SurfLink®
MOBILE

FREQUENTLY ASKED QUESTIONS
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When I have my SurfLink Mobile plugged into the USB port on my computer, the Wi-Fi does not work. Why?

Computers may recognize the SurfLink Mobile as an Ethernet-capable device because it runs Ethernet over USB. By default, many computers drop the Wi-Fi connection when an Ethernet, or hardwire, connection is established. If this behavior is not desired, the Networking behavior can usually be customized on the computer itself.

How will the SurfLink Mobile interact with my cell phone and my car’s Bluetooth system?

In a Bluetooth pairing situation, both the car and SurfLink Mobile are considered “slave” devices to the cell phone, which is the “master” device. Since both can be paired with and used to stream audio from the phone, we cannot predict which Bluetooth device the cell phone will choose by default. In some cases it is first come, first served while in others, it always selects a particular device by default. The best approach is to turn Bluetooth Off on the device you don’t want to use while in the car. For example, if you want to use the SurfLink Mobile in the car, the car’s Bluetooth system should be turned Off.

Which hearing devices are compatible with the SurfLink Mobile?

SurfLink Mobile is compatible with all 900MHz wireless hearing devices. Older wireless hearing devices may require a firmware update to be compatible with the SurfLink Mobile. SurfLink Mobile is not compatible with 2.4GHz wireless hearing devices.
Do ear-to-ear hearing device commands work when actively streaming audio from the SurfLink Mobile?

No. Ear-to-Ear hearing device commands are disabled when the hearing devices are actively engaged in any communication or streaming from SurfLink accessories: SurfLink Mobile, SurfLink Programmer or SurfLink Media.
SECTION 3

STREAMING

When does the SurfLink Mobile stream in stereo and/or mono?

SurfLink Mobile streams in stereo during Bluetooth Media profile (A2DP) and Line-In streaming. In these two scenarios, the SurfLink Mobile always streams to both hearing devices if binaural hearing devices are synced to the SurfLink Mobile. The right audio channel is sent to the right hearing device and the left audio channel is sent to the left hearing device. If only one of the binaural hearing devices is engaged in the streaming session, only one channel of audio will be heard.

SurfLink Mobile streams a mono signal during cell phone and remote microphone streaming. If only one hearing device is synced to SurfLink Mobile, right and left audio channels are combined and streamed to that hearing device.

When I am streaming audio, why does the volume level seem to fluctuate and the audio seem to be “uneven?”

When streaming audio, Noise Control features are applied to both the streamed audio and the hearing device microphone input. If some Noise Control features are enabled, the hearing device may interpret the streamed audio as undesirable noise and may alter the audio presentation.

By default, both the Music and Streaming environments disable the Noise Control adaptations in the hearing device. Therefore, a patient may prefer a Music or Streaming environment memory when listening to streamed audio.

<table>
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<tr>
<th>Feedback Cancellation</th>
<th>Fitting Formula</th>
<th>Hearing Device Mic Setting</th>
<th>Noise Control Adaptations</th>
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<tr>
<td>Music</td>
<td>Active</td>
<td>No extra low frequency gain applied (compared with Streaming environment)</td>
<td>Omni</td>
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<tr>
<td>Streaming</td>
<td>Active</td>
<td>Additional low frequency gain applied (compared with Music environment)</td>
<td>Omni</td>
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<tr>
<td>Listening to Streamed Audio in any other Environment</td>
<td>As defined by Environment</td>
<td>As defined by Environments</td>
<td>If hearing device microphone is Directional, then only Omni input is used</td>
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Can the USB-to-micro-USB Cable be used to stream digital audio directly from the computer’s USB jack into the SurfLink Mobile?

No. The USB connection currently supports only data transfer (e.g., firmware updates) or charging. The micro-USB-to-3.5mm Audio Jack Cable that was shipped with the SurfLink Mobile should be used for wired audio output from the computer.

How can I reduce “static” during audio streaming?

There are several ways to reduce static, if experienced, during audio streaming.

- Insert new batteries into the hearing devices
- Increase the audio source volume level
- Create a Music or Streaming Environment memory with approximately 10dB less gain; this encourages the patient to turn up the audio source volume
- Additional sound quality improvements will be included in each SurfLink Mobile firmware update

Can a SurfLink Mobile be connected to a television’s RCA-style audio output jacks?

Yes. You will need the following accessories:

- Optional 3.5mm stereo female-to-RCA male cable (not available from Starkey Hearing Technologies)
- Line-in cable (shipped with the SurfLink Mobile)

Follow these steps:

1. Plug the RCA male cable to the TV audio out jacks
2. Connect the line-in cable to the 3.5mm female end of the RCA cable
3. Connect the micro-USB cable to the SurfLink Mobile
Can a patient stream audio from a SurfLink Media and use the SurfLink Mobile as a remote control?

Yes. The SurfLink Media and SurfLink Mobile are designed to work with the same set of hearing devices. On the SurfLink Mobile, use the Favorite button on the Remote screen to Stop/Start streaming of the SurfLink Media.
Does it matter if I answer an incoming call on my cell phone or the SurfLink Mobile?

If possible, it is best to answer an incoming call via the SurfLink Mobile. There are some cell phones that do not properly route the call to the SurfLink Mobile if you answer a call via the cell phone itself.

During a phone call, can I switch back and forth between conducting the call using the SurfLink Mobile or via the cell phone?

When using a Hands-Free Profile (HFP) connection, the Disconnect/Connect button on the SurfLink Mobile Remote screen switches between streaming the audio via the SurfLink Mobile and conducting the call via the cell phone itself.

During a phone call, the Remote Favorite button is replaced with the Disconnect/Connect button. When the phone call is completed, the Favorite button programmed functionality returns.

Why don’t I always see the incoming caller’s name on my SurfLink Mobile?

The SurfLink Mobile detects which Bluetooth profiles are supported by the paired cell phone. If the paired devices support both Hands-Free Profile (HFP) and Media Profile (A2DP), such as smartphones, SurfLink Mobile expects both profiles to connect prior to establishing the Phone Book Access Profile (PBAP).

If for some reason, only the HFP connection is established, then the PBAP will not operate properly, as SurfLink Mobile is still expecting the A2DP connection to be made.

If the cell phone does not support A2DP, the SurfLink Mobile will automatically connect the PBAP immediately after establishing the HFP connection.

With which cell phones is the SurfLink Mobile compatible?

The SurfLink Mobile is compatible with a wide variety of cell phones. For a complete, up-to-date list, please refer to the SurfLink Mobile Compatibility Chart found on the professional website.
What are the transmission ranges for the SurfLink Mobile?

The transmission ranges vary based on the required function.

<table>
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<tr>
<th>FROM</th>
<th>TO</th>
<th>COMMUNICATION TYPE</th>
<th>RANGE IN FEET</th>
<th>RANGE IN METERS</th>
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<td>4 - 5 Meters</td>
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<tr>
<td></td>
<td></td>
<td>• Surround Mic</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Focus Mic</td>
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<tr>
<td></td>
<td></td>
<td>• Line-In Audio</td>
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<td></td>
<td></td>
<td>• Bluetooth Media (A2DP) Audio</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One-Way Cell Phone (JustTalk Disabled)</td>
<td></td>
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<tr>
<td>SurfLink Mobile</td>
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<td>Two-way Cell Phone Streaming (JustTalk Enabled)</td>
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(cell phone, MP3 player, laptop, etc.)
SECTION 6

USER CONTROLS

What is the Volume Control behavior of the wireless system?
Volume is adjusted via the physical buttons on the side of the SurfLink Mobile.

VOLUME CONTROL ADJUSTMENTS WHILE STREAMING

- VC adjustments from the Streaming Screen adjusts the streaming input volume and is displayed by a slider bar
  - SurfLink Mobile remembers the last volume setting used

- VC adjustments from the Phone Call Screen adjusts the streaming input volume (this screen only appears during an active phone call) and is displayed by a slider bar
  - SurfLink Mobile remembers the last volume setting used

- VC adjustments from the Remote Control Screen adjusts the hearing aid volume and is displayed by a speaker with plus or minus sign

VOLUME CONTROL ADJUSTMENTS WHEN NOT STREAMING

- VC adjustments from the Streaming Screen adjusts the hearing aid volume and is displayed by a speaker with plus or minus sign

- VC adjustments from the Remote Control Screen adjusts the hearing aid volume and is displayed by a speaker with plus or minus sign
Is the SurfLink Mobile compatible with Bluetooth stethoscopes?

Currently there are no Bluetooth hearing device systems in the industry that provide sound quality that would be acceptable to medical personnel.
SECTION 8

PRODUCT DEMONSTRATIONS

When demonstrating the SurfLink Mobile for groups of people, how can interference be minimized?

To optimize the product demonstration, follow these steps.

1. Do not wirelessly program with a SurfLink Programmer at the same time
2. Turn off all nearby SurfLink accessories (SurfLink Programmer & SurfLink Media)
3. Demonstrate in an 8 meter x 8 meter (25’ x 25’) room or larger:

**UNITED STATES AND CANADA:**

Maximum of 4 active SurfLink Mobile devices may be supported.

**EUROPE:**

Maximum of 2 active SurfLink Mobile devices may be supported.

The EU limits the RF bandwidth which reduces the ability of the SurfLink Mobile to avoid interference by moving to a new frequency channel.
SECTION 9

TROUBLESHOOTING

My SurfLink Mobile is “locked-up” or non-responsive. What can I do?

The SurfLink Mobile can usually be reset by pressing the power button for 30 seconds and releasing. In some cases, there will be no apparent response from the SurfLink Mobile. Press the power button again for about 3 seconds, which should now Power On the display.

How can I upgrade the firmware on the SurfLink Mobile?

The SurfLink Mobile firmware is updated via an executable file.

2. Download and run the executable file or download the file and save it locally to run at a later time
3. Connect the SurfLink Mobile to the USB port of the PC using the USB-to-micro-USB Cable
4. Initiate the firmware upgrade wizard to perform the firmware update
5. The update will take 5 - 10 minutes to complete

How can the patient adjust the Touch Screen inactivity time before the display automatically turns off?

On the SurfLink Mobile, go to Tools > Settings > Display > Sleep Delay and choose 1 (default), 3 or 5 minutes.

Touch Screen inactivity adjustability is not available with Firmware Versions 1.0 - 1.3. The SurfLink Mobile firmware may be updated by following the directions in the How can I upgrade the firmware on the SurfLink Mobile? section outlined above.

Does the indicator level adjustment in the Inspire® software influence the volume of the specialized ringtones from a cell phone?

No. It impacts only the generated indicator from the hearing aid.

How does the patient increase the level of the specialized ringtones?

The phone ringtone is considered a streamed input; the volume can be increased via the SurfLink Mobile volume controls. SurfLink Mobile will remember the volume of the ringtones going forward.
Can SurfLink Mobile be concurrently synced to more than one set of hearing devices?

No. The SurfLink Mobile can only be synced to one Left and one Right hearing device at a time.

Can a set of hearing devices respond to more than one SurfLink Mobile?

No. A set of hearing devices will only respond to one SurfLink Mobile at any given time. To use a different SurfLink Mobile with a set of hearing devices, the hearing devices would need to be synced to the different SurfLink Mobile. If the hearing devices were previously synced to the different SurfLink Mobile, then the hearing devices would need to be re-synced (i.e., “trashed” and then synced).

Can a SurfLink Mobile and a SurfLink Remote be used with the same set of hearing devices?

No. Hearing devices can only be used with one remote control accessory at a time. It must be synced to either the SurfLink Mobile or the SurfLink Remote; it cannot be synced to both at the same time.

What batteries are recommended for optimal performance when streaming wirelessly to a CIC instrument?

The SurfLink Power Batteries are recommended.
How does the 900 MHz wireless technology used in all SurfLink accessories and wireless hearing devices interact with medical devices like pacemakers and defibrillators?

This information is taken directly from the SurfLink Mobile Operations Manual:

If you use other medical devices or wear implantable medical devices such as defibrillators or pacemakers and are concerned that your SurfLink Mobile 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. The SurfLink Mobile should not be used during an MRI procedure.

How do devices using 900 MHz that are within range of the SurfLink Mobile interfere with the performance of the SurfLink Mobile?

When two 900 MHz electronic devices are placed in close proximity, the radio frequency (RF) emissions can cause unintended interference with the SurfLink Mobile or vice versa. On the SurfLink Mobile, this may result in disrupted signals and/or decreased audio quality. In most environments, SurfLink Mobile’s Adaptive Frequency Agility technology adjusts to an interference-free frequency channel to resolve the interference.

However, if the interfering signal is either close enough, puts out a very strong signal, or is very brief in duration, patients may notice slight changes in the audio signal quality on the SurfLink Mobile. In most instances, simply moving the SurfLink Mobile farther away from the interfering 900 MHz equipment will resolve any issues.

On rare occasions where there is insufficient available space to separate the interfering equipment from the SurfLink Mobile, it may be necessary to replace or adjust the frequencies of the interfering equipment or temporarily stop audio streaming on the SurfLink Mobile.