# Busch-Welcome®

# 83205-SM-xxx Indoor audio station with handset



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Busch-Welcome <sup>®</sup> Safety

## 1 Safety



## Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 230 V.

- Work on the 230V supply system may only be performed by authorised electricians!
- Disconnect the mains power supply prior to installation and/or disassembly!

## 2 Intended use

The 83205-SM-xxx indoor station is an integral part of the BuschWelcome<sup>®</sup> 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 domestic waste.

 The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

#### 3.1 Busch-Jaeger devices

All packaging and devices from Busch-Jaeger bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.

Busch-Jaeger 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)

## 4 User Manual

Detailed information for planning Busch-Welcome® systems is contained in the user manual. Download at www.Busch-Jaeger.de.

# 5 Operation

## 5.1 Standard operation

## 5.1.1 A call is pending

Lift off the handset to answer a call.

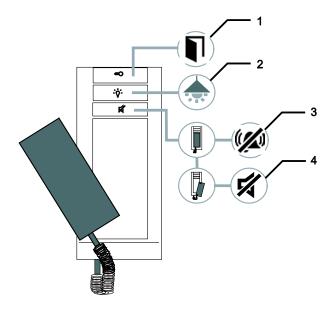


Fig. 1:

| No.  | Function  |  |  |  |
|--|---|--|--|--|
| 1  | Press on the top push-button to open the door.                  |  |  |  |
| 2  | Press on the middle push-button to switch on the lighting.      |  |  |  |
| 3  | Press on the bottom push-button to switch off the bell.         |  |  |  |
| Press on the bottom push-button to activate the mute function. |   |  |  |  |
|  | - The party at the other end cannot hear you.                   |  |  |  |
|  | - Press on the bottom push-button to continue the conversation. |  |  |  |

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Busch-Welcome ® Operation

## 5.1.2 No call is pending

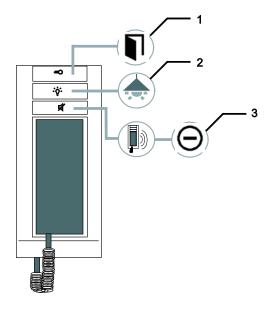


Fig. 2:

| No. | Function  |
|-----|---|
| 1   | Press on the top push-button to open the door.              |
| 2   | Press on the middle push-button to switch on the lighting.  |
| 3   | Press on the bottom push-button to refuse an incoming call. |

## 5.2 Adjusting the device

Aside from the standard control you can set the device according to your requirements via the push-buttons. To change to the device settings, press simultaneously on the upper and lower button. In the following you will find the setting options after you have changed to the device settings.

## 5.2.1 Stored settings

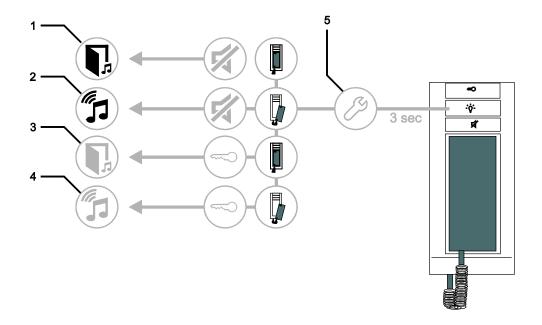


Fig. 3:

| No. | Function   |
|-----|--|
| 1   | Use this button to set the volume of the bell sound for the front door with the handset removed. |
|     | Five volume settings are available.  |
| 2   | Use this button to select the bell sound for the front door with the handset replaced.           |
|     | - Five bell sounds are available for selection.  |
| 3   | Use this button to set the volume of the bell sound for the floor door with the handset removed. |
|     | Five volume settings are available.  |
| 4   | Use this button to select the bell sound for the floor door with the handset replaced.           |
|     | - Five bell sounds are available for selection.  |
| 5   | To change to the device settings, press the light button for 3 seconds.                          |

Busch-Welcome ® Operation

#### 5.2.2 Terminal resistor

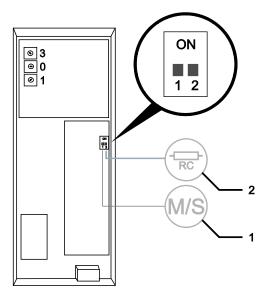


Fig. 4:

- In pure audio installations always set the terminal resistor (2) on "OFF".
- In video installations or mixed audio and video installations set the terminal resistor for the last devices of a branch on "ON".

Busch-Welcome ® Operation

## 5.2.3 Setting the master/slave switch

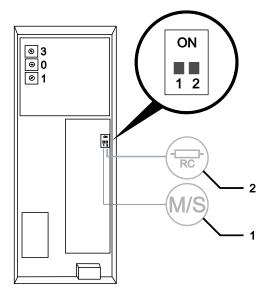


Fig. 5:

One station in each apartment must be set as "Master". All additional indoor stations in the same apartment must be set as "Slave".

Indoor station that is to be set as "Master" Set the switch "M"(1-1) on "ON".

For all other indoor stations Set the switch "S"(1-2) on "OFF".

## 6 Technical data

| Designation           | Value                      |
|-----------------------|----------------------------|
| Operating temperature | -5°C to +40°C              |
| Storage temperature   | -20°C – +70°C              |
| Protection            | IP 20                      |
| Single-wire clamps    | 2 x 0.6 mm² – 2 x 1 mm²    |
| Fine-wire clamps      | 2 x 0.6 mm² – 2 x 0.75 mm² |
| Volume                | Maximum 80 dB              |
| Bus voltage           | 28 V- ±2 V                 |

## 7 Mounting / Installation



## Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 230 V.

Low-voltage and 230 V cables must not be installed together in a flush-mounted socket!
In case of a short-circuit there is the danger of a 230 V load on the low-voltage line.

#### 7.1 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 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.
- Use suitable personal protective clothing.
- · Use only suitable tools and measuring devices.
- Check the type 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.).

#### 7.2 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 230 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.

## 7.3 Mounting

Mounting in 2 flush-mounted sockets according to DIN 49073-1

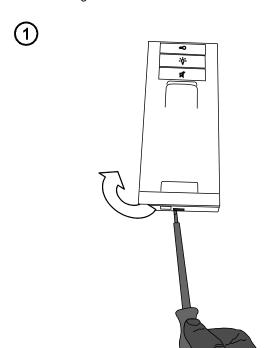


Fig. 6:

1. Open the housing of the indoor station by pressing in the clamp on the bottom of the device.

Video for disassembling the device, prior to mounting the device.



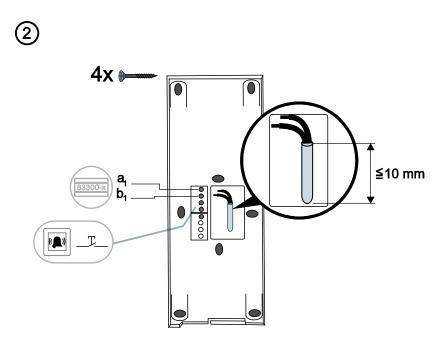


Fig. 7:

2. Fix the bottom of the device to the wall and connect it in accordance with the graphics. The insulated section of the cable end must not be longer than 10 mm.

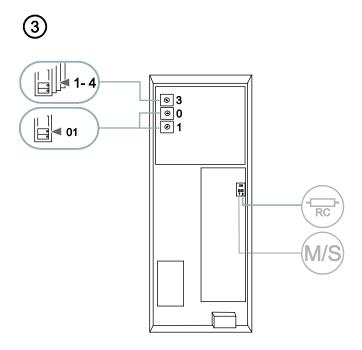


Fig. 8:

3. Set the address of the preferred outdoor stations and the address of the indoor station on the rotary switches (see chapter "Addressing" on page 14).

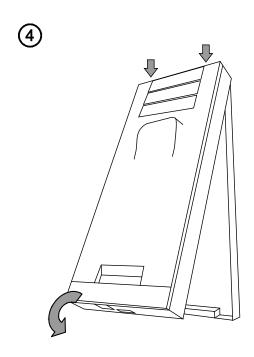
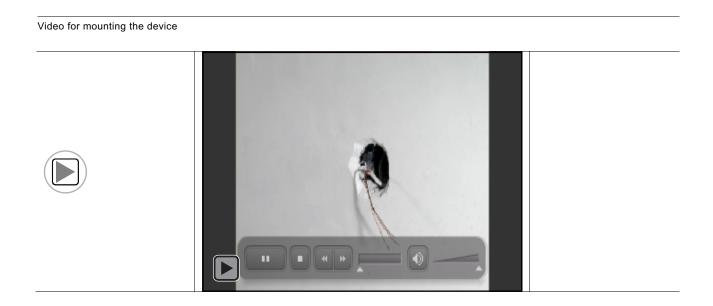


Fig. 9:

4. Latch the upper part of the device onto its bottom part. To do this, 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.



Busch-Welcome ® Addressing

## 8 Addressing

#### 8.1 Addressing the stations

#### 8.1.1 Potentiometer

Before installing as system, it must must be addressed.

For this "Addressing", three potentiometers have been fitted to the rear of the device. The digits 0 to 9 can be set on each potentiometer.

Fig. 10: Potentiometer for setting the stations

#### Outdoor station:

The left potentiometer (1) at an outdoor station indicates the address of this station.

The next two potentiometers (2) indicate the address of the **topmost** doorbell push-button of this station. The doorbell push-switches below that are automatically numbered (consecutive).

## Indoor station:

The left potentiometer (3) of the indoor station indicates the address of the preferred outdoor station. The next two potentiometers (4) indicate the address of this indoor station.

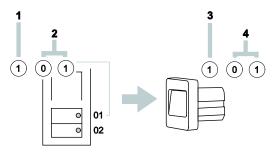


Fig. 11: The function of the potentiometers

## 8.1.2 Setting the address of the outdoor station:

The allocation to one of the four inputs of the system is made on the outdoor stations and the associated switch actuators for door and light via the setting of the address.

For this the potentiometer house/outdoors is set on an address between 1 and 4. The potentiometer is located on the rear of the outdoor station or the front of the MDRC switch actuator.

#### 8.1.3 Assigning the doorbell push-button of an outdoor station to an apartment

The doorbell push-buttons of an outdoor station are assigned to the apartments consecutively from top to bottom and left to right with the addresses 01, 02, etc.

This assignment applies equally to several outdoor stations in a system. This means that in Figure 13 on page 16, in each outdoor station push-button A is assigned to apartment 01, etc.

This factory setting is fixed via two potentiometers on the rear of the outdoor station. The middle potentiometer must be on "0" and the right one on "1".

#### 8.1.4 Setting the address of the indoor station

The apartment is assigned on the indoor station via the setting of the address. Up to 99 apartments can be addressed within one system. In each of these up to four indoor stations with the same rights can be located with the same address.

When pressing the assigned doorbell push-button, all four indoor stations are called. The address of an indoor station (e.g. "15") is set with the aid of the potentiometers on the indoor station, the middle one indicating the tens digit (here "1") and the right one the singles digit (here "5"). The potentiometer is located on the back or outside of the indoor stations.

## 8.1.5 Setting of the "standard outdoor station"

For several outdoor stations in a system the "standard outdoor station" must be set on the indoor stations. For this the potentiometer STATION is set on the address of the standard outdoor station - between 1 and 4. The potentiometer is located on the rear of the indoor stations.

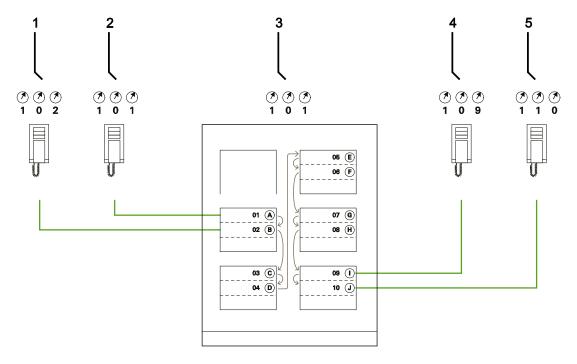


Fig. 12: Factory assignment of doorbell push-buttons

| No. | Designation     |
|-----|-----------------|
| 1   | Apartment 01    |
| 2   | Apartment 01    |
| 3   | Outdoor station |
| 4   | Apartment 09    |
| 5   | Apartment 10    |

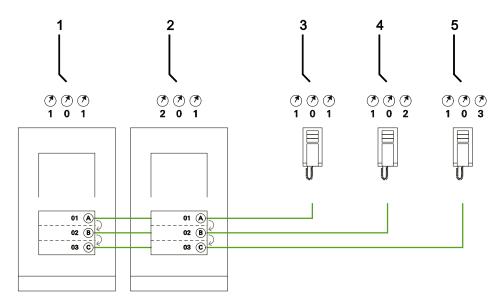


Fig. 13: Several outdoor stations with identical assignment

| No. | Designation                   |
|-----|-------------------------------|
| 1   | Main entrance outdoor station |
| 2   | Side entrance outdoor station |
| 3   | Apartment 01                  |
| 4   | Apartment 02                  |
| 5   | Apartment 03                  |

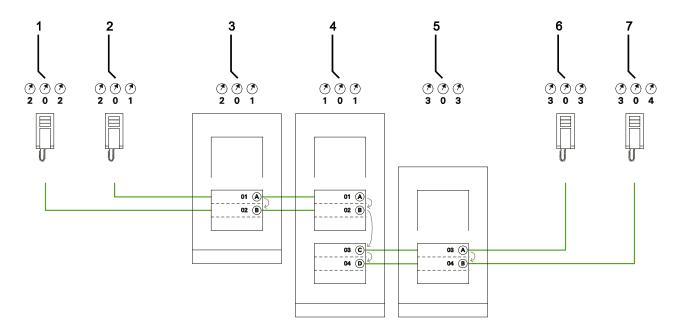


Fig. 14: Several outdoor stations with identical assignment

| No. | Designation                           |
|-----|---------------------------------------|
| 1   | Apartment 01                          |
| 2   | Apartment 02                          |
| 3   | Outdoor station of the left building  |
| 4   | Outdoor station of the entrance gate  |
| 5   | Outdoor station of the right building |
| 6   | Apartment 03                          |
| 7   | Apartment 04                          |

## 8.2 Video for addressing the device

Video for addressing the device



# BUSCH-JAEGER

| Project name:                              |    |   |  |  |  |
|--|----|---|--|--|--|
| Mounting position for the outdoor station: |    |   |  |  |  |
|  |    |   |  |  |  |
|  |    |   |  |  |  |
|  | ⑥  | - |  |  |  |
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