



BTA1 TV Transmitter

Model: BTA1



Frequently asked questions (FAQ)

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Use the search function to get an answer to your question.

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Version: 02/2026, A01

Product Overview

What makes the BTA1 TV Transmitter so unique?

Enjoy flawless TV audio with your favorite Auracast™ headphones with the Sennheiser BTA1 TV Transmitter. Plug it into almost any TV or audio receiver using the HDMI, optical, USB or analog port and get crisp, low-latency Bluetooth LE headphone sound without pairing headaches or lip-sync issues. Speech Clarity lifts voices, Virtual Surround Sound gives you a cinematic experience, and Normalize Volume smooths volume spikes. Setup is easy. Auracast™ broadcast mode lets unlimited Auracast™ headphone listeners choose their own volume and settings.

What are the key features of BTA1 TV Transmitter?

- **The Power Behind Wireless TV Sound:** BTA1 TV Transmitter sends audio wirelessly from your TV to your Auracast™ headphones, giving you personalized, high-quality sound without any lag.
- **Speech Clarity:** Never miss another line of dialogue with voices that are much clearer and easier to understand.
- **Virtual Surround Sound:** Feel the depth and immersion of sound all around you, like in a movie theater.
- **Perfectly synced audio:** Sound is always in sync with the actor's lips and the action on the screen.
- **Easy setup and universal compatibility:** Just connect the transmitter to nearly any TV (or other sources like AV receivers) with included cables and easily pair with your headphones.
- **Bluetooth Auracast™ broadcast mode:** Connect as many headphones to the transmitter as you like, with independent volume and feature settings, leaving the TV speaker on if you choose.

What specific features does the product offer if I have some kind of hearing challenges?

Speech Clarity – Enhances voices and amplifies dialogue while keeping full stereo sound. This ensures improved intelligibility without compromising the immersive experience.

If you are interested in more customized audio settings optimized for television, please check out our headphone and transmitter bundle [RS 275 TV Headphones](#).

Can I use the BTA1 TV Transmitter without the Sennheiser Smart Control Plus app?

Yes, absolutely.

The transmitter works perfectly right out of the box—no app required.

However, the app unlocks several **valuable additional features**, including:

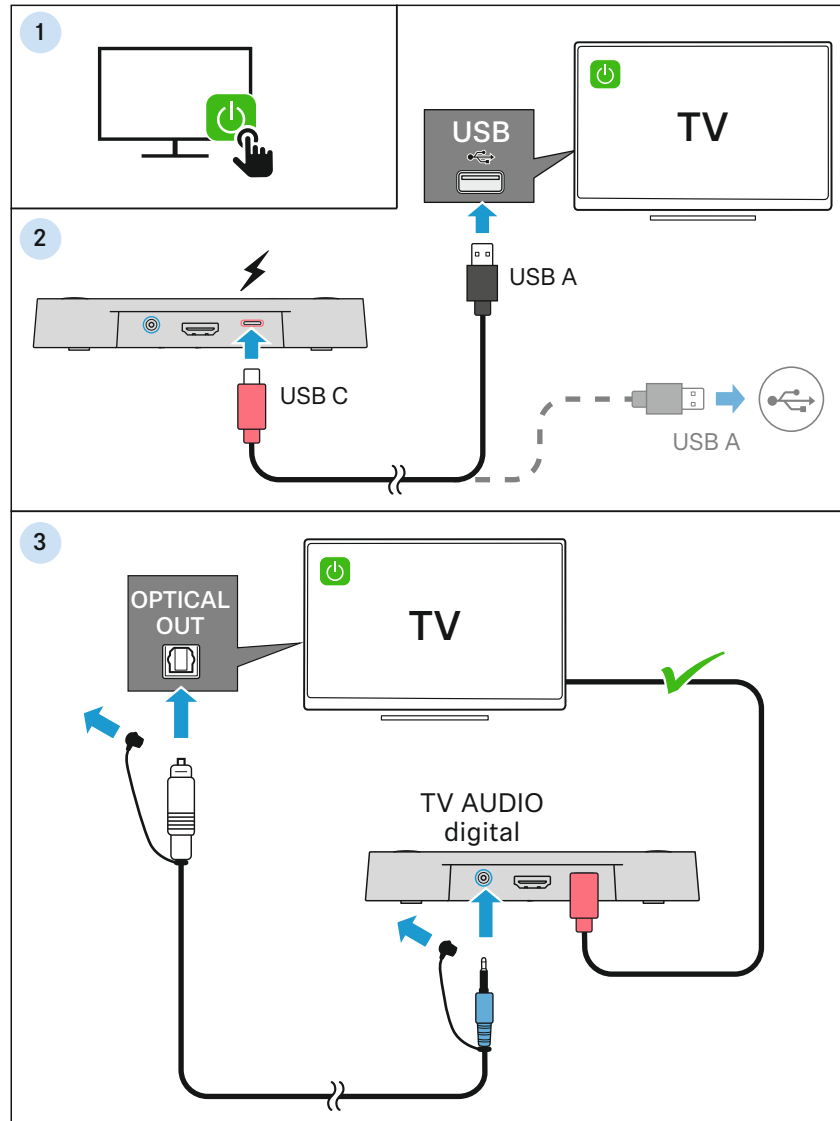
- Normalize volume
- Control of the three sound modes
- Privacy encryption settings
- And more

The app is also essential for keeping the transmitter up to date, as **firmware updates can only be installed through the app**.

Setup & General Use

How to connect the transmitter?

1. Turn on your TV. It needs to be powered on before you start.
2. Power on the transmitter. Connect it to your TV (or another USB power source) using the USB C to USB A cable.
3. Establish the audio connection. Use the optical cable to link the transmitter's Optical In to your TV's Optical Out.
No optical output? Use the included analog cable or your own HDMI cable, depending on what your TV supports.

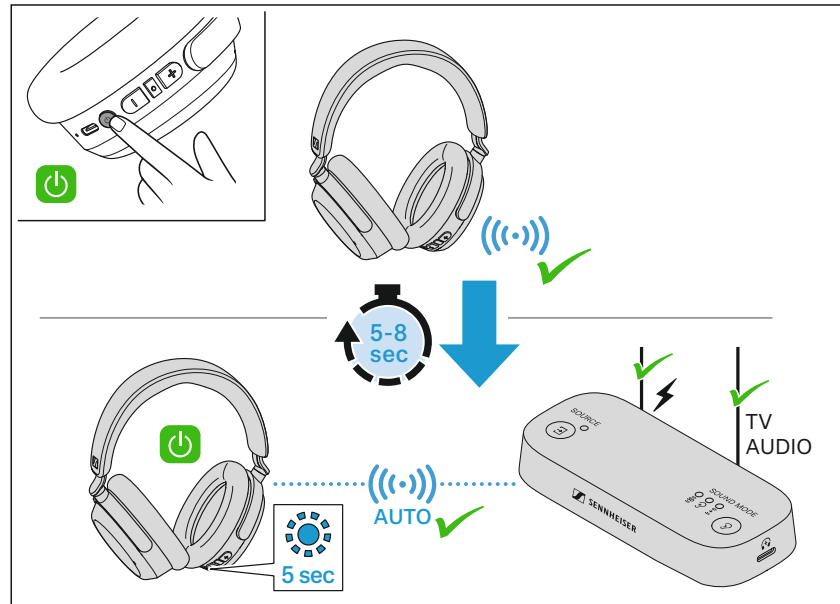


How to connect my own headphones to the transmitter?

- ▷ **Make sure the TV transmitter is powered on and receiving an audio signal.**
The **SOURCE** LED should be solid (not flashing) and may appear blue, white, or orange depending on the audio source.
- ▷ **Then follow the pairing instructions for your headphones.** This is usually done via app or the Bluetooth settings.

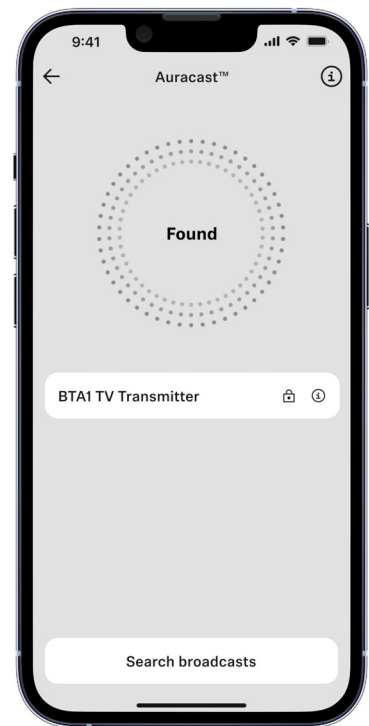
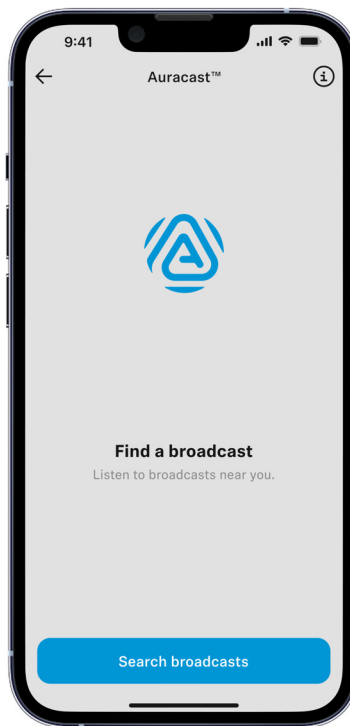
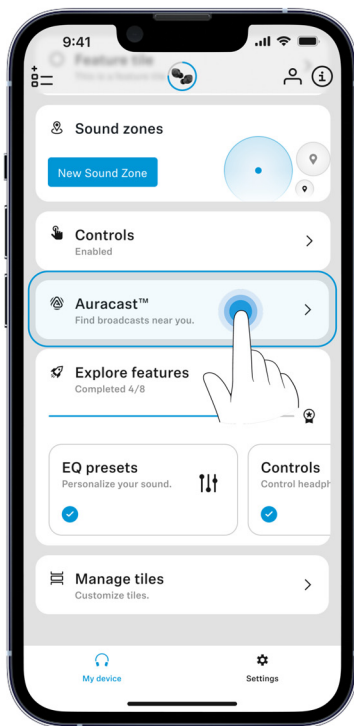
How to connect the HDR 275 TV Headphones?

- ▷ Connect the transmitter to your TV (power + audio) as shown in the instructions [here](#).
- ▷ Turn on the headphones using the power button.
- ▷ Wait 5-8 seconds. Both devices will automatically search for each other and pair.
- ▷ Wait for the voice prompt “Connected” to confirm a successful connection.



How to connect compatible Sennheiser headphones with the BTA1 TV Transmitter?

- ▷ **Connect your headphones:** Make sure your headphones are paired with your smartphone via Bluetooth.
- ▷ **Install and open the app:** Download and open the Sennheiser Smart Control Plus app on your smartphone.
- ▷ **Access Auracast:** Go to the “My Device” tab and find the “Auracast” tile. Tap it to open the wizard and manage your connection.
- ▷ **Select a transmitter:** You can select the desired transmitter from the list.
- ▷ **Encrypted streams:** If a stream password has been set (recommended), a lock symbol is displayed on each encrypted stream.



What is included in the packaging? Do I need extra cables which are not provided?



The cables included in the box are **sufficient for the majority of TVs**. You can set up power and audio using the provided **USB A to USB C cable, optical cable, and analog cable**.

If you prefer to connect the transmitter via **HDMI-ARC**, this is also possible, as the transmitter has an HDMI port. However, **an HDMI-ARC compatible cable is not included**.

HDMI-ARC Cable Information

- Only cables labeled “**with Ethernet**” support ARC.
- For best performance, we recommend a “**Premium high-speed HDMI cable with Ethernet**”.

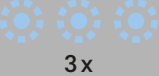
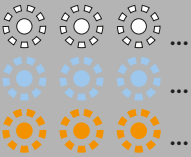
External USB Power (Optional)

- The transmitter can be powered directly from any **USB port on your TV** using the included cable.
- You may also use an external USB power adapter with a **5 V output**, but it's not required.

Can I manually switch from one Auracast™ transmitter to another one?

The RS 275 TV Headphones will automatically connect to the first previously known BTA1 TV Transmitter. To switch to a different transmitter, use the Auracast™ wizard in the Sennheiser Smart Control Plus App.

What do the different LED colors and behaviors (e.g., flashing) mean?

LED SOURCE		Operating state
	Off	Switched off, standby mode or no audio source available
	Flashes green	Pairing with smartphone (for connection to Smart Control Plus app)
	Flashes white 3x	Audio source HDMI-ARC selected
	Lights up white	Audio source HDMI-ARC active
	Flashes light blue 3x	Audio source TV AUDIO (analog/digital) selected
	Lights up light blue	Audio source TV AUDIO (analog/digital) active
	Flashes orange 3x	Audio source USB Audio selected
	Lights up orange	Audio source USB Audio active
	Flashes continuously white/light blue/orange	No audio input detected, searching for audio source
	Lights up red	Unsupported codec
	Flashes red	Error while charging headphones
	Lights up white for 1 second	Reset to factory default settings

How can I connect to my PC?

Most PCs can be connected using either a USB cable or a 3.5 mm analog audio cable. Your computer will recognize the TV transmitter as an additional audio device.

How can I connect to my AV receiver?

You can connect the transmitter to your AV receiver using one of the following methods:

- Digital Audio (recommended):
Use an optical TOSLINK cable to connect the AV receiver's Optical Out to the transmitter's Optical In.
- Analog Audio:
Use a 3.5 mm analog audio cable from the transmitter to the headphone output or analog audio output of the AV receiver.

If your AV receiver uses RCA outputs:

Some receivers only provide red/white RCA audio outputs. In this case, you will need an RCA-to-3.5 mm converter, which can be purchased separately.

How many transmitters can I use in parallel?

Each transmitter uses Frequency Hopping Spread Spectrum (FHSS) technology to ensure coexistence with Wi-Fi and other Bluetooth devices. In practical terms, around 10 to 20 transmitters can be used in parallel without any noticeable interference or audio dropouts.

How many headphones can I use with one BTA1 TV Transmitter?

Theoretically, an unlimited number of Auracast™ headphones can be connected to a single TV transmitter. In practice, a transmitter can typically support between 200 and 500 headphones while maintaining good performance.

Can I connect my generic Bluetooth headphones with the BTA1 TV Transmitter?

No, only Auracast™-capable headphones are compatible with the BTA1 TV Transmitter.

Can I connect the BTA1 TV Transmitter with my TV via HDMI-ARC?

The BTA1 TV Transmitter is certified to the HDMI 1.4b standard, including ARC capabilities. TVs with HDMI 1.4b certification or higher are compatible.

Sound & Hearing Enhancement

How does the Speech Clarity feature make the dialogue clearer?

This feature improves the intelligibility of dialogue by emphasizing the frequency ranges of human speech. An equalizer amplifies the parts of the audio signal where voices are most clearly audible, while keeping the overall sound balanced and immersive so you can still enjoy the full richness of music, effects, and ambience.

Why don't the Sound Modes work when connected via USB C audio?

When using USB C audio, the connection focuses on PC audio, where no additional processing may be required. For this reason, sound modes and digital signal processing are bypassed in this mode.

Power & Charging

How do I know that the TV transmitter is on?

- If **one or more LEDs are lit**, the transmitter is switched on.
- If **no LEDs are lit**, make sure that the transmitter is connected to the power supply and that your TV is switched on. Press any button on the transmitter to wake it up.

Does charging via USB depend on the USB power supply?

Yes. If your USB power adapter doesn't provide enough power, your headphones will simply charge more slowly.

The good news: Almost all modern chargers for smartphones, tablets, and laptops provide **more than enough power for full-speed charging**.

Minimum requirements:

- Current: **at least 400 mA (0.4 A)**
- Voltage: **between 5.0 V and 5.5 V**

Examples of compatible chargers:

- 5.1 V, 1500 mA (1.5 A)
- 5.0 V, 2 A
- 5.0 V, 1.2 A
- 5.0 V, 1 A
- 5.2–5.3 V, 2 A
- 5 V, 4.5 A

All of these meet the requirements, as they can supply more than 0.4 A and remain within the range of 5.0 to 5.5 V.

Can I charge devices other than my headphones via the USB C output on the TV transmitter?

Yes, but with a limitation:

The USB C output provides **less than 500 mA of current**, so **not all devices can be charged properly or at all**.

It works best for **low-power devices**, such as headphones or small accessories, but **smartphones or tablets may charge very slowly or not at all**.

Bluetooth & Connectivity

What is the benefit of the new Bluetooth Auracast™? How does it differ from Bluetooth Classic?

Bluetooth Auracast™ allows you to broadcast audio from your TV or other devices to multiple headphones or earbuds at the same time, making it perfect for shared listening. In contrast, Bluetooth Classic only connects to one device at a time, which is ideal for personal use such as listening to music or making calls.

For more details, you can read an article about Auracast™ [here](#).

How many devices can I connect to the Auracast™ stream?

Theoretically, an unlimited number of Auracast™ headphones can be connected to a single TV transmitter/Auracast™ stream. In practice, a transmitter can typically support between 200 and 500 headphones while maintaining good performance.

Which headphones can I connect to the Auracast™ stream?

You can connect **any headphones or earbuds that support Bluetooth Auracast™**. Standard Bluetooth Classic headphones will **not** work with the Auracast™ broadcast.

How do I know that the Auracast™ stream is active?

The TV transmitter automatically starts broadcasting as soon as it is powered on. You can verify that audio is being transmitted by checking the **SOURCE** LED on the transmitter—if it is lit continuously (not flashing), the audio stream is active.

How can I name my Auracast™ Stream? And why should I name it?

You can rename your Auracast™ stream using the **Smart Control Plus app**. Simply connect your transmitter with the app and update the name in the *Broadcast Settings* menu. The name you choose will appear in your Auracast™ assistant, making it easier to identify your stream. Especially when multiple broadcasts are available nearby.

How can I encrypt my Auracast™ stream and how secure is my stream after encryption?

You can enable stream encryption through the **Smart Control Plus app**. Simply connect your transmitter with the app, go to the *Broadcast Settings* menu, and activate **encryption**, then set a password. The security of your stream depends on the strength of the password you choose. The Smart Control Plus app also includes a feature to generate a strong, random password for increased protection.

Although encryption improves data protection, the Auracast™ password is not unbreakable, and absolute security against offline brute force attacks to recover the key cannot be guaranteed.

Can I connect my hearing aids to the transmitter?

Yes, provided your hearing aids support Auracast™. Please note that the TV transmitter's Auracast™ stream is set to high quality with a sampling rate of 48 kHz by default. Some Auracast™ devices, including certain hearing aids, may not support this setting. Using the Smart Control Plus app, you can select a lower sampling rate to ensure full compatibility with any Auracast™-enabled devices.

What is the transmission range?

- With the TV transmitter (Auracast™): up to **50 meters**
- With Bluetooth Classic: up to **25 meters**

The actual range may vary depending on the environment—for example, walls, furniture, or a large number of Wi-Fi devices can reduce the effective distance.

Can I start several streams at the same time?

No, a single transmitter can only stream **one audio source at a time**. However, you can use **multiple TV transmitters** to stream different sources simultaneously.

What is the system latency?

The system latency is approximately **50 ms**.

Latency is the slight delay between an audio signal entering the system and the moment you actually hear the sound. For most users, a latency of 50 ms is so low that it is imperceptible. During normal TV operation, audio and video should remain synchronized.

Can I connect the BTA1 TV Transmitter to my Bluetooth speaker?

Yes, please note that the BTA1 is only compatible with Bluetooth speakers that support Auracast™ technology. You may need an interface or app for the speaker to search for Auracast™ streams and select the BTA1. Please refer to your speaker's user manual for more information.

Reset, Firmware and Maintenance

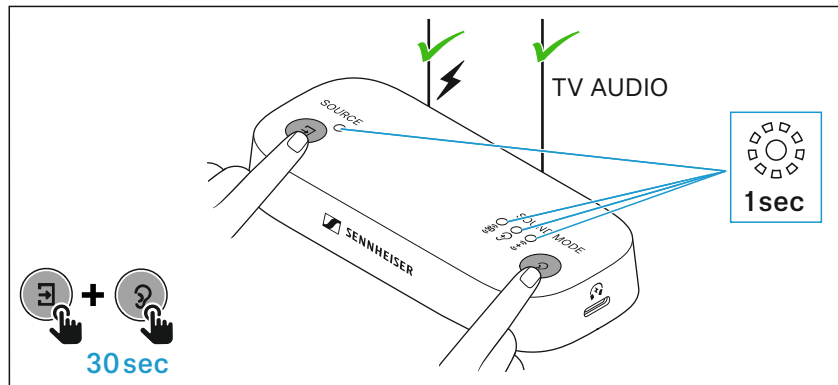
How can I update my TV transmitter with the latest firmware?

Firmware updates can be downloaded free of charge from the Internet using the Sennheiser Smart Control Plus app. For more details, please refer to the BTA1 manual in the chapter “Installing firmware updates”.

How can I reset my TV transmitter?

If the function of the TV transmitter is disturbed and interrupting the power supply (hardware reset) does not improve, reset the TV transmitter to the factory default settings:

- ▷ Press and hold both **SOURCE** and **SOUND MODE** buttons for approx. 30 seconds.
All LEDs of the TV transmitter light up white for one second.
The TV transmitter is successfully reset to the factory settings.
- ▷ Reconnect your TV transmitter to your headphones and your Bluetooth device.



App & PC Integration

Why should I download the Sennheiser Smart Control app? What are the benefits?

The Sennheiser Smart Control Plus app gives you full control over your headphones and transmitter. Here are three key benefits:

- **Firmware updates** – keep your headphones and transmitter up to date with the latest features and improvements.
- **Personalized hearing enhancements** – adjust hearing profiles, noise suppression, and the balance between the left and right channels (only available in the app).
- **Secure Auracast™ streaming** – enable encryption for your audio streams.

The app ensures you get the best performance, a personalized experience, and the latest features for your devices.

How can I connect the TV transmitter to the Sennheiser Smart Control Plus app?

- ▷ Activate Bluetooth on your smartphone with the Smart Control Plus app installed.
- ▷ On the TV transmitter, simultaneously press and hold the **SOURCE** and **SOUND MODE** buttons for 5 seconds. The **SOURCE** LED will start flashing green, indicating the transmitter is ready to connect.
- ▷ Open the Smart Control Plus app on your smartphone, tap the “+” icon on the start screen to add a new device, and select the TV transmitter from the list.
- ▷ When your smartphone prompts you to allow pairing with a new device, approve the connection.
- ▷ Once pairing is successful, the TV transmitter will appear in the list of connected devices. Select “**BTA1 TV Transmitter**” to establish the connection.

Why can't I connect to the TV transmitter using my smartphone's native Bluetooth settings?

The TV transmitter only connects to your smartphone to configure settings via the Smart Control Plus app. A standard Bluetooth connection, such as the one used for headphones, is not required and is therefore not supported for this purpose.

Why does the TV transmitter disconnect from the app when the app is closed?

The TV transmitter connects to Smart Control Plus via Bluetooth Low Energy (BLE). On most smartphones, BLE connections can be restricted or interrupted when an app is closed or running in the background. This is normal behavior designed to conserve battery power and system resources.

Therefore, the transmitter may appear disconnected when the app is not active. As soon as you re-open the app, it will automatically attempt to re-establish the connection. To maintain an active connection, leave the Smart Control Plus app open and running in the foreground.

How do I operate the TV transmitter?

The transmitter has two buttons:

- **SOURCE:** Switch between different audio inputs.
- **SOUND MODE:** Switch between three sound modes or turn the sound off completely.

For additional settings and more convenient control, you can also use the Smart Control Plus app.

Troubleshooting (If a problem occurs...)

How do I get sound only from the headphones and not through the speakers?

The sound from the transmitter is independent of the TV speakers.

If you only want to hear sound through the headphones, simply

- mute the TV speakers, or
- turn the TV volume down to 0.

The headphones will continue to receive the audio signal normally, regardless of the volume settings of the TV speakers.

How do I get sound from **BOTH** the TV and headphones at the same time?

To play audio through both the TV speakers and the headphones:

- ▷ Use the TV's **digital audio output** (optical/TOSLINK) if available. On many TVs, the optical output remains active while the TV speakers are turned on, allowing for dual audio output.
- ▷ Check your TV's audio settings for options such as:
 - “TV speakers + optical out”
 - “Audio output: TV + external device”
 - “Multi-output audio”

If your TV does not offer this feature, it may not be possible to play sound through both outputs at the same time.

What can I do if there is interference from radio signals (or Wi-Fi)?

Remove or turn off other wireless devices near the headphones and TV transmitter, such as:

- Wi-Fi routers
- Cordless phones
- Smartphones
- Other Bluetooth devices

Reducing the number of radio signals in the environment can improve the connection and reduce interference.

Why does my TV switch back to HDMI-ARC when I try to select the optical output?

Some TVs prioritize HDMI-ARC as the default audio output over other connections. In addition, certain soundbars connected via HDMI-ARC may automatically override the TV's audio output settings.

A possible workaround is to connect the TV transmitter via HDMI-ARC and your other device via the optical output. In most cases, the BTA1 TV Transmitter will only follow the HDMI output when it is actively in use.

Why does the transmitter's SOURCE LED light up blue when I connect the analog cable?

The transmitter automatically detects when a cable is connected to the analog input and switches to that input, which is indicated by a solid blue SOURCE LED. If the cable is not connected at the other end, the transmitter may detect ambient noise as an audio signal, which can cause streaming interference or unintended sound.

Why do I hear noise or static when streaming audio via USB C (via a docking station or USB dongle)?

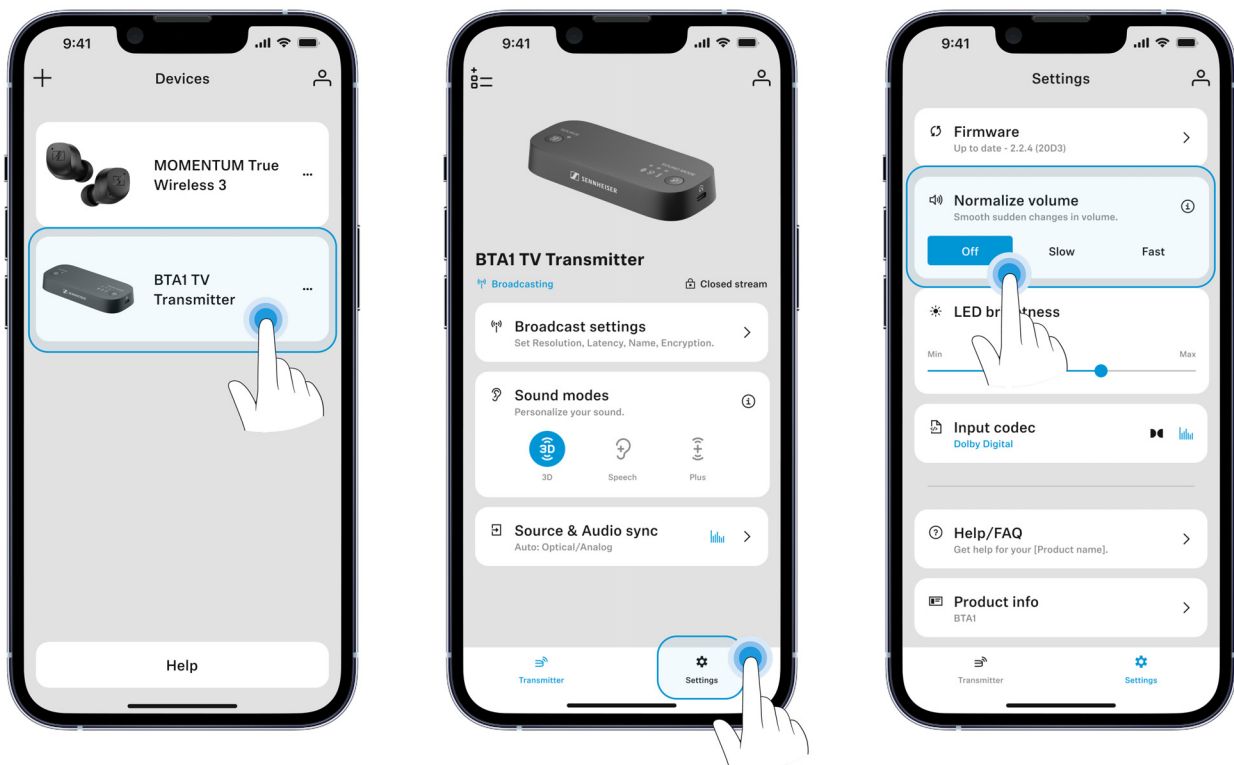
Some USB controllers can cause audio quality issues, such as noise or static. To resolve this, connect the transmitter to a different USB port or directly to the device, bypassing hubs or docking stations if possible.

Why does the volume seem to fluctuate on its own when watching TV?

This may be because some TVs do not respond to the “Normalize Volume” function as intended.

The “Normalize Volume” function is designed to improve listening comfort by amplifying quieter sounds and reducing sections that might otherwise be too loud. On some TVs or set-top boxes, these adjustments can be more pronounced and occur quickly, which can lead to noticeable volume fluctuations.

To prevent this effect, disable the function “Normalize Volume” in the Smart Control Plus app.



Why does the SOURCE LED light up red when the optical cable is connected?

A red SOURCE LED indicates an unknown or unsupported audio codec on the optical input. This can happen if the optical output is not selected as the TV's audio output.

- ▷ If you are using the TV transmitter and the optical output is selected, change your TV's audio codec to a supported format (e.g., Dolby Digital).
- ▷ If another device, such as a soundbar, is currently using a different TV output, you can ignore the red LED. It simply indicates that there is no valid audio signal on the optical connection.