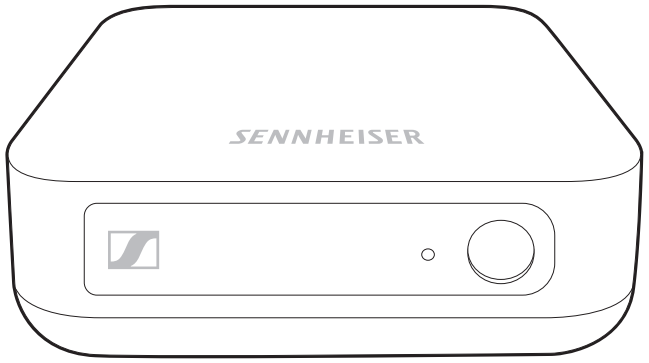
Bluetooth® Audio Transmitter



Instruction Manual

SENNHEISER

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Important safety instructions

- Read this instruction manual carefully and completely before using the product.
- Do not use an obviously defective product.
- Only use the product in environments where **Bluetooth**® wireless transmission is permitted.

Preventing damage to health and accidents

- Do not use the product near water and do not expose it to rain or moisture to reduce the risk of fire or electric shock.
- Keep the product, accessories and packaging parts out of reach of children and pets to prevent accidents and choking hazards.

Preventing damage to the product and malfunctions

- Always keep the product dry and do not expose it to extreme temperatures to avoid corrosion or deformation.
- Only use attachments/accessories/spare parts supplied or recommended by Sennheiser.
- Clean the product only with a soft, dry cloth.
- Use the product with care and store it in a clean, dust-free environment.

Intended use/Liability

The **Bluetooth**® Audio Transmitter is suitable for use with hi-fi systems, TV sets, PCs, and home cinema systems and supports both analog and digital signals.

This product is designed for use with headphones that support wireless communication via **Bluetooth**.

It is considered improper use when this product is used for any application not named in the associated instruction manuals and product guides.

Sennheiser does not accept liability for damage arising from abuse or misuse of this product and its attachments/accessories.

Before putting the product into operation please observe the respective country-specific regulations!

The Bluetooth® Audio Transmitter

The **Bluetooth**® Audio Transmitter delivers precise sound reproduction through Qualcomm® aptX™ audio technology.

Expect an even better audio-video experience at home through your favorite headphones.

Features

- Supports Qualcomm® aptX™ for true Hi-Fi sound
- Supports Qualcomm® aptX™ Low Latency for optimized audio-visual experience
- Supports analog and digital audio inputs and allows easy toggling between the inputs

Bluetooth

The **Bluetooth**® Audio Transmitter complies with the **Bluetooth** 4.2 standard and is compatible with all **Bluetooth** 1.1, 1.2, 2.0, 2.1, and 3.0 devices with Advanced Audio Distribution Profile (A2DP).

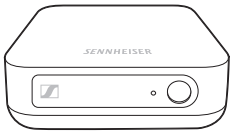
aptX™

With aptX™ audio coding, you can be assured of crisp, pure and full stereo sound. It allows you to not only hear, but experience and feel the audio as it was intended. Utilizing aptX™, **Bluetooth** technology can now offer wireless audio quality that is indistinguishable from the highest quality wired connection.

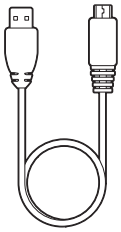
aptX™ Low Latency

Qualcomm® aptX™ Low Latency audio ensures your **Bluetooth**® wireless enabled device can deliver sound in sync with visual media. It reduces delay and improves end-to-end speed of the audio transmission, resulting in a high quality, synchronized audio-visual experience. With aptX™ Low Latency you can enjoy the freedom of wireless for applications such as gaming and watching videos.

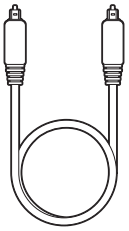
Package includes



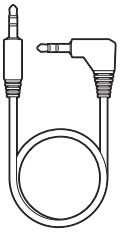
Bluetooth transmitter



USB power cable



Digital optical cable



Analog audio cable

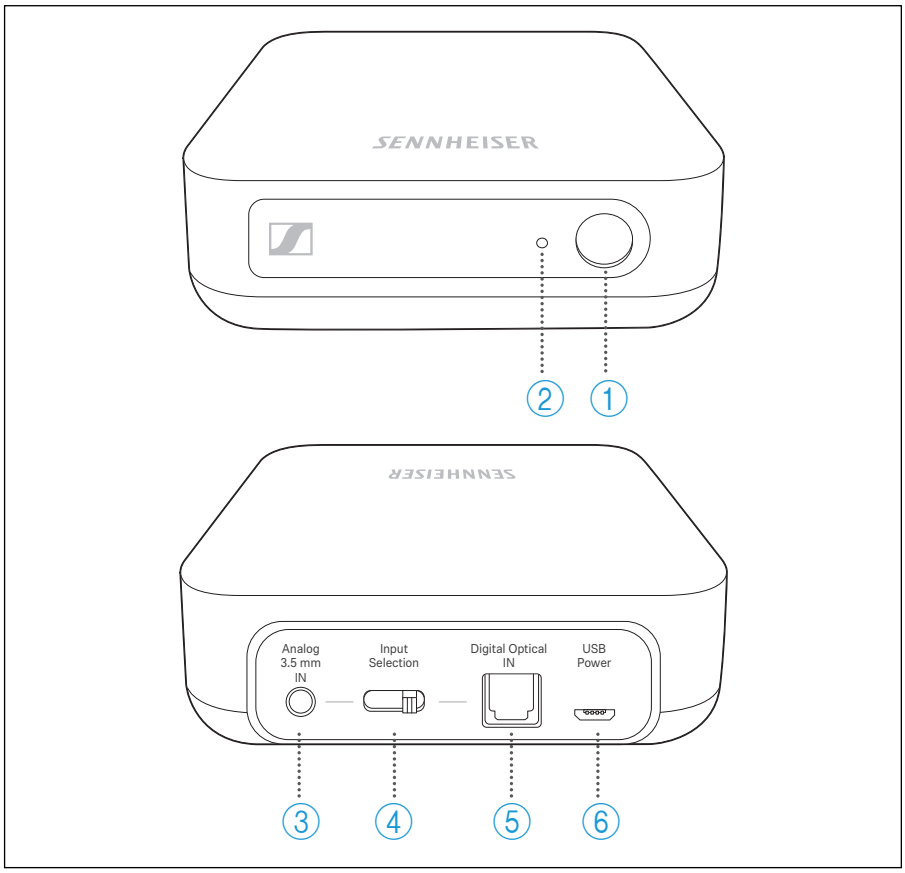
Quick guide

Safety guide

A list of accessories can be found at www.sennheiser.com. For information on suppliers, contact your local Sennheiser partner: www.sennheiser.com > “Sales Partner“.

Product overview

Overview of the transmitter

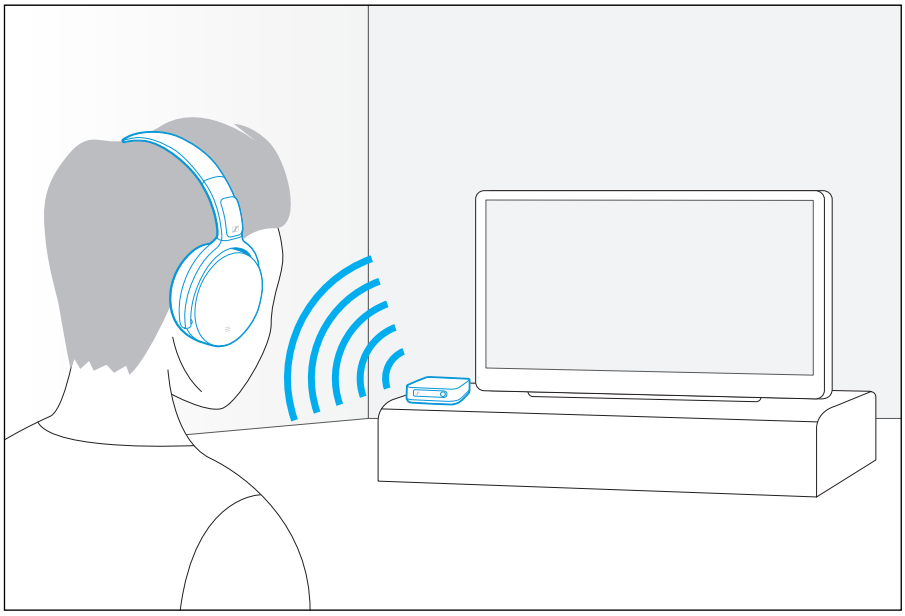


① Multifunction button
② LED
③ Analog 3.5 mm IN input
④ Input Selection switch
⑤ Digital Optical IN input
⑥ USB micro-B input socket (power)

Getting started

Setting up the Bluetooth® Audio Transmitter

- Choose a suitable place near your audio source.
- Avoid placing the transmitter and other wireless devices too close to one another to prevent interference.
- 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.



Connecting the Bluetooth® Audio Transmitter to an audio source

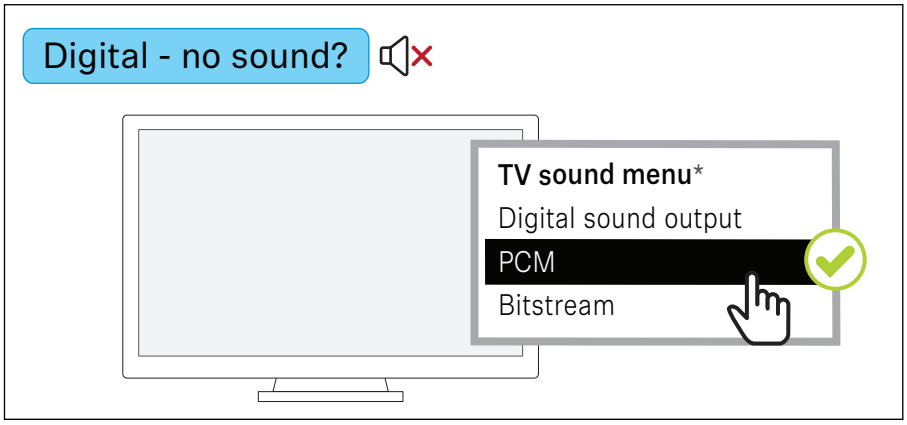
You can simultaneously connect 2 different audio sources (e.g. a TV or PC and a stereo hi-fi system) to the transmitter. The transmitter features a digital as well as an analog audio input. If you connect 2 audio sources, you can toggle between them using the Input Selection switch (see page 15).

- ▶ Switch your audio source off before connecting the transmitter.
- ▶ Check the connection options available on your audio source (for analog audio connection, the audio output is usually marked “OUT”).
- ▶ Select the corresponding connection cable and, if necessary, a suitable adapter.
- ▶ Once the cable is selected, slide the Input Selection switch toward the correct input.

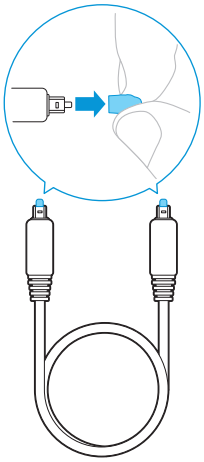
Connection to an audio source using the digital optical cable

To achieve the best possible listening experience, we recommend that you connect the **Bluetooth**® Audio Transmitter to your home cinema or hi-fi system using the supplied digital optical cable.

Your **Bluetooth**® Audio Transmitter allows digital audio streaming using only PCM audio output from devices connected through the digital optical input. Refer to the sound menu or the instruction manual of your TV to change from another audio stream (e.g. Bitstream) to PCM.

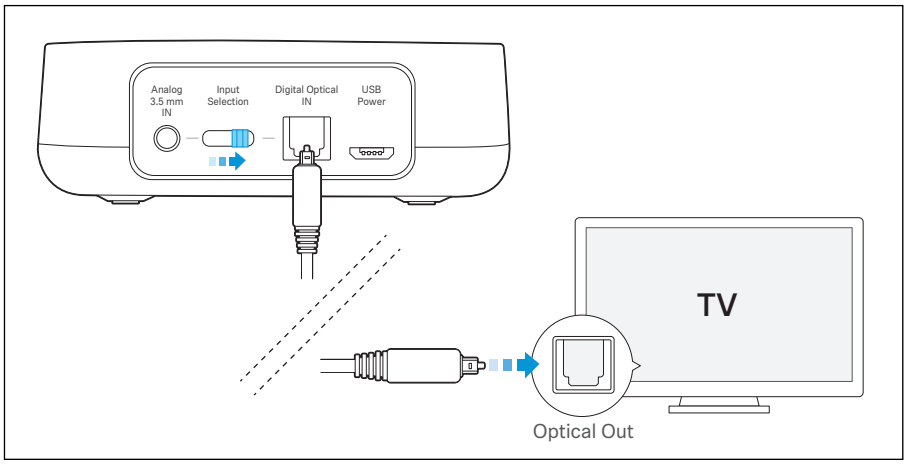


** The appearance of the Sound menu can vary depending on the device used.*



Pull off the clear protective caps from both plugs of the digital optical cable before connecting to the TV and transmitter.

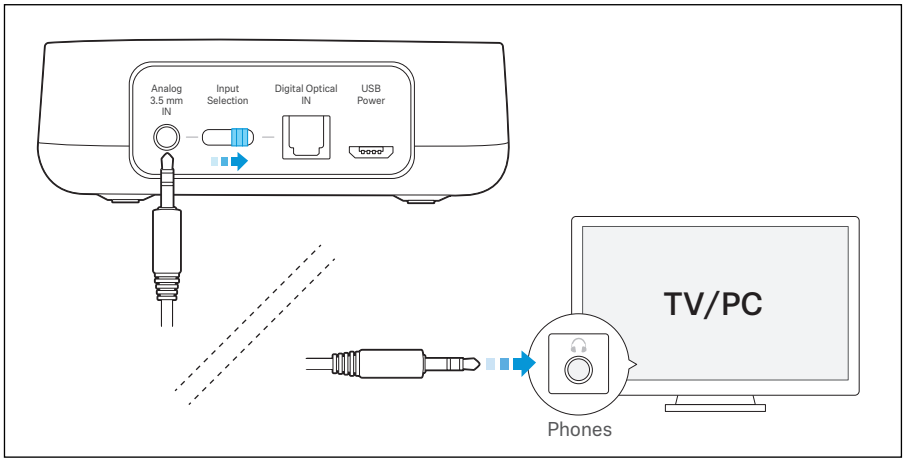
- ▶ Switch your audio source off before connecting the transmitter.
- ▶ Slide the Input Selection switch toward the Digital Optical IN input.
- ▶ Connect one end of the digital optical cable to the Digital Optical IN input of the transmitter and the other end to the optical output of your TV.



Connection to an audio source using the 3.5 mm analog audio cable

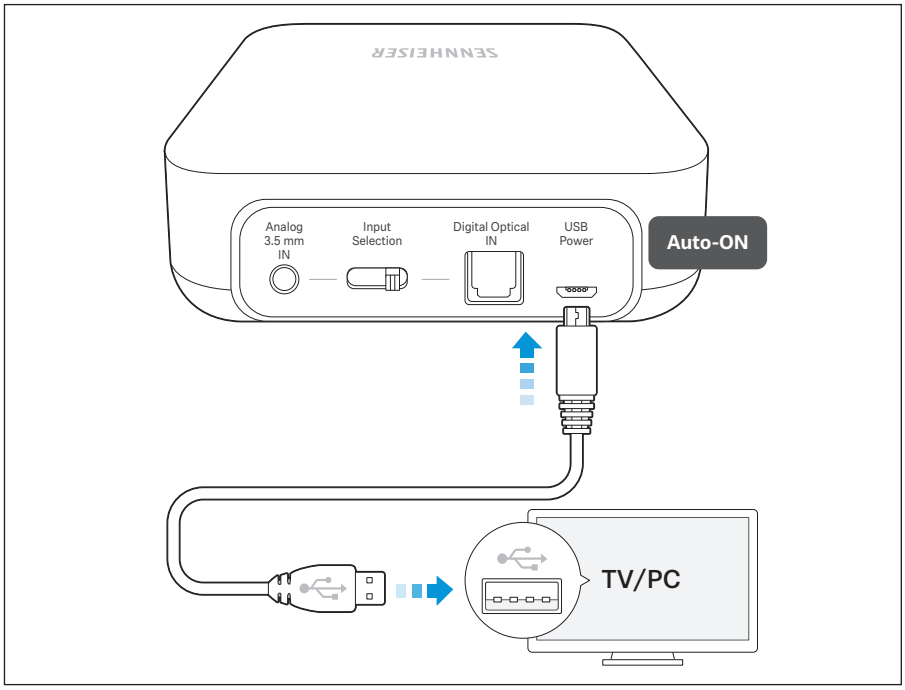
Some TV models mute the loudspeakers when you connect the transmitter to the headphone socket. Check in the menu of your TV to see if the muting function can be deactivated.

- ▶ Connect the 3.5 mm plug of the analog audio cable to the Analog input of the transmitter.
- ▶ Connect the other end of the analog audio cable to the 3.5 mm headphone socket of the TV or PC.



Powering the transmitter

1. Connect the USB micro B plug of the supplied USB power cable to the USB-B port of the transmitter.
2. Connect the USB plug to the USB port of your TV or PC. For older TV models without built-in USB port, connect the USB plug to an external USB power adapter and connect to the power source.
   The transmitter automatically switches on.



Pairing the transmitter to the headphones

CAUTION

Danger of malfunction!

The transmitted radio waves of **Bluetooth** devices can impair the operation of sensitive and unprotected devices.

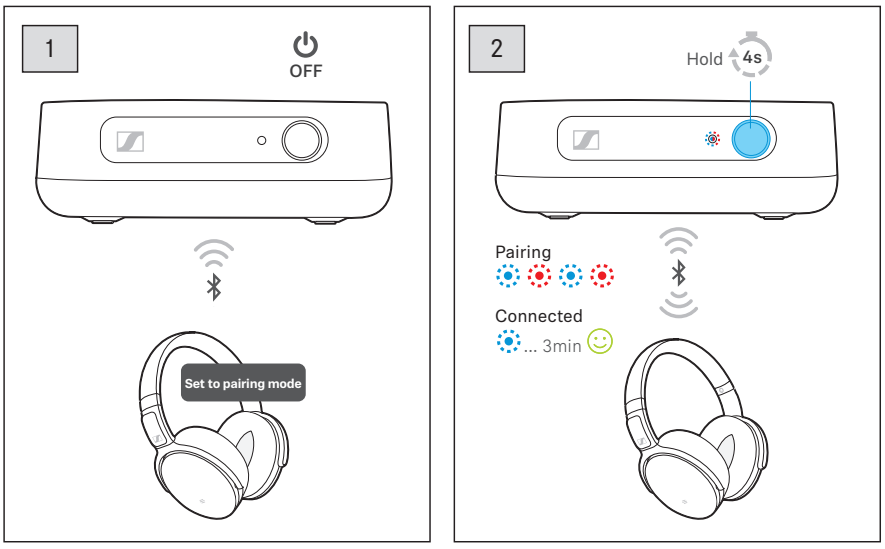
▶ Only use **Bluetooth** devices in locations where wireless transmission is permitted.

The transmitter can save the connection profiles of up to eight **Bluetooth** headphones. If you pair the transmitter to the ninth headphones, the saved connection profile of the least used headphones will be overwritten.

If you are watching/listening from your home entertainment system, the transmitter can connect to up to 2 headphones simultaneously.

Pairing the transmitter to the headphones

1. Set your headphones to pairing mode.
   If you are using Sennheiser headphones, the headphones' LED usually flashes blue and red during pairing.
2. Press the the Multifunction button on the transmitter for 4 seconds.
   The transmitter goes into pairing mode and the LED flashes blue and red. If pairing is successful, the LED flashes and then lights up blue for approximately 3 minutes.



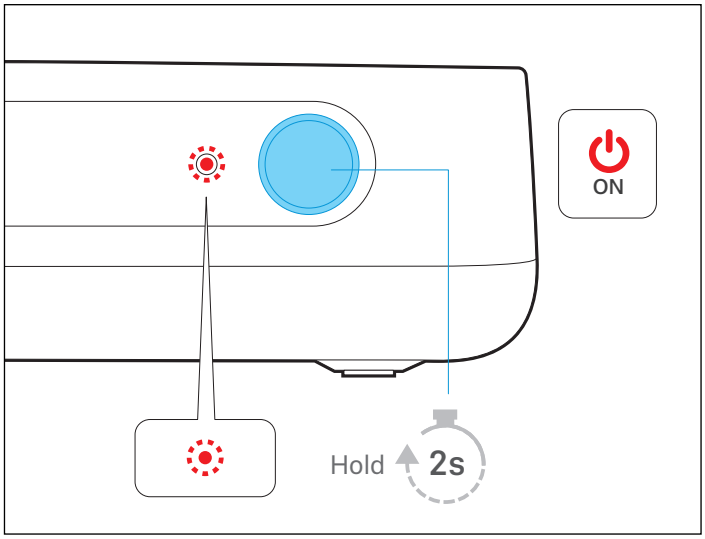
If no connection is established within 5 minutes, pairing mode is terminated and the transmitter goes into standby mode. If necessary, repeat the pairing procedure.

Using the transmitter

Switching the transmitter on

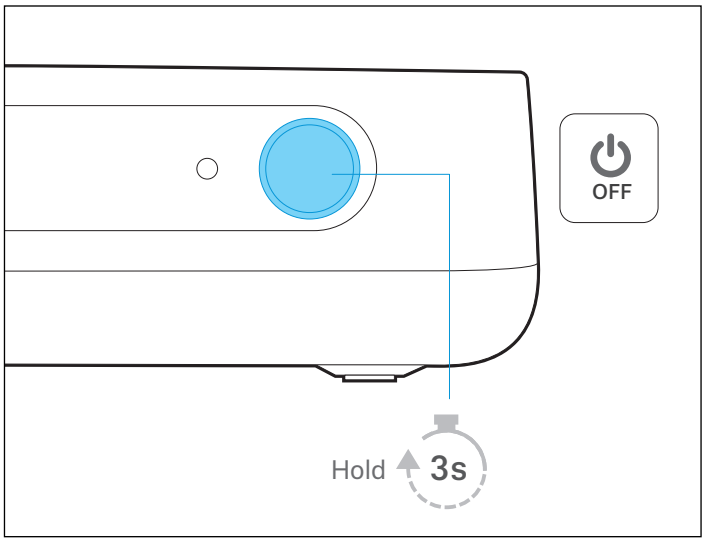
The transmitter goes into pairing mode when switched on for the first time.

1. Press the Multifunction button for 2 seconds.
   The LED lights up red.



Switching the transmitter off

1. Press the Multifunction button for 3 seconds.
   The LED switches off.



Selecting an audio input

If both the analog and the digital audio input are connected to an audio source, the transmitter allows you to toggle between the two inputs.

WARNING

Danger due to high volume levels!

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

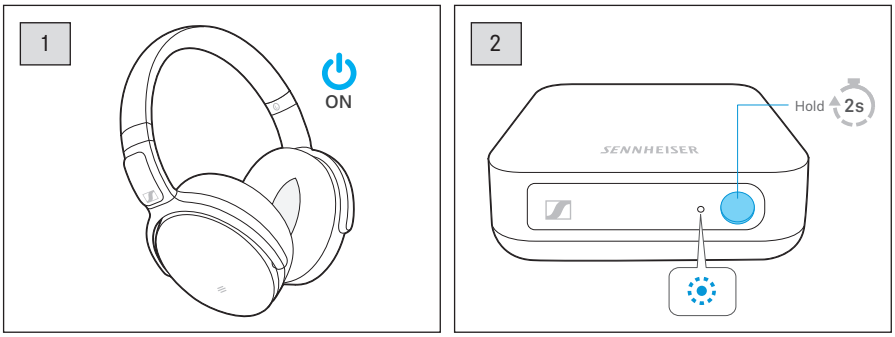
- ▶ Before putting the headphones on and before toggling between your audio inputs, adjust the volume on the headphones to a low level. Toggling between inputs may cause enormous volume jumps that can damage your hearing.
- ▶ Do not continuously expose yourself to high volume levels.

- ▶ Slide the Input Selection switch toward the Digital Optical IN input to listen to an audio source connected using the digital optical cable (see page 10).
- ▶ Slide the Input Selection switch toward the Analog 3.5 mm IN input to listen to an audio source connected using the analog audio cable (see page 11).

Connecting the transmitter to the headphones

Connect the headphones to the transmitter to watch a movie or listen to music from your TV, PC, or home entertainment system.

1. Switch the paired headphones on.
2. Switch the transmitter on.
   The LED lights up red. Once the connection is established, the LED lights up blue.

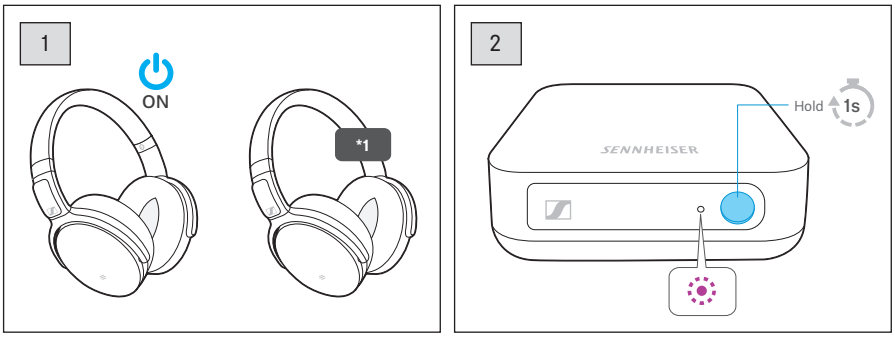


Connecting the transmitter to a second pair of headphones

The aptX Low Latency codec is not supported when 2 headphones are connected to the transmitter. With this configuration and depending on other factors, such as the models of the headphones used, the synchronization of audio to the TV picture may not be completely guaranteed.

You can quickly connect another pair of headphones while the first pair of headphones is streaming audio. When the second pair of headphones is connecting to the transmitter, the first headphones may experience an audio interruption until both pairs are connected successfully.

1. Set the second pair of headphones to pairing mode.
2. Press the Multifunction button of the transmitter for 1 second.
   The LED lights up red. Once the transmitter detects that 2 pairs of headphones are connected, the LED lights up purple for 3 minutes.



**1 Set to pairing mode.*

Playing music/videos

If your audio source and headphones support the aptX or aptX LL codec, the **Bluetooth**® Audio Transmitter plays your music wirelessly in stunning audio quality. If the audio source and headphones do not support any of these audio codecs, the audio is played in standard quality.

When watching videos from a TV/PC that supports aptX Low Latency codec, the synchronization of sound to the visual media is automatically optimized. This means that the audio remains in sync with the video all the time.

When the transmitter is connected to 2 pairs of headphones, the audio on both headphones will be played in either aptX or standard quality. With this configuration and depending on other factors, such as the models of the headphones used, the synchronization of audio to the TV picture may not be completely guaranteed. 2-headphone configuration is best utilized especially for home audio listening.

- ▶ Pair and connect your headphones to the transmitter, and then connect the transmitter to the TV/PC, see page 13.
- ▶ Play music/videos from your TV/PC.

Care and maintenance

CAUTION

Liquids can damage the electronics of the product!

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

- ▶ Keep all liquids away from this product.
- ▶ Do not use any solvents or cleaning agents.

To clean the **Bluetooth**® Audio Transmitter:

- ▶ Switch the transmitter off and disconnect it from the power source before cleaning.
- ▶ Clean the product only with a soft, dry cloth.

Troubleshooting

Problem	Possible cause	Possible solution	Page
Transmitter cannot be switched on	USB power cable is not connected to the power source	Check the USB power connection.	12
No audio signal	Transmitter is not paired with the headphones	Check if the headphones are paired. If necessary, pair the headphones with the transmitter again.	13
	Volume of the analog audio source is either set to the minimum or is muted	Increase the volume on the audio source to at least a medium level/ Deactivate the muting function on the audio source.	
	Analog audio cable is defective	Replace the analog audio cable.	
	Wrong audio input is selected	Slide the Input Selection switch toward the correct audio input.	15
	Digital audio connection uses incompatible data transmission settings	Set the digital audio output of your device/ audio source to “PCM”, with a sampling rate of max. 96 kHz (see the instruction manual of your audio source).	10
	Audio plug is not properly connected	Check the plug connection.	
Transmitter does not switch on	USB power cable is not connected to the transmitter	Check the USB power cable connection.	12
Headphones cannot connect to the transmitter	Distance between headphones and transmitter is too large	Move the headphones closer and within line of sight of the transmitter.	
	Headphones have not been paired to the transmitter	Pair the headphones to the transmitter.	13

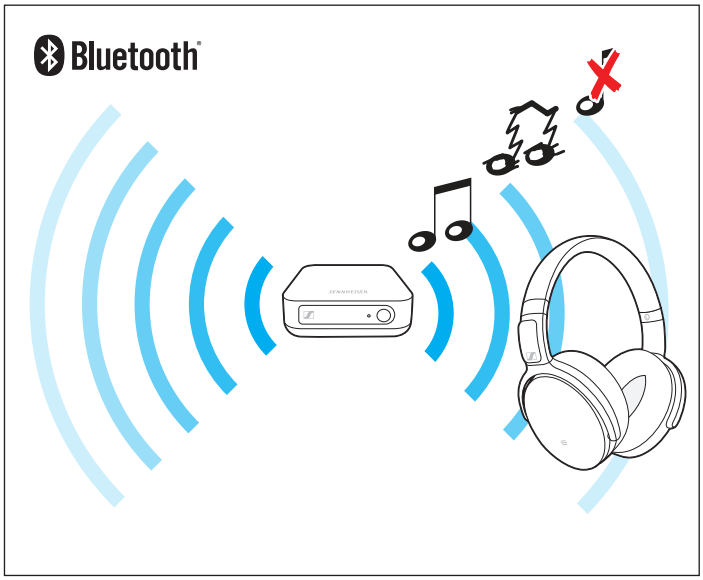
If you encounter a problem that is not listed in the table, or if the solutions provided do not work, please visit the **Bluetooth**® Audio Transmitter product page at www.sennheiser.com for the most up-to-date list of frequently asked questions.

You may also contact your local Sennheiser service partner for assistance. To find a Sennheiser service partner in your country, visit www.sennheiser.com.

Leaving the Bluetooth transmission range

Wireless streaming is only possible in the **Bluetooth** transmission range of your **Bluetooth** devices. The transmission range largely depends on environmental conditions such as wall thickness, wall composition etc. With a free line of sight, the transmission range of most **Bluetooth** devices is up to 30 meters.

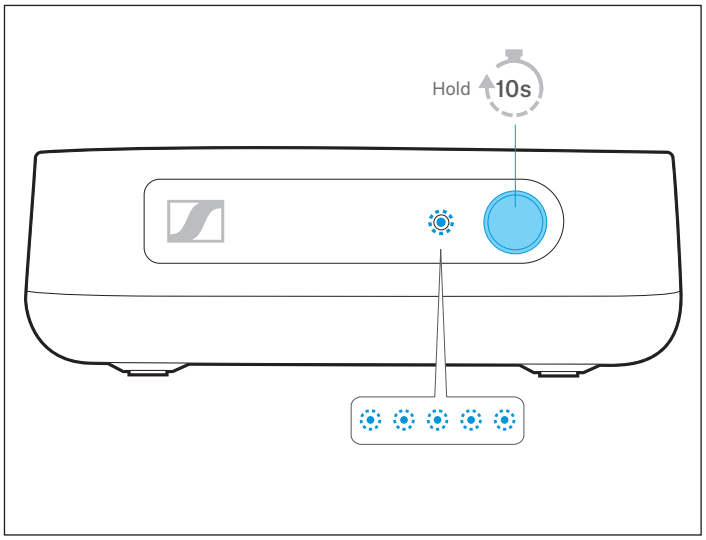
If the headphones leave the **Bluetooth** transmission range of the transmitter, the sound quality deteriorates until the connection breaks down completely. You can re-establish the connection when you re-enter the **Bluetooth** transmission range of the transmitter.



Clearing the pairing settings

All previously paired headphones are cleared from the transmitter. Ensure that the transmitter is switched off when performing this procedure.

1. Press the Multifunction button for 10 seconds.
   The LED flashes blue 5 times and the transmitter returns to off state immediately.



Specifications

BT T100 Bluetooth® Audio Transmitter

Input voltage & current	5V⎓ 500mA
Number of transmission channels	79
Occupied bandwidth	1 channel 1 MHz
Frequency response	20 Hz - 20 kHz
Weight	85 g
Temperature range	*operation:* 0 to 40°C (32 to 104°F)
Dimensions	93 x 93 x 27 mm (approx.)

Bluetooth

Version	4.2, class 1
Transmission frequency	2402 to 2480 MHz
Modulation type	GFSK, π/4 DQPSK, 8 DPSK
Profile	A2DP
RF output power	10 mW (max)
Supported codecs	SBC, aptX, aptX LL*

*supported on a single pair aptX LL headphone connection.

Trademarks

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