

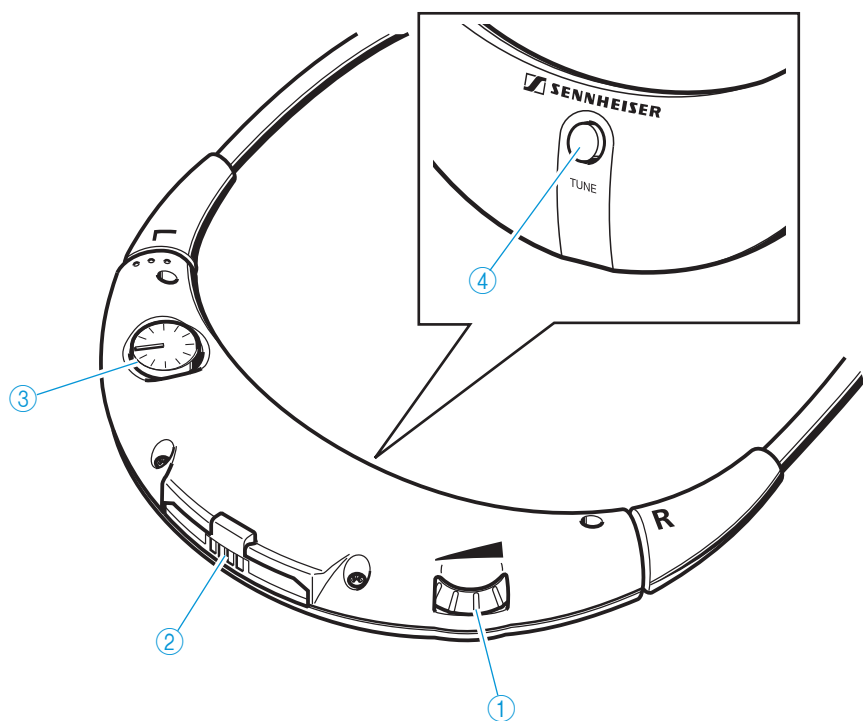
# RS 4200 II RS 4200-2 II

RF wireless stereo stetho-  
set headphone system

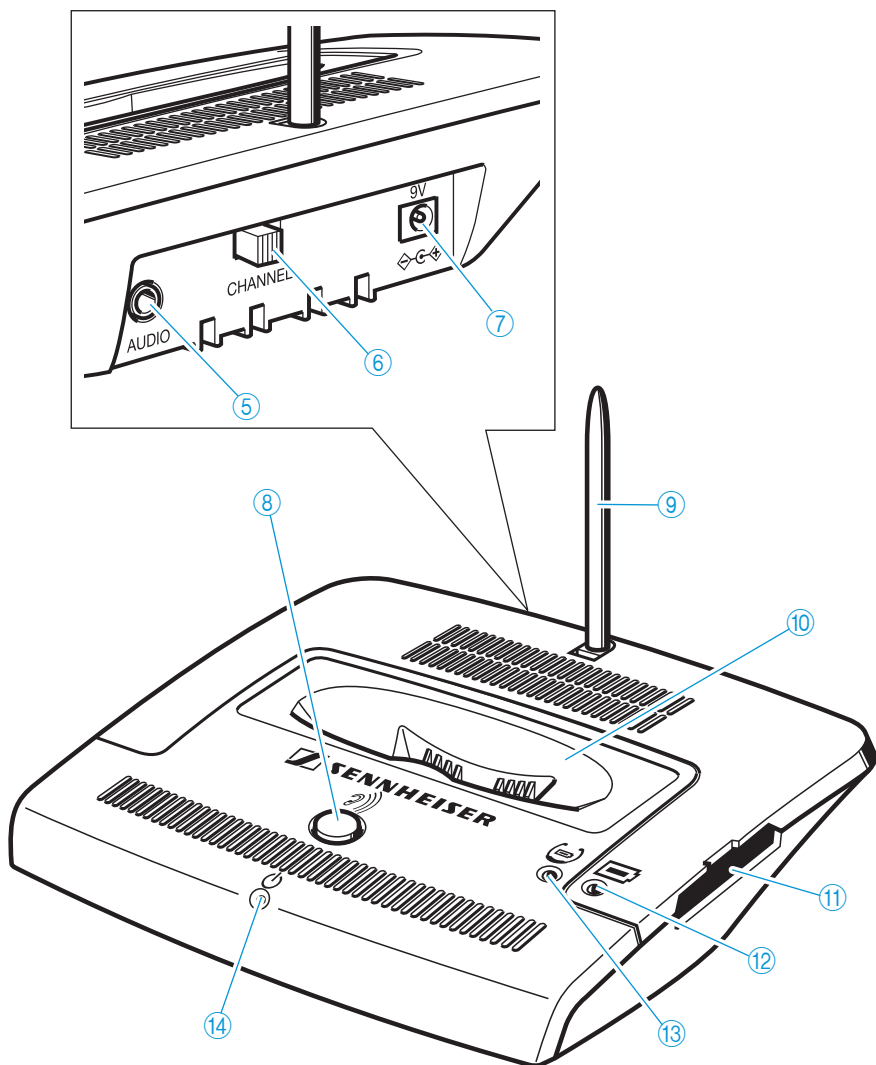


Instruction manual

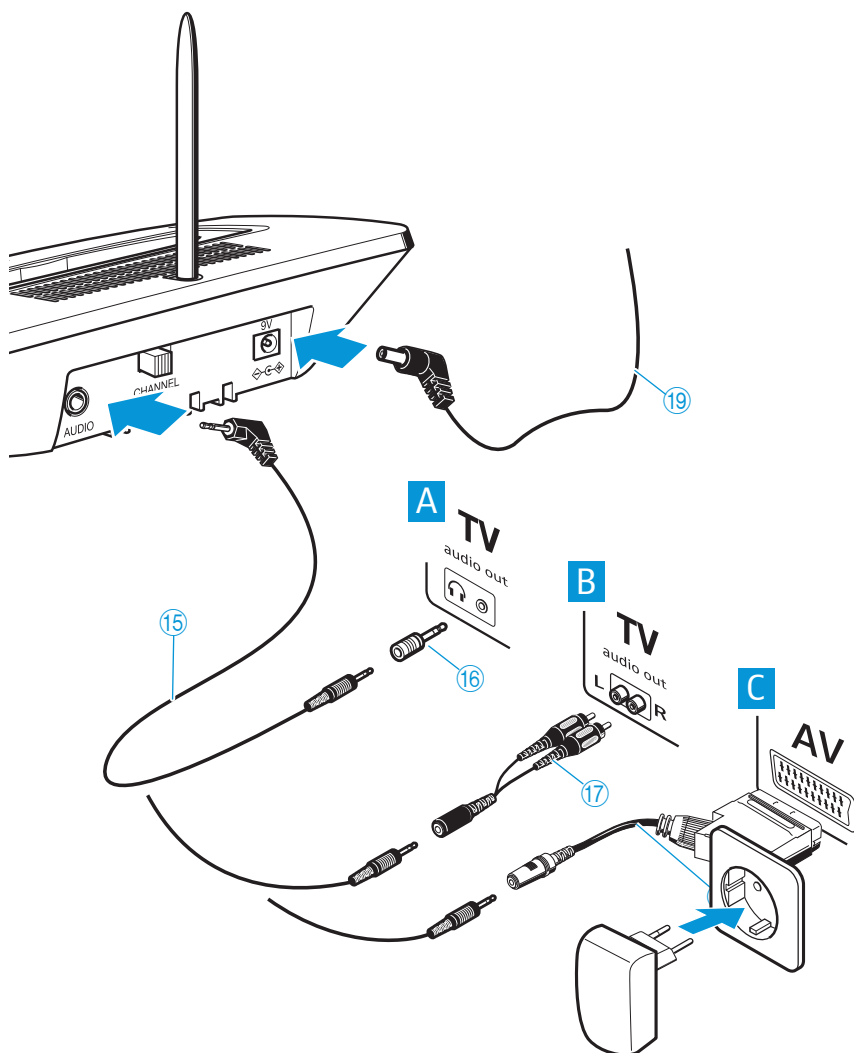
A



B



C





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## Important safety instructions



- ▶ Please read this instruction manual carefully and completely before using the product.
- ▶ Make this instruction manual available to all users at all times.

### In order to prevent damage to health:

- ▶ Before using the product, set the volume to a low level. To protect your hearing, avoid listening at high volume levels for long periods of time.

The product generates stronger permanent magnetic fields that could cause interference with cardiac pacemakers and implanted defibrillators (ICDs).

- ▶ Always maintain a distance of at least 3.94" (10 cm) between the ends of the earbuds with the ear pads and the cardiac pacemaker or implanted defibrillator.

### In order to prevent accidents:

- ▶ Ensure that the mains unit is readily operable, easily accessible and properly plugged into the wall socket.
- ▶ Unplug the mains plug from the wall socket to disconnect the product from the mains during lightning storms or when unused for long periods of time.
- ▶ Do not wear the product in an environment that requires your special attention (e.g. in traffic).
- ▶ To reduce the risk of fire or electric shock, do not use the product near water and do not expose it to rain or moisture.
- ▶ Keep the product, accessory and packaging parts out of reach of children.

### In order to prevent damage to the product:

- ▶ Only use attachments/accessories specified by Sennheiser.
- ▶ Switch off the product after use to conserve battery power. Remove the rechargeable batteries if the product will not be used for extended periods of time.
- ▶ Do not place the product on delicate surfaces.
- ▶ Always keep the product dry and do not expose it to extreme temperatures (hairdryer, heater, extended exposure to sunlight, etc.).
- ▶ Use the product with care and store it in a clean, dry and dust-free environment.
- ▶ Use only a dry and soft cloth to clean the product.

### Intended use

Intended use of the product includes

- having read this instruction manual, especially the chapter "Important safety instructions",
- using the product within the operating conditions and limitations described in this instruction manual.

"Improper use" means using the product other than as described in this instruction manual, or under operating conditions which differ from those described herein.















### Handling and safety information for rechargeable batteries

If abused or misused, the rechargeable batteries of your product may leak. In extreme cases, they may even present



- a heat hazard,
- a fire hazard,
- an explosion hazard,
- a smoke or gas hazard.

Sennheiser does not accept any liability for damage arising from abuse or misuse.

	Keep away from children.		When not using the product for extended periods of time, remove the rechargeable batteries from the product.
	Immediately remove rechargeable batteries from an obviously defective product.		Only use rechargeable batteries specified by Sennheiser.
	Dispose of rechargeable batteries at special collection points or return it to your specialist dealer.		Pack/store charged batteries so that the terminals cannot contact each other – danger of shorting out/fire hazard.
	Only charge the rechargeable batteries at ambient temperatures between 10°C/50°F and 40°C/104°F.		Do not charge the rechargeable batteries if the product is obviously defective.
	Do not mutilate or dismantle.		Switch rechargeable battery-powered products off after use.
	Do not expose to moisture.		Do not continue to use defective rechargeable batteries.
	Only charge the rechargeable batteries with the appropriate Sennheiser chargers.		Do not heat above 70°C/158°F, e.g. do not expose to sunlight or throw into a fire.

## Delivery includes



RR 4200 stethoset receiver



TR 4200 transmitter with integrated charging compartment



BA 300 Lithium-Ion rechargeable battery



Mains unit



Connection cable fitted with two 3.5 mm stereo jack plugs for connection to headphone socket (with one adapter to 1/4" (6.3 mm) jack socket)



Adapter RCA/jack socket for connection to RCA sockets (e.g. TB/Aux-Out)



2 pairs of ear pads (available in different versions)



Quick setup guide



Instruction manual

## RS 4200-2 II product variant

The RS 4200-2 II allows a second person to listen. The scope of delivery of the RS 4200-2 II variant is identical to the delivery of the RS 4200 II but includes:

- 2 RR 4200 stethoset receivers
- 2 BA 300 rechargeable batteries
- 4 pairs of ear pads (available in different versions)



A list of accessories can be found on the RS 4200 II product page at [www.sennheiser.com](http://www.sennheiser.com). For information on suppliers, contact your local Sennheiser partner: [www.sennheiser.com](http://www.sennheiser.com) > "Service & Support"


## Operating controls

The overview pictures of the receiver and the transmitter can be found on the inside front cover of this instruction manual.




### **A** Receiver

- ① Volume control
- ② Compartment for BA 300 rechargeable battery
- ③ Balance control
- ④ **TUNE** button

### **B** Transmitter

- ⑤ 3.5 mm stereo jack socket labeled AUDIO (marked blue) for connection of sound source
- ⑥ Channel selector switch **CHANNEL**
- ⑦ DC socket labeled 9 V<sub>DC</sub> (marked yellow) for connection of mains unit
- ⑧ "Speech intelligibility" button 
- ⑨ Antenna
- ⑩ Charging compartment for receiver
- ⑪ Charging compartment for spare rechargeable battery

### **B** LED indications

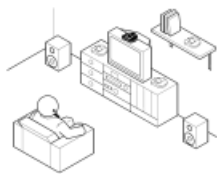
- ⑫ Charging control LED for spare rechargeable battery 
- ⑬ Charging control LED for receiver rechargeable battery 
- ⑭ Operation indication 

### **C** Connection possibilities

- ⑮ Connection cable for headphone socket
- ⑯ Adapter to 1/4" (6.3 mm) jack socket
- ⑰ Adapter (RCA/jack socket)
- ⑱ SCART adapter (optional)
- ⑲ Mains unit

# Putting the system into operation

## Setting up the transmitter





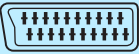
- ▶ Choose a suitable place near your sound source (e.g. TV).
- ▶ Do not place the transmitter close to metal objects such as shelf bars, reinforced concrete walls, etc. as this can decrease the transmitter's range.



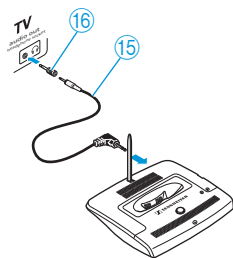
It is not necessary that the transmitter and stethoset receiver are in a direct line of sight, so you can move around freely in the home or outside in the garden. One transmitter can be used to transmit to several receivers on the same frequency.

## Connecting the transmitter to the sound source

- ▶ Plug in one end of the connection cable ⑮ to the blue AUDIO socket ⑤ on the transmitter.
- ▶ Check the connection possibilities of your sound source (e.g. TV).

A	B	C	D
TV 	TV L  R	AV 	No socket
Headphone socket	RCA sockets	SCART socket	External microphone

### A Connecting the transmitter via the headphone socket



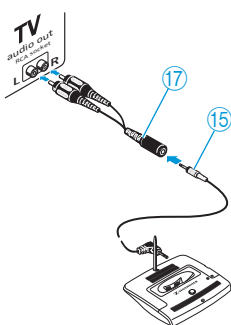
- ▶ Plug in the other end of the connection cable (15) to the headphone socket on your sound source.
- ▶ Adjust the volume of the headphone socket on your sound source to a medium level. This improves the quality of wireless sound transmission. If necessary, check the menu setting of your TV.

**i** With most TVs, the headphone socket is located at the front or sides. Depending on the socket, you may have to use the adapter (16).

In order to prevent damage to hearing, newer TVs often have a function that mutes the TV sound as soon as headphones are connected.

- ▶ If another person wants to listen to the TV sound via the loudspeaker, deactivate the muting function via the TV menu setting.

### B Connecting the transmitter via the RCA sockets

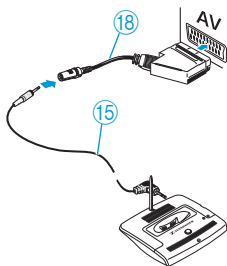


- ▶ Connect the connection cable (15) to the adapter (RCA/jack socket) (17).
- ▶ Connect the red and white RCA connectors of the adapter (17) to the matching red and white RCA sockets on your sound source.

**i** With most TVs, the RCA sockets are located at the rear.



### C Connecting the transmitter via the SCART socket



If your sound source has a SCART socket, you can order the suitable SCART adapter from your Sennheiser dealer.

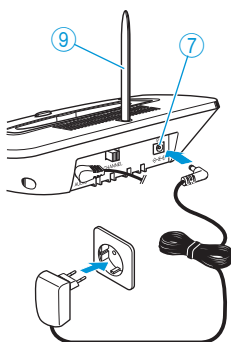
- ▶ Connect the connection cable (15) to the SCART adapter (18).
- ▶ Plug in the SCART adapter (18) to the SCART socket on your TV. If your TV has several SCART sockets, select a SCART socket that is also an output (for details, see operating manual of your TV).

### D Using an external microphone

If your sound source doesn't have a headphone or audio output, SCART or RCA socket, you can use your RS 4200 II together with an external microphone (optional accessory).

- ▶ Connect the microphone to the blue socket AUDIO (5) on the transmitter.
- ▶ Position the microphone in front of the loudspeaker of your sound source. You can change the sound by varying the position of the microphone in front of the loudspeaker.

## Connecting the transmitter to the mains



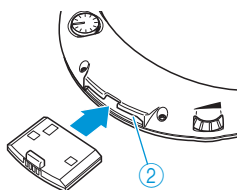
- ▶ Connect the mains unit to the yellow socket (9 V<sub>DC</sub>) (7) on the transmitter.
- ▶ Plug the mains connector into a wall socket.
- ▶ Align the antenna (9) vertically.



When not using the transmitter for extended periods of time (e.g. when you are on holiday), pull out the mains connector from the wall socket. In this case, however, the receiver's rechargeable battery will not be recharged.

## Inserting and removing the receiver's rechargeable battery

The receiver is delivered with the battery inserted.



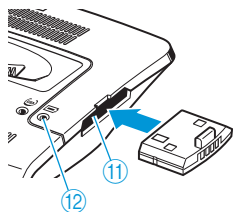
- ▶ Insert the battery into the compartment ② as shown on the left. Make sure that the battery is inserted correctly.
- ▶ To remove the battery, use the finger catch projection to pull the battery out of the receiver.



- ▶ Before using the rechargeable battery for the first time, charge it until the LED ⑬ lights up green (see "Storing and charging the receiver" on page 13). This can take a maximum of 3 hours.

## Inserting a spare rechargeable battery into the transmitter's charging compartment

You can charge a spare battery (not included) in the charging compartment ⑪ at the side of the transmitter. This spare battery is not required for operating the RS 4200 II but offers extended listening time while the discharged first battery is being recharged.



- ▶ Insert the spare battery into the charging compartment ⑪ as shown on the left.



- ▶ If the battery is inserted correctly, the LED ⑬ lights up

red: The rechargeable battery is being charged.

green: The rechargeable battery is fully charged.

## Replacing the ear pads

The product is supplied with two pairs of ear pads in different fits. You can change to these ear pads to optimize the wearing comfort, if necessary (see "Cleaning the ear pads" on page 15).

## Using the system components

### Switching the transmitter on/off

To switch the transmitter **on**:



- ▶ Switch your sound source on.

This automatically switches on the transmitter and the LED ⑭ lights up green. If the transmitter does not switch on, increase the volume of your sound source.

To switch the transmitter **off**:

- ▶ Switch your sound source off.

The transmitter automatically switches off after 3 minutes. The LED ⑭ goes off.



In order to save energy, you can manually switch off the transmitter even if the sound source remains switched on. To do so, keep the button ㉹ ⑧ pressed until the LED ⑭ goes off. In this case, the rechargeable batteries can still be charged. To switch the transmitter on again, briefly press the button ㉹ ⑧, the LED ⑭ lights up.

### Switching the stethoset receiver on

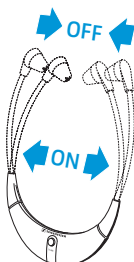


#### WARNING

#### Danger of hearing damage!

Listening at high volume levels for long periods can lead to permanent hearing defects.

- ▶ Before putting the receiver on, set the volume on the receiver to a low value.
- ▶ Then adjust a comfortable sound amplification.

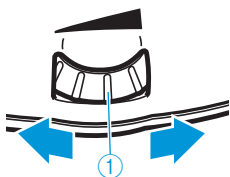


The stethoset receiver automatically switches on when you pull the earbows apart and put the receiver on. When you take the receiver off, it automatically switches off.

- ▶ Before putting the receiver on, use the volume control ① to adjust the volume to a low level. This protects your hearing from damage.
- ▶ Put the receiver on the correct way round, with the Sennheiser logo at the front.

## Adjusting the volume

If the transmitter is connected to a headphone socket of your sound source:

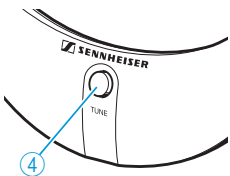


- ▶ Adjust the volume of the sound source to a medium level. This improves the quality of wireless sound transmission.
- ▶ Use the volume control ① to adjust the volume to a sufficient and comfortable level.

## Automatic transmitter search tuning

- ▶ Put the receiver on.

The receiver starts searching for a transmitter signal and automatically tunes itself to the last selected channel. If a transmitter signal is found, the transmitter search tuning stops and the receiver produces – depending on the selected channel – 1, 2 or 3 beeps (see “Meaning of the LEDs and acoustic signals” on page 14). The audio transmission then starts.

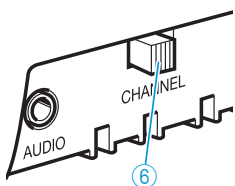


If the signal found is not the correct one (e.g. from another nearby system):

- ▶ Briefly press the **TUNE** button ④ to continue the transmitter search tuning.

## Changing the transmission and receiver channel

If several transmitters are operated simultaneously and are very close to one another, reception can be subject to interference (e.g. hissing).

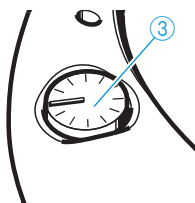


- ▶ Change the position of the channel selector switch **CHANNEL** ⑥ to change the transmission channel.
- ▶ Press the **TUNE** button ④ to re-start transmitter search tuning (see previous section).

## Adjusting the balance

The RS 4200 II features a balance control for right/left volume adjustment.

- ▶ Use the balance control ③ to adjust the volume so that you hear equally well with both ears.



## Enhancing the speech intelligibility

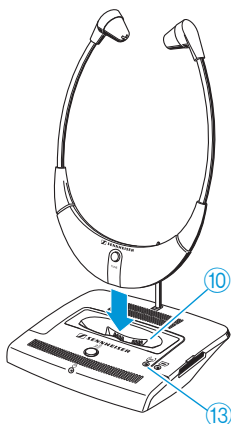
The button ⑧ allows you to enhance the speech intelligibility.



- ▶ If the speech is barely intelligible, press the button ⑧. The button ⑧ is backlit in yellow and the speech intelligibility is enhanced.
- ▶ If the speech remains barely intelligible, increase the volume of your sound source.

## Storing and charging the receiver

Do not store your receiver on a glass dummy head, chair armrest, or similar for long periods of time as this can reduce the contact pressure of the earbows. Furthermore, with the earbows pulled apart, the receiver remains switched on.



- ▶ After use, place the receiver into the transmitter's charging compartment ⑩ as shown on the left, without exerting too much pressure.
- ▶ If the receiver is placed correctly into the charging compartment, the LED ⑬ lights up



red: The rechargeable battery is being charged.  
green: The rechargeable battery is fully charged.





- ▶ Before using the rechargeable battery for the first time, charge it until the LED ⑬ lights up green. This can take a maximum of 3 hours. With a fully charged battery, the operating time is approx. 9 hours.



Always store the receiver in the transmitter's charging compartment ⑩ to ensure that it is fully charged. The intelligent battery charging technology prevents overcharging. When not using the receiver for extended periods of time, charge the battery regularly every three months.

## Meaning of the LEDs and acoustic signals

### LEDs on the transmitter

LED	Status	Meaning
	Operation indication ⑭	lit green
	off	Transmitter is switched off
	Charging control LED of receiver rechargeable battery ⑬	lit red
	Charging control LED of spare rechargeable battery ⑫	lit green
	Speech intelligibility button ⑧	lit yellow
		Speech enhancement is activated

### Acoustic signals of the receiver

Acoustic signal	Meaning	Commentary
6 short beeps	No audio signal (transmitter is not activated or out of range)	Automatic switch-off after approx. 3 minutes
2 long beeps	Rechargeable battery is flat	Automatic switch-off after approx. 10 minutes
1, 2 or 3 beeps after having pressed the <b>TUNE</b> button ④	Receiver is tuned to channel 1, 2 or 3	These beeps can be switched off by pressing the <b>TUNE</b> button ④ for 5 seconds while the receiver is switched on.

## Care and maintenance

### Cleaning the system

#### CAUTION

**Liquids can damage the electronics of the devices!**

Liquids entering the housing of the units can cause a short-circuit and damage the electronics.

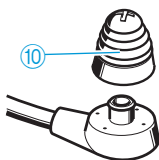
▶ Keep all liquids far away from the devices.

▶ Before cleaning, disconnect the transmitter from the mains.

▶ Only use a slightly damp cloth to clean the devices. Do not use any cleansing agents or solvents.

### Cleaning the ear pads

For reasons of hygiene, the ear pads ②0 should be replaced from time to time. Please order the ear pads from your Sennheiser dealer.




▶ Carefully remove the ear pads ②0 from the receiver.

▶ Clean the ear pads ②0 with warm soapy water and rinse thoroughly.

▶ Dry the ear pads ②0 before putting them back on the receiver.

## If a problem occurs...

► Check if the problem you face is listed in the table below:

Problem	Possible cause	Page
You cannot hear anything	Are all jack plugs connected correctly?	7 ff
	Is the transmitter connected to the sound source?	7 ff
	Is the transmitter connected to the mains?	9
	Is the volume of the sound source sufficient?	11
	Is the green operation indication lit?	11
	Is the volume of the receiver sufficient?	12
	Is the rechargeable battery fully charged and inserted properly into the receiver?	10
The sound is subject to interference	Is the receiver still within the transmitter's range?	7
	Is interference being received from an external source in close proximity?	12
The speech intelligibility is reduced	Is the "Speech intelligibility" button  backlit in yellow?	13
	Is the volume of the headphone socket on the sound source sufficient?	11
You hear the sound only with one ear	Is the balance adjusted correctly?	12

If a problem occurs that is not listed in the above table or if the problem cannot be resolved with the proposed solutions, please contact your local Sennheiser agent for assistance.



## Specifications

### System

Modulation	FM stereo
Carrier frequencies	863.3 / 864.0 / 864.7 MHz
Range	up to 100 m in the open
AF frequency response	50 Hz–16 kHz
THD	< 1%
Signal-to-noise ratio	typ. 70 dB(A)


### Transmitter

Audio/microphone connection	3.5 mm stereo jack socket
Charging time of rechargeable battery	approx. 3 hrs
Power supply for transmitter	9 V <sub>DC</sub> /300 mA via NT09-3A mains unit
Power supply for NT09-3A mains unit	100–200 V~/50–60 Hz/ max. 100 mA
Energy efficiency of the mains unit	level V, standby power consumption < 0.3 W
Weight	approx. 150 g
Dimensions	approx. 115 x 145 x 95 mm

### Receiver

Max. SPL	125 dB (SPL)
Power supply	via BA 300 rechargeable battery (3.7 V / 150 mAh)
Operating time	approx. 9 hrs
Weight	approx. 50 g
Dimensions	approx. 200 x 135 x 20 mm

### In compliance with

Europe:	EMC	EN 301489-1/-9
	Radio	EN 301357-1/-2
	Safety	EN 60065

Transmitters that operate in the 863 – 865 MHz frequency range can be used licence-free in the following countries:

AT, BA, BE, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, TR, UA.

## Manufacturer Declarations

### Warranty

Sennheiser electronic GmbH & Co. KG gives a warranty of 24 months on this product. For the current warranty conditions, please visit our website at [www.sennheiser.com](http://www.sennheiser.com) or contact your Sennheiser partner.

### In compliance with the following requirements

- RoHS Directive (2002/95/EC)
- WEEE Directive (2002/96/EC)



Please dispose of this product by taking it to your local collection point or recycling centre for such equipment. This will help to protect the environment in which we all live.

- Battery Directive (2006/66/EC)



The supplied rechargeable batteries can be recycled. Please dispose of them as special waste or return them to your specialist dealer. In order to protect the environment, only dispose of ex-hausted batteries.

### CE Declaration of Conformity

- **CE 0682**
- R&TTE Directive (1999/5/EC)
- EMC Directive (2004/108/EC)
- Low Voltage Directive (2006/95/EC)
- EuP Directive (2005/32/EC)

The declaration is available at [www.sennheiser.com](http://www.sennheiser.com). Before putting the product into operation, please observe the respective country-specific regulations!

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