ABB-Welcome

M25102xC
M25102xA-x-
M25102xPx.
M25102xK-x.
M25102xCR.
5102xDN
Outdoor station
ABB-Welcome

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<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
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<td>8.2</td>
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<td>56</td>
</tr>
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<td>8.3</td>
<td>Mounting</td>
<td>57</td>
</tr>
</tbody>
</table>
1 Safety

Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 100-240 V.
– Work on the 100-240V supply system may only be performed by authorised electricians!
– Disconnect the mains power supply prior to installation and/or disassembly!

2 Intended use

The outdoor station is an integral part of the ABB Welcome door communication 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 domestic waste.
– The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.
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 and electric devices and their components via the authorized collection depots and disposal companies.

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)
## Terminal description

### Audio module

<table>
<thead>
<tr>
<th>No.</th>
<th>Function</th>
</tr>
</thead>
</table>
| 1   | LED flashes slowly, indicating a call established  
<pre><code> | LED flashes fast, indicating that the system is busy |
</code></pre>
<p>| 2   | LED illuminates, indicating possible communication. |
| 3   | LED illuminates, indicating the door is unlocked |
| 4   | Call pushbuttons |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Connector for camera module</td>
</tr>
<tr>
<td>2</td>
<td>Connector for device software update</td>
</tr>
<tr>
<td>3</td>
<td>Plug-in clamps (COM-NC-NO) for floating output, door opener (30VAC/DC 1A)</td>
</tr>
<tr>
<td>4</td>
<td>Plug-in clamps (Lock-GND) for door opener (18V 4A impulsive, 250 mA holding)</td>
</tr>
<tr>
<td>5</td>
<td>Plug-in clamps (DC-GND) for additional power supply</td>
</tr>
<tr>
<td>6</td>
<td>Plug-in clamps (a-b) for Bus connection</td>
</tr>
<tr>
<td>7</td>
<td>Connector for induction loop module</td>
</tr>
<tr>
<td>8</td>
<td>Connector for next module</td>
</tr>
<tr>
<td>9</td>
<td>Connector for exit push button</td>
</tr>
<tr>
<td>10</td>
<td>Connector for sensor for checking the door status</td>
</tr>
<tr>
<td>11</td>
<td>Rotary switch for setting the address of OS (1-9)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>12</td>
<td>Set feedback tones for push buttons: ON/OFF</td>
</tr>
<tr>
<td>13</td>
<td>Configure push buttons in a single column or double column mode (ON=double column; OFF=single column)</td>
</tr>
</tbody>
</table>
| 14 | Configure functions of the 1st/2nd push button.  
3->OFF, 4->OFF=call indoor station/call indoor station;  
3->ON, 4->OFF=switch on lighting/call indoor station;  
3->OFF, 4->ON=call guard unit/call indoor station;  
3->ON, 4->ON=switch on lighting/call guard unit. |
| 15 | Adjust the loudspeaker volume. |
| 16 | Adjust the door lock release time, 1-10s (available for the lock connected with the Lock-GND) |
4.1.1 Lock connected with terminals 3&4

<table>
<thead>
<tr>
<th>Lock type</th>
<th>Pic</th>
<th>Operation type</th>
<th>Voltage</th>
<th>Wiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Strike Lock, 12V</td>
<td></td>
<td>Power supply to open.</td>
<td>12V DC/AC</td>
<td>Type A Type B</td>
</tr>
<tr>
<td>Electric Strike Lock, 24V</td>
<td></td>
<td>Power supply to open.</td>
<td>24V DC/AC</td>
<td>Type B</td>
</tr>
<tr>
<td>Electric Rim Lock, 12V</td>
<td></td>
<td>Power supply to open.</td>
<td>12VDC</td>
<td>Type A Type B</td>
</tr>
<tr>
<td>Electric mortise lock</td>
<td></td>
<td>Power on to close.</td>
<td>12VDC</td>
<td>Type C</td>
</tr>
<tr>
<td>Magnetic lock</td>
<td></td>
<td>Power on to close.</td>
<td>12/24VDC</td>
<td>Type C</td>
</tr>
</tbody>
</table>
4.2 Camera module

Fig. 3 Terminal description
<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Connector for additional analog camera</td>
</tr>
<tr>
<td>2</td>
<td>Connector for audio module</td>
</tr>
<tr>
<td>3</td>
<td>Jumper for setting the video format: PAL / NTSC</td>
</tr>
<tr>
<td>4</td>
<td>Adjust the camera view area</td>
</tr>
</tbody>
</table>
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 analog camera to the outdoor station can reach up to 50 meters by Coax cables or about 10 meters 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
4.2.2 Detached camera connection

Camera module can be used as a detached camera, and the wiring is shown in below.

3 pairs 2-wire bus together
4.3 Push button module

Fig. 4 Terminal description

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Connector for previous module</td>
</tr>
<tr>
<td>2</td>
<td>Connector for next module</td>
</tr>
</tbody>
</table>
Regardless of the structure of the push button module, the button numbers are listed from the top to bottom and from left to right (in the double column mode).

Lighting switch / call guard unit function is always assigned to the 1st/2nd button.

User names can be printed by the labelling tool of the Welcome configuration software.
4.4 Keypad module

Fig. 6 Terminal description

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Program button</td>
</tr>
<tr>
<td>2</td>
<td>Connector for previous module</td>
</tr>
<tr>
<td>3</td>
<td>Connector for device software update</td>
</tr>
<tr>
<td>4</td>
<td>USB connector for the connection to the PC : download/upload the configuration</td>
</tr>
<tr>
<td>5</td>
<td>Connector for next module</td>
</tr>
</tbody>
</table>
### Terminal description

#### 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 button ▲ or the button ◀ of the accompanying display module to make a call.
Meanwhile, pressing the button ⏎ can cancel the call.
*This function is only available in Pic1.

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 lock connected with terminals “LOCK-GND” of the audio module.
Press " ▼ +2 + ▼ + password + ▼ “ to release the 2nd-lock connected with terminals "COM-NC-NO" of the audio module.
The initial password is 123456 and residents can set their own customized password with indoor stations.

4 | System engineering configuration
Press " ▼ + ▼ + system password + ▼ “ to enter the system
The initial system password is 345678 and it can be modified by the administrator.

4.5 Display and card reader module

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Program button</td>
</tr>
<tr>
<td>2</td>
<td>Connector for previous module</td>
</tr>
<tr>
<td>3</td>
<td>Connector for device software update</td>
</tr>
<tr>
<td>4</td>
<td>Connector for Wiegand output</td>
</tr>
<tr>
<td>5</td>
<td>USB connector for connecting to the PC: download/upload the configuration</td>
</tr>
<tr>
<td>6</td>
<td>Connector for the next module</td>
</tr>
</tbody>
</table>
### Terminal description

![ABB Welcome Terminal](image)

**Fig. 9** Terminal description

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LCD display</td>
</tr>
</tbody>
</table>
| 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 using a PC to download the program file. (M251021CR is accompanied with an ID card reader, while the M251022CR is accompanied with 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 audio module.*

**Technical Specification:**

M251021CR : Display module with ID card reader
# Terminal description

<table>
<thead>
<tr>
<th>Work Frequency</th>
<th>125KHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>ISO18000-2</td>
</tr>
<tr>
<td>Support card</td>
<td>EM4100, EM4205, EM4305, EM4450, TK4100, T5567 / T5577 Compatible HID 2</td>
</tr>
<tr>
<td>Output format</td>
<td>Wiegand 26, 34bit</td>
</tr>
</tbody>
</table>

M251022CR : Display module with IC card reader

<table>
<thead>
<tr>
<th>Work Frequency</th>
<th>13.56MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>ISO 14443A</td>
</tr>
<tr>
<td>Support card</td>
<td>Mifare One S50/S70,etc.</td>
</tr>
<tr>
<td>Output format</td>
<td>Wiegand 26, 34bit</td>
</tr>
</tbody>
</table>
### 4.6 Nameplate module

![Nameplate module diagram](image)

**Fig. 10** Terminal description

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Connector for previous module</td>
</tr>
<tr>
<td>2</td>
<td>Connector for next module</td>
</tr>
</tbody>
</table>

Labeling of the nameplate module can be printed by the labelling tool of the Welcome configuration software.
5 Operation

5.1 Pushbutton outdoor station

Fig. 11 Pushbutton outdoor station

5.1.1 Addressing
1. Configure functions of the 1st / 2nd push button
Fig. 12  Addressing

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3-&gt;OFF, 4-&gt;OFF</td>
</tr>
<tr>
<td>2</td>
<td>Call apartment 01</td>
</tr>
<tr>
<td>3</td>
<td>Call apartment 02</td>
</tr>
<tr>
<td>4</td>
<td>Call apartment 03</td>
</tr>
</tbody>
</table>

Fig. 13  Addressing

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3-&gt; ON, 4-&gt;OFF</td>
</tr>
<tr>
<td>2</td>
<td>Switch on light. The light is connected with a switch actuator, and the address of the switch actuator must be same as the address of this outdoor station.</td>
</tr>
<tr>
<td>3</td>
<td>Call apartment 01</td>
</tr>
<tr>
<td>4</td>
<td>Call apartment 02</td>
</tr>
</tbody>
</table>
ABB-Welcome

Operation

Fig. 14  Addressing

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3-&gt; OFF, 4-&gt; ON</td>
</tr>
<tr>
<td>2</td>
<td>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”.</td>
</tr>
<tr>
<td>3</td>
<td>Call apartment 01</td>
</tr>
<tr>
<td>4</td>
<td>Call apartment 02</td>
</tr>
</tbody>
</table>

Fig. 15  Addressing

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
</table>
### Operation

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3-&gt; ON, 4-&gt; ON</td>
</tr>
<tr>
<td>2</td>
<td>Switch on lights</td>
</tr>
<tr>
<td>3</td>
<td>Call guard unit</td>
</tr>
<tr>
<td>4</td>
<td>Call apartment 01</td>
</tr>
</tbody>
</table>

2. **Configure push button in a single column or double column modes**

Fig. 16   Addressing

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2-&gt; OFF</td>
</tr>
<tr>
<td>2</td>
<td>Call apartment 01</td>
</tr>
<tr>
<td>3</td>
<td>Call apartment 02</td>
</tr>
<tr>
<td>4</td>
<td>Call apartment 03</td>
</tr>
<tr>
<td>5</td>
<td>Call apartment 04</td>
</tr>
</tbody>
</table>
Fig. 17   Addressing

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2-&gt; ON</td>
</tr>
<tr>
<td>2</td>
<td>Call apartment 01</td>
</tr>
<tr>
<td>3</td>
<td>Call apartment 02</td>
</tr>
<tr>
<td>4</td>
<td>Call apartment 03</td>
</tr>
<tr>
<td>5</td>
<td>Call apartment 04</td>
</tr>
<tr>
<td>6</td>
<td>Call apartment 05</td>
</tr>
<tr>
<td>7</td>
<td>Call apartment 06</td>
</tr>
<tr>
<td>8</td>
<td>Call apartment 07</td>
</tr>
<tr>
<td>9</td>
<td>Call apartment 08</td>
</tr>
</tbody>
</table>
5.1.2 Setting the language for the voice messages (if the audio module has a speech synthesis function)

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

Set OS address as "0", hold the 1st button for 3s to play the voice message.
Click on this button to select the language one by one.

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2-&gt; ON, 3-&gt; ON, 4-&gt; ON</td>
</tr>
<tr>
<td>2</td>
<td>Switch on lights</td>
</tr>
<tr>
<td>3</td>
<td>Call the guard unit</td>
</tr>
<tr>
<td>4</td>
<td>Call apartment 01</td>
</tr>
<tr>
<td>5</td>
<td>Call apartment 02</td>
</tr>
<tr>
<td>6</td>
<td>Call apartment 03</td>
</tr>
<tr>
<td>7</td>
<td>Call apartment 04</td>
</tr>
<tr>
<td>8</td>
<td>Call apartment 05</td>
</tr>
<tr>
<td>9</td>
<td>Call apartment 06</td>
</tr>
</tbody>
</table>
After choosing the right language, hold this button to save and exit the setting.

**Fig. 19** Addressing

**Pushbutton outdoor station used as gate station**

If pushbutton outdoor station is set as a gate station, gateway as an important system device must be used and it must be set as floor gateway mode.

**Fig. 20**
Detailed information please refer to "Gateway user manual", floor gateway chapter.
5.2 Pushbutton Outdoor Station with display module

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

Register a master card/deactivate master card (we recommend that this work is carried out by specialized personnel):

1. Disconnect the power supply.
2. Reconnect the power
3. Hold the “program button” for 5s to enter "program master card" interface within 30s.
4. Any card swiped by the reader during this time will be taken to be the new MASTER card. A prompt “Register master card successfully” will appear on the screen.
5. If the card exists, when you swipe it again, the information will be deleted, and a prompt “Delete master card successfully” will appear on the screen.

Only 1 master card can be registered.

Enter system setting using master card:

1. Swipe the MASTER card to enter the setting menu. Three LEDs will turn on.
2. 6 options:
   - Program Card;
   - Language;
   - Wiegand Output;
   - Choose Door
   - Date & Time;
   - Back

Fig. 21
There is a 5s countdown for each option.

3. Swipe the MASTER card again within 5s to change to the next option.
   Or, 5s over, the current option will be chosen.

4. 30s Over, to exit the settings menu.

5.3 Pushbutton Outdoor Station with keypad module

The keypad module can be assembled with a push button outdoor station, and users can enter the password to open the door.

Users can enter the system settings menu by the following steps (during setting, 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:

1. system password # =>
2. system password # => 1
3. system password # => 2
4. system password # => 3
5. system password # => 4
6. system password # => 5

2. Modify "system password"

   #* system password # =>
   2 # => Enter new password (6-8 bits) # => Enter the password again #

3. Modify "door open code"

   #* system password # =>
   3# => Enter new door open code (6-8 bits) # => 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/disable access control function

   Enable access control function:
   #* system password # =>
   5# => 1 #
   Disable access control function:
ABB-Welcome

**Operation**

### System Password

```
#* system password # =>
5# => 2 #
```

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

It is possible to reset the system password to 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 and other settings.

1. Disconnect the power supply.
2. Reconnect the power.
3. Hold the “program button” for 5s within 30s.
4. A “di” will be sounded and the system password will be reset to the default (345678).
5.4 Keypad outdoor station
5.4.1 Call a resident (3 types)

1. By physical address
Physical address is the internal code which the outdoor station will send through the bus connection to indoor stations or other devices in the system. For each apartment, physical address means the address of an indoor station which is installed in the apartment. For each building, physical address means the address of a gateway which is installed for each building, and it is also called the building number.
In standby mode, a visitor can press the physical address corresponding to the residence that you want to call directly, from 001 to 250.
For a complex building, a visitor needs to press the building number (01~60) + physical address (001~250) or make a call in the gate station.

---

<table>
<thead>
<tr>
<th>Enter Physical Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>dd.:</td>
</tr>
<tr>
<td>01 001</td>
</tr>
</tbody>
</table>

2. By logic address
Logic 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.
The apartment No. or some special codes can be used to set the logic address, which is easy for the users to remember.
Set the logic address by taking the following steps:
Assign the logic address:
* system password # => system setting =>
Address Book => Add => Logic Add
### Turn on the “logic address” call mode

* system password # => system setting =>

**Configuration => Call mode**

3. By resident name
(Remarks: this function is only available for the outdoor station with a keypad module (M251021K-..).)

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

Also, a visitor can enter the resident name with a keypad directly to make a call.

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

* system password # => system setting

=> **Address Book => Add => Contact List**

5.4.2 **Call the guard unit**

Press the button to make a call to a guard unit.
5.4.3 If an indoor station is in "leave home mode"
If an indoor station works in the “leave home mode”, a visitor can record a message for the resident after entering the following interface.

5.4.4 If a guard unit is in "intercept mode"
If a guard unit works in the “intercept mode”, the call from an outdoor station to an indoor station will be intercepted by the guard unit and after the identity is confirmed, the guard unit will forward the call to the indoor station.
Call from an outdoor station to an indoor station

GU accept the call

Guard unit transfers the call to an indoor station
5.4.5 System settings
(During setting, press “#” to confirm, press “*” to cancel, default system password is 345678):

1. Enter the system setting menu
   
   * system password #

   Menu__________
   Configurations ▲
   Access Control

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 Logic Code
   
   **Set the call mode by Physical Address:**
   * system password # =>
   Configurations # => Call mode # => Physical Address #
Set the call mode by a Logic Code, No. of digits (1-8 digits):

"*" system password # =>

Configurations # => Call mode # => Logic Code #

(3) System password setting

Modify the system password

"*" system password # =>

Configurations # => System code # => Modify #

Reset the system password

"*" system password # =>

Configurations # => System code # => Reset #

3. Access control

(1) Door open code

The password can be set as 6-8 digits. The default door open password is "123456", and it can be changed with an outdoor station.
Meanwhile, users can set their own passwords with indoor stations, totally, 6000 passwords can be stored.

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

* system password # =>

Access Control # => Door open code # => Enable / Disable #

<table>
<thead>
<tr>
<th>Door Open Code</th>
<th>=&gt;</th>
<th>Done!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable</td>
<td>∧</td>
<td></td>
</tr>
<tr>
<td>Modify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Modify the door open password

* system password # =>

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

<table>
<thead>
<tr>
<th>New Password:</th>
<th>=&gt;</th>
<th>Re-enter:</th>
<th>=&gt;</th>
<th>Done!</th>
</tr>
</thead>
<tbody>
<tr>
<td>******</td>
<td></td>
<td>******</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reset the door open password

* system password # =>

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

<table>
<thead>
<tr>
<th>Reset Door Open Code?</th>
<th>=&gt;</th>
<th>Done!</th>
</tr>
</thead>
<tbody>
<tr>
<td>“#” to Confirm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(2) Proximity card (3000 cards can be registered for outdoor station.)

Register cards:
Welcome

Operation

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

Enter Card No.: 0123456
Or

Enter Card No.: 0123456
Or Done!

Delete cards:
#* system password # =>
Access control # => Proximity card # => Delete card #

Enter Card No.: 0123456
Or

Enter Card No.: 0123456
Or Done!

Delete all cards
#* system password # =>
Contact # => Proximity card # => Delete All #

Delete All Cards?
"#" to Confirm

Done!

4. Contact(3,000 names of the combination of 24 alphanumeric characters)
(1) Add
Add the contact by user names
#* system password # =>
Contact # => Add # => User Names #

Physical Add.: 001
User Name:
Resident names must be associated with physical address.

**Add the contact by logic address**

#* system password # =>

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

<table>
<thead>
<tr>
<th>Physical Add.:</th>
<th>001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logic Add.:</td>
<td></td>
</tr>
</tbody>
</table>

Logic address must be associated with physical address.

(2) **Modify**

**Modify contact by user names**

#* system password # =>

Contact # => Modify # => User Names #

|             | Alexander.G | Bodin.K |

Modify the resident names and its corresponding physical address.

**Modify contact by logic address**

#* system password # =>

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

| Enter Logic Add.: | 0101 |

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

(3) **Delete**

**Delete the contact by user names**
#* system password # =>
Contact # => Delete # => User Names #

____________________________
Alexander.G  ∧
Bodin.K

Delete the contact by logic address
#* system password # =>
Contact # => Delete # => Logic add. #

Enter Logic
Add.:
0101

(4) Clear all
#* system password # =>
Contact # => Clear all #

Delete All Names? =>
“#” to Confirm
Done!

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

5. System setting
   (1) Date and time
   #* system password # =>
   Settings # => Date & time # => Enter time and date => #
(2) Door Open Time

/# system password # =>
Settings # => Door Open Time # => Time 1-10s (default: 3s) => #
Lock(NC-NO-C) means the lock connected with COM-NC-NO terminals.

(3) Setting the voice message on/off
If the audio module with the speech synthesis function (M251024A-..) is assembled, the speech synthesis function can be enabled or disabled. Meanwhile, the local language can be chosen, too.

/# system password # =>
Settings # => Voice message #

(4) Select language
**ABB-Welcome**

### Operation

#* system password # =>
Settings # => Language #

<table>
<thead>
<tr>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
</tr>
<tr>
<td>Français</td>
</tr>
</tbody>
</table>

(5) Welcome sg.

#* system password # =>
Settings # => Welcome sg. #

New Message:
ABB Welcome!
“#” to Confirm => Done!

Max 64 characters can be entered.

(6) Setting the Wiegand output digits

#* system password # =>
Settings # => Wiegand Output #

<table>
<thead>
<tr>
<th>Wiegand Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 bit !</td>
</tr>
<tr>
<td>34 bit !</td>
</tr>
</tbody>
</table>

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

#* system password # =>
Settings # => Choose Door #

<table>
<thead>
<tr>
<th>Door Select</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st (LOCK-GND)</td>
</tr>
<tr>
<td>2nd (NC-CO-COM)</td>
</tr>
</tbody>
</table>
Setting the lock which will be released when swiping the registered card:
1st (LOCK-GND): the lock connected with the LOCK-GND terminals will be released when swiping the card.
2ND (NC-NO-COM): the lock connected with the NC-NO-COM terminals will be released when swiping the card.

(8) Reset

RESET* SYSTEM PASSWORD* =>
SETTINGS => RESET* =>

Reset to Factory Default?
“#” to Confirm

Done!

Reset all settings to factory settings, but other information, e.g. user names, logic addresses and cards information cannot be reset.

(9) Information

RESET* SYSTEM PASSWORD* =>
SETTINGS => INFORMATION#

Audio module: V1.07_131106
Card reader:

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

*Reset the system password of keypad module:
It is possible to reset the system password to 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 and other settings.
1. Disconnect the power supply.
2. Reconnect the power
3. Hold the “program button” for 5s within 30s.
4. A “di” will be sounded and the system password will be reset to the default (345678).
5.5 Keypad outdoor station without display (Camera + audio+ keypad)

5.5.1 Calling a resident, just input physical address
In standby mode, a visitor can press the physical address corresponding to the residence that you want to call directly, from 001 to 250. For a complex building, the visitor needs to press the building number (01~60) + physical address (001~250) to make a call from a gate station.

5.5.2 Call guard unit
Press the button  to make a call to a guard unit.

5.5.3 System settings
Users can enter the system settings by the following steps (during 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 bits) # => Enter the password again #

3. Modify the "door open code"
   #* system password # =>
   3# => Enter new door open code (6-8 bits) # => Enter the code again #

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

*Reset the system password of keypad module:
It is possible to reset the system password to 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 and other settings.
1. Disconnect the power supply.
2. Reconnect the power
3. Hold the "program button" for 5s within 30s.
4. A "di" will be sounded and the system password will be reset to the default (345678).
6 Advanced configuration

Connect to the PC to configure the keypad or display

Fig. 25
## Technical data

<table>
<thead>
<tr>
<th>Designation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>-40 °C- +70 °C</td>
</tr>
<tr>
<td>Protection (cover frame assembled)</td>
<td>IP 54</td>
</tr>
<tr>
<td>Power supply, door opener (Lock-GND)</td>
<td>18V 4A impulsive, 250 mA holding</td>
</tr>
<tr>
<td>Floating output, door opener (COM-NC-NO)</td>
<td>30 V AC / DC 1A</td>
</tr>
<tr>
<td>Single-wire clamps</td>
<td>2 x 0.28 mm² – 2 x 1 mm²</td>
</tr>
<tr>
<td>Fine-wire clamps</td>
<td>2 x 0.28 mm² – 2 x 1 mm²</td>
</tr>
<tr>
<td>Bus voltage</td>
<td>20-30 V</td>
</tr>
</tbody>
</table>
8  Mounting / Installation

Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 100-240 V.
– Low-voltage and 100-240 V cables must not be installed together in a flush-mounted socket!
In case of a short-circuit there is the danger of a 100-240 V load on the low-voltage line.

8.1 Requirements 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 is 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.
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 and other power supplies (to avoid interference).
- Do not install the wires of the system bus together with 100-240 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.
8.3 Mounting

Prepare a pair of gloves to protect yourself from cutting.
Dimension

Audio module

Camera module

Nameplate module

Pushbutton module

Keypad module

Display and card reader module
Cover frame
Flush-mounted
Rain hood
Components of the Outdoor Station

<table>
<thead>
<tr>
<th>No.</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cover frame</td>
</tr>
<tr>
<td>2</td>
<td>Modules</td>
</tr>
<tr>
<td>3</td>
<td>Flash-mounted box</td>
</tr>
<tr>
<td>4</td>
<td>Rain hood</td>
</tr>
</tbody>
</table>
Mount each module at the cover frame

1. Insert each module into the cover frame from behind until they click in place. All modules can be inserted, e.g. the camera module, audio module, push button module, keypad module, display and card reader module, nameplate module.

2. Pay special attention to the top to bottom orientation of each module.
Modules 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.
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 the removal of the end strip.
Wires

1. Prepare the installation box.
2. Strip the wires.
   – The insulated section of the cable end must not be longer than 10 mm.

Assemble the frame into the flush-mounted box

Fig. 29  Mounting

Fig. 30  Mounting
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.

**Three types of installation**

Option 1: Flush-mounted only with a flush-mounted box

![Fig. 31](image)

Option 2: Flush-mounted with a rain hood
Option 3: Surface-mounted with a rain hood

Fig. 33  Surface-mounted with a rain hood
**Dismounting outdoor station**

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

**Dismount the modules**

---

**Fig. 34**  Mounting

**Fig. 35**  Dismounting the modules
1. Dismount the module from one side of the module.
2. Take out the modules.

Replace the name plates

![Image of replacing name plates]

Fig. 36  Mounting

1. Remove the pushbutton cover and write the user names on the label.
2. *Use a piece of labelling A4 sheet with software necessary for the correct format and print the labels.

Adjust the angle of the camera

![Image of adjusting camera angle]

Fig. 37  Adjust the angle of the camera

1. Unscrew the camera;
2. Adjust the angle of the camera in 4 directions (up, down, right and left).
3. Screw on the camera.
Extension of 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 for modules connection.

*The extension is useful for multi-outdoor stations connection.*
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