# EPOS | SENNHEISER



# GSP 670 | GSA 70

Gaming Headset with low latency connection and Bluetooth® connectivity | USB Dongle with 2.4 GHz RF

#### **User Guide**

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Welcome 2

## Welcome

The new GSP 670 wireless gaming headset, combines the HiFi audio performance of the GSP 600 with advanced features and wireless connectivity.

Through the **EPOS Gaming Suite** the headset will get even more features unlocked, and delivers cutting edge audio performance.

#### Connectivity

The headset can be connected to the PC or PS 4™ either via USB or through the wireless Dongle. Furthermore the headset offers Bluetooth 5.0 connectivity to Bluetooth compliant devices.

#### **EPOS Gaming Suite**

The EPOS Gaming Suite, is a free of charge software for PCs with Microsoft® Windows and offers additional features for the headset. The software also allows to update the firmware of headset and dongle.

#### Key benefits & features

Low latency connection to dongle GSA 70 for better performance in situations where picture and audio is linked such as Gaming and Video

Bluetooth connection to any compliant Bluetooth device

Separated chat and game audio with two different volume wheels - for PC only

On the fly adjustments of game audio and microphone mute

Smart button to quickly toggle between settings. As standard this will toggle between different profiles in the headset. These profiles can be adjusted in the EPOS Gaming Suite.

Adjustable contact pressure via the headband for perfect wearing comfort

Memory foam ear pads in high quality material for minimal irritation over longer gaming sessions

**USB** charging

#### Battery times

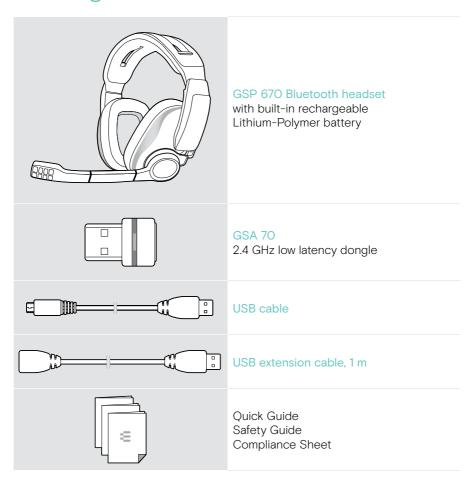
up to 16 hours over low-latency connection and up to 20 hours via Bluetooth



For safety instructions, consult the Safety Guide.

Package contents 3

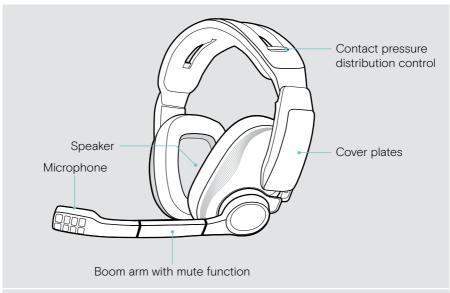
# Package contents

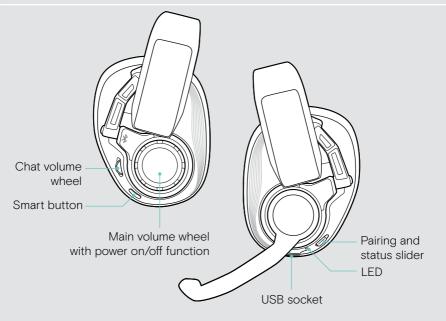


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# GSP 670 at a glance

#### Headset at a glance





GSP 670 at a glance 5

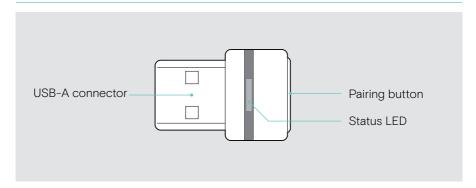
#### Overview of the headset LED

Headset	LED	Meaning
	<u> 3x 💥</u>	Headset switches on
	*	Headset is connected via USB cable
		Headset is being charged
	*********	Headset is in pairing mode
	<u>3x</u>	Pairing to mobile device was successful*
	<u>3x</u>	Pairing to dongle was successful*
	1 3x <b>※</b>	Pairing has failed or has been cancelled
		Headset disconnects
	1x 🔆 🕒	Headset switches off
	********	Rechargeable battery is weak

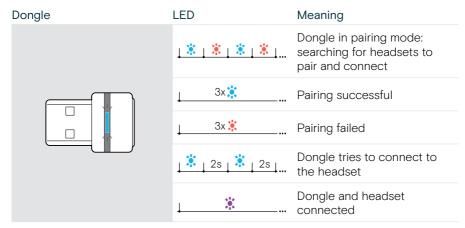
<sup>\*</sup>Once the headset is successfully connected, the LED goes off.

GSP 670 at a glance 6

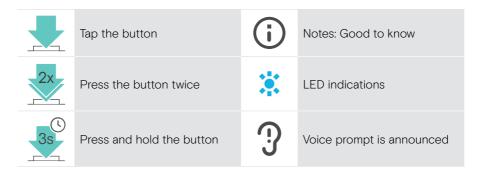
## GSA 70 dongle at a glance



#### Overview of the dongle LED



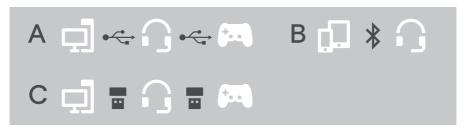
#### Icons at a glance



# Getting started

You can connect the headset:

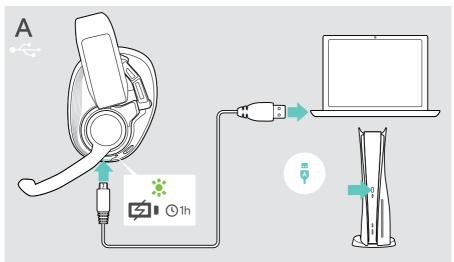
- A via the USB cable to a PC or PlayStation® PS5™/PS4™ or
- B via Bluetooth to a mobile device (e.g. smartphone, tablet) or
- C via the Dongle (low latency connection) to a PC or PlayStation® PS5™/PS4™.



If you connect the headset via USB cable A it will automatically be charged.

## A Connecting via USB cable & charging the battery

- > Connect the small plug of the USB cable to the headset's USB socket.
- > Connect the other plug to a USB-A socket of your PC or PlayStation.
  The LED lights up green. The battery is being charged.



#### For PC use:

Install the EPOS Gaming Suite (see page 12).

#### B Pairing with your wireless devices



#### **CAUTION**

#### Danger of malfunction!

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

Only make calls with the headset in locations where wireless Bluetooth transmission is permitted.

You can connect the headset either via Bluetooth to mobile devices (e. g. smartphone, tablet PC) or together with the Dongle GSA 70 to a PC or PlayStation. The delivered Dongle is already paired with the headset.

The headset complies with the Bluetooth 5.0 standard. Bluetooth devices need to support the "hands free profile" (HFP), the "headset profile" (HSP) or the "advanced audio distribution profile" (A2DP).

The headset can save up to eight paired devices. If you pair the headset with a ninth device, the first device in the pairing list will be overwritten. If you want to re-establish a connection with this device, you have to pair it again.



#### Pairing the headset via Bluetooth with a mobile device

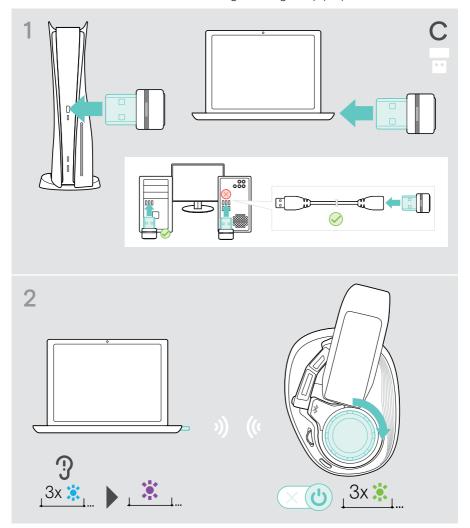
- 1 Turn the main volume wheel over a slight resistance to switch the headset on.
- 2 Slide and hold the pairing slider until the LED alternately flashes blue and red (pairing mode). Search for Bluetooth devices and select "GSP 670" to establish a Bluetooth connection to the headset – see instruction manual of your mobile device. Once the headset is paired with the mobile device, the LED goes off.



## C Connecting the dongle

You can connect the dongle e. g. to your PC or PlayStation. Upon arrival the dongle is already paired with the headset.

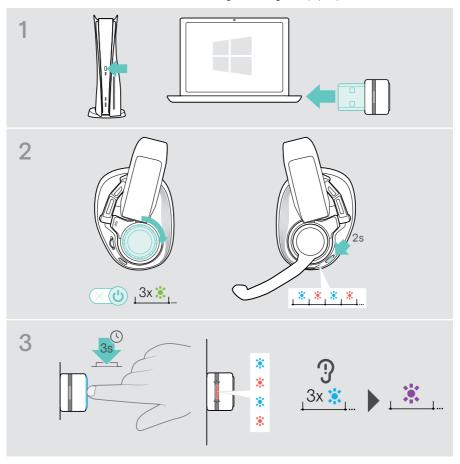
- 1 Plug the dongle into a USB-A port of your device. For desktop PCs: Use a port on the front of the housing or connect the USB extension cable in addition to avoid the rear as this might lead to disturbances.
- 2 Turn the main volume wheel over a slight resistance to switch the headset on.
  Once the dongle and the headset are connected, both LEDs flash 3 times blue.
  The headset LED switches off, the dongle LED lights up purple.



#### Pairing with the dongle

Upon arrival the dongle is already paired with the headset. In case you reset your paired device list, please follow the instructions below.

- 1 Plug the dongle in and switch on the headset see chapter before.
- 2 Slide and hold the pairing slider until the LED alternately flashes blue and red. The headset is in pairing mode.
- 3 Press and hold the dongle's button until the LED alternately flashes blue and red. The dongle is in pairing mode.
  - Once the dongle and the headset are connected, both LEDs flash 3 times blue. The headset LED switches off, the dongle LED lights up purple.

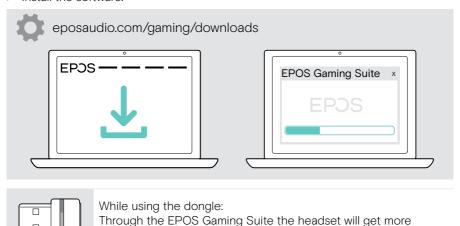


## Installing the EPOS Gaming Suite

The free software EPOS Gaming Suite allows you to add value to your GSP 670. The software is only available for Microsoft® Windows.

It enables headset configurations e. g. of the smart button, equalizer, side tone, noise reduction and update of your devices.

- > Download the software from eposaudio.com/gaming/downloads.
- Install the software

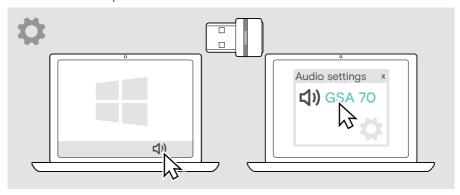


features unlocked, and deliver cutting edge audio performance.

## Changing audio settings - Microsoft® Windows

Windows usually changes the audio settings automatically if you connect the dongle. If the dongle and headset are connected but you hear no sound:

- > Right-click the audio icon.
- Select under output GSA 70 as main audio.



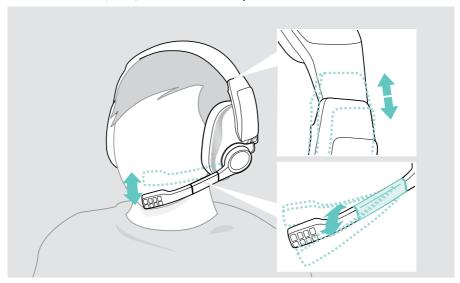
## Individually adjusting the headset

For good sound quality and best possible wearing comfort, the headset has to be adjusted to properly fit your head.

> Wear the headset so that the headband runs over the top of your head.

#### Adjusting the headband and the boom arm

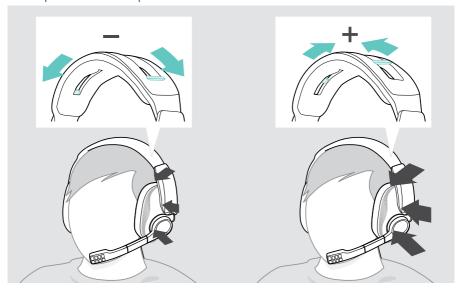
- > Adjust the headset so that
  - your ears are comfortably covered by the ear pads,
  - you feel even, gentle pressure around your ears,
  - a snug fit of the headband on the head is ensured.
- > Bend the microphone boom so that the microphone is in line with your mouth and about 0.8" (2 cm) from the corner of your mouth.



#### Changing the contact pressure distribution

The headset pressure distribution may feel extra tight right out of the box, but the pressure will decrease slowly over time. You can also adjust the pressure:

- > Slide both contact pressure distribution controls
  - down to reduce or
  - up to increase the pressure on the ears.



## How to use - the basics



#### **CAUTION**

#### Risk of hearing damage!

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

- > Set the volume to a low level before putting on the headset.
- > Do not continuously expose yourself to high volumes.

#### Switching the headset on - auto connect

> Turn the main volume wheel clockwise over a slight resistance.
The LED flashes green 3 times. The voice prompt "power on" is announced in the headset.

If the headset is **not connected via the USB cable**, it automatically tries to connect to two of the available paired wireless devices (Bluetooth or low latency channel). Once the connection is successfully established, one or two voice prompts are announced in the headset "... connected".



To connect a third device:

Deactivate any active wireless connection to the headset, and enter pairing mode (see page 7).

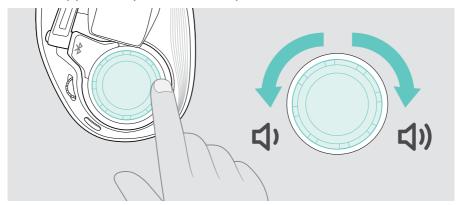


If the headset does not find a paired device to connect to, it automatically switches to sleep mode after 15 min.

## Changing the volume

- > Turn the main volume wheel
  - clockwise to increase or
  - counter-clockwise to reduce the volume.

Alternatively you can adjust the volume on your connected device.



#### Changing the chat volume separately - headset connected with PC

If the chat participants are louder or quieter than the gaming sounds during a game, you can change the chat volume. The volume changes for the incoming voices.

> Make sure that GSA 70 is set as default device in Windows (see page 12).

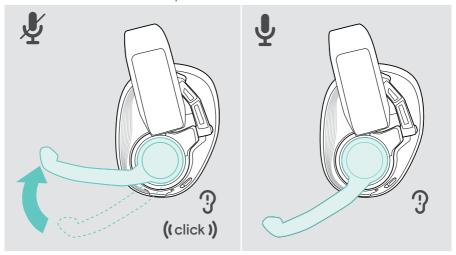
To adjust the chat volume:

- > Turn the chat volume wheel
  - clockwise to increase or
  - counter-clockwise to reduce the chat volume.



## Muting the headset's microphone

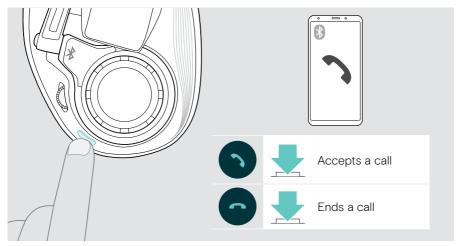
- > Move the boom arm
  - up until you hear a click to mute or
  - down to unmute the microphone.



## Handling calls

You can handle calls of devices that are connected via Bluetooth. These functions are device and application dependent.

- > Initiate calls via your connected device.
- Press the smart button:

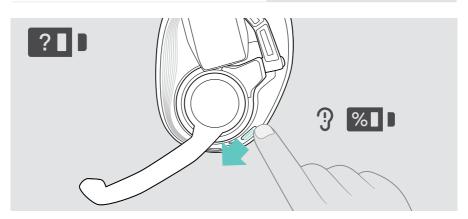


## Verifying remaining battery power

You can retrieve information on the remaining battery power at any time:

> Press the status slider.

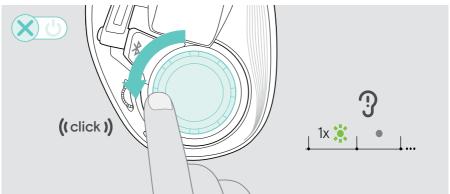
Information announced	Remaining battery power
"More than 80 percent battery left"	> 80%
"More than 60 percent battery left	> 60%
"More than 40 percent battery left"	> 40%
"More than 20 percent battery left"	> 20%
"Less than 20 percent battery left"	< 20%
"Recharge headset"	less than 5%; automatic voice prompt > Charge the headset.



## Switching the headset off

> Turn the main volume wheel counter-clockwise over a slight resistance.

The LED flashes green 1 time and switches off. The voice prompt "power off" is announced in the headset.

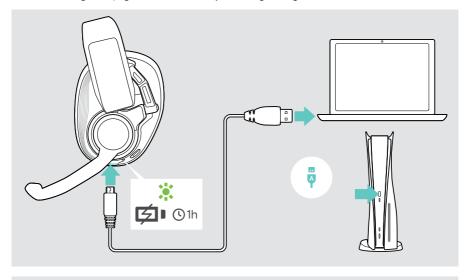


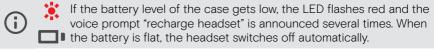
## Charging and storing the headset

#### Charging the headset

You can charge the headset regardless of the power state (on or off). Wireless connections will keep established.

- > Switch off the headset for faster charging.
- > Connect the USB cable to your headset and your PC or PlayStation.
  The LED lights up green. The battery is being charged.



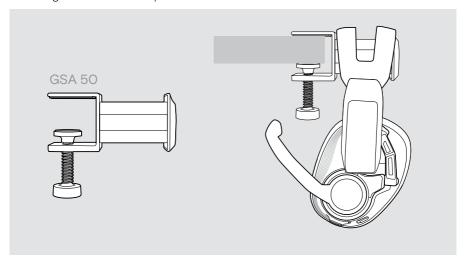


#### Storing the headset

> Store the headset in a clean and dry environment.

The GSA 50 headset hanger is the perfect accessory for keeping your gaming headset conveniently out of sight, yet easy to reach.

The hanger is available at eposaudio.com.



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## Good to know

#### Activating surround sound or presets

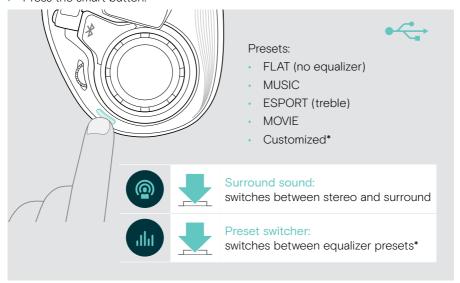
In addition to the call handling, you can activate additional functions for the smart button in the EPOS Gaming Suite (see page 12) to either surround sound or preset switcher.

To change the setting for the smart button:

- > Connect the headset to your PC (see page 7).
- > Change and save the settings for the smart button via EPOS Gaming Suite.



Press the smart button:



<sup>\*</sup>Customized preset: You can also add your own preset in the EPOS Gaming Suite. For more information, visit eposaudio.com/gaming.

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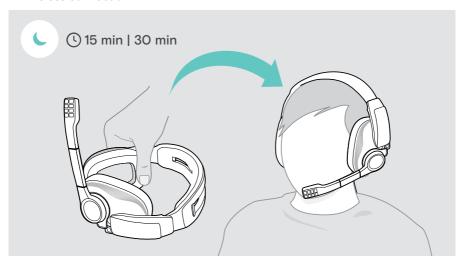
## Reconnect & waking up from sleep mode

The headset turns to sleep mode to save battery power, if:

- you lay down the headset on your desk (via motion sensor) after 30 minutes or
- it does not receive any audio signal for 30 minutes or
- it does not find a paired device to connect to for 15 minutes.

#### To wake up the headset:

> Put the headset on or press any button.
A sensor recognizes the motion. The LED flashes green 3 times. The voice prompt "power on" is announced in the headset. The headset re-establishes the wireless connection.



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## If you leave the Bluetooth or dongle's range

The range between the headset and the connected device is device dependent. The transmission range largely depends on environmental conditions such as wall thickness, wall composition etc. With a free line of sight, the Bluetooth transmission range is up to 20 meters and up to 10 meters via low-latency connection.

If the audio quality gets worse or the link breaks down completely:

> Re-enter the radio range of the Bluetooth device or dongle to re-connect.



After 15 minutes the headset enters sleep mode – see former chapter.

# Maintaining & updating products

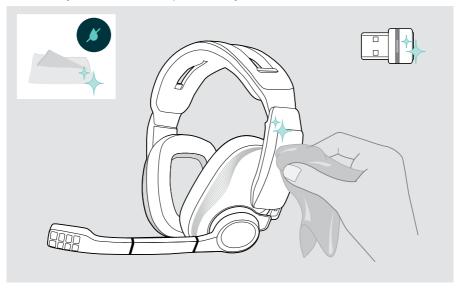
#### Cleaning the products

#### **CAUTION**

#### Liquids can damage the electronics of the product!

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

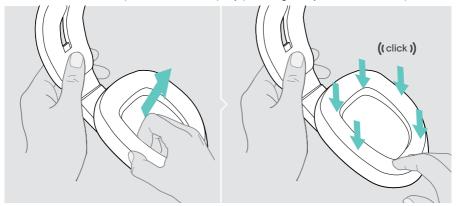
- > Keep all liquids far away from the product.
- > Do not use any cleansing agents or solvents.
- > Use a dry cloth to clean the product only.



## Replacing the ear pads

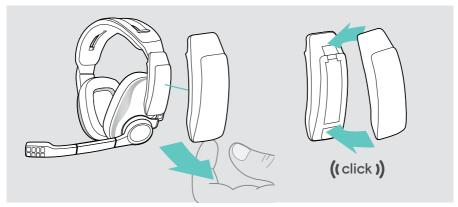
For hygienic reasons, you should replace the ear pads from time to time. Spare ear pads are available from your EPOS partner.

- > Carefully remove the old ear pad from the ear cup.
- > Attach the new ear pad to the ear cup by pressing firmly around the ear pad.



## Exchange cover plates

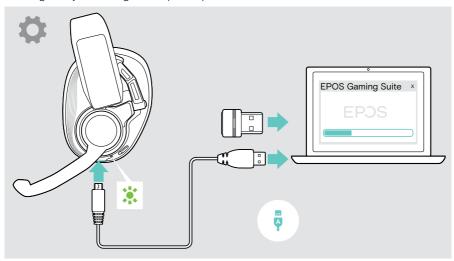
- Slide a fingernail into the small notch under the cover plate and push it away from the headset.
- > Place the new cover plate on top of the holder and press it down at the bottom.



## Updating the firmware

You can update the firmware of your headset and dongle by using the free EPOS Gaming Suite software (see page 12).

- > Connect the USB cable to your headset and your PC. The LED lights up green. OR
- > Plug the dongle into the USB port of your PC. The LED flashes blue.
- > Start the EPOS Gaming Suite. If there is a new firmware available the software will guide you through the update process.



# If a problem occurs...

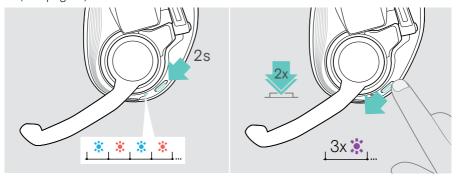
Problem	Possible cause	Solution	Page
Headset cannot be switched on	Rechargeable battery empty	> Recharge the headset battery.	20
No audio signa	Headset not paired with a Bluetooth device or dongle	> Pair the headset.	8
	Volume adjusted too low	Increase the volume on the headset or your connected device.	16
	Headset or connected device switched off	> Switch the headset or device on.	15
	USB cable's plugs not fully inserted	> Insert the plugs again.	7
Headset cannot be connected via		> Pair the headset.	8
Bluetooth	Bluetooth at connected device turned off	> Turn Bluetooth on.	-
	Dongle not plugged in	> Plug the dongle into the USB port of your device.	10
Headset cannot be switched off	Headset connected via the USB cable: auto on	<ul><li>Disconnect the USB cable.</li><li>Switch the headset off.</li></ul>	7 19
Dongle use: Disturbed sound, lag, noise or range reduced	Dongle plugged directly into USB port which can create noise	> Connect the dongle via the extension cable.	7
	Transmission disturbed by noise from USB port	> Connect the dongle via the extension cable.	7
Headset or dongle does not react to any button press	Software or hardware problems	> Switch the headset off and on again.	19 15
		> Unplug and plug in the dongle again.	
		> Clear the pairing list of the headset.	29
		> Clear the pairing list of the dongle.	29
		To reset the headset:  > Press the power and smart button at the same time. The headset LED flashes and the headset switches off.	-

If a problem occurs that is not listed here or if the problem cannot be solved with the proposed solutions, please contact your local EPOS partner for assistance.

To find an EPOS partner in your country, search at eposaudio.com.

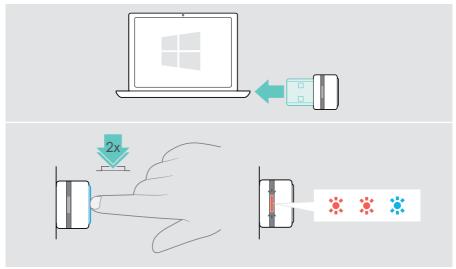
## Clearing the pairing list of the headset (Reset)

- > Turn the main volume wheel over a slight resistance to switch the headset on.
- > Slide and hold the pairing slider until the LED alternately flashes blue and red. The headset is in pairing mode.
- Double press the slider 2 times quickly. The LED flashes purple three times. The pairing list is cleared. The headset tries to pair with wireless devices (see page 8).



## Clearing the pairing list of the dongle (Reset)

- > Plug the dongle into the USB port of your PC.
- Double press the dongle's button. The LED flashes two times red and one time blue. The pairing list is cleared. The dongle tries to pair with wireless devices (see page 11).



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# Specifications

#### GSP 670 headset

Dimensions (W x H x D)

Weight

Connector

Standby time

Talk time via Bluetooth

Charging time

Rechargeable battery (built-in)

Max. charging voltage

Speaker principle

Frequency response

Sound pressure

Total harmonic distortion (THD)

Microphone type

Impedance

Microphone Pick-up pattern

Microphone Sensitivity

200 x 90 x 190 mm / 7.9 x 3.5 x 7.5 in

399 g / 0.88 lbs / 14.07 oz

USB A to Micro USB

Streaming/Music: up to 16 hours
Sleep mode: up to 200 hours

up to 20 hours

approx. 1.2 h @ 5 V, 430 mA

Lithium Polymer / 3.7 V / 335 mA

5.1 V / max. current 470 mA

dynamic, closed

Microphone: Speakers: 10 Hz - 7,300 Hz 10 Hz - 23,000 Hz

max. 112 dB

< 0.07 %

Bi-Directional ECM

28 Ω

Noise Cancellation

-47 dBV/Pa

#### Bluetooth

Bluetooth

Range

Transmission frequency

**Profiles** 

version 5.0 / class 1

up to 20 m / 65.6 ft

2402 - 2480 MHz

- **HSP** Headset Profile (version 1.2)
- HFP Handsfree Profile (version 1.7)
- A2DP Advanced Audio Distribution Profile (version 1.3)

Output power

max. 10 dBm (EIRP)

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#### GSA 70 dongle

Dimensions (W x H x D)	22 x 16 x 6 mm / 0.87 x 0.63 x 0.24 in
Weight	2 g / 0.07 oz / 0.004 lbs
Connector	USB-A plug
Range	up to 10 m / 32.8 ft
Transmission frequency	2402 – 2480 MHz
Output power	max. 8 dBm (EIRP)

#### Headset | Dongle

Temperature range	0 °C to +40 °C / +32 °F to +104 °F
Relative humidity	10~80%

#### **Trademarks**

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All other trademarks are the property of their respective owners.

# EPOS | SENNHEISER



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