SurfLink

MEDIA 2

OPERATIONS MANUAL

Table of Contents

Introduction 3
Rear Panel Overview 5
Basic Use 6
Using with External Microphone 9
Connecting to Electronic Audio Sources 10
Configuring Audio Settings 11
Mono/Stereo Audio 11
Audio Fidelity 11
LED Indicator 12
Front Panel Overview 14
Streaming to Hearing Aids 15
Starting and Stopping 15
Interoperability with Other Accessories 15
Troubleshooting 16
Safety Information 17
Regulatory Notices 20

Introduction

SurfLink Media 2 is designed to stream audio from electronic audio sources directly to your wireless hearing aids. SurfLink Media 2 can be successfully connected to many electronic audio sources, including televisions, radios, computers, MP3 players, DVD players and cable boxes.

SurfLink Media 2 can concurrently stream audio to multiple users, allowing them to share the same listening experience.

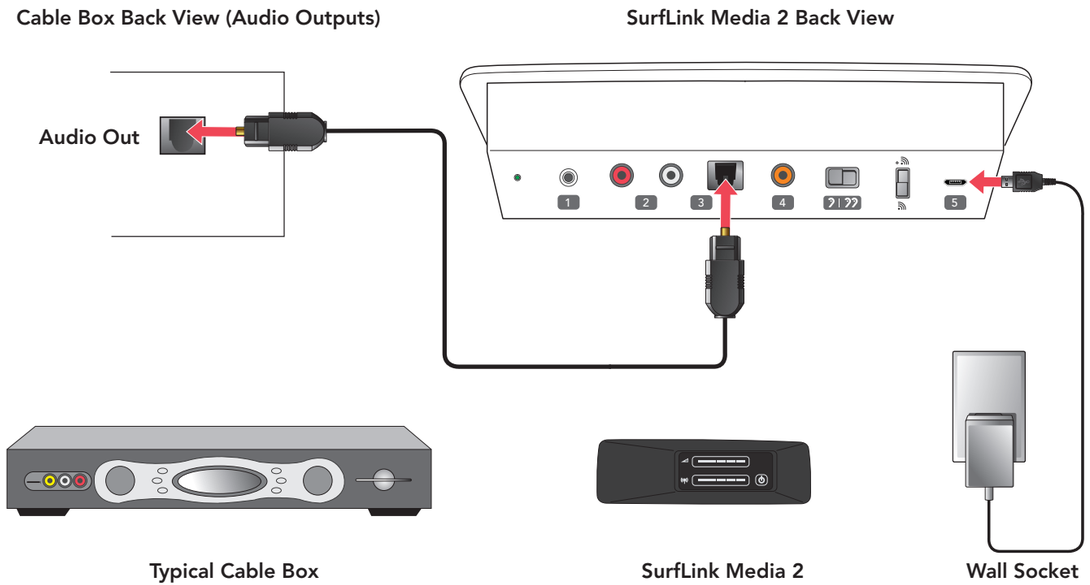
Streaming – Audio or sound transmitted wirelessly from SurfLink Media 2 directly to your hearing aids.

Electronic Audio Source – These provide the audio content that can be streamed through SurfLink Media 2 to your hearing aids. Examples include television, radio, computer, MP3 player, DVD player and cable box.

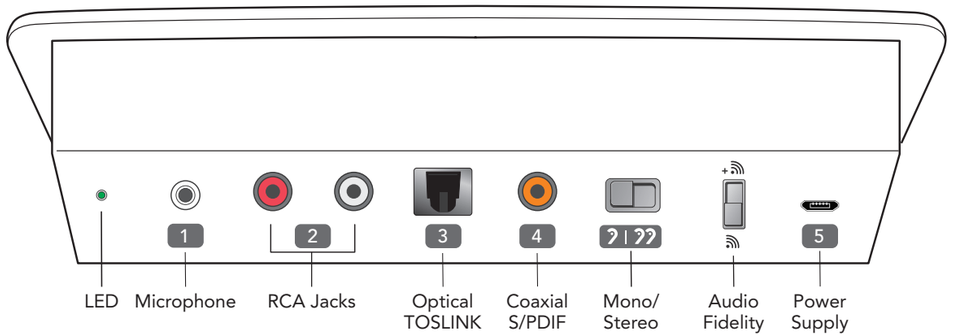
Package Contents

- SurfLink Media 2
- Power Adaptor
- Audio Cable
- Operations Manual

Typical Setup



Rear Panel Overview



LED: The LED indicator provides helpful information about the current state of SurfLink Media 2.

1. Microphone Jack: Mono external microphones can be obtained from your hearing professional (ask for part #52640-000).

2. RCA Jacks: This cable can be obtained from your hearing professional (ask for part #90969-000).

3. Optical TOSLINK Jack: This cable can be obtained from your hearing professional (ask for part #90972-000).

4. Coaxial S/PDIF Jack: This cable can be obtained from your hearing professional (ask for part #90971-000).

Mono/Stereo Switch: Mono is appropriate for one hearing aid, and Stereo is appropriate for two hearing aids.

Audio Fidelity Switch: All wireless hearing aids can stream audio from bottom position ( ). Only hearing aids marked with (+) can stream audio from top position.

5. Power Supply Jack: A power adaptor is provided.

TIP: Additional cables are available at most consumer electronic stores.

Basic Use

To quickly start using SurfLink Media 2 with a typical setup:

1. Remove the plastic caps from both ends of the TOSLINK cable.

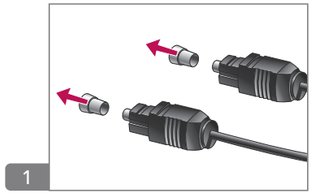
2. Insert a TOSLINK cable into the Audio OUT jack on your electronic audio source. Power on your electronic audio source.

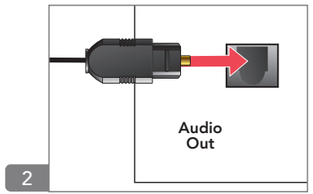
   Note: If there is no TOSLINK audio OUT jack, try a different electronic audio source or try the 3.5mm to RCA cable.

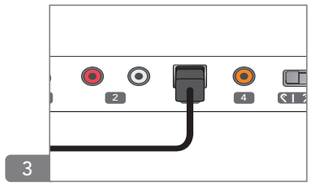
3. Attach the other end of TOSLINK cable to the rear of SurfLink Media 2 (jack #3).

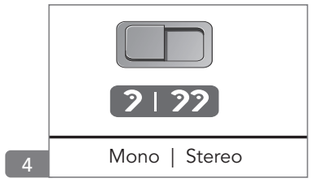
4. Choose appropriate settings for Mono/Stereo switch:

   - MONO (left position) – if you wear one hearing aid.
   - STEREO (right position) – if you wear two hearing aids.



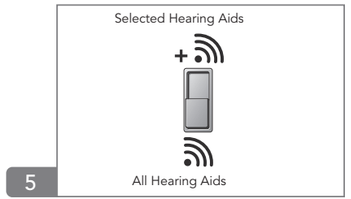




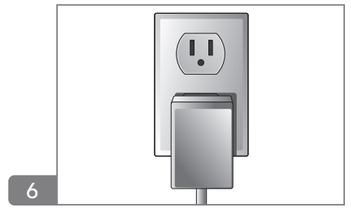


5. Choose appropriate settings for Audio Fidelity switch:

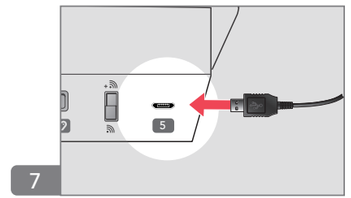
   - All wireless hearing aids can stream audio from bottom switch position ((•)).
   - Only wireless hearing aids marked with (+(•)) can stream audio from top switch position. If unsure, contact your hearing professional.



6. Plug the power adaptor into the wall socket.



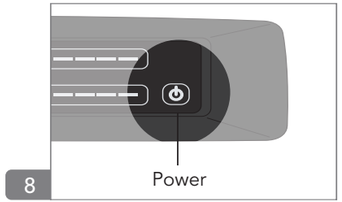
7. Insert the power adaptor microUSB connector into the rear of SurfLink Media 2 (jack #5).



8. Turn on SurfLink Media 2 by pressing the front power button until it glows blue.

9. If the rear LED glows solid green, then SurfLink Media 2 is detecting an incoming audio signal.

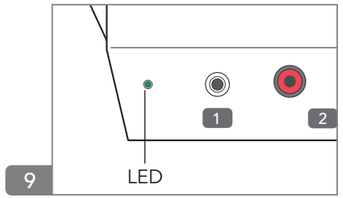
Tip: If the LED does not illuminate, recheck your setup or review Troubleshooting section on page 16.



10. Power on your hearing aids. Go to a memory environment that supports audio streaming.

    If your hearing professional set up your hearing aid(s) to:

    - Automatically stream audio, you should now hear audio in your hearing aids.
    - Manually stream audio, then you will need to use the Favorite button (☆) on your remote control to start the audio stream.



11. Slide your finger on the upper blue LED bar to set Volume Control to a comfortable level (60% or higher).

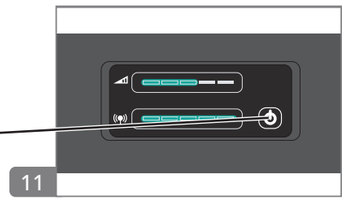
    - Slide your finger on the lower blue LED bar to set Streaming Activation Control to far right (100%).

12. To stop streaming,

    - Turn off SurfLink Media 2 (⏻).

    OR

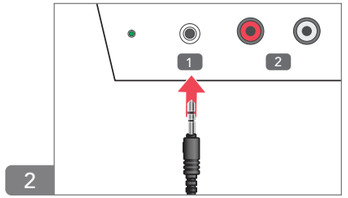
    - Press Favorite button (☆) on your remote control.



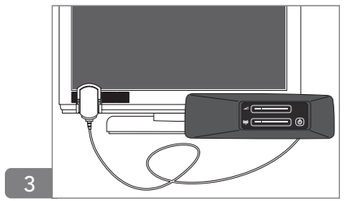
Using with External Microphone

1. If there are no AUDIO OUT jacks available on your electronic audio source, then an external microphone can capture audio.

2. Insert the microphone cable into rear of SurfLink Media 2 (jack #1).



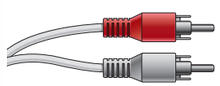
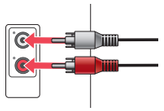
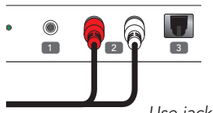
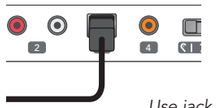
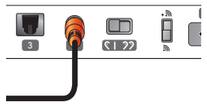
3. Place the microphone near an active speaker.



TIP: The External Microphone takes priority over all incoming audio into SurfLink Media 2.

Connecting to Electronic Audio Sources

There are different ways to attach your electronic audio source to SurfLink Media 2. Carefully examine your electronic audio source to determine which AUDIO OUT options it offers.

	Insert cable into the AUDIO OUT jack on your electronic audio source	Attach the other end of cable to the rear of SurfLink Media 2
Analog RCA 	AUDIO OUT  *Note: Connect the red-to-red and white-to-white*	 *Use jack #2*
Digital S/PDIF Optical TOSLINK	AUDIO OUT	 *Use jack #3*
Digital S/PDIF Coaxial	AUDIO OUT	 *Use jack #4*

TIP: If your electronic audio source has multiple AUDIO OUT jacks, only use one. You can connect SurfLink Media 2 to multiple electronic audio sources by using a combination of different cable styles.

Configuring Audio Settings

Mono/Stereo Audio

The Mono/Stereo switch supports both Mono and Stereo audio streaming. When Mono is chosen, SurfLink Media 2 merges the left and right audio channels and streams combined audio to a hearing aid.

Appropriate settings for Mono/Stereo switch are:

- MONO (left position) – if you wear one hearing aid
- STEREO (right position) – if you wear two hearing aids

Audio Fidelity

The vertical switch supports different audio fidelity formats. If you are unsure about which setting is appropriate for your hearing aids, ask your hearing professional.

Hearing aids marked with (+) can successfully stream audio from either the top or bottom switch position. The best audio quality is experienced from the top position.

All wireless hearing aids are capable of streaming audio from the bottom position ( ).

Wireless hearing aids without a (+) marking cannot stream audio from the top switch position, as they are incompatible with that audio format.

TIP: When transitioning between ( ) and (+) audio formats, SurfLink Media 2 automatically resets and begins streaming the new audio format within 20 seconds.

LED Indicator

The rear LED indicator provides helpful information about SurfLink Media 2:

LED BEHAVIOR	SURFLINK MEDIA 2 STATE
Off	• SurfLink Media 2 is turned off. • SurfLink Media 2 does not detect any incoming audio.
Blinks 5 times	• During power up, LED blinks to signal SurfLink Media 2 is ready to stream audio. • When the ( ) *or* (+) switch is changed, LED blinks as a reminder that a reboot is in process.
Solid Green	• Incoming audio is available.
Blinking continuously	• Possible error condition. See Troubleshooting section on page 16.

When initially setting up SurfLink Media 2, a solid green LED confirms that an electronic audio source is outputting audio at a detectable level and the cable is properly attached to SurfLink Media 2. If you are not hearing streamed audio, troubleshoot by changing memories in your hearing aids or by pressing the Favorite button (start/stop streaming) on your remote control.

Audio streaming automatically stops when an incoming audio signal is not detected. Even though incoming audio may still be present, its volume level may be too low to provide acceptable streaming sound quality. When SurfLink Media 2 detects "meaningful" audio input (above a certain volume threshold), it will automatically start streaming audio. When using an external microphone (jack #1), SurfLink Media 2 will continue to stream, even if the room is very quiet.

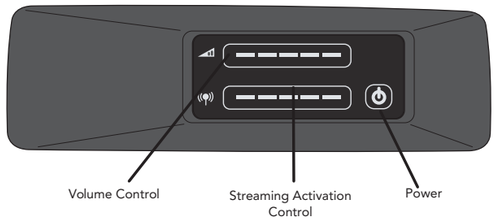
For best sound quality, we recommend maximizing (50% or higher) the volume from an electronic audio source. For example, most television and computer headphone jacks allow a user to turn up the audio being sent from the Audio Out jack.

TIP: During initial setup, a solid green LED confirms a proper cable hookup between SurfLink Media 2 and your electronic audio source.

Front Panel Overview

Power On/Off

The Power button turns on and off SurfLink Media 2. When the Power button glows blue, SurfLink Media 2 automatically streams audio when it is available. When SurfLink Media 2 is powered off, it automatically stops streaming audio.



Volume Control

The Volume Control slider bar allows a user to adjust the audio streaming level transmitted to a hearing aid. The blue light bar indicates the current volume level with more dots indicating higher volume. To change the audio streaming level, slide your finger left or right to find a comfortable listening position. Volume adjustments made on SurfLink Media 2 do not affect a hearing aid microphone volume level, nor do they affect the volume setting of the electronic audio source. *Note: For best audio quality, the volume control should be set at 60% or higher.*

TIP: Each audio input jack has a different Volume Control level, as the output levels from electronic audio sources vary significantly.

Streaming Activation Control

The Streaming Activation Control slider bar modifies the distance that hearing aids will be able to start streaming. The blue light bar indicates the current distance where a streaming session begins with more dots indicating greater distance. Slide your finger to the right to increase the distance where you want to be able to start streaming. Most users will be successful with the blue light bar fully illuminated to the right. Once hearing aids are actively streaming, they will continue streaming until they move outside the maximum range of SurfLink Media 2. The Streaming Activation Control has no effect on the maximum audio streaming range, which is fixed and not user adjustable.

Streaming to Hearing Aids

Starting and Stopping

A hearing professional can set up your hearing aids to start audio streams in two different ways:

- "Automatic" streaming – hearing aids will start streaming when they are both within the Streaming Activation distance and in a memory environment that is enabled for streaming.
- "Manual" streaming – hearing aids will start streaming when they are within the streaming activation distance, they are in a memory environment that is enabled for streaming and the user selects the Favorite button (☆) on a remote control. This method requires either a SurfLink Advanced Remote or SurfLink Mobile accessory.

To stop audio streaming, you can:

- Turn off SurfLink Media 2.
- Press Favorite button (☆) on your remote control.
- Change to a hearing aid memory environment that is not enabled for audio streaming.
- Power off electronic audio source.

Interoperability with Other Accessories

On a remote control, the Favorite button (☆) can be used to start and stop audio streaming. To use a remote control during audio streaming, aim the remote control directly at SurfLink Media 2 as the command is actually relayed by SurfLink Media 2 to the hearing aids.

If you also use a SurfLink Mobile, phone call streaming will take priority over SurfLink Media 2 audio streams. When a SurfLink Mobile phone call stream ends, SurfLink Media 2's audio stream automatically returns to a hearing aid.

Troubleshooting

SYMPTOM / ISSUE	POSSIBLE CAUSE	POSSIBLE REMEDY
One (or both) hearing aids unexpectedly drops out of audio streaming.	Hearing aids may be on the edge of wireless range.	Move closer to SurfLink Media 2.
	Battery level in hearing aid can no longer support audio streaming.	Replace hearing aid battery with new one.
	SurfLink Media 2 may not be positioned for optimal streaming.	Re-orient SurfLink Media 2 spatially by turning a few degrees to right or left.
	Large object, such as furniture or a wall, may be degrading signal.	For best performance, your hearing aids should be within line-of-sight and about the same elevation as SurfLink Media 2.
LED is solid green, but no streamed sounds are heard in the hearing aids.	Hearing aids are not within wireless range.	• Move closer to SurfLink Media 2. • Adjust the Streaming Activation Control slider to the far right.
	Telephone memory may be active.	When telephone memory is active, streaming is stopped. Ensure hearing aid is in a memory capable of streaming.
	Current audio fidelity setting is not supported by hearing aid.	Adjust the audio fidelity switch to the bottom position ( ).
LED is off, but SurfLink Media 2 appears to be on.	Audio cable may be connected to "audio IN" on electronic audio source.	Ensure the cable is plugged into "audio OUT" jack on the electronic audio source.
	No incoming audio signal is available.	Turn on the electronic audio source.
	Electronic audio source output is not correct format.	Set the digital output on your electronic audio source to PCM. Audio formats not compatible with SurfLink Media 2 include RAW, Dolby Digital®, AC3 and MPEG.
LED is blinking continuously.	Possible error condition.	Remove power adaptor from jack #5, wait 5 seconds and reinsert power adapter.
Streamed audio is not synchronized with the television picture.	Many new televisions (such as HDTVs) take a long time to process the video signal, so they may delay the audio to maintain synchronization.	• Try using another audio output jack (which may require a different type of cable) on your television. • Try using another electronic audio source. For example, if currently using cable box, try the audio OUT on a television or vice-versa. • Some electronic audio sources (such as televisions or A/V receivers) have a built-in option to adjust the timing sequence of audio and video.

Safety Information

Intended Use

The SurfLink Media 2 is an accessory to wireless hearing aids and is intended to improve signal to noise ratios between the selected entertainment media source and wireless hearing aids by wirelessly streaming audio data directly to the hearing aids.

Your SurfLink Media 2 is designed to comply with the most stringent Standards of International Electromagnetic Compatibility. However, it is still possible that you may experience interference caused by power line disturbances, electromagnetic fields from other medical devices, radio signals and electrostatic discharges.

If you use other medical devices or wear implantable medical devices such as defibrillators or pacemakers and are concerned that your SurfLink Media 2 might cause interference with your medical device, please contact your physician or the manufacturer of your medical device for information about the risk of disturbance.

Your SurfLink Media 2 should be stored within the temperature and humidity ranges of -40˚C (-40˚F) to +60˚C (140˚F) and 10%-95% relative humidity.

Your SurfLink Media 2 is designed to operate indoors in the range of temperatures from 10˚C (50˚F) to 40˚C (104˚F).

Any serious incident that has occurred in relation to your Starkey device should be reported to your local Starkey Hearing Technologies representative and the Competent Authority of the Member State in which you are established. A serious incident is defined as any malfunction, deterioration in the characteristics and/or performance of the device, or inadequacy in the device Operations Manual/ labeling which could lead to the death or serious deterioration in the state of health of the user, OR could do so upon recurrence.

International Use

Your SurfLink Media 2 is approved to operate at a radio frequency that is specific to your country or region and might not be approved for use outside your country or region. Be aware that operation during international travel may cause interference to other electronic devices, or other electronic devices may cause interference to your SurfLink Media 2.

⚠ **WARNING**: Use of SurfLink Media 2 directly next to other electronic equipment should be avoided because it could result in improper performance. If such use is necessary, note as to whether your hearing aids and the other equipment are operating normally.

⚠ **WARNING**: Use of accessories, components or replacement parts other than those provided by the manufacturer of SurfLink Media 2 could result in increased electromagnetic emissions and decreased electromagnetic immunity and could result in degradation of performance.

⚠ **WARNING**: If Portable Radio Frequency communications equipment is used closer than 30 cm (12 inches) from SurfLink Media 2, degradation of the performance of your hearing aid could result. If this occurs, move away from the communications equipment.

Wireless Technical Description

The North American version of SurfLink Media 2 operates in the 902-928 MHz frequency band with a maximum effective radiated power of 14.5 dBm with transmission modulation type of 723KF1D. The receiver section of the radio has a bandwidth of 300 kHz.

The European version of SurfLink Media 2 operates in the 863-865 MHz frequency band with a maximum effective radiated power of 9 dBm with transmission modulation type of 342KFXD. The receiver section of the radio has a bandwidth of 300 kHz.

SurfLink Media 2 has been tested to, and has passed, the following emissions and immunity tests:

- IEC 60601-1-2 radiated and conducted emissions requirements for a Group 1Class B device as stated in CISPR 11.
- Harmonic distortion and voltage fluctuations affecting the power input source as stated in Table 2 of IEC 60601-1-2.
- RF radiated immunity at a field level of 10 V/m between 80 MHz and 2.7 GHz as well as higher field levels from communications devices as stated in Table 9 of IEC 60601-1-2.
- Immunity to power frequency magnetic fields at a field level of 30 A/m.
- Immunity to ESD levels of +/- 8 kV conducted discharge and +/- 15 kV air discharge.
- Immunity to electrical fast transients on the power input at a level of +/- 2 kV at a 100 Hz repetition rate.
- Immunity to surges on the power input of +/- 1 kV line to line.
- Immunity to conducted disturbances induced by RF fields on the power input as stated in Table 6 of IEC 60601-1-2.
- Immunity to voltage dips and interruptions on the power input as stated in Table 6 of IEC 60601-1-2.

Regulatory Notices

FCC ID: EOA-TV G722
IC: 6903A-TVG722 (Model 210)

FCC Notice

This device complies with part 15 of the FCC rules and with Industry Canada license-exempt RSS standards. 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 of the device.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

NOTE: Le manufacturier n'est pas responsable de l'interférence créée par la modification de cet équipement lors de l'écoute du téléviseur ou de la radio. De telles modifications pourraient entrainer la révocation de l'autorité de l'utilisateur à opérer cet équipement.

EU NOTICE

Hereby, Starkey Hearing Technologies declares that the product listed above is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. A copy of the Declaration of Conformity can be obtained from the following addresses and from docs.starkeyhearingtechnologies.com

Starkey Hearing Technologies
6700 Washington Ave. South
Eden Prairie, MN USA

EC REP

Starkey Laboratories (Germany) G.m.b.H
Weg beim Jäger 218-222
22335 Hamburg
Germany

CE

Waste from electronic equipment must be handled according to local regulations.

Consult Operations Manual

Keep dry

Notes

Notes

Notes

Dolby Digital is a registered trademark of Dolby Laboratories.
SurfLink and Starkey are trademarks of Starkey Laboratories, Inc.

©2021 Starkey Laboratories, Inc. All Rights Reserved. 81922-007 8/21 BKLT2822-08-EE-XX