



CX 7.00BT

In-Ear Wireless

Instruction Manual

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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.
- ▶ Only use the product in environments where wireless **Bluetooth®** 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 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).

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.
- ▶ Use the product with care and store it in a clean, dust-free environment.



Intended use/Liability

These In-Ear wireless headphones 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.



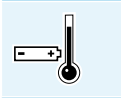
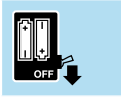



Safety instructions for the Lithium-Polymer battery pack

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 CX 7.00BT In-Ear Wireless headphones

The CX 7.00BT In-Ear Wireless headphones deliver detailed sound and enhanced bass with **Bluetooth** 4.1 and Qualcomm® aptX™ for true Hi-Fi sound. A lightweight ergonomic design and ten-hour battery lets you enjoy a great all day listening experience.

Features

- High quality headphones tuned for clarity and superior bass
- Ergonomic and robust around-the-neck design for all day listening experience
- Supports Qualcomm® aptX™ for true Hi-Fi sound
- 10 hour battery life with 1.5 hour charging
- Supports USB audio
- Immediate pairing to smart devices using NFC

Bluetooth



The CX 7.00BT In-Ear Wireless headphones comply with the **Bluetooth** 4.1 standard and are compatible with all **Bluetooth** 1.1, 1.2, 2.0, 2.1, 3.0, 4.0 and devices with the following profiles: Hands Free Profile (HFP), Advanced Audio Distribution Profile (A2DP), and Audio/Video Remote Control Profile (AVRCP).

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.

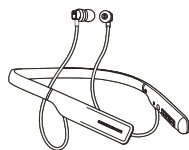
aptX™

Qualcomm®
aptX™



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

Package includes



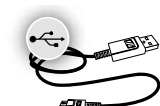
Neckband headphones



Carry case



Ear adapters



USB cable with micro-USB connector



Quick guide



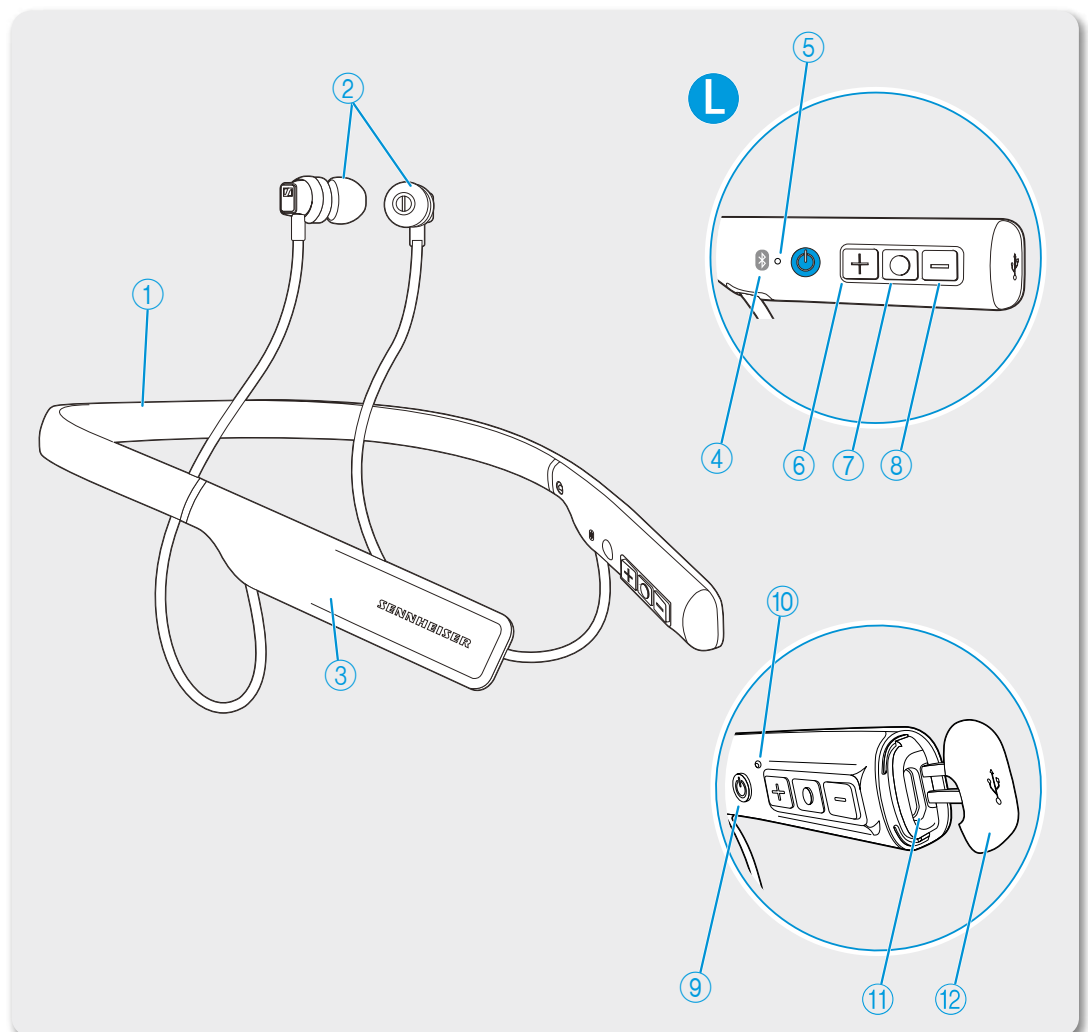
Safety guide



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 headphones




- | | |
|-------------------------|-------------------------|
| ① Neckband | ⑦ Play/pause button |
| ② Ear adapters | ⑧ Volume/track - button |
| ③ NFC panel | ⑨ Power button |
| ④ Bluetooth antenna | ⑩ Microphone |
| ⑤ LED | ⑪ Micro-USB input |
| ⑥ Volume/track + button | ⑫ Micro-USB cover |

Overview of pictograms




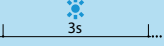
Pictograms for pressing a button

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


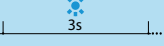



Pictograms for alerts and tones

Pictogram	Meaning
	You hear beeps in the headphones


Pictograms for the LED

Pictogram	Meaning
	The LED lights up
	The intervals signify flashing
	The LED lights up/flashs continuously
	The time the LED lights up before blinking

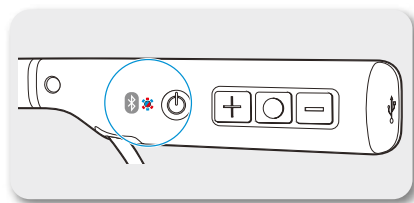
Examples of pictograms that may be used in this manual:

Pictogram	Meaning
	The LED flashes continuously
	The LED lights up for 3 seconds, then off, and repeat
	The LED lights up, then off for 2 seconds, and repeat
	The LED lights up continuously
	The LED continuously flashes blue and red per second

The pictogram “i”

 Notes marked with the pictogram “i” provide useful information on the use of the headphones.

Overview of the LED indications



LED indications during operation

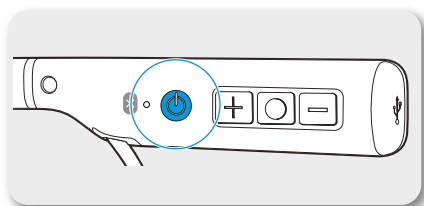
LED	Meaning
	The headphones switch on
	Pairing/connecting with a device is successful
	The headphones switch off
	Pairing with a device is unsuccessful
	The headphones are in pairing mode
	The device is/devices are successfully cleared from the headphones
	The headphones are in idle mode (e.g. headphones are paired but not connected to the device)



LED indications during calls

LED	Meaning
	Incoming call
	Incoming call with an almost empty battery

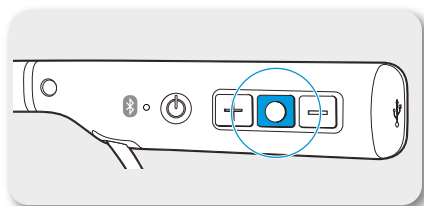
Overview of buttons




Power button



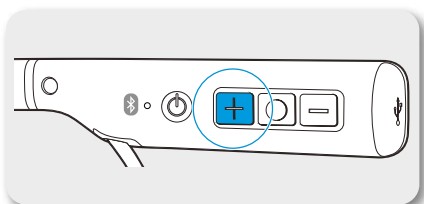
Press	Function	Page
	Switches the headphones on and off	18
	Checks the battery life	20



Play/pause button



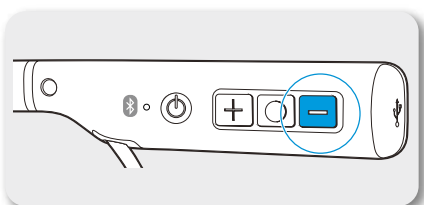
Press	Function	Page
	Accepts/ends a call	24
	Accepts an incoming call and ends the active call	24
	Plays/pauses a track	23
	Rejects a call	24
	Activates the voice control	26
	Transfers a call between the headphones and the smartphone	25
	Accepts an incoming call and holds the active call/ Toggles between 2 calls	24



Volume/track + button



Press	Function	Page
	Increases the volume	19
	Plays the next track	23

Volume/track - button



Press	Function	Page
	Decreases the volume	19
	Plays the previous track	23

Getting started

Charging basics



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

When the battery is almost empty or when the headphones are being charged, the LED lights up or flashes as indicated in the following table and a voice prompt announces the charge condition of the battery. When the battery charge drops to a low level, a voice prompt asks you to recharge the headphones.

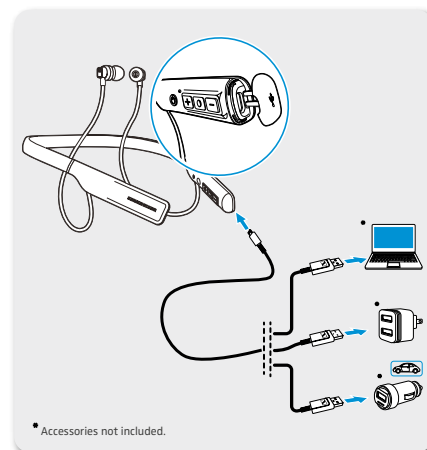
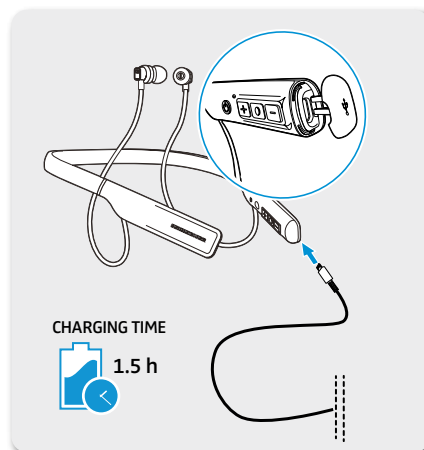
It is recommended to charge the headphones using only the supplied USB cable. If you are charging using an external USB-power adapter, it is recommended to use an adapter with an output rating of 500 mA or higher.

LED	Meaning	Voice prompt
	Battery is almost empty (less than 2 % charged)	"recharge headset"
	Battery is less than 10% charged	"below 1 hour play time"
	Battery is less than 20% charged	"between 1 and 2 hours play time"
	Battery is less than 50% charged	"between 2 and 5 hours play time"
	Battery is more than 50% charged	"between 5 and 10 hours play time"

Charging the headphones

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 LED flashes/lights up depending on the battery life of the headphones. The headphones utilize an intelligent battery charging technology that prevents overcharging.



Charging time may take longer at ambient temperatures below 15°C/ 59°F.

For more information on playing music using the USB cable, see page 22.

Pairing the headphones

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 headphones in locations where **Bluetooth** wireless transmission is permitted.

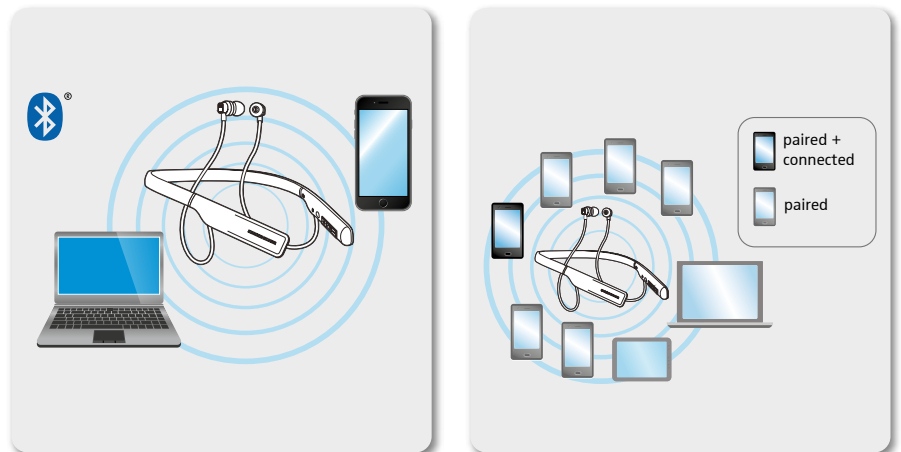
The CX 7.00BT In-Ear Wireless headphones comply with the **Bluetooth 4.1** standard. In order that data can be transmitted wirelessly using **Bluetooth** technology, you have to pair your headphones with compatible **Bluetooth** devices that support the following profiles:

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

When you switch the headphones on for the first time, they automatically go to pairing mode. If the headphones have already been paired with a few devices, they automatically try to connect to the most-recently connected **Bluetooth** device when switched on. The headphones can save the connection profiles of up to eight **Bluetooth** devices or smartphones.

If you pair the headphones 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 headphones again.

You can easily pair and connect your wireless headphones with your smart-phone if the device supports the Near Field Communication (NFC) technology.



To pair and connect the headphones to a PC or Mac, it is recommended to use a Sennheiser **Bluetooth** USB dongle.



Pairing the headphones with a Bluetooth device using NFC

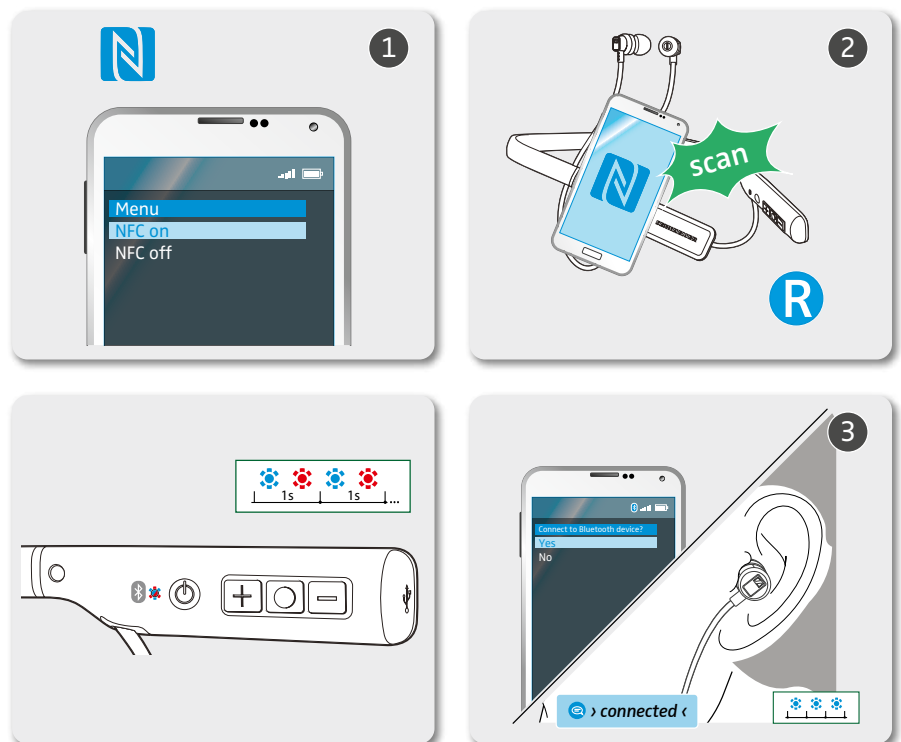
The following sections describe, using a smartphone as an example, how to pair your CX 7.00BT In-Ear Wireless headphones with a **Bluetooth** device using NFC. If the instructions provided do not work on your device, proceed as described in the instruction manual of the device.

You can pair the headphones with 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 neckband, see NFC panel location on page 7.
You hear the voice prompt *"power on"* and a beep sound. The LED flashes blue and red.

i At this point, if you decide to cancel pairing, press the play/pause button once. The headphones go to idle mode.

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 was successful, you hear the voice prompt *"connected"*. The LED flashes blue 3 times.





Pairing the headphones with a Bluetooth device

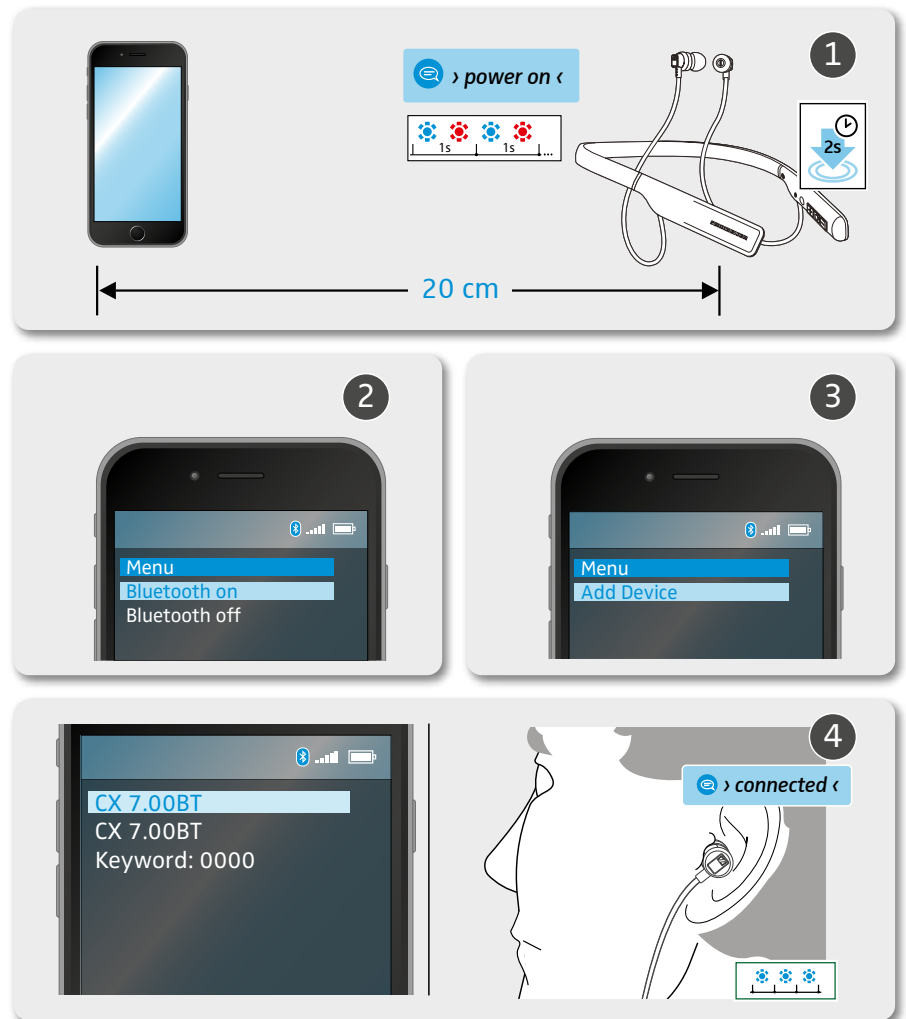
Ensure that the headphones are within the 20 cm range of your smartphone when performing this procedure.

1. Switch the headphones on (see page 18).
 - If you pair the headphones to the device for the first time, they automatically go to 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 prompt "power on" and a beep sound.

The LED flashes blue and red. The headphones are in pairing mode.

i At this point, if you decide to cancel pairing, press the play/pause button once. The headphones go to idle 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 "CX 7.00BT". If necessary, enter the default PIN code "0000".
If pairing was successful, you hear the voice prompt "connected". The LED flashes blue 3 times.

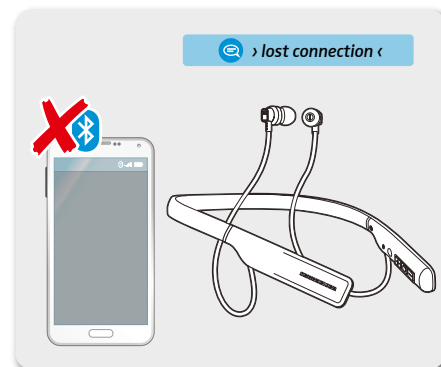
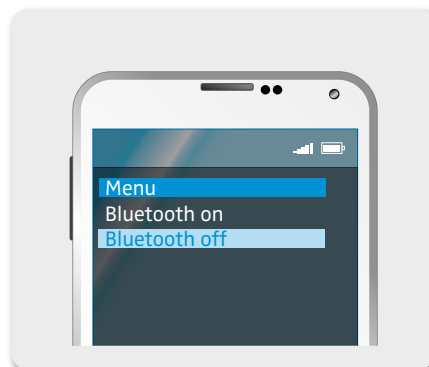


i If no connection is established within 5 minutes, pairing mode is terminated and the headphones switch off. If necessary, repeat the pairing procedure.

Disconnecting the headphones from your Bluetooth device

- ▶ Deactivate **Bluetooth** on your smartphone.

The headphones are disconnected from the smartphone. The headphones then search for other paired devices. If no device is found, you hear the voice prompt *"lost connection"*. The headphones go to idle mode.



Using the headphones

Switching the headphones on

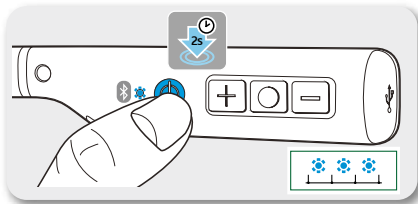
WARNING

Danger due to high volume levels!



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

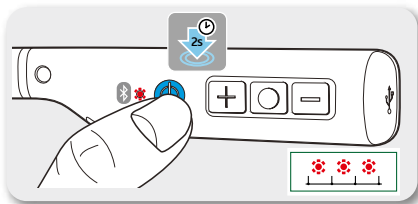
- ▶ Before putting the headphones on, set the volume to a low level.
- ▶ Do not continuously expose yourself to high volume levels.



- ▶ Press the power button for 2 seconds.
You hear the voice prompts *"power on"* and *"connected"*. The LED flashes blue 3 times.

Switching the headphones off

- ▶ Press the power button for 2 seconds.
You hear the voice prompt *"power off"*. The LED flashes red 3 times.



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 headphones 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. These functions are available when the headphones and the device are connected using **Bluetooth** or USB cable.

- ▶ Press the volume/track + or - button once to increase or decrease the volume. When the minimum or maximum volume is reached, you hear an alert.

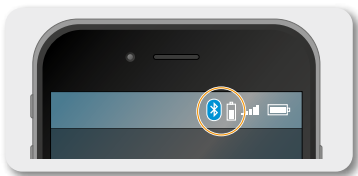
Press	Function	
		Increases the volume
		Decreases the volume

Checking the battery life of the headphones

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

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

Voice prompt	Meaning
<i>"recharge headset"</i>	Battery is almost empty (less than 2% charged)
<i>"below 1 hour play time"</i>	Battery is less than 10% charged
<i>"between 1 and 2 hours play time"</i>	Battery is less than 20% charged
<i>"between 2 and 5 hours play time"</i>	Battery is less than 50% charged
<i>"between 5 and 10 hours play time"</i>	Battery is more than 50% charged



Battery life indicator on your device

The battery life of your headphones may also be displayed on the screen of your smartphone or device.

Playing music

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

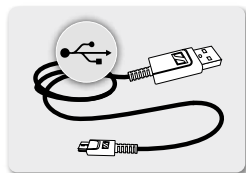
Playing music wirelessly



If your audio source supports aptX audio codec, the CX 7.00BT In-Ear Wireless automatically plays your music wirelessly in stunning high-resolution audio quality. If the audio source does not support aptX audio codec, the CX 7.00BT In-Ear Wireless plays music in normal audio quality.

- ▶ Pair and connect the headphones with your smartphone, see page 14.
- ▶ Play music on your smartphone.
The music plays through the CX 7.00BT In-Ear Wireless headphones.

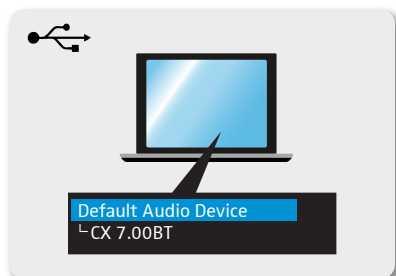
Playing music using the USB cable



With the supplied USB cable connected, you can play audio content from your computer directly through the CX 7.00BT In-Ear Wireless headphones.

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

Using the headphones as the default audio device of your computer



- ▶ Make sure that the CX 7.00BT In-Ear Wireless is connected to the computer using the USB cable.
- ▶ From the Systems Preferences or Control Panel of your computer, select "CX 7.00BT" as the default audio (input and output) device.
- ▶ Start music playback from the computer.
The music plays through the CX 7.00BT In-Ear Wireless headphones.

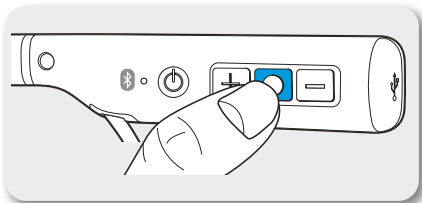
Controlling music playback





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

Playing/pausing music

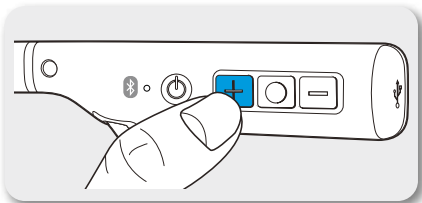
- ▶ Quickly press the play/pause button.





Press	Function	
		Plays or pauses music

Playing the next track

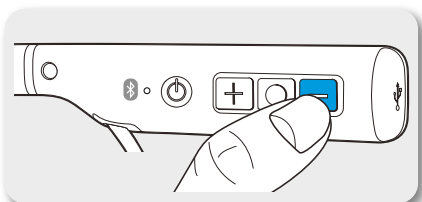
- ▶ Press and hold the volume/track + button for 2 seconds to play the next track.




Press	Function	
		Plays the next track in the playlist

Playing the previous track

- ▶ Press and hold the volume/track - button for 2 seconds to play the previous track.

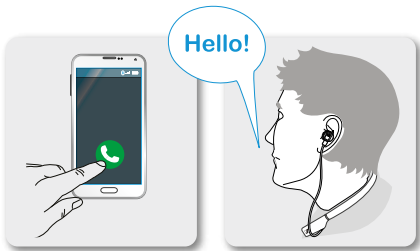


Press	Function	
		Plays the previous track in the playlist

Making calls on the headphones



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



Making a call

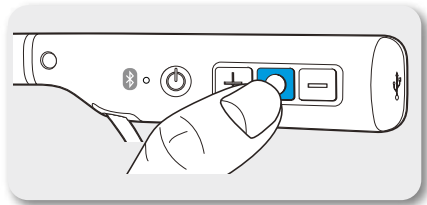
- ▶ Dial the desired number on your smartphone.
- i** If your smartphone does not automatically transfer the call to the headphones, select CX 7.00BT In-Ear Wireless as the audio source on your smartphone (see the instruction manual of your smartphone if necessary).

Accepting/rejecting/ending a call

If your headphones are connected to a smartphone and you receive a call, the ring tone is played in the headphones. The LED flashes purple.

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.

Press	Function		Signal
		Mutes the call	
		Unmutes the call	

Transferring a call to/from the headphones

When a call has been established, you can transfer the call between the headphones and the smartphone.

► Press and hold the play/pause for a second.





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

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.

You can use this function when the headphones are not actively playing music or are used for making calls.

► Press the play/pause button twice.



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

Voice control function

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

You can use this function when the headphones are not used for making calls.

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

Press	Function		Signal
		Starts voice control	<i>"voice dialing"</i>

- 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!



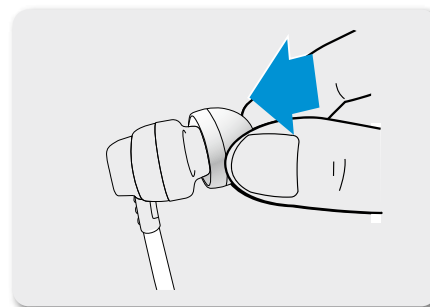
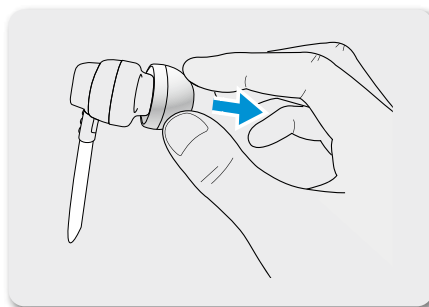
Liquids entering the housing of the product can cause a short-circuit and damage the electronics.

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

Changing ear adapters

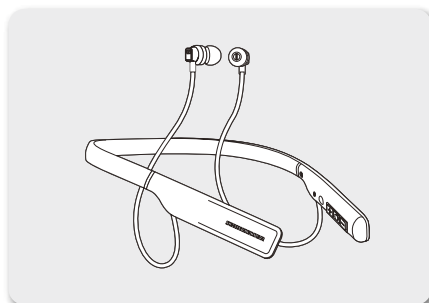
You can change ear adapters depending on the size of your ear canal. Spare ear adapters are available from your local Sennheiser partner.

1. Lightly pull the ear adapter away from the in-ear sound tunnel until it is completely detached.
2. Secure the new ear adapter by pushing it back onto the in-ear sound tunnel. Ensure that it completely locks into place.



Storage and handling

To keep the headphones in good condition and to avoid nicks and scratches, always store the headphones in the carry case when not in use or when carrying them around.



Information about the rechargeable battery

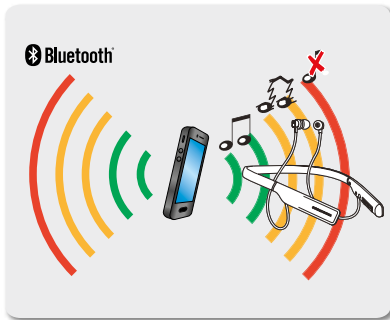
Sennheiser ensures and guarantees that the battery performs at its optimum upon purchase of the headphones. Upon purchase or within the warranty period, if you suspect that the battery is obviously defective, please immediately return the headphones to any Sennheiser service partner.

Troubleshooting

Problem	Possible cause	Possible solution	Page
Headphones cannot be switched on	Battery is empty	Charge the headphones.	13
No audio signal	Headphones are not paired with your device	Check if the headphones are paired. If necessary, pair the headphones with your device again.	14
	Volume too low	Increase the volume.	19
	Headphones are switched off	Switch the headphones on.	18
Headphones 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.	
Headphones do not respond to any button press	Function of the headphones is faulty	Clear the pairing settings from the headphones.	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.



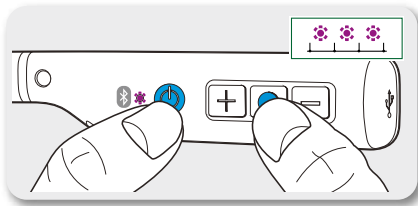
Leaving the Bluetooth transmission range

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 headphones leave the **Bluetooth** transmission range of the smartphone, the sound quality deteriorates and you 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"*.

- ▶ To re-establish the connection, press the play/pause button.

Clearing previously paired devices



- ▶ Set the headphones 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 headphones are permanently disconnected from all devices and immediately go into pairing mode.

Specifications

CX 7.00BT In-Ear Wireless

Ear coupling	ear canal
Frequency response	17 - 21,000 Hz
Transducer principle	dynamic
Sound pressure level (SPL)	112 dB (passive: 1 kHz/ 0 dBFS)
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
Charging time	1.5 hours
Weight	approx. 48 g



Bluetooth

Version	4.1, class 1
Transmission frequency	2402 – 2480 MHz
Modulation type	GFSK, $\pi/4$ DQPSK, 8DPSK
Profiles	HFP, AVRCP, A2DP
RF Output power	10 mW (max)
Supported codec	SBC, aptX



NFC

Frequency	13.56 MHz
Modulation type	ASK

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