# SURFLINK®



#### OPERATIONS MANUAL

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## Introduction

The SurfLink Remote Microphone is designed to stream remote microphone audio directly to your 900MHz wireless hearing instruments. When worn by a distant speaker in noisy environments, SurfLink Remote Microphone functions as an assistive listening device.

**Streaming** – Audio or sound transmitted from SurfLink Remote Microphone to your 900MHz wireless hearing instruments.

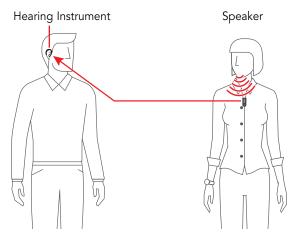
#### Package Contents

- SurfLink Remote Microphone
- USB-to-MicroUSB Recharging Cable
- Operations Manual

#### **Optional Accessories**

- Wall Power Adaptor
- Car Charger Adaptor
- Lanyard

#### Typical Setup



## Basic Use

## Basic Use

#### To quickly start using SurfLink Remote Microphone:

 Power on SurfLink Remote Microphone. Green LED appears for 2 seconds.



 Press "Sync" icon on slider button for 5 seconds until LED starts rapidly blinking blue.



 Open one hearing instrument battery door, insert battery and close battery door. Green LED blinks to confirm successful sync.

If you only have one hearing instrument, wait 20 seconds until red LED blinks.

If you have two hearing instruments, open second hearing instrument battery door, insert battery and close battery door. Green LED blinks to confirm successful sync.



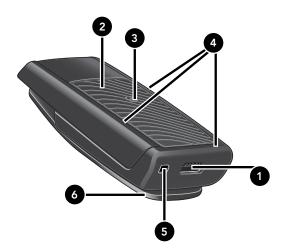


- 4. Each hearing instrument should automatically start streaming audio. Blue LED slowly blinks when audio streaming is active.
- 5. Have a speaker attach SurfLink Remote Microphone to their clothing within 8" (20cm) of their mouth.
- 6. To stop streaming, turn off SurfLink Remote Microphone.









## **Controls Overview**

#### 1. MicroUSB Jack for Recharging

Recharging via Battery-Charging Cable.

#### 2. Power On/Off Slider

- Moving the slider towards the microUSB jack powers on SurfLink Remote Microphone.
- Moving the slider away from the microUSB jack powers off SurfLink Remote Microphone.

#### 3. Syncing

Establishes the relationship between SurfLink Remote Microphone and hearing instruments.

#### 4. Built-In Microphones

Pick up sound and transmits to hearing instruments.

#### 5. LED Indicator

Identifies the current state of SurfLink Remote Microphone.

#### 6. Clip

Affixes SurfLink Remote Microphone to clothing.

## **Operation**

#### Low Battery and Recharging

If SurfLink Remote Microphone is on and enters a low battery condition, the LED slowly blinks red and provides an audible indicator tone to a hearing instrument. The indicator tone is distinctly different from the low battery indicator for a hearing instrument, so there is no confusion as to which is experiencing a low battery condition. Once SurfLink Remote Microphone enters a low battery condition, the indicator tone will occur about every 5 minutes until SurfLink Remote Microphone automatically shuts down, or until a recharging power source is applied.

When SurfLink Remote Microphone is properly connected to a power source, the LED turns green for 2 seconds and recharging automatically begins. While SurfLink Remote Microphone is off, the LED slowly blinks green during recharging and changes to solid green when fully charged. While SurfLink Remote Microphone is on, the LED prioritizes streaming by slowly blinking blue (even when the battery is fully charged).

Operation

**TIP** – Recharging SurfLink Remote Microphone can take longer while streaming audio. Recharging will be faster when the SurfLink Remote Microphone is off.

#### **Typical Charging Method**

To recharge the battery, connect the microUSB end of the recharging cable to the microUSB jack on SurfLink Remote Microphone.

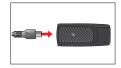
Connect the USB end of the recharging cable to a female USB jack, such as found on a computer.

#### **Optional Charging Methods**

Wall Power Adaptor – The SurfLink Remote Microphone can be recharged using a wall power adaptor, which can be plugged into a wall outlet. These wall power adaptors are available at most consumer electronic stores.







They can also be obtained from your hearing professional (ask for part #52824-000).

Car Charger Adaptor – The

SurfLink Remote Microphone can be recharged using a car charger adaptor. These car charger adaptors are available at most consumer electronic stores. They can also be obtained from your hearing



professional (ask for part #52869-000).

#### Power On/Off Slider

Power On – Move the slider toward the microUSB end to turn on. The LED turns green for 2 seconds to verify power is on.



Power Off - To stop streaming audio, move the slider away from the microUSB end until the brightly colored surface is exposed. The LED turns red for 2 seconds to verify power is off.



#### Syncing

Syncing establishes a relationship between your hearing instruments and SurfLink Remote Microphone. For hearing instruments to receive streamed audio from SurfLink Remote Microphone, you must first sync the hearing instruments with SurfLink Remote Microphone. You only have to sync SurfLink Remote Microphone with your hearing instruments once, as they will automatically connect when both are powered on and they are within wireless operating range.

To put SurfLink Remote Microphone into an active syncing state, press the "Sync" icon on the Power On/Off slider for 5 seconds until the LED starts rapidly blinking



blue. To sync a hearing instrument with SurfLink Remote Microphone, open your hearing instrument battery door, insert a battery, and close your hearing instrument battery door.

The SurfLink Remote Microphone remains in an active syncing state for up to 20 seconds (concluded by red LED blink), or until one hearing instrument is synced with it (confirmed by a green LED blink).

After a successful hearing instrument syncing, SurfLink Remote Microphone continues in an active syncing state for another 20 seconds (concluded by red LED blink), or until the second hearing instrument is synced with it (confirmed by green LED blink).

After successful syncing, each hearing instrument should automatically start streaming audio. If syncing did not yield the desired result, then repeat the process.

To cancel syncing mode, turn off and then turn on SurfLink Remote Microphone.

The SurfLink Remote Microphone can be synced with at most one left and one right hearing instrument at a time. When hearing instruments are synced with SurfLink Remote Microphone, any previously synced hearing instruments will be automatically deleted. **Built-In Microphones** 

Depending on SurfLink Remote Microphone's physical orientation, it automatically adjusts the microphone settings to either "Focus" (directional) or "Surround" (omnidirectional).

"Focus" – When Surflink Remote Microphone is body worn, it automatically prioritizes sound from above while reducing sounds levels from other directions. This is useful for listening to a single speaker when background noise is present.

"Surround" - When Surfl ink Remote Microphone is placed horizontally (on its clip), it receives sound from all directions. This setting is useful for listening to multiple nearby speakers in quiet environments.

TIP - In noisy environments, move SurfLink Remote Microphone as close as possible to sound source.

#### LED

The LED indicator provides helpful information about

LED behavior	SurfLink Remote Microphone state
Off	<ul> <li>SurfLink Remote Microphone is off and is not connected to a power source</li> <li>SurfLink Remote Microphone battery is not operational and needs recharging</li> </ul>
Green for 2 seconds	<ul> <li>SurfLink Remote Microphone successfully powers on</li> <li>Recharging started</li> </ul>
Red for 2 seconds	• SurfLink Remote Microphone powers off
Slow blinking blue	• SurfLink Remote Microphone is streaming audio
Slow blinking green	• Battery is recharging and SurfLink Remote Microphone is off
Solid green	• Battery is fully charged and SurfLink Remote Microphone is off
Slow blinking red	• Low battery state and SurfLink Remote Microphone is on
Rapid blinking red	• Possible error condition. Refer to Troubleshooting section.
Rapid blinking blue	• SurfLink Remote Microphone is in active syncing state

#### How to Wear

The SurfLink Remote Microphone can be affixed to clothing or worn on a lanyard. For better performance, SurfLink Remote Microphone should be within 8" (20cm) of the speaker's mouth.

**Clip** – Gently press the clip as shown. Slide clip opening onto clothing and release clip. Ensure SurfLink Remote Microphone is securely affixed to clothing.

Lanyard (optional) –

- 1. Gently press the clip as shown.
- 2. Insert lanyard loop into clip opening and lift loop toward top of clip. Release clip. Ensure the lanyard is securely attached to SurfLink Remote Microphone.

Lanyards can be obtained from your hearing professional (ask for part #53262-000).



**TIP** – To achieve better signal-to-noise performance, a hearing professional can adjust (mute or attenuate) your hearing instrument microphones during SurfLink Remote Microphone use.

#### Streaming Audio

After SurfLink Remote Microphone powers on, it automatically begins streaming audio to synced hearing instruments. The LED slowly blinks blue to confirm that audio streaming is active and SurfLink Remote Microphone's battery is operational. When SurfLink Remote Microphone is turned off, it automatically stops streaming audio.

The user can adjust streamed audio volume level via their hearing instruments. The SurfLink Remote Microphone does not contain an integrated volume control.

#### Interoperability with Other Accessories

If you also use a SurfLink Mobile, then its phone call streaming will take priority over the SurfLink Remote Microphone audio stream. When a SurfLink Mobile phone call stream ends, SurfLink Remote Microphone's audio stream automatically returns to a hearing instrument. SurfLink Remote Microphone streamed audio is equal in priority to SurfLink Media streamed audio with preference being given to the first available audio source.

If you use a SurfLink Remote or SurfLink Mobile, then remote control commands will continue to be sent to your hearing instruments.

## Troubleshooting

SYMPTOM / ISSUE	POSSIBLE CAUSE
One (or both) hearing instruments unexpectedly drop out of audio streaming.	Hearing instrument may be on the edge of wireless range.
	Battery level in hearing instrument can no longer support audio streaming.
	Large object, such as furniture or a wall, may be degrading signal.
	Outdated hearing instrument firmware.
LED is slowly blinking blue, but no streamed sounds are heard in the hearing instruments.	Hearing instruments are not within wireless range.
	Hearing instruments are not properly synced with SurfLink Remote Microphone.
	Battery level in hearing instrument cannot support audio streaming.
LED is rapidly blinking red continuously.	Possible error condition.
Difficult to hear speaker in noisy environments.	Signal-to-noise performance not optimal for current hearing instrument memory.
	SurfLink Remote Microphone may not be positioned for optimal streaming.
	SurfLink Remote Microphone may be too far from speaker.

Troubleshooting

POSSIBLE REMEDY
Move closer to SurfLink Remote Microphone.
Replace hearing instrument battery with new one.
For best performance, your hearing instruments should be within line-of-sight.
Hearing professional can update hearing instruments with the most recent firmware.
Move closer to SurfLink Remote Microphone.
Sync hearing instruments with SurfLink Remote Microphone.
Replace hearing instrument battery with new one.
Turn off SurfLink Remote Microphone, wait 15 seconds, and turn on SurfLink Remote Microphone.
Change to memory optimized by your hearing professional for use with SurfLink Remote Microphone.
Re-orient SurfLink Remote Microphone spatially by turning a few degrees to right or left.
Move SurfLink Remote Microphone closer to speaker's mouth.

## **Regulatory Notices**

#### **Required Information**



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

#### Instructions for Disposal of Old Electronics

Paradigm encourages, and your local community laws may require, that your SurfLink Remote Microphone be disposed of via your local electronics recycling/disposal process.

The below instructions are provided for the benefit of disposal/recycling personnel. Please include this manual with your device when disposing of your SurfLink Remote Microphone.

#### For Disposal/Recycling Personnel Only

This product contains a Lithium Ion Polymer battery. To remove this battery:

- Power off the SurfLink Remote Microphone.
- Insert small screwdriver into the side housing crevice just above the clip spring and pry apart the housing halves.
- Unplug the battery connector from the circuit board to prevent accidental shorting.
- Pry the battery away from the back plate using a wide flat blade.

#### Intended Use

The SurfLink Remote Microphone is an accessory to a wireless air conduction hearing instrument. It is intended to wirelessly transmit audio signals from the location of the SurfLink Remote Microphone directly to an air conduction hearing instrument.

The SurfLink Remote Microphone is classified as a Type B applied part under the IEC 60601-1 medical instrument standard.

SurfLink Remote Microphone 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, airport metal detectors, 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 Remote Microphone 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.

SurfLink Remote Microphone should not be used during an MRI procedure.

#### Use on Aircrafts

SurfLink Remote Microphone should not be used on aircrafts unless specifically permitted by the flight personnel.

Regulatory Notices

#### International Use

SurfLink Remote Microphone 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 with other electronic devices, or other electronic devices may cause interference with your SurfLink Remote Microphone.

The battery in your SurfLink Remote Microphone is not replaceable. Do not attempt to replace the battery.

FCC ID: EOA-CM IC: 6903A-CM (Model 400)

#### FCC/IC Notice

This device complies with part 15 of the FCC rules and with RSS-247. 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.

#### Note FCC/IC

Cet appareil est conforme avec la partie15 des règles de la FCC et du RSS-247. L'utilisation est assujettie à deux conditions: (1) Cet appareil ne doit pas causer d'interférence nuisible et (2) ce dispositif doit accepter l'interférence reçue incluant l'interférence qui pourrait causer des opérations indésirables pour l'appareil.

**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.

Regulatory Notices Hereby, Paradigm declares that the SurfLink Remote Microphone is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the Declaration of Conformity can be obtained from the addresses below.

Paradigm, Inc. 6600 Washington Ave. South Eden Prairie, MN 55344 USA

EC REP

Paradigm, Inc. European Headquarters Wm. F. Austin House, Bramhall Technology Park Pepper Road, Hazel Grove, Stockport SK7 5BX United Kingdom

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The following symbols are used in this document and on the Remote Microphone:

This device produces and receives radio frequency energy. Interference may occur in the vicinity of equipment marked with the following symbols:



Class II device

Dispose of properly

Consult operations manual





#### Notes


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