

MOMENTUM True Wireless 2

True wireless stereo earphones

M3IETW2, M3IETW2 R, M3IETW2 L, M3IETW2 C



Instruction manual

Use the search function, the navigation (left) or the following links:

Start

“Product overview”

“Getting started”

“Using the earphones”

“FAQ/If a problem occurs ...”

“Specifications”



Sennheiser electronic GmbH & Co. KG

Am Labor 1

30900 Wedemark

Germany



www.sennheiser.com

Version: 04/20 A01

Important safety instructions

- ▷ Read this instruction manual carefully and completely before using the product.
- ▷ Always include this instruction manual when passing the product on to third parties.
- ▷ Do not use the product if it is obviously defective or makes loud, unusual (whistling or beeping) noise.
- ▷ Only use the product in environments where Bluetooth® wireless transmission is permitted.

Preventing damage to health and accidents

- ▷ Protect your hearing from high volume levels. Permanent hearing damage may occur when headphones are used at high volume levels for long periods of time. Sennheiser headphones sound exceptionally good at low and medium volume levels. 
- ▷ Do not insert the earphones too deep into your ears and never insert them without ear adapters. Always remove the earphones slowly and carefully from your ears.
- ▷ The product generates stronger permanent magnetic fields that could cause interference with cardiac pace-makers, implanted defibrillators (ICDs) and other implants. Always maintain a distance of at least 3.94"/10 cm between the product component containing the magnet (earbuds and charging case) and the cardiac pacemaker, implanted defibrillator, or other implant. 
- ▷ Keep the product, accessories and packaging parts out of reach of children and pets to prevent accidents. Swallowing and choking hazard.
- ▷ Do not use the product in an environment that requires your special attention (e.g. in traffic). Especially the product's active noise cancellation can make ambient noise inaudible or drastically change the perception of acoustic warning signals.

Preventing damage to the product and malfunctions

- ▷ Always keep the product dry and do not expose it to extreme temperatures (hairdryer, heater, extended exposure to sunlight, etc.) to avoid corrosion or deformation. The normal operating temperature is from 0 °C to 40 °C/32 °F to 104 °F.
- ▷ To avoid loud, unusual (whistling or beeping) noise and to ensure proper noise cancellation, do not cover the microphone openings of the active noise cancellation circuitry located on the outside of the earbuds.
- ▷ Use only attachments/accessories/spare parts supplied or recommended by Sennheiser.
- ▷ Clean the product only with a soft, dry cloth.

Safety instructions for Lithium rechargeable batteries



WARNING

If abused or misused, the rechargeable batteries may leak. In extreme cases, they may even present a risk of:

- explosion,
- fire development,
- heat generation,
- smoke or gas development.

	Only use rechargeable batteries and chargers recommended by Sennheiser.
	Only charge the product / rechargeable batteries at ambient temperatures between 10 °C to 40 °C/50 °F to 104 °F.
	Do not heat the product / rechargeable batteries above 70 °C/140 °F. Avoid exposure to sunlight and do not throw the product / rechargeable batteries into fire.
	When not using the product / rechargeable batteries for extended periods of time, charge them regularly (about every three months).
	Switch rechargeable battery-powered products off after use.
	Dispose of defective products with built-in rechargeable batteries at special collection points or return them to your specialist dealer.

Notes on the ingress protection rating of the earphones

The earphones feature an IPX4 ingress protection rating which means they are protected from the ingress of water (protection class according to International Protection Marking (IP code), IEC standard 60529, tested under laboratory conditions).

The earbuds can be used in the rain, for example. However, they are not suitable for immersion in water or for wearing in the shower. In case of permanent moisture/wetness, the ingress protection can be reduced and the product can be damaged.

Do not charge wet earbuds. Completely dry wet earbuds with a dry cloth before charging them.

The charging case is not splash waterproof. Always keep the charging case dry.

Notes on data collection and processing and on firmware updates

This product stores individual settings such as the volume, the sound profiles and the Bluetooth connection data of paired devices. This data is required for the operation of the product and is not transferred to Sennheiser or companies commissioned by Sennheiser and is not processed.

Important safety instructions

Using the “Sennheiser Smart Control” 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 Sennheiser servers in order to provide and transfer suitable firmware updates: hardware identifier, hardware revision number, firmware version of the product, operating system type (Android, iOS) and version, 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

These headphones have been designed as an accessory for Bluetooth compliant devices. They are intended for wireless audio communication such as music playback and phone calls via Bluetooth wireless technology.

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

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

Sennheiser is not liable for damages to USB devices that are not consistent with the USB specifications. Sennheiser is not liable for damages resulting from the loss of connection due to flat or overaged rechargeable batteries or exceeding the Bluetooth transmission range.

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

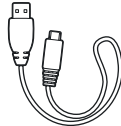
Package contents



Earbud R for right ear (M3IETW2 R) and earbud L for left ear (M3IETW2 L)



Charging case (M3IETW2 C) with built-in rechargeable battery for the earbuds



USB charging cable with USB-C and USB-A connector, approx. 0.25 m



Silicone ear adapters (size XS, S, M (pre-mounted to the earbuds) and L)



Quick guide



Safety guide

Online you can find:

- this detailed instruction manual and additional information (www.sennheiser.com/download)
- the Sennheiser Smart Control app for configuring the headphones and for additional functions (www.sennheiser.com/smartcontrol)



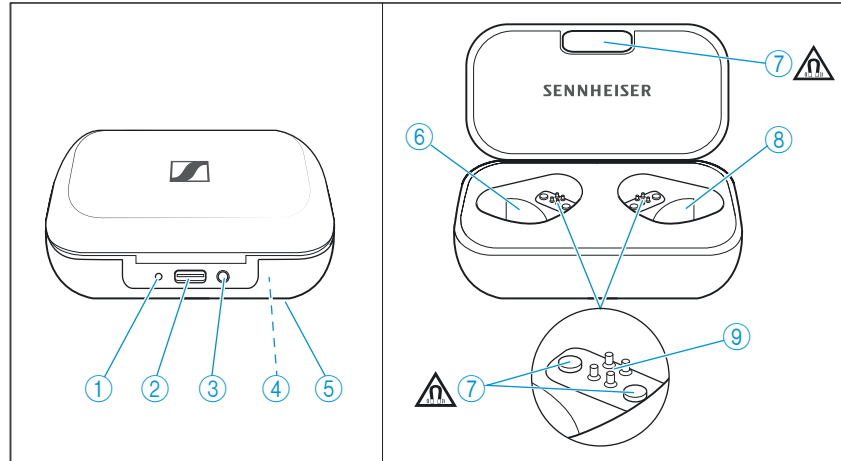
A list of accessories can be found on the MOMENTUM True Wireless 2 product page at www.sennheiser.com.

Contact your local Sennheiser partner: www.sennheiser.com > “Service & Support”.

Product overview

Charging case

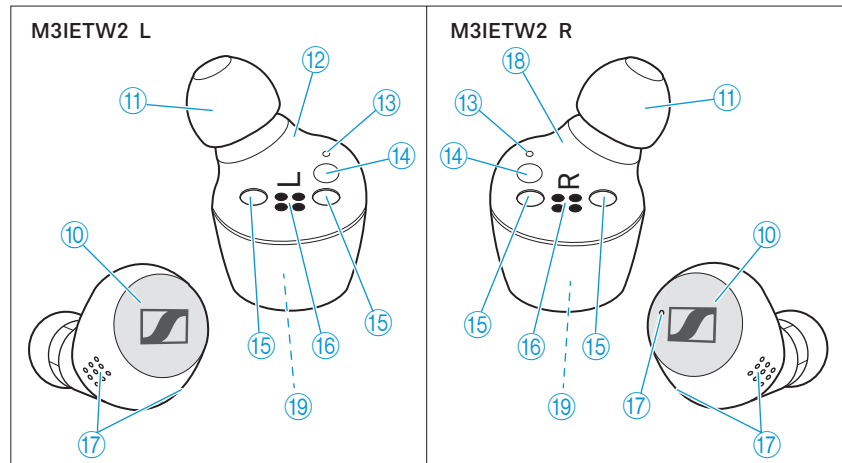
M3IETW2 C



- ① LED displays the charging process/charge status of the rechargeable battery of the charging case or of the earbuds (when inserted into the charging case)
- ② Input for USB-C connector for charging the rechargeable batteries
- ③ LED button activates the LED display for 5 seconds
- ④ Built-in rechargeable battery for charging the earbuds on the go
- ⑤ Type plate
- ⑥ Charging compartment for the left earbud L
- ⑦ Magnetic holders
- ⑧ Charging compartment for the right earbud R
- ⑨ Charging contacts

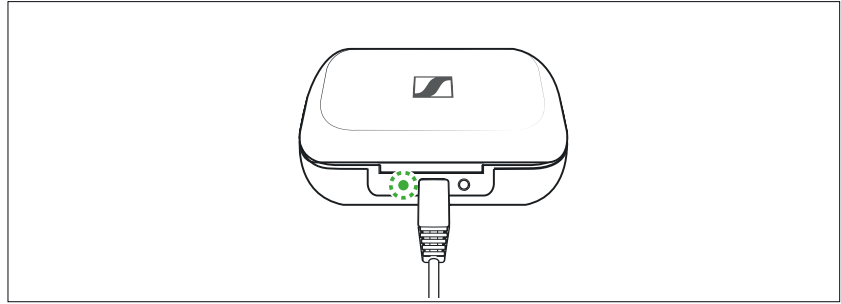
Earphones

M3IETW2 R and M3IETW2 L






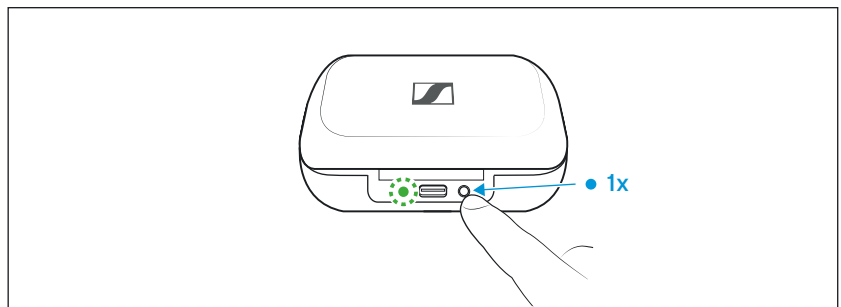
- ⑩ Touch control panel
- ⑪ Changeable silicone ear adapters
- ⑫ Left earbud L (slave earbud, receives signals from the right earbud)
- ⑬ Status LED
- ⑭ Infra-red carrying sensor
- ⑮ Magnetic holders
- ⑯ Charging contacts
- ⑰ Microphones for the active noise cancellation ANC, for the perception of ambient noise ("Transparent Hearing") and for phone calls
- ⑱ Right earbud R (master earbud, controls the Bluetooth connection to the smartphone and to the left earbud)
- ⑲ Built-in rechargeable battery

Overview of the LED indications of the charging case








When a USB cable is connected, the LED of the charging case permanently displays the charging process:

LED		Charging case WITH earbuds inserted	Charging case WITHOUT earbuds inserted
	pulses yellow	... earbuds and charging case are being charged	... charging case is being charged
	lights up green	... earbuds and charging case are fully charged	... charging case is fully charged
	flashes red	... a charging error/battery error has been detected in at least one earbud (> 34)	... a charging error/battery error has been detected in the charging case (> 34)



If you press the LED button and no USB cable is connected, the LED of the charging case displays the battery charge status or the charging process of the earbuds for 5 seconds:

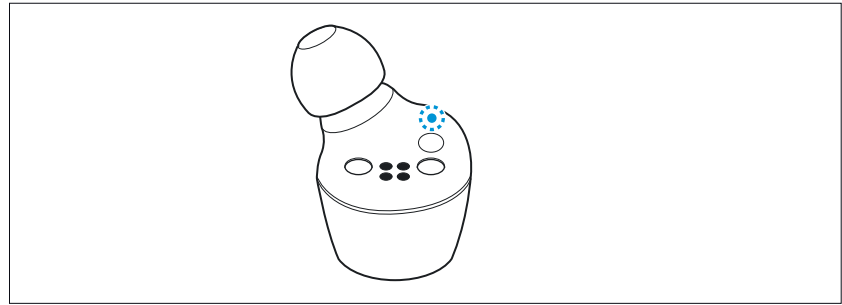
LED		Charging case WITH earbuds inserted	Charging case WITHOUT earbuds inserted
	lights up green	... earbuds are fully charged and the charging case can still charge at least one complete cycle	... charging case is fully charged
	pulses yellow	... earbuds are being charged via the rechargeable battery of the charging case	–
	lights up yellow	... earbuds are fully charged, the charging case cannot charge another complete cycle	... charging case is charged less than 90 %
	lights up red	... rechargeable batteries of the earbuds and the charging case are empty	... rechargeable battery of the charging case is empty
	flashes red	... a charging error/ battery error has been detected in at least one earbud (> 34)	... a charging error/ battery error has been detected in the charging case (> 34)




If the LED does not light up:

- Clean the contacts on the earbuds and in the charging case (> 33).
- Charge the rechargeable batteries of the earbuds and the charging case until the LED lights up again (> 15).

Overview of the LED indications of the earbuds



LED		Meaning; the earbuds ...
	flashes red-blue for approx. 1 minute	... are in Bluetooth pairing mode
	flashes blue 3x	... Bluetooth pairing or earbud pairing successful
	flashes red 3x	... Bluetooth pairing or earbud pairing failed
	lights up blue	... are connected to a device via Bluetooth (master earbud (R) is connected to the smartphone, slave earbud (L) is connected to the master earbud (R))
	lights up red	... are not connected to a device via Bluetooth or the connection has been lost (master earbud (R) is not connected to a smartphone, slave earbud (L) is not connected to the master earbud (R))
	flashes red quickly	... rechargeable battery is almost empty
	flashes red slowly	... system error – the Smart Control app may display details. Perform a restart (> 35).
	flashes red-green for approx. 1 minute	... are in earbud pairing mode (to pair the right and left earbud)

 When you insert the earbuds into your ears, the LEDs of the earbuds automatically go off.

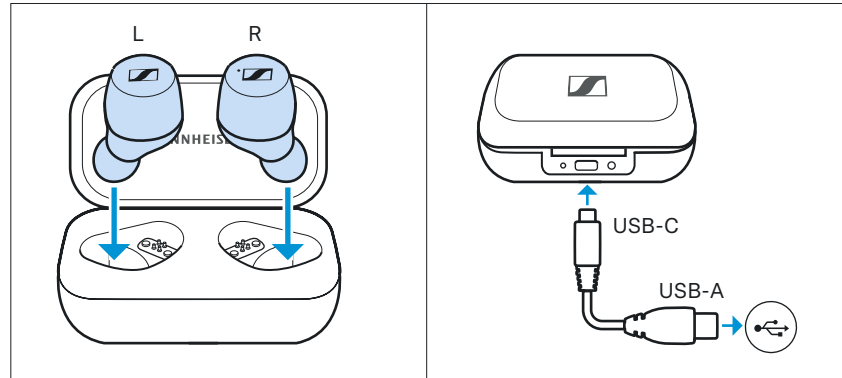
Notes on voice prompts

The earphones output voice prompts for events (the table gives some examples). Using the Smart Control app, you can change the language of the voice prompts, choose between voice prompts and beep sounds, or deactivate the status messages with a few exceptions (e.g. rechargeable battery is empty).

Voice prompt	Meaning/earbuds...
"Power on"	... are switched on
"Power off"	... switch off
"Connected"	... connected via Bluetooth
"No connection"	... not connected via Bluetooth
"Pairing"	... in Bluetooth pairing mode
"Pairing cancelled"	... Bluetooth pairing cancelled
"Pairing successful"	... Bluetooth pairing successful
"Pairing failed"	... Bluetooth pairing not successful
"Recharge headset"	... rechargeable battery is almost empty. Recharge the rechargeable battery.
"Call rejected"	... incoming call rejected
"Call ended"	... call ended
"Volume min"	... volume set to minimum
"Volume max"	... volume set to maximum

Getting started

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



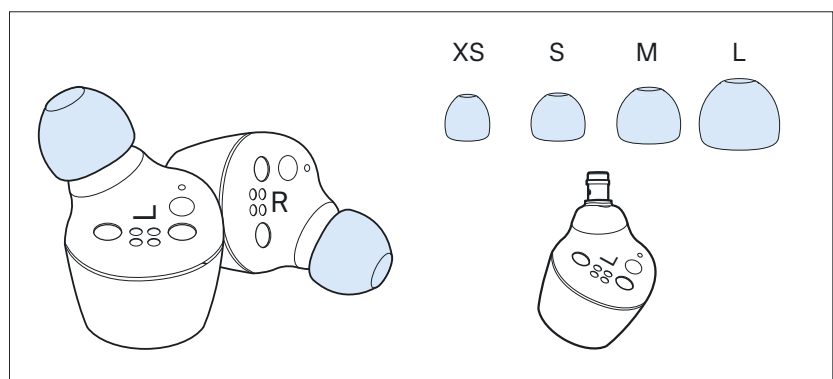
Upon delivery, the rechargeable batteries of the earbuds and the charging case are in sleep mode and have to be woken up by connecting them to a power source once.

- ▷ Insert the earbuds into the charging case.
- ▷ Connect the USB-C cable to the charging case and to a USB power source (> 15).
The earbuds and the charging case are woken up and the rechargeable batteries are being charged. The earbuds are now ready for use.

Alternatively:

- ▷ Press and hold the LED button on the charging case for 3 seconds.
The earbuds and the charging case are woken up and can now be used.

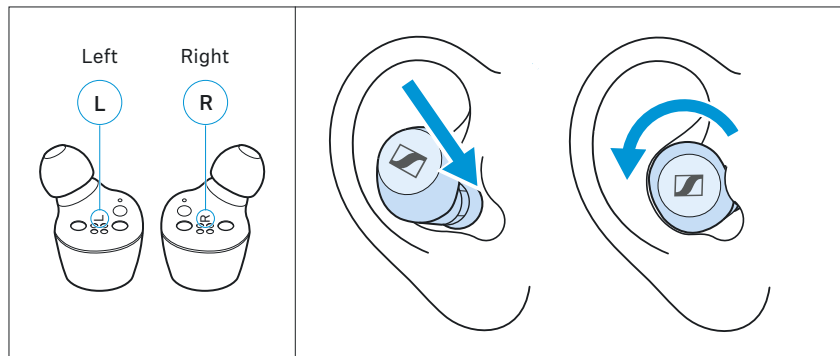
2. Selecting suitable ear adapters for optimum fit of the earbuds



The perceived sound quality including bass performance and the best possible noise cancellation of the earphones depends to a large extent on the correct fit of the earbuds in the ear.

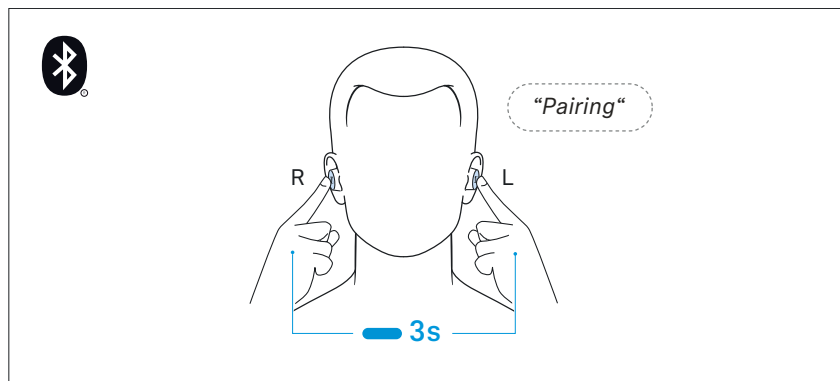
- ▷ Test which ear adapter size gives you the best sound quality and the best wearing comfort.

- ▷ You can choose between 4 different ear adapters in size XS, S, M and L (> 21).



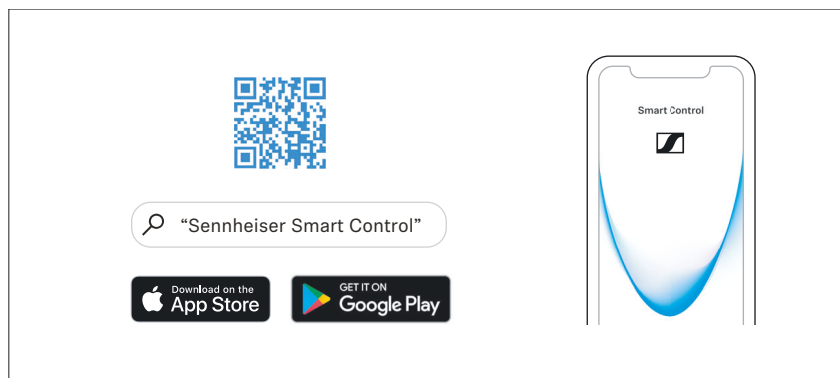
- ▷ Assign the right earbud to your right ear and the left earbud to your left ear.
- ▷ Insert the earbuds at a slight angle into the ears and twist them slightly into the ear canal so that they sit comfortably and snugly in the ear canal.

3. Connecting the earphones to a Bluetooth device



Connect the earphones to your smartphone via Bluetooth (> 17).

4. Installing the Smart Control app on your smartphone



The Sennheiser **Smart Control** app allows you to use all functions and settings of the earphones and to e.g. adjust the sound to your liking using the equalizer (> 20).

Using the earphones

Information on the rechargeable battery, the charging process and the first use

The earbuds and the charging case each have a built-in rechargeable battery. The charging case allows you to store the earbuds safely at all times while they are being charged.

Rechargeable battery	Operating/standby time with fully charged rechargeable batteries
Earbuds	approx. 7 hours of operating time
Earbuds and charging case	approx. 28 hrs (up to 3 additional charging cycles of the earbuds via the charging case)

Upon delivery, the rechargeable batteries of the earbuds and the charging case are in sleep mode and have to be woken up by connecting them to a power source once. Sennheiser recommends charging the earbuds and the charging case for a complete charging cycle without interruption before using for the first time.

A complete charging cycle of the charging case and the earbuds takes about 1.5 hours. The quick charge function gives you approx. 1.5 hour of playback time after 10 minutes of charging.

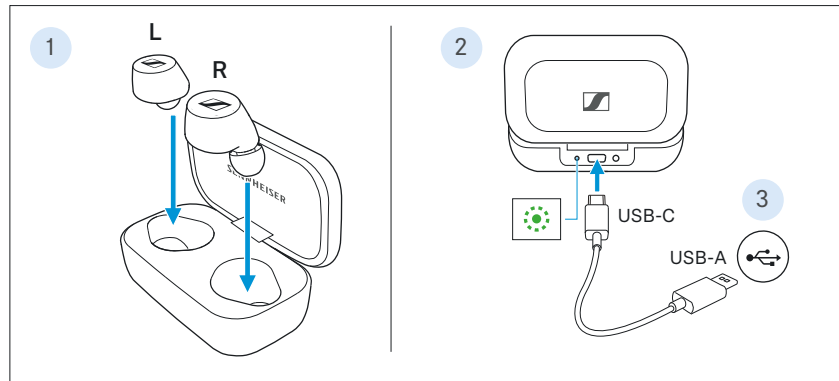
Sennheiser recommends using the supplied USB cable and a compatible standard USB power supply for charging the headphones.

When a USB cable connected to a power source is also connected to the charging case, the rechargeable battery of the charging case is being charged. When the earbuds are inserted into the charging box, their rechargeable batteries are being charged at the same time. The LED of the charging case displays the charging process (> 8).

When the battery charge of the earbuds drops to a critical level, a voice prompt asks you to recharge the earbuds (“Recharge headset”).

The charge status of the rechargeable battery of the charging case is displayed by the LED on the charging case (> 8).




Charging the rechargeable battery of the earbuds and the charging case



1. Open the charging case by overcoming a slight magnetic resistance and insert the left earbud into the left charging compartment and the right earbud into the right charging compartment. The earbuds are magnetically pulled into the charging compartments.
2. Connect the USB-C connector of the USB cable to the USB-C socket of the charging case.
3. Connect the USB-A connector to a corresponding socket of a USB power source (to be ordered separately). Make sure that the USB power source is connected to the power supply system. The rechargeable batteries of the earbuds and the charging case are being charged.

If no earbuds are inserted into the charging case, only the rechargeable battery of the charging case is being charged.

The LED of the charging case displays the charge status:

LED		Charging case WITH earbuds inserted	Charging case WITHOUT earbuds inserted
	pulses yellow	... earbuds and charging case are being charged	... charging case is being charged
	lights up green	... earbuds and charging case are fully charged	... charging case is fully charged
	flashes red	... a charging error/ battery error has been detected in at least one earbud (> 34)	... a charging error/ battery error has been detected in the charging case (> 34)

Connecting the earphones to a Bluetooth device

To be able to use the Bluetooth wireless connection, you must register both devices (earphones and e.g. smartphone) via the device settings of your smartphone. This process is called pairing.

If operation differs from the steps mentioned, also refer to the instruction manual of the Bluetooth device you are using.

i When you switch on the earphones for the first time after initial charging, they automatically switch to pairing mode.

Information on the Bluetooth wireless connection

The earphones are compatible with Bluetooth 5.1.

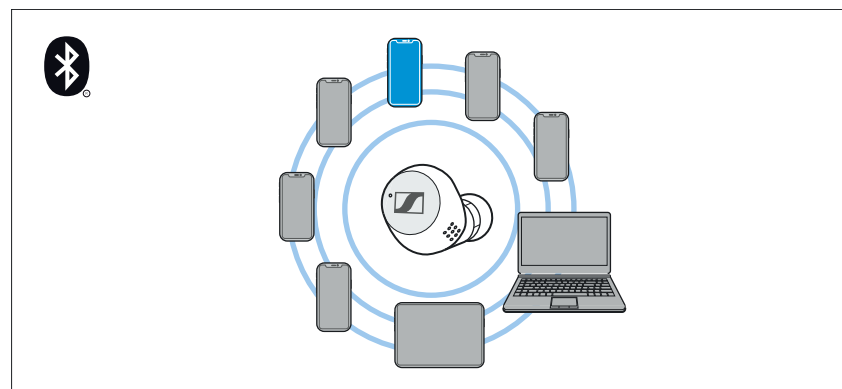
If your audio source supports one of the following high-resolution audio encoding methods, music is automatically played in high audio quality: aptX® or AAC. Otherwise the headphones will play your music in normal audio quality (SBC).

Paired devices establish the Bluetooth wireless connection immediately after switch-on and are ready for use.

When you switch the earphones on, they automatically try to connect to the last connected Bluetooth device. The earphones can save the connection profiles of up to eight Bluetooth devices with which they have been paired.

If you pair the earphones with the ninth Bluetooth device, the saved connection profile of the least used Bluetooth device will be overwritten. If you want to re-establish a connection with the overwritten Bluetooth device, you have to pair the earphones again.

Using the Smart Control app, you can view the list of paired devices and selectively connect and disconnect devices (“Connections”; > 18).



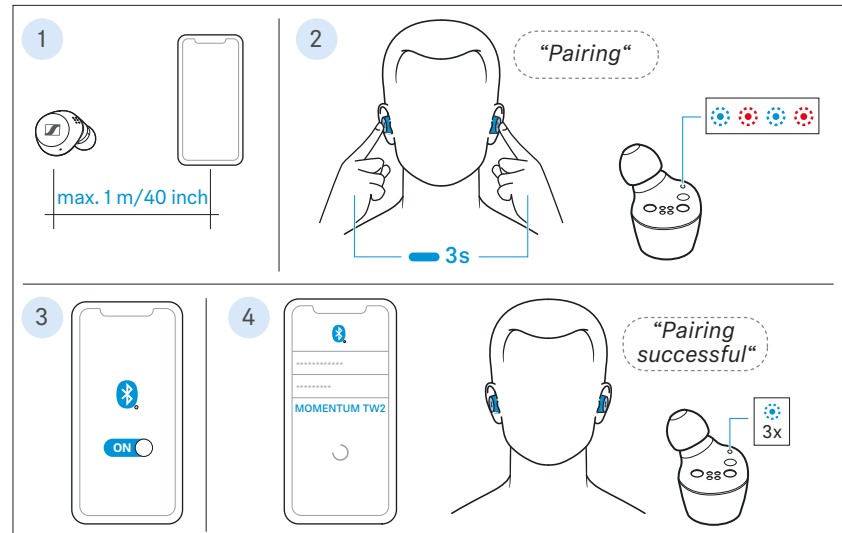
Paired and connected Bluetooth device



Paired Bluetooth device (currently not connected)

- i** The right and the left earbud also use a Bluetooth wireless connection. Both earbuds are paired with each other upon delivery. If you use another earbud (e.g. a replacement earbud), the two earbuds must also be paired with each other (> 35).

Pairing the earphones with a Bluetooth device



1. Take both earbuds out of the charging case and insert them into your ears (> 21). The distance between the earbuds and the Bluetooth device should not exceed 40"/1 m.
2. Simultaneously touch and hold the right and the left touch control panel for 3 seconds until you hear the voice prompt "Pairing" and a beep.
The LEDs of the earbuds flash blue and red. The earbuds are in pairing mode.
3. Activate Bluetooth on your Bluetooth device.
4. Via the menu of your Bluetooth device, start the search for new Bluetooth devices.
All active Bluetooth devices in the proximity of your smartphone are displayed.
From the list of found Bluetooth devices, select "MOMENTUM TW 2". If necessary, enter the default pin code "0000".
If pairing was successful, you hear the voice prompt "Pairing successful" and the LEDs of the earbuds flash blue 3x.

- i** If no connection is established within 1 minute, pairing mode is terminated and the earbuds switch to idle mode. If necessary, repeat the steps described above.
- If the earphones are not paired with any Bluetooth device (the pairing list is empty), pairing mode is permanently active.

Switching the connection to paired Bluetooth devices/“Connections”

To selectively switch the audio connection to paired Bluetooth devices using the “Connections” function, you require the Smart Control app (> 20).

- ▷ In the Smart Control app, tap “Connections”.
The list of Bluetooth devices paired with the earphones appears.
- ▷ From the list, select the paired device to which you want to connect the earphones. Make sure that the desired device is switched on and Bluetooth is activated.
The Bluetooth connection for audio between the desired Bluetooth device and the earphones is established.
The app connection between the device with the Smart Control app installed and the earphones remains active (only Bluetooth Low Energy for communication between app and earphones, the device name is marked on bold letters).

Disconnecting the earphones from a Bluetooth device

- ▷ Via the menu of your Bluetooth device, disconnect the connection to the earphones.
The earphones are disconnected from the Bluetooth device. The earphones then search for other paired devices. If no device is found, you hear the voice prompt “No connection”. The earphones switch to idle mode.

i Using the “Connections” function in the Smart Control app, you can also selectively connect the earphones to paired devices without terminating an existing connection (> 35).

i If you want to clear the Bluetooth pairing list of the earphones, reset the earphones to the factory default settings (> 35).

Pairing the earbuds with each other (optional)

The right and the left earbud are paired with each other upon delivery. If, however, you are using a different earbud (e.g. a spare earbud), you have to pair the two earbuds with each other once:

1. Make sure that the right earbud is not connected to any Bluetooth device. Deactivate Bluetooth on your Bluetooth device or delete “MOMENTUM TW 2” from the list of paired devices in the Bluetooth menu of your Bluetooth device.
2. Charge the right and the left earbud (> 15).
3. Take both earbuds out of the charging case and make sure that the right and the left earbud are close together (max. distance 50 cm).
The LEDs of the earbuds light up red.

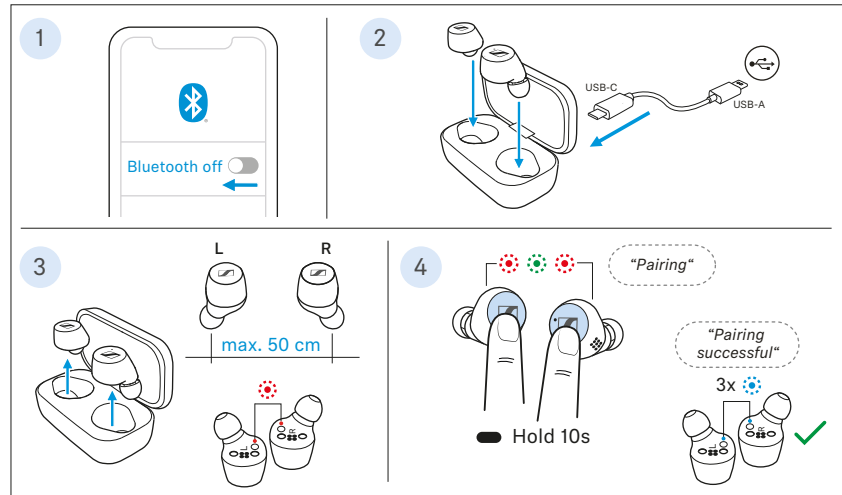
Using the earphones

4. Simultaneously touch and hold the right and the left touch control panel for 10 seconds until you hear the voice prompt “Pairing” and a beep.

The LEDs of the earbuds flash green and red. The earbuds are in earbud pairing mode.

If pairing was successful, you hear the voice prompt “Pairing successful” and the LEDs of the earbuds flash blue 3x.

- ▷ Now pair the earphones with your Bluetooth device (> 17).

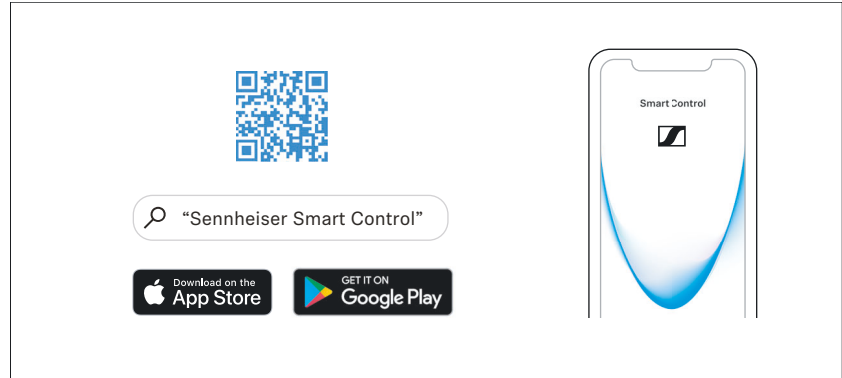


Installing the Smart Control app

To make full use of all the settings and functions of the headphones, you need to have the free Sennheiser Smart Control app installed on your smartphone.

Download the app from the App Store or Google Play and install it on your smartphone. Alternatively, you can use your smartphone to scan the following QR code or to call up the following Internet site:

www.sennheiser.com/smartcontrol

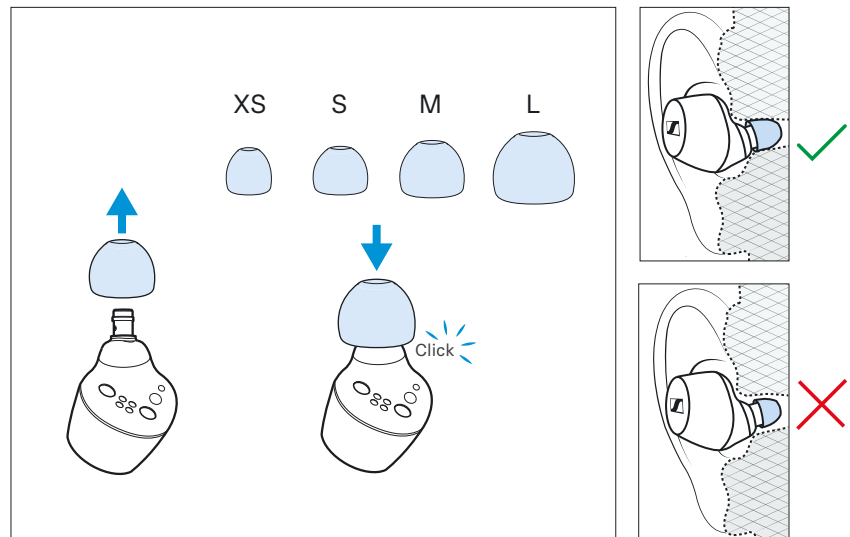


- ▷ Connect your smartphone to the earphones using Bluetooth (> 16).
- ▷ Start the Smart Control app.
- ▷ Follow the instructions in the app.
- ▷ Simultaneously touch and hold the right and the left touch control panel for 3 seconds to accept the Bluetooth Low Energy connection.

The Smart Control app recognizes the earphones and activates all available settings and functions.

- i** If you connect the earphones via the Smart Control app, only a Bluetooth Low Energy connection may be established (Bluetooth name "LE-MOMENTUM TW 2"). To use the earphones for music playback, etc., pair the earbuds via the Bluetooth menu of your smartphone (Bluetooth name "MOMENTUM TW 2") (> 17).

Selecting suitable ear adapters for optimum fit of the earbuds

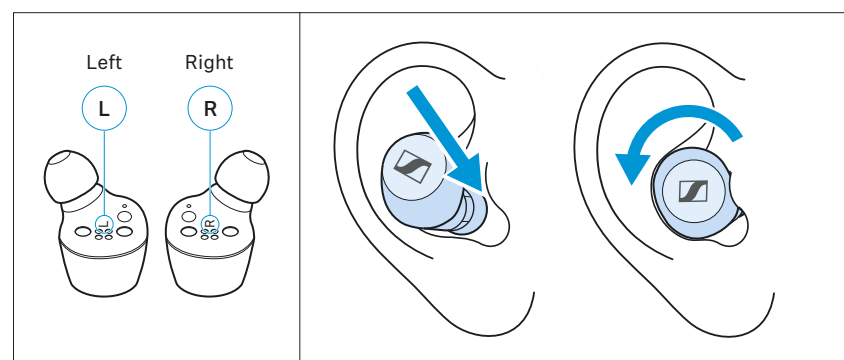


The perceived sound quality including bass performance and the best possible noise cancellation of the earphones depends to a large extent on the correct fit of the earbuds in the ear.

- ▷ Pull the ear adapter away from the in-ear sound tunnel.
- ▷ Mount the new ear adapter to the in-ear sound tunnel. Ensure that it locks into place.
- ▷ Test which ear adapter size gives you the best sound quality and the best wearing comfort.

You can choose between 4 different ear adapters in size XS, S, M and L. The ear adapters must fit snugly in the ear canal and completely seal your ears.

Inserting the earbuds into the ears



- ▷ 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 (> 21).

i You can use the right earbud alone without using the left earbud. The left earbud, however, cannot be used alone.

- i** The Smart Pause function automatically stops music playback if you remove an earbud from your ear (> 26).

Switching the earphones on

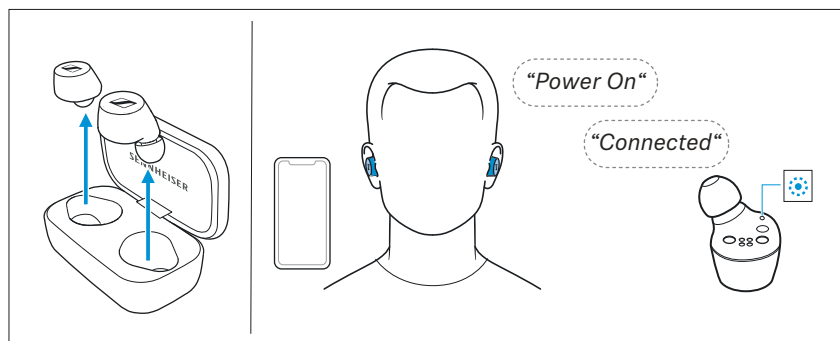


WARNING

Danger of hearing damage due to high volume levels!

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

- ▷ Before putting your headphones on, adjust the volume to a low level (> 23).
- ▷ Do not continuously expose yourself to high volume levels.

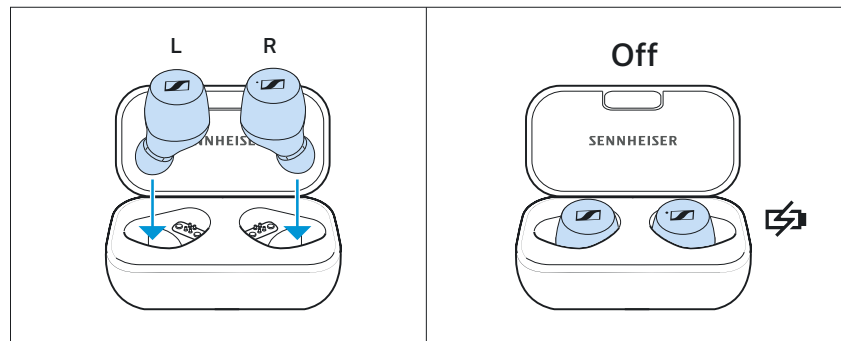


- ▷ Take both earbuds out of the charging case and insert them into your ears (> 21).
If a paired Bluetooth device is within the transmission range, you hear the voice prompts “Power On” and “Connected”. The LEDs of the earbuds light up blue.

- i** If you take the earbuds out of the charging case during an incoming call, the call is automatically accepted and you can use the earbuds directly for making calls.
This Auto Call function can also be deactivated (> 28).

- i** The earbuds automatically switch to idle mode if they do not find a paired Bluetooth device within 15 minutes or if they are inactive for approx. 60 minutes (connected via Bluetooth but no audio playback). You can wake up the earbuds from idle mode by touching their touch control panels 1x or by briefly inserting them into the charging case.

Switching the earphones off



The earbuds do not have to be switched off explicitly.

- ▷ Insert the earbuds into the charging case to switch them off. As soon as the earbuds are inserted into the charging case, they switch off and are being charged (> 15).

i You can also switch off the earbuds manually (idle mode) via the Smart Control app.

i The earphones automatically switch to idle mode if they do not find a paired Bluetooth device within 15 minutes or if they are inactive for approx. 60 minutes (connected via Bluetooth but no audio playback). You can wake up the earphones from idle mode by touching their touch control panels 1x or by briefly inserting them into the charging case.

i If you remove an earbud from the ear, music playback is paused. This Smart Pause function can also be deactivated (> 26).

Adjusting the volume

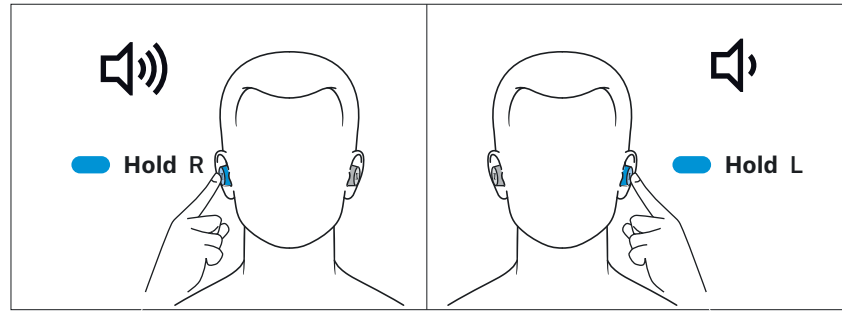


WARNING

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 level.
- ▷ Do not continuously expose yourself to high volume levels.



To increase the volume:

- ▷ Touch and hold the touch control panel of the right earbud until the volume is increased.

To reduce the volume:

- ▷ Touch and hold the touch control panel of the left earbud until the volume is reduced.

When the minimum or maximum volume is reached, you hear the voice prompt “Volume max” or “Volume min”.

i You can also adjust the volume using the connected Bluetooth device.

Information on active noise cancellation ANC

Due to the wearing style in the ear canal, the earphones provide effective passive isolation from ambient noise.

In addition, the earphones have an active noise cancellation (ANC) function, which allows you to reduce ambient noise to a minimum. This feed forward system with one microphone per earbud is especially effective at reducing low-frequency noise. A possible feeling of pressure on the ears and the slight ANC noise (in very quiet environments) is avoided with this system.

Even when ANC is activated, your headphones' sound quality is always at its best.

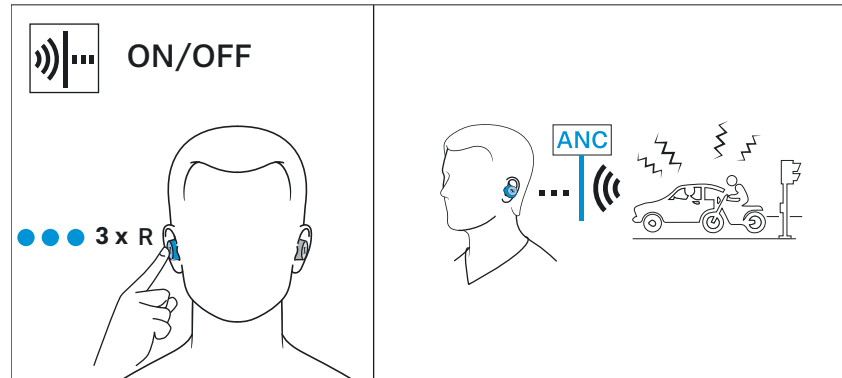
If you want to create a quiet space in a noisy environment, you can simply use the earphones as noise protection by using ANC.

Notes on active noise cancellation

- Continuous low-frequency noise, such as motor or fan noise, is particularly well suppressed.
- Speech or high-frequency noise is significantly reduced, but can remain perceptible.
- If unusual (whistling or beeping) noise occurs, take the headphones off and put them on again. Make sure that the earbuds properly fit in your ears and make a good seal with the ear canal.
- To avoid loud, unusual (whistling or beeping) noise and to ensure proper noise cancellation, do not cover the microphone openings of the active noise cancellation circuitry located on the outside of the earbuds.
- With active noise cancellation ANC activated, the battery life of the earbuds is reduced.

Activating/deactivating the active noise cancellation ANC

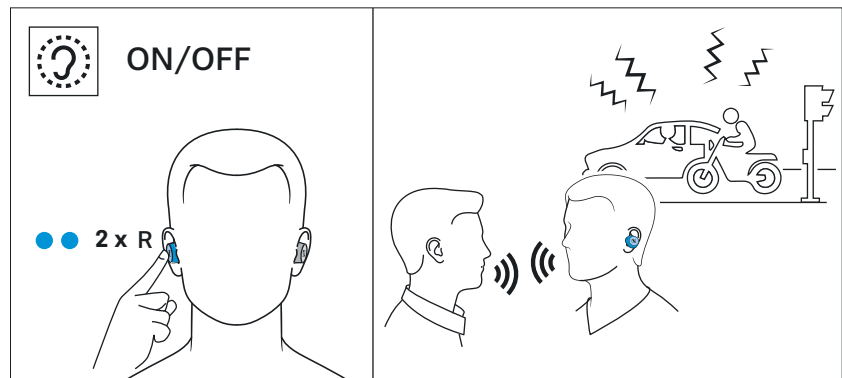
- ▷ Tap the touch control panel of the right earbud 3x.
The active noise cancellation ANC is activated or deactivated.



i You can also activate or deactivate the active noise cancellation ANC via the Smart Control app.

Listening of ambient noise or conversations - activating/deactivating the Transparent Hearing function

With Transparent Hearing activated, you can hear ambient sounds or communicate without having to remove the earbuds from your ears. This allows you to hear e.g. announcements in the train or aircraft or to have short conversations.



- ▷ Tap the touch control panel of the right earbud 2x.
The Transparent Hearing mode set in the Smart Control app is activated. You can hear ambient sounds without having to remove the earbuds from your ears.

To deactivate Transparent Hearing:

- ▷ Tap the touch control panel of the right earbud 2x.

Adjusting the Transparent Hearing function

To be able to fully use Transparent Hearing, you require the Smart Control app (> 20).

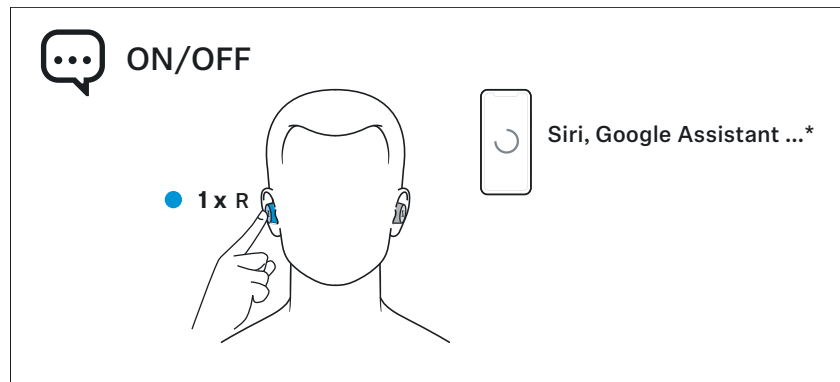
- ▷ Select the desired Transparent Hearing function in the Smart Control app:

Transparent Hearing	Description
“Keep music playing and mix with ambient sound”	Audio playback (e.g. music) continues and is mixed with ambient sounds.
“No music playback, only ambient sound”*	Audio playback (e.g. music) is muted and you hear only ambient sounds.

*: default setting

Using the voice assistant/voice dialing

- ▷ Tap the touch control panel of the right earbud 1x.
The available voice assistant of your smartphone is activated (*depending on the system or app on your smartphone: Siri, Google Assistant, ...).
- ▷ Ask the voice assistant your question or make a request.
To cancel the voice assistant/voice dialing:
- ▷ Tap the touch control panel of the right or left earbud 1x.



Using the Smart Pause function

The earbuds automatically detect whether they are worn in the ear or removed from the ear.

Music playback pauses when you remove an earbud from your ear and resumes when you insert it again (if you interrupt for more than 1 minute, playback will not start automatically).

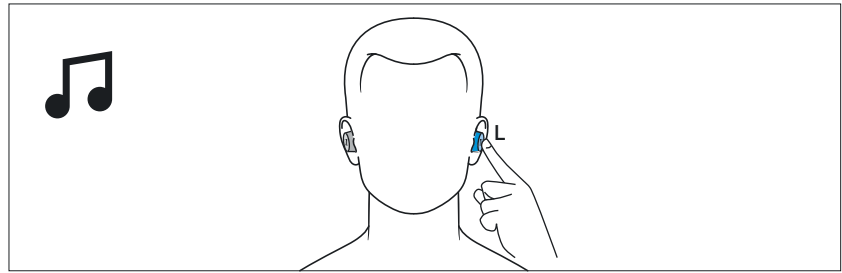
You can activate (default setting) or deactivate the function via the Smart Control app.

i You can use the right earbud alone without using the left earbud. The left earbud, however, cannot be used alone.

Controlling music playback

The music playback functions are only available when the earphones and the device are connected via Bluetooth. Some smartphones or music players may not support all functions.



The **left earbud** allows you to control music playback.



i The Smart Control app allows you to customize the control functions for music playback (> 31).



Playing/pausing music

▷ Tap the touch control panel of the left earbud 1x.

Left touch control panel		Function
	Tap 1x 	Plays or pauses music



Playing the next track

▷ Tap the touch control panel of the left earbud 2x.

Left touch control panel		Function
	Tap 2x 	Plays the next track in the playlist

Playing the previous track

▷ Tap the touch control panel of the left earbud 3x.

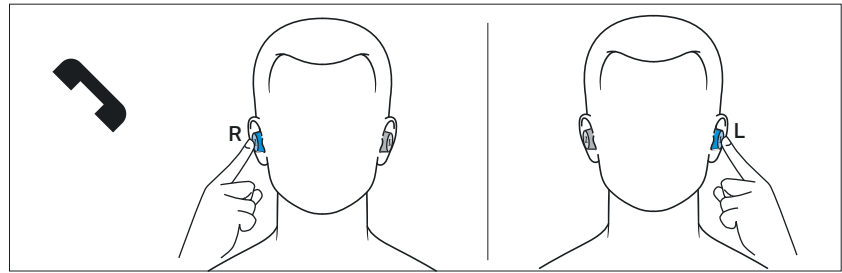
Left touch control panel		Function
	Tap 3x 	Plays the previous track in the playlist

Making calls using the earphones

The call functions are only available when the earphones and the smartphone are connected via Bluetooth.

Some smartphones and telephony apps (e.g. WhatsApp, Skype, WeChat) may not support all call control functions.

During a call, you can use the **right and/or left earbud** to control the call functions.



Making a call

- ▷ Dial the desired number on your smartphone.
If your smartphone does not automatically transfer the call to the headphones, select “MOMENTUM TW 2” as the output device on your smartphone (see the instruction manual of your smartphone if necessary).

Accepting/rejecting/ending a call

If your headphones are connected to a smartphone and you receive a call, you hear a ring tone in the headphones.

If you are playing music when you receive a call, the music pauses until you end the call.

Right touch control panel		Function
	Tap 1x ●	Accepts a call
	Tap 1x ●	Ends a call Voice prompt “Call ended”
	Tap 2x ● ●	Rejects a call Voice prompt “Call rejected”
	Tap 1x ●	Accepts an incoming call and ends the active call
	Tap 2x ● ●	Rejects an incoming call and continues the active call

Using the Auto Call function

If you take the paired earbuds out of the charging case during an incoming call, the call is automatically accepted and you can use the earbuds directly for making calls.

You can activate (default setting) or deactivate the function via the Smart Control app.

i You can use the right earbud alone without using the left earbud. The left earbud, however, cannot be used alone.

Using Sidetone

When using the earphones for phone calls, you may find it more comfortable if your own voice is audible in the earphones. With the Sidetone function activated, your own voice is played back through the earphones during a phone call.

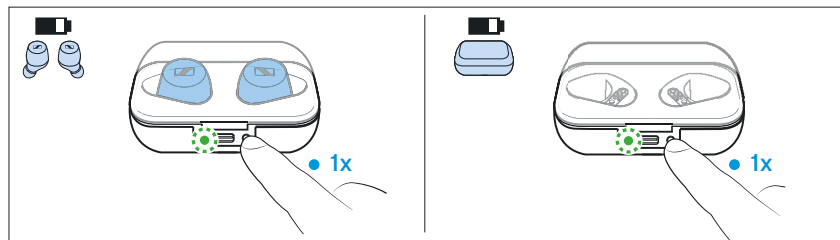
You can activate (default setting) or deactivate the function via the Smart Control app.

Displaying the battery charge status

When the earphones are connected to your Bluetooth device, the battery charge status can be displayed on the screen of your smartphone or device (depending on the device and operating system used).




The Smart Control app also displays the charge status of the earbuds' rechargeable batteries.

Displaying the battery charge status using the charging case





If no USB cable is connected to the charging case:

- ▷ Press the LED button of the charging case.
The LED of the charging case displays the battery charge status for 5 seconds:

LED		Charging case WITH earbuds inserted	Charging case WITHOUT earbuds inserted
	lights up green	... earbuds are fully charged and the charging case can still charge at least one complete cycle	... charging case is fully charged
	pulses yellow	... earbuds are being charged via the rechargeable battery of the charging case	–
	lights up yellow	... earbuds are fully charged, the charging case cannot charge another complete cycle	... charging case is charged less than 90 %

Using the earphones

LED		Charging case WITH earbuds inserted	Charging case WITHOUT earbuds inserted
	lights up red	... rechargeable batteries of the earbuds and the charging case are empty	... rechargeable battery of the charging case is empty
	flashes red	... a charging error/ battery error has been detected in at least one earbud (> 34)	... a charging error/ battery error has been detected in the charging case (> 34)

Adjusting sound effects/the equalizer

To be able to use the sound effects/equalizer, you require the Smart Control app (> 20).

- ▷ In the Smart Control app, select the desired sound effects via the equalizer. You can use predefined presets or define your own settings.

The sound effects are stored in the earphones. These sound settings are active even without using the Smart Control app, i.e. when you are using a different Bluetooth device.

Setting the voice prompts/beep sounds

To be able to set the voice prompts and beep sounds, you require the Smart Control app (> 20).

You can change the language of the voice prompts, choose between voice prompts and beep sounds, or deactivate the status messages with a few exceptions (e.g. rechargeable battery is empty).

Customizing the control functions

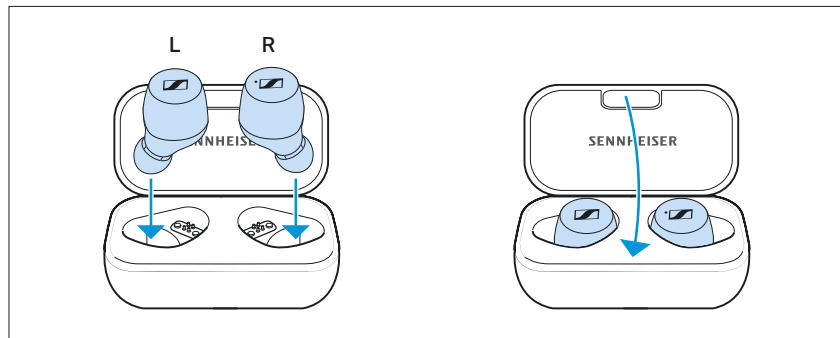
To be able to customize the control functions for music playback, you require the Smart Control app (> 20).

The app allows you to customize the control functions and other commands or to select preset control functions. Some basic functions cannot be changed (e.g. volume loud/quiet, call control).

Storing or transporting the earphones in the charging case

Store the earphones in the charging case to prevent damage to the earphones when you are not using or transporting them. The earphones are automatically charged in the charging case so you always have the full battery life to work with.

- ▷ Open the charging case by overcoming a slight magnetic resistance and insert the left earbud into the left charging compartment and the right earbud into the right charging compartment. The earbuds are magnetically pulled into the charging compartments.
- ▷ Close the charging case.



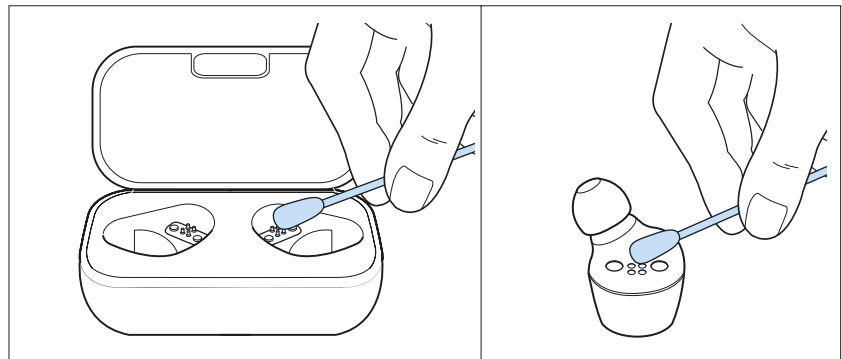
Care and maintenance of the earbuds/charging case

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 far away from the product.
 - ▷ Do not use any solvents or cleansing agents.
-
- ▷ Only clean the charging case with a soft, dry cloth.
 - ▷ Clean the earbuds with a slightly damp cloth.
 - ▷ Clean the charging contacts on the earbuds and in the charging case from time to time using e.g. a cotton swab.



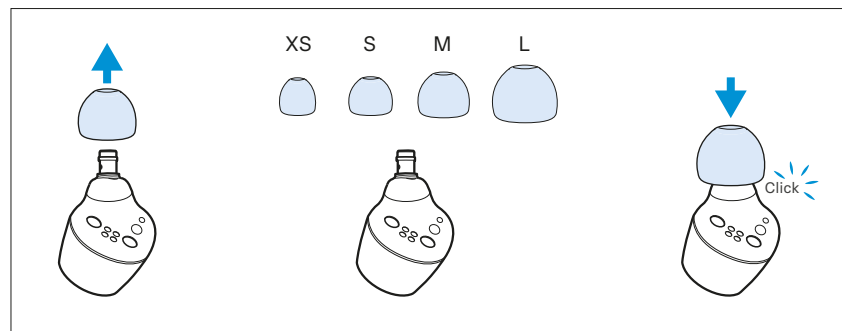
If the earbuds have gotten wet:

- ▷ Remove the ear adapters and dry the earbuds and ear adapters with a dry cloth. If necessary, leave the earbuds and ear adapters dry at room temperature for approx. 24 hours.

Replacing the ear adapters

For reasons of hygiene, you should replace your ear adapters from time to time. Spare ear adapters are available from your Sennheiser partner.

1. Pull the ear adapter away from the in-ear sound tunnel.
2. Mount the new ear adapter to the in-ear sound tunnel. Ensure that it locks into place.



Information on the built-in rechargeable battery

Sennheiser 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 or if a charging error/battery error is displayed (> 8), stop using the product, disconnect it from the power supply system and immediately return the product to any Sennheiser service partner.

Installing firmware updates

Firmware updates can be downloaded free of charge from the Internet using the Sennheiser Smart Control app.

- ▷ Connect your earphones to your smartphone and start the Smart Control app (> 20).
- ▷ The app provides information on available firmware updates and guides you through the installation process.

FAQ/If a problem occurs ...

Current list of frequently asked questions (FAQ)



Visit the MOMENTUM True Wireless 2 product page at www.sennheiser.com

There you will find a current list of frequently asked questions (FAQ) and suggested solutions.

Your question has not been answered or the problem persists?

If a problem occurs that is not listed in the FAQ section or if the problem cannot be solved with the proposed solutions, please contact your Sennheiser partner for assistance.

To find a Sennheiser partner in your country, search at www.sennheiser.com > “Service & Support”.

Leaving the Bluetooth transmission range

Wireless calling and streaming are only possible in the Bluetooth transmission range of your smartphone. 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 smartphones and Bluetooth devices is up to 10 meters. If you, and therefore the earphones, leave the Bluetooth transmission range of the smartphone, the sound quality deteriorates increasingly until you hear the voice prompt “No connection” and the connection breaks down completely. If you immediately re-enter the Bluetooth transmission range, the connection is automatically re-established and you hear the voice prompt “Connected”. If this is not the case, tap the touch control panel of the earbud 1x.

The right earbud (master earbud) can be used alone. The left earbud (slave earbud) cannot be used alone because it requires the right earbud for Bluetooth transmission.

Resetting the earphones to the factory default settings/Reset

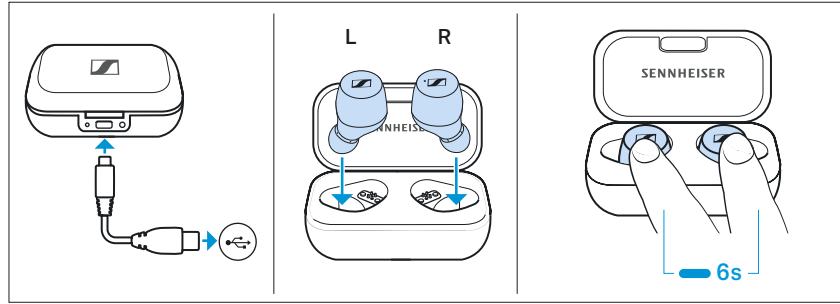
If the function of the earphones is disturbed:

- ▷ Insert both earbuds into the charging case and wait at least 10 seconds before taking the earbuds out of the charging case and switching them on again.

If the function of the earphones is disturbed and switching them off and on again does not improve, reset the earphones to the factory default settings. This deletes, among other things, all pairing settings.

- ▷ Make sure that the contacts on the earbuds and in the charging case are clean and make contact (the LED of the charging case lights up when you insert the earbuds into the charging case). If necessary, clean the contacts (> 33).
- ▷ Use the USB cable to connect the charging case to a power source (> 15).
- ▷ Insert the earbuds into the charging case and, within 30 seconds, touch and hold the right and the left touch control panel for 6 seconds.
The earphones are reset to the factory default settings.

FAQ/If a problem occurs ...



i You can also reset the earphones to the factory default settings using the Smart Control app.

Specifications

MOMENTUM True Wireless 2

M3IETW2

Wearing style	True wireless stereo earphones
Ear coupling	ear-canal
Frequency response	5 Hz to 21 kHz
Transducer principle	dynamic, closed-back
Transducer size	7 mm
Sound pressure level (SPL)	107 dB (1 kHz/1 mW)
THD (1 kHz, 94 dB SPL)	< 0.08 %
Active noise cancellation ANC	1 microphone per earbud
Microphone principle	MEMS
Microphone frequency response	100 Hz to 10 kHz
Microphone pick-up pattern (speech and ANC)	2-mic beamforming array
Power supply	built-in Lithium rechargeable batteries, 3.7 V --- earbuds: 55-60 mAh charging case: 600 mAh USB charging via USB-C socket of the charging case: 5 V ---, 650 mA
Operating time	7 hrs (music playback via A2DP, ANC or Transparent Hearing deactivated) with rechargeable battery of the earbuds; 28 hrs with rechargeable battery of the charging case
Charging time of rechargeable batteries	approx. 1.5 hrs
Temperature range	<i>operation:</i> 0 to +40 °C <i>storage:</i> -25 to +60 °C
Relative humidity	<i>operation:</i> 10 to 80%, non condensing <i>storage:</i> 10 to 90%
Magnetic field strength	earbuds: 1.34 mT charging case: 87.70 mT
Ingress protection of the earbuds	splash proof (IPX4)
Weight	earbuds: approx. 6 g each charging case: approx. 58 g

Bluetooth

Version	Bluetooth 5.1 compatible, class 1, BLE
Transmission frequency	2,402 MHz to 2,480 MHz
Modulation	GFSK, $\pi/4$ DQPSK, 8DPSK
Profiles	HSP, HFP, AVRCP, A2DP

Specifications

Output power	10 mW (max)
Codec	aptX®, AAC, SBC
Device name	MOMENTUM TW 2 LE-MOMENTUM TW 2 (Bluetooth Low Energy only)

Manufacturer Declarations

Warranty

Sennheiser electronic GmbH & Co. KG gives a warranty of 24 months on this product.

For the current warranty conditions, please visit our website at www.sennheiser.com or contact your Sennheiser 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, Sennheiser electronic GmbH & Co. KG declares that the radio equipment type M3IETW2 (M3IETW2 R, M3IETW2 L, M3IETW2 C) is in compliance with the Radio Equipment Directive (2014/53/EU).

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

Notes on disposal



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

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, please observe the legal regulations on waste segregation applicable in your country.

Further information on the recycling of these products can be obtained from your municipal administration, from the municipal collection points, or from your Sennheiser partner.

The separate collection of waste electrical and electronic equipment, batteries/rechargeable batteries (if applicable) and packaging is used to promote the reuse and recycling and to prevent negative effects caused by e.g. potentially hazardous substances contained in these products. Herewith you make an important contribution to the protection of the environment and public health.

Trademarks

Sennheiser is a registered trade mark of Sennheiser electronic GmbH & Co. KG.

Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.

Google Play and the Google Play logo are trademarks of Google LLC.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Sennheiser electronic GmbH & Co. KG is under license.

Qualcomm aptX is a product of Qualcomm Technologies International, Ltd. Qualcomm is a trademark of Qualcomm Incorporated, registered in the United States and other countries, used with permission.

aptX is a trademark of Qualcomm Technologies International, Ltd., registered in the United States and other countries, used with permission.

Other product and company names mentioned in the user documentation may be the trademarks or registered trademarks of their respective holders.

Open Source license terms and conditions

FIPS 180-2 SHA-224/256/384/512 implementation

Last update: 02/02/2007

Issue date: 04/30/2005

HMAC-SHA-224/256/384/512 implementation

Last update: 06/15/2005

Issue date: 06/15/2005

Copyright (C) 2005, 2007 Olivier Gay <olivier.gay@a3.epfl.ch>

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.