

# Operating Instructions

## Busch-AudioWorld®

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### Busch-AudioWorld® Amplifier insert 8211 / 8212 U



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## 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 device is part of the Busch-AudioWorld® system and is to be used exclusively with the components that are supplied and licensed as described in the "Structure and Function" chapter. The device must only be installed in dry indoor rooms.

### 2.1 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.

All packaging materials and devices 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.

The products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU Directive 2002/96/EC WEEE and 2002/95/EC RoHS)

(EU REACH ordinance and law for the implementation of the ordinance (EC) No.1907/2006)

### 3 Operation

#### 3.1 Key assignment

##### 3.1.1 8211 display buttons

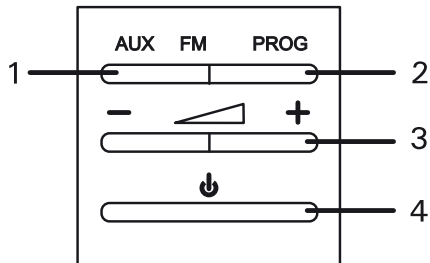


Fig. 1: Standard view

No.	Function
1	Change between external source and radio (central unit)
2	Calling of stored FM stations (central unit)
3	Volume control
4	ON/OFF/automatic switching-off function Pressing longer than 3 seconds in the ON state: Automatic deactivation after approx. 30 minutes

##### 3.1.2 8212 display buttons

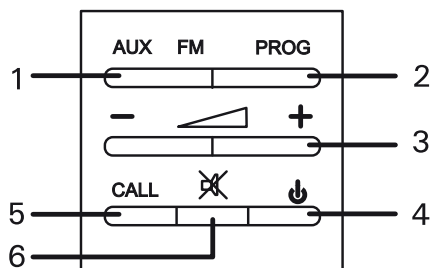


Fig. 2: Standard view

No.	Function
1	Change between external source and radio (central unit)
2	Calling of stored FM stations (central unit)
3	Volume control
4	ON/OFF/automatic switching-off function Pressing longer than 3 seconds in the ON state: Automatic deactivation after approx. 30 minutes
5	Broadcast to all amplifier inserts 8212U (keep button pressed while speaking)
6	Broadcast call suppression

## 3.2 Functions of device

### 3.2.1 Saving the broadcast volume

To save the broadcast volume, press the volume control.



#### Note

The volume of a broadcast depends on the volume of the audio playback.

### 3.2.2 Loudness function

### 3.2.3 Sleep function

The amplifier insert offers an automatic switch-off function after approx. 30 minutes.

1. Press the "ON / OFF" button for at least 3 seconds!

An orange coloured LED on the left of the "ON / OFF" button starts to light up.  
Automatic deactivation after approx. 30 minutes is activated.

## 4 Technical data



### Important Note!

This unit may only be connected to units respecting the SELV/PELV protective regulations.

Designation	Value
Operating voltage:	15 V
Max. current consumption:	300 mA
Power output:	2 x 1 W at 16 Ohm
Protective class:	IP 20

## 5 Setup and function

### 5.1 Features of function and equipment

#### 5.2 8211 U amplifier insert

For individual volume control.

- With switchover between radio and external music source.
- Eight station locations
- For step-by-step switching of the central radio program.
- For mono / stereo mode. With automatic loudness function.
- Optional automatic switch-off after 30 min. (Sleep function).

#### 5.3 Intercom amplifier inserts 8212 U

Busch-AudioWorld® system amplifier.

- For individual volume control.
- With switchover between radio and external music source.
- Eight station locations
- For step-by-step switching of the central radio program.
- With voice button and integrated microphone for spoken messages to other Intercom amplifier inserts (8212 U).
- Optional deactivation of voice messages (do not disturb).
- For mono / stereo mode.
- With automatic loudness function.
- Optional automatic switch-off after 30 min. (Sleep function).

5.4 Possible combinations

	 8211 U	 8212 U		 8211 U	 8212 U
 0247		X	 8209-101	X	
 1751-2x	X	X	 8221 U	X	
 1751-7x	X		 822X EB	X	
 1751-8x	X		 8251-2x	X	
 2147 U-x	X		 8251-21x	X	X
 8202	X		 8251-8x	X	
 8201		X			
 8208	X				

## 6 Installation and electrical connection

### 6.1 Mounting



#### Warning

##### Electric voltage!

Risk of death due to electrical voltage of 230 V during short-circuit in the low-voltage line.

- Low-voltage and 230 V lines must not be installed together in a flush-mounted socket!

### 6.2 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 and short-circuit;
  5. Cover or barricade adjacent live parts.
- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the supply network type (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).

The flush-mounted insert must only be installed in flush-mounted wall boxes according to DIN 49073-1, Part 1, or suitable surface-mounted housings.



### 6.3 General mounting 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 lines of the system bus together with 230 V- lines.
- 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.

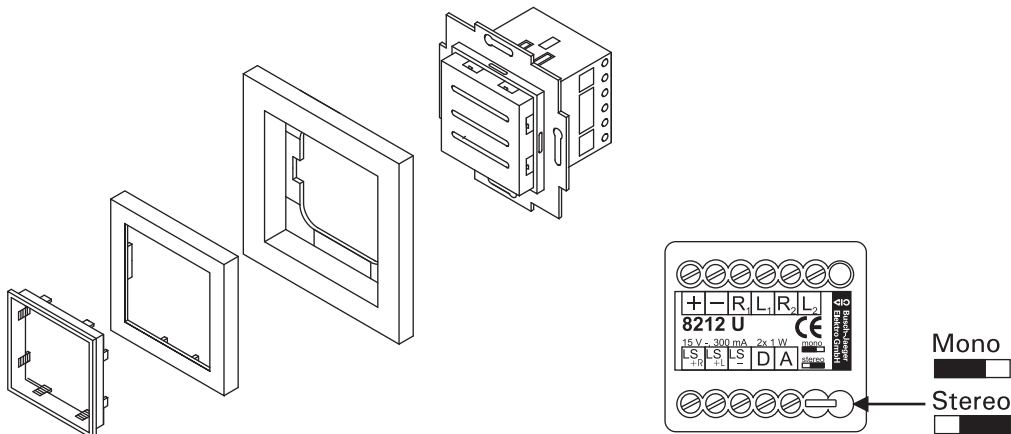


Fig. 3: Installation

1. Connect the cables to the flush-mounted insert.
2. Mount the flush-mounted-insert.
3. Plug the cover plate together with the frame onto the flush-mounted insert (see illustration).

6.4 Electrical connection

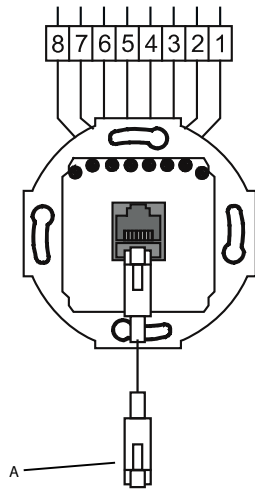


Fig. 4: Connection diagram

No.	Assignment
8 (+)	
7 (-)	
6 (R1)	Right channel 1
5 (L1)	Left channel 1
4 (R2)	Right channel 2
3 (L2)	Left channel 2
2 (A)	
1 (D)	
A	AUDIO BUS connection

6.4.1 Installation / connection possibilities

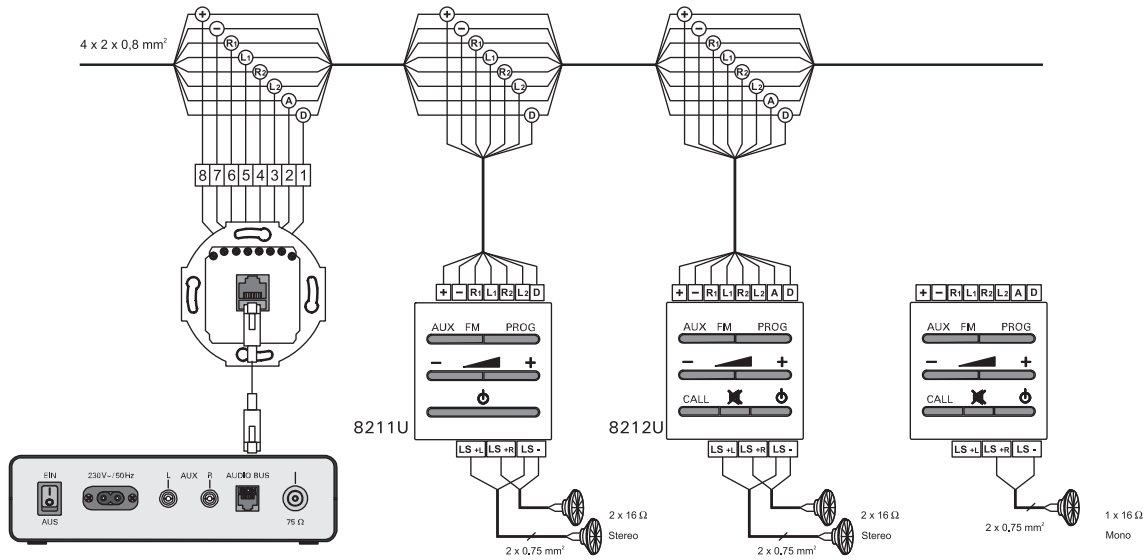


Fig. 5: Electrical connection

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