**PROGRAM RESOURCES** 



# Naída CI

Troubleshooting Guide



If you suspect a problem with a child's cochlear implant equipment, some basic troubleshooting steps can be taken to attempt to solve the problem. Before beginning, make sure you have your troubleshooting equipment available. Always begin troubleshooting with the Basic Steps. Proceed to the recommendations for specific situations after you have completed the Basic Steps.

## Recommended Items for Troubleshooting Equipment

#### **Basic Equipment**

- Compressed Air
- Universal Headpiece (UHP)
- UHP cable
- Zinc-Air Battery Pak cartridge
- Zinc-Air high power 675 batteries
- Naída CI Listening Check™ accessory
- Earbuds

#### **Comprehensive Equipment**

- PowerCel<sup>™</sup> 170 battery
- PowerCel charger
- Zephyr Dry & Store®
- T-Mic<sup>™</sup> 2 microphone
- AB myPilot remote control



If measures do not resolve the problem, contact Advanced Bionics.
In the United States and Canada, Technical Support can be reached toll free at: 866-844-HEAR (4327) or visit *AdvancedBionics.com* 



#### **BASIC STEPS**



- 1. Verify the UHP is in place on the child's head. If the headpiece is not on the child's head, place it on their head, positioned over the internal implant (you will feel the magnetic attraction).
- 2. Remove the Naída CI sound processor and UHP from the child. Visually inspect the equipment and systematically replace damaged parts.
- Check the Naída CI for damage.
- Inspect the headpiece cable for any damage (twisting, fraying) or breakage and verify it is firmly attached to the Naída CI.
- Verify the cable clicks or snaps into place when connected to the UHP and to the Naída CI.
- Verify there is no visible damage to the UHP.
- Inspect cable ports and jacks for debris. Clean with compressed air if needed.
- Inspect the T-Mic<sup>™</sup> 2 microphone for any damage (twisting, fraying) or breakage.
- 3. Verify the battery is charged. Remove the battery and then re-attach it to the processor. When the battery is engaged, the LED (located in the middle of the volume control) will flash ORANGE to indicate battery status. Three to four ORANGE blinks indicate the battery is sufficiently charged to power the Naída CI. Replace with a fully charged battery if needed.

Note: Zinc-Air batteries will not provide LED battery status information upon start up. Only PowerCel™ batteries and the AAA PowerPak power option will provide LED battery status information.

4. Reset the child's Naída CI to Program 1. The Naída CI will always default to Program 1 with the volume set at the child's standard settings when the battery is removed and re-attached. If you have removed and re-attached the battery as instructed in step 3 then the Naída CI has been reset to Program 1.

If Program 1 is not the child's standard program, push the program button down briefly and then release the button until you reach the child's standard program. The programs will switch in chronological order. The LED will display 1, 2, 3, 4, or 5 GREEN blinks depending on how many programs are stored in the processor. The number of GREEN blinks displayed indicates which program is in use. Once the final program is reached, the Naída CI will return back to the first program.

Note: The audiologist has the ability to disable the program button. Check with the child's family or audiologist to determine if the program button has been disabled.

5. Place the Naída CI and UHP back on the child and use the Naída CI LED indications and internal alarms to determine what the problem may be. See the charts on page 3. The LED and internal alarms can be programmed by the audiologist. Check with the child's family or audiologist to determine if these features are active.

**Note**: It is normal for the LED to blink red once per second when the Naída CI is not being worn by the child.

6. Perform a listening check of the Naída CI sound sources as described in the Tools for Schools™ Naída CI System Check guide. Replace any malfunctioning equipment.



#### Naída CI Sound Processor LED Indications

Feature	Color
Battery Status	Orange
Microphone Status	Green
Program Position	Green
CI Status	Red

Color	Behavior	Indication		
Orange 1	Blinks at start-up	<ul> <li>4 quick blinks indicate that the battery is fully charged</li> <li>2 - 3 quick blinks indicate that the battery is sufficiently charged to power the Naída Cl sound processor</li> <li>1 quick blink indicates that the battery is nearly depleted</li> <li>No blinking indicates depleted battery. Replace with charged or new battery</li> </ul>		
	Solid	The battery is almost depleted		
	Blinks twice every three seconds	The battery is almost depleted and cannot support stimulation (Sleep Mode)		
	Fades out	The Naída CI is entering Standby Mode		
	Blinks once per second	Loss of lock with the implant		
	Blinks rapidly (more than once per second)	Intellilink™ feature enabled and the Naída CI is connected to the wrong implant		
Red	Solid	Sound processor error condition. Fully remove and re-insert the battery to reset processor		
	Blinks five times	Response to the AB myPilot request to 'Find Paired Devices'. The Right paired device will identify itself with this LED pattern.		
	Flickers in response to loud inputs	The sound processor and microphone are responding to sound		
	Blinks at start-up, after battery status, and upon program change	<ul> <li>1 blink indicates program one</li> <li>2 blinks indicate program two</li> <li>3 blinks indicate program three</li> <li>4 blinks indicate program four</li> <li>5 blinks indicate program five</li> </ul>		
Green	Solid	A processor that is not yet programmed		
	Blinks four times	Response to the AB myPilot remote control request to 'Find Paired Devices'. The Left paired device will identify itself with this LED pattern.		

### Naída CI Internal Alarms

Behavior	Indication	
Beeps upon program change	<ul><li>1 beep indicates program one</li><li>2 beeps indicate program two</li><li>3 beeps indicate program three</li></ul>	<ul><li>4 beeps indicate program four</li><li>5 beeps indicate program five</li></ul>
Short beep upon increase/ decrease in volume	Beeps once per press, either up or down, of the volume control (a double beep will be heard when the following settings are reached: top of the volume range, baseline volume setting, and bottom of the volume range)	
Long beep (once every fifteen minutes)	Low battery	



#### No Sound/Red LED Indicator is On

No sound is heard or the red LED is flashing once per second on the Naída CI sound processor when the UHP is in place over the implant:

- Verify the UHP is positioned properly on the head.
- 2 Remove any materials (hat, scarf, headband, etc.) that may be covering the microphone.
- 3 Visually inspect the cable for any damage or breakage and verify it is firmly attached to the UHP and Naída CI.
- 4 Remove and re-attach the battery.
- 5 Replace the UHP cable.
- 6 Replace the UHP.
- Perform a listening check of the Naída CI sound sources as described in the Tools for Schools™ Naída CI System Check guide. Replace any malfunctioning equipment.

No sound is heard or a solid red LED is displayed on the processor:

- Remove and re-attach the battery.
- Verify a charged PowerCel<sup>™</sup> battery or two fully charged high power cochlear implant plus 675 Zinc-Air batteries are in place.
- 3 Replace the UHP cable.
- 4 Replace the UHP.
- 5 Try a different program.

### Static, Muffled, or Distorted Sounds

Static, muffled, or distorted sounds are heard:

- 1) Remove any materials (hat, scarf, headband, etc.) that may be covering the microphone.
- Verify the UHP is positioned properly on the head.
- Remove and re-attach the battery.

- 4 Verify the UHP cable is firmly attached to the UHP and Naída Cl.
- 5 Verify the Naída CI is set to the proper program and volume settings.
- 6 If available, use an AB myPilot remote control to do a Device Status Check to confirm correct program, volume, and sensitivity settings.
- 7 Try a different program.
- 8 Visually inspect the microphones for signs of debris or wear.
- 9 Perform a listening check of the Naída CI sound sources as described in the Tools for Schools™ Naída CI System Check guide. Replace any malfunctioning equipment.
- 10 Replace the UHP cable.
- Replace the UHP.
- 12 Replace the T-Mic<sup>™</sup> 2 microphone.
- 13 Clean the battery contacts on the processor with compressed air.

## **Debris on Battery Contacts**

If the processor battery contacts appear to have rust or debris forming on them:

- 1 Clean the battery contacts with compressed air.
- 2 Place PowerCel<sup>™</sup> batteries in the Zephyr Dry & Store<sup>®</sup>. PowerCel batteries should be placed in the Dry & Store when not being charged.



## Naída CI Sound Processor Does Not Power Up

If the Naída CI does not power up:

- Remove and re-attach the battery.
- Verify the PowerCel<sup>™</sup> battery is properly attached or the Zinc-Air batteries are inserted correctly.
- 3 Verify you are using a fully charged PowerCel battery or two fully charged high power cochlear implant plus 675 Zinc-Air batteries.

Note: Zinc-Air batteries will not provide LED battery status information upon start up. Only Power Cel batteries and the AAA PowerPak power option will provide LED battery status information.

# Green LED Does Not Flash in Response to Loud Sounds

- The processor must have LEDs enabled. Check with the child's family or audiologist to verify that LEDs are active.
- 2 Remove and re-attach the battery.
- Verify the PowerCel battery is properly attached or the Zinc-Air batteries are inserted correctly.
- 4 Verify you are using a fully charged PowerCel battery or two fully charged high power cochlear implant plus 675 Zinc-Air batteries.
- 5 Verify that the processor is set to the proper program and volume settings.
- 6 If available, use an AB myPilot remote control to do a Device Status Check to confirm correct program, volume, and sensitivity settings.
- 7 Try a different program.
- 8 Perform a listening check of the Naída CI sound sources as described in the Tools for Schools™ Naída CI System Check guide. Replace any malfunctioning equipment.
- 9 Replace the UHP cable.

- 10 Replace the UHP.
- Replace the T-Mic<sup>™</sup> 2 microphone.
- Clean the battery contacts with compressed air.

## No Orange Blinks or Only One Orange Blink is Observed During Battery Status Check

- 1 Zinc-Air batteries will not provide LED battery status information upon start up. Only PowerCel™ batteries and the AAA PowerPak will provide LED battery status information.
- 2 Remove and re-attach the battery.
- 3 Verify the PowerCel battery is properly attached to the Naída CI.
- 4 Verify you are using a fully charged PowerCel battery.
- 5 Clean the battery contacts with compressed air.

## **Preventative Maintenance Tips**

- 1) Store extra equipment in a Zephyr Dry & Store®. Run through one drying cycle (8 hrs) nightly.
- 2 If a Zephyr Dry & Store is not available, keep extra equipment in the Naída CI case. If you do not have the case, you can use another sealed container or a sealable bag.
- 3 To keep battery contacts from accumulating debris, attach Naída CI PowerCel battery covers to the PowerCel batteries when they are not in use. The covers can be ordered from Customer Service 877-829-0026 (US and Canada).



#### OTHER HELPFUL RESOURCES

These recommendations were created specifically for school professionals. Advanced Bionics has several other resources you can consult for additional support.

- To speak with Advanced Bionics directly about a troubleshooting issue or if you have any other questions, please contact an an AB representative at 866-844-HEAR (4327) or visit AdvancedBionics.com.
- Visit our YouTube home page at YouTube.com/AdvancedBionics and click on the "Naída Cl Instructional Videos".
- Download the FREE myNaída Cl app, available for both Apple® and Android™ devices, from iTunes® or Google Play™ digital distribution platforms.





Visit our website at *AdvancedBionics.com*Visit the Tools for Schools website at *AdvancedBionics.com/tfs* 



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