

Daily Check/Trouble Shooting Guide

Nucleus CI 24

Child's Name: _____ **Audiologist:** _____

Date of Last Mapping: _____ **Processor Serial Number:** _____

Recommended Program #: _____ **Recommended Mic Sensitivity:** _____

Suggested Spare Equipment: 1 short cord (goes from mic to coil), 1 long cord (goes from processor to mic), 2 AA alkaline batteries, earphones, coil-check (wand), lapel microphone.

QUICK CHECK

The coil check wand has been shown to drain power when placed over the coil positioned on the child's head (this is especially true for the ESprit Speech Processor). Instead remove the coil from the child's head and place it in the palm of your hand (it should remain attached to the headset and processor). Place the wand over the coil and the red light should light up to your voice. If it does, the quick check will tell you that the signal is being transmitted through the entire system, however, it does not tell you about the quality of the signal. It is recommended that you proceed with the following protocol for trouble shooting on a regular basis.

DAILY CHECK

Step 1

Battery Check

A. Check that the display panel is on. If nothing is in the display panel follow steps 1-3.

- If the battery symbol is displayed in the panel, () follow step 4.

Trouble Shooting

1. Turn the processor on. (button)
2. If there is still no display, check polarity of batteries (+ and -).
3. If still no display, replace the batteries.
4. If the low battery symbol appears replace the batteries.

- If the public alarm is enabled (), it will beep four times each minute when the batteries are nearly dead. Replace the batteries.

Step 2

Program Check

A. Look at the display panel. Make sure the program display matches the recommended program and the mic sensitivity is at the recommended level.

Program # →

P
I
10




← Microphone sensitivity

- If program panel does not match recommended settings, follow steps 1-3.

N.B. If lock function is enabled, you will see a padlock symbol in the display. You will not be able to change the settings until you unlock the buttons. To unlock the buttons, hold down the select button until the lock symbol disappears from the display panel. After changing the settings, reset the lock by holding down the select button until the padlock symbol appears again.


1. Make sure the recommended program is set.
2. If mic sensitivity level is not at the recommended setting, use the + & - buttons to adjust level.

Step 2 continued...

3. If the  and  symbols are in the display, or the display shows a Program other than the recommended one and the  button does not allow you to re-select the recommended program, the MAP may be corrupted. If another program is available, the processor automatically selects it. If all 4 programs are corrupted, the processor stops working. Please contact the parents if the recommended program cannot be used or if you see the fault and warning symbols in the display panel.

Step 3

Transmitting Coil and Cords

A. To check that the speech processor is transmitting sounds to the cochlear implant, place the transmitting coil on the back of the processor. The transmission symbol () should appear in the lower left-hand corner of the display panel.

- If the panel does not display the transmission symbol, follow step 1-3.

1. Replace the short cord, and try again.
2. If the symbol still does not appear, replace the long cord, and try again.
3. If the transmission symbol still does not appear in the display, the coil may be defective. Please contact parents.

Step 4

Ear Level Microphone Check

A. Speak into the headset microphone. You should see the segment meter respond to your voice.

B. Test the quality of the microphone by plugging the earphones into the smaller socket at the top of the processor.

- If the segment meter is intermittent or does not respond to speech, or if the quality of the sound from the microphone is poor follow step 1.

1. If the microphone is damaged, use the lapel microphone until the headset microphone can be replaced. Plug the lapel microphone into the external input socket (the larger of the two sockets) found at the top of the processor. Please contact parents.

Step 5

Ling Six Sound Test

A. With the unit on, have the child respond to the Ling Six Sound Test (ah, oo, ee, sh, s, m) at the level of his ability. Detection: have child raise hand in response to sound. Identification: have child show or repeat what is said.

- If child does not respond at his/her typical level of performance, follow step 1.
- Record all errors.

1. If child does not respond consistently at his or her typical level, or if the child reports a change in the way the processor sounds there may be a problem with the 'map' of the processor. Please inform the parents so they can make arrangements for audiological management as necessary.

Daily Check/Trouble Shooting Guide

Nucleus CI 22

Child's Name: _____ Audiologist: _____

Date of Last Mapping: _____ Processor Serial Number: _____

Recommended Mic Sensitivity: _____

Suggested Spare Equipment: 1 short cord (goes from mic to coil), 1 long cord (goes from processor to mic), 1 AA alkaline battery, coil-check wand, lapel microphone.

Quick Check

Using the coil-check wand, hold the circle of the wand over the child's coil placed on his/her head. The red light on the wand should light up, and flash in response to your voice. If it does not, remove the coil from the child's head and place the coil in the palm of your hand (but still attached to the headset and processor). Place the wand over the coil and it should light up in response to your voice. NOTE: This check tells you that the signal is being transmitted through the entire external system, however, it does not tell you about the quality of the signal. It is recommended that you proceed with the following protocol for trouble shooting on a regular basis.

DAILY CHECK

Step 1

Battery Check

A. Have the child remove the processor and headset. Turn the dial to "T" for test. The red "M" light at the top of the processor should shine continuously.

Trouble Shooting

Trouble Shooting

1. If the "M" light blinks once per second, the battery may be low.
2. If the "M" light does not illuminate at all, check the polarity of the battery or replace the battery.

Step 2

Transmitting Coil and Cords

B. Set the function knob to "N" and the sensitivity dial to 0. Place the transmitting coil against the top front of the speech processor. The "C" (coil) light should light up.

1. If the "C" light does not illuminate, replace the short cord and try again.
2. If the "C" light still does not light up, replace the long cord, (making sure to align the dots on the microphone end) and try again.
3. If there is still no light at this point, the coil may be defective.

Step 3

Microphone Check

C. With the function knob on the “N” and the sensitivity at the recommended number, speak into the microphone and the “M” light should flicker to your voice. If the light does not flicker or is extremely dull, follow steps 1 and 2.

D. With the function knob on “N”, if the “M” light keeps blinking once per second and does not respond to your voice, the MAP may be corrupted and the child may not hear anything. Follow step 3.

1. Plug the lapel microphone into the external socket located at the top of the processor. Repeat check. If the “M” light flickers in response to your voice, the behind the ear microphone may be defective and need to be replaced.

2. If the “M” light still does not light with the lapel mic in place, try changing each cord and repeating mic check.

3. Notify the parent if you suspect the mic is defective or that the MAP may be corrupted.

Step 4

Ling Six Sound Test

E. With the child wearing the speech processor, have him/her respond to the Ling Six Sounds (ah, oo, ee, sh, s, m) at their level of ability (detection or identification). If the child does not respond at his/her typical level of performance, follow step 1.

1. If the child does not respond typically, or if he/she reports a change in the way the processor sounds, the processor may need to be reMAPped. Please inform the parents so they can make arrangements for audiological management as necessary.