

REMOTE MICROPHONE TROUBLESHOOTING

AUDITORY OUTREACH WEBINAR

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We would like to acknowledge that we are presenting from the qathet region, on the lands of the Coast Salish peoples, specifically the traditional territory of the Tla'amin Nation on which qathet School District resides. I value the opportunity to live, learn, and share educational experiences here.

AGENDA

- Tools necessary for troubleshooting
- Most common issues, possible causes and solutions
- Device-specific troubleshooting
- FAQs

TROUBLESHOOTING TOOLS

Battery tester



Alcohol wipes



Hearing aid - stethoscope



Cochlear Implant – monitor earphones



Bone conduction – listening rod



TROUBLESHOOTING TOOLS – SCHOOL KIT

Cleaning tools



Size 312 for Roger Focus



Batteries – size 13 most common in hearing aids



Size 675 *Implant Plus* for CIs, Osia BCHD



1) Receiver won't connect

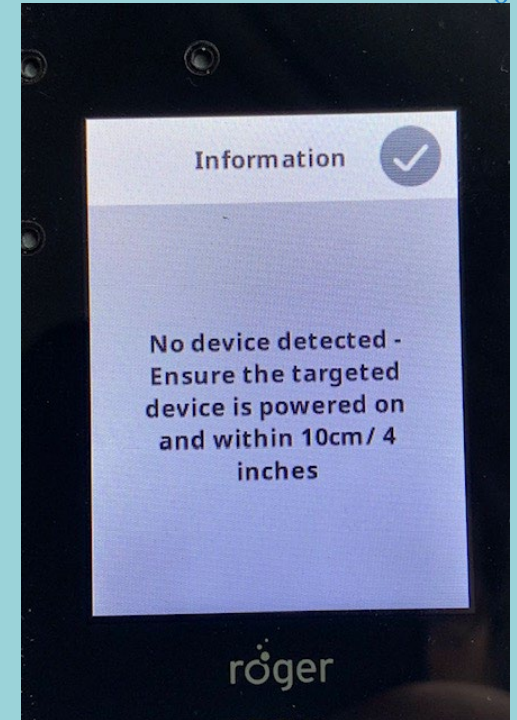
- Out of connection range

➔ Bring powered-on receiver within “**4 inches**” of powered-on transmitter when trying to connect

- Interference from other transmitters or wireless device

➔ Ensure no other DM transmitters are powered on and within 3 metres of the receiver except for the transmitter you are trying to connect

➔ Move at least 3 metres away from or power OFF *Bluetooth* devices and *WIFI* routers when trying to connect



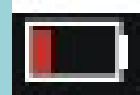
Receiver won't connect ... cont'd

- Insufficient power in receiver

➔ Insert a new battery in hearing device and wait 10 seconds before attempting to connect

- * Disposable batteries need to “air” for one minute (5 minutes for size 675 batteries) after sticker is removed
- * Ensure battery door is fully closed on hearing aid

- Insufficient power in transmitter



➔ Check battery status on transmitter. If low, power transmitter OFF and charge until no longer red before attempting to connect.

➔ Roger ON should be charged using the supplied cable and wall plug. The docking station is mainly designed for audio input. Charging via the docking station does not provide full shelf life to transmitter.



Receiver won't connect ... cont'd

- Hearing device not in FM/DAI/streaming program



➔ Press hearing aid button to change program, then connect again

- * check with hearing aid audiologist regarding compatible program for FM use
- * Devices that stream directly from the transmitter (no attached or installed receiver), i.e. Mini Mic 2+ for N7/N8, Kanso, Osia, Resound HA, need to be toggled to *streaming*

- Rust/dirt build up on receiver/battery door contacts



➔ Clean contacts with an alcohol wipe and allow to air dry completely before reattaching

Receiver won't connect ... cont'd

- Receiver not installed in hearing device (for *Phonak* hearing aids with *Roger Direct*)

➔ Check that receiver is installed using the Installer

* if no installer, check with health unit audiologist receiver has been installed



2) Intermittent signal – “teacher’s voice comes and goes”

➔ Ensure transmitter is positioned within 20 cm of mouth

➔ Ensure speaker is within range and line of sight (as required by transmitter)

TRANSMISSION RANGE

On Manufacturers' Specs (free field: direct line of sight)	In Classroom (partial obstruction between teacher and student)
Touchscreen: 120 metres (when used with Roger Direct) 25 metres (with other hearing devices)	Touchscreen: 15 metres
Roger On: 25 metres (with extended range enabled on Roger Direct)	Roger On: 10 metres (extended range) 8 metres (default: no extended range or non-Phonak HAs)
Cochlear Mini Mic 2+: 25 metres	Cochlear Mini Mic 2+: 8 metres
Oticon EduMic: 20 metres	Oticon EduMic: 15 metres

3) Trouble hearing peers with RM on

- Hearing aid/CI mics default to *fixed directional* in Roger+M program

➡ Consult with health unit audiologist regarding directionality of M in Roger+M

The screenshot displays the Roger+M software interface with the following settings:

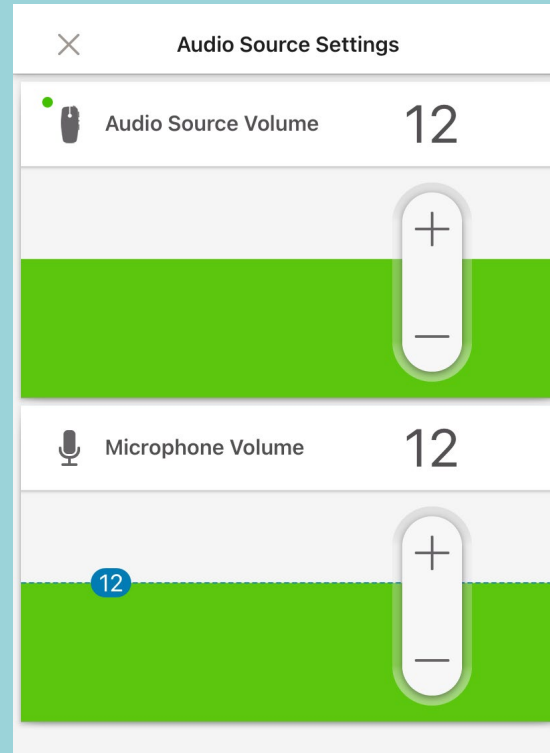
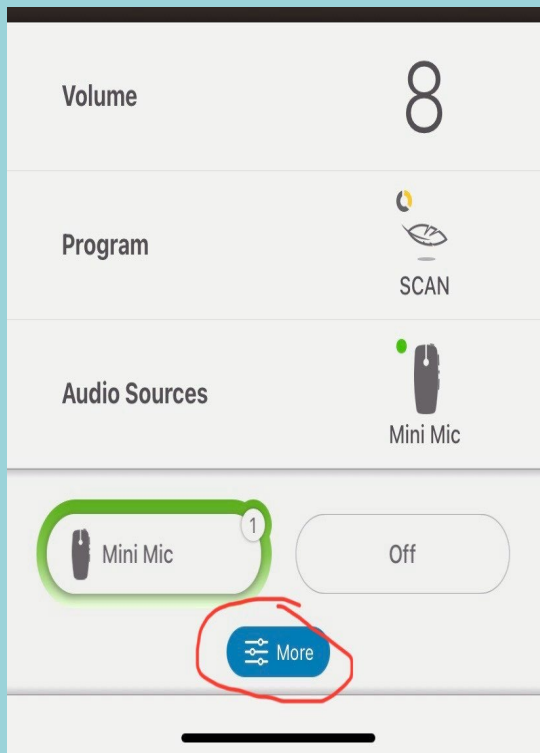
- Program activation:** Automatic (selected)
- Adaptive microphone behavior:** Standard (selected)
- Enable microphone:** Checked, 0 dB
- Hearing aid microphone:** Fixed directional (selected), level 12. A red arrow points to this setting with the text "Set the level of directionality".
- SoundRelax:** Level 7, Weak
- NoiseBlock:** Level 7, Weak

The left sidebar shows the program manager with "RogerDirect + mic" selected at the bottom.

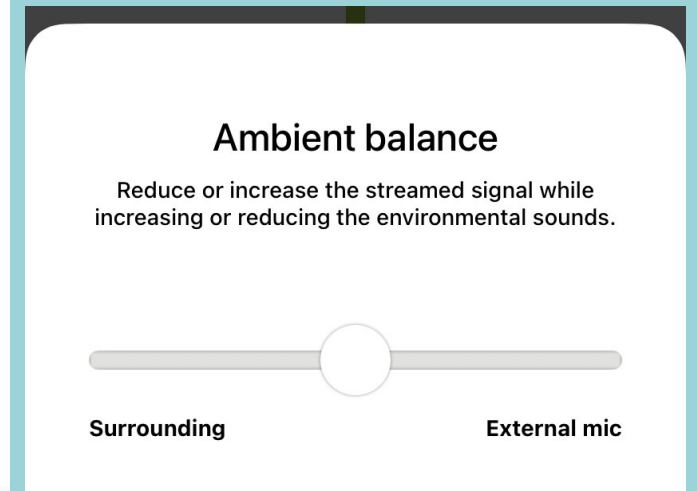
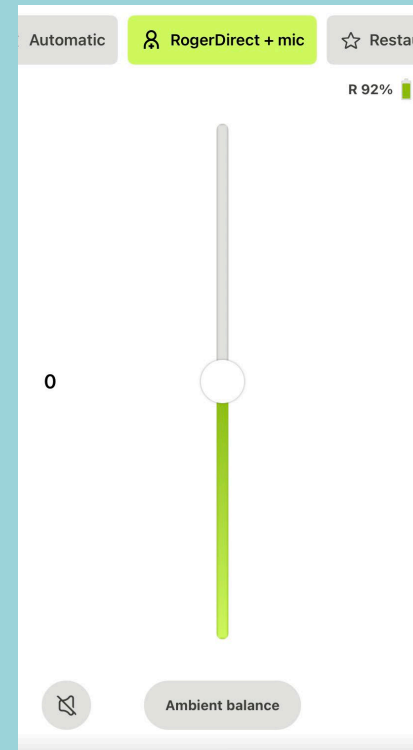
Trouble hearing peers with RM on ...

- Default 1:1 mixing (RM:HA mics) does not provide sufficient amplification for HA mics
➔ for older students, use the applicable app to adjust the RM:mic balance

Cochlear – *Nucleus Smart* app



Phonak hearing aids – *MyPhonak* app



Trouble hearing peers with RM on ... cont'd

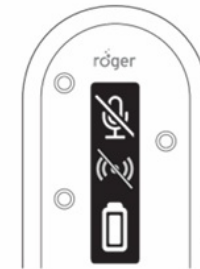
- Teacher not muting consistently during non-instruction times

➔ Help student advocate for themselves by developing a hand gesture to remind teacher to mute

➔ for older students, consult with HA/CI audiologist regarding activating “the button” so student can toggle out of RM

➔ For students with *Phonak* hearing aids with *Roger Direct* who use Roger On, ensure firmware is updated on Roger On. This gives them “Smart Mute”, allowing them to benefit from adaptive directional mics whenever the Roger On is muted

2. SmartMute



- When Roger is muted, hearing devices will leave RogerDirect + mic, and switch to AutoSense OS

4) Device not charging

- ➔ Ensure transmitters are powered off while charging. For a complete charge, leave plugged in overnight
- ➔ Ensure you are using the manufacturer cord and charging block specific to that device. Please note, charging using the cord is preferred to charging with the docking station for the Roger On.
- ➔ Check cords, blocks and charging port for damage or loose parts.

5) Hearing devices not streaming from tablet/phone

- Lost *Bluetooth* pairing

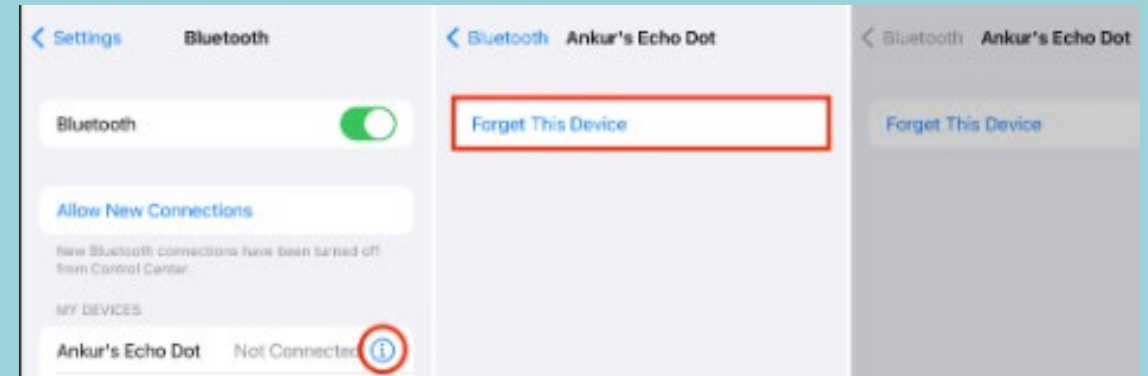
➔ “*Forget This Device*” under Settings -> Bluetooth, then re-pair by powering OFF and ON the hearing devices

➔ *Note on binaural* hearing aids/CIs, 1) those with binaural streaming technology (e.g. Phonak Sky/Naida Marvel) will show one side to be paired only (“**L – hearing aid**”), but audio will stream to both sides; 2) binaural CIs should be paired together within the same pairing window

- App or tablet/phone needs updating

➔ Ensure latest version of app is installed. Re-start tablet/phone before re-pairing to hearing device

➔ Ensure latest software version is installed on tablet/phone



Device-specific Troubleshooting

Transmitter	Issue	Solution
Touchscreen	Not charging/turning on	<ul style="list-style-type: none">- Ensure Touchscreen is powered OFF and charged for at least 2 hours prior to use- Try a different electrical outlet- Reboot Touchscreen
	Too much room noise / “FM too loud”	<ul style="list-style-type: none">- Change Mic mode to Lanyard
On	Not charging	<ul style="list-style-type: none">- Ensure On is powered OFF and charged using the provided cable and plug- Do NOT use docking station to charge- Reboot transmitter
	Battery not lasting a full school day	<ul style="list-style-type: none">- “extended range” reduces battery life from 8 hours to 6 -> disable with MyRogerMic app
EduMic	Not pairing or connecting	<ul style="list-style-type: none">- Erase previous pairings by pressing and holding the button for 12 sec -> red light

Touchscreen reboot

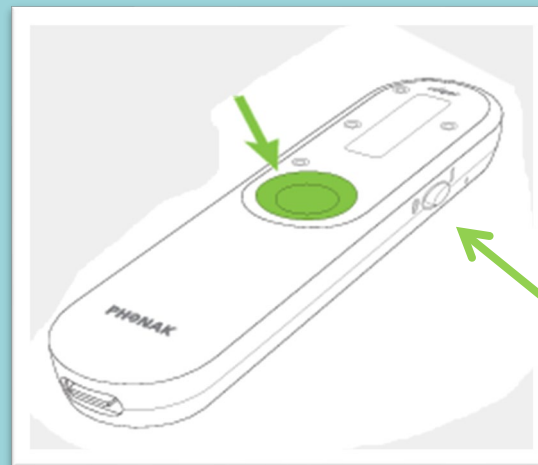
Press and hold the POWER and MUTE buttons together for 10 seconds until the screen turns black. Touchscreen will restart. Re-connect each receiver.



10 sec

On reboot

Press and hold the MUTE and CONNECT buttons together for 10 seconds then release. Re-connect each receiver.



10 sec

EduMic – erase pairings

Press and hold button for 12 seconds until light turns red.



12 sec

Device-specific Troubleshooting

Transmitter	Issue	Solution
BAHA	Inconsistent connection to Mini Mic	<ul style="list-style-type: none">- BAHA streams OUT after 5 min of no signal from Mini Mic- Ensure <i>streaming</i> is activated by pressing the BAHA button or remote control
	Remote not working	<ul style="list-style-type: none">- Re-pair remote by pressing pairing button and restarting BAHA
Osia	Flashing green and student not hearing	<ul style="list-style-type: none">- Osia not securely attached to implant. Check position of Osia and make sure hair is not in the way
	Battery not lasting a full school day	<ul style="list-style-type: none">- With RM use, battery life is 1.5 days. Remind family to change battery every day and ensure good batteries in student's school kit
Ponto via Streamer	Not pairing or connecting	<ul style="list-style-type: none">- Ensure streamer is worn around student's neck- Ensure streaming button on lower right side is pressed

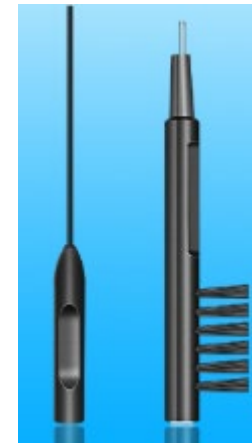


FAQs

- what should students have in a kit for at school
- cheatsheet on the lights/common issues
- basic trouble shooting for EAs
- how to use iPads with CIs

SCHOOL KIT FOR DHH STUDENTS

- Spare batteries
 - Hearing aids with disposable batteries: size 13, 675 or 312 (for Focus)
 - Hearing aids with rechargeable battery – extra charger from home
 - CIs with rechargeable batteries: compact rechargeable or disposable battery “rack” with 675 batteries
 - Bone implant with disposable batteries (Osia) – 675 “implant plus”
- Cleaning tools
 - Alcohol wipes, brush, “wire”
- Phone number for technical support
 - Hearing aid students: health unit audiology
 - CI students: Cochlear audiologist-on-call 1-877-883-3101
 - RM issue: Auditory Outreach 1-866-430-4327 ext.4
- Listening check equipment for school staff



CHEAT SHEET ON LIGHTS

- Varies from HA model to model; when it blinks (e.g. all the time signal is received or only when low battery etc...) is individually customized at hearing aid fitting appointment
- Consult student's audiologist
- For cochlear implants,
 - N7/N8: **orange** light indicates malfunction -> check cable connection
 - > check coil stability
 - > change battery
 - : **green** = processor receiving environmental sounds
 - : **blue** = accessory (e.g RM) receiving signal
- For Osia, flashing **green** = processor not on implant
- flashing **orange** = low battery
- steady **orange** = streaming

Basic Troubleshooting for School-based Staff

- How to re-establish connection
 - Emphasize “as close as possible” between receiver and transmitter
 - Let them know this function is “finicky” and tapping “connect” more than once is typical
- Observe teacher’s transmitter wearing and muting
 - Is the transmitter upright?
 - Is anything hitting on the transmitter?
 - Is teacher muting whenever they are not speaking to the whole class?
- How to change battery
 - Let them know to wait one full minute (and 5 minutes for size 675 batteries) after peeling sticker
 - Wait 10 sec after closing battery door before conducting functional check
- How to clean receiver contacts
 - Make sure contacts are fully air-dried (or wipe with clean paper towel) before reattaching receiver and closing battery door

Using iPads with CIs/HAs

Older models “8th gen” iPads with standard 3.5 mm audio jack

➔ use included audio cable to connect transmitter (Touchscreen, On, Mini Mic) to headphone jack / audio-out of iPad to audio-in of transmitter

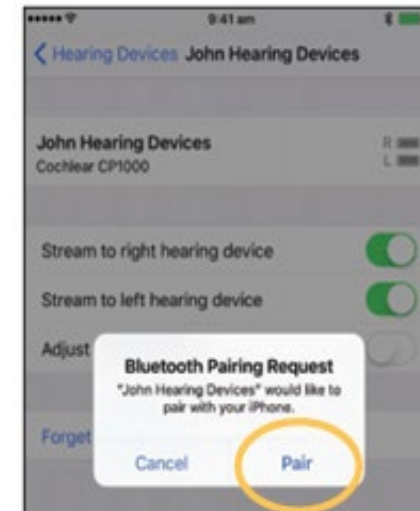
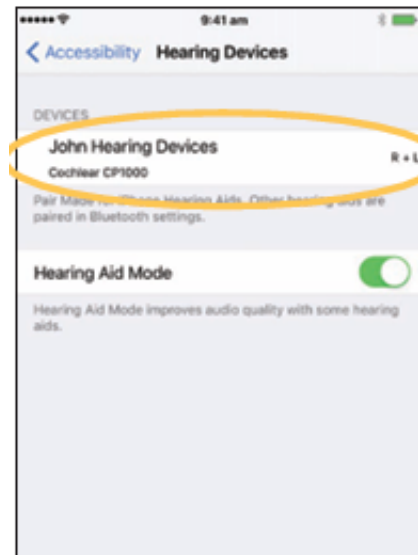
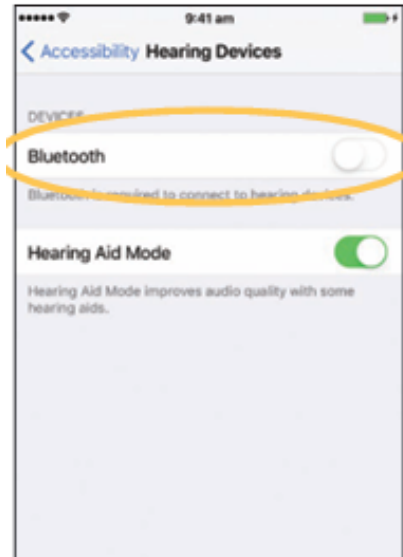
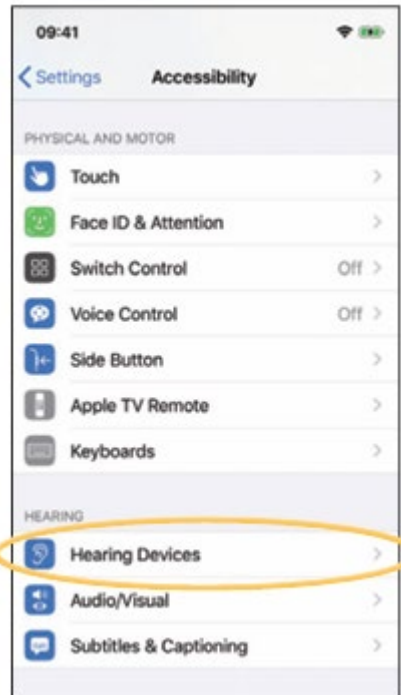


Using iPads with CIs/HAs ... cont'd

iPad Pros with USB-C

➔ use USB-C to audio adapter + included audio cable to connect transmitter to headphone jack / audio-out of iPad to audio-in of transmitter

OR ➔ connect HA/CI via *Bluetooth* to the iPad



Notes about *Bluetooth* pairing

- For hearing aids with “binaural streaming”, e.g. *Phonak Marvel, Oticon Opn Play, Exceed Play*
 - Only ONE hearing aid needs to be paired for sound to stream to BOTH hearing aids
- Using *Bluetooth* alongside *Roger* – *Bluetooth* has priority!
 - When there is sound playing out of a previously paired *Bluetooth* device, hearing aids / CI processors default to *Bluetooth* over *Roger* (even if *Roger* receiver is attached and connected to *Roger* transmitter)

➡ the device paired by *Bluetooth* to student should ideally be used by student only, otherwise

➡ should “forget device” (unpair HAs/CIs from device) after student finishes using *Bluetooth* device

THANK YOU !

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