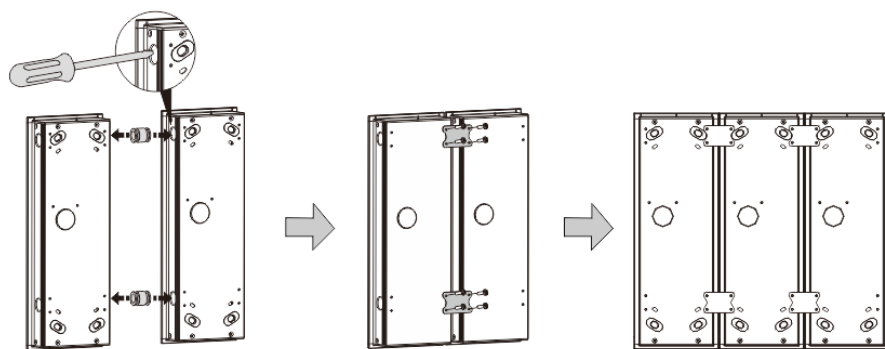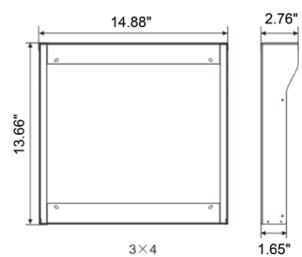**Adjusting the angle of the camera**

Fig. 1   Adjust the angle of the camera

1. Unscrew the camera.
2. Adjust the angle of the camera in four directions (up, down, right and left).
3. Screw on the camera.

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Extending the outdoor station

1. Make a hole for the cable.
2. Use the joining fixtures to assemble the flush-mounted boxes horizontally.
3. Run the connection wires between the boxes.
   *The extension is useful for multi-outdoor station connections.

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