

# **TV Clear Earbuds 2**

True Wireless TV earbuds Model: TVC2-EBC, TVC2-EB, TVC2-C



#### Instruction manual

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"Product overview"

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"FAQ/If a problem occurs ..."

"Specifications"

### Sonova Consumer Hearing GmbH

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Version: 01/23

# Important safety instructions



▶ Please read the following information before using your device.

#### **General warnings**

- ▶ These devices are not for children below 36 months. They contain small parts that can cause choking, if swallowed by children. Keep out of reach of children and mentally challenged people or pets. If swallowed, consult a physician or hospital immediately.
- > Changes or modifications to any of the devices that were not explicitly approved by Sonova Consumer Hearing GmbH are not permitted. Such changes may damage your ear or the devices.
- Do not use these devices in explosive areas (mines or industrial areas with danger of explosions, oxygen rich environments or areas where flammable anesthetics are handled) or where electronic equipment is prohibited.
- tions and metallic structures may impair and significantly reduce the operating range.
- > The USB ports of the devices are to be used for the described purpose only.
- ence of the devices on the implantable device (e.g. pacemakers, defibrillators, etc.) is experienced, stop using the devices and contact your doctor and/or the manufacturer of the implantable device for advice.
- ▶ If these devices have been dropped or damaged, if they overheat, have a damaged cord or plug, or have been dropped into liquid, stop using the devices and contact an authorized Sonova Consumer Hearing partner.
- Dispose of electrical components in accordance with your local regulations.

#### **Hazard warnings**

- in accordance with the relevant IEC 62368-1 standards or other applicable safety standards.
- ▶ For charging, use only IEC 62368-1 certified equipment with an output rating of 5 V ===, max. 0.6 A.
- Do not cover the charging case while charging, e.g. with a cloth etc.
- ment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- ▶ Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the earbuds or charging case including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

- > The earbuds and charging case contain lithium-ion batteries that can be taken onto airplanes as carry-on luggage only.
- The system operates between 2,400 MHz 2,483.5 MHz frequency range. When flying please check if flight operator requires devices to be off.
- ▶ Use caution and follow applicable laws regarding mobile phone and headphone use if using the earbuds for phone calls while driving. Some jurisdictions impose specific limitations, such as single earbud configuration, on the use of such products while driving. Don't use the earbuds for any other purpose while driving.
- while engaging in any activity requiring your attention, e.g., while riding a bicycle or walking in or near traffic, a construction site or railroad, etc. Remove the earbuds or adjust your volume to ensure you can hear surrounding sounds, including alarms and warning signals.
- > The ambient awareness mode can reduce background noise. Please be aware that warning signals or noise coming from behind, e. g. cars, are partially or entirely suppressed.
- Do not use the earbuds at a high volume for any extended period. To avoid hearing damage, use your earbuds at a comfortable, moderate volume level.



- > Put on the earbuds at low volume then slowly adjust the volume control to a comfortable level.
- drums, inflamed ear canals or otherwise exposed middle ear cavities. In the unlikely case that any part of this product should remain in the ear canal, it is strongly recommended to see a medical specialist for safe removal.
- Do not insert the earbuds too deep into your ears and never insert them without the ear adapters.
- ▷ If the ear adapter or parts of the ear adapter (dome, retention) is broken or damaged it needs to be replaced.
- ▶ If you feel pain in or behind your ear, if it is inflamed or if skin irritation and accelerated accumulations of earwax occur, please check with your hearing care professional or physician.
- wearing them. A strong physical impact to the earbuds or ear (e.g. during sports) may lead to perforation of the ear canal or eardrum.
- ▶ The devices contain lithium-ion batteries with a Watt hour rating <20 Wh which have been tested according to UN 38.3 of the "UN Manual of Tests and Criteria" and should be shipped in accordance with all the rules and regulations on the safe shipment of lithium-ion batteries.
- ➤ The following is only applicable for persons with active implantable medical devices (i.e. pacemakers, defibrillators, etc.): Keep the earbuds and charging case at least 15 cm (6 inches) away from the active implant. If you experience any interference, switch off the earbuds and contact the manufacturer of the active implant. Please note that interference can also be caused by power lines, electrostatic discharge, airport metal detectors etc.
- > Only authorized personnel are allowed to disassemble the devices due to possible electrical hazard.

#### **Product safety information**

- Never wash the microphone inputs. Doing so could cause it to lose its special acoustic features.
- Special medical or dental examination, including radiation described below, may adversely affect the correct functioning of the devices. Remove and keep them outside the examination room/area before undergoing:
  - medical or dental examination with X-ray (also CT scan).
  - medical examinations with MRI/NMRI scans, generating magnetic fields.
- ▶ Protect your earbuds and charging accessories from heat (never leave near a window or in the car). Never use a microwave or other heating devices to dry your earbuds or charging accessories (due to risk of fire or explosion).
- Do not place the earbuds and charging case close to an induction cooking surface. Conductive structures inside the charging accessories could absorb inductive energy resulting in thermal destruction.
- Ensure to use the earbuds and charging case within operating temperature range: +5° to +40° Celsius (+41° to +104° Fahrenheit).
- ▷ Always make sure that the earbuds and charging case are dry and clean, especially before charging. Otherwise the charging reliability cannot be guaranteed.
- Do not use excessive force when connecting the devices to the cables or when inserting the earbuds into the charging case.
- ▶ Protect the device connectors, the plugs, and the power supply unit from dirt and debris.
- ▶ Protect the devices from excessive moisture (bathing or swimming areas) and heat sources (radiator). Protect the devices from excessive shock and vibration. Never immerse them in water.
- Clean the devices using a damp cloth. Never use household cleaning products (washing powder, soap, etc.) or alcohol for cleaning. Never use a microwave or other heating devices to dry the devices.
- If you are not using the earbuds, store them in the charging case
   in a well ventilated location. This allows moisture to evaporate
   and prevents a potential impact on performance.
- Use of accessories and cables other than those specified or provided by the manufacturer of this device could result in increased electromagnetic emissions or decreased electromagnetic immunity of this device and result in improper operation.

# Notes on data collection and processing and on firmware updates

The earbuds locally store individual settings such as the volume, the sound profiles and the Bluetooth addresses of paired devices to ensure proper operation.

When used with the "Sennheiser TV Clear" app the settings and usage data such as power-on cycles and operating times (e.g. music playback, used speech modes) are encrypted and transferred in an anonymous form to Sonova Consumer Hearing GmbH or companies commissioned by Sonova Consumer Hearing GmbH, where they are

stored and processed. The data is processed to determine statistical characteristics regarding the provision, maintenance and improvement of the earbuds and the app. At no time does the data processed permit direct association with any specific individual. If you do not want this data to be transferred and processed, revoke your consent to the use by adjusting your settings in the "Privacy" section of the app menu.

Using the "Sennheiser TV Clear" app, you can update the firmware of the product for free via an Internet connection. If the device on which the app is installed is connected to the Internet, the following data is automatically transferred to and processed by Sonova Consumer Hearing GmbH or companies commissioned by Sonova Consumer Hearing GmbH in order to provide and transfer suitable firmware updates: hardware identifier, hardware revision number, firmware version of the product, type of operating system (Android, iOS), version of the operating system and version of the app. The data will only be used as specified and will not be stored permanently. If you do not want this data to be transferred and processed, do not connect to the Internet.

### Intended use/Liability

The intended use of the "TV Clear Earbuds 2" is to wirelessly connect to Bluetooth® enabled devices such as mobile phones, smartphones or tablets. You can stream the stereo audio signal to the earbuds and make hands-free phone calls. To watch TV, best results are achieved when using the low latency interface transmitter "TV Clear Transmitter 2".

It is considered improper use when the product is used for any application not named in the corresponding product documentation.

Sonova Consumer Hearing GmbH does not accept liability for damage arising from improper use or misuse of the product and its attachments/accessories.

Sonova Consumer Hearing GmbH is not liable for damages to USB devices that are not consistent with the USB specifications.

Sonova Consumer Hearing GmbH is not liable for damages resulting from the loss of connection due to flat or overaged rechargeable batteries or exceeding the Bluetooth/2.4 GHz transmission range.

Before putting the products into operation, please observe the respective country-specific regulations.

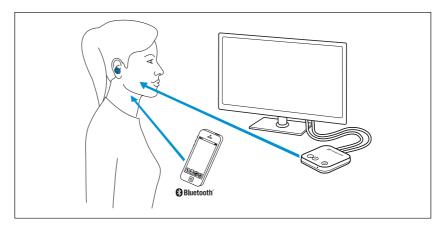
# The Sennheiser TV Clear Earbuds 2

#### General use

The earbuds allow you to wirelessly connect to Bluetooth® enabled devices such as mobile phones, smartphones or tablets. You can stream the stereo audio signal to the earbuds and make hands-free phone calls.

You can also transmit TV sound to the earbuds. To achieve the best sound quality when transmitting TV sound, use the earbuds together with the "TV Clear Transmitter 2". The transmitter can be connected to a TV via a digital optical connection or an analog audio output.

The "TV Clear Transmitter 2" is available both as a stand-alone product and as a set together with the earbuds.



#### Streaming stability

A direct line of sight between the earbuds and the connected device is not required.

The range is normally up to 10 m with a Bluetooth connection and up to 15 m when using the "TV Clear Transmitter 2".

The range may be reduced if the signal is attenuated by obstacles such as walls or the human body.

For best results, use the earbuds within line of sight of the connected

If audio transmission is interrupted, reduce the distance between the earbuds and the connected device and avoid any obstacles between them.

# **Package contents**



Earbuds for the right and left ear (model: TVC2-EB)



Charging case (model: TVC2-C) with built-in rechargeable battery for the earbuds

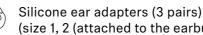


USB charging cable with USB-C and **USB-A connectors** 













(size 1, 2 (attached to the earbuds upon delivery) and 3)



Quick guide



Safety guide

#### Online you can find:

- Frequently asked questions (FAQ): www.sennheiser-hearing.com/tvclearearbuds2
- The "Sennheiser TV Clear" app for configuring the earbuds and for additional functions:
  - Google Play Store: click
  - Apple App Store: click

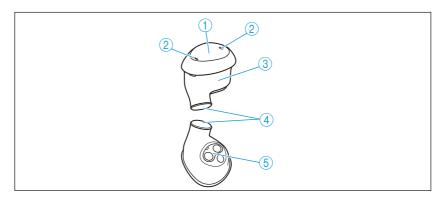
A list of accessories for the "TV Clear Earbuds 2": www.sennheiser-hearing.com/tvclearearbuds2

# **Product overview**

### TV Clear Earbuds 2

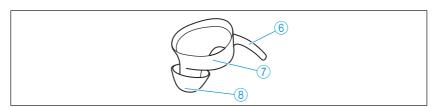
#### **Earbuds:**

Model: TVC2-EB



- Multi-function button (1) (short and long press)
- 2 Microphones
- (3) Left/right marking
- 4 Sound opening
- Charging contacts and ear sensor (5)

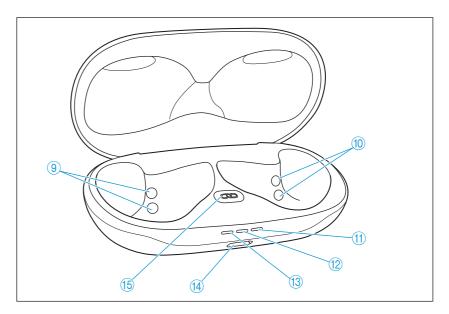
#### Ear adapters



- **(6)** Retention for a secure hold
- 7 Size (1 - 3) and left (L)/right (R) marking
- (8) Dome
- The default language for the voice prompts is English. This and other settings can be adjusted using the "Sennheiser TV Clear" app.

### **Charging case:**

Model: TVC2-C



- 9 Charging contacts of the left earbud
- 10 Charging contacts of the right earbud
- 11 Battery light indicator of the right earbud
- 12 Battery light indicator of the charging case
- 13 Battery light indicator of the left earbud
- (14) USB-C charging socket
- (15) Pairing button

# Quick guide

The following steps describe how to put the earbuds into operation for the first time in the best possible way.

### 1. Waking up the earbuds and the charging case and charging the rechargeable batteries

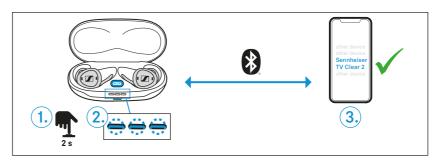
Upon delivery, the rechargeable batteries of the earbuds and the charging case are in sleep mode and have to be woken up by opening the lid of the charging case and waiting at least 10 seconds.

We recommend charging the earbuds and the charging case for a complete charging cycle without interruption before using for the first time (> 24).



### 2. Connecting the earbuds to a Bluetooth device

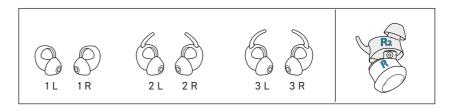
Description Connect the earbuds to your smartphone (or tablet) via Bluetooth (> 14).



### 3. Selecting suitable ear adapters for optimum fit of the earbuds

The perceived sound quality including bass performance, the best voice quality for phone calls and a secure hold of the earbuds in the ears depends to a large extent on the correct fit of the earbuds. Therefore, you can choose between ear adapters with retentions in different sizes.

- ▶ Test which ear adapter size gives you the best sound quality and the best wearing comfort (> 16).
- > Assign the right earbud to your right ear and the left earbud to your left ear.
- ▷ Insert the earbuds at a slight angle into the ears and twist them slightly into the ear canal so that they sit comfortably and snugly in the ear canal and auricle (> 17).



### 4. Installing the app on your smartphone

The app allows you to use all the functions and settings of the earbuds (> 23).

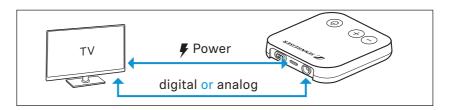
• Apple App Store: click Google Play Store: click



# 5. Connecting the TV transmitter to the TV

To achieve the best sound quality when transmitting TV sound, use the earbuds together with the TV Clear Transmitter 2 (model: TVC2-TX). The TV transmitter is available both as a stand-alone product and as a set with the earbuds.

▷ Connect the USB power cable of the transmitter and the audio connection (digital or analog) to your TV.

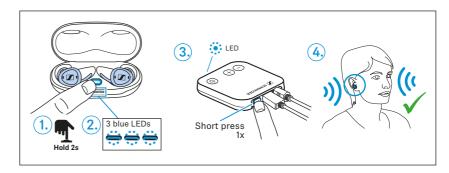


Refer to the "TV Clear Transmitter 2" instruction manual to connect and operate the transmitter. www.sennheiser-hearing.com/tvcleartransmitter2

### 6. Connecting the earbuds to the "TV Clear Transmitter 2"

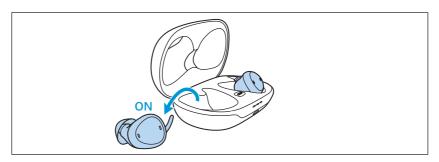
If you purchased the devices as a set, the earbuds and the transmitter are factory paired with each other.

▶ If you purchased the devices separately, you have to manually start the pairing process once (> 15). After the first manual pairing, the earbuds automatically connect to the transmitter when they are taken out of the charging case.



# **Configuring the TV Clear** Earbuds 2

#### Switching the earbuds on and off



The earbuds switch on automatically when they are taken out of the charging case. They switch off when they are reinserted into the charging case and are fully charged.

The light indicators light up:

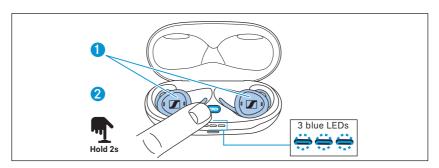
Light indicator		Meaning
•	green	Battery charge status ok (> 50 %)
0	orange	Battery charge status 20 – 50 %
•	red	Battery charge status < 20 %, charge the rechargeable battery

If an earbud has switched off, it can be switched on again by briefly pressing the button.



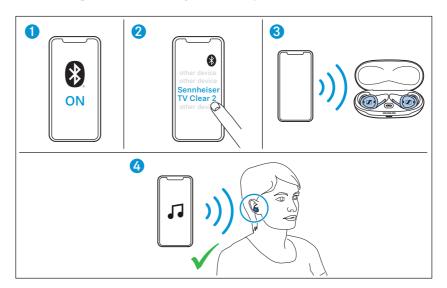
#### Setting the earbuds to pairing mode

- 1. Make sure that both earbuds are properly inserted into the charging case.
- 2. Press the pairing button for 2 seconds until the light indicator starts flashing blue.



- 3. Wait until all 3 light indicators flash blue (this can take up to 10 seconds). Pairing mode ends after 8 minutes or when pairing was successful.
- 4. Leave the earbuds in the charging case and continue with "Connecting the earbuds to your smartphone (or tablet)" (> 14) or "Connecting the earbuds to the TV transmitter" (> 15).

#### Connecting the earbuds to your smartphone (or tablet)



When connecting the earbuds to the device for the first time, you have to set them to pairing mode as described in chapter "Setting the earbuds to pairing mode" (> 13). After pairing, the earbuds connect automatically when you take them out of the charging case.

- 1. Open the Bluetooth settings and activate Bluetooth on your smartphone.
- 2. Wait until you see the "Sennheiser TV Clear 2" in the list of available devices and select it.
- Depending on your smartphone, you may have to allow access to your phone contacts through the earbuds.
- 3. Your smartphone is now connected to the earbuds and the light indicators on the charging case stop flashing.
- 4. Remove the left earbud from the charging case first.
- 5. Insert the earbuds into your ears. After insertion, you hear a confirmation. The sound from your smartphone will be played through the earbuds when they are connected.
- If the "Sennheiser TV Clear" app is installed and connected, i you may see "Sennheiser TV Clear 2 LE" in the list of paired devices. Do not select this entry.
- If you take both earbuds out of your ears, the sound is paused. This behavior can be configured in the "Sennheiser TV Clear" app.

#### Connecting the earbuds to the TV transmitter

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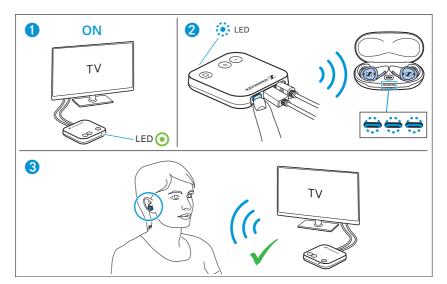
Refer to the "TV Clear Transmitter 2" instruction manual to connect and operate the transmitter.

www.sennheiser-hearing.com/tvcleartransmitter2

When connecting the earbuds to the TV transmitter for the first time, you have to set them to pairing mode as described in chapter "Setting the earbuds to pairing mode" (> 13).

After pairing, the earbuds connect automatically when you take them out of the charging case.

If the transmitter has been purchased as part of the "TV Clear 2" set, the transmitter and earbuds have already been paired during production. Simply open the lid of the charging case and continue with the chapter "Daily use - TV transmitter" (> 29).



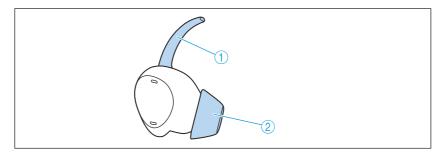
- 1. Make sure that the TV transmitter is properly connected to the TV or audio source and switch it on (see the instruction manual of the TV transmitter).
- 2. Press the pairing button on the rear of the TV transmitter. The light indicator on the front of the TV transmitter flashes briefly. Your transmitter is now connected to the earbuds and the light indicators on the charging case stop flashing.
- 3. Insert the earbuds into your ears. After insertion, you hear a confirmation. The sound from your transmitter will be played through the earbuds when they are connected.

### Additional information on pairing

- The earbuds can be paired with up to 6 devices, including a maximum of 2 TV transmitters. If the earbuds are paired with a seventh device, the least used device will be replaced.
- All three light indicators flash blue during the pairing process. This process can take up to 8 minutes, but is usually completed within a few seconds.
- The earbuds have to be paired only once with a smartphone, tablet or the TV transmitter. The devices remain paired after they are switched off and are automatically reconnected when they are switched on, if they are within the range.
- To reconnect manually, go to the Bluetooth menu of your device and select "Sennheiser TV Clear 2" from the list or briefly press one of the buttons on the earbuds while wearing them.

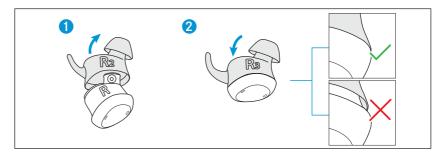
#### Adjusting the earbuds to your ears

The silicone ear adapters are an essential part of your earbuds and are available in three sizes: 1, 2 and 3. The size is indicated on the ear adapter.



- 1. The retention helps to hold the earbud in place.
- 2. The dome must fit snugly on your ear canal to ensure a good seal.

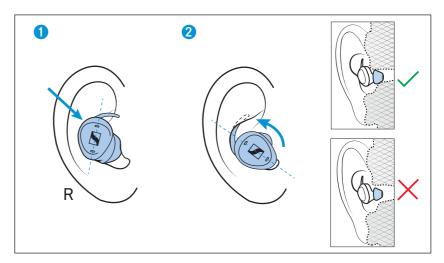
If the medium size ear adapter (size 2, attached to the earbuds upon delivery) is too large or too small for you, select size 1 or 3.



- 1. Carefully remove the ear adapter from the earbud. To do this, you can, for example, slide your fingernail between the rubber and the housing ring and separate these two parts.
- 2. Carefully insert the earbud into the ear adapter that works best for you. Make sure that the ear adapter fits snugly on the earbud and clicks into place and that there is no gap between the earbud and the ear adapter.
- 3. Repeat for the other side.
- The size of the ear adapter may be different for the left and i right ear.
- Make sure that the left ear adapter is assigned to the left earbud and the right ear adapter is assigned to the right earbud (L = left, R = right).

### Inserting the earbuds into the ears

The L (left) and R (right) markings are printed on the ear adapters. Insert the right earbud into your right ear and the left earbud into your left ear.



- 1. Carefully insert the earbuds into your ears with the dome facing the ear canal and pointing downward.
- 2. Rotate the retention until it fits snugly and comfortably in the auricle.

# Daily use

# Daily use - TV Clear Earbuds 2

#### Reconnecting for daily use



Pairing as described in (> 13) is only required when the earbuds are connected for the first time. They do not have to be paired again.

- 1. Make sure that Bluetooth is activated on your smartphone or that the TV transmitter is switched on - before you take the earbuds out of the charging case.
- 2. When you take the earbuds out of the charging case, they are usually automatically connected to the smartphone within 12 seconds.
- 3. This is displayed on the smartphone status screen or in the Bluetooth menu (the exact details may depend on your smartphone model).



- If you have activated Bluetooth after you have already taken the earbuds out of the charging case, or if you are out of range of your smartphone, you can briefly press the button on the earbud to re-establish the connection.
- · When the earbuds are paired with multiple devices, the earbuds first try to connect to the last connected device. If the device is not found, the earbuds will try to connect to the second to last connected device and so on. Since each connection attempt can take up to 7 seconds, the connection attempt in case of 6 paired devices can take up to 42 sec-
- Depending on your smartphone, it could be necessary to establish the connection between the smartphone and the earbuds manually. To do so, you have to either select "Sennheiser TV Clear 2" from the list of paired Bluetooth devices or briefly press the multifunction button on the earbud.
- You can also stream from your smartphone if only one earbud has been taken out of the charging case. The first earbud taken out of the charging case is the primary earbud. This is important because the primary earbud will pick up your voice during a call.
- When you reinsert the primary earbud into the charging case, the earbuds switch roles and the other earbud becomes the primary earbud. This briefly interrupts your streaming for about 5 seconds, as the remaining earbud has to be reconnected to the smartphone.

#### Controlling the earbuds

The earbuds offer two ways to control the various functions.

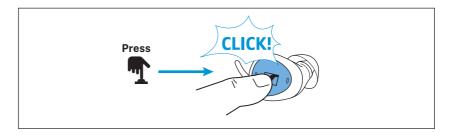
The controls are only active when the earbuds are properly inserted into the ears.

#### Button control

Each earbud has a proper button with click feeling in the center of the button surface.

The button of the right earbud "increases (up)" and the button of

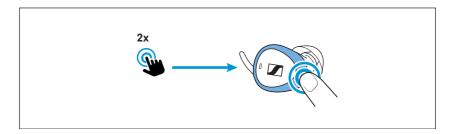
the left earbud "reduces (down)". The buttons are not configurable.



#### Configurable double-tap control

To activate additional functions, tap the earbud frame twice lightly but clearly. The double-tap control can be configured via the app.

The default configuration of the right earbud is Ambient Awareness Off/On and the left earbud is Pause/Restart of playback.

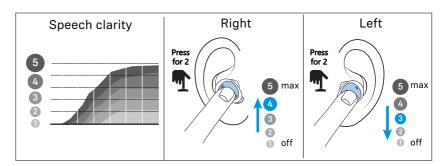


#### Adjusting the speech clarity

During streaming or a call, you can select one of five predefined settings for speech clarity.

Setting 1: no additional amplification

Settings 2 – 5: boost of high frequencies for more speech clarity



- clarity.
- ▶ Long-press to the left (> 1.5 seconds) to reduce the sharpness. A voice prompt confirms the changes to the settings, e.g. "Program 4".

#### Adjusting the volume

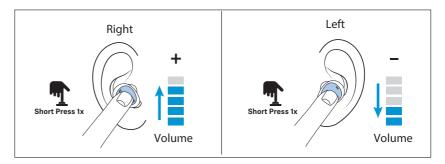


#### **WARNING**

Danger of hearing damage 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 audio sources, adjust the volume to a low
- ▷ Do not continuously expose yourself to high volume levels.

During streaming or a call, you can change the volume.



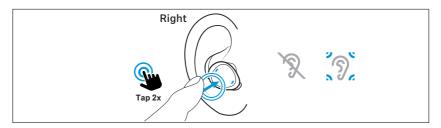
- Short-press to the right (< 0.5 seconds) to increase the volume.
  </p>
- Short-press to the left (< 0.5 to the) to reduce the volume.
  </p> A short acoustic signal confirms each change of the volume. When you adjust to the maximum or minimum value, the voice prompt "maximum" or "minimum" can be heard.
- Alternatively, you can also change the volume via the smartphone.
- Some smartphones prevent you from adjusting a high volume level when listening to music. If necessary, you must first allow high volume levels in the menu of your smartphone.
- The volume and speech clarity settings are automatically stored when the earbuds are switched off.

#### "Ambient Awareness"

An important feature of the earbuds is the possibility to hear ambient sounds while streaming.

By default, the ambient sound level switches between level 0 (OFF) and 6.

Double tap the right earbud to switch ambient sounds off or on.



You can configure the ambient sound level via the app.

During a call, the ambient sound level cannot be changed, but i a double tap will mute or unmute the earbud microphone.

#### Making a call

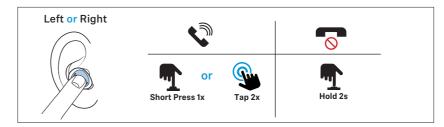
To make hands-free calls, make sure that the earbuds are connected to the smartphone and properly inserted into the ears (> 14 and 17).



During a call, the previously selected ambient level remains active (> 20).

To initiate a call, initiate the call from the smartphone.

When you receive a call, you hear the ringtone in your earbuds. Use one of the two earbuds to accept or reject the call.



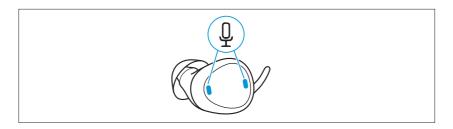
#### Accepting a call:

Double-tap or short-press

#### Rejecting a call:

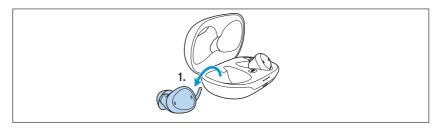
#### Microphone pick-up

During a call, your voice is picked up by the microphones of the primary earbud.



It is important to protect the two small microphone inputs from i dirt and foreign objects.

The primary earbud is the one that is taken out of the charging case first.

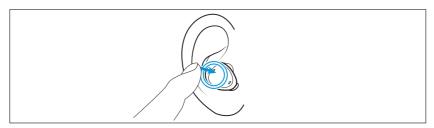


When you reinsert the primary earbud into the charging case, the earbuds switch roles and the other earbud becomes the primary earbud.

Switching between the primary earbuds can take up to 5 seconds, and you may experience an interruption. This is normal. To identify the primary earbud in the app, a microphone icon appears below the R or L identification of the earbud.

#### **Call functions**

Normally, the call is controlled using the smartphone. However, some important functions can be activated with a double-tap, such as muting the microphone or ending the call.



To activate these functions, download the "Sennheiser TV Clear" app from the App Store and follow the instructions (> 23).



Calls via Bluetooth always have priority over streaming. If, for example, you are streaming from your TV using the TV transmitter, you hear the ringtone in your earbuds and can answer the call.

#### Pausing and resuming streaming

You can control streaming directly via the earbud.

Double tap the left earbud to pause or resume streaming.



- First, you have to start music playback from your device.
- The configurations of the double-tap function can be changed with the app.
- If you pause streaming during a call, the call is transferred to your smartphone. Use the smartphone menu to continue streaming audio through the earbuds.

#### Using the app

We recommend using the app as it offers many advantages, such as:

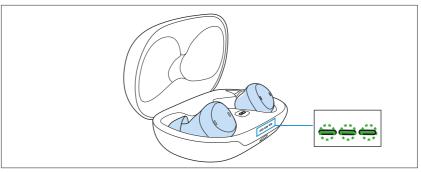
- The earbuds are kept up to date with the latest firmware.
- The possibility to change and configure the preset English voice prompts.
- The possibility to configure the double-tap control for additional functions, such as starting the voice assistant, pausing and resuming streaming, playing the previous and next track, getting information on the battery charge status, controlling the ambient sounds, and more.

Download the app from the Apple App Store or Google Play and install it on your smartphone:

- Google Play Store: click Apple App Store: click
- Sennheiser TV Clear 2" TV Clear 2 τvÐ
- During a call (via smartphone, Skype, Microsoft Teams, etc.), the app cannot connect to the earbuds.

#### Charging the rechargeable batteries of the earbuds

The charging case features a rechargeable battery.



- Insert the earbuds into the charging case to charge them.
- The light indicator flashes to indicate that the earbuds have been inserted correctly and the charging process has started.
- The Bluetooth connection is interrupted when the earbuds are inserted into the charging case.
- We recommend that you safely store the earbuds in the charging case when not in use.

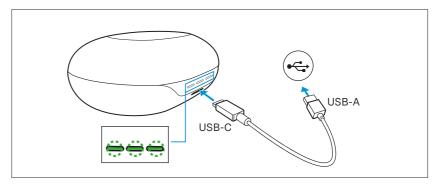
Whenever you store the earbuds in the charging case for an extended period of time, you should close the lid of the charging case. If the lid remains open, the earbuds will not switch off after charging and will discharge the rechargeable battery.

Make sure that the charging contacts are free of dirt and i debris.

#### Charging the rechargeable battery of the charging case

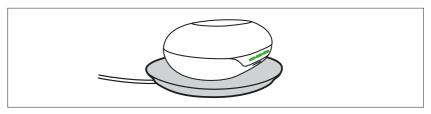
The rechargeable battery of the charging station charges the earbuds up to 1.5 times before it has to be recharged.

#### Using the USB-C cable:



- tamination. Connect the USB-C cable to the charging case.
- ▷ Connect the other end of the cable to a certified USB-A compatible power source (to be ordered separately, optional accessory).
- ▶ The light indicator on the charging case flashes to indicate that charging has begun.

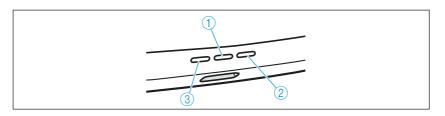
#### Qi wireless charging:



- ▶ Place the charging case on a Qi-certified charging station (to be ordered separately, optional accessory).
- > The light indicator on the charging case flashes to indicate that the charging case is placed correctly.
- Wireless charging via a Qi charging station can take longer than direct charging via a USB-C cable.

#### **Battery status indicators**

Once the earbuds are in the charging case, their battery status is indicated.



- (1) Charging case
- Right earbud
- (3) Left earbud

The light indicators respond when:

- · the earbuds are inserted into the charging case,
- · the lid of the charging case is opened or closed,
- the power supply cable is connected to a power source,
- the charging case is placed on a Qi wireless charging station.

Light indicator		Meaning
•	lights up green per- manently	Rechargeable battery is fully charged
(3)	flashes green	Rechargeable battery is being charged, battery charge status > 50 %
•	lights up orange	Battery charge status 20 – 50 %
(*)	flashes red	Battery charge status < 20 %, charging required
_	off	Rechargeable batteries are exhausted, charging required
	flashes blue	Manual pairing in progress
	flashes orange	Firmware is being updated

The light indicators light up or flash continuously as long as the charging case is open and supplied with power.

The light indicators dim after 10 seconds when the charging case is not connected to the power supply or when the lid of the charging case is closed.

Voice prompts provide information on the remaining battery charge status when the earbuds are worn.

i

The battery charge status is also displayed in the app.

#### Cleaning the earbuds

#### **CAUTION**

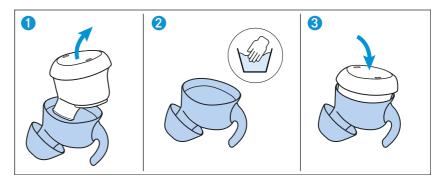
Liquids can damage the electronics of the product!

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

- ▷ Do not use any solvents or cleansing agents.

Over time, earwax may accumulate in the silicone ear adapter of the earbud. To clean the earbuds, proceed as follows:

- 1. Carefully remove the earbud from the ear adapter.
- 2. Wash the ear adapter by hand in warm water using a small amount of soap. Make sure the earbud itself never gets wet!
- 3. Make sure that the ear adapter is completely dry! Then carefully reinsert the earbud into the ear adapter.



To clean the charging socket:

- ▶ If necessary, carefully remove any stuck dirt from the charging socket using a dry, soft brush or a dry interdental brush. Only apply gentle pressure when doing so.

#### Information on the built-in rechargeable battery

Sonova Consumer Hearing GmbH ensures and guarantees that the rechargeable batteries perform at their optimum upon purchase of the product. If, upon purchase or within the warranty period, you suspect that a rechargeable battery is obviously defective, stop using the product, disconnect it from the power supply system and contact your Sonova Consumer Hearing partner. Your Sonova Consumer Hearing partner will coordinate the repair/replacement with you.

Do not return a product with a defective battery to your dealer or Sonova Consumer Hearing partner unless requested to do so. To find a partner in your country, search at

www.sennheiser-hearing.com/service-support).

At the end of its operational lifetime, this product with its built-in rechargeable battery must be disposed of separately from normal household waste. You can find more information here: > 33.

#### Firmware update

The "TV Clear Earbuds 2" can be updated to the latest firmware version via the app.

Updating the firmware helps to keep the earbuds up to date. If you are experiencing functionality issues with your earbuds, first make sure that you are using the latest firmware version.

To download the app, please click on the links in the chapter "Using the app"(> 23).

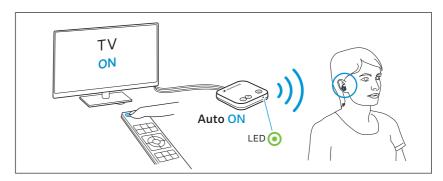
The app automatically detects if a new firmware version is available for your earbuds.

### Daily use - TV transmitter

A detailed description of the TV transmitter and its functions can also be found in the instruction manual of the TV transmitter: www.sennheiser-hearing.com/tvcleartransmitter2

#### Switching on audio transmission

The transmitter starts or stops streaming automatically when you switch the TV on or off (Auto On/Off).



- > Switch on your TV or audio source.
- > Switch on the TV transmitter by briefly touching the power touch

The transmitter automatically transmits the audio signal to the paired "TV Clear Earbuds 2".

When a transmission via the transmitter is taking place, the transmitter's light indicator lights up green.

When the transmitter is not receiving an audio signal, the light indicator lights up white.

30 seconds after the start of the transmission, the transmitter sends a short beep sequence to the paired earbuds. This allows you to detect an active transmission even if the transmitter is not currently receiving an audio input signal.

#### Switching off audio transmission

> To stop the transmitter from transmitting the audio signal, simply switch off the transmitter via the power touch panel.

If you leave the transmitter switched on, the TV is switched off and the transmitter does not receive any audio signal for more than 3 minutes, the transmitter switches to standby mode. The transmitter's light indicator will then light up white.

#### Adjusting the volume

We recommend using the volume control on the earbud for adjusting the volume on a daily basis.

During initial setup, you can use the volume controls on the transmitter to select a comfortable initial volume.

To reduce the volume:

To increase the volume:

# FAQ/If a problem occurs ...

If a problem has occurred, proceed in the following order until the problem is solved and you can use the earbuds again:

- 1. Perform a soft reset of the "TV Clear Earbuds 2" (> 30).
- 2. Connect the earbuds to the "TV Clear" app to install the latest firmware (> 23).
- 3. Reset the earbuds to the factory default settings (> 30).
- 4. Check the list of frequently asked questions to see if there is a solution to the problem (> 30).

#### List of frequently asked questions (FAQ)

Visit the list of frequently asked questions (FAQ) and suggested solutions including how-to videos for the "TV Clear Earbuds 2" at: www.sennheiser-hearing.com/tvclearearbuds2

#### Soft reset of the "TV Clear Earbuds 2"

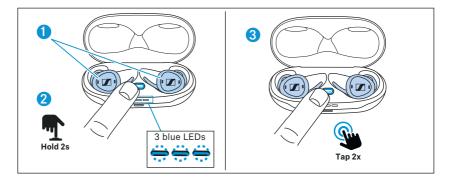
The soft rest restarts the earbuds. However, your settings are kept.

- 1. Press the button of each earbud for 15 seconds at a time to manually switch off the earbuds.
- 2. Insert both earbuds back into the charging case. Now continue to use the earbuds as usual.

### Resetting the "TV Clear Earbuds 2" to the factory default settings

If you want to reset the earbuds to the factory default settings, you can perform a factory reset. This will:

- delete all information on paired devices.
- reset all configurations to the factory default settings.
- 1. Make sure that both earbuds are properly inserted into the charging case.
- 2. Press the pairing button for 2 seconds until you see a blue light. Wait until all 3 light indicators flash blue.
- 3. Press the pairing button 2x. The earbuds are reset to the factory default settings, which is indicated by orange flashing light indicators.



After resetting the earbuds to the factory default settings, you have to pair the earbuds again as described under "Setting the earbuds to pairing mode" (> 13).

# **Specifications**

# **TV Clear Earbuds 2**

Model: TVC2-EB, TVC2-C

Wearing style	True Wireless stereo earbuds
Ear coupling	ear-canal
Frequency response	20 Hz to 20 kHz
Transducer principle	dynamic
Transducer size	6 mm
Sound pressure level (SPL)	100.5 dB (1 kHz/1 mW)
THD (1 kHz, 94 dB SPL)	≤ 0.5 % (1 kHz, 94 dB)
Noise cancellation	passive, with ambient awareness mode
Microphone principle	Digital MEMS
Microphone frequency response	100 Hz to 10 kHz
Microphone pick-up pattern (speech and ambient awareness mode)	1 microphone per earbud for ambient awareness mode 2 beamforming microphones in the primary earbud during the call
Rechargeable batteries	built-in lithium rechargeable batteries, earbuds: 69 mAh charging case: 490 mAh
Charging method via charging case	USB charging via USB-C socket of the charging case: 5 V ===, max. 0.6 A Qi wireless charging
Operating time	up to 15 hours of streaming with "TV Clear Transmitter 2"; up to 12 hours of streaming with A2DP; 1.5 additional charges through charging case
Charging time of rechargeable batteries	approx. 2 hours for a full charge via USB-C source approx. 3 hours for a full charge via Qi wireless charging approx. 5 minutes (with an empty rechargeable battery) for 1 hour of music playback
Temperature range	operation: +5 to +40 °C storage: -20 to +40 °C
Relative air humidity, non- condensing	operation: < 85 % storage: < 90 %

Magnetic field strength	earbuds: 137 mT
	charging case: 32 mT
Weight	earbuds: approx. 7 g each
	charging case: approx. 50 g
	earbuds and charging case: 64 g
Bluetooth	
Version	compatible with Bluetooth 4.2, class 1
Transmission frequency	2,400 MHz to 2,483.5 MHz
Modulation	GFSK, π/4DQPSK, 8DPSK
Profiles	HFP, AVRCP, A2DP, DID
Output power	10 mW (max)
Codec	SBC
Device name	Sennheiser TV Clear 2
Number of active	2
connections	

### Manufacturer declarations

For more information on regulatory compliance markings, refer to the supplied supplement sheet.

#### Warranty

Sonova Consumer Hearing GmbH gives a warranty of 24 months on this product.

For the current warranty conditions, please visit our website (www.sennheiser-hearing.com/warranty) or contact your Sonova Consumer Hearing partner.

#### In compliance with the following requirements

- General Product Safety Directive (2001/95/EC)
- Compliant to Sound Pressure Limits according to country specific requirements

### EU declaration of conformity



RoHS Directive (2011/65/EU)

Hereby, Sonova Consumer Hearing GmbH declares that the radio equipment type TVC2-EBC (TVC2-EB, TVC2-C) is in compliance with the directive 2014/53/EU.

The full text of the EU declaration of conformity is available in English language at the following Internet address: www.sennheiser-hearing.com/download.

#### **UK** declaration of conformity



- RoHS Regulations (2012)
- Radio Equipment Regulations (2017)

#### Notes on disposal



- EU: Battery Directive (2006/66/EC & 2013/56/EU)
- EU: WEEE Directive (2012/19/EU)
- UK: Battery Regulations (2015)
- UK: WEEE Regulations (2013)

The symbol of the crossed-out wheeled bin on the product, the battery/rechargeable battery (if applicable) and/or the packaging indicates that these products must not be disposed of with normal household waste, but must be disposed of separately at the end of their operational lifetime. For packaging disposal, observe the legal regulations on waste segregation applicable in your country.

Improper disposal of packaging materials can harm your health and the environment.

The separate collection of waste electrical and electronic equipment, batteries/rechargeable batteries (if applicable) and packagings is used to promote the reuse and recycling and to prevent negative effects on your health and the environment, e.g. caused by potentially hazardous substances contained in these products. Recycle electrical and electronic equipment and batteries/rechargeable batteries at the end of their operational lifetime in order to make contained recyclable materials usable and to avoid littering the environment.

If batteries/rechargeable batteries can be removed without damaging them, you are obliged to dispose of them separately (for the safe removal of batteries/rechargeable batteries, see the instruction manual of the product). Handle lithium-containing batteries/ rechargeable batteries with special care, as they pose particular risks, such as the risk of fire and/or the risk of ingestion in the case of coin batteries. Reduce the generation of battery waste as much as possible by using longer-life batteries or rechargeable batteries. Further information on the recycling of these products can be obtained from your municipal administration, from the municipal collection points, or from your Sonova Consumer Hearing partner. You can also return electrical or electronic equipment to distributors who have a take-back obligation. Herewith you make an important contribution to the protection of the environment and public health.

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