M2 IEBT
In-Ear Wireless

Instruction Manual

SENNHEISER

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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 an obviously defective product.

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 ear canal phones too deep into your ears and never insert them without ear adapters. Always extract the ear canal phones from your ears very slowly and carefully.
- Keep the headphones at least 10 cm/3.94″ from cardiac pacemakers or implanted defibrillators. The headphones contain magnets that generate a magnetic field which could cause interference with cardiac pacemakers and implanted defibrillators.
- Keep the product, accessories and packaging parts out of reach of children and pets to prevent accidents and choking hazards.
- Do not use the product in situations which require special attention (e.g. in traffic or when performing skilled jobs).
- Unplug the power supply unit from the wall socket during lightning storms or when it is unused for long periods of time.

Preventing damage to the product and malfunctions

- Always keep the product dry and do not expose it to extreme temperatures to avoid corrosion or deformation. The normal operating temperature is from 10 to 40°C/50 to 104°F.
- Only use attachments/accessories/spare parts supplied or recommended by Sennheiser.
- Clean the product only with a soft, dry cloth.
- Only use the product in environments where **Bluetooth**® wireless transmission is permitted.
- Use the product with care and store it in a clean, dust-free environment.

Caring for leather parts

- Gently wipe leather parts periodically with a clean, soft cloth dampened with water.
- Do not use leather polish, detergents or harsh soaps to clean leather parts.
- Avoid storing the headphones in a damp or humid environment.

Intended use/Liability

These wireless neckband earphones are designed for use with mobile devices (e. g. mobile music players, mobile phones, tablets) that support wireless communication via **Bluetooth**. Compatible **Bluetooth** devices include those that support the following profiles: Hands Free Profile (HFP), Advanced Audio Distribution Profile (A2DP), and Audio/Video Remote Control Profile (AVRCP).

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

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

Safety instructions for the Lithium-Polymer battery pack

WARNING

In extreme cases, abuse or misuse of the Lithium-Polymer battery pack can lead to:

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

	Dispose of products with built-in rechargeable batteries at special collection points or return them to your specialist dealer.
	Only use rechargeable batteries and chargers recommended by Sennheiser.
	Charge products with built-in rechargeable batteries at ambient temperatures between 10 and 40°C /50 and 104°F.
	Switch battery-powered products off after use.
	When not using the product for extended periods of time, charge its built-in rechargeable batteries regularly (about every 3 months).
	Do not heat above 70°C/158°F, e.g. do not expose to sunlight or throw into fire.
	Do not charge a product with built-in rechargeable batteries if the product is obviously defective.

The M2 IEBT neckband headphones

For uncompromised style, sound performance and take-anywhere mobility, Sennheiser has created the M2 IEBT neckband headphones. The premium neckband headphones combine luxurious, high quality design with an exceptional wireless sound assured by **Bluetooth** 4.1 and Qualcomm® apt-X™, for true hi-fi sound. With NFC for simple one touch pairing, an integrated microphone, and a ten-hour battery life, it is the perfect companion to mobile devices.

Features

- Ergonomic and robust around-the-neck design for comfortable all-day listening experience
- Luxurious leather neckband for a feeling of substance and quality
- Custom-machined, stainless-steel, in-ear sound tunnels for superior acoustic precision.
- Supports Qualcomm® apt-X™ for true Hi-Fi sound
- Supports AAC (Advanced Audio Coding) for greater sound quality and transparency
- 10 hour battery life with 1.5 hour fast USB charging
- Supports USB audio via the supplied USB cable
- Immediate pairing to smart devices using NFC

Bluetooth

The M2 IEBT Wireless neckband earphones comply with the **Bluetooth** technology 4.1 standard and are compatible with all **Bluetooth** 1.1, 1.2, 2.0, 2.1, 3.0, 4.0 and 4.1 devices with the following profiles:

- **Hands-Free Profile (HFP) 1.6** - provides functionalities such as voice control, etc.
- **Audio/Video Remote Control Profile (AVRCP) 1.5** - used to control music on the **Bluetooth** device from the earphones (play, pause, skip music track, etc.).
- **Advanced Audio Distribution Profile (A2DP) 1.3, supporting aptX®** - used by a **Bluetooth** device to stream high-quality stereo music to the earphones.

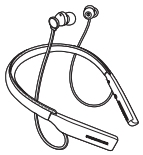
NFC

Near Field Communication (NFC) is a short-range wireless technology that enables connection and communication between NFC-capable electronic devices by placing them near one another or with a single touch.

AAC, aptX® audio codecs

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

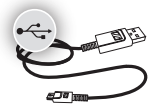
Package includes



Neckband earphones

Carry case

Ear adapters



USB cable with micro USB connector

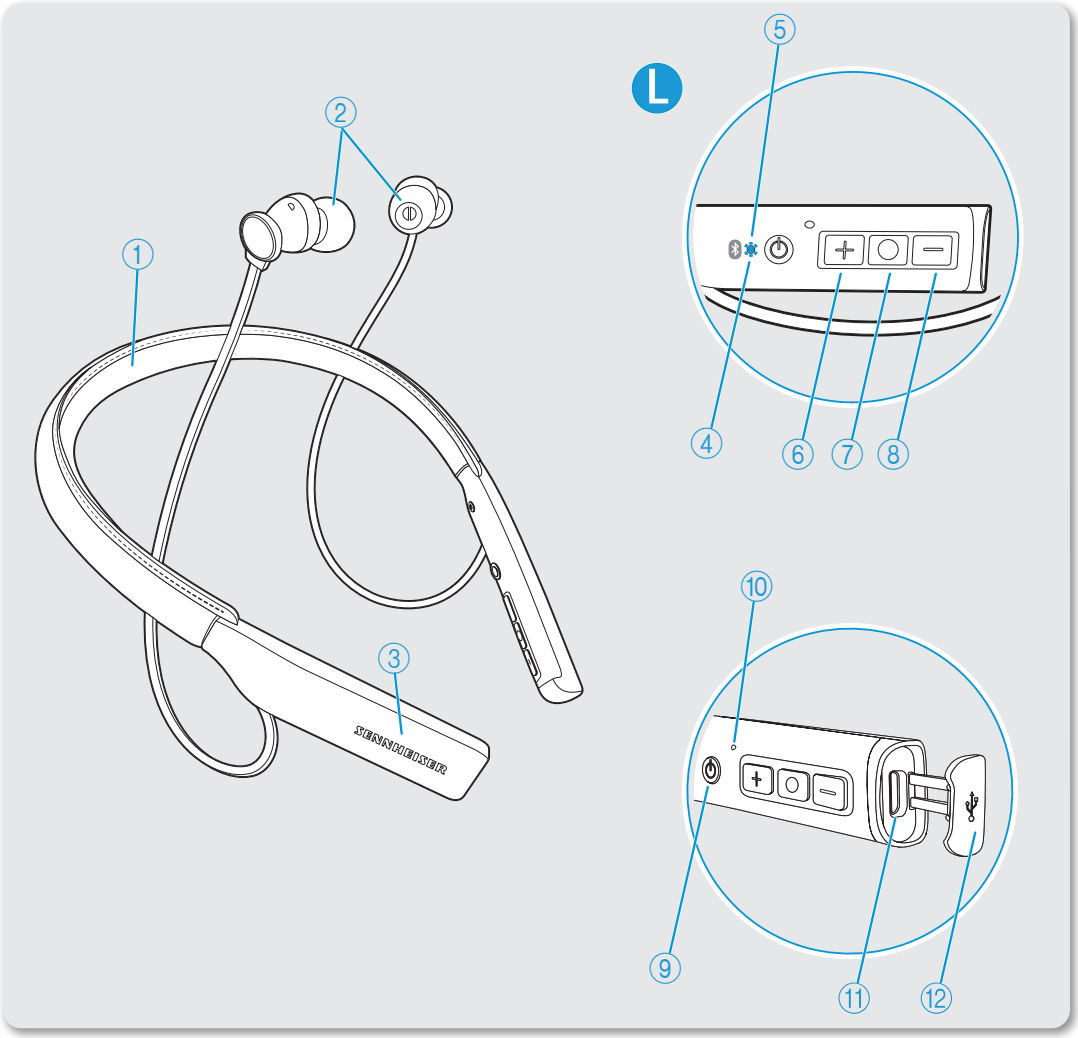
Quick guide

Safety guide

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

Product overview

Overview of the earphones



① Neckband
② Ear adaptors
③ NFC antenna
④ Bluetooth antenna
⑤ LED
⑥ + button
⑦ Play/pause button
⑧ - button
⑨ Audio input
⑩ Micro USB input
⑪ Micro USB input
⑫ Micro USB cover

Overview of pictograms

Pictograms for pressing a button

Pictogram	Meaning
	Press and immediately release the button
	Press the button twice
	Press the button and hold for 5 seconds

Pictograms for alerts and tones

Pictogram	Meaning
	The neckband vibrates
	You hear beeps on the earphones

Pictograms for the LED

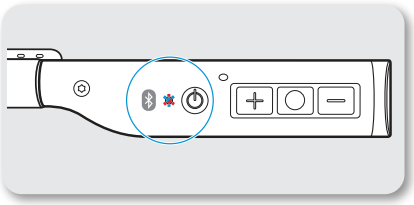
Pictogram	Meaning
	The LED lights up
	Time interval or interruption. Causes the LED to flash
	The LED lights up/flashes continuously
	Time interval of flashing

Examples of pictograms used in this manual:

Pictogram	Meaning
	The LED flashes continuously
	The LED flashes/lights up once every 3 seconds
	The LED lights up continuously
	The LED flashes 3 times per second

The icon with "i"

Notes marked with the pictogram "i" provide useful information on the use of the earphones.



Overview of the LED indications

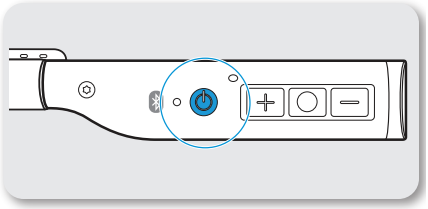
LED indications during operation

LED	Meaning
	The earphones switch on Pairing with a device is successful
	The earphones switch off Pairing with a device is not successful
	The earphones are in pairing mode
	The pairing settings are cleared from the earphones
	The earphones are in idle mode (no active call or music reproduction)

LED indications during calls

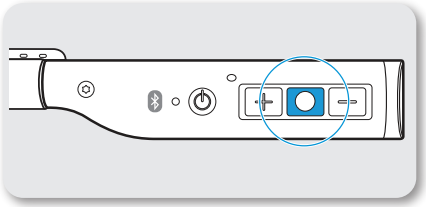
LED	Meaning
	Incoming call
	Incoming call with an almost empty battery

Overview of buttons



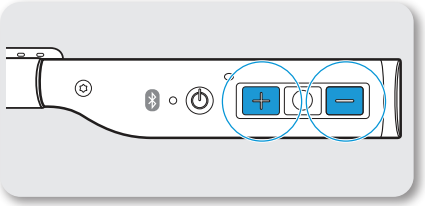
Power button

Press	Function	Page
2s	Switches the earphones on and off	18
1x	Checks the battery life	



Play/pause button

Press	Function	Page
1x	Accepts/ends a call Accepts an incoming call and ends the active call Plays/pauses track	24 24 20
1x	Rejects a call Activates the voice control Transfers a call	24 25 22
2x	Accepts an incoming call and puts the active call on hold/Toggles between 2 calls	24



+/- buttons

Press	Function	Page
1x	Increases/decreases the volume	
2s	Plays the next/previous track	24 25 <?>

Getting started

Charging basics

A complete charging cycle takes about 1.5 hours. Before using the earphones for the first time, charge their rechargeable battery for a complete charging cycle without interruption.

When the battery is almost empty or when the earphones are being charged, the LED lights up or flashes as indicated in the table below and a voice prompt announces the charge condition of the battery. When the battery charge drops to a low level, a voice message prompts you to recharge the earphones to avoid call and music disruptions.

It is recommended to charge the earphones using only the supplied USB cable. If you are charging using an external USB-power adapter, it is recommended to use an adapter with an output rating of 500 mA or higher.

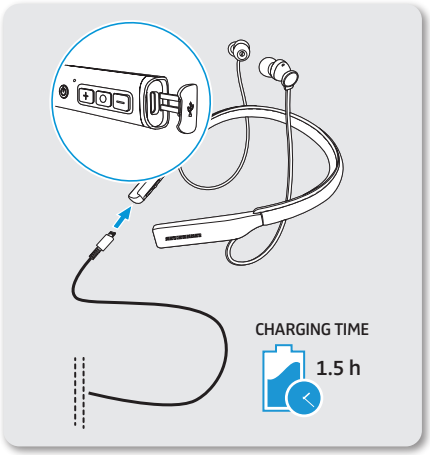
LED	Meaning	Voice prompt
	Battery is almost empty (less than 2 % charged)	*"Recharge headset"*
	Battery is less than 11% charged	*"Less than 2 hours play time"*
	Battery is less than 23% charged	*"Between 2 and 6 hours play time"*
	Battery is less than 45% charged	*"Between 6 and 12 hours play time"*
	Battery is more than 45% charged	*"More than 12 hours play time"*
	Battery is fully charged	*"More than 12 hours play time"*

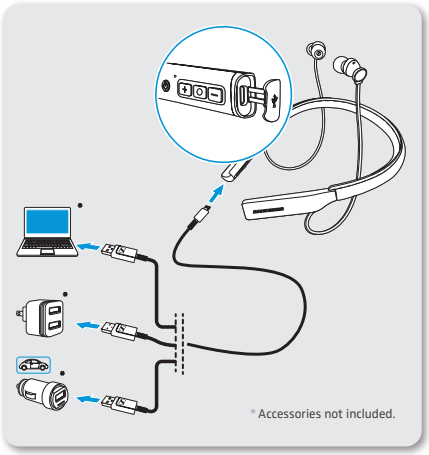
Charging time may take longer at temperatures below 15°C.

Charging the earphones

You can charge the earphones regardless of their power state (on or off).

1. Open the micro USB cover to access the micro-USB input.
2. Connect the micro-USB plug of the charging cable to the micro-USB input of the headphones.
3. Connect the USB plug to the USB port of your computer. If you are using an external power adapter, connect the USB plug to the power adapter or to the USB car charger adapter, and connect to the power source.
   The LEDs flash/light up depending on the battery life of the earphones.





The earphones utilize an intelligent battery charging technology that prevents overcharging.

For faster charging, charge the earphones while they are switched off. For more information on playing music using the USB cable, see page 22.

Pairing the earphones

CAUTION

Danger of malfunction!

The transmitted radio waves of mobile phones can impair the operation of sensitive and unprotected devices.

- Only make calls with the earphones in locations where **Bluetooth** wireless transmission is permitted.

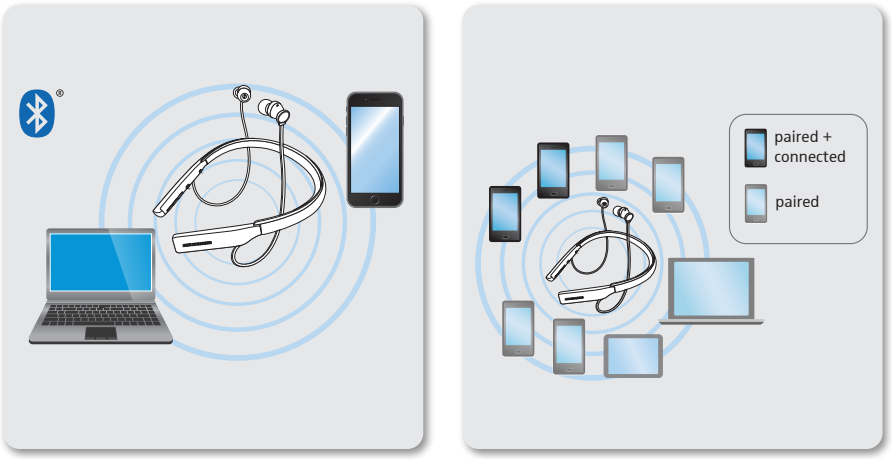
The M2 IEBT earphones comply with the **Bluetooth** 4.0 standard. In order that data can be transmitted wirelessly using **Bluetooth** technology, you have to pair your earphones with compatible **Bluetooth** devices that support the following profiles:

- Hands Free Profile (HFP)
- Audio/Video Remote Control Profile (AVRCP)
- Advanced Audio Distribution Profile (A2DP)

When you switch the earphones on, they automatically try to connect to the last two connected **Bluetooth** devices. 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 a 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.

You can easily pair and connect your wireless earphones with your smartphone if the device supports the Near Field Communication (NFC) technology.

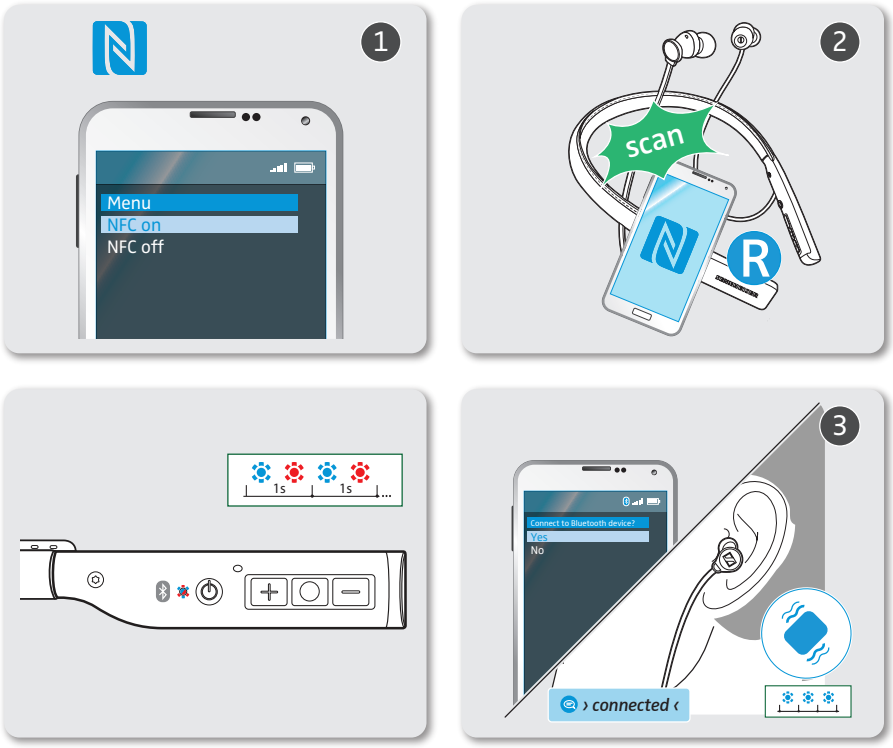


Pairing the earphones with a Bluetooth device using NFC

The following sections describe, using a smartphone as an example, how to pair your M2 IEBT Wireless neckband earphones with a **Bluetooth** device using NFC. If the instructions provided do not work on your device, proceed as described in the instruction manual of the device.

You can pair the headphones to other devices using NFC regardless of the headphones' power state (on or off).

1. Activate NFC on your smartphone.
2. Scan the smartphone to the NFC panel on the left panel of the neckand.
   You hear the voice prompts "*Power on*" and "*pairing*". The LED flashes blue and red.
3. Click "*Yes*" if the pairing confirmation dialog appears on the screen of your smartphone (this step may vary depending on your smartphone).
   If pairing is successful, you hear the voice prompt "*connected*". The LED flashes blue 3 times.

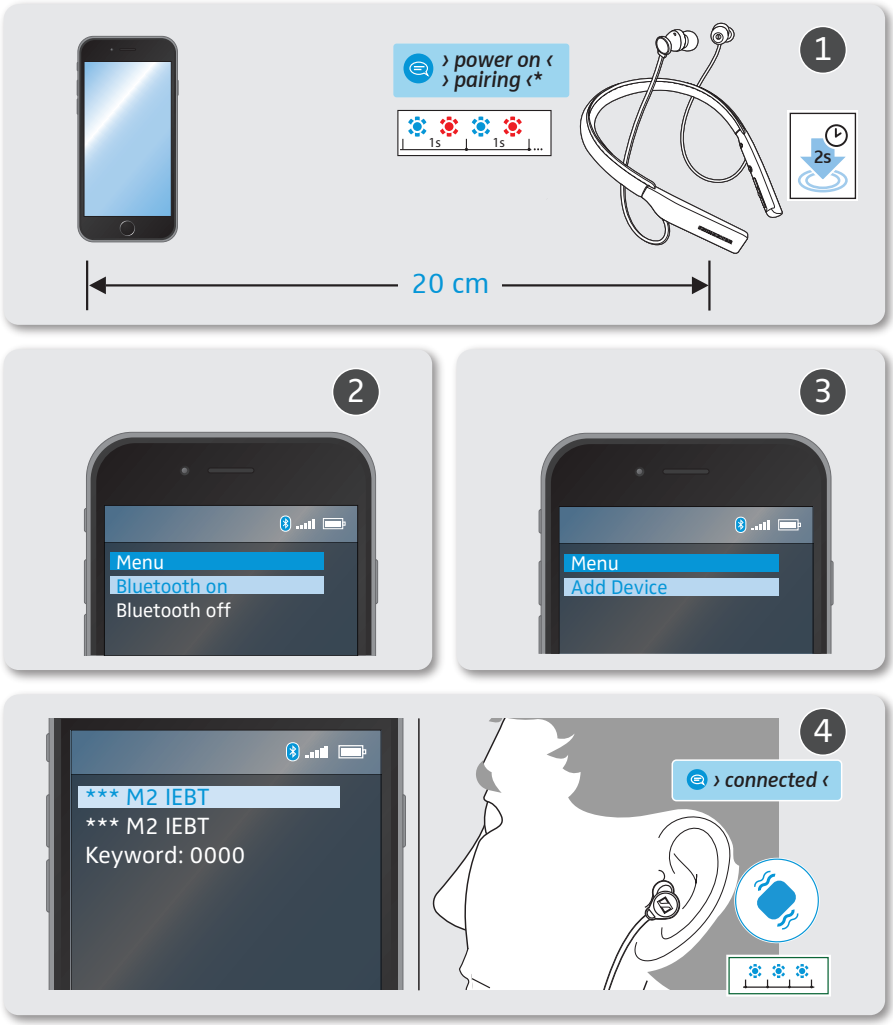


Pairing the earphones with a Bluetooth device

Ensure that the earphones are within the 20 cm range of your smartphone when performing this procedure.

1. Switch the earphones on (see page 18).
   - If you pair the earphones to the device for the first time, they automatically go to the pairing mode.
   - If the headphones don't automatically go to pairing mode, switch the headphones off and press the Power button again for 4 seconds or until you hear the voice prompts "*power on*" and "*pairing*".

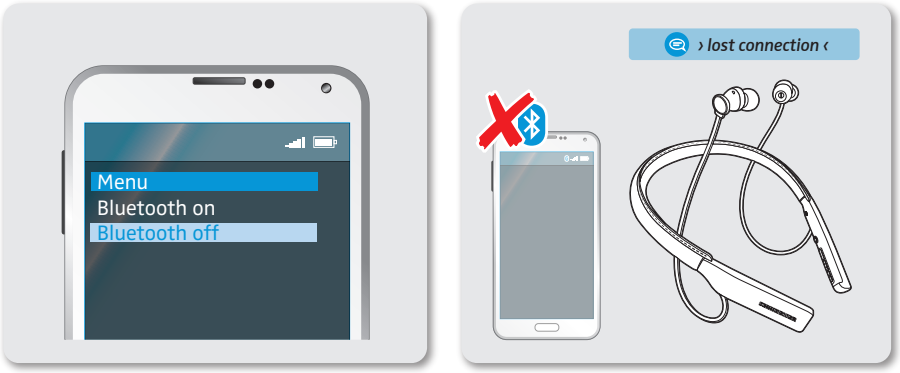
   The LED flashes blue and red. The earphones are in pairing mode.
2. Activate **Bluetooth** on your smartphone.
3. On your smartphone, start a search for **Bluetooth** devices.
   All active **Bluetooth** devices in the proximity of your smartphone are displayed.
4. From the list of found **Bluetooth** devices, select "*M2 IEBT*". If necessary, enter the default PIN code "0000".
   If pairing was successful, you hear the voice prompts "*connected*". The LED flashes blue 3 times.



If no connection is established within 5 minutes, pairing mode is terminated and the earphones return to the disconnected state. Switch the earphones off and repeat the pairing procedure.

Disconnecting the earphones from your Bluetooth device

▶ Deactivate **Bluetooth** on your smartphone.
The headphones are disconnected from the smartphone. The headphones then search for other paired and connected headphones. If no device is found, you hear the voice prompt "*lost connection*".



Using the earphones

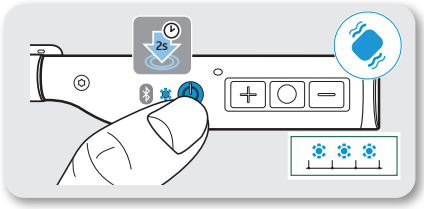
Switching the earphones on

WARNING

Danger due to high volume levels!

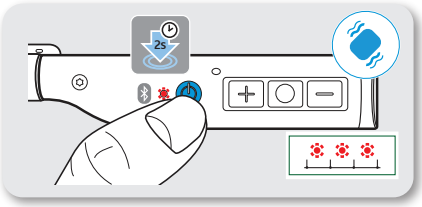
Listening at high volume levels for long periods of time can lead to permanent hearing defects.

- Before putting the earphones on, set the volume to a low level.
- Do not continuously expose yourself to high volume levels.



- Press the power button for 2 seconds.
  The control panel on the neckband vibrates and you hear the voice prompts *"power on"* and *"connected"* and the LED flashes blue 3 times. The earphones are switched on.

Switching the earphones off



- Press the power button for 2 seconds.
  The control panel on the neckband vibrates and you hear the voice prompt *"power off"* and the LED flashes red 3 times. The earphones are off.

Adjusting the volume

WARNING

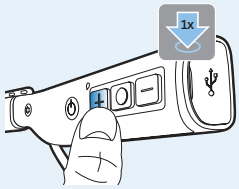
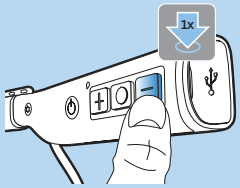
Danger due to high volume levels!

Listening at high volume levels for long periods of time can lead to permanent hearing defects. Switching between audio sources may cause enormous volume jumps that can permanently damage your hearing.

- Before putting the earphones on and before switching between audio sources, adjust the volume to a low level.
- Do not continuously expose yourself to high volume levels.

You can adjust the volume for music and phone calls.

- If you are playing music or are on a call, press the volume +/- buttons to increase or decrease the volume of music or calls.

Gesture	Function	
		Increases the volume
		Decreases the volume

Checking the battery life of the earphones

You can check the remaining play and talk time when the earphones are in idle mode or not actively playing music or making calls.

▶ Quickly press the Power button.
You hear the voice prompt announcing the remaining play time.

Voice prompt	Meaning
"Recharge headset"	Battery is almost empty (less than 2 % charged)
"Below 3 hours play time"	Battery is less than 15 % charged
"Between 3 and 5 hours play time"	Battery is less than 25 % charged
"Between 5 and 11 hours play time"	Battery is less than 50 % charged
"Between 11 and 18 hours play time"	Battery is less than 80 % charged
"Between 18 and 22 hours play time"	Battery is more than 80 % charged

Battery level indicator on your device

The battery level of your earphones may also be displayed on the screen on your smartphone or device.

Playing music

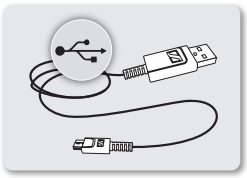
You can play music wirelessly using **Bluetooth** or through the USB cable.

Playing music wirelessly

If your audio source supports AAC or aptX® audio codec, the M2 IEBT Wireless automatically plays your music wirelessly in stunning high-resolution audio quality. If your audio source does not support any of these 2 audio codecs, the M2 IEBT Wireless plays your music in normal audio quality.

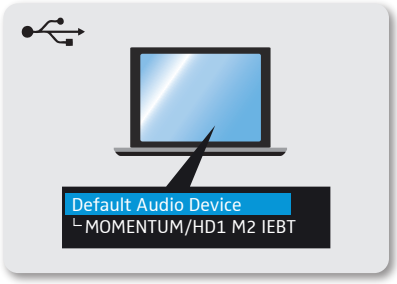
- Pair your earphones with the smartphone, see page 17.
- Play music on your smartphone.
  The music plays through the M2 IEBT Wireless earphones.

Playing music using the USB cable



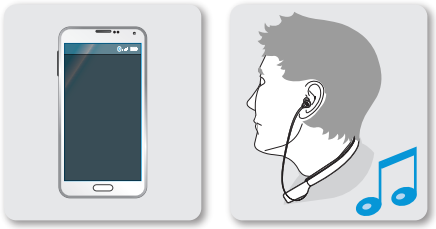
With the supplied USB cable connected, you can play audio content from your computer directly through the M2 IEBT Wireless earphones.

The battery gets charged automatically when you connect the earphones to a computer using the USB cable.



Using the earphones as the default audio device of your computer

- Make sure that the M2 IEBT Wireless is connected to the computer using the USB cable.
- From the Systems Preferences or Control Panel of your computer, select "MOMENTUM/HD1 M2 IEBT" as the default audio (input and output) device.
- Start music playback from the computer.
  The music plays through the M2 IEBT Wireless earphones.



Controlling music playback

The following music functions are only available when the earphones and your device are connected using **Bluetooth** or the USB cable. Some smartphones or music players may not support all functions.

Playing/pausing music

▶ Quickly press the Play/pause button.

Press	Function	
1x	▶ ⏸	Plays or pauses music

Playing the next/previous track

▶ Press and hold on to the the +/- buttons for 2 seconds.

Press	Function	
2s	⏭	Plays the next track in the playlist
2s	⏮	Plays the previous track in the playlist

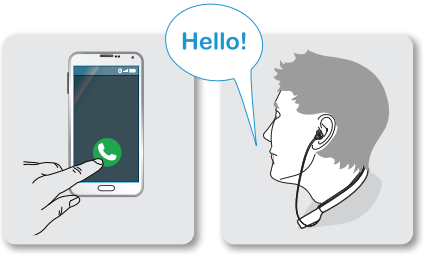
Making calls on the earphones

The following call functions are only available when the earphones and the smartphone are connected using **Bluetooth** or USB cable. Some smartphones may not support all functions.

Making a call

▶ Dial the desired number on your smartphone.

If your smartphone does not automatically transfer the call to the earphones, select the M2 IEBT Wireless as the audio source on your smartphone (see the instruction manual of your smartphone if necessary).



Accepting/rejecting/ending a call

If your earphones are connected to a smartphone and you receive a call, the control panel on the neckband vibrates and the ring tone is played in the earphones. If the battery level of the earphones is sufficient, the LED flashes blue; if not, the LED flashes red.

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

▶ Press the Play/pause button accordingly:

Press	Function	Signal
1x	Accepts a call	
1x	Ends a call	*"Call ended"*
1s	Rejects a call	*"Call rejected"*
1x	Accepts an incoming call and ends the active call	
2x	Puts the call on hold	
2x	Accepts an incoming call and puts an active call on hold	
2x	Toggles between 2 active calls	
1s	Rejects an incoming call and continues the active call	

Muting/unmuting a call

▶ Quickly press the Play/pause button twice while on a call.

Gesture	Function		Signal
		Mutes the call	
		Unmutes the call	

Transferring a call to/from the earphones

When a call has been established, you can transfer the call between the earphones and the smartphone. The control panel on the neckband vibrates when the transfer is successful.

▶ Press and hold the Play/pause for a second.

Press	Function	
		Transfers a call from the earphones to the smartphone
		Transfers a call from the smartphone to the earphones

Redialing

The redialing function must be supported by your smartphone or **Bluetooth** device (with HFP profile). This function may be required to be activated on your smartphone.

▶ Press the Play/pause button twice.

Press	Function		Signal
		Redials the last number called	*"redialling"*
		Cancels redialing	*"call ended"*

Voice control function

The voice control function is only supported by **Bluetooth** smartphones with HFP profile.

You can use the voice control function when the earphones are in idle mode or not actively playing music or making calls.

1. Press the Play/pause button and hold for a second.

Press	Function		Signal
		Starts voice control	*"voice dialling"*

2. Say your voice command, such as *"Call Jane"*.
   The **Bluetooth** smartphone calls Jane.

   –

Care and maintenance

CAUTION

Liquids can damage the electronics of the product!

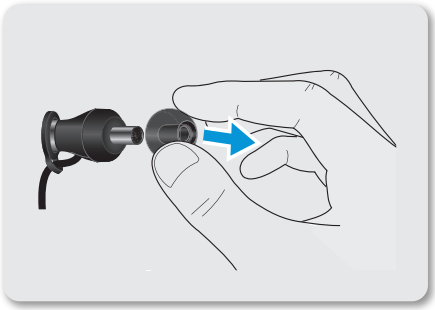
Liquids entering the housing of the product can cause a short-circuit and damage the electronics.

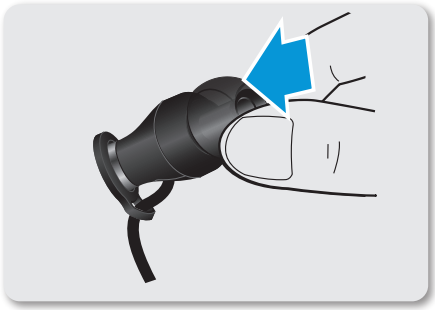
- Keep all liquids away from this product.
- Do not use any solvents or cleaning agents.

Changing ear adaptors

You can change the ear adaptors that's perfect for the size of your ear canal. Spare ear adaptors are available from your local Sennheiser partner.

1. Lightly pull the ear adaptor away from the ear phones until it is completely detached.
2. Secure the new ear adaptor by pushing them into the ear canal tube of the earphones. Ensure that they are completely locked in place.





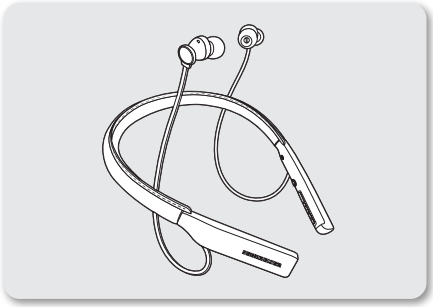
Cleaning and maintaining leather parts

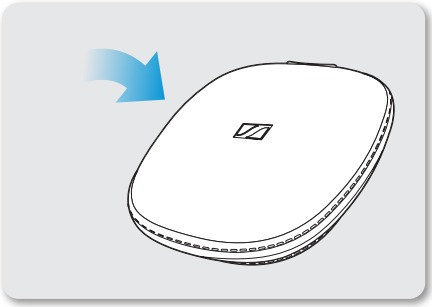
Regularly clean and maintain the leather parts to keep the product in pristine condition and increase its lifespan.

- Gently wipe leather parts periodically with a clean, soft cloth dampened with water.
- Do not use leather polish, detergents or harsh soaps.
- Do not store your earphones in a damp or humid environment.

Storage and handling

To keep the earphones in good condition and to avoid nicks and scratches, always store the earphones on a carry case when not in use or when travelling.





Replacing/removing the rechargeable battery

CAUTION

Danger of damage to the product!

During the warranty period, the rechargeable battery must only be replaced by an authorized Sennheiser service center, otherwise the warranty will be null and void.

- Contact your Sennheiser service center if the rechargeable battery needs to be replaced or removed. To find a Sennheiser service partner in your country, visit www.sennheiser.com.

Outside the warranty period, the rechargeable batteries may be replaced or removed by any qualified service center in an appropriate manner. Instructions on how to replace or remove the batteries for qualified service centers are available from the Sennheiser service partner.

Troubleshooting

Problem	Possible cause	Possible solution	Page
Earphones cannot be switched on	Battery is empty	Charge the earphones.	13
	Battery is completely exhausted/worn out	Visit an authorized Sennheiser service center for battery replacement.	
No audio signal	Earphones are not paired with your device	Check if the earphones are paired. If necessary, pair the earphones with your device again.	14
	Volume too low	Increase the volume.	19
	Earphones are switched off	Switch the earphones on.	18
Earphones cannot connect	Pairing does not work	Check if your smartphone supports the HFP **Bluetooth** profile.	
	Smartphone is switched off	Switch your smartphone on.	
	Bluetooth is deactivated on your smartphone	Activate **Bluetooth** on your smartphone.	
Earphones do not respond to any button press	Function of the earphones is faulty	Clear the pairing settings from the earphones.	31

If you encounter a problem that is not listed in the table, or if the solutions provided do not work, please contact an authorized Sennheiser service partner for assistance.

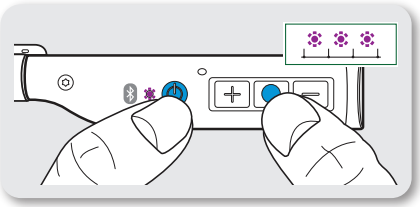
To find a Sennheiser service partner in your country, visit www.sennheiser.com.

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 the earphones leave the **Bluetooth** transmission range of the smartphone, the sound quality deteriorates and you repeatedly hear the voice prompt *"lost connection"*. At this point, the connection breaks down completely. You can re-establish the connection if you re-enter the **Bluetooth** transmission range and you hear the voice prompt *"connected"*.

Clearing previously paired devices



- Set the earphones to pairing mode, see page 16.
  The LED flashes blue and red. The headphones are in pairing mode.
- Simultaneously press the Play/pause button and the power button for 4 seconds.
  The LED flashes purple 3 times. The earphones are permanently disconnected from all devices and immediately go into pairing mode.

Specifications

M2 IEBT

Ear coupling	Ear Canal
Frequency response	15 - 22,000 Hz
Transducer principle	Dynamic
Sound pressure level (SPL)	112 dB (passive: 1 kHz/ 0 dBFS)
Impedance	18 Ω
THD (1 kHz, 100 dB)	< 0.5 %
Pick-up pattern (speech audio)	Omni-directional
Input power	*3.7 VDC, 170 mAh:* Built-in rechargeable Lithium-Polymer battery *5 VDC, 500 mA:* USB charging
Operating time	10 hours (A2DP)
Temperature range	*Operation:* 0 to 40°C/32 to 104°F *Storage:* -25 to 70°C/-13 to 158°F
Relative humidity	*Operation:* 10 to 80%, non condensing *Storage:* 10 to 90%
Charging time	1.5 hours
Weight	approx. 53 g

Bluetooth

Version	4.1, class 1
Transmission frequency	2402 MHz to 2480 MHz
Modulation type	GFSK, π/4 DQPSK
Profiles	HFP, AVRCP, A2DP
RF Output power	10 mW (max)
Supported Codec	SBC, AAC, aptX®

NFC

Frequency	13.56 MHz
Modulation type	ASK

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