

Model: CX 120BT

In-Ear Wireless



Instruction manual

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

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SENNHEISER

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Version: 09/20 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. 
- ▷ 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 and the cardiac pacemaker, implanted defibrillator, or other implant. 
- ▷ 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.
- ▷ 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 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 (hairdryer, heater, extended exposure to sunlight, etc.) to avoid corrosion or deformation.
- ▷ Use only attachments/accessories/spare parts supplied or recommended by Sennheiser.
- ▷ Clean the product only with a soft, dry cloth.







Safety instructions for Lithium-Polymer 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.
	Charge products with built-in rechargeable batteries at ambient temperatures between 10 and 40°C/50 and 104°F.
	Do not heat above 60 °C/140 °F, e.g. do not expose to sunlight or throw into fire.
	When not using the product for extended periods of time, charge its built-in rechargeable battery regularly (about every 3 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 data collection and processing

This product stores individual settings such as the volume and the Bluetooth addresses 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.

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



Earphones



USB charging cable with micro-USB and USB-A connector



Silicone ear adapter set in the following sizes:
S, M (pre-mounted upon delivery) and L



Quick guide/Safety Guide

Online you can find:

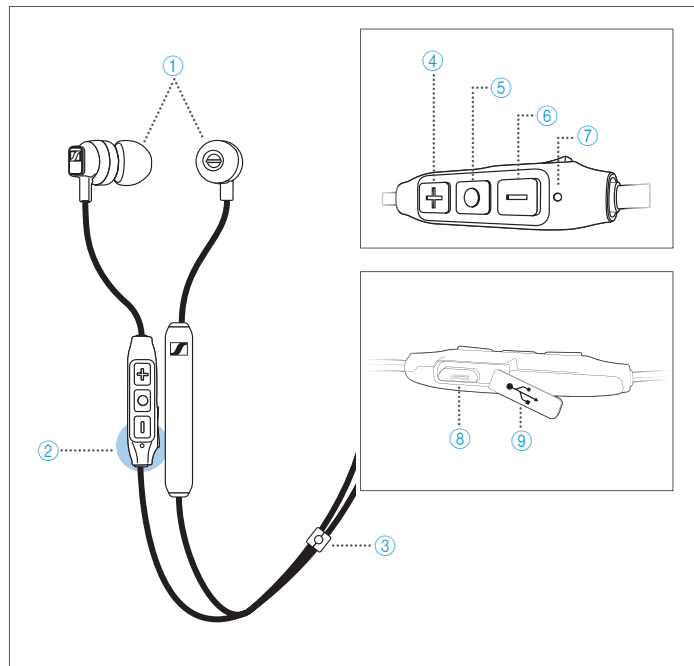
- this detailed instruction manual and additional information (www.sennheiser.com/download)



You can find a list of accessories on the CX 120BT product page at www.sennheiser.com. Contact your local Sennheiser partner: www.sennheiser.com > „Service & Support“.

Product overview

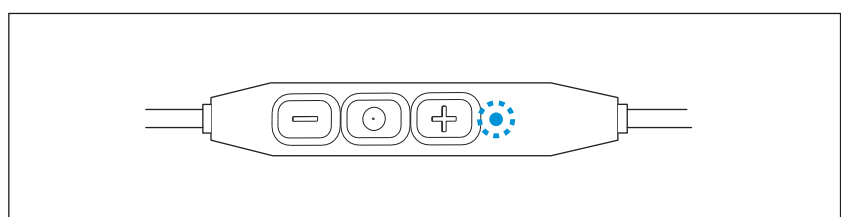
Model: CX 120BT











- ① Earphones
- ② Bluetooth antenna (not visible)
- ③ Cable holder
- ④ Volume + button / track +
- ⑤ Multi-function button
- ⑥ Volume - button / track -
- ⑦ LED
- ⑧ Micro-USB input
- ⑨ Cover for USB socket



Overview of the LED display

During operation



LED		Meaning; the headphones
	lights up red	are being charged
	lights up blue	are fully charged
	flashes blue	are switched on
	flashes red-blue	are in Bluetooth pairing mode
	flashes blue	Bluetooth pairing successful
	flashes red	Bluetooth pairing failed
	flashes blue	are connected to a device via Bluetooth
	flashes red	are switched off

During phone calls

LED		Meaning
	flashes purple	Incoming call
	flashes red	Incoming call and the rechargeable battery of the headphones is almost empty



If the LED does not light up immediately during charging, clean the charging contacts and charge the headphones until the LED lights up again (> 9).

Notes on voice prompts

The headphones output voice prompts for the following functions. 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).

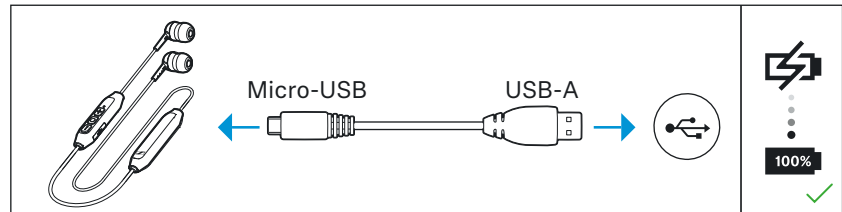
Voice prompt	Meaning/headphones
"Power on"	are switched on
"Power off"	are switched off
"Device (1) (2) connected"	are connected to device 1 or 2
"Lost connection"	are not connected via Bluetooth
"Pairing"	are in Bluetooth pairing mode
"Pairing successful"	Bluetooth pairing successful
"Pairing failed"	Bluetooth pairing failed
"Call rejected"	incoming call rejected
"Call ended"	call ended
"Redialing"	redials the last dialed number
"Voice dialing"	Voice dialing is activated

Voice prompt	Meaning/headphones
“Mute on”	Microphone is muted, active call is put on hold
“Mute off”	Microphone is reactivated
“Recharge headset”	Rechargeable battery is empty. Recharge the headphones.

Getting started

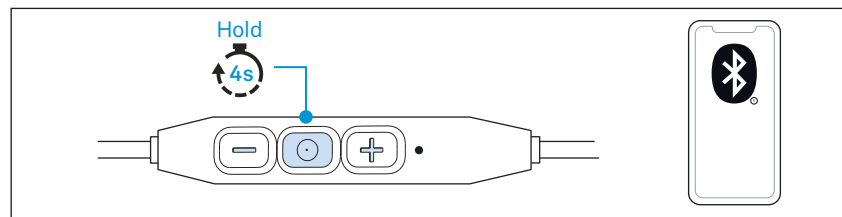
1. Charging the rechargeable battery

The headphones' rechargeable battery is not fully charged upon delivery. Before using the headphones for the first time, charge the rechargeable battery for a complete charging cycle without interruption (> 9).

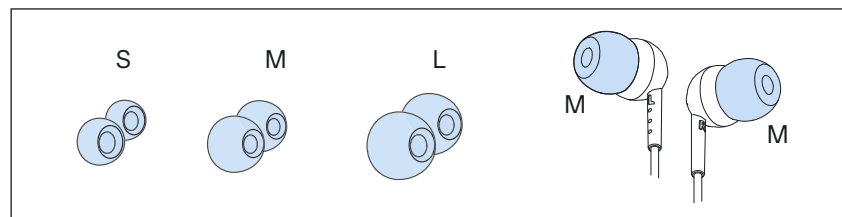


2. Connecting the headphones to a Bluetooth device

Connect the headphones to your smartphone via Bluetooth (> 9).



3. Selecting suitable ear adapters for optimum fit of the headphones



The perceived sound quality and bass performance depends to a large extent on the correct fit of the headphones in the ear.

- ▷ Test which ear adapter size gives you the best sound quality and the best wearing comfort.
- ▷ You can choose between 3 different ear adapters in size S, M and L.

The ear adapters must fit snugly in the ear canal and completely seal your ears (> 12).

Using the headphones

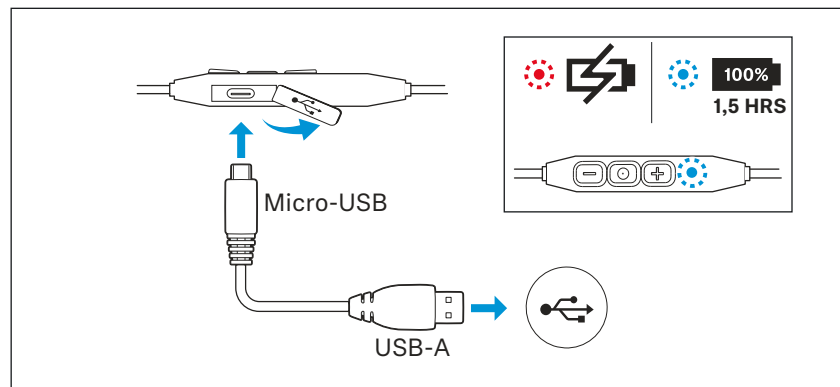
Information on the rechargeable battery and the charging process

The headphones have a built-in rechargeable battery. A complete charging cycle takes approx. 1.5 hours. Before using the headphones for the first time, charge the rechargeable battery for a complete charging cycle without interruption.



When the headphones are being charged, the LED lights up (> 5).

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

Charging the headphones' rechargeable battery



1. Connect the micro-USB connector of the USB cable to the micro-USB socket of the headphones.
2. 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 charging process of the headphones begins. The LED displays the charge status:

LED		Meaning
	lights up red	Rechargeable battery is being charged
	lights up blue	Rechargeable battery is fully charged

Connecting the headphones to a Bluetooth device

To be able to use the Bluetooth wireless connection, you must register both devices (headphones 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.



If you switch on the headphones for the first time, they automatically switch to pairing mode.

Information on the Bluetooth wireless connection

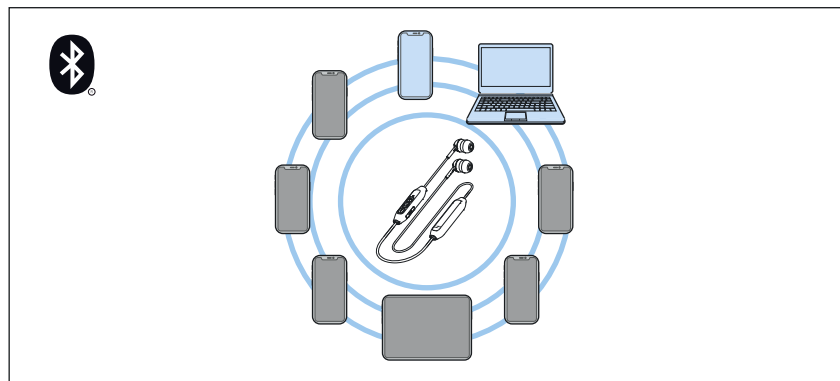
The headphones are compatible with Bluetooth 4.2.

If your audio source supports aptX audio encoding, music is automatically played in high audio quality: 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.

On switch-on, the headphones automatically try to connect to the last two connected Bluetooth devices. The headphones can save the connection profiles of up to eight Bluetooth devices with which they have been paired.

If you pair the headphones 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 headphones again.



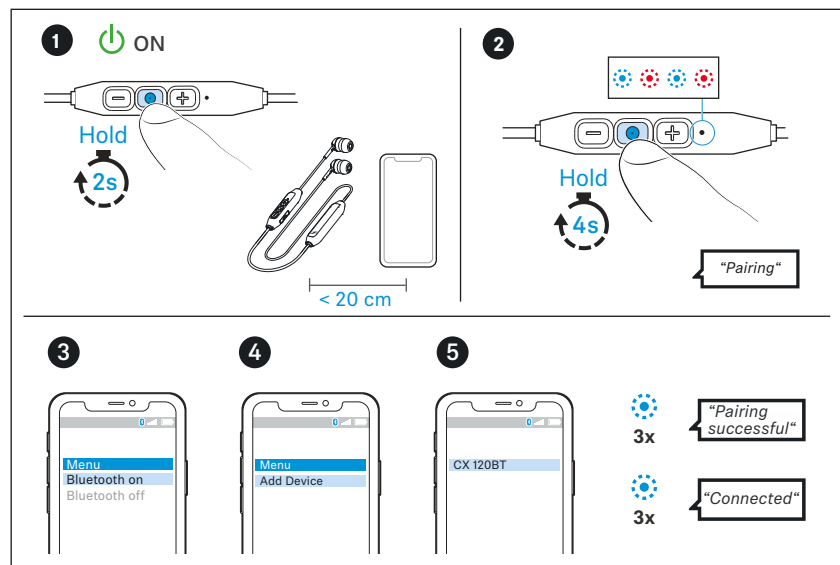
Paired and connected Bluetooth device



Paired Bluetooth device (currently not connected)

Pairing the headphones with a Bluetooth device

1. Switch the headphones on (> 13) and place them close to the Bluetooth device (max. 20 cm).
2. Press and hold the multi-function button for 4 seconds.
You hear the voice prompt “power on” and a beep sound. The LED flashes blue and red. The earphones 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 Bluetooth device are displayed.
5. From the list of found Bluetooth devices, select “CX 120BT”. If necessary, enter the default pin code “0000”.
If pairing was successful, you hear the voice prompt “Connected”. The LED flashes blue 3x.

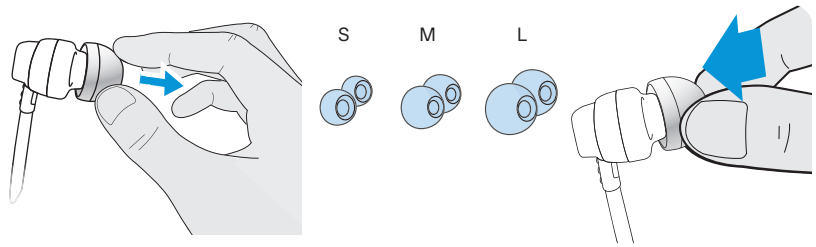


i If no connection is established within 5 minutes, pairing mode is terminated and the headphones switch off. If necessary, repeat the steps described above.

Disconnecting the headphones from a Bluetooth device

- ▷ Via the menu of your Bluetooth device, disconnect the connection to the headphones.
The headphones are disconnected from the Bluetooth device. You hear the voice prompt “Lost connection”. The headphones then search for other paired devices. If no device is found within 5 minutes, the headphones switch to idle mode.

Selecting suitable ear adapters for optimum fit of the headphones

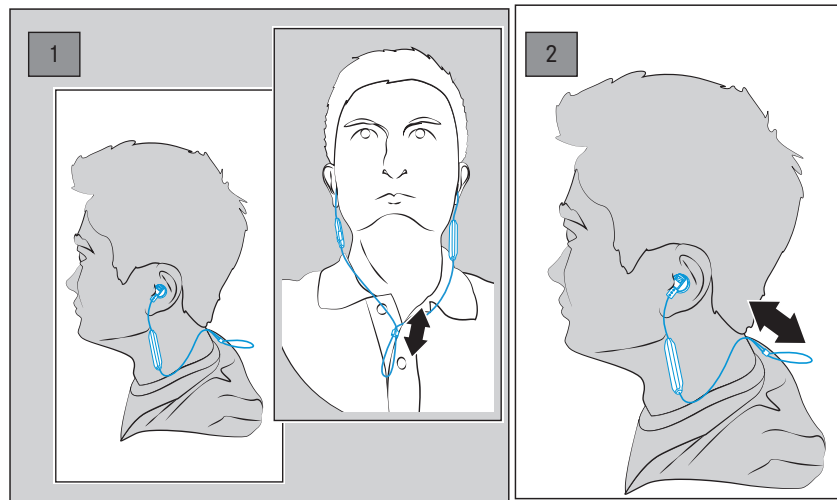


The perceived sound quality and bass performance of the headphones depends to a large extent on their correct fit in the ear.

- ▷ 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 3 different ear adapters in size S, M and L. The ear adapters must fit snugly in the ear canal and completely seal your ears.

Wearing the headphones



- ▷ You can wear the headphones with the cables either behind your head or in front.
- ▷ Assign the right earphone to your right ear and the left earphone to your left ear.
- ▷ Press the earphones lightly into the ear canal.
- ▷ Adjust the cable holder.

i If the earphones fit too loose in the ear canal and fall out easily:

- ▷ Try larger ear adapters.

i If you feel immediate pressure when wearing the earphones:

- ▷ Try smaller ear adapters.

Switching the headphones on

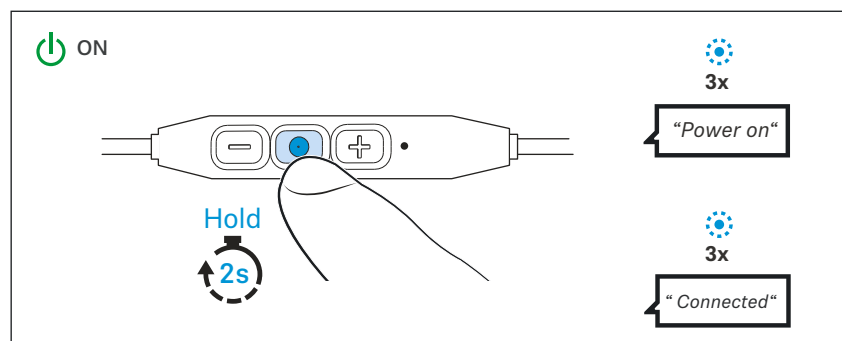


WARNING

Danger of hearing damage due to high volume levels!

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

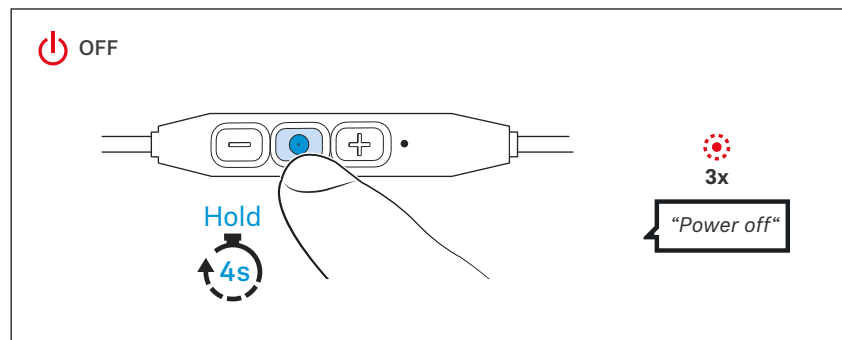
- ▷ Before putting the headphones on, adjust the volume to a low level (> 15).
- ▷ Do not continuously expose yourself to high volume levels.



- Press the multi-function button for 2 seconds.
The headphones switch on. You hear the voice prompt “Power on” and the LED display flashes blue 3x.
If a paired Bluetooth device is within the transmission range, you hear the voice prompt “Device (1) connected”. The LED flashes blue 3x.

- i** Make sure that Bluetooth is already activated on your Bluetooth device when switching on the headphones.
- i** If Bluetooth is activated and the headphones cannot find a paired Bluetooth device within a few minutes, you hear the voice prompt “Lost connection”. The LED flashes red. The headphones switch to standby mode.

Switching the headphones off



- Press the multi-function button for 4 seconds.
You hear the voice prompt “Power off” and the LED flashes red 3x.
- i** The headphones automatically switch to idle mode if no paired Bluetooth device can be found within 5 minutes. You can wake up the headphones from idle mode by pressing the multi-function button for approx. 3 seconds.

Retrieving information on the battery charge status

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.

- Press the volume - button/track -.

Voice prompt	Meaning
“Recharge headset”	The rechargeable battery is empty. Recharge the rechargeable battery (> 9). In addition, the LED flashes red.
“Below 1 hour play time”	Battery is less than 10% charged. In addition, the LED flashes red.
“Between 1 and 2 hours play time”	Battery is less than 20% charged. In addition, the LED lights up red.

Voice prompt	Meaning
"Between 2 and 4 hours play time"	Battery is less than 50% charged. In addition, the LED lights up purple.
"Between 4 and 6 hours play time"	Battery is more than 50% charged. In addition, the LED lights up blue.

Adjusting the volume



WARNING

Danger of hearing damage due to high volume levels!

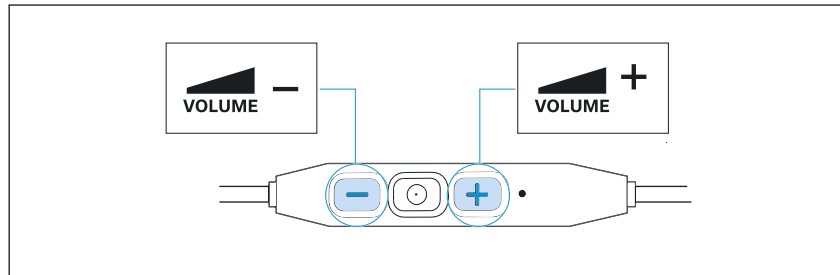
Listening at high volume levels can lead to permanent hearing defects.

- ▷ 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.

You can adjust the volume for music, voice prompts, and phone calls.

- ▷ If you are playing music or are on a call: Press the volume **+** or **-** button to increase or reduce the volume.

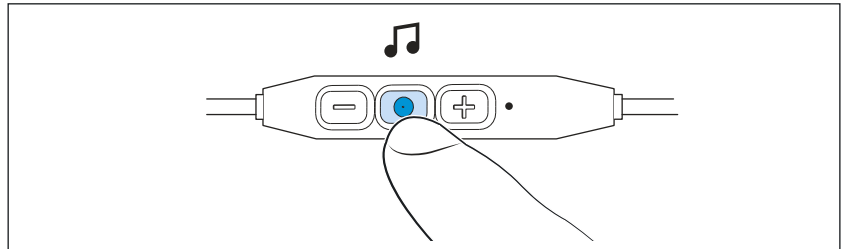
When the maximum or minimum volume is reached, you hear an alert tone.



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

Controlling the music playback

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



Playing/pausing music

- ▷ Press the multi-function button 1x.

Multi-function button		Function
	Press 1x ●	Plays or pauses music

Playing the next track

- ▷ Press the volume + button/track + for 1 second.

Volume + button/track +		Function
	Hold for 1 sec ■ Hold 2s	Plays the next track in the playlist

Playing the previous track

- ▷ Press the volume - button/track - for 1 second.

Volume - button/track -		Function
	Hold for 1 sec ■ Hold 2s	Plays the previous track in the playlist

Making phone calls using the headphones

The call functions are only available when the headphones and the smartphone are connected via Bluetooth. Some smartphones may not support all functions.

The multi-function button allows you to control the call functions.

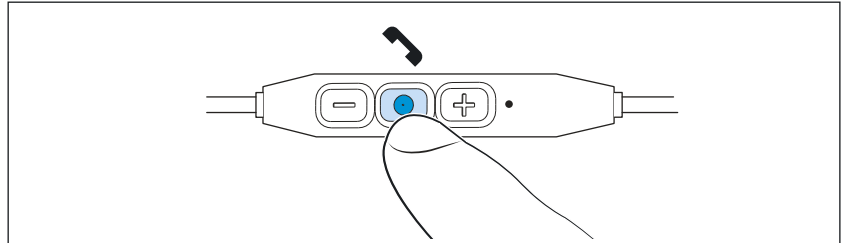
Making a call








- ▷ Dial the desired number on your smartphone.
If your smartphone does not automatically transfer the call to the headphones, select “CX 120BT” 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, you hear a ring tone in the headphones and the LED flashes purple.

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



Multi-function button		Function
	Press 1x ●	Accepts a call
	Press 1x ●	Ends a call Voice prompt "Call ended"
	Hold for 1 sec ●● Hold 2s	Rejects a call Voice prompt "Call rejected"
	Press 1x ●	Accepts an incoming call and ends the active call
	Press 2x ● ●	Puts the active call on hold and accepts an incoming call
	Press 2x ● ●	Toggles between active call and call on hold
	Hold for 1 sec ●● Hold 2s	Rejects an incoming call and continues the active call

Muting the microphone

To mute the headphones' microphone during a call:

- ▷ Press the multi-function button 2x.
The microphone is muted. You hear the voice prompt "Mute on".

To continue the call and reactivate the microphone:

- ▷ Press the multi-function button 2x.
The microphone is reactivated. You hear the voice prompt "Mute off".

Transferring a call to/from the headphones

When a connection is established, you can transfer the call from the headphones to the smartphone or from the smartphone to the headphones.

- ▷ Press the multi-function button for 1 second respectively.

Redialing

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

- ▷ To do so, press the multi-function button 2x.
You hear the voice prompt “Redialing”.
- ▷ Press the multi-function button 1x to cancel redialing.
You hear the voice prompt “Call ended”.

Voice control

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

1. Press the multi-function button 3x.
You hear the voice prompt “Voice dialing”.
2. Say your voice command, such as “Call Jane”.
The Bluetooth smartphone calls Jane.

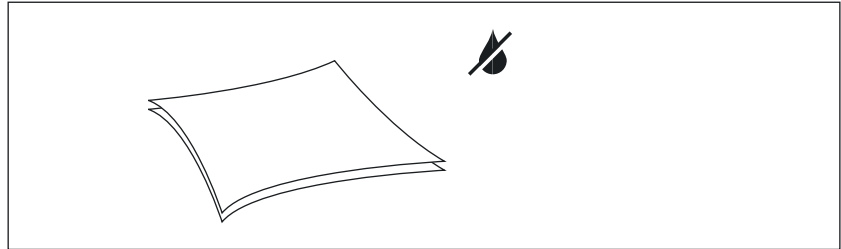
Care and maintenance

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.

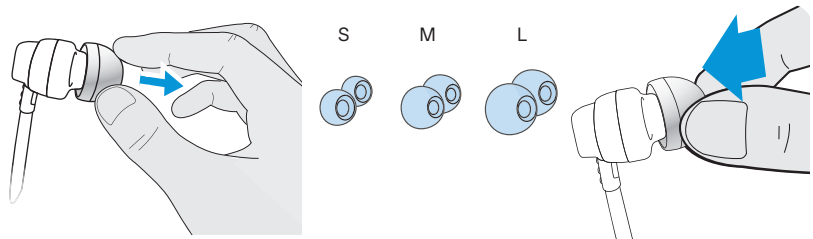
- ▷ Keep all liquids far away from the product.
 - ▷ Do not use any solvents or cleansing agents.
-
- ▷ Clean the product only with a soft, dry cloth.



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 (> 5), stop using the product, disconnect it from the power supply system and immediately return the product to any Sennheiser service partner.

FAQ/If a problem occurs ...

Current list of frequently asked questions (FAQ)



Visit the CX 120BT product page at

www.sennheiser.com/download

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 headphones, leave the Bluetooth transmission range of the smartphone, the sound quality deteriorates increasingly until you hear the voice prompt “Lost connection” and the connection breaks down completely. If you immediately re-enter the Bluetooth transmission range, the connection is automatically re-established.

Deleting the Bluetooth pairing list of the headphones

1. Switch the headphones on (> 13).
2. Press and hold the multi-function button for 2 seconds.
The headphones are in Bluetooth pairing mode. The LED flashes blue and red.
3. Press and hold the volume + button for 2 seconds.
The LED flashes purple 3x. The Bluetooth pairing list is deleted. The headphones then stay in Bluetooth pairing mode.

Specifications

Model: CX 120BT

Wearing style	Bluetooth® neckband cable
Ear coupling	ear-canal
Frequency response	17 Hz to 21,000 Hz
Transducer principle	dynamic
Transducer size	10 mm
Sound pressure level (SPL)	112 dB (1 kHz/0 dBFS)
THD (1 kHz, 100 dB)	< 0.5 %
Microphone principle	MEMS
Microphone frequency response	100 Hz to 8,000 Hz
Microphone sensitivity (as per ITU-T P.79)	-42 dB V/Pa
Microphone pick-up pattern (speech audio)	omni-directional
Power supply	built-in rechargeable lithium-polymer battery: 3.7 V \approx , 100 mAh; USB charging: 5 V \approx , 500 mA max.
Operating time	up to 6 hours (A2DP) 8.5 hours (HFP)
Charging time of rechargeable batteries	approx. 1.5 hrs
Temperature range	operation: 0 °C to +40 °C storage: -25 °C to +70 °C
Magnetic field strength	3.6 mT
Weight	approx. 14 g

Bluetooth

Version	4.2, class 1
Transmission frequency	2,402 MHz to 2,480 MHz
Modulation	GFSK, $\pi/4$ DQPSK
Profiles	HFP, AVRCP, A2DP
Output power	10 mW (max)
Codec	SBC, aptX, aptX LL

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 CX 120BT 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.

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Manufacturer Declarations

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