

# TOOLS for SCHOOLS™ Program



## Using & Troubleshooting the Neptune™ Sound Processor

Name

Title



Advanced Bionics



# Mission

At Advanced Bionics we are *dedicated* to improving lives by developing technologies and services that help our recipients achieve their full potential.

- Our commitment to putting patients first and providing the best possible hearing *performance* remains at the forefront of all that we do.
- The trust patients place in us inspires us to act with *integrity and transparency* as we strive for excellence each and every day in all that we do.

*To learn more about Advanced Bionics visit [AdvancedBionics.com](https://www.advancedbionics.com)*



# Advanced Bionics



**PHONAK**

| Partners for Better Hearing

TOOLS for SCHOOLS™



# Tools for Schools

Today's presentation is just one of many valuable FREE resources provided by Advanced Bionics' Tools for Schools™ program (TFS™).

**The goal of the TFS program is to:**

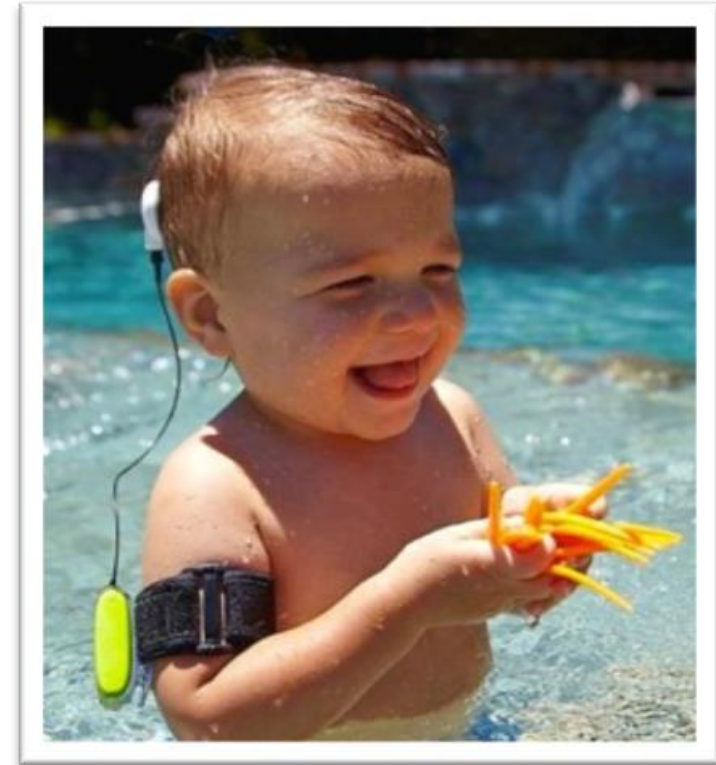
- Help school aged children with cochlear implants succeed in the classroom.
- Ease your workload and save you time.
- Educate parents and professionals about CI technology.
- Provide support for effective teaming between the School, CI center and Home.

Visit [www.advancedbionics.com/tfs](http://www.advancedbionics.com/tfs) to learn more.



# What You Will Learn Today

- **Features and functions of the Neptune™ sound processor**
- Troubleshooting the Neptune sound processor
- Connectivity with the Neptune sound processor





# The HiResolution™ Bionic Ear System

## Naída CI Sound Processor

The ultimate in  
behind-the-ear wearing



## Neptune™

Swimmable sound processor

## HiRes 90K™ Advantage Implant

The world's most advanced technology



# Neptune™ Sound Processor





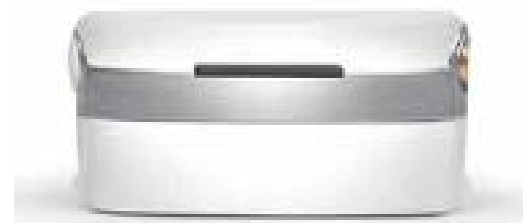
# Neptune™ Sound Processor

## Wearing Options



Neptune Processor with  
Neptune Connect

Color Cover



Neptune Processor  
without Neptune Connect





# Neptune™ Sound Processor

## Wearing Options

### Reasons to remove Neptune Connect

- To make Neptune waterproof
- To make Neptune “child proof”
- To make the Neptune smaller



**Neptune Processor  
without Neptune Connect**





# Neptune™ Sound Processor

## Fun and Bright!





# Neptune™ Sound Processor

Headpiece Cable  
Connector

Neptune Clip

Neptune  
Color Cover

Neptune  
Connect

Aux input Jack

On/Off Button

Processor LED

Battery Cover





# Neptune™ Sound Processor

## Diagnostic Indicators

### Light-Emitting Diode (LED)

- system status
- battery life
- program position
- audio input
- error condition

### Audible Alarms

- system status
- battery life
- error condition





# Neptune™ Sound Processor

## Power Options

### Single AAA Battery

- Alkaline
- Lithium

### Rechargeable AAA battery

- Nickel-metal Hydride (NiMH)





# Neptune™ Sound Processor

- **Lithium AAA battery**

- Avg 20 hrs
- Range 11-30 hrs

- **Alkaline AAA battery**

- Avg 12 hrs
- Range 6-21 hrs

- **Rechargeable NiMH AAA battery**

- Avg 13 hours
- Range 8-21 hrs





# Neptune™ Sound Processor

## Neptune Connect

- Easy-to-use,
  - volume dial
  - sensitivity dial
  - program position
  
- FM, Roger™ and Audio Input
  
- Listening Check



***Removable Module- not needed for daily operation***



# Neptune™ Sound Processor

## Neptune Connect

Volume Control

Sensitivity Control

EuroPort

Sync Light



Aux input Jack

Program Switch

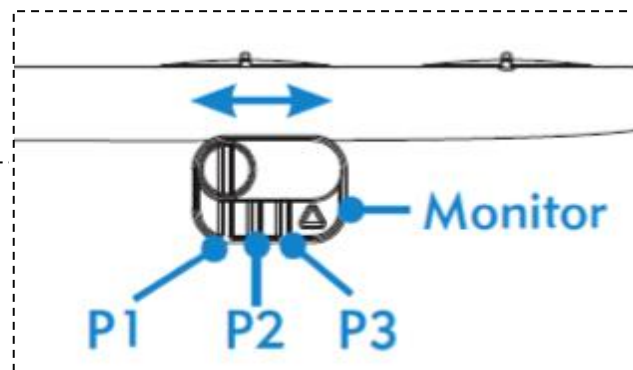
*Remember: Volume control is at the end and Sensitivity control is in the middle*





# Neptune™ Sound Processor

## Program Switch



Select a program or monitor the headpiece microphone by sliding the Program Switch to the right or left.



# Neptune™ Sound Processor

## Sync Light

- Verify communication between the Neptune Connect and the sound processor
- Safety feature
- Peace of mind





# Neptune™ Sound Processor

## Sync Light

### To sync if Neptune™ is OFF:

- Remove Color Cover and attach Neptune Connect
- Set program & dials
- Turn on Neptune

### To sync if Neptune is ON:

- Remove Color Cover and attach Neptune Connect
- Confirm program and sensitivity settings on the Neptune Connect
- Turn the volume wheel fully counter-clockwise - Sync Light will flash green once
- Return the volume to the typical use position
- The controls are now active








# Neptune™ Sound Processor

**SYNC**

**LIGHT**

Behavior	Indication
One green flash 	Neptune Connect and processor settings are synced. Any changes made to the volume or sensitivity wheel will take effect.
Flashes red once per second 	A mismatch exists between Neptune processor settings and Neptune Connect settings. In order to sync settings, turn volume dial all the way down (counter-clockwise); verify green light flashes once; then adjust the controls to desired position(s).
Solid red light 	Error condition. If this occurs, remove and re-attach Neptune Connect.



# Neptune™ Sound Processor

To Detach the Neptune Connect press the release latch



Release Latch



# Neptune™ Sound Processor

## Headpieces

### Universal Headpiece (UHP)

- Compatible with all AB sound processors
- Designed for use during everyday activities with the exception of swimming and bathing

### AquaMic™

- For use with Neptune™ and Naída CI Q70 processors
- Designed for use during swimming and bathing
- IP68 Rating



AquaMic

UHP



# Neptune™ Sound Processor

## AquaMic™ vs. UHP

How to tell the difference?

Size

- UHP is slightly thinner

Color

- UHP underside is **black**
- AquaMic underside is **grey**

Cable Connector

- Headpiece specific



UHP

AquaMic



# Neptune™ IP 68 Rating



IP

**Ingress Protection**

Only AB has the **industry's highest rating**



6

**Protection against solid foreign bodies**

AB offers maximum protection against solid particles.



8

**Protection against various forms of moisture**

Only AB offers the world's first processor and microphone intended for repeated submersions.





# Neptune™ Sound Processor

## T-Comm™

### Benefits of T-Comm

- Improved hearing in noise & localization
- Ease of use with telephones, headphones, & Bluetooth receivers
- T-Coil option
- Small & extremely lightweight

T-Comm



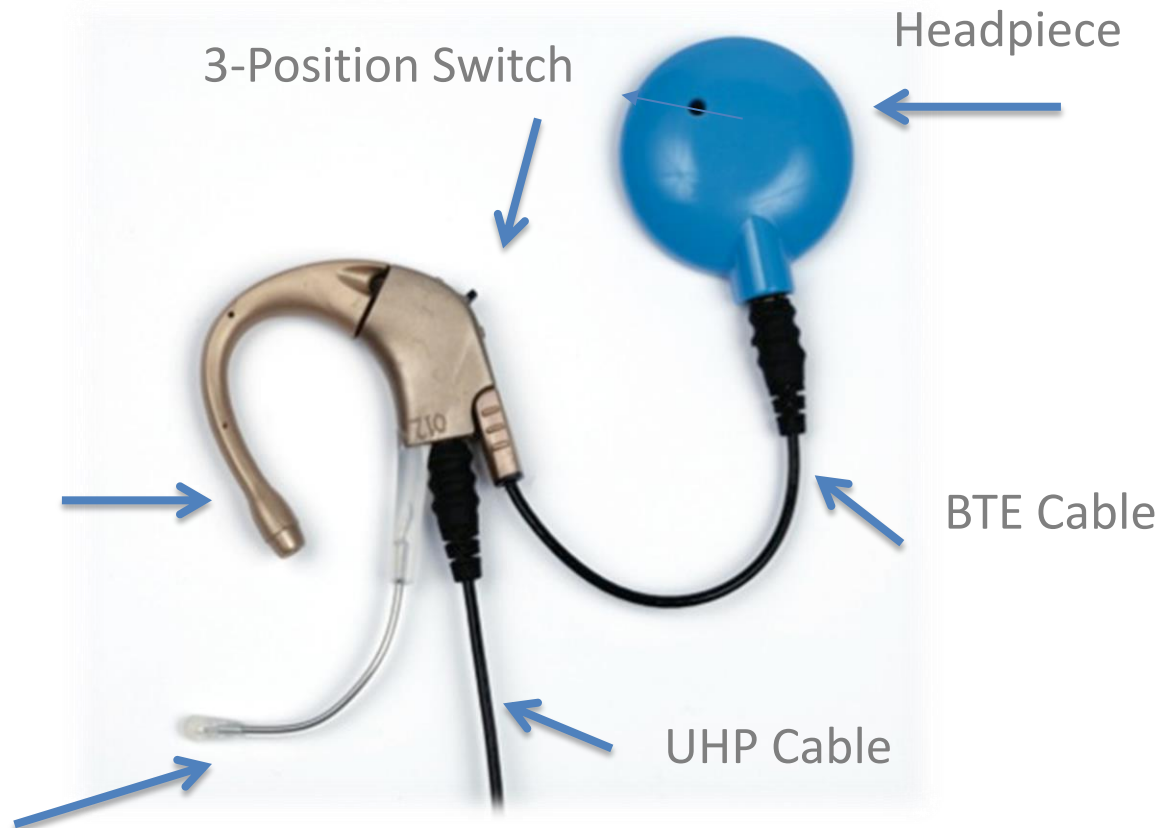
\* T-Comm must be removed prior to Neptune water use.

TOOLS for SCHOOLS™



# Neptune™ Sound Processor

## T-Comm™ Parts





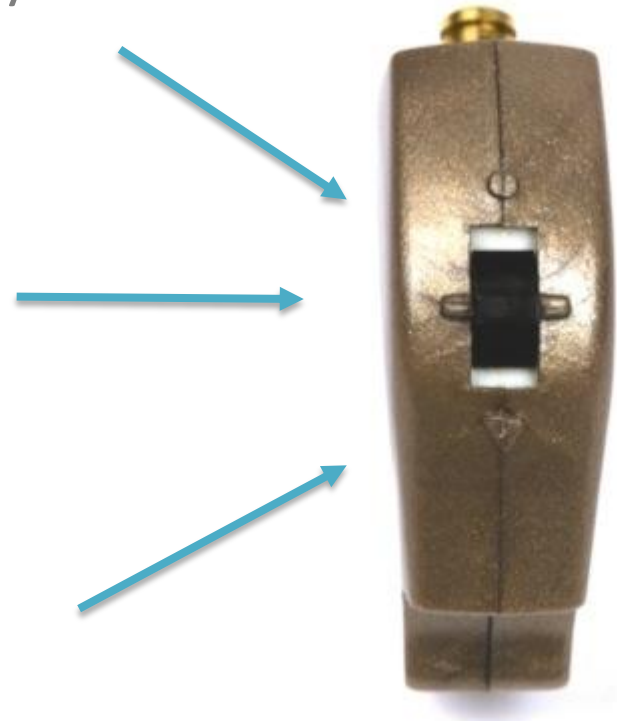
# Neptune™ Sound Processor

## Using T-Comm™

T-Mic™ input only  
Top

T-Mic + T-Coil input  
Middle

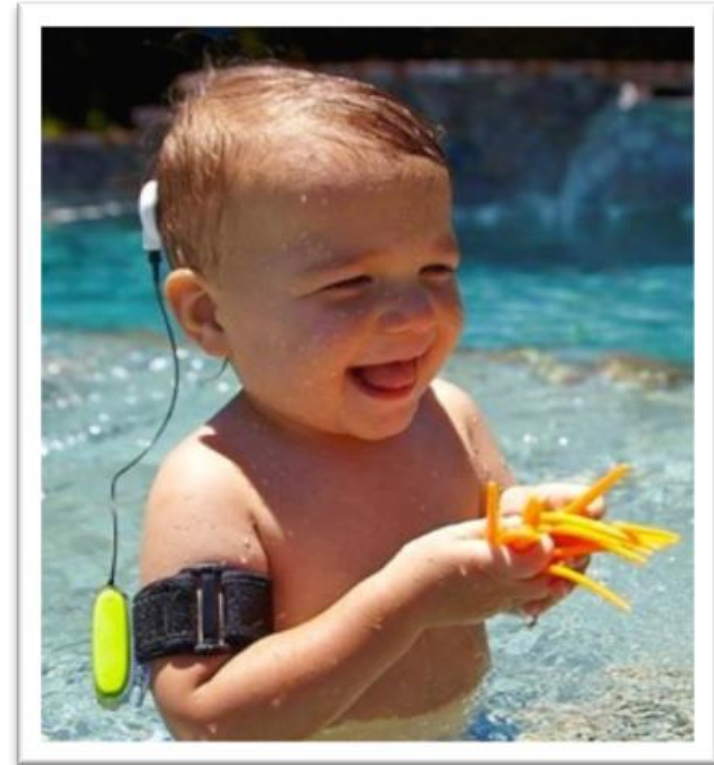
T-Coil input only  
Bottom





# What You Will Learn Today

- Features and functions of the Neptune™ sound processor
- **Troubleshooting the Neptune sound processor**
- Connectivity with the Neptune sound processor





# Troubleshooting

## Basic Steps

### When a child is not responding as expected:

1. Verify the UHP is in place and on the child's head
2. Remove the Neptune and UHP from the child. Visually inspect the equipment and replace damaged parts
3. Verify the battery is charged
4. Verify Neptune settings or reset the Neptune to Program 1
5. Place the Neptune and UHP back on the child and use the LED's and/or audible alarms to determine what the problem may be
6. Perform a listening check



# Troubleshooting

## 1. Verify the headpiece is in place on the child's head

- If the headpiece is not on the child's head, place it on the child's head, positioned over the internal implant (you will feel the magnetic attraction)
- Contact the child's parents or audiologist if the headpiece falls off often. This may indicate that the strength of the magnet inside the headpiece needs to be adjusted





# Troubleshooting

## 2. Visually inspect the child's equipment and systematically replace damaged parts

- Check the Neptune for damage
- Inspect the cable for any twisting, fraying, or breakage. Remember the cable is the weakest link.
- Verify the cable clicks or snaps into place when connected to the UHP and processor
- Verify there is no visible damage to the UHP
- Inspect cable ports and jacks for debris. Clean with compressed air if needed
- Replace damaged equipment if necessary



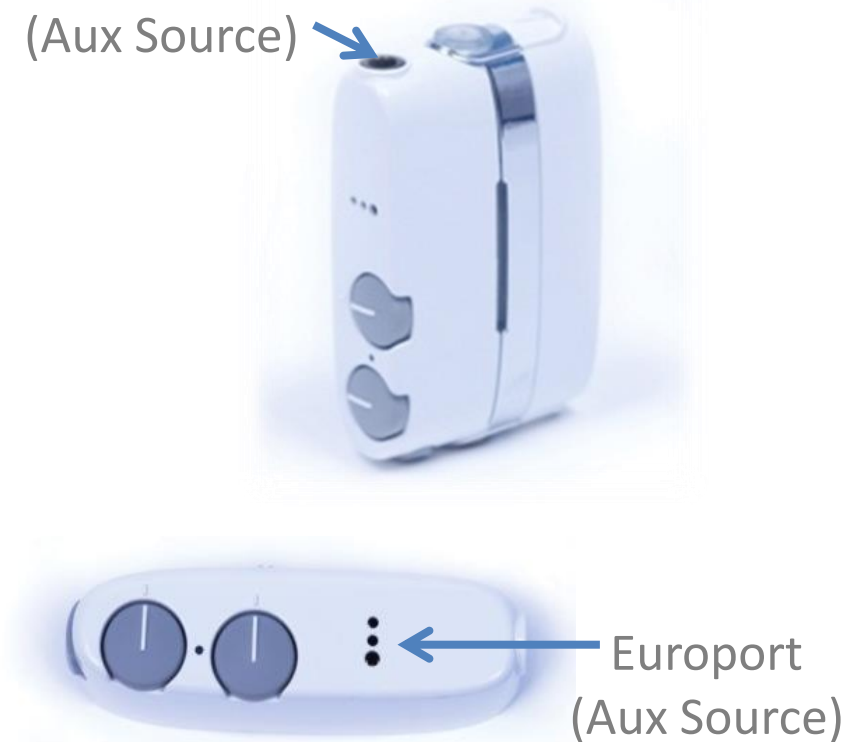
# Troubleshooting Neptune™

## Inspect Ports and Jacks

- Ensure connections are tight
- Look for debris or damage



Auxiliary Jack (Aux Source)







# Troubleshooting

## 3. Verify the battery is charged

- Remove the battery and then reattach it to the processor
- The LED (located on the side of the processor) will flash ORANGE to indicate battery status
- 3-4 ORANGE blinks indicates the battery is sufficiently charged to power the processor
- Replace with a fully charged battery if needed



LED



# Troubleshooting

## 4. Verify settings or Re-set the child's processor to Program 1

- **If the child is using the Neptune connect**
  - Ensure the processor is set on the correct program with standard volume and sensitivity setting
  - Power off and then re-start the Neptune
- **If the child is not using the Neptune connect**
  - Power off and then re-start the Neptune processor
  - Hold the power button for 3-5 seconds when powering on to re-set the processor to P1 at default volume and sensitivity settings



# Troubleshooting




5. Use the Neptune's LED indications and audible alarms to determine what the problem may be

## LED Indicators

FEATURE	COLOR
Battery Status	Orange
Microphone Status	Green
Program Position	Green
CI Status	Red



## LED Indications

 <p><b>Orange Battery Status</b></p>	<ul style="list-style-type: none"><li>• Blinks at start-up: 1-4 quick blinks indicates level of charge with 4 meaning a fully charged battery</li><li>• Solid: Battery is almost depleted</li><li>• Blinks twice every two seconds: Battery depleted and cannot support stimulation</li><li>• Fades Out: Powering down</li></ul>
 <p><b>Red System Status</b></p>	<ul style="list-style-type: none"><li>• Blinks once per second: Loss of lock</li><li>• Blinks rapidly: Wrong implant</li><li>• Solid: Error Condition</li></ul>
 <p><b>Green Microphone &amp; Program Status</b></p>	<ul style="list-style-type: none"><li>• Flickers in response to loud inputs: Mic and sound processor are responding to sound</li><li>• Blinks at start-up: Program position</li><li>• Solid Green: Empty program slot or monitor position</li></ul>



# Troubleshooting Neptune™

## Audible Alarms

Beeps once per second	Yes	Loss of lock with the implant
Beeps rapidly (more than once per second)	Yes	Wrong implant connected
Beeps slowly (once every five seconds)	Yes	Low battery
Two beeps every three seconds	Yes	Battery is depleted and cannot support stimulation
Continuous beep	No	Sound processor error condition. Fully remove and re-insert battery to reset processor.



## 6. Perform a Listening Check

- Listen to the headpiece microphone/T-Mic/FM/T-Coil
- Say the Ling 6 sounds as you complete the check as these sounds encompass the frequency range of all phonemes
- After completing the Listening Check replace any malfunctioning equipment





# Troubleshooting Neptune™

## Microphone Inputs

FM/Roger™



Headpiece Mic



T-Coil



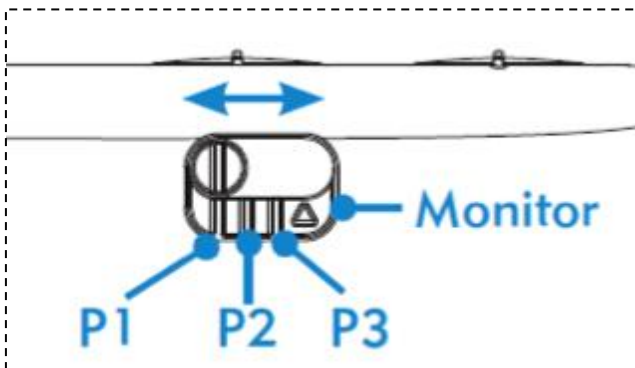
T-Mic™





## Completing a Listening Check

1. Turn on the Neptune™ processor
2. Attach the Neptune connect
3. Ensure the Neptune Connect and Neptune are synced
4. Connect earbuds to the Auxiliary Jack
5. Set the program switch to the fourth (triangle) position.
6. Speak in a normal voice and monitor output with earbuds/headphones







# AB MAKES IT SIMPLE FOR SCHOOLS!

## Did you know??

AB makes it Simple for Schools by providing FREE and easy downloadable instructions and pictures to conduct a Ling 6 Sound assessment.

Visit [AdvancedBionics.com/tfs](https://www.advancedbionics.com/tfs) and click on Tools for Using the Ling 6 Sounds to print

### The Ling 6 Sounds”

“ah”, “oo”, “eee”, “sh”, “sss”, “mmm”





# Troubleshooting

## Ask the Right Questions

If you are unable to resolve the problem it is helpful to provide the following information to the child's parent or audiologist so they can complete further troubleshooting:

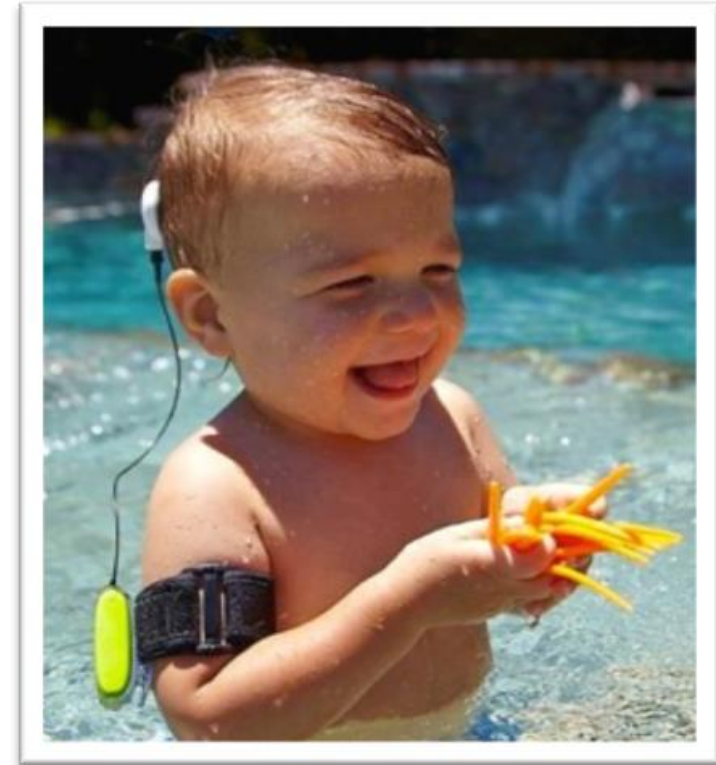
- When did the problem begin?
- What pieces of equipment seem to be involved?
- Is the problem constant or intermittent?
- Is the problem situational?





# What You Will Learn Today

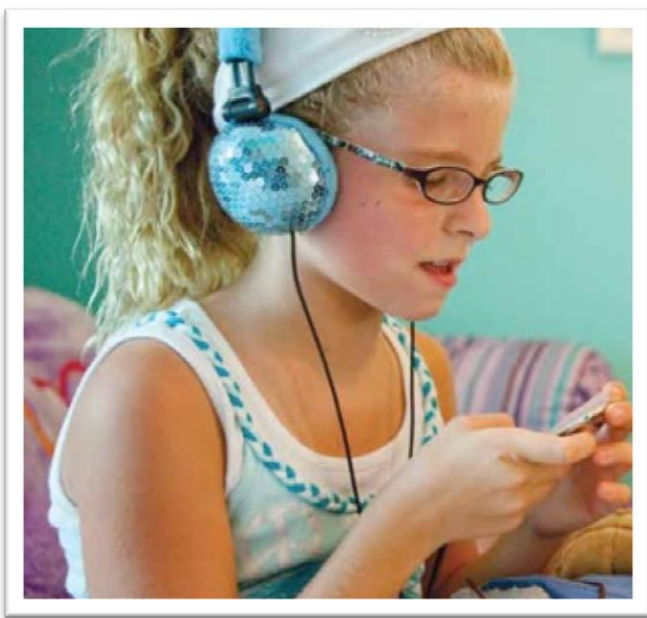
- Features and functions of the Neptune™ sound processor
- Troubleshooting the Neptune sound processor
- **Connectivity with the Neptune sound processor**





# Connectivity

## Options in Connectivity



- Natural
- Wireless
- T-Coil
- Direct



# Connectivity

## Natural Connectivity with the T-Mic™

- Natural Placement for headsets, earbuds, or phones
- Access to commercially available audio devices





# Connectivity

## Wireless Connectivity

Many AB recipients benefit from Roger™/FM

A system that employs a transmitter/microphone and a receiver to improve the signal-to-noise ratio in difficult listening environments





# Connectivity

## Compatible Receivers



MLxi



Roger™



MyLink+



Roger™ MyLink

Receiver	Compatible with Neptune
Roger X	Yes
MLxi	Yes
MyLink+	Yes (must use T-Comm)
Roger MyLink	Yes (must use T-Comm)



# Connectivity

## Wireless FM with the Roger™ and MLxi

- Remove the Neptune and headpiece from the child
- Ensure that the Neptune is on and synced to Neptune Connect
- Align the three connector pins with the Euro connector as shown
- Adjust the program dial to the proper Roger/FM Program
- Turn down the volume on the Neptune
- Position the headpiece and Neptune in the child's preferred wearing style
- Turn up the volume on the Neptune and Roger/FM system to user settings
- Complete a functional listening check using the Ling 6 Sound Check or simple sentence materials.



Simply Sync  
and Connect





# Connectivity

## Wireless Roger™ /FM with MyLink+ or Roger MyLink

- Remove the Neptune and headpiece from the child
- Attach the T-comm if it is not already attached for use
- Ensure that the Neptune is on and synced to Neptune Connect
- Ensure the MyLink+ or Roger MyLink is synced to the transmitter/microphone
- Adjust the program switch on the Neptune to the proper FM Program
- Adjust the T-comm to the desired setting- T-Coil or T-coil +T-Mic
- Turn down the volume on the Neptune
- Position the headpiece and Neptune in the child's preferred wearing style
- Hang the Roger MyLink or MyLink+ around the neck of the child
- Turn up the volume on the sound processor and Roger/FM system to user settings
- Complete a functional listening check using the Ling 6 Sound Check or simple sentence materials.





# Connectivity

## Compatible Phonak Transmitters/Microphones

- The specific Transmitter or Microphone you are using must be compatible with the receiver being used
- Contact Phonak at [www.phonak.com](http://www.phonak.com) for detailed information on compatibility





# Connectivity

## T-COIL

- For looped areas, compatible phones, or Roger™ /FM use
- Neptune users must attach the T-Comm to use the T-Coil

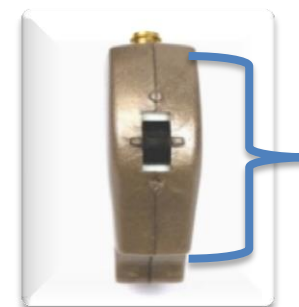
## T-COMM

### Three Position Switch:

Top = T-Mic

Middle = T-Mic + T-Coil

Bottom = T-Coil





# Connectivity

## Direct



- Requires plugging an interface cable into the Auxiliary Jack on the side of the Neptune Connect
- Items such as MP3 players, tablets, and telephones can be directly connected



# Connectivity

## Direct

- Use the AB Audio Interface Cable.
- The Interface cable has two 3.5 mm connectors and is compatible with a 3.5 mm jack
- Jack size converters for a 2.5mm port can be found at most electronics stores



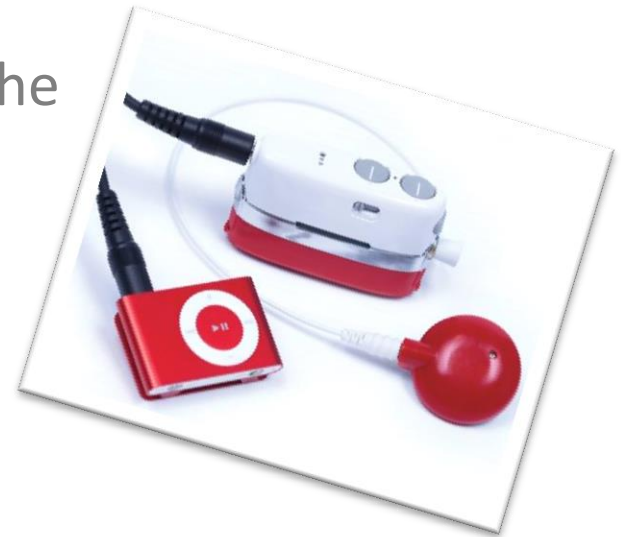
Audio Interface Cable



# Connectivity

## Steps to connect to a portable electronics device:

- Ensure the Neptune is on and synced to the Neptune Connect
- Ensure that the proper program for auxiliary input is selected
- Connect one end of the Audio Interface Cable to the 3.5 mm Auxiliary Jack on the side of the Neptune Connect (this cable is not sided)
- Connect the opposite end of the cable to the headphone jack of the audio device.





# Connectivity

## Direct

Additional interface cables available from AB



The Telephone Adapter



The Telecoil Pick-up (for use with T-Comm™)



# Connectivity

## Considerations for Connectivity

### Important!

Sync Neptune Connect with the Neptune sound processor before connecting an auxiliary input!







# Best Practices in Connectivity

- Verify you are using the correct program and settings for Roger/FM or auxiliary input
- Only connect to battery-powered audio devices
- Only connect to AB tested and approved devices
- Complete a listening check and monitor input and connections





# AB Makes it Simple for Schools

**TOOLS for SCHOOLS™**  
FOR TEACHING A CHILD WITH A COCHLEAR IMPLANT

**FOR THE TEACHER**

- Know your own hearing level
- Identify your own hearing loss
- Adapt your own teaching style
- Use the best teaching strategies for your child
- Know when to ask for help
- Know when to refer your child to an audiologist

**FOR THE PARENT**

- Know your own hearing level
- Identify your own hearing loss
- Adapt your own teaching style
- Use the best teaching strategies for your child
- Know when to ask for help
- Know when to refer your child to an audiologist

**FOR THE CHILD**

- Know your own hearing level
- Identify your own hearing loss
- Adapt your own teaching style
- Use the best teaching strategies for your child
- Know when to ask for help
- Know when to refer your child to an audiologist

**FOR THE CLASSROOM**

- Know your own hearing level
- Identify your own hearing loss
- Adapt your own teaching style
- Use the best teaching strategies for your child
- Know when to ask for help
- Know when to refer your child to an audiologist

**FOR THE EQUIPMENT**

- Know your own hearing level
- Identify your own hearing loss
- Adapt your own teaching style
- Use the best teaching strategies for your child
- Know when to ask for help
- Know when to refer your child to an audiologist

**FOR THE AUDIOLOGIST**

- Know your own hearing level
- Identify your own hearing loss
- Adapt your own teaching style
- Use the best teaching strategies for your child
- Know when to ask for help
- Know when to refer your child to an audiologist

**TOOLS for SCHOOLS™**  
Audiogram of Human Speech

**Advanced Bionics**  
For questions or additional information, call 800-368-6265 (TDD) or 800-368-6262 (Voice Line) or visit us online at [www.abhearing.com](http://www.abhearing.com). You can also email us at [toolsforschools@abhearing.com](mailto:toolsforschools@abhearing.com).

**FREE resources!!**  
[www.advancedbionics.com/ffs](http://www.advancedbionics.com/ffs)

**TOOLS for SCHOOLS™**  
IN COORDINATION WITH COCHLEAR AND IMPLANTS

**How the Ear Works**  
Sound waves travel from the ear drum to the ossicles. The ossicles then vibrate and push the cochlea, which is the spiral-shaped part of the inner ear. The cochlea contains the hearing nerve. Each of these parts plays a role in the hearing process.

**The Outer Ear**  
The outer ear (or pinna) captures sound and then funnels the sound down the ear canal to the eardrum.

**The Middle Ear**  
Sound vibrations from the eardrum are transferred to the ossicles. The ossicles can vibrate at three times the distance (amplitude) from rest. This is the unique property of the ossicles that allows them to transfer sound to the inner ear.

**The Inner Ear**  
The inner ear contains the cochlea, which is the spiral-shaped part of the inner ear. The cochlea contains the hearing nerve. Each of these parts plays a role in the hearing process.

**The Auditory Nerve**  
The auditory nerve (or hearing nerve) is responsible for carrying the sound information from the inner ear to the higher processing centers of the brain. The brain is responsible for interpreting sound.

**TOOLS for SCHOOLS™**

**TOOLS for SCHOOLS™**

The Sounds of Speech

English Consonants	IPA Symbol	Approx. Freq. (Hz)	Approx. Intensity (dB)	Approx. Duration (ms)	Approx. Bandwidth (Hz)
P	p	4000	100	100	4000-8000
B	b	4000	100	100	4000-8000
T	t	4000	100	100	4000-8000
D	d	4000	100	100	4000-8000
N	n	4000	100	100	4000-8000
K	k	4000	100	100	4000-8000
G	g	4000	100	100	4000-8000
F	f	4000	100	100	4000-8000
V	v	4000	100	100	4000-8000
S	s	3500	100	100	3500-7000
Z	z	3500	100	100	3500-7000
SH	ʃ	3500	100	100	3500-7000
ZH	ʒ	3500	100	100	3500-7000
CH	tʃ	3500	100	100	3500-7000
JH	dʒ	3500	100	100	3500-7000
M	m	1500	100	100	1500-3000
N	n	1500	100	100	1500-3000
NG	ŋ	1500	100	100	1500-3000
L	l	1500	100	100	1500-3000
R	r	1500	100	100	1500-3000
W	w	1500	100	100	1500-3000
Y	y	1500	100	100	1500-3000
E	e	500	100	100	500-1000
I	i	500	100	100	500-1000
A	a	500	100	100	500-1000
O	o	500	100	100	500-1000
U	u	500	100	100	500-1000
OH	oʊ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
EH	eɪ	500	100	100	500-1000
AH	eɪ	500	100	100	500-1000
EH	eɪ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
AH	eɪ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
OH	oʊ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
AH	eɪ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
OH	oʊ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
AH	eɪ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
OH	oʊ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
AH	eɪ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
OH	oʊ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
AH	eɪ	500	100	100	500-1000
UH	uː	500	100	100	500-1000
OH	oʊ	500	100	100	500-1000
UH	uː	500	100	100	500-1000

**Visual Consonants - A set of 26 cards**

**Tip for using The Sounds of Speech charts and cards:**

1. These charts and individual cards are designed to help you identify the sounds of speech.
2. If you are having trouble hearing the sounds of speech, you can use these charts and cards to help you identify the sounds of speech.
3. Remember to use the Visual Consonants cards when you are practicing your speech.
4. It is important to use not only the first sound of the target sounds during therapy, but also the subsequent sounds as well.

**Advanced Bionics**  
For questions or additional information, call 800-368-6265 (TDD) or 800-368-6262 (Voice Line) or visit us online at [www.abhearing.com](http://www.abhearing.com). You can also email us at [toolsforschools@abhearing.com](mailto:toolsforschools@abhearing.com).

**TOOLS for SCHOOLS™**  
THE LING SIX SOUND CHECK

**What is "Hearing" Hearing?**  
When it comes to hearing, there are many different ways to measure it. The most common way is to measure the ability to hear sounds at different frequencies and intensities. However, there are other ways to measure hearing, such as measuring the ability to hear sounds in different environments or to hear sounds in different directions.

**Why is "Hearing" Hearing?**  
There are many reasons why it is important to measure hearing. One reason is that hearing is an important part of our lives. It allows us to communicate with others and to enjoy the world around us. Another reason is that hearing loss can lead to many problems, such as difficulty understanding speech and difficulty hearing sounds in different environments.

**Advanced Bionics**  
For questions or additional information, call 800-368-6265 (TDD) or 800-368-6262 (Voice Line) or visit us online at [www.abhearing.com](http://www.abhearing.com). You can also email us at [toolsforschools@abhearing.com](mailto:toolsforschools@abhearing.com).

**TOOLS for SCHOOLS™**

**What is the Ling Six Sound Check?**  
The Ling Six Sound Check is a simple test that can be used to help you identify the sounds of speech. It consists of six sounds: 'ah', 'oo', 'sss', 'sh', 'sss', and 'mmm'. Each sound is played through a speaker, and you are asked to identify the sound.

**How do I Complete the Ling Six Sound Check?**

- Play the sounds one at a time.
- Listen carefully to each sound.
- Identify the sound by saying the letter or letters that make up the sound.
- Write down the sound on the provided sheet.
- Repeat the test with a different person.
- Repeat the test with a different speaker.
- Repeat the test with a different environment.
- Repeat the test with a different direction.
- Repeat the test with a different intensity.

**TOOLS for SCHOOLS™**

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Sound	Frequency (Hz)	Intensity (dB)	Duration (ms)	Bandwidth (Hz)
ah	500	100	100	500-1000
oo	500	100	100	500-1000
sss	3500	100	100	3500-7000
sh	3500	100	100	3500-7000
sss	3500	100	100	3500-7000
mmm	1500	100	100	1500-3000

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# Tools for Toddlers™ Program

Do you know about Advanced Bionics' Tools for Toddlers program (TFT™)?

TFT provides free resources created specifically to help support early intervention and pre-school aged children.



Visit the Tools for Toddlers Program at

[www.advancedbionics.com/tfs](http://www.advancedbionics.com/tfs)

TFT resources can be found on the lower section of the TFS page



**LITERACY STRATEGIES for the Very Young Child**  
By Ellen S. Harniss, MS, CCC-SLP, LBS, CASHA

When you begin planning therapy for the infant with hearing loss, the first thought may be that books are not appropriate due to a child's lack of reading and attention. However, the opposite is actually true. You can and should begin introducing books to children as early as 6 months and certainly no later than the child's first year. There are several books designed to provide you with strategies on how to facilitate pre-literacy development in therapy young child.

Therapy for the Infant (0-12 Months)		
The Goal	The Child	Book Features
<ul style="list-style-type: none"> <li>• Introducing the parents</li> <li>• Exposure to print</li> <li>• Introduction to books</li> <li>• Introduction to authors</li> <li>• Point to pictures</li> <li>• Use bookends to get content and book properties</li> <li>• Point to pictures highlighting an illustration</li> <li>• Read a few pages at a time</li> <li>• Read to your child for the page</li> <li>• Use simple phrases</li> <li>• Hold up your own words</li> </ul>	<ul style="list-style-type: none"> <li>• Listen and observe</li> <li>• Smiling with the adult</li> <li>• 10-15 months of age, the child wants to hold and turn the book</li> <li>• Increased interest in pictures, bright and colorful colors</li> <li>• Interest in pictures of faces</li> </ul>	<ul style="list-style-type: none"> <li>• Simple large pictures</li> <li>• Single images</li> <li>• Clear and bold text</li> <li>• Bold and simple</li> <li>• Distinctive books</li> </ul>

Therapy for the Infant (6-12 Months)		
The Goal	The Child	Book Features
<ul style="list-style-type: none"> <li>• Continue with previous</li> <li>• Follow child's lead - respond to words he/she is using</li> <li>• Talk about pictures</li> <li>• Keep books on one station</li> <li>• Child is holding the book</li> <li>• Hold up "key"</li> </ul>	<ul style="list-style-type: none"> <li>• Attempts to get to me</li> <li>• Recognizes familiar objects</li> <li>• Turns pages with help</li> <li>• Visualizes the sequence to reading</li> <li>• Holds pictures</li> <li>• Follows pictures of faces</li> <li>• Increased attention to the words following just continues to have what collection open for long books</li> </ul>	<ul style="list-style-type: none"> <li>• Small books</li> <li>• Pictures of faces</li> <li>• Turn pages with help</li> <li>• Bold text</li> <li>• Small plastic picture albums</li> <li>• Humany rhymes</li> <li>• Books about various words</li> <li>• Distinctive books</li> </ul>



**Exploring COMMUNICATION OPTIONS**

As a parent of a child with a severe to profound hearing loss you will want to choose which communication methodology is the best for your child and your family. While you will find some basic information about all communication options available, we have also provided additional information to help you to learn more about each approach.

**Advanced Sign Language (ASL)**

- Typically associated with the Deaf culture (Deaf and Deafblind)
- A completely visual and non-speech system
- A separate language comprised of its own unique syntax and grammar
- No written form
- English is used and essential for communication
- No focus on grammar or syntax within language
- Expressive communication uses the entire body in conveying meaning

**For Further Information about ASL, visit:**  
[www.deafworld.com/glossary.html](http://www.deafworld.com/glossary.html)

**Total Communication**

- Used to develop spoken language through speech reading with some form of manual communication
- Used by the most hearing impaired individuals who do not use hearing
- Expressive speech development through a combination of hearing aids and lip-reading
- There is no other more than parents in manual communication during early language years
- Used by the most severely incident or mixed hearing loss
- Use of sign language interaction depends on student needs

**For Further Information about Total Communication, visit:**  
[www.deafworld.com/glossary.html](http://www.deafworld.com/glossary.html)

**Cued Speech**

- Aided communication system of eight handshapes (used that represent different sounds of speech)
- Can be used while relying on the spoken language when hearing aids
- This system allows the child to distinguish sounds that would otherwise be the same
- An oral system
- Parent is often the primary language to the child
- Used by the most severely incident hearing loss

**For Further Information about Cued Speech, visit:**  
[www.deafworld.com](http://www.deafworld.com)



# AB Makes It Simple for Schools

## Additional FREE Resources

- [www.hearingjourney.com](http://www.hearingjourney.com)
- [www.thelisteningroom.com](http://www.thelisteningroom.com)
- [www.advancedbionics.com/bea](http://www.advancedbionics.com/bea)
- [www.advancedbioinics.com](http://www.advancedbioinics.com)
  - Take free courses
  - Learn about products
  - Watch videos
  - Download materials and resources
  - Connect with others



HEARINGJOURNEY™



# Resources & Support

## For Educators, Therapists, Recipients, and Families

### Online:

#### Live Chat:

[AdvancedBionics.com](https://www.advancedbionics.com)

### Customer Care:

#### Speak with an audiologist:

Toll Free Phone: 1-877-829-0026

TTY: 1-800-678-3575

#### Email Questions:

[CustomerService@AdvancedBionics.com](mailto:CustomerService@AdvancedBionics.com)

[ToolsForSchools@AdvancedBionics.com](mailto:ToolsForSchools@AdvancedBionics.com)

Monday through Friday, 5 am to 5 pm PST

