Queen's Medical Centre Nottingham
University Hospital NHS Trust

Nottingham Cochlear Implant Programme
Directorate of Otorhinolaryngology & Head and Neck Surgery
Ropewalk House
113 The Ropewalk
Nottingham NG1 6HA

Tel: 0115 948 5549
Fax: 0115 948 5560
E-mail: acip@qmc.nhs.uk

Your Freedom BTE Speech Processor

BTE VERSION

BABY BTE VERSION

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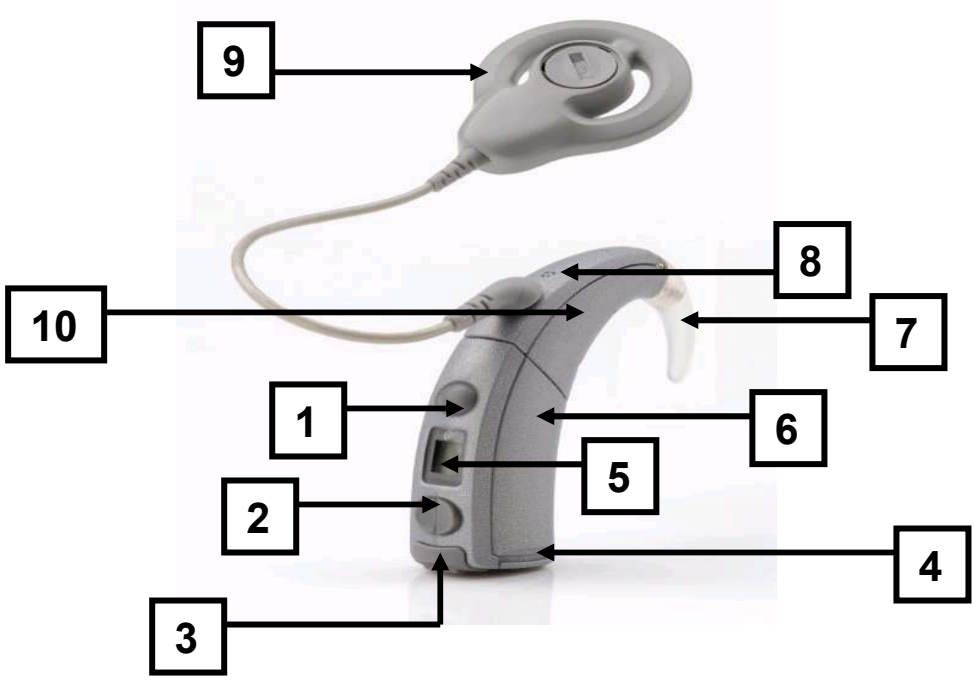
Your Freedom Behind The Ear (BTE) Speech Processor:



1. **On/Off and Select Button –** Please remember to switch your speech processor OFF when it is not in use. (please see: "controls" section for more information)

2. **Increase and Decrease Buttons –** These can be used to increase and decrease the microphone sensitivity and volume of the speech processor, dependent on which is activated. Your audiologist will give you more details at your programming sessions.

3. **Accessory Socket** – This socket can be used to connect accessories to your speech processor such as:
   - Monitor earphones
   - FM System
   - Tv/Hi-Fi cable
   - Personal Audio cable

4. **Battery rack** – This is where the batteries are placed which power your BTE speech processor. It requires 3 x Power One Implant plus batteries, which will last on average 2 days, depending on your/your child's map. The battery rack fits inside the bottom part of the BTE controller and can be removed (when changing the batteries) by placing your fingers in the grove at the bottom and pulling gently until it releases from the controller.

5. **LCD Display –** The LCD display shows the following:
   - Program number
   - Sensitivity/Volume
   - Telecoil enabled

This display can also help you to detect common problems with your speech processor; it uses a simple help code to determine what action needs to be taken (please see the LCD information further down in the booklet for more information).

6. **The Freedom BTE Controller –** This part of the speech processor houses the LCD panel, the controls and the battery rack. The controller can be removed by twisting it a quarter turn away from the speech processing unit. **As this is a very fragile connection and there is no need for you to remove the controller, we would like to stress that you keep both pieces together.**

7. **Ear hook** – The ear hook allows the speech processor to sit behind the ear comfortably. It also houses an LED alert system (useful for younger children who are unable to report back to parents or teachers). Below are details of how this system works:

Depending on what has been set up in the map, (the audiologists will normally ask you at your/your child's programming appointment which alarm you would like to have activated). These are the options you may have:

- A flicker will indicate that the microphone is picking up sound; the flicker should correspond to the sound being picked up by the microphone.
- A flashing light will indicate a fault with the system:
    i. A slow flash indicates that the batteries are running low.
    ii. A fast flash indicates a warning signal. In this instance, please go to the troubleshooting section in this booklet.

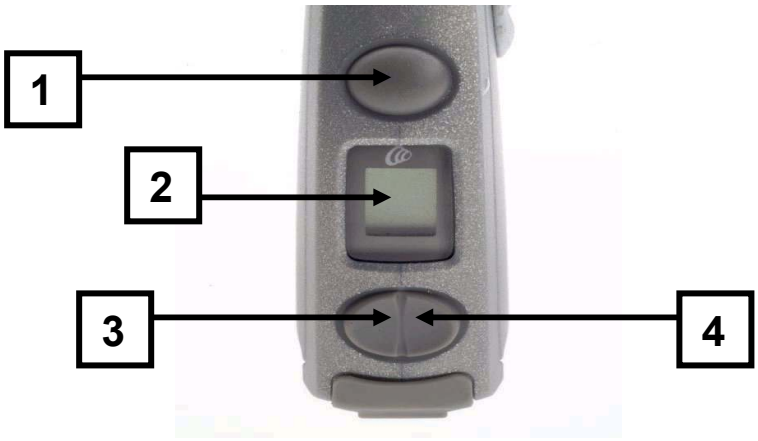
You can only have **one** of the options above activated.

8. **Microphones** – The microphone is the part of the speech processor, which picks up the sound. In this processor there are two microphones placed within a short distance from each other, to enable directionality when listening through the microphones. There is a microphone cover on top of the microphone, which helps prevent dirt and dust from getting into the microphones. The cover can be removed by first removing the headpiece and then placing your fingers under the grove and pulling it free.

9. **The Headpiece** – This consists out of a coil and a short lead, which come as one item. The coil is kept in place on the head by a magnet that connects to the magnet in the internal device. It transmits the information coming from the speech processor to the internal device.

10. **Speech Processing Unit** – This is the part of the speech processor, which processes the sounds picked up by the microphone. The signal is then sent to the internal device via the headpiece.

Controls on your speech processor



1. **On/Off and Select Button** – This button allows you to switch the speech processor on and off and select different settings within the speech processor.
   - To switch the speech processor ON, press and hold the select button until the LCD display appears.
   - To switch the speech processor OFF, press and hold the select button until the LCD display disappears.
   - The select button allows you to switch between the different maps given in each programme by your audiologist. The Freedom body-worn device allows you to store up to four maps in the four different programme locations. A short press on this button will change between the four programme locations.

2. **LCD Display** – This displays your speech processor programmes, settings and status. Please see the LCD display section in this booklet for further information.

3. **Decrease Button** – This allows you to decrease either the volume or the sensitivity of the speech processor, whichever is programmed in / activated.

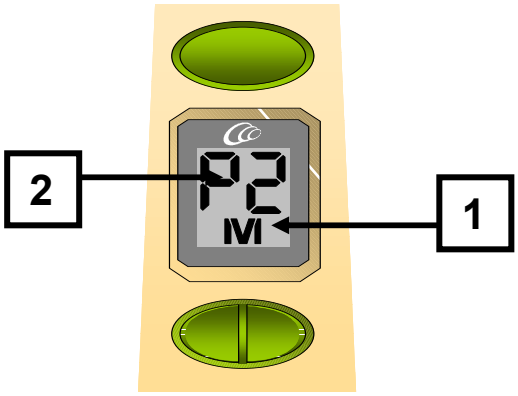
4. **Increase Button** – This allows you to increase either the volume or sensitivity of the speech processor, whichever is programmed in / activated.

Resetting and locking the speech processor

- To reset your/your child's speech processor you need to press and hold the **select**, **increase** and **decrease** buttons at the same time and this will reset the speech processor settings to what they were previously.

- To lock your/your child's speech processor press and hold the **select** and **decrease** buttons at the same time until you see an L appear on the LCD. The lock can be used to stop buttons being pressed accidentally and settings being altered. Pressing the select and decrease button again will remove the lock.

LCD Panel



1. **Settings Activated –** The bottom part of the display shows you which setting is activated ready to adjust. Using the buttons you can activate one of the settings below depending on how your speech processor has been programmed by your audiologist.
   - **S**ensitivity – You can adjust the sensitivity (using the increase and decrease buttons) of the microphone. **We advise that the sensitivity is set to 12.**
   - **V**olume – You can adjust the volume of the incoming sounds (using again the increase and decrease buttons). However, in most cases you will not need to use this, as it will be set in clinic by your audiologist. If your volume control is activated, **we advise that volume is set to 9.**
   - **M**icrophone – The M will appear on the LCD whilst your/your child's speech processor is in use; this means the microphone on the processing unit is picking up the sounds. You can switch form the microphone setting (M) to the Telecoil setting (T) – (see below) by pressing and holding both the increase and decrease buttons together until it changes to the desired setting (either T or M).
   - **T**elecoil – The T will appear on the LCD when you/your child use the Telecoil setting. This setting needs to be activated to be able to listen through your speech processor – with the Telecoil – to the sound coming from a loop system.

2. **Programme/Number display** - This top part of the display shows the information for the speech processor as follows:
   - It tells you which program is in use. There are four different program locations, which hold the maps your audiologist has given you in clinic.
   - It allows you to see what numbers are set for the sensitivity and volume controls.
   - It will also bring up help codes/messages to help you troubleshoot the speech processor. Please see the troubleshooting section of this guide for more information.

Daily checks:

It is essential that you check your/your child's speech processor every morning to ensure that it is functioning effectively - it may be some time before your child is able to let you know if there is a problem with the device.

Before putting the speech processor on:

1. Check whether the batteries are fully charged by checking the LCD panel for a help message

2. Check the leads are not damaged.

3. Check the microphone ports for any blockages i.e dirt/dust build up.

4. Check whether the microphone is working OK, by listening via the listening earphones.

After putting the speech processor on:

1. Check if the settings on the speech processor are correct:
   - **Sensitivity should be set 12**
   - **Volume should be set at 9**

2. Check if the coil is functioning correctly by using the signal check - Place the signal check over the coil and it should illuminate red if the coil is functioning correctly.

3. Check whether the segment metre on the LCD is moving and the LED on the ear hook is flickering when speaking into the microphone (if this setting is activated by your audiologist).

Troubleshooting:

The LCD display on the Freedom BTE speech processor has a “help messages function” which can help in the troubleshooting process. Below you find the list of help messages, which could come up on the LCD screen if there is a problem with the speech processor:

If the LCD panel does not appear when you press and hold the select button check if the batteries are placed in the rack correctly

- **H1 –** This indicates that the batteries are flat and need changing immediately. The battery symbol on the LCD will also show that the battery is flat.
- **H2 –** This indicates that the batteries are running low and need to be replaced soon. Again the battery symbol on the LCD will also indicate when the battery is low.
- **H3 –** This indicates that there is an error with the coil/cable. Make sure the coil is correctly placed on the head, if this does not resolve the problem try changing the coil/cable.
  Use the signal check to determine if the speech processor and the internal device are communicating. If the speech processor and the internal device are communicating then the signal check will light up steadily, if they are not then the signal check will not light up at all.
- **H4 –** This indicates that there is an error with the sound/stimulation being received. Firstly check the microphone ports for dirt and dust and clean them with the brush or microphone puffer. Check the microphone using the monitor earphones, if a crackling or distorted noise is heard, try changing the long lead.
- **H5 –** This indicates that the map in use is corrupted, try changing to another programme and contact the Implant Programme for advice.

If after troubleshooting your speech processor, there is still no response, please contact the Implant Programme immediately so that we can send you a replacement speech processor. All faulty speech processors should be returned to the Implant Programme as soon as possible to be sent for repair.

Batteries:

The batteries, which power your Freedom BTE speech processor, are:

Varta Powerone Implant Plus or Rayovac Crystal Clear Cochlear plus

They fit into the battery rack, which fits into the bottom part of the Freedom processor and can only be placed in the rack a certain way (flat end at the bottom). These batteries can last on average 2 days, sometimes even longer, depending on your (individual) map. Your audiologist will let you know at the end of the session.

When you are first issued with your Freedom BTE speech processor, you will be given 8 packs of batteries, which should last around 1 month. After this month the batteries should be obtained from your local audiology service, as it is their responsibility to provide you with these batteries.

A battery letter will be sent by your Implant Programme to your local service, informing them which batteries you require. You will also be given a battery book, which you should take with you when you collect your batteries.

To change the batteries:

1. Remove the seal from the batteries and allow them to stand for one minute.
2. Turn off the Freedom BTE and remove the battery rack.
3. Remove the old batteries by tipping the Freedom BTE to one side. They slide out from one side only.
4. Slide the new batteries into place. They only fit in from the side.
5. Place the battery rack back into the bottom part of the speech processor.

Do's and Don'ts!

✵ **Don't** wear another person's speech processor, all processors are programmed on an individual basis, yours is only programmed with your personal parameters.

If you have two processors:
✵ **Don't** switch the processors. Use the left one for your left ear and the right one for your right ear.

✵ **Don't** bathe or shower whilst wearing your processor, or headset. The processor is only splash proof and not waterproof.

✵ **Don't** shave the scalp as some hair helps the coil to grip.

✵ **Don't** touch battery contacts when changing batteries.

✵ **Don't** go through metal detectors at airports. You can be scanned with a hand held scanner from the neck down.

✵ **Don't** use electric head lice combs.

✙ **Do** ensure the best coupling between the transmitting coil and the implant, this may mean trimming the hair directly over the implant, leaving about **2mm** hair growth.

✙ **Do** turn the processor off during LANDING and TAKE OFF if travelling by aeroplane.

✙ **Do** contact the airline direct before travelling as they all have their own rules.

✙ **Do** remove all external parts when involved in body contact sports.

✙ **Do** remove all external parts when playing on plastic slides, bouncy castles etc.

✙ **Do** show your medical card to the medical specialist if attending hospital for any treatment.

Accessories available from your Implant Centre.

FM Leads:
These are to be used with radio aid systems (usually used within the school setting). The Implant Programme can provide the first lead but any spares or replacements must be provided by the local service. Leads can be obtained from:

Cochlear Europe LTD,
9 Weybridge Business Park,
Addlestone Road,
Addlestone,
Surrey,
KT15 2UF
Telephone: 01932-871500

TV/Hi-Fi Cable:
This cable is to be used with television; computers and AC powered audio equipment. Your child will need to set the volume control appropriately and adjust the microphone sensitivity on their speech processor to alter the balance between environmental sound and the sound coming in from the audio equipment. It is electrically isolated to protect your child from an electric shock.

When used with the television, plugging in the cable may stop the sound from the television's main speaker, depending on your television. A qualified electrician will be able to alter your set so that both speaker and cable work together. Please ask your Implant Centre for details.

Personal Audio Cable:
This cable is for use with personal stereos. Connect the cable between the external input socket on the speech processor and the headphone socket on the personal stereo. This cable must only be used with battery operated equipment and not mains powered equipment as it has not been electrically isolated.

Lapel Microphone:
This microphone can be used instead of the headset microphone during group discussions, where the microphone can be handed around to individual speakers. The cable is plugged into the external input socket on the speech processor. It can also be used when the headset microphone is thought to be faulty.

Monitor Earphones:
These are to be used by parent/carer to listen to the headset microphone to check for faults.

Dry store and brics:
The Dry store is used to remove excessive moisture from the speech processor, for example, in humid environments or from perspiration. Place the speech processor and headset in the dry store, along with a dry bric and leave overnight. For further information, read the instruction leaflet with the Dry store.