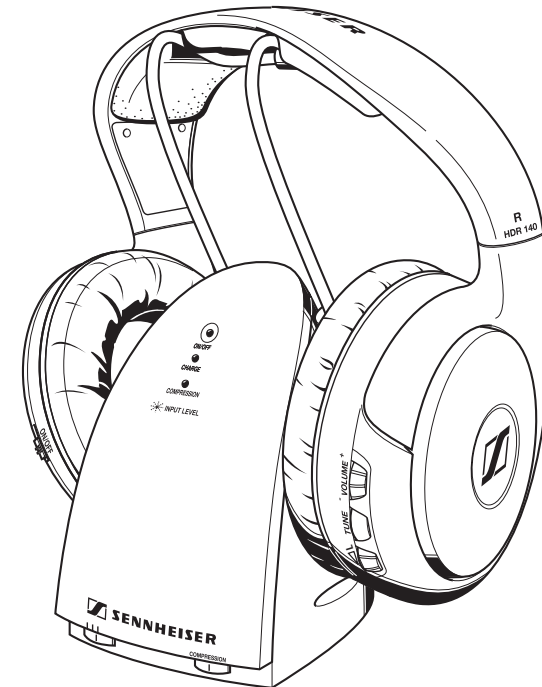


RS 140

Bedienungsanleitung
Instruction Manual
Notice d'emploi
Istruzioni per l'uso
Instrucciones para el uso
Instruções de Uso
Gebruiksaanwijzing
Käyttöohje
Οδηγίες χειρισμού



EU-Konformitätserklärung
EC Declaration of Conformity

Sennheiser electronic GmbH & Co. KG
 Am Labor 1
 D-30900 Wedemark

Erklärt in alleiniger Verantwortung, dass das Produkt:
 Declare under sole responsibility that the product:

Modell: RS 130 (864 MHz), RS 140 (864 MHz)
System Components: Headphone Receiver HDR 130, HDR 140
 Transmitter TR 130, TR 140
 Power Supply NT-RS100

Nach den folgenden Richtlinien und unter Anwendung der harmonisierten Normen entwickelt, konstruiert und gefertigt worden ist. / To which this declaration relates, is in conformity with the following requirements:

Low Voltage Directive 73/23/EEC, new 93/68/EEC,

Comprising the harmonized standards

IEC / EN 61558-2-6 - Safety of power transformers, power supply units and similar

**Electromagnetic compatibility 89/336/EEC,
 and corresponding article 3.1.2 R&TTE 1999/5/EEC**

Comprising the harmonized standards

ETSI EN 301 489-1/-9 - Electromagnetic compatibility and Radio spectrum Matters (ERM) – Electro Magnetic Compatibility (EMC) standard for radio equipment and services (CETECOM Test Report: 2-3759-01-03/04)

Radio spectrum R&TTE 1999/5/EEC, corresponding article 3.2

Comprising the harmonized standards

ETSI EN 301 357-2, class I: - Radio Equipment and Systems (RES); for wireless microphones in the 25 MHz to 3 GHz frequency range. (CETECOM Test Report : 2-3759-01-01/04)

Qualitätszusicherung: Der Herstellerbetrieb ist nach ISO 9001 : 2000 zertifiziert

Quality Assurance: The product is produced by a manufacturing organisation on ISO 9001 : 2000 level

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Wedemark, 2004-11-08


 Volker Bartels
 President Manufacturing



Konformitätserklärung

Sennheiser electronic GmbH & Co. KG erklären, dass dieses Gerät die anwendbaren CE-Normen und Vorschriften erfüllt.

Approval

Sennheiser electronic GmbH & Co. KG declare that this device is in compliance with the applicable CE standards and regulations.

Certification

Sennheiser electronic GmbH & Co. KG déclarons que cet appareil est en conformité avec les normes CE.

Certificazione

Sennheiser electronic GmbH & Co. KG dichiara che questo apparecchio risponde alle normative e alle prescrizioni CE applicabili.

Autorización

Sennheiser electronic GmbH & Co. KG declara que este aparato cumple las normas y directrices de la CE aplicables.

Declaração de conformidade

A Sennheiser electronic GmbH & Co. KG declara que este aparelho cumpre as normas CE e prescrições aplicáveis.

Vergunning

Sennheiser electronic GmbH & Co. KG verklaren, dat dit toestel voldoet aan de toepasselijke CE-normen en voorschriften.

Vaatimustenmukaisuustodistus

Sennheiser electronic GmbH & Co. KG vahvistaa, että tämä laite on tarvittavien CE-normien ja määräysten mukainen.

Δήλωση Συμμόρφωσης

Η εταιρία Sennheiser electronic GmbH & Co. KG δηλώνει ότι η παρούσα συσκευή ανταποκρίνεται στα εφαρμοσθέντα πρότυπα CE και στις εφαρμοσθείσες προδιαγραφές.

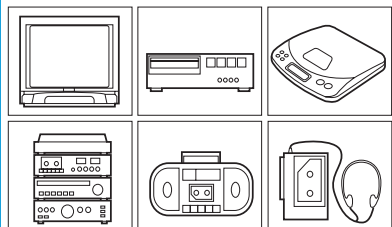
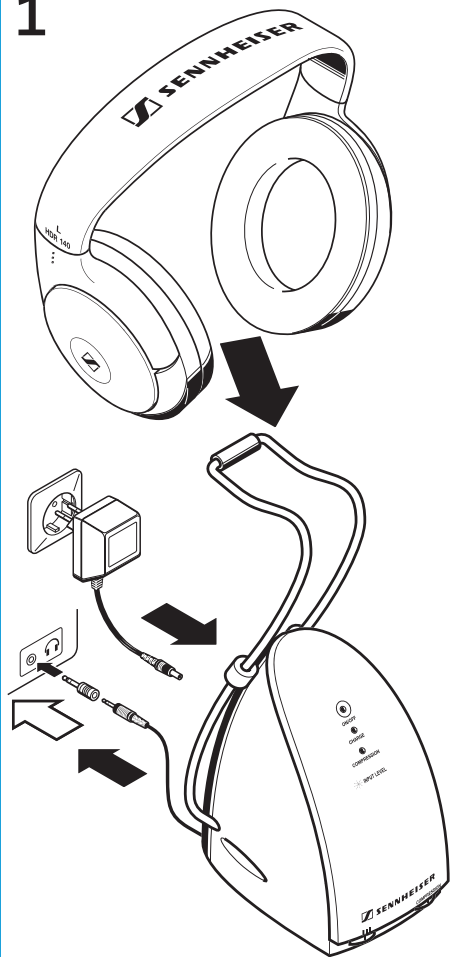
FCC Rules

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: 1) Reorient or relocate the receiving antenna. 2) Increase the separation between the equipment and receiver. 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. 4) Consult the dealer or an experienced radio/TV technician for help.

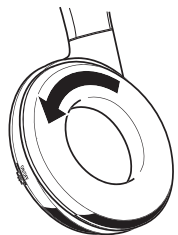
The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Warning: Changes or modifications made to this equipment not expressly approved by Sennheiser electronic Corp. may void the FCC authorization to operate this equipment.

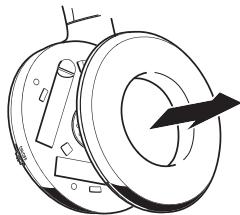
1



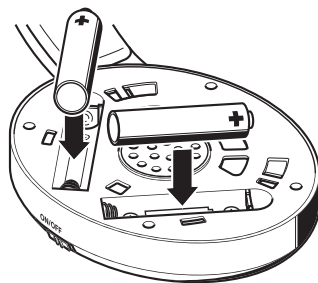
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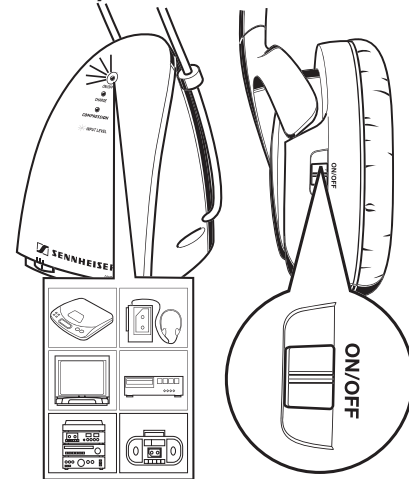
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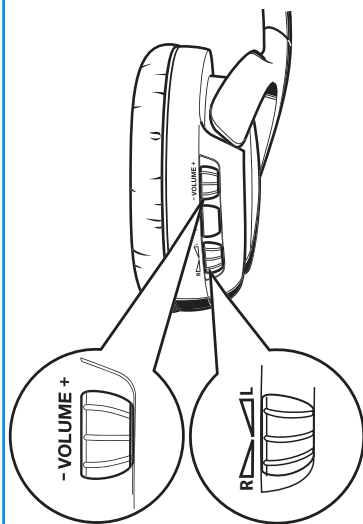
4



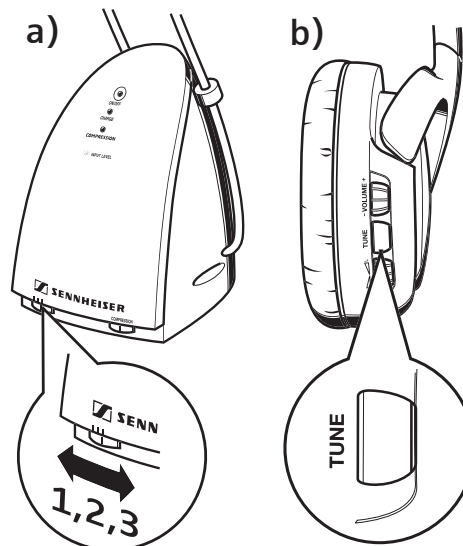
5 ON/OFF



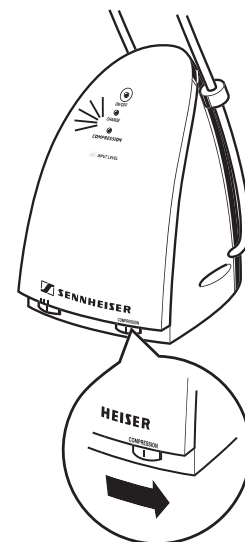
6 VOLUME/BALANCE



7 TUNE



8 COMPRESSION



RS 140

The RS 140 is an up-market wireless RF headphone system suitable for use with hi-fi systems and televisions. The headphones are very comfortable to wear and the system incorporates a variety of technical innovations such as:

- Transmitter with automatic on/off function
- Automatic transmitter search-tuning with memory function
- Self-learning automatic level control with memory function
- Switchable dynamic compression ensures excellent speech intelligibility
- "Noise Gate" function reduces hissing noise, e.g. during pauses
- Acoustic signals provide feedback on the functions
- High output level (adjustable)
- Balance control for right/left volume adjustment
- Intelligent battery charging technology

Delivery includes

- HDR 140 headphones
- 2 x AAA size Ni-MH rechargeable battery, 1.2 V
- TR 140 transmitter with audio connecting cable (permanently connected)
- NT-RS 100 mains unit
- Adapter 3.5 mm/6.3 mm
- RCA phono plug (926 MHz variant only)
- Instructions for use

Safety instructions

Never open the transmitter nor the receiver, otherwise you can be injured and the warranty becomes null and void.



Attention: Do not wear the headphones in situations which require special attention (e.g. in traffic or when performing skilled jobs).

Attention: Listening at high volume levels can lead to hearing defects.

Attention: Do not charge standard batteries via the headphones! Only use rechargeable batteries (danger of explosion)!



Dispose of exhausted rechargeable batteries at special collection points or return them to your specialist dealer.

- Always keep the system dry and do not expose it to extreme temperatures (ideally 10–35°C).
- Use the system with care and set it up in a clean, dust-free environment.
- Varnish or furniture polish may degrade the rubber feet of the transmitter, which could stain your furniture.
- Do not store your headphones on a glass dummy head, chair armrest, or similar for long periods of time as this can widen the headband and reduce the contact pressure of the headphones.
- Use a soft cloth for cleaning the units. Do not use abrasive cleaners.

Wall mounting

The transmitter is prepared for wall mounting. The required mounting hardware (screws and plugs) is not included in the delivery.

Connecting the transmitter (Fig. 1)

Establish the necessary connections (mains unit, audio connecting cable).

Removing the ear cushions (Fig. 2 and 3)

The ear cushions are secured to the earcups by means of a quarter turn fastener. To remove an ear cushion, turn it in the direction of the arrow until you overcome a slight resistance and lift it off the earcup.

Inserting the rechargeable batteries (Fig. 4)

Remove the left ear cushion (Fig. 2 and 3).
Insert the rechargeable batteries.

Attention: Observe correct polarity when inserting the batteries!

Charging the rechargeable batteries

For charging the batteries, place the headphones on the charging cradle of the transmitter. (The headphones automatically turn off during charging.) The red LED "CHARGE" lights up during the charging process. If the batteries are fully charged, the transmitter automatically switches to trickle charging and the red LED "CHARGE" flashes slowly.

Charge the batteries for at least 16 hours prior to first time use. Subsequent charging time is about the same time as the previous operating time.

Always store the headphones on the transmitter to ensure that they are fully charged when they are needed. The intelligent battery charging technology prevents overcharging. If you do not use the headphones for extended periods of time, please remove the batteries and disconnect the transmitter's mains unit from the mains.

Nearly discharged batteries will significantly reduce the sound quality. Approx. 10 minutes before the batteries are completely discharged, an acoustic warning signal is produced (two long beeps, see table on page 16).

Turning the transmitter on and off (Fig. 5)

Turn on the sound source. This automatically activates the transmitter and the green LED "ON/OFF" lights up. If the sound source is turned off, the transmitter is automatically deactivated after approx. 3 minutes (the LED "ON/OFF" goes off).

Note: The automatic level control only functions if the volume of the sound source is sufficient.

Turning the headphones on and off (ON/OFF, Fig. 5)

Move the "ON/OFF" switch on the headphones to the position "ON". The headphones then start the transmitter search-tuning.

Adjusting the volume (VOLUME, Fig. 6)

Use the "VOLUME" control to adjust the volume on the headphones.

Adjusting the balance (BALANCE, Fig. 6)

Use the "BALANCE" control to adjust the volume of the right and left channels. There is a click-stop in the center position.

Auto-tuning – automatic transmitter search-tuning with memory function (TUNE, Abb. 7)

Note: The transmitter must be activated (green LED "ON/OFF" lit) and the headphones must be turned on.

By pressing the TUNE button or after turn-on, the headphones start scanning the whole frequency range for a transmitter signal. If a transmitter signal is found, the transmitter search-tuning stops and the audio transmission starts.

If, for some reason, the signal found is not the correct one (e.g. from another nearby system), press the TUNE button again and the transmitter search-tuning is continued. When turning on the headphones, they automatically start the transmitter search-tuning on the last selected channel.

If no transmitter signal is received for an extended period of time (e.g. the range is exceeded or the transmitter is deactivated), six short beeps are produced. After approx. 10 minutes, the

headphones automatically turn off. By pressing the TUNE button, the headphones can be turned on again.

Self-learning automatic level control with memory function

The transmitter is equipped with an automatic level control which ensures that the headphones always receive an optimum signal. The level is continuously adjusted during operation and remains stored as long as the transmitter is connected to the mains.

Under-modulation (audio signal too low)

With under-modulation, the yellow LED "INPUT LEVEL" flashes slowly. If this happens, gradually increase the volume of the sound source. If the audio signal remains too weak, an optimum transmission is not possible. It could be that the transmitter is deactivated after some time.

Over-modulation (audio signal too high)

With over-modulation, the yellow LED "INPUT LEVEL" flashes rapidly. If this happens, gradually reduce the volume of the sound source.

Dynamic compression system (Fig. 8)

The RS 140 system is equipped with a switchable dynamic compression system. This system reproduces soft passages louder and decreases loud sounds. To activate the dynamic compression system, move the slide switch "COMPRESSION" on the transmitter to the right. The yellow LED "COMPRESSION" lights up. If the LED flashes slowly, gradually increase the volume of the sound source (see "Under-modulation").

Automatic noise reduction

In addition, the transmitter features a "Noise Gate" function, which reduces hissing noise when no audio signal is transmitted (e.g. during pauses).

Meanings of the LEDs and acoustic signals

Transmitter, LED	Status	Meaning
ON/OFF (green)	lit	Audio signal is present, transmitter is activated
CHARGE (red)	lit	Rechargeable batteries are being charged
	flashes slowly	Rechargeable batteries are fully charged, transmitter has switched to trickle charging
COMPRESSION INPUT LEVEL (yellow)	lit	"COMPRESSION" function is activated
	flashes slowly	Audio signal too low
	flashes rapidly	Audio signal too high

Headphones, acoustic signals	Meaning	Commentary
6 short beeps	No audio signal (transmitter is not activated, out of range)	Automatic turn-off after approx. 10 minutes
2 long beeps	Rechargeable batteries are flat	Automatic turn-off after approx. 10 minutes
Sequence of 3 beeps	Manual or automatic turn-off	—
1, 2 or 3 beeps after pressing TUNE	Headphones tuned to channel 1, 2 or 3	—

Turning the acoustic signals (beeps) on and off

The acoustic signals of the headphones can be turned on or off as follows:

- Turn the headphones on.
- Press the TUNE button for 5 seconds.
- Turn the headphones off.
- If the acoustic signals are turned on, the headphones produce a sequence of beeps at turn-off. If no beeps are produced, the acoustic signals are now turned off.

If problems occur...

- Check if all jack plugs are connected correctly.
- Make sure that the batteries are charged.
- Check if the batteries are inserted correctly and that the polarity is correct.
- Check if the headphones and sound source are turned on and that the volume of the headphones and sound source is sufficient.
- Move closer to the transmitter.
- Choose a different channel on the transmitter.
- Press the TUNE button again.
- Reset the system:
Remove the rechargeable batteries from the headphones and – at the same time – interrupt the power supply of the transmitter for at least 30 seconds.
- Some electronic devices (e.g. televisions) can cause interference, which can be eliminated by increasing the distance between the transmitter and the interference source.
- Try to operate the transmitter with a different sound source.

Should the problem persist, please contact your authorized dealer for assistance.

Accessories

- Additional headphones: HDR 140 (864 MHz) Cat. No. 009934
HDR 140 (926 MHz) Cat. No. 009935
- Replacement ear cushions: Cat. No. 511792

Only use original Sennheiser components and spare parts, otherwise the units can be damaged and the warranty becomes null and void.

Warranty

2-year warranty

Type approval regulations

Please observe the respective country-specific type approval regulations!

Specifications

Modulation	FM stereo
Frequency range	see type plate on the bottom of transmitter
AF frequency response	18 Hz–21 kHz
Signal-to-noise ratio	typ. > 68 dBA

TR 140 transmitter

RF output power	< 10 mW (864 MHz variant) < 0.75 mW (926 MHz variant)
Power supply	9 V DC via NT-RS 100 mains unit
Current consumption	< 1.8 VA
Channels	3
Connector	3.5 mm jack plug (864 MHz variant) RCA plug (926 MHz variant)
Weight	approx. 430 g (incl. audio connecting cable)
Dimensions	width: 85 mm, depth: 133 mm, height: 225 mm (incl. charging cradle)

HDR 140 headphones

Transducer principle	dynamic, circum-aural, closed
Max. SPL at 1 kHz	110 dB
THD	< 0.5%
Power supply	2 AAA size Ni-MH rechargeable batteries (LR 03)
Charging time	approx. 16 h (full charge)
Operating time	approx. 23 h (with fully charged batteries)
Weight	approx. 280 g incl. batteries