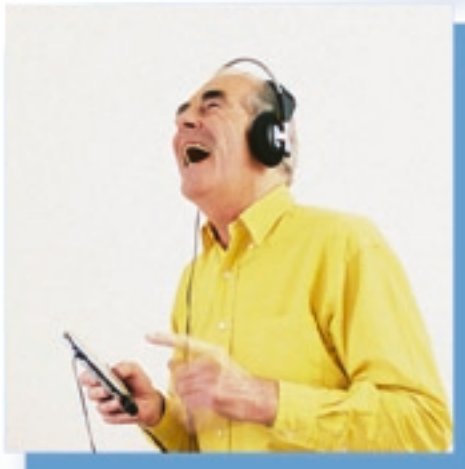


# Getting the best from the Platinum™ Sound Processor



The Platinum Sound Processor is a robust, body worn processor providing high resolution sound to a device, implanted behind the ear. It consists of a processor module, a headpiece with cable and a rechargeable battery.

## Quick start/checks

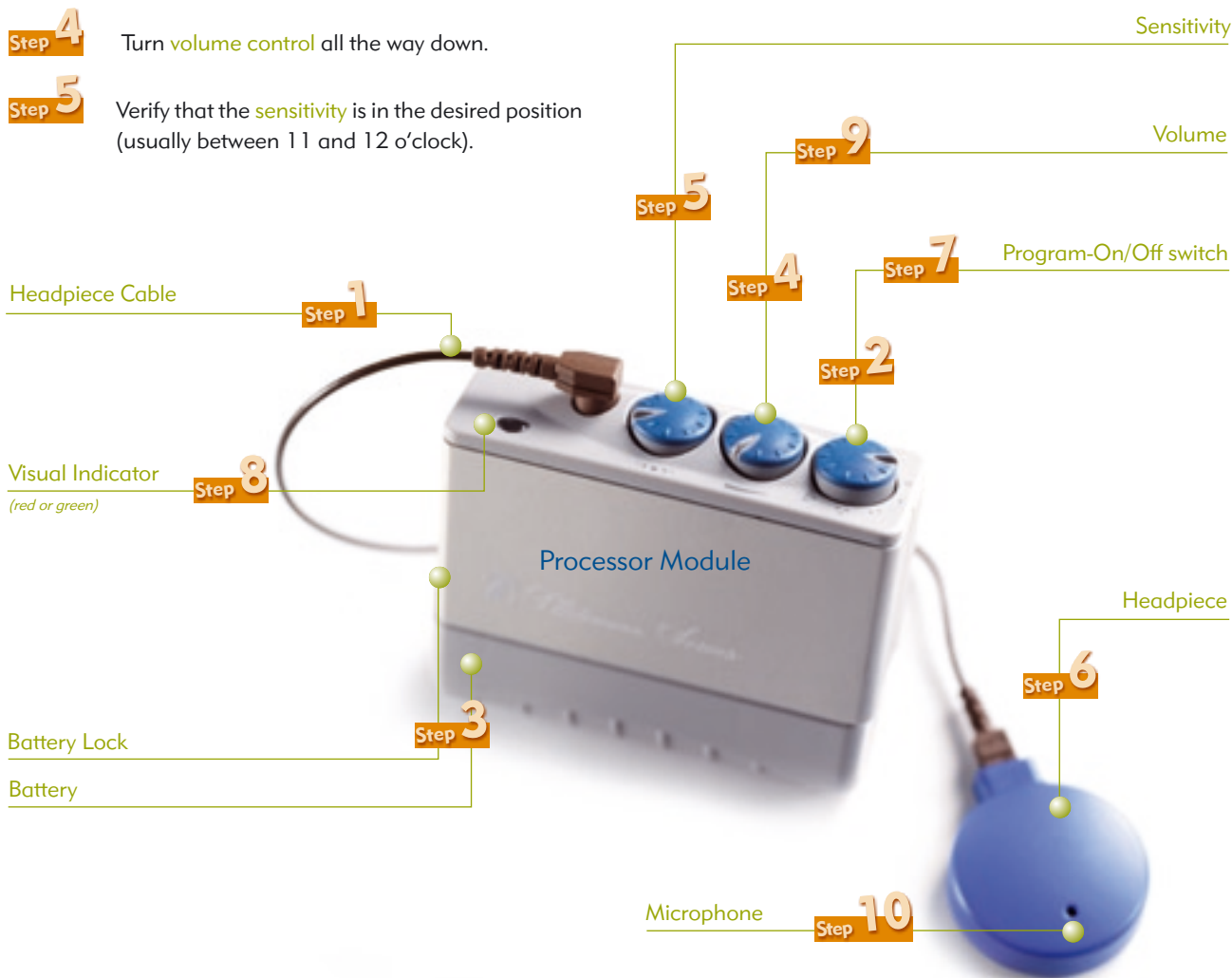
**Step 1** Check the **headpiece cable** is properly plugged into the headpiece on one side and the processor module on the other side.

**Step 2** Verify processor is off (**program switch** set to "O").

**Step 3** Slide on a fully charged **battery** and lock it.

**Step 4** Turn **volume control** all the way down.

**Step 5** Verify that the **sensitivity** is in the desired position (usually between 11 and 12 o'clock).



**Step 6** Place the **headpiece** over the internal implant (you should feel the magnetic attraction).

**Step 7** Turn the processor to appropriate programme.

**Step 8** Use **visual indicator** to verify battery charge and lock status.

**Step 9** Gradually increase the **volume control** to user setting.

**Step 10** Check the **microphone** status. The light (Step 8) should flash green when snapping your fingers or saying "ba-ba-ba" in a loud voice near the microphone.

**Step 11** Perform a behavioural listening check, for example check the ling 6 sounds

# Optimising the Platinum™ Sound Processor

## Sound Quality

### Program-On/Off switch

The program switch turns the sound processor ON and OFF. The program switch has 3 different program positions. You will need to check with the audiologist or parents to determine which program should be used. The program switch also has a microphone test position which allows you to listen to the speech processor microphone. See the "Sound Processor Microphone Testing" guide for details on how to do this.



### Volume

Allows the user to adjust the loudness level of the incoming sound. It is typically worn at the 12 o'clock position.

Decrease ← 12:00 → Increase



### Sensitivity

The sensitivity control knob determines the quietest level of sound that will be picked up from the environment by the microphone. The dial is typically set between 11 and 12 o'clock.

Decrease ← 12:00 → Increase



### Auxiliary input

The auxiliary jack is used to connect battery powered external auditory input sources, such as FM systems or CD/MP3 players. An interface cable may be required for connecting certain audio inputs.



**Info** Never plug a device that is powered through a wall socket directly into the sound processor, without a safety cable.

## Feedback - Visual and Audible

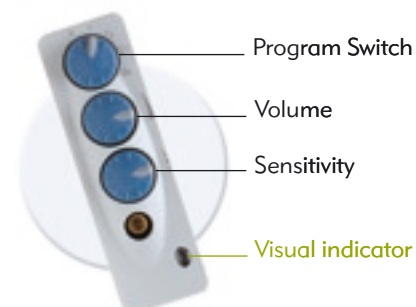
### Is the battery charged?

When the sound processor program switch is turned from the off (o) position to positions •, ••, or •••, the red light will blink as follows:

**3 to 4 quick red flashes** indicate that the battery is fully charged,  
**2 quick red flashes** indicate that the battery is sufficiently charged to power the system,  
 and **1 quick red flash** indicates that the battery charge is nearly depleted.

### Does the sound processor communicate with the internal implant?

When the battery charge sequence is complete, the visual indicator begins to **flash red** approximately once per second. Red flashing will continue until the headpiece is properly positioned on the head and lock is obtained.



**Does the microphone pick up sound?**

When the battery and lock sequences are complete, the light should **flash green** as you snap your fingers or say “ba-ba-ba” close to the headpiece microphone to indicate correct functioning.

**What does it mean when the processor is beeping?**

This is an integrated audible alarm that alerts you when the processor is not transmitting sound to the implant. For example, when the headpiece falls off, the processor will beep and the light will flash red, or if the battery is nearly depleted and requires changing. Not all students will have this feature activated. This feature can be programmed by the audiologist during mapping.

**System Sensor**

A hand held device to check the system functionality. Use it as follows:

**Step 1:**

Place the Sensor over the headpiece at a distance of approximately 3-5 cm. Gently press the button and the sensor will display its status.

- **Steady orange light** indicates the System Sensor is functioning properly.
- **No orange light** indicates System Sensor battery is depleted and you need a new Sensor.

**Step 2:**

Slowly move the sensor toward the headpiece and observe the system transmitting status as follows:

- **Steady green light** indicates the system is successfully transmitting a signal.
- **Rhythmically flashing green light** indicates processor battery is charged but the system is not successfully transmitting a signal. See “Reported Problems” section.
- **No green light** indicates processor battery is depleted and needs to be replaced.

**Tool box**

- 1 System Sensor
- 1 spare Platinum headpiece
- 1 spare headpiece cap & Colour caps
- 1 spare headpiece cable
- 1 microphone tester earphones
- 1 auxiliary microphone
- Additional power:
  - 1 battery charger
  - 1 Alkaline AA/LR6 battery
  - 1 AA/LR6 battery compartment
- 1 bottle of alcohol
- Cotton wool
- 1 dry and clean cotton swab

## Care and Maintenance

- Carrying cases are available to keep sound processor, accessories and batteries safe while not in use.
- All parts of the Platinum sound processor have been **designed and tested to withstand daily wear and tear**, for example, accidental dropping or contact with water. However we advise that the processor and headpiece be **removed during bathing, showering, or swimming**.
- Further guidance on how to handle **accidental dropping or contact with water** is covered in the next section.
- The Platinum Processor and headpiece can be **cleaned** with a slightly dampened cloth or tissue.
- The battery contacts on the rechargeable battery and on the processor should be kept free from dirt and dust. Clean the contacts with a dry cotton swab at least once a month and immediately after exposure to moisture or perspiration.

# Checking, diagnosing and fixing

The Platinum Sound Processor is designed to give many years of troublefree use. Nevertheless it is important to understand when something may be going wrong and how to carry out basic checks and remediation. This is particularly the case with those who may not be able to report basic problems themselves – for example very young children.

Being aware of a young child's normal response to sound provides an obvious baseline from which to observe changes in listening behaviour and comfort. Daily routines or games may provide a structure for spotting changes. The Ling 6 sounds detection task can be used for this purpose.

If a cochlear implant (CI) user reports intermittencies or absence of sound, or fails to respond normally to a Ling 6 Sound detection task, please follow the further guidance.

This guide deals only with the external parts of the cochlear implant system. If you are concerned that damage may have occurred to the internal part, for example after a blow to the head in the region of the headpiece, you should report it to the parents or the cochlear implant centre.

Notice : Frequent visits to the audiologist are common during the first 3-6 months of device use. In addition, regular visits to the audiologist are common during the first year. Following the first year, children see the audiologist at least once annually.

## Reported Problems

| INDICATION  | ACTION   |
|---|--|
| <b>No sound</b>   | <ol style="list-style-type: none"> <li>1. Check the processor is on.</li> <li>2. Verify processor controls are set correctly, based on cochlear implant centre recommendations.</li> <li>3. Check light to make sure is flashing green to loud sound.</li> <li>4. Replace battery with back-up rechargeable battery or AA/LR6 battery compartment.</li> <li>5. Replace the cable.</li> <li>6. Replace the headpiece.</li> <li>7. Perform Ling 6 Sound Test to see if the user can respond to auditory input.</li> <li>8. Inform the parents or contact the programming centre.</li> </ol>  |
| <b>Bad sound quality</b> <ul style="list-style-type: none"> <li>• Background noise perception</li> <li>• Sound is not clear</li> <li>• Sound is too soft</li> <li>• Intermittent functioning</li> </ul> | <ol style="list-style-type: none"> <li>1. Verify that the program setting and volume control are according to the audiologist's advice. If not readjusted them.</li> <li>2. Use the System Sensor to check processor and battery status.</li> <li>3. Clean the battery contacts.</li> <li>4. Clean the sound processor's battery contacts.</li> <li>5. Check to ensure cable is securely attached.</li> <li>6. Try alternative programme.</li> <li>7. Replace the headpiece.</li> <li>8. Perform Ling 6 Sound Test to see if student can respond to auditory input.</li> <li>9. Inform the parents or contact the programming centre.</li> </ol> |
| <b>Visual feedback</b> <ul style="list-style-type: none"> <li>• None or only one red flash</li> </ul>   | <ol style="list-style-type: none"> <li>1. Replace battery with AA/LR6 battery compartment.</li> <li>2. Clean battery contacts with an alcohol swab.</li> </ol>   |
| <ul style="list-style-type: none"> <li>• Red light continuously flashes at one-second intervals and/or Audible alarm (if activated) sounds at one second intervals.</li> </ul>                          | <ol style="list-style-type: none"> <li>1. Check signal with microphone tester earphones.</li> <li>2. Replace cable.</li> <li>3. Replace headpiece.</li> <li>4. Inform the parents or contact the programming centre.</li> </ol>  |
| <ul style="list-style-type: none"> <li>• Green light does not illuminate to loud speech close to microphone.</li> </ul>   | <ol style="list-style-type: none"> <li>1. Make sure the processor is on.</li> <li>2. Check the volume and sensitivity settings to ensure they are correct.</li> <li>3. Replace battery with back-up rechargeable battery or AA battery compartment.</li> <li>4. Check signal with microphone tester.</li> <li>5. Plug in Auxiliary Microphone.</li> <li>6. If visual indicator lights, then replace the headpiece and or the cable.</li> <li>7. Inform the parents or contact the programming centre.</li> </ol>   |

## Damage

| PROBLEM   | ACTION  |
|---|---|
| <b>Battery broken</b>   | <ul style="list-style-type: none"> <li>• Replace the battery.</li> <li>• Inform the parents or contact the programming centre.</li> </ul>   |
| <b>Platinum processor battery pin(s) broken</b>   | <ul style="list-style-type: none"> <li>• Inform the parents or contact the programming centre.</li> </ul>   |
| <b>Knob(s) broken</b>   | <ul style="list-style-type: none"> <li>• If the user can hear properly, avoid manipulating the device during the day.</li> <li>• Inform the parents or contact the programming centre.</li> </ul> |
| <b>Battery lock broken</b>  | <ul style="list-style-type: none"> <li>• If the user can hear properly, avoid manipulating the device during the day.</li> <li>• Inform the parents or contact the programming centre.</li> </ul> |
| <b>Headpiece cable</b> <ul style="list-style-type: none"> <li>• Too fall down</li> <li>• Too stiff</li> <li>• Broken</li> </ul> | <ul style="list-style-type: none"> <li>• Replace the headpiece cable.</li> <li>• Inform the parents or contact the programming centre.</li> </ul>   |
| <b>Headpiece</b> <ul style="list-style-type: none"> <li>• Broken colour cap</li> </ul>  | <ul style="list-style-type: none"> <li>• Change the cap with a spare unit.</li> <li>• Inform parents for an exchange.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Falling off</li> <li>• Broken elastomer sole</li> <li>• Broken headpiece</li> </ul>    | <ul style="list-style-type: none"> <li>• Inform the parents or contact the programming centre.</li> </ul>   |

## Accidents

| PROBLEM  | ACTION  |
|--|---|
| <b>External component falls in water</b>   | <ul style="list-style-type: none"> <li>• Remove the battery from the sound processor as soon as possible.</li> <li>• Disconnect all the components.</li> <li>• Wipe each component up with a dry cotton swab.</li> <li>• Leave the components during at least 12 hours without using it.</li> </ul>                   |
| <b>External component falls down on the floor</b>  | <ul style="list-style-type: none"> <li>• Visually inspect the equipment : battery is in order and in place? Cable twisted, frayed or broken? Headpiece cracked?</li> <li>• If one of those appears broken, use the spare equipment to complete investigation.</li> </ul>  |
| <b>Extreme temperature exposure</b><br>Advanced Bionics qualified operating temperature from 0°C to 45°C | <ul style="list-style-type: none"> <li>• Remove the battery from the sound processor as soon as possible.</li> <li>• Leave the components during for at least 12 hours without using it to remove any condensed moisture.</li> </ul>  |
| <b>Extreme humidity exposure</b>   | <ul style="list-style-type: none"> <li>• Remove the battery from the sound processor as soon as possible.</li> <li>• Disconnect all the components.</li> <li>• Wipe each component up with a dry cotton swab.</li> <li>• Leave the components in a dry environment for at least 12 hours without using it.</li> </ul> |

**Additional action: For all indications, please inform parents or programming centre.**