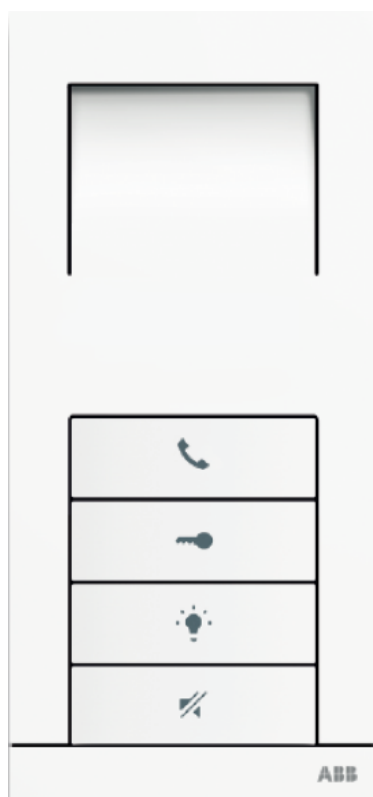


VER: 1.2 | 02.20.2017

# ABB Welcome

## 83210-AP-xxx-500

### Audio hands-free indoor station



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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

This device is an integral part of the ABB Welcome door communication system and operates exclusively with components from this system. The device must only be installed in dry indoor rooms.

## 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 packaging material, electronic devices and their components via authorized recycling facilities or disposal companies.

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## 4 Operations

### 4.1 Standard operations

#### 4.1.1 Control elements

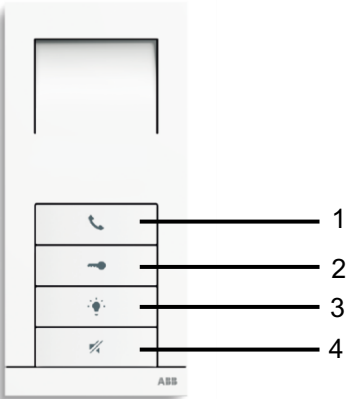



Fig. 1 Control elements


No.	Functions
1	<p><b>Communication button</b></p> <p>1A For incoming call, press this button within 30 seconds to activate communication, and press it again to end the call.</p> <p>1B In standby mode, press this button to enter the communication menu.</p>
2	<p><b>Unlock button</b></p> <p>2A Press this button to open the door at any time.</p> <p>2B Auto-unlock: The door is automatically opened after an incoming call. (Hold this button for more than 10 seconds until the backlit LED turns on. The same operation will switch off the function, and LED will be turned off.)</p>
3	<p><b>Light button</b></p> <p>3A Switch the lighting (default function).</p> <p>3B Long press for 3 seconds to enter setting mode for additional functions, e.g., call to guard unit, room to room intercom and open the second lock.</p>
4	<p><b>Mute button</b></p> <p>4A In standby mode, press this button to mute ringtone of the indoor station.</p> <p>4B In standby mode, hold the button to mute ringtone of all indoor stations in the apartment.</p> <p>4C Press this button to reject incoming call.</p> <p>4D During a conversation, press this button to mute microphone.</p> <p>The LED illuminates to indicate mute status.</p>


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## 4.2 Setting

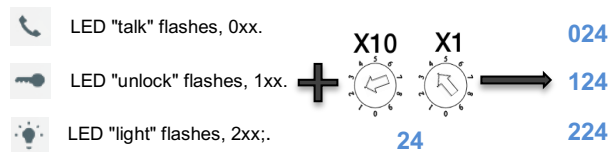
### 4.2.1 Set indoor station address (X200, X100)


Step 1: Hold "light"  button for 3 seconds to enter setting mode (4 LEDs are on).

Step 2: Hold "talk"  button for 3 seconds to enter the setting of X200/X100.

Step 3: Press "mute"  button to change the number.


The value is indicated by LED of each button.(Default value =0)




Step 4: Hold "light"  button for 3 seconds to exit setting mode (4 LEDs are off).





### 4.2.2 Set function of light button


Step 1: Hold "light"  button for 3 seconds to enter setting mode (4 LEDs are on).

Step 2: Hold "unlock"  button for 3 seconds to enter the setting of light button.


Step 3: Press "mute"  button to change the function.

The value is indicated by LED of each button.(Default value =0)




-  LED "talk" flashes, switching the lighting.
-  LED "unlock" flashes, opening the second lock.
-  LED "light" flashes, room to room intercom.
-  LED "mute" flashes, call guard unit.


Step 4: Hold "light"  button for 3 seconds to exit setting mode (4 LEDs are off).

### 4.2.3 Set ringtone type

Step 1: Hold "light"  button for 3 seconds to enter setting mode (4 LEDs are on).




Step 2: Press button as shown below to change ringtone.

-  Press "unlock" button to set ringtone type for doorbell.
-  Press "light" button to set ringtone type for room to room intercom or call guard unit.
-  Press "mute" button to set ringtone type for outdoor station or gate station.





Step 3: Hold "light"  button for 3 seconds to exit setting mode (4 LEDs are off).

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## 4.2.4 Set repeated ringtone





- Step 1: Hold "light"  button for 3 seconds to enter setting mode (4 LEDs are on).
- Step 2: Hold "mute"  button for 3 seconds to repeat the ringtone or not.
- Step 3: Hold "light"  button for 3 seconds to exit setting mode (4 LEDs are off).

## 4.2.5 Set ringtone volume

- Step 1: Hold "light"  button for 3 seconds to enter setting mode (4 LEDs are on).
- Step 2: Press "talk"  button to enter the ringtone volume setting.
- Step 3: Press "mute"  button to adjust the ringtone volume.
- Step 4: Hold "light"  button for 3 seconds to exit setting mode (4 LEDs are off).

## 4.2.6 Set speech volume

*First push the communications button.*

- Step 1: Hold "light"  button for 3 seconds to enter setting mode (LED  flashes)
- Step 2: Press "light"  button to adjust the volume.
- Step 3: Hold "light"  button for 3s to enter setting mode.

## 4.3 Adjusting the device

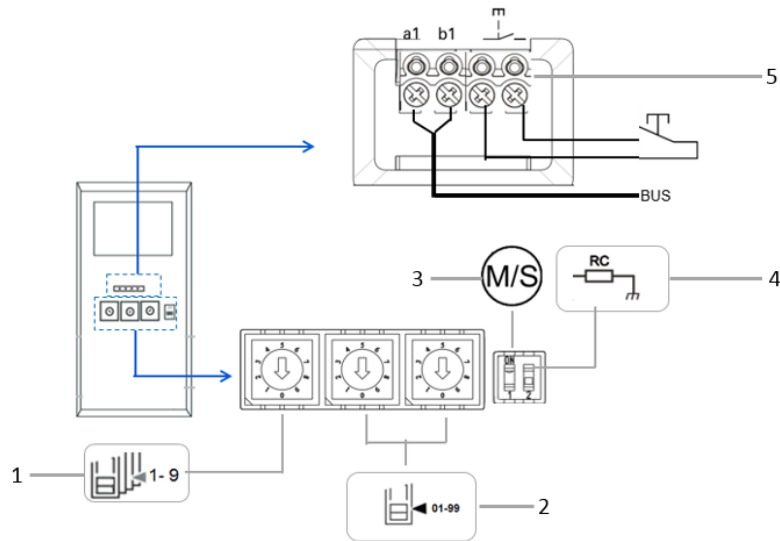


Fig. 2:

### 1. Station

Press selector switch to set the address of default outdoor station.

### 2. X10 X1

Press selector switches to set the address (tens and units digits) of the indoor station.

### X100 X200

Set through "light" button.

### 3. Master or slave function

One indoor station in each apartment must be set as "Master." (Switch should be set as "M/S on.") All additional indoor stations in the same apartment must be set as "Slave." (Switch should be set as "M/S off.")

### 4. Terminal resistor

In video installations or mixed audio and video installations, the switch must be set as "RC on" on the last device of the line.

### 5. a b = Bus connection

 = Doorbell connection



## 5 Technical data

<b>Designation</b>	<b>Value</b>
Operating temperature	+14 °F to +131 °F
Storage temperature	-40 °F to +158 °F
Protection	IP 30
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
Size	6.89" x 3.19" x 0.89"

## 6 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.

### 6.1 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, such as a 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;
  2. Secure against being re-connected;
  3. Ensure there is no voltage;
  4. Connect to 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 earthing, necessary additional measures, etc.).

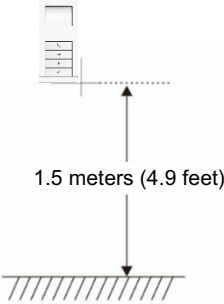
### 6.2 General installation instructions

- 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.

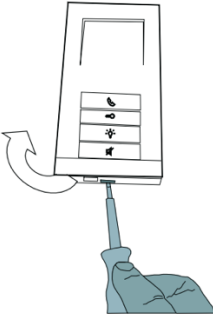
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## 6.3 Mounting

### Recommended installation height



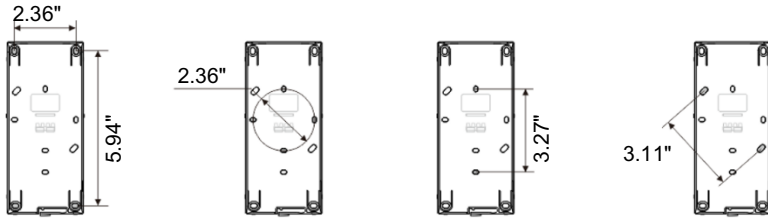
### Dismantling



Pull the clamp on the bottom of the device, and then open the housing of the panel.

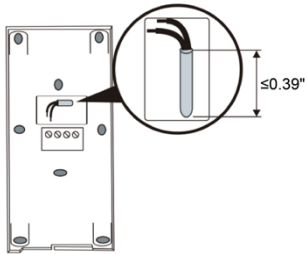
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## Installation dimensions for slotted screw holes



1. The bottom of the device has screw holes for fastening to the wall according to the dimensions above.
2. In addition, the bottom of the device can be affixed to an existing flush-mounted box. The dimensions of a compatible flush-mounted box are shown above.

## Wiring



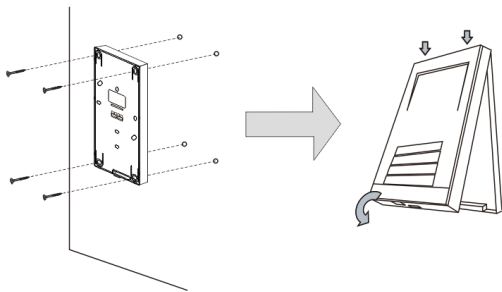
Affix the bottom of the device and connect it according to illustration above. The insulated section of the cable end must not be longer than 0.39".

## Settings

Set addresses of the preferred outdoor stations and the address of the indoor station on the jumper.  
(See Chapter 4.3, Adjusting the device.)

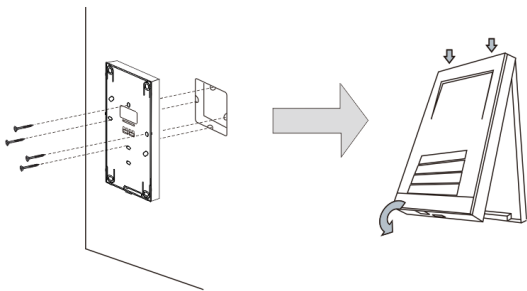
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## Mounted on the wall



1. Affix the bottom of the device to the wall.
2. Latch the upper part of the device onto its bottom part. Place the upper side of the device on the lock-in lugs, and then press the bottom side onto the bottom part of the device until the clamp catches.

## Mounted with flush-mounted box



1. Affix the bottom of the device to the existing flush-mounted box.
2. Latch the upper part of the device onto its bottom part. Place the upper side of the device on the lock-in lugs, and then press the bottom side onto the bottom part of the device until the clamp catches.

The installation of the indoor station is now complete.



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