# **TV Connector**

User Guide







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# 1. Welcome

Congratulations on choosing the TV Connector. The TV Connector allows you to connect your hearing aids to your TV or other entertainment/communication devices.

Please read this user guide carefully to discover how to benefit from the features of your TV Connector.

If you have any questions, please consult your hearing care professional or go to www.phonak.com/tvconnector

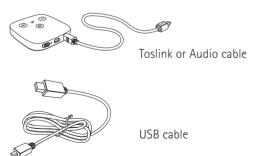
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# 2. Getting to know your TV Connector

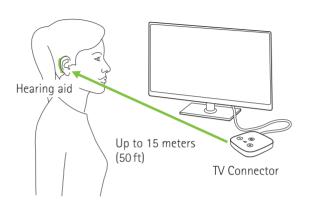
The intended use of the TV Connector is to establish a wireless connection between your hearing aids and a TV (or any other audio source). It sends audio signals within a 15 meter (50 ft) radius wirelessly to the hearing aids.

TV Connector is compatible with all Phonak direct connectivity wireless hearing aids.



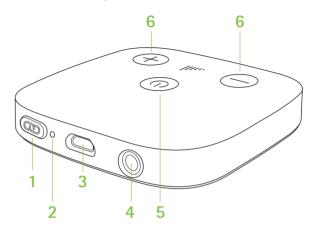


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① Line-of-sight between your hearing aids and the TV Connector is not required. However, environmental interference like walls or furniture may reduce the operating range.

# 2.1 Device description



- 1 Connect button
- 2 Indicator light (LED)
- 3 microUSB power socket
- 4 Audio socket for optical (Toslink) or analog (3.5mm jack) cable
- 5 Power button
- 6 Volume up and down buttons (calibration)

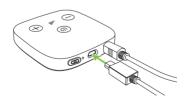
# 3. Getting started

### 3.1 Setting up the power supply

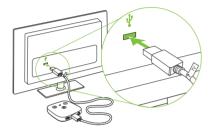
1. Plug the power supply unit into the socket outlet of the mains power.



2. Insert the smaller end of the USB cable into the free socket of the TV Connector.



Alternatively the TV Connector can be powered via USB cable on the TV. Insert the larger end of the USB cable into the USB socket of the TV.



- ① The TV Connector will turn ON the first time it is connected to a power source. If the TV Connector does not turn ON automatically when the power supply is connected, press and hold the power button for longer than 2 seconds to turn ON the device.
- ① Upon the very first time powering the device, the connection to the hearing aids will be initiated automatically and the hearing aids will play a confirmation tone.

#### 3.2 Supported audio connections

The TV Connector can be connected to any audio source such as a TV, PC or HiFi system. It supports two different audio cable inputs: Optical (Toslink) or Analog (3.5 mm jack). Either of the audio cables can be plugged into the dedicated audio socket on the TV Connector.



# Optical (Toslink)

Digital signal
Fiber optic cable
(optical cable pre-installed)

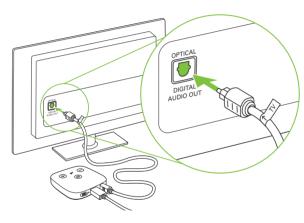
# Analog

3.5 mm jack (optional)

(i) Always connect the chosen audio cable of the TV Connector to the audio **OUTPUT** of your TV or alternative audio device!

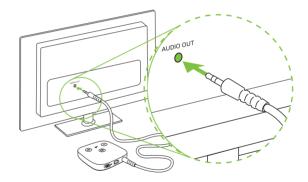
# 3.3 Connecting to an audio device

Connect the free end of the optical (TOSLINK) cable into the optical digital audio output of your TV (or audio source).



# 3.4 Optional: Connecting to an audio device using the audio socket

Replace the supplied optical (Toslink) cable on the TV Connector with the analog (3.5 mm jack) cable. Insert one end of the analog cable into the TV Connector and connect the other end of the analog cable to the audio out port of your TV (or alternative audio source).



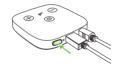
(i) Some TVs will switch off their loudspeakers when using the headset socket – the TV will not be audible for other people.

# 3.5 Connecting the TV Connector to the hearing aids

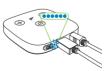
When the TV Connector is plugged into a power source the very first time upon installation, the connection to the hearing aids will be initiated automatically and the hearing aids will play a confirmation tone.

To connect new hearing aids to the TV Connector follow the steps:

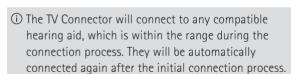
 Press the Connect button on the back, and the indicator light will start blinking blue.



 Make sure the hearing aids are switched on and within
 1 meter (3 ft) of the
 TV Connector.



- You will hear a confirmation beep in your hearing aids when the connection was successful.
   This may take up to 10 seconds
- If no audio is present during the connect process, beeps will be played left/right during 5 seconds after the confirmation beep of the hearing aids

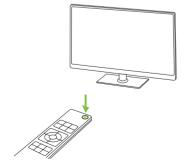




# 4. Daily use of the TV Connector

① The TV Connector can receive and transmit Dolby Audio™, stereo or mono audio signals. Please make sure no DTS function has been enabled in TV (or on alternative audio source) settings. If present, this audio signal will be indicated by a blinking red LED indicator light on the TV Connector. Please change the audio signal to this (PCM) in the audio settings menu of the TV. Alternatively, switch to the analog 3.5 mm audio cable.

Switch ON your TV (or alternative audio device). If the TV Connector is powered on, it will automatically transmit the audio signal to the connected hearing aids.





You might need to accept the incoming audio signal on the hearing aid by pressing the hearing aid button.



You will hear the sound of the TV/audio device directly in your hearing aids.

- i) Make sure the TV/audio device is switched on.
- ① If no audio input is available, the TV Connector automatically stops the audio transmission to the hearing aids. The indicator light will be solid white (standby mode).

If the hearing aids are out of range of the TV Connector the audio transmission will be terminated. Once the hearing aids are back into the range of TV Connector, the audio signal will automatically resume streaming.

# 4.1 Adjusting the volume of the audio transmitting from TV Connector

To adjust the volume of the audio from the TV Connector:

- Push the volume increase button (+) on top of the TV Connector
- Push the volume decrease button (-) on top of the TV Connector

A tune will be played in any connected hearing aid to indicate that the volume has changed.

① The volume can be adjusted independently of the audio source (Toslink or analog). The individual settings remain stored even after powering OFF the TV Connector.

# 4.2 TV Connector and phone calls

If the hearing aids are connected to your cell phone, you can still receive phone calls, even when using the TV Connector.

In case of an incoming call, the hearing aids automatically stop the audio signal from the TV Connector and alerts will be played signalizing the incoming call. After the call the hearing aids automatically switch back to the TV Connector audio signal.

#### 4.3 Switching off audio transmission

To end the transmission of the audio signal, simply switch off the TV or other connected audio sources. The TV Connector will go into the standby mode automatically. Alternatively, turn OFF the TV Connector using the power button on the top of the device. In this case turn ON the TV Connector using the power button when using the TV Connector next time.

# 4.4 Understanding the indicator light (LED)

Solid green		Switched on and transmitting audio	
Solid white		Switched on but no audio transmission (standby mode)	
Blinking blue	000000	Connecting mode	
Blinking red • • •		Wrong audio input format (DTS)	
No light		Switched off	

# 5. Troubleshooting

# 5.1 Testing the audio transmission

If you cannot hear the sound from the audio source (e.g. TV), check the following options:

- Make sure all cables are inserted properly into the TV Connector and the audio device (e.g. TV)
- Make sure the audio cable is plugged into the audio OUT plug of the audio source (e.g. TV)
- Switch on the audio device and the TV Connector
- Test the connection of the TV Connector to the hearing aids
- Go through the steps described in chapter 3.5
- Test the connection of TV Connector to the audio device (e.g. TV)
- Check if the indicator light is solid green

#### 5.2 Questions and answers

A summary of frequently asked questions and answers:

# Causes What to do I don't hear any sound although the TV is switched on and connected to the TV Connector No audio input available at the TV Connector (indicator light is solid white or blinking red). Check if the optical (Toslink) or analog (3.5mm jack) cable is inserted into the TV Connector and the audio source properly.

- properly.
  Check that the audio cable is inserted at the audio output of the audio source (e.g. TV).
- Blinking red, wrong audio input format (DTS) from the audio source (e.g. TV). Switch to Dolby Audio™ or stereo (PCM) audio format in the audio settings of your source (e.g. TV). If this is not possible, use the analog (3.5 mm jack) audio cable instead.

Causes	What to do		
Cannot hear sound from the audio source, the LED indicator is off			
TV Connector is plugged in but turned OFF.	Press and hold the Power button on top of the TV Connector for 2 seconds until the LED turns on.		
The indicator light is solid green but I cannot hear the TV			
The TV Connector is not connected to the hearing aids.	Connect your hearing aids as described in chapter 3.		
The volume during streaming is not comfortable (too low or too high)			
The different TV audio sources have different output volume.	If TV Connector is connected to the optical (Toslink) socket of your TV, adjust the volume by using the buttons		

the device

of your hearing aids. Alternatively, adjust the volume of the TV Connector using the volume buttons on top of

Causes
After connections switched off
You have sele the headset of the TV set.
The audio fr streamed au
The delay set TV loudspeak high.

# What to do cting the TV Connector, the TV loudspeaker is

• Check the audio settings of the ected TV to enable the loudspeakers to be output of used in parallel.

> • Please use the optical (Toslink) cable instead of the analog (3.5mm jack) cable to connect the TV Connector to an audio source (e.g. TV). See chapter 3.4.

#### rom the TV loudspeakers is delayed compared to the idio in my hearing aids

tting of the cers is too

Adjust the audio delay time of your TV loudspeakers (reduce the delay) in the audio settings menu of your TV.

# 6. Service and warranty

#### 6.1 Local warranty

Please ask the hearing care professional, where you purchased your devices, about the terms of the local warranty.

# 6.2 International warranty

Phonak offers a one year limited international warranty, valid as of the date of purchase. This limited warranty covers manufacturing and material defects. The warranty is valid only if proof of purchase is shown.

The international warranty does not affect any legal rights that you might have under applicable national legislation governing sale of consumer goods.

# 6.3 Warranty limitation

This warranty does not cover damage from improper handling or care, exposure to chemicals, immersion in water or undue stress. Damage caused by third parties or non-authorized service centers renders the warranty null and void. This warranty does not cover any services performed by a hearing care professional in his/her office.

Serial number:	Authorized hearing care professional (stamp/signature):
Date of purchase:	

# 7. Compliance information

# Europe:

Declaration of Conformity

Hereby Sonova AG declares that this product is in compliance with the essential requirements of the Radio Equipment Directive 2014/53/EU. The full text of the Declaration of Conformity can be obtained from the manufacturer or the local representative whose address can be taken from www.phonak.com

Operation frequency: 2400 - 2483.5 MHz Power level: <20 mW conducted power

# Australia/New Zealand:



R-NZ

Indicates a device's compliance with applicable Radio Spectrum Management's (RSM) and Australian Communications and Media Authority (ACMA) regulatory arrangements for the legal sale in New Zealand and Australia.

The compliance label R-NZ is for radio products supplied in the New Zealand market under conformity level A1.

#### Notice 1:

This device complies with Part 15 of the FCC Rules and with Industry Canada's license – exempt RSSs. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation.

#### Notice 2:

Changes or modifications made to this device not expressly approved by Sonova AG may void the FCC authorization to operate this device.

#### Notice 3:

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules and ICES-003 of Industry Canada.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna of the TV or alternative audio source.
- Increase the separation between the device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Notice 4:

Japanese Radio Law Compliance.

This device is granted pursuant to the Japanese Radio Law (電波法). This device should not be modified (otherwise the granted designation number will become invalid)."

More details can be found in the data sheet which can be downloaded from www.phonak.com/tvconnector

#### Notice 5:

# FCC/Industry Canada RF Radiation Exposure Statement

This equipment complies with FCC/Industry Canada RF radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# 8. Information and explanation of symbols

CE	The CE symbol is confirmation by Sonova AG that this product meets the requirements as the Radio Equipment Directive 2014/53/EU.
Ţ <u>i</u>	This symbol indicates that it is important for the user to read and take into account the relevant information in this user guide.
<b></b>	Indicates the device manufacturer.
$\triangle$	This symbol indicates that it is important for the user to pay attention to the relevant warning notices in this user guide.
(i)	Important information for handling and product safety.
	<u> </u>

Operating conditions	The device is designed such that it functions without problems or restrictions if used as intended, unless otherwise noted in this user guide.
X	Temperature transport and storage: -20° to +60° Celsius (-4° to +140° Fahrenheit). Temperature operation: 0° to +40° Celsius (+32° to +104° Fahrenheit).
DOLBY	Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories. All rights reserved.
Ť	Keep dry.



The device is designed for Direct Current (DC) power source with the specified parameters defined on the label of the product.



Humidity during transportation and storage: <90% (non-condensing). Humidity operation: <90% (noncondensing).



Atmospheric pressure: 500 hPa to 1500 hPa.



This symbol on the product or its packaging means that it should not be disposed of with your other household waste. it is your responsibility to dispose of your waste equipment separately from the municipal waste stream. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.

# 9. Important safety information

Please read the information on the following pages before using your device.

# Hazard warnings



This device is not for children below 36 months. It contains small parts that can cause choking, if swallowed by children. Keep out of reach of children and mentally challenged people or pets. If swallowed, consult a physician or hospital immediately.



TV Connector may generate magnetic fields. If any influence of the TV Connector on the Implantable Device (e.g. pacemakers, defibrillators, etc.) is experienced, stop using the TV Connector and contact your doctor and /or the manufacturer of the Implantable device for advice.

# Use only hearing aids that have been specially programmed for you by your hearing care professional.

<u>M</u> Dispose of electrical components in accordance with your local regulations.

Changes or modifications to any of the devices that were not explicitly approved by Sonova AG are not permitted.

⚠ External devices may only be connected if they have been tested in accordance with the relevant standards IEC 60601-1, IEC 60065, IEC 60950-1, IEC 62368-1 or other applicable safety standards. Only use accessories approved by Sonova AG.

For safety reasons, only use chargers supplied by Sonova AG or stabilized chargers with a rating of 5 VDC, min. 500 mA.

⚠ Do not use the device in explosive areas (mines or industrial areas with danger of explosions, oxygen rich environments or areas where flammable anesthetics are handled) or where electronic equipment is prohibited.

Opening the device might damage it. If problems occur which cannot be resolved by following the remedy guidelines in the troubleshooting section of this user guide, consult your hearing care professional.

## Product safety information

- Protect the device connectors, plugs, power supply from dirt and debris.
- Do not use excessive force when connecting your device to its different cables
- (i) Protect the device from excessive moisture (bathing or swimming areas) and heat sources (radiator). Protect the device from excessive shock and vibration.
- (i) Clean the device using a damp cloth. Never use household cleaning products (washing powder, soap, etc.) or alcohol to clean them. Never use a microwave or other heating devices to dry the device.
- (i) X-ray radiation, CT or MRI scans may destroy or adversely affect the correct functioning of the device.

(i) If the device has been dropped or damaged, if it overheats, has a damaged cord or plug, or has been dropped into liquid, stop using your device and contact authorized service centre.

## Other important information

- (i) High-powered electronic equipment, larger electronic installations and metallic structures may impair and significantly reduce the operating range.
- Protect your eyes of the optical light from the optical Toslink cable when plugged into the device or TV.

Notes		



#### Manufacturer:

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