## Busch-Welcome®

83200-FM-xxx Indoor audio station with display



## Busch-Welcome®

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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 83200-UP-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 in suitable flush-mounted sockets.

#### 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<sup>®</sup> systems is contained in the user manual. Download at www.Busch-Jaeger.de.

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## 5 Operation

#### 5.1 Standard operation

#### 5.1.1 A call is pending

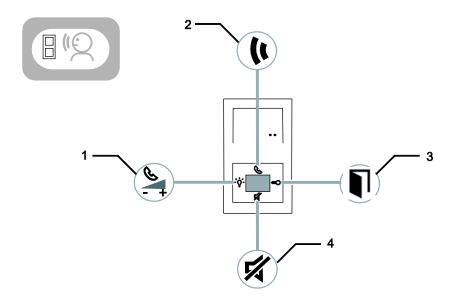


Fig. 1:

No.	Function			
1	Press on the left of the rocker during a conversation to adjust the volume.			
2	To talk, press on the top of the rocker.			
	Press on the top of the rocker to terminate the conversation.			
3	Press on the right of the rocker to open the door.			
4	Press on the bottom of the rocker to activate the mute function.			
	- The party at the other end cannot hear you.			
	- Press again on the bottom of the rocker to deactivate the mute function.			

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#### 5.1.2 No call is pending

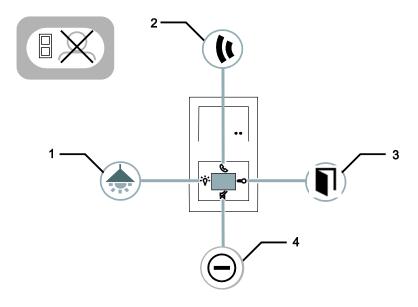


Fig. 2:

No.	Function
1	Press on the left of the rocker to switch on the lighting.
2	Press on the top of the rocker to establish an audio connection to the preferred outdoor station.
3	Press on the right of the rocker to open the door.
4	Press on the bottom of the rocker to deactivate the bell (the display is shown in red).

#### 5.2 Adjusting the device

Aside from the standard control you can set the device according to your requirements via the rocker.

To change to the device settings, press the left of the rocker for three seconds.

In the following you will find the function of the rocker and the setting options after you have changed to the device settings.

#### 5.2.1 Rocker functions

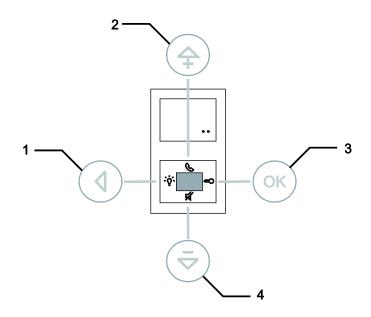


Fig. 3:

No.	Function			
1	To change to the device settings, press the left of the rocker for 3 seconds.			
	To change back, press the left of the rocker.			
2	Press the top of the rocker to scroll to the top.			
3	Press the right of the rocker to confirm the selection.			
4	Press the bottom of the rocker to scroll to the bottom.			
1 — 4	To reset the device settings, press the entire rocker for 10 seconds.			
	The device will be reset to the factory settings.			

#### 5.2.2 Stored settings

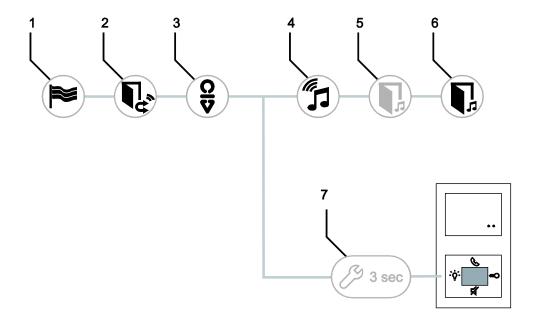


Fig. 4:

No.	Function	
1	Use this selection to set the language.	
2	Use this selection to set the automatic door opener.	
3	Use this selection to display the system information / address.	
4	Use this selection to set the volume of the bell.	
5	Use this selection to set the type of the bell sound for the door of the floor.	-
6	Use this selection to set the type of the bell sound for the front.	-
7	To change to the device settings, press the left of the rocker for 3 seconds.	

O Information for resetting to the factory settings Press all buttons for 10 seconds.

- The device will be reset to the factory settings and start with the language selection..

#### 5.2.3 Terminal resistor

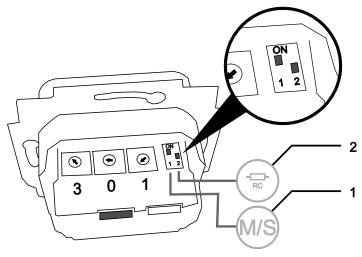


Fig. 5: Setting the terminal resistor on the device

- 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".

#### 5.2.4 Setting the master/slave switch

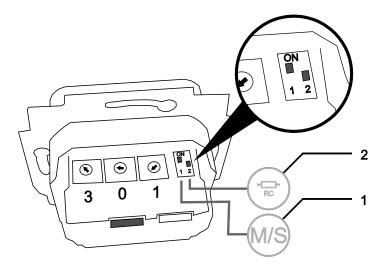


Fig. 6:

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". Busch-Welcome® Technical data

## 6 Technical data

Designation	Value
Display resolution:	128 x 100
Display size:	3.8 cm (1.5 ")
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):
  - 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

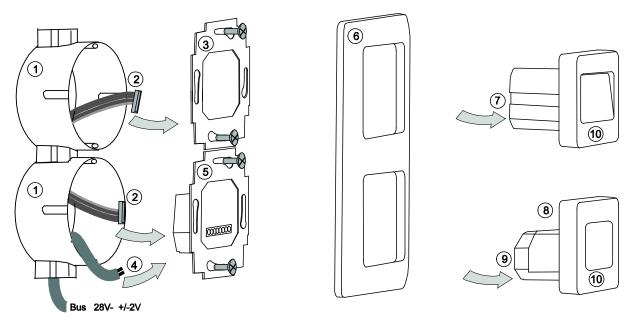


Fig. 7:

- 1. Mount the indoor station with display into two FM sockets (DIN 49073-1).
- 2. Guide the enclosed connecting cable through both sockets.
- 3. Fix the upper support ring.
- 4. Connect the wires for the system controller and, if necessary, a floor call button to the lower support ring with the FM insert of the display.
- 5. Then mount the bottom support ring.

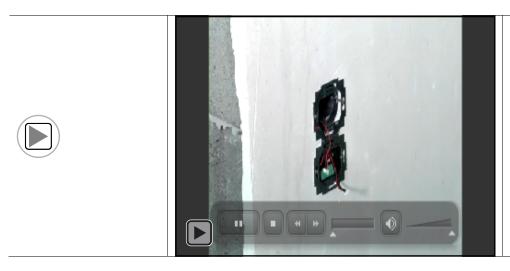
Video for mounting the inserts of the device



- 6. Attach the cover frame.
- 7. Plug the connecting cable into the loudspeaker insert and then fix the loudspeaker insert.
- 8. Set the address of the preferred outdoor stations and the address of the indoor station on the rotary switches of the display (see chapter "Addressing" on page 13).
- 9. Plug the connecting cable into the display and press the display into the contact strip of the FM insert.
- 10. And finally place the cover on the loudspeaker and the display.

The indoor station with display is now fully installed.

Video for mounting the cover frame





#### 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. 8: 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.

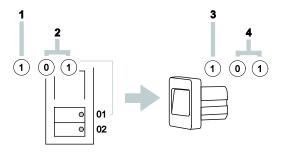


Fig. 9: The function of the potentiometers

#### 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 11 on page15, 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.

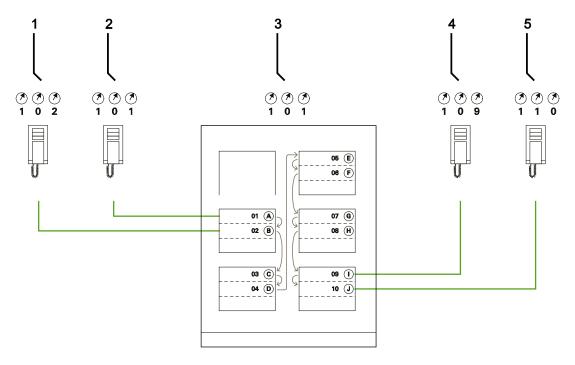


Fig. 10: Factory assignment of doorbell push-buttons

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

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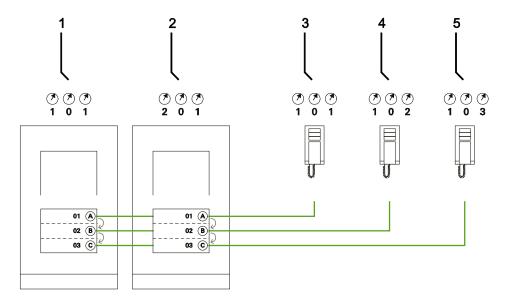


Fig. 11: Several outdoor stations with identical assignment

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

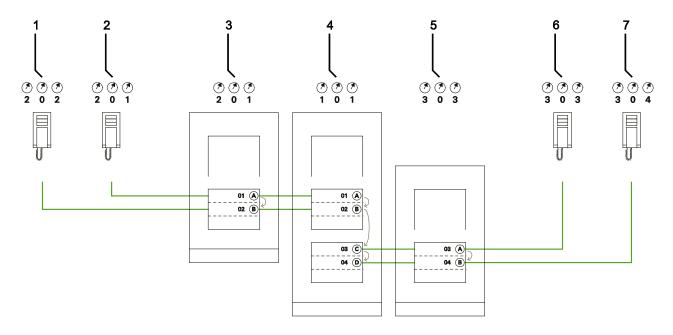


Fig. 12: Several outdoor stations with identical assignment

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



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# BUSCH-JAEGER

Project name:						
Mounting position for the outdoor station:						
	⑥	-				
Floor 02	01					
		ı				
		_				
		-				

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