Wireless Technology in the Classroom

For Nucleus® and Baha® Recipients
Introduction

This guide will assist parents, teachers, educational audiologists and other school professionals in the selection, fitting and monitoring of assistive wireless technology for Nucleus® cochlear implant and Baha® recipients. In the past several years, students’ options for wireless connections have expanded, leaving professionals with a need for updated information. Cochlear is committed to helping each recipient hear their best. That includes ensuring our young recipients are able to maximize their use of wireless systems in the classroom and supporting schools in their efforts to create a learning environment that enables listening.

As technology has evolved, the language we use has changed as well. Below are some terms that are used in this guide to discuss wireless technology in the classroom:

• Frequency Modulation (FM) System: Traditional remote microphone technology which generally consists of a transmitter used by the speaker (e.g., teacher) and a receiver that is coupled to the student’s hearing instrument or sound processor; the transmitter sends an FM signal to the receiver
• Digital Modulation (DM) System: Newer remote microphone technology in which the transmitter and receiver are connected using digital wireless technology (e.g., paired) rather than via a traditional FM signal
• Neckloop: A personal assistive listening device which can send a transmitted signal to the individual’s personal hearing device (e.g., hearing aid or sound processor) via electromagnetic induction or telecoil
• Remote Microphone Hearing Assistance Technologies (RM-HAT): A collective way to refer to all remote microphone systems (e.g., both FM and DM systems)
• Signal-to-Noise Ratio (SNR): The amount (in decibels) by which the amplitude of the desired signal (usually speech) exceeds that of an interfering signal
• Streaming: The digital transmission of an audio signal to a hearing instrument or sound processor
Acoustic Environment

Environments should be evaluated for their ambient background noise level and reverberation. The American National Standards Institute (ANSI) has defined the following appropriate acoustical environments in schools:

• Unoccupied classroom levels must not exceed 35 dBA
• The signal-to-noise ratio should be at least +15 dB at the child’s ears
• Unoccupied classroom reverberation must not surpass 0.6 seconds in smaller rooms and 0.7 seconds in larger rooms

The ANSI standards are voluntary and while many schools have adopted the standards, studies have shown that unoccupied classroom noise levels can range from 42-62 dBA, much higher than the ANSI standard. Recent studies have looked at classrooms built or renovated within the last decade and found that noise levels still generally exceed the ANSI standards. Noise in the classroom can have a significant effect on understanding, listening effort, attention and even teacher stress.

Student Characteristics

SOCIAL/EMOTIONAL

The motivation of the student and the adults supporting the student should be considered when selecting RM-HAT. Social or emotional factors such as self-image and self-advocacy abilities may also have some impact on the decision to use RM-HAT or may inform choice of device. As many educational audiologists know, a student who is resistant to the use of RM-HAT for social reasons will not demonstrate benefit from even the most technologically advanced system.

AGE/COGNITIVE LEVEL

The student’s age and cognitive development will have an impact on which devices will be most useful for them in the classroom. Consider a very young child who is unable to care for the equipment or report if they are having issues with their sound. In this case, it will be critical that an adult check the equipment once or twice a day and also perform listening checks with the child to ensure they are hearing well. On the other hand, an older child may be able to check and care for their equipment without daily support.

Academic Setting

Children in a modern classroom need to hear different things during the school day in a multitude of settings. Students often find themselves in a dynamic learning environment where they meet in small groups, sit together in a large group or interact with classroom technology. Consider a high school student: most of the time, they will probably want to hear the teacher’s voice while the teacher lectures. But there will be times they will need to listen to a computer-based assessment or a video in the classroom or an assembly. They may also work in small groups and need to listen to a group of 6-8 of their peers. These needs should all be considered when choosing technology. In contrast, the needs of a child in a pre-kindergarten classroom may be quite different. It may be rare for a kindergartner to sit in a row and listen to the teacher and most of their learning will take place at small stations or in small groups with their peers. RM-HAT must be flexible enough to be used in a variety of settings throughout the school day.
## Remote Microphone Hearing Assistive Technology (RM-HAT)
### Options for Students with Cochlear Technology

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*Neckloop fittings will not be covered in detail in this guide. All Nucleus Sound Processors (Nucleus 7, Nucleus 6, Kanso, Nucleus 5) have telecoil capability. See the overview of each processor for details on how to activate the telecoil. Note that for some processors (Nucleus 7, Nucleus 6 and Kanso) the telecoil has to be enabled during programming of the processor to be available for use. Please follow guidelines from the manufacturers for the neckloops (ie, Phonak myLink or Oticon Arc) for further guidance in setting up these systems.

### Remote Controls & Apps for Baha and Nucleus Devices

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<td>Baha Smart App</td>
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<td>• Volume</td>
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<td>• Coil on/off</td>
<td>Remote must be in “advanced mode” for mixing ratios to be accessible.</td>
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</table>
The revolutionary Nucleus 7 Sound Processor – released in 2017 – is the smallest and lightest behind-the-ear hearing solution for cochlear implant recipients with uncompromised connectivity with iOS and Android devices. With the Nucleus 7 Sound Processor, recipients can stream sound directly to their sound processor, control and manage their settings, track their data and locate a lost processor. In addition to streaming technology, Nucleus 7 Sound Processor users can also access Cochlear’s True Wireless accessories, including the Mini Microphone 2+ to connect to the world around them. With dual microphones and Cochlear’s most advanced sound management system – SmartSound® iQ with SCAN* – The Nucleus 7 Sound Processor helps recipients hear their best even in noisy environments.

*SNR-NR and WNR are approved for use with any recipient ages 6 years and older, who is able to 1) complete objective speech perception testing in quiet and in noise in order to determine and document performance 2) report a preference for different program settings. SCAN is FDA approved for use with any recipient age 6 years old and older, to be used at the discretion of the recipient/parent/caregiver.

**TELECOIL**

- Press and hold the button for 2 seconds then release to turn on telecoil.
- Short press the button to turn off telecoil.
- Blue: telecoil/accessory is working.
- Green: telecoil/accessory is off.
- Note: Telecoil must be enabled by the clinician.

**EVERYDAY USE**

- Processor flashes while receiving sound from microphones (Child mode only).
- Turning on and changing programs. Number of flashes indicates the number of the current program.
- Turning off processor.

**LOCKING BUTTON**

- Locking processor button.
- Unlocking processor button.
- Processor button is locked.

**MINI MICROPHONE**

- Once the processor has been paired to the mini microphone (see pg. 10), Press and hold the button for 2 seconds then release to stream audio.
- Press and release again if you need to cycle to the next audio source.
- Blue: Wireless Accessory is streaming audio.
- Green: Wireless Accessory is not streaming.

**STREAMING AUDIO**

- Processor flashes when pairing to wireless accessory is successful.
- Processor flashes while receiving audio from an audio source (Child mode only).

**ALERTS**

- Processor batteries are low. Change batteries.
- Fault. Contact clinician. Stays on until the issue is resolved.

**NUCLEUS SMART APP**

- Use the Nucleus Smart App to:
  - Lock the sound processor’s control button.
  - Change volume and sensitivity.

**HOW TO CHANGE BATTERIES**

**Remove/attach rechargeable battery**

1. Twist the battery module as shown to release it from the processing unit.
2. Pull the battery module from the processing unit.
3. Align raised marker and arrow on battery module towards back of processing unit.
4. Twist the battery module as shown to attach the parts.
5. The processor turns on automatically.

**Change disposable batteries**

1. Insert two new 675 (PR44) zinc air disposable batteries (not silver oxide or alkaline), flat side facing up.
2. Twist the battery module as shown to attach the parts.
3. The processor turns on automatically.

**CHANGE PROGRAMS**

- Short-press the button to switch between programs.
**Steps for fitting:**

**PAIRING**

1. Remove the Sound Processor from the ear. Disconnect the battery.
2. Turn on the microphone.
3. Press the pairing button on the Mini Microphone once using the tip of a pen or similar object. The LED will flash yellow every 2 seconds and the Mini Microphone will now be in pairing mode for 20 seconds.
4. While pairing mode is active (20 seconds), attach the battery to the Nucleus 7 Sound Processor. A blue indicator light flashes to show that pairing has been successful.

**STREAMING**

- **Streaming using the Button on the Sound Processor**
  1. Turn on the sound processor and the MM2+.
  2. Press and hold the button on the processor for 2 seconds, then release.
  3. A blue light on the processor will indicate that streaming has started.

- **Streaming using the Remote Control (CR310)**
  1. Turn on the sound processor and the MM2+.
  2. Press and hold the Telecoil button for 2 seconds, then release. Audio will start streaming through the Mini Microphone.
  3. To stop streaming, tap the Telecoil button.

- **Streaming using the Nucleus Smart App**
  1. Turn on the sound processor and the MM2+.
  2. Start the Nucleus Smart App.
  3. Tap Audio Sources and tap the Mini Mic icon. The sound processor flashes a blue light to indicate streaming.
  4. The Mini Mic streaming icon displays on the app.
  5. To stop streaming, tap off.

**Tips for Use:**

- Keep the MM2+ 6 inches or less from the speaker’s mouth in an upright position (the upright position ensures the MM2+ is in a directional setting, which helps reduce background noise).
- To use in a small group/conference setting, place the MM2+ horizontally on the table or desk (this puts the MM2+ into an omnidirectional microphone setting).
- The mode button can be used to toggle between audio sources (Note: that when something is first plugged in, the MM2+ will automatically switch to that source).
- If the MM2+ is out of range of the processor, the processor will automatically switch out of streaming mode in 5 minutes; it will not automatically switch back into streaming mode if 5 minutes has passed, so the user will need to activate streaming when they want to listen to the MM2+ again.
- One MM2+ may be paired to multiple hearing instruments or sound processors; one sound processor may be paired with up to 3 MM2+ (see user manual for details).

**EXTENDED AUDIO CAPABILITIES INCLUDE:**

- **Conference Microphone**
  Directional microphone becomes omnidirectional when the mic is placed in a horizontal position (ideal for small group/conference use).

- **Line-in Direct Audio Input**
  A 3.5 mm audio port on the bottom of the MM2+ can be used to connect to external audio sources such as TVs, smart boards, laptops, etc.

- **Telecoil**
  A built-in telecoil can be used to pick up audio from a room loop or personal loop system.

- **Euro Adaptor**
  Can be used to connect traditional RM-HAT technology through the MM2+ (see pg. 12).

**Battery Level**

- Press and hold the rectangular Mode button. The Mode LEDs will flash to indicate charge level. 4 lights indicate 100% charge, 3 lights indicate 75% charge, 2 lights indicate 50% charge and a single light indicates 25% charge.
Advantages:

- Can use a universal receiver with Europin connection (ie, Phonak Roger) so purchase of a receiver dedicated to this processor is not necessary.
- User can flip easily between universal receiver input and other audio sources or MM2+ input.
- MM2+ with a single universal receiver can stream to a bilaterally implanted child, a child using a Nucleus 7 Sound Processor and a ReSound hearing aid, or a classroom full of such users.
- Preserves sound processing from universal receiver system and delivers it directly to the processor.

Steps for fitting:
1. Before first use, pair the MM2+ and processor.
2. Configure the universal receiver according to manufacturer instructions.
3. To begin using, plug the universal receiver into the MM2+ then have the user start streaming.

Tips for use:
- Most users will prefer a 1:1 mixing ratio set for streaming the MM2+ in this configuration. This can be set in the Nucleus 7 Sound Processor using the programming software or using the Nucleus Smart App (see information about the App in the Made for iPhone section at the end of this guide).
- The MM2+ will not automatically start or stop streaming when the transmitter is turned on or off; ensure the user manually starts and stops streaming when necessary.
- Data logging for this configuration will be shown as MM2+ usage rather than “FM” usage.

Advantages:

- AutoFM feature is utilized on the sound processor, wherever the transmitter is turned on or off by the teacher, the receiver is automatically activated or deactivated.
- FM use may be monitored independently in the data logging (ie, not included in the accessory streaming data).

Steps for fitting:
1. Disconnect the battery from the Nucleus 7 Sound Processor.
2. Connect the Roger 20 to the sound processor, then connect the battery to the Roger 20.
3. Set up the Roger system according to manufacturer guidelines.

Tips for use:
Most users prefer a mixing ratio of 1:1 for use with Roger systems. This can be set in the Nucleus 7 Sound Processor using the Sound Processor programming software or using the Nucleus Smart App (see information about the App in the Made for iPhone section at the end of this guide).

WARNING
Some accessories that fit between the sound processor and the battery module prevent the battery module from being locked to the sound processor, which means the battery module can be removed and poses a choking or ingestion hazard. Always supervise.
The Kanso Sound Processor, introduced in 2016, is a simple, discreet, off-the-ear sound processor. Kanso uses the same dual microphone technology and SmartSound iQ with SCAN® as our behind-the-ear sound processors, allowing recipients to hear their best no matter which style suits them. Kanso is compatible with our True Wireless accessories, such as the Mini Microphone 2+ and is splash and dust resistant.

**SNR-NR and WNR are approved for use with any recipient ages 6 years and older who is able to 1) complete objective speech perception testing in quiet and in noise in order to determine and document performance 2) report a preference for different program settings. SCAN is FDA approved for use with any recipient age 6 years old and older, to be used at the discretion of the recipient/parent/caregiver.

**The Kanso Sound Processor is water resistant to level IP54 of the International Standard IEC60529.

**HOW TO CHANGE BATTERIES**

**Change batteries**

1. Turn the lock screw counterclockwise to unlock the battery cover (clockwise to lock).
2. Slide to open. Use your fingers on the sides to pull off the cover.
3. Insert two new p675 high power zinc air disposable batteries, flat side facing up.
4. Replace battery cover. Turn lock screw clockwise to lock.

**TURN ON AND OFF**

1. Press button to turn on.
2. To turn off, press and hold button until the light is a steady orange.

**CHANGE PROGRAM**

1. Press button to change program.
2. Number of beeps or green flashes (if set up by the clinician) indicates the program number.

**STREAM AUDIO**

1. Press and hold button (2 seconds) to stream audio sources.
2. Press and release again to cycle to next audio source.
4. Tap button to stop streaming.

**EVERYDAY USE**

1. Press button to change program.
2. Number of beeps or green flashes (if set up by the clinician) indicates the program number.

**ALERTS**

1. Processor flashes while coil is off (or connected to the wrong implant).
2. Processor batteries are low. Charge batteries.
3. Fault. Contact the clinician. Stays on until the issue is resolved.

**WHAT IT MEANS**

- Processor flashes while receiving sound from microphones (Child mode only).
- Number of beeps or green flashes indicates the number of the current program.
- Processor flashes while receiving sound from audio source (Child mode only).
- Turning off processor.
Advantages:
• Direct streaming from the remote microphone to the processor (discreet option).
• Inexpensive compared to other systems.
• Compatible with Nucleus, Baha and ReSound technology.
• Extended audio input capabilities, including conference microphone, line-in direct audio input, telecoil, and Euro adaptor (see next option for Universal Receiver with MM2+).

Steps for fitting:

PAIRING
Follow the steps below to pair the Sound Processor to the MM2+

1. Press and hold Kanso® button until the light is steady orange. Release your finger and processor will now be off.
2. Turn on the microphone.
3. Press the pairing button on the Mini Microphone 2+ once using the tip of a pen or similar object. The LED will flash yellow every 2 seconds and the Mini Microphone will now be in pairing mode for 20 seconds.
4. While pairing mode is active (20 seconds), press and hold the Kanso button to power the processor on. A blue indicator light flashes to show that pairing has been successful.

STREAMING

Streaming using the Buttons on the Sound Processor
1. Turn on the sound processor and the MM2+.
2. Press and hold the button on the processor for 2 seconds, then release.
3. A blue light on the processor will indicate that streaming has started.

Streaming using the Remote Control (CR210)
1. Turn on the sound processor and the MM2+.
2. Press and hold the Telecoil button for 2 seconds, then release. Audio will start streaming through the Mini Microphone.
3. To stop streaming, tap the Telecoil button.

Streaming using the Remote Assistant
1. Turn on the sound processor and the MM2+.
2. Press and hold the side button for 2 seconds, then release. Audio will start streaming through the Mini Microphone.
3. To stop streaming, tap the side button.

Tips for Use:
• Keep the MM2+ 6 inches or less from the speaker’s mouth in an upright position (the upright position ensures the MM2+ is in a directional setting, which helps reduce background noise).
• To use in a small group/conference setting, place the MM2+ horizontally on the table or desk.
• The mode button can be used to toggle between audio sources note that when something is first plugged in, the MM2+ will automatically switch to that source.
• If the MM2+ is out of range of the processor, the processor will automatically switch out of streaming mode in 5 minutes; it will not automatically switch back into streaming mode if 5 minutes has passed, so the user will need to activate streaming when they want to listen to the MM2+ again.
• One MM2+ may be paired to multiple hearing instruments or sound processors; one sound processor may be paired with up to 3 MM2+ (see user manual for details).

EXTENDED AUDIO CAPABILITIES INCLUDE:

Conference Microphone
• Directional microphone becomes omnidirectional when the mic is placed in a horizontal position (ideal for small group/conference use).

Line-in Direct Audio Input
• A 3.5 mm audio port on the bottom of the MM2+ can be used to connect to external audio sources such as TVs, smart boards, laptops, etc.

Telecoil
• A built-in telecoil can be used to pick up audio from a room loop or personal loop system.

Euro Adaptor
• Can be used to connect traditional RM-HAT technology through the MM2+ (see pg. 18)

Battery Level
• Press and hold the rectangular Mode button. The Mode LEDs will flash to indicate charge level: 4 lights indicate 100% charge, 3 lights indicate 75% charge, 2 lights indicate 50% charge and a single light indicates 25% charge.
Advantages:

- Can use a universal receiver with Europin connection (e.g., Phonak Roger) so purchase of a receiver dedicated to this processor is not necessary.
- User can flip easily between universal receiver input and other audio sources or MM2+ input.
- MM2+ with a single universal receiver can stream to a bilaterally implanted child, a child using a Kanso Sound Processor and a ReSound hearing aid, or a classroom full of such users.
- Preserves sound processing from universal receiver system and delivers it directly to the processor.

Steps for fitting:

1. Before first use, pair the MM2+ and processor.
2. Configure the universal receiver according to manufacturer instructions.
3. To begin using, plug the universal receiver into the MM2+ then have the user start streaming.

Tips for use:

- Most users will prefer a 1:1 mixing ratio set for streaming the MM2+ in this configuration. This can be set in the Kanso programming software.
- The MM2+ will not automatically start or stop streaming when the transmitter is turned on or off; ensure the user manually starts and stops streaming when necessary.
- Data logging for this configuration will be shown as MM2+ usage rather than "FM" usage.
Fitting Remote Microphone Hearing Assistive Technology (RM-HAT)

**Nucleus 6 Sound Processor (CP910 and CP920)**

The Cochlear Nucleus 6 family of sound processors, released in 2013, deliver hearing performance across a range of acoustic environments. The introduction of SmartSound iQ with SCAN*, connectivity with True Wireless accessories, Data logging and new user controls such as Master Volume allow for a simply smarter hearing experience. The Nucleus 6 family includes the CP910, which has an accessory port and the smaller CP920 which does not have an accessory port.

**Microphones and protectors**
- Indicator light
- Upper button
- Lower button
- Earhook
- Standard rechargeable battery module

**HOW TO CHANGE BATTERIES**

**Remove/attach rechargeable battery**
- **REMOVE**
  - Twist the battery module as shown to release it from the processing unit.
- **ATTACH**
  - Twist the battery module as shown to attach the parts.
  - The processor will turn on automatically.

**Change disposable batteries**
- Insert two new p675 high power zinc air disposable batteries (not silver oxide or alkaline), flat side facing up.
- Processor turns on automatically.
- Turn the lock screw counterclockwise to unlock the tamper-resistant battery cover (clockwise to lock).
- Slide to open.

**TURN ON AND OFF**
- Lower button
  - Short-press and release lower button to turn on.
  - Long-press the lower button (about two seconds) to turn off.

**LOCK PROCESSOR BUTTONS**
- Short-press and release both buttons at once to lock or unlock buttons. (+-range light means buttons locked)

**CHANGE PROGRAMS**
- Short-press and release lower button to change programs.
- Number of beeps or green flashes (if set up by the clinician) indicates the program number.

**MINI MICROPHONE**
- Long-press the upper button to start streaming audio from the Mini Microphone or TV Streamer.
- Short-press to turn off.
- Blue: Wireless Accessory is streaming audio.
- Green: microphones are working.

**TELECOIL**
- Short-press the upper button to turn manual telecoil on and off.
- Blue: telecoil/accessory is working.
- Green: microphones are working.

**EVERYDAY USE**
- Processor flashes while receiving sound from telecoil/audio accessory (if set up by the clinician).
- Processor flashes while receiving sound from microphones (if set up by clinician).
- Turning on and changing programs. Number of flashes indicates the number of the current program.
- Turning off processor.

**LOCKING BUTTONS**
- Locking processor buttons.
- Unlocking processor buttons.
- Processor buttons are locked.

**ALERTS**
- Processor flashes while coil is off (or connected to the wrong implant).
- Processor battery is empty. Charge battery.
- Fault. Contact clinician. Stays on until the issue is resolved.

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Advantages:

- Direct streaming from the remote microphone to the processor (discreet option).
- Inexpensive compared to other systems.
- Compatible with Nucleus, Baha and ReSound technology.
- Extended audio input capabilities, including conference microphone, line-in direct audio input, telecoil, and Euro adaptor (see next option for Universal Receiver with MM2+).

Steps for fitting:

PAIRING

Follow the steps below to pair the Sound Processor to the MM2+

1. Remove the Sound Processor from the ear. Disconnect the battery.
2. Turn on the microphone.
3. Press the pairing button on the Mini Microphone 2+ once using the tip of a pen or similar object. The LED will flash yellow every 2 seconds and the Mini Microphone will now be in pairing mode for 20 seconds.
4. While pairing mode is active (20 seconds), attach the battery to Nucleus 6 Sound Processor. A blue indicator light flashes to show that pairing has been successful.

STREAMING

Streaming using the Buttons on the Sound Processor

1. Turn on the sound processor and the MM2+.
2. Press and hold the button on the processor for 2 seconds, then release.
3. A blue light on the processor will indicate that streaming has started.

Streaming using the Remote Control (CR210)

1. Turn on the sound processor and the MM2+.
2. Press and hold the Telecoil button for 2 seconds, then release. Audio will start streaming through the Mini Microphone.
3. To stop streaming, tap the Telecoil button.

Streaming using the Remote Assistant

1. Turn on the sound processor and the MM2+.
2. Press and hold the side button for 2 seconds, then release. Audio will start streaming through the Mini Microphone.
3. To stop streaming, tap the side button.

EXTENDED AUDIO CAPABILITIES INCLUDE:

Conference Microphone
- Directional microphone becomes omnidirectional when the mic is placed in a horizontal position (ideal for small group/conference use).

Line-in Direct Audio Input
- A 3.5 mm audio port on the bottom of the MM2+ can be used to connect to external audio sources such as TVs, smart boards, laptops, etc.

Telecoil
- A built-in telecoil can be used to pick up audio from a room loop or personal loop system.

Euro Adaptor
- Can be used to connect traditional RM-HAT technology through the MM2+ (see pg. 18).

Battery Level
- Press and hold the rectangular Mode button. The Mode LEDs will flash to indicate charge level. 4 lights indicate 100% charge, 3 lights indicate 75% charge, 2 lights indicate 50% charge and a single light indicates 25% charge.

Tips for Use:

- Keep the MM2+ 6 inches or less from the speaker’s mouth in an upright position (the upright position ensures the MM2+ is in a directional setting, which helps reduce background noise).
- To use in a small group/conference setting, place the MM2+ horizontally on the table or desk.
- The mode button can be used to toggle between audio sources (Note: that when something is first plugged in, the MM2+ will automatically switch to that source).
- If the MM2+ is out of range of the processor, the processor will automatically switch out of streaming mode in 5 minutes; it will not automatically switch back into streaming mode if 5 minutes has passed, so the user will need to activate streaming when they want to listen to the MM2+ again.
- One MM2+ may be paired to multiple hearing instruments or sound processors; one sound processor may be paired with up to 3 MM2+ (see user manual for details).
Advantages:

• Can use any universal receiver with Europin connection (e.g., Phonak Roger) so purchase of a receiver dedicated to this processor is not necessary.
• User can flip easily between universal receiver input and other audio sources or MM2+ input.
• MM2+ with a single universal receiver can stream to a bilaterally implanted child, a child using a Nucleus 6 Sound Processor and a ReSound hearing aid, or a classroom full of such users.
• Preserves sound processing from universal receiver system and delivers it directly to the processor.

Steps for fitting:
1. Before first use, pair the MM2+ and processor.
2. Configure the universal receiver according to manufacturer instructions.
3. To begin using, plug the universal receiver into the MM2+ then have the user start streaming.

Tips for use:
• Most users will prefer a 1:1 mixing ratio set for streaming the MM2+ in this configuration. This can be set in the Nucleus 6 in the programming software or using the Nucleus Smart App (see information about the App in the Made for iPhone section at the end of this guide).
• The MM2+ will not automatically start or stop streaming when the transmitter is turned on or off, ensure the user manually starts and stops streaming when necessary.
• Data logging for this configuration will be shown as MM2+ usage rather than "FM" usage.

Advantages:

• Can use any universal receiver with Europin connection (e.g., Phonak Roger) so purchase of a receiver dedicated to this processor is not necessary.
• AutoFM feature is utilized on the sound processor; whenever the transmitter is turned on or off by the teacher, the receiver is automatically activated or deactivated.
• FM use may be monitored independently in the data logging (i.e., separately from the accessory streaming data).

Steps for fitting:
1. Turn the processor off (press and hold the lower button).
2. Lift open the accessory cover with a screwdriver or locking tool.
3. Push the Euro Adaptor into the accessory port until it clicks into place.
4. The accessory cover may be lowered onto the top of the Euro Adaptor to help hold it in place.
5. Connect the universal receiver to the Euro Adaptor.
6. Configure the universal receiver according to manufacturer guidelines.

Tips for use:
• Most users prefer a mixing ratio of 1:1 for use with Roger systems. This can be set in the Nucleus 6 Sound Processor using the programming software.

Advantages:

• AutoFM feature is utilized on the sound processor; whenever the transmitter is turned on or off by the teacher, the receiver is automatically activated or deactivated.
• FM use may be monitored independently in the data logging (i.e., not included in the accessory streaming data).

Steps for fitting:
1. Turn the processor off (press and hold the lower button).
2. Lift open the accessory cover with a screwdriver or locking tool.
3. Push the Roger 14/ML14i receiver into the accessory port until it clicks into place.
4. The accessory cover should be lowered onto the top of the Roger 14/ML14i to hold it in place.
5. Set up the Roger system according to manufacturer guidelines.

Tips for use:
• Most users prefer a mixing ratio of 1:1 for use with Roger systems. This can be set in the Nucleus 6 Sound Processor using the programming software.
Nucleus® CP810 Sound Processor

The Nucleus 5 Sound Processor, introduced in 2010, set a new benchmark in hearing performance when it was released. The compact and discreet size, as well as stylish and ergonomic design, provided improved retention and comfort for adults and children. The Nucleus 5 sound processor communicates wirelessly with the CR110 Remote Assistant, providing control to the patient. SmartSound 2 provides customized programs for different listening environments, helping recipients select the best possible program for noisy environments.

**HOW TO CHANGE BATTERIES**

Remove/attach rechargeable battery

1. Twist the battery module as shown to release it from the processing unit.

2. Pull the battery module from the processing unit.

3. Slide to open.

4. Insert two new zinc air disposable batteries flat side facing up.

5. Processor turns on automatically.

Change disposable batteries

1. Pull the battery module from the processing unit.

2. Slide to open.

3. Insert two new zinc air disposable batteries flat side facing up.

4. Processor turns on automatically.

**EVERYDAY USE**

<table>
<thead>
<tr>
<th>LIGHT</th>
<th>WHAT IT MEANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚫</td>
<td>You are changing volume or sensitivity (Advanced option only)</td>
</tr>
<tr>
<td></td>
<td>Changing from microphone to telecoil/plug-in audio accessory</td>
</tr>
<tr>
<td></td>
<td>Changing from telecoil/plug-in audio accessory to microphone</td>
</tr>
</tbody>
</table>

**CHANGE VOLUME OR SENSITIVITY**

1. Quick press to upper button to increase.

2. Quick press to lower button to increase.

NOTE: This option will only be available if clinician has enabled.

**LOCK PROCESSOR BUTTONS**

1. Short-press and release both buttons at once to lock or unlock buttons.

NOTE: This must be enabled by the programming clinician.

**CHANGE PROGRAMS**

1. Short-press and release lower button to change programs.

**LOCKING BUTTONS**

1. Processor flashes while receiving sound from telecoil/audio accessory (if set up by the clinician).

2. Processor flashes while receiving sound from microphones (if set up by the clinician).

3. Turning on and changing programs. Number of flashes indicates the number of the current program.

4. Turning off processor.

5. Locking processor buttons.

6. Unlocking processor buttons.

7. Processor buttons are locked.

**VOLUME OR SENSITIVITY**

<table>
<thead>
<tr>
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<tr>
<td></td>
<td>Changing from telecoil/plug-in audio accessory to microphone</td>
</tr>
</tbody>
</table>

**TELECOIL INPUT**

1. Press the upper button to turn on.

2. Press the upper button to turn off.

NOTE: This feature must be enabled by the programming clinician.

**ALERTS**

1. Processor battery is empty. Charge battery.

2. Fault: Contact the clinician. Stays on until the issue is resolved.

3. Processor is off. Turn on processor.

4. Processor is turned on. Turn off processor.

5. Processor is unlocked. Lock processor.
Steps for fitting:
1. Turn the processor off (press and hold the lower button).
2. Lift open the accessory cover with a screwdriver or locking tool.
3. Push the Roger 14/ML14i into the accessory port until it clicks into place.
4. The accessory cover should be lowered onto the top of the Roger 14 to help hold it in place.
5. Configure the Roger 14/ML14 according to manufacturer guidelines.

Tips for use:
Most users prefer a mixing ratio of 1:1 for use with Roger systems. This can be set in the programming software or using the CR110 Remote Assistant.

ACTIVATING FM

Using the CR110 Remote Assistant
Follow the steps below to activate FM using the CR110 Remote Assistant.

1. Turn on the sound processor with the Roger 14/ML14i receiver in place.
2. Turn on the CR110 Remote Assistant by pressing and holding the Cochlear button. Press and hold the Telecoil button for two seconds, then release.
3. To stop listening to FM transmission, tap the Telecoil button.

Advantages:
• Cosmetically-appealing solution for an FM receiver.
• Receiver is automatically turned on when the transmitter is turned on (user must manually stop the accessory by pressing the top button when the transmitter is turned off, otherwise processor is left in accessory mode and has a limited input dynamic range).

Note: Only Nucleus 5 sound processors that are build standard C or later are compatible with adaptive FM systems such as Roger 14 or ML14i; if there are questions about compatibility for a Nucleus 5 sound processor, please contact Cochlear.

Steps for fitting:
1. Turn the processor off (press and hold the lower button).
2. Lift open the accessory cover with a screwdriver or locking tool.
3. Push the Euro Adaptor into the accessory port until it clicks into place.
4. The accessory cover may be lowered onto the top of the Euro Adaptor to help hold it in place.
5. Connect the universal receiver to the Euro Adaptor.
6. Configure the universal receiver according to manufacturer guidelines.

Tips for use:
Most users prefer a mixing ratio of 1:1 for use with most RM-HAT systems. This can be set in the programming software or using the CR110 Remote Assistant.

Advantages:
• Any universal receiver that has a Europin connection can be used.
• Receiver is automatically turned on when the transmitter is turned on (user should manually stop the accessory by pressing the top button when the transmitter is turned off, otherwise processor is left in accessory mode and has a limited input dynamic range).
Fitting Remote Microphone Hearing Assistive Technology (RM-HAT)

**Baha 5 Sound Processors**

The Baha 5 family of sound processors includes the Baha 5, Baha 5 Power and Baha 5 SuperPower. The Baha 5 sound processor is the smallest and least noticeable of our bone conduction devices with the power output to fit bone conduction thresholds up to 45 dBHL. The Baha 5 Power sound processor is a fully featured sound processor, adding an LED light and integrated tamper-proof battery door, with a larger fitting range up to 55 dBHL. The revolutionary Baha 5 SuperPower merges Baha and Nucleus technology to offer the most powerful head-worn sound processor in the industry with a fitting range up to 65 dBHL. All Baha 5 processors provide unparalleled wireless connectivity with Made for iPhone capabilities, the Baha Smart App for iPhone® and Android™ devices and compatibility with Cochlear’s True Wireless accessories.

**TURNING ON/OFF**

**Easy On/Off Function**

- Baha 5 and Baha 5 Power processors are turned on when the battery door (located at the bottom of the processor) is closed. The processor is turned off when the battery door is open.
- Baha 5 SuperPower is turned on when a rechargeable battery is attached, and turned off when the battery is detached.

**PROCESSOR BUTTONS AND LIGHTS**

Only the Baha 5 Power and the Baha 5 SuperPower have indicator lights that can be configured by the clinician. All light flashes are orange.

<table>
<thead>
<tr>
<th>BUTTON</th>
<th>LIGHT</th>
<th>WHAT IT MEANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn on processor</td>
<td></td>
<td>Close the battery door completely (Baha 5 Power) or attach battery (Baha 5 SuperPower).</td>
</tr>
<tr>
<td>Turn off processor</td>
<td></td>
<td>Open battery door until you feel the first click (Baha 5 Power) or detach battery (Baha 5 SuperPower).</td>
</tr>
<tr>
<td>Change program</td>
<td></td>
<td>Press the button (Baha 5 Power) or press and hold upper button (Baha 5 SuperPower).</td>
</tr>
<tr>
<td>Activate streaming</td>
<td></td>
<td>Press and hold the button (Baha 5 Power), or press and hold lower button (Baha 5 SuperPower).</td>
</tr>
<tr>
<td>Stop streaming</td>
<td></td>
<td>Press the button again (Baha 5 Power), or press and hold upper button (Baha 5 SuperPower).</td>
</tr>
<tr>
<td>Change Volume</td>
<td></td>
<td>Use the volume rocker on the side of the processor (Baha 5 Power) or press and release upper/lower button to increase/decrease (Baha 5 SuperPower).</td>
</tr>
</tbody>
</table>

*For the Baha 5 Super Power, long press (2 seconds) the lower button until you hear a melody to activate streaming. To turn streaming off, short press the lower button.*
**Advantages:**
- Direct streaming from the remote microphone to the processor (discreet option).
- Inexpensive compared to other systems.
- Compatible with Nucleus, Baha and ReSound technology.
- Extended audio input capabilities, including conference microphone, line-in direct audio input, telecoil, and Euro adaptor (see next option for Universal Receiver with MM2+).

**Steps for fitting:**

**PAIRING**

Follow the steps below to pair the Sound Processor to the MM2+

1. Remove the Sound Processor from the ear. Remove the battery or open battery door.
2. Turn on the Mini Microphone.
3. Press the pairing button on the Mini Microphone 2+ once using the tip of a pen or similar object. The LED will flash yellow every 2 seconds and the Mini Microphone will now be in pairing mode for 20 seconds.
4. While pairing mode is active (20 seconds), turn on the sound processor. Successful pairing will be indicated by either audible melody played in the sound processor, or by a flashing light on the sound processor (depending on the type of sound processor).

**STREAMING**

**Streaming using the Remote Control**

1. Turn on the sound processor and the MM2+.
2. Press the streaming button once to start streaming. If the sound processor is paired with more than one wireless accessory press once, twice, or three times to toggle between the accessories.
3. To stop streaming, Press Home button and return to program 1 and default volume settings or press Program button and return to the last used program and volume settings.

**Streaming using the Baha5 Smart App**

1. Turn on the sound processor and the MM2+.
2. Start the Baha 5 Smart App.
3. Tap over the Wireless icon.
4. To stop streaming, tap over another program.

**EXTENDED AUDIO CAPABILITIES INCLUDE:**

**Conference Microphone**
- Directional microphone becomes omnidirectional when the mic is placed in a horizontal position (ideal for small group/conference use).

**Line-in Direct Audio Input**
- A 3.5 mm audio port on the bottom of the MM2+ can be used to connect to external audio sources such as TVs, smart boards, laptops, etc.

**Telecoil**
- A built-in telecoil can be used to pick up audio from a room loop or personal loop system.

**Euro Adaptor**
- Can be used to connect traditional RM-HAT technology through the MM2+ (see pg. 18).

**Battery Level**
- Press and hold the rectangular Mode button. The Mode LEDs will flash to indicate charge level: 4 lights indicate 100% charge, 3 lights indicate 75% charge, 2 lights indicate 50% charge and a single light indicates 25% charge.

**Tips for Use:**
- Keep the MM2+ 6 inches or less from the speaker’s mouth in an upright position (the upright position ensures the MM2+ is in a directional setting, which helps reduce background noise).
- To use in a small group/conference setting, place the MM2+ horizontally on the table or desk.
- The mode button can be used to toggle between audio sources note that when something is first plugged in, the MM2+ will automatically switch to that source.
- If the MM2+ is out of range of the processor, the processor will automatically switch out of streaming mode in 5 minutes; it will not automatically switch back into streaming mode if 5 minutes has passed, so the user will need to activate streaming when they want to listen to the MM2+ again.
- One MM2+ may be paired to multiple hearing instruments or sound processors; one sound processor may be paired with up to 3 MM2+ (see user manual for details).
Advantages:

- Can use a universal receiver with Europin connection (e.g., Phonak Roger) so purchase of a receiver dedicated to this processor is not necessary.
- User can flip easily between universal receiver input and other audio sources or MM2+ input.
- MM2+ with a single universal receiver can stream to a bilaterally implanted child, a child using any of the Baha 5 Sound Processors and a ReSound hearing aid, or a classroom full of such users.
- Preserves sound processing from universal receiver system and delivers it directly to the processor.

Steps for fitting:

1. Before first use, pair the MM2+ and processor.
2. Configure the universal receiver according to manufacturer instructions.
3. To begin using, plug the universal receiver into the MM2+ then have the user start streaming.

Tips for use:

- Most users will prefer a 1:1 mixing ratio set for streaming the MM2+ in this configuration. This can be set in the Baha 5 programming software.
- The MM2+ will not automatically start or stop streaming when the transmitter is turned on or off; ensure the user manually starts and stops streaming when necessary.
Visual verification using the Smart App for Baha 5, Nucleus 7 Sound Processors or remote controls (earlier processors) allows non-users to confirm input from the RM-HAT. Visually confirming device function can also be used to confirm bilateral signal vs. unilateral signal reception from RM-HAT technology or other wireless devices.

**USE VISUAL VERIFICATION TO:**

- Routinely monitor the device fitting (especially with small children)
- Troubleshoot any device concerns

### Baha 5 and Nucleus 7 Sound Processors

**Visual Verification of Streaming With MFi (Made for iPhone)**

1. Open compatible iOS device. Tap on the Settings icon.
2. Select the Accessibility menu, then Hearing Devices.
3. To ensure connectivity to Roger 20 system or MiniMic, confirm a checkmark next to the Roger 20/or MiniMic menu option.

### Kanso and Nucleus 6

**Visual Verification of Roger 14 Streaming Through CR230 Remote Assistant**

1. If using AutoFM, as soon as the transmitter is turned on, the processor connects and an FM icon will display on the CR230 screen.
2. To manually turn FM on and off tap the side button of the CR230.

### Nucleus 7 Sound Processor

**Visual Verification of Roger 20 Streaming Through Smart App**

1. As soon as transmitter is turned on, the processor connects.
2. Open compatible Nucleus Smart App.
3. Review the Home Screen, and review the Audio Source.
4. If the FM is transmitting, a green dot will appear next to Roger 20.
5. If FM is not sending signal, or is in standby a grey dot will appear next to the Roger 20.

### Nucleus 5/6

**Monitor Earphones and Adaptor**

1. Disconnect the battery from the sound processor.
2. Connect the monitor earphone adaptor to the sound processor.
3. Connect the battery to the monitor earphone adaptor.
4. Plug earphones into 3.5mm jack of adaptor (any non-noise cancelling earphones can be used).
5. You are now listening to the microphones of the processor, to listen to streaming (ie, MM2+), simply start streaming on the processor.
6. To connect the Roger 20, connect in the order shown below.

**WARNING:** Some accessories that fit between the sound processor and the battery module prevent the battery module from being locked to the sound processor, which means the battery module can be removed and poses a choking or ingestion hazard. Always supervise.

### TEST ROD TO LISTEN TO/CONFIRM BAH A FITTINGS

Professionals may listen to RM-HAT on a Baha sound processor by using a Baha test rod. Place the test rod on the forehead or mastoid to listen to the device; it may be easiest to hear the sound by plugging the ears.

**Nucleus 5/6 Monitor Earphones**

1. Power the processor off by pressing and holding the lower button.
2. Lift the accessory door using a small screwdriver or locking tool.
3. Plug in the monitor earphones until you feel a click.
4. If desired, connect a receiver (ie, Euro Adaptor with universal receiver, Roger 14, etc) to the port in the middle of the cable of the monitor earphones.
5. Power the processor on by pressing the lower button.
6. You are now listening to the processor microphones and/or the RM-HAT technology.
While the use of monitor earphones can confirm a signal, the best way to ensure the student is receiving benefit from wireless or remote microphone technology is to perform a more formal evaluation. This method may be used for both Cochlear Nucleus and Baha technologies.

1. Choose a listening task in which the listener can score in the range of 50-80% correct in quiet.
2. Administer the task without visual cues in quiet using the sound processor at a normal setting.
   - The child and examiner should be about 3 feet apart.
   - The suggested presentation level is 60 dB SPL at the listener’s ear, or normal conversational speech.
3. Repeat the test in quiet through the wireless or remote microphone system only.
4. May set the mixing ratio of the processor to “accessory only” to ensure the student is not hearing the speech through the environmental microphone (may also use a sound isolated booth for this testing).
5. Performance in the two conditions should be equivalent – if not, the FM receiver settings may need to be optimized.
6. Further testing may be performed in the presence of background noise to evaluate the remote microphone advantage, if desired.

### Table: Remote Microphone Hearing Assistance Technology (RM-HAT)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Sound Processor</th>
<th>Receiver</th>
<th>Transmitter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Sound</strong></td>
<td>• Check Batteries</td>
<td>• Ensure receiver is paired to transmitter</td>
<td>• Check connections</td>
</tr>
<tr>
<td></td>
<td>• Check Coils/Cable</td>
<td>• Ensure receiver is in operating range</td>
<td>• Check position of microphone</td>
</tr>
<tr>
<td></td>
<td>• Check sound processor microphone</td>
<td>• Check the FM receiver on another sound processor/hearing instrument</td>
<td>• Check that the microphone is not muted</td>
</tr>
<tr>
<td></td>
<td>via monitor earphones or audio meter</td>
<td>• Check that the volume settings are high enough for use</td>
<td>• Check battery</td>
</tr>
<tr>
<td></td>
<td>on remote or app</td>
<td></td>
<td>• Ensure within operating range</td>
</tr>
<tr>
<td></td>
<td>• Replace interface for FM receiver (ie, Euro Adaptor, MMA+)</td>
<td></td>
<td>• Check settings are correct</td>
</tr>
<tr>
<td></td>
<td>• Ensure receiver is paired to transmitter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Check connections</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure within operating range</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Check sound quality of transmitter with another receiver</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Check the microphone is not muted</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure cable to mic (if appropriate) is not frayed/ kinked</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Poor Sound Quality</strong></td>
<td>• Check mixing ratio settings</td>
<td>• Check connections</td>
<td>• Change position of microphone</td>
</tr>
<tr>
<td></td>
<td>• Check Sensitivity settings</td>
<td></td>
<td>• Ensure within operating range</td>
</tr>
<tr>
<td></td>
<td>• Change batteries</td>
<td></td>
<td>• Check sound quality of transmitter with another receiver</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Ensure within range</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Check that the microphone is not muted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Enable microphone</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Ensure microphone is working and positioned correctly for optimum pick up of signal</td>
</tr>
<tr>
<td><strong>Equipment does not respond to commands</strong></td>
<td>• Check batteries</td>
<td></td>
<td>• Check the transmitter is not locked</td>
</tr>
<tr>
<td></td>
<td>• Ensure the processor buttons are not locked (see user manual for details)</td>
<td></td>
<td>• Reboot the transmitter, if available</td>
</tr>
<tr>
<td><strong>Listening is poorer with the RM-HAT system than with the processor alone</strong></td>
<td>• Check that the correct program is being used in the processor</td>
<td>• Increase the gain in the receiver (if available)</td>
<td>• Ensure microphone is working and positioned correctly for optimum pick up of signal</td>
</tr>
<tr>
<td></td>
<td>• Check the mixing ratio</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Check the volume and sensitivity settings</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Check the receiver and transmitter on another device to confirm which device has the issue</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Recipient can hear input from RM-HAT but not from environment</strong></td>
<td>• Check the mixing ratio</td>
<td>• Check the receiver settings (per manufacturer guidelines)</td>
<td>• Check the transmitter settings (per manufacturer guidelines)</td>
</tr>
<tr>
<td></td>
<td>• Check the volume and sensitivity settings</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Check that the appropriate program is being used</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Direct-to-Device Streaming Technology

Cochlear is committed to delivering superior hearing and user experience while providing an efficient system to maximize day-to-day listening experiences. By using low energy audio streaming protocols, Cochlear recipients are able to experience binaural streaming through an integrated solution without significantly impacting their battery life or increasing the weight or size of the device with extra accessories.

In the classroom, iPads have been shown to increase academic performance and improve engagement and motivation.12 Students with Nucleus 7 Sound Processor or Baha 5 Sound Processors can stream directly from their compatible Apple or Android* devices by pairing the sound processor with the device.

Compatibility and Pairing Instructions

For the most current list of compatible smartphones or devices and instructions on pairing, please visit Cochlear’s compatibility site located at www.Cochlear.com/Compatibility
Cochlear leverages Apple and Android connectivity technology which also allows for the use of Smart Apps with the Nucleus 7 Sound Processor to control and monitor the sound processors. In the classroom, the apps can be used to confirm fittings, start streaming, monitor devices and even track the hearing of a recipient. Apps are available for Apple or Android technology and may be found on the Apple Store or Google Play by searching for “Nucleus Smart App”. For an Apple device, pair the phone as noted above, then follow the app instructions to connect to the App. For an Android device, open the app once loaded and follow the pairing instructions from within the app.

Nucleus 7 Sound Processor Smart App features:

**MONITOR AND CONTROL THE NUCLEUS 7 SOUND PROCESSOR**

Follow the steps below to connect the sound processor to the Smart App:

1. Tap the Nucleus Smart icon to start the app.
2. Set up the app. The first time you run the app, a series of screens step you through setting it up.

**NOTE**: You will need to log in to the app using the Cochlear account.

**THE HOME SCREEN**

1. Sound processor battery level
2. Sound processor status
3. Control panel (closed)
4. Control panel (open)
5. Setting name
6. Setting current value
7. Setting controls

Adjust:

- Streamed volume
- Programs
- Bass and treble
- Streamed audio
- Sensitivity
- Master volume limit

1. Start streaming from an Audio Source.
2. Tap more to open the appropriate control panel.
3. Tap + / - to change settings.
4. Tap X at top left to close the Audio Source Settings control panel.

**HEARING TRACKER**: Provides information about sound processor usage to caregivers and patients

**FIND MY PROCESSOR**: Locates a lost sound processor by providing the last place the processor was connected to the Smart App.

**MONITORING AND TROUBLESHOOTING**

**TROUBLESHOOTING**

- You have trouble connecting to the app:
  1. Restart the sound processor.
  2. Restart the app.
  3. Restart the device running the app.

- You don’t receive notifications:
  1. Check that the app is running on the device.
Baha 5 Smart App

With the Baha 5 Smart App, your patients can control their Baha 5 sound processor directly from their smartphone and personalize their listening experience directly from their iPhone or Android™ device.

Baha Smart App features:
- Control the Baha 5 sound processor directly from a compatible smartphone
- Personalize the hearing experience of the user
- Change programs
- Adjust volume
- Receive assistance and get handy operating tips
- Start wireless streaming
- Monitor battery life
- Locate a lost sound processor

Baha 5 Smart App features:

MONITOR AND CONTROL THE BAHA 5 SOUND PROCESSOR
Follow the steps below to connect the sound processor to the Baha 5 Smart App
1. Make sure that the sound processor is paired to the smartphone via Bluetooth.
   - The sound processor should have a fresh battery.
   - Turn off any wireless accessories.
2. Turn OFF the sound processor and then turn ON the sound processor to make it discoverable.
3. Tap the Baha Smart App icon to start the app.
4. Read through the Terms of Use and the introductory tutorial slides (visible at first-time-use only).
5. Choose to connect/pair device.
6. Please wait for the Baha 5 Smart App to connect to and pair to the sound processor.
7. You’re ready to run the Cochlear Baha 5 Smart App.

NOTE: When pairing to two sound processors, turn them on simultaneously. If you have additional questions about pairing the smartphone to the sound processor, please refer to the Setup Guide for Android and iPhone.

THE HOME SCREEN
Change programs on the sound processor(s) and activate wireless streaming.

ADJUST VOLUME
Adjust the volume on the sound processor(s) and Cochlear Wireless Accessories.

LOCATE DEVICE:
Locate a lost sound processor by signal strength or by map view.
Signal strength:
- Locate a sound processor that is still within range (there is still a connection between processor and smartphone).
- The bar displays how close or far away you are from the sound processor.
Map view:
- Locate a sound processor that is out of range (there is no connection between processor and smartphone).
- The map will pin the location where the last connection between sound processor and phone was lost.

PROGRAM +
Users can adjust treble and bass settings and create personalized programs (Programs).
If user has a compatible Apple device, they can Geo Tag a program and it will automatically get activated once the user is inside the specified area. They can also adjust the size of the area triggering the program activation in the app.

SOUND PROCESSOR INFORMATION
View sound processor information and usage.
The system information page displays sound processor information, last fitting data, program adjustments, locations and usage.
NOTE: This page can be shared with hearing care professionals during fittings as support information to data logging to help guide to the appropriate fitting.

TROUBLESHOOTING
You have trouble connecting to the app
- Restart the sound processor.
- Restart the app.
- Restart the device running the app.
You don’t receive notifications
- Check that the app is running on the device.
Additional Resources

- Kanso Instructional Videos and Manuals: https://www.cochlear.com/us/recipients/kanso

References

8. D801287, Cochlear Baha 5 Power datasheet
9. D770056, Cochlear Baha 5 Power datasheet
10. D1333582, MPO measurements of Oticon Medical Ponto 3 SuperPower device
11. As stated in the Genie Medical Software - Help section: “Genie Medical can display several technical curves that provide an exact representation of the frequency response, gain and compression of the instrument.”

Notes:
As the global leader in implantable hearing solutions, Cochlear is dedicated to helping people with moderate to profound hearing loss experience a life full of hearing. We have provided more than 550,000 implantable devices, helping people of all ages to hear and connect with life’s opportunities.

We aim to give people the best lifelong hearing experience and access to innovative future technologies. We have the industry’s best clinical, research and support networks.

That’s why more people choose Cochlear than any other hearing implant company.