# Your StarLink Mini Remote Microphone User Manual



Accessory for: Wireless hearing aids

# Congrats!

You're about to enhance your hearing experience.

## You've got a Mini Remote Microphone. Clearer speech. Easier conversations.

Your Mini Remote Mic enhances speech so you can enjoy conversations. And connect with the world around you.

Use this simple manual to get started.

# **Table of contents**

1. Get to know your	
Mini Remote Microphone	
Meet your Mini Remote Mic	6
Set up your Mini Remote Mic	7
Use your Mini Remote Mic	10
Charge your Mini Remote Mic	14
2. Troubleshooting guide	18
3. Additional guidance	
Intended use	22
ECC information	24
FCC information	

# Get to know your Mini Remote Microphone

- Meet your Mini Remote Mic
- Set up your Mini Remote Mic
- Use your Mini Remote Mic
- Charge your Mini Remote Mic

# Meet your Mini Remote Mic

### **Overview**

### 1. Power button

Turns the Mini Remote Mic OFF/ON.

### 2. Indicator light

Identifies how your Mini Remote Mic is currently operating.

### 3. Microphone

Picks up the speaker's voice (audio) so you can hear it.

# 4. Power supply jack (microUSB)

For the power adapter.

### 5. **Clip**

Attaches the Mini Remote Mic to the speaker's clothing or lanyard.



# Set up your Mini Remote Mic

### Power ON/OFF

Use the power button to turn your Mini Remote Mic ON or OFF:

• ON – press the power button for 2 seconds. Release when the indicator light glows green.



• OFF - press the power button for 2 seconds. Release when the green indicator light no longer appears.



### To pair with hearing aids

Before using your Mini Remote Mic for the first time, you'll need to pair it with your hearing aid(s). This allows your accessory to recognize your hearing aids so they can work together.

### STEP 1: Turn ON your Mini Remote Mic

### STEP 2: Turn your hearing aids OFF and ON.

• For CROS hearing aid systems: Turn OFF your hearing aids and CROS transmitter. Next, turn ON your hearing aids but leave the CROS transmitter **OFF**.

# Set up your Mini Remote Mic

# STEP 3: Pair your Mini Remote Mic with your hearing aid(s):

- Ensure your hearing aids are not connected to nearby Bluetooth® devices:
  - Turn OFF Bluetooth on your mobile phone.
  - Turn OFF any wireless accessories already paired to your hearing aids.
- Place your hearing aids within 6 inches (15 cm) of your Mini Remote Mic.
- When the green indicator light on your Mini Remote Mic begins to blink, slowly press the power button twice. The indicator light will then blink in red and blue.



# Set up your Mini Remote Mic

### 4. For a **set** of hearing aids:

1st indicator light blink	2nd indicator light blink	Pairing result	Next step
1	2	Both hearing aids paired	Complete
1	2	Only one hearing aid paired	Repeat 1 – 5 within STEP 3
1	N/A	No hearing aids paired	Repeat 1 – 5 within STEP 3

### 5. For a **single** hearing aid:

Indicator light blink	Pairing result	Next step
1	Hearing aid paired	Complete
1	Hearing aid not paired	Repeat 1 – 5 within STEP 3

Done! Head to the next page to start using your Mini Remote Mic.

### To use your Mini Remote Mic

STEP 1: Check that your hearing aids are ON.

**Reminder** – Before streaming audio for the first time, ensure your hearing aids are paired to your Mini Remote Mic. See p. 9.

STEP 2: Start/stop streaming audio (a speaker's voice).

Do one of the following:

- Turn On the Mini Remote Mic: Audio streaming automatically starts in hearing aid.
- Hearing aid mobile app: Open the app on your mobile phone or tablet.
   Select the option to start/stop streaming from Accessories screen.
- Wireless Remote:
   If configured by your
   hearing care professional,
   press the Favorite button.



**NOTE:** Typical wireless operating range is up to 60 feet (20 M). This may be shortened by environmental factors (e.g., obstructions, interference, position of people). Wider operating ranges may be possible, however, your audio or connection quality may decrease.

Hearing aid user control:
 If configured by your hearing care professional, a specific gesture (e.g., a long press on a user control) can start/stop streaming.

**NOTE:** An audible indicator may play in your hearing aids to signal the start/stop of audio streaming.

# STEP 3: Adjust the streaming volume. Do one of the following:

- Move the volume slider on the Accessories screen of your compatible mobile app.
- Press the Favorite button on your wireless Remote.\*
- Press (or tap) your hearing aid user controls.\*

<sup>\*</sup>Controlling your Mini Remote Mic using this function must be set up by your hearing care professional.

### Indicator light

The indicator light identifies how your Mini Remote Mic is currently operating:

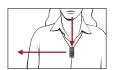
Indicator light status	Operational status
Slow, blinking green	ON
No green indicator light appears	OFF
Slow, blinking red (a tone will also play every 5 minutes)	Low battery
Solid red	Malfunction or electrical issue

### Wearing the Mini Remote Mic

Your Mini Remote Mic can be attached to the clothing or lanyard worn by the person speaking. It's best to place it within 8 inches (20 cm) of the person's mouth.

### Clothing instructions:

 Squeeze the clip of the Mini Remote Mic until it opens.



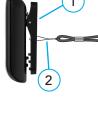
- 2. Slide the opening of the clip onto the clothing.
- 3. Release the clip.



4. Ensure your Mini Remote Mic is securely attached to the clothing.

### Lanyard (optional) instructions:

- Squeeze the clip of the Mini Remote Mic until it opens.
- 2. Slide the lanyard loop into the clip opening. Lift it towards the top of the clip.



- 3. Release the clip.
- 4. Ensure your Mini Remote Mic is securely attached to the lanyard
- 5. Place lanyard around the neck.

### How your Mini Remote Mic helps

Your Mini Remote Mic is designed to enhance speech and help you enjoy



conversations with another person.

You can also try placing your Mini Remote Mic near your TV to hear the audio better. For best results, use a TV Streamer. See your hearing care professional for details.

# **Charge your Mini Remote Mic**

### To charge your Mini Remote Mic

 Attach the microUSB end of the charging cable to the microUSB jack on your Mini Remote Mic.



Attach the microUSB end of the charging cable to the jack on the power adapter.



- 3. Plug the power adapter into an external power source, like a wall outlet.
- 4. Check the charging status using the indicator light on your Mini Remote Mic.

# **Charge your Mini Remote Mic**

Power status	Indicator light status	Charging status
OFF	Solid green	Recharging
OFF	None	Fully charged
ON	Solid green briefly interrupted by other indicator light behaviors	Recharging
ON	None	Fully charged

Your Mini Remote Mic will fully charge in about 3 hours.

**Reminder** – Charging your Mini Remote Mic may take longer if you're streaming audio. Charging is typically faster when your Mini Remote Mic is OFF.

Problems with your Mini Remote Mic? Try these tips. If issues continue, contact your hearing care professional.

Symptom	Possible causes	Solutions
	Hearing aids may be almost outside the wireless range.	Move closer to your Mini Remote Mic.
One (or both) hearing aids unexpectedly stops streaming audio.	Battery level of your hearing aid can no longer support audio streaming.	Replace your hearing aid battery with a new one. OR Recharge your hearing aid.
	Large object (e.g., furniture or a wall) may be blocking the signal.	<ol> <li>Remove obstructions (if possible).</li> <li>Position your hearing aids in full view from the Mini Remote Mic.</li> </ol>
	Lost wireless connection to your Mini Remote Mic.	Restart the audio streaming. See Start/stop streaming audio on p. 12.

Symptom	Possible causes	Solutions
Distorted sound quality of streamed audio.	Low battery level in your Mini Remote Mic.	Recharge your Mini Remote Mic. See Charge your Mini Remote Mic on p. 16.
Streamed audio is too loud or too soft.	Audio streaming volume has not yet been adjusted for your hearing needs.	Adjust the audio streaming volume using your compatible mobile app, wireless remote, or hearing aid user controls.
Difficult to hear another	Mini Remote Mic may be too far from the person speaking.	Move your Mini Remote Mic closer to the speaker's mouth.
person speaking in a noisy environment.	Mini Remote Mic may be covered by clothing or is not positioned correctly.	1. Uncover your Mini Remote Mic if needed.  2. Position your Mini Remote Mic correctly near the speaker's mouth.

Symptom	Possible causes	Solutions
Indicator light is slowly	Hearing aids are not ready to receive streamed audio.	Start the audio stream. Follow the steps in Start/stop streaming audio on p. 12.
blinking green, but audio is not streaming to hearing aids.	Hearing aids are not paired with your Mini Remote Mic.	Follow the steps in To pair with hearing aids on p. 9.
Indicator light shows solid red.	Possible malfunction or electrical issue.	<ol> <li>Turn OFF your Mini Remote Mic.</li> <li>Wait 30 seconds.</li> <li>Turn ON your Mini Remote Mic again.</li> </ol>

# Additional guidance

- Intended use
- FCC information
- Regulatory information

### Intended use

The Mini Remote Microphone is an accessory to a 2.4 GHz wireless air conduction hearing aid. It is intended as a wireless transmitter of sound from an audio source to air conduction hearing aids. When worn by a distant speaker in noisy environments, it functions as an assistive listening device.

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

The Mini 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.

The Mini Remote Microphone is designed to be cleaned with a damp cloth moistened with soapy water.

If you use other medical devices or wear implantable medical devices such as defibrillators or pacemakers and are concerned that your Mini 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. The Mini Remote Microphone should not be used during an MRI procedure or in a hyperbaric chamber. The Mini Remote Microphone is not formally certified to operate in explosive atmospheres such as may be found in coal mines or certain chemical factories.

### Use on Aircrafts

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

### International Use

The Mini Remote Microphone is approved to operate at radio frequencies that are 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 Mini Remote Microphone.

45 C 95% rH Your Mini Remote Microphone is designed to operate, he stored and be transported with its operate, be stored, and be transported within the temperature range of -10°C (14°F) to 45°C (113°F) and relative humidity range of 10%-95%, and altitude limits 70 kPa - 106 kPa (equivalent to altitudes from 1,200 ft (380 m) below sea level to 10,000 ft (3,000 m).

The charging temperature range is between 0°C (32°F) and 40°C (104°F).

### Clinical benefit

The accessory itself does not provide a direct clinical benefit. An indirect clinical benefit is provided by enabling the parent device (wireless hearing aids) to achieve their intended purpose.

We are required by regulations to provide the following warnings:

**WARNING:** Use of the Mini Remote Microphone 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.

### Intended use

WARNING: Use of accessories, components or replacement parts other than those provided by the manufacturer of the Mini Remote Microphone 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 your Mini Remote Microphone, degradation of the performance of your hearing aid could result. If this occurs, move away from the communications equipment.

Although the Mini Remote Microphone is not formally certified (IP rated) for protection against dust or water ingress, per IEC 60529, it has been tested to the IP 5X level. This means that the Mini Remote Microphone is protected from dust.

The battery in your Mini Remote Microphone is not replaceable.

Do not attempt to replace the battery. The Mini Remote Microphone does not contain any user-serviceable parts. Do not open or modify it.

The USB AC adapter used with the Mini Remote Microphone must be certified for safety by a Nationally Recognized Testing Laboratory (in North America) or meet applicable national electrical safety standards (in other countries)

Do not connect the Mini Remote Microphone to any devices not described in this manual.

The expected service life of the Mini Remote Microphone is 3 years.

### Wireless Technical Description

The Mini Remote Microphone operates in the 2.4-2.4835 GHz band with a maximum effective radiated power of 8 dBm with transmission modulation type of GFSK with 2 MHz bandwidth. The receiver section of the radio has a bandwidth of 2 MHz.

The Mini Remote Microphone 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 1 Class 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 and to proximity magnetic fields as stated in Table 11 of IEC 60601-1-2.
- 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.

## Intended use

### **EU ADVERSE EVENT REPORTING**

Any serious incident that has occurred in relation to your device should be reported to your local Starkey 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 user 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.

# **FCC information**

### WIRELESS NOTICES

FCC ID: EOA-24RMQ

IC: 6903A-24RMQ (Model 950)

This device complies with part 15 of the FCC rules and with ISED Canada license-exempt RSS standard(s). 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.

Hereby, Starkey Laboratories, Inc. declares that the Mini Remote Microphone 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.

Hereby, Starkey Laboratories, Inc. declares that the Mini Remote Microphone is in compliance with the UK Radio Equipment Regulations SI 2017 as amended. A copy of the UK Declaration of Conformity can be obtained from the following addresses and from docs. starkeyhearingtechnologies.com.

# Regulatory information



### Starkey Labs Canada Co.

2476 Argentia Road, Suite 301 Mississauga, ON L5N 6M1 www.starkeycanada.ca



Starkey Laboratories (Germany) GmbH Weg beim Jäger 218-222 22335 Hamburg Germany

UK Authorised Person: Starkey UK William F. Austin House Pepper Rd, Hazel Grove Stockport SK7 5BX, UK www.starkey.co.uk



Waste from electronic equipment must be handled according to local regulations



Consult user manual



Keep dry

### Instructions for Disposal of Old Electronics

Starkey Laboratories, Inc. encourages, the EU requires, and your local community laws may require, that your Mini 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 when disposing of your Mini Remote Microphone.

### FOR DISPOSAL/RECYCLING PERSONNEL ONLY

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

- · Power off the Mini Remote Microphone.
- · Pry apart the housing halves with a small screwdriver.
- Cut the battery wires from the circuit board to prevent accidental shorting.
- Pry the battery away from the housing using a wide flat blade.

Such modifications could void the user's authority to operate the equipment.

# **Regulatory information**

Symbol	Symbol Meaning	Applicable Standard	Symbol Number
<b></b>	Manufacturer	BS EN ISO 15223-1:2021	5.1.1
EC REP	Authorized representative in the European Community	BS EN ISO 15223-1:2021	5.1.2
~	Date of Manufacture	BS EN ISO 15223-1:2021	5.1.3
REF	Catalogue Number	BS EN ISO 15223-1:2021	5.1.6
SN	Serial Number	BS EN ISO 15223-1:2021	5.1.7
MD	Medical Device	BS EN ISO 15223-1:2021	5.7.7
宁	Keep Dry	BS EN ISO 15223-1:2021	5.3.4
1	Temperature Limit	BS EN ISO 15223-1:2021	5.3.7
Ø	Humidity Limitation	BS EN ISO 15223-1:2021	5.3.8
$\triangle$	Caution	BS EN ISO 15223-1:2021	5.4.4
<b>^</b>	General warning sign	EC 60601-1, Reference no. Table D.2, Safety sign 2	ISO 7010- W001
<b>③</b>	Refer to instruction manual/booklet	EC 60601-1, Reference no. Table D.2, Safety sign 10	ISO 7010- M002
X	Collect Separately	DIRECTIVE 201 2/19/EU (WEEE)	Annex IX
	Class II equipment	IEC 60417 Reference no. Table D.1	Symbol 9 (IEC 60417- 5172)
<b>&amp;</b>	Regulatory Compliance Mark (RCM)	AS/NZS 4417.1:2012	N/A
€	Giteki Mark	Japanese Radio Law	N/A
	Direct current	IEC 60601-1 Reference no. Table D.1	IEC 60417- 5031
PS PS PATENTIAL PATEN	Recycling Symbol	European Parliament and Council Directive 94/62/EC	Annex I-VII

# **Notes**

# **Notes**

# **Notes**



Patent: www.starkey.com/patents