<table>
<thead>
<tr>
<th>Symbol</th>
<th>Note</th>
<th>Important information or advice. Can save inconvenience.</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>Caution (no harm)</td>
<td>Special care to be taken to ensure safety and effectiveness. Could cause damage to equipment.</td>
</tr>
<tr>
<td>⚠️</td>
<td>Warning (harmful)</td>
<td>Potential safety hazards and serious adverse reactions. Could cause harm to person.</td>
</tr>
</tbody>
</table>
Contents

Introduction ....................................................................................................... 7
  Purpose of this guide ................................................................................. 7
  The Cochlear Nucleus CP810 Sound Processor .................................... 7
Getting to know your processor..................................................................... 9
  Processing unit ........................................................................................ 9
  Earhook ...................................................................................................... 10
  Battery module ........................................................................................ 11
  Coil and coil cable ............................................................................... 12
  Coil magnet ............................................................................................. 13
  Microphone protectors .......................................................................... 13
  Processor options .................................................................................. 14
Wearing your processor ................................................................................ 15
  Placing your processor on your ear ....................................................... 15
  Attaching the coil and coil cable ........................................................... 16
    Attaching the coil cable to the coil ....................................................... 16
    Attaching the coil to the processing unit ........................................... 16
  A secure and comfortable fit ................................................................ 17
  Changing the earhook ............................................................................ 18
  Adjusting and replacing the coil magnet .............................................. 19
    Adjusting magnet depth .................................................................... 19
    Changing magnet strength ................................................................ 20
  Changing the coil cable ........................................................................ 21
  Using the Mic Lock™ for a secure fit .................................................... 23
    Fitting the Mic Lock .......................................................................... 23
  Using the Snugfit™ for a secure fit ....................................................... 25
    Attaching and removing the Snugfit .................................................. 26
  Changing the way you wear your processor ....................................... 27
    Attaching and detaching the LiteWear Cable ...................................... 28
    Locking and unlocking the LiteWear Cable ......................................... 31
  Using the LiteWear Case ....................................................................... 33
Introduction

Purpose of this guide

This user guide is designed to help recipients, parents and carers understand how to use and take care of the Cochlear™ Nucleus® CP810 Sound Processor. The guide provides step-by-step instructions for wearing and using the processor. It also provides guidance on how to take care of the processor.

It is important that you read and understand the warnings and precautions information provided in this guide. The Important Information Booklet included in the document pack you received with your processor also contains important safety information about the processor.

The CP810 and CR110 Troubleshooting Guide provided with your documentation helps you identify and troubleshoot basic processor problems.

The Cochlear Nucleus CP810 Sound Processor

The Cochlear Nucleus CP810 Sound Processor is used together with a cochlear implant to transfer sound to the cochlea, which is the inner ear.

The processor consists of a processing unit, earhook, coil, coil cable and a battery module. The two buttons on the processing unit allow you to control the functions of your processor.

You can also use the Cochlear™ Nucleus® CR110 Remote Assistant to control the functions of your processor. It is an easy-to-use remote control that allows you to communicate with up to two processors at the same time. It also provides processor troubleshooting assistance. For information on how to use the remote assistant with your processor, refer to the Remote Assistant User Guide provided with your processor documentation.

The rechargeable battery option is currently unavailable in the United States, pending FDA approval.
Getting to know your processor

This section helps you familiarise yourself with your processor.

Processing unit

The processing unit, which is the brain of your processor, converts sound signals for transfer to your implant.

Figure 1: CP810 Sound Processor parts

Figure 2: Processing unit with earhook
The processing unit allows you to perform the following functions:

<table>
<thead>
<tr>
<th>Function</th>
<th>Simple user interface button press sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn your processor on and off</td>
<td>Press and hold the lower button</td>
</tr>
<tr>
<td>Change your program (e.g. from</td>
<td>Press the lower button</td>
</tr>
<tr>
<td>Everyday to Noise)</td>
<td></td>
</tr>
<tr>
<td>Turn the telecoil on and off</td>
<td>Press the upper button</td>
</tr>
<tr>
<td>Lock and unlock processor</td>
<td>Briefly press both the upper button and lower button at the same time</td>
</tr>
<tr>
<td>buttons</td>
<td></td>
</tr>
</tbody>
</table>

For more information on simple user interface button press sequences, see *Using your processor*.

You can change volume and microphone sensitivity using the remote assistant. If your processor has an Advanced user interface, you can also change volume or sensitivity using the processing unit. For more information, see *Advanced user interface*.

The indicator light on the processing unit provides a visual indication when you perform a function (e.g. when you change a program), or when there is a problem with the processor (e.g. processor battery is empty). For more information, see *Understanding indicator lights*.

**Earhook**

The earhook secures the processing unit in place on your ear. It is attached to the processing unit and is available in a range of sizes. For more information, see *Changing the earhook*. 
Battery module

You can use a Cochlear™ Nucleus® CP800 Series Standard Battery Module, which uses two disposable batteries (P675 zinc air batteries), or a Rechargeable Battery Module to power your processor.

Figure 3: Standard Battery Module (1) and Compact Rechargeable Battery Module (2)

The Standard Battery Module consists of a battery holder and a battery cover.

Figure 4: Battery holder with zinc air batteries (1), tamper resistant battery cover (2) and battery lock (3)
To prevent children from detaching the battery cover from the battery holder, you can use the Cochlear™ Nucleus® CP800 Series Tamper Resistant Battery Cover. You can also lock the standard battery module or the rechargeable battery module to the processing unit. Cochlear supplies a battery charger to recharge the rechargeable battery module. For more information, see Replacing and recharging batteries.

Coil and coil cable

The coil is a small round disk that you place over the implant. It transfers electromagnetic signals from your processing unit to the implant. The coil is attached to a removable coil cable, which plugs into the processing unit. The coil and coil cable are available in a choice of colours and lengths. For more information, see Changing the coil cable.

![Figure 5: Coil only (1) and coil with cable (2)](image-url)
Coil magnet
A magnet holds the coil in place over your implant.

![Coil magnet](image)

Figure 6: Coil magnet

If your coil falls off often, or if you experience discomfort, you can change the depth of the magnet in the coil. You can also use a stronger or weaker magnet. For more information, see Adjusting and replacing the coil magnet.

Microphone protectors
The processor microphones capture sound, which is processed by the processing unit for transfer to the implant. Microphone protectors are designed to protect the microphones from dirt and moisture. It is important that you keep the microphone protectors in place at all times. Replace the microphone protectors if you notice degradation in the sound quality, or if the protectors look dirty. For more information, see Replacing microphone protectors.

![Microphone protectors](image)

Figure 7: Microphone protectors
Processor options

Depending on your listening needs, your clinician can enable the following options on your processor:

- **SmartSound™ technologies to improve your hearing.** SmartSound is a suite of four input sound processing technologies. These technologies are applied to four available programs: Everyday, Noise, Focus and Music. For more information on these programs, see *Changing programs*.

- **Indicator light flashes** that you see when you perform a function, or when there is a processor problem. For more information, see *Understanding indicator lights*.

- **Private tones** that you hear when you perform a function, or when there is a processor problem. A private tone can be heard only by you. For more information, see *Understanding private tones*.

- **Microphone sensitivity or volume** that you can change (with Advanced user interface only). For more information, see *Changing loudness of sounds*.

- **Telecoil/microphones and accessory/microphones mixing ratios** that you can change using the remote assistant. For more information, refer to the Remote Assistant User Guide.

Your processor has been programmed for use with your implant only. It is important that you only use your own processor and never swap your processor with another person’s processor. If you have two implants, correctly match your processor to the correct implant.

Components described in this user guide may not be available in all countries. Please contact your clinician for more information.
Wearing your processor

Your processor is designed to fit neatly and comfortably behind your ear. You can also wear the processing unit behind the ear and attach the battery module to the body. This provides greater comfort and flexibility for both adults and children.

You can change the processor coil cable, coil magnet and earhook for optimal comfort (e.g. if the coil cable length is too short, you can easily change the cable to a longer one).

This section describes how to wear your processor and wearing options.

Placing your processor on your ear

To be able to hear sound from the processor, it needs to be placed on the ear.

To place your processor on your ear:

1. Place the processing unit over your ear while holding the coil in the other hand.
2. Place the coil on your head. The coil magnet should hold it in place over your implant.

You may find it easier to turn on your processor before placing it on your ear. To turn it on, press and hold the lower button for at least one second until you see short flashes of green. The number of flashes you see corresponds to the number of your current program (e.g. if your current program is program 2, you see two green flashes).

When you turn on your processor before placing it on your ear, you may see flashes of orange. This indicates that the coil is not placed on your head. If the flashes do not stop even after placing the coil on your head, see Understanding indicator lights for more information.
Attaching the coil and coil cable

If the coil is not attached to the processing unit, or the coil cable is not attached to the coil, you need to attach them before placing the processor on your ear.

Attaching the coil cable to the coil

To attach the coil cable to the coil:

1. Hold the coil in one hand and the coil cable plug in the other hand as shown.
2. Align the coil end of the coil cable plug with the coil.
3. Push the coil cable plug firmly into the coil until it clicks into place.

Attaching the coil to the processing unit

To attach the coil to the processing unit:

1. Align the coil cable plug with the coil cable socket on the processing unit.
2. Push the coil cable plug firmly into the socket until it clicks into place.
The coil functions properly only when the coil cable is fully inserted into the processing unit. To check if the coil is receiving sound signals from the processor, you can use the in-built coil sensor on the remote assistant. For more information on how to use the coil sensor, see *Checking the coil*.

If you attach the coil to the processing unit when your processor is turned on, your processor may turn off. If this occurs, turn your processor back on.

**A secure and comfortable fit**

For a more secure and comfortable fit, you may want to:

- Change the earhook size.
- Adjust the coil magnet strength.
- Change the coil magnet.
- Change the coil cable.
- Use the Mic Lock™.
- Use the Snugfit™.
- Use the LiteWear cable, which allows the battery module to be attached to the body.

Read the following sections for more details.
Changing the earhook

Earhooks are available in different sizes. If your earhook becomes loose, you should replace it.

To change the earhook:

1. Hold your processor and the earhook as shown.

2. Remove the earhook by pushing the lower end of the earhook towards the processing unit until the earhook is removed.

3. Hold the new earhook in one hand and your processor in the other hand as shown.

4. Attach the earhook to the processing unit by pushing it back into place.

Avoid twisting the earhook as it may become loose.
Adjusting and replacing the coil magnet

If the magnet strength is too weak, the coil may fall off. If it is too strong, it may cause discomfort or skin irritation. You may consult your clinician if you are unsure about correct magnet strength.

Make sure the coil is positioned correctly against the implant by placing it where the coil magnet "pull" feels the strongest. You can change how firmly the magnet sits on your head by adjusting its depth in the coil. If adjusting the depth of the magnet is not sufficient, you can replace the magnet with a stronger or weaker magnet.

Adjusting magnet depth

To adjust magnet depth:

1. Place the thumb and index finger on the magnet as shown.
2. Turn the magnet in a clockwise direction to increase magnet strength, or in an anti-clockwise direction to reduce strength.
Changing magnet strength

To change the magnet to a stronger or weaker one:

1. Place the thumb on the top of the magnet and index finger on the underside of the magnet as shown.
2. Turn the magnet in an anti-clockwise direction until you remove it from the topside of the coil.
3. Hold the new magnet between the thumb and index finger as shown.
4. Hold the coil in the other hand.
5. Insert the magnet gently into the magnet slot on the topside of the coil. The side with the star should face upwards. The magnet fits easily.
6. Turn the magnet in a clockwise direction until it is in position. Do not overtighten the magnet, or force it to turn if it becomes difficult to turn during insertion or removal. The movement should be smooth and turning should need only a small amount of force. If turning becomes difficult, check that:

- The magnet is correctly aligned in the coil.
- You are turning the magnet in the correct direction.

**Changing the coil cable**

If you find that the coil cable is too long or short for your comfort, you can change the coil cable. Regularly check to see if the coil cable is damaged. If damaged, you will need a new coil cable.

To change the coil cable to a longer or shorter one, do the following:

Remove the coil cable from the processing unit as shown.

1. Place the thumb and index finger over the finger grips on the processor end of the coil cable plug as shown.

2. Gently pull the coil cable plug away from the processor. Do not pull on the coil cable, or twist/rotate the coil cable plug.
Remove the coil cable from the coil as shown.

1. Hold the coil and coil cable with the underside of the coil facing up. Pushing your fingernail between the coil and coil cable on the underside of the coil may help detach the coil from the coil cable.

2. Firmly pull the coil and coil cable away from each other. Do not rotate the coil cable plug.

Removing the coil cable from the coil is not recommended. You should remove the coil cable only if you are changing it to a different one.

Attach the new coil cable to the coil as shown.

1. Hold the coil in one hand and the coil cable plug in the other hand as shown.

2. Align the coil end of the coil cable plug with the coil.

3. Push the coil cable plug firmly into the coil until it clicks into place.
Using the Mic Lock™ for a secure fit

The Mic Lock™ helps hold the processing unit in place behind the ear.

You can use the Mic Lock with a standard or rechargeable battery module. You cannot use the Mic Lock with the Cochlear™ Nucleus® CP800 Series LiteWear option. For more information on the LiteWear option, see *Attaching and detaching the LiteWear Cable*.

![Figure 8: Processor with Mic Lock](image)

Fitting the Mic Lock

To Fit the Mic Lock:

1. Ensure the battery module is attached to the processing unit.

2. Insert the processor through the Mic Lock band with the tubing facing downwards and towards the earhook end of the processing unit. Move the band up until it fits firmly on the battery module.

3. Put your processor on your ear.

4. Bring the tubing around to the front of your ear and up to the earhook. If the Mic Lock does not feel comfortable, rotate the band around the base of your processor for a better fit.

5. Hold your processor firmly in place and determine where the tubing should be cut.
Wearing your processor

6. Mark the tubing, allowing for an additional few millimetres, so it can attach to the earhook.

7. Cut the tubing only when you are certain the length will allow a secure and comfortable fit. It is important not to cut it too short.

8. Feed it onto your earhook.

To wear the processor with the Mic Lock attached:

1. Fold your ear down.

2. Gently pass your earlobe through the loop made by the processor and Mic Lock until it is in position on your ear.

   Alternatively, with the Mic Lock band in position on your processor, place the processor on your ear. Bring the tubing to the front of your ear and feed it onto your earhook. Your processor should fit securely with the Mic Lock in place.

To remove the processor with the Mic Lock attached, fold your ear lobe and reverse the process. Alternatively, ease the tubing off the earhook.
Using the Snugfit™ for a secure fit

The Cochlear™ Nucleus® CP800 Series Snugfit™ helps hold the processing unit in place more securely than using the earhook alone. The Snugfit is available in a choice of different sizes to fit differently sized ears. It is easily adjustable, comfortable and robust enough to withstand an active lifestyle.

You can use the Snugfit with the Cochlear™ Nucleus® CP800 Series LiteWear option to provide an even more comfortable and secure fit.

Figure 9: Snugfit (1) and Snugfit attached to processor (2)
Attaching and removing the Snugfit

To attach the Snugfit to the processor:

1. Hold your processor in one hand as shown.
2. Hold the Snugfit between the thumb and index finger of the other hand and gently squeeze on the wings. This helps fit the Snugfit more securely on the processor.
3. Gently slide the Snugfit upwards until the base of the Snugfit is aligned with the base of the processing unit.

You can further adjust the shape of the Snugfit by gently bending the lower part of the bottom hook into the shape you want.

To remove the Snugfit from the processor:

1. Hold your processor and the Snugfit as shown.
2. Remove the Snugfit by gently pulling it downwards.
Changing the way you wear your processor

The Cochlear Nucleus CP800 Series LiteWear option provides greater comfort and flexibility in the way children and adults wear the processor. It allows the battery module to be attached to the body. The processing unit is worn behind the ear and is connected to the battery module by the Cochlear™ Nucleus® CP800 Series LiteWear Cable.

The Cochlear™ Nucleus® CP800 Series LiteWear Case protects and holds the battery module securely. The LiteWear Case can be connected to your clothing with a Cochlear™ Nucleus® CP800 Series LiteWear Fixing Aid.

You cannot use a Cochlear™ Nucleus® CP800 Series Compact Rechargeable Battery Module or a Cochlear™ Nucleus® CP800 Series Sound Processor Cover with the LiteWear Cable.

1. Processing unit
2. LiteWear Cable upper shoe locking latch (on the processing unit)
3. LiteWear Cable upper shoe
4. LiteWear Cable
5. LiteWear Cable lower shoe
6. LiteWear Fixing Aid (Alligator Clip)
7. LiteWear Case
8. Battery module
9. LiteWear Cable lower shoe locking latch (on the lower shoe)

Figure 10: LiteWear
Attaching and detaching the LiteWear Cable

To attach the LiteWear Cable:

1. If the battery module is attached to the processing unit, detach it from the processing unit.

2. Hold the processing unit and the upper shoe of the LiteWear cable (cable end that connects to the processing unit) so they touch. The upper shoe should face to the left and the processing unit to the right of the final position.

3. Gently twist the processing unit and the upper shoe until the two parts fit.

4. Hold the battery module and the lower shoe of the LiteWear cable (cable end that connects to the battery module) so they touch. The lower shoe should face to the right and the battery module to the left of the final position.
5. Gently twist the battery module and the lower shoe until the two parts fit.
To detach the LiteWear Cable:

1. Ensure that the LiteWear Cable is unlocked. For more information, see *Locking and unlocking the LiteWear Cable*.

2. Hold the processing unit in one hand and the LiteWear Cable in the other hand.

3. Gently twist the upper shoe of the LiteWear Cable to the left and the processing unit to the right until the two parts separate.

4. Hold the battery module in one hand and the LiteWear Cable in the other hand.

5. Gently twist the lower shoe of the LiteWear Cable to the right and the battery module to the left until the two parts separate.
Locking and unlocking the LiteWear Cable

You can lock the processing unit and the battery module to the LiteWear Cable. This reduces the risk of children detaching the battery module or the processing unit from the LiteWear Cable.

To lock the processing unit to the LiteWear Cable:

1. Attach the LiteWear Cable to the processing unit.
2. Lift the accessory socket cover on the processing unit to reveal the lock. It is located below the accessory socket.
3. Using a pair of tweezers or a screwdriver, push the latch to the left to lock the processing unit to the LiteWear Cable.

To unlock, push the latch to the right.
To lock the battery module to the LiteWear Cable:

1. Attach the LiteWear Cable to the battery module.
2. Using a pair of tweezers or a screwdriver, push the latch on the lower shoe of the LiteWear Cable to the left.

To unlock, push the latch to the right.
Using the LiteWear Case

You can use the LiteWear Case to protect and hold the battery module securely. The LiteWear Case has a safety feature to reduce the risk of children removing the battery module from the case. The LiteWear Case can be attached to the body with a LiteWear Fixing Aid.

You cannot use the LiteWear Case with the Compact Rechargeable Battery Module.

Figure 11: LiteWear case
To insert the battery module into the LiteWear Case:

1. If a LiteWear Fixing Aid is not already attached to the LiteWear Case, attach it before inserting the battery module into the LiteWear Case. For more information, see *Attaching and detaching the LiteWear Fixing Aid*.

2. Hold the LiteWear Case in one hand and the lower end of the cable shoe in the other hand.

3. Insert the battery module into the LiteWear Case by gently pushing on the lower end of the cable shoe. The Battery Module can be inserted both ways.

4. Continue pushing on the cable shoe until the battery module is fully inserted and clicks into place.
To remove the battery module from the LiteWear Case:

1. Hold the LiteWear Case with both hands.
2. Slightly pull the top of the LiteWear Case away from the lower end of the cable shoe.
3. Remove the battery module by pushing it from the bottom.
Attaching and detaching the LiteWear Fixing Aid

You can use a LiteWear Fixing Aid to attach the LiteWear Case to your clothing.

Three different fixing aids are available:

- **Cochlear™ Nucleus® CP800 Series LiteWear Fixing Aid (Alligator Clip).**
- **Cochlear™ Nucleus® CP800 Series LiteWear Fixing Aid (Hook & Loop).**
- **Cochlear™ Nucleus® CP800 Series LiteWear Fixing Aid (Safety Pin).**

![LiteWear Fixing Aids: Hook & Loop (1), Safety Pin (2) and Alligator Clip (3)](image)

Figure 12: LiteWear Fixing Aids: Hook & Loop (1), Safety Pin (2) and Alligator Clip (3)
To attach the LiteWear Fixing Aid to the LiteWear Case:

1. Ensure that the battery module has not been inserted into the LiteWear Case.

2. Hold the LiteWear Case in one hand and the LiteWear Fixing Aid in the other hand.

3. Align the hooks on the side of the LiteWear Case with the hooks on the LiteWear Fixing Aid so they touch. The LiteWear Fixing Aid should be positioned at a slight angle.

4. Rotate the LiteWear Fixing Aid in a clockwise direction until it clicks into place.
To detach the LiteWear Fixing Aid from the LiteWear Case:

1. Remove the battery module from the LiteWear Case.
2. Rotate the LiteWear Fixing Aid in an anti-clockwise direction until you detach it from the LiteWear Case.
Locking and unlocking the battery module

To prevent children from removing the battery module from the processing unit, you can lock the battery module to the processing unit.

To lock the battery module to the processing unit:

1. Lift the accessory socket cover of the processor to reveal the lock. It is located below the accessory socket.

2. Using a pair of tweezers or a screwdriver, push the latch to your left to lock the battery module.

To unlock, push the latch to your right.
Locking and unlocking the tamper resistant battery cover

To prevent children from removing the battery holder from the battery cover, you can lock the tamper resistant battery cover of the Standard Battery Module to the battery holder.

To lock the tamper resistant battery cover:

1. Insert the battery holder into the battery cover as shown.

2. Using a screwdriver, gently rotate the lock in a clockwise direction until it is positioned horizontally.

To unlock, gently rotate the lock in an anti-clockwise direction until it is positioned vertically.

Do not overturn the lock as it could damage the lock.
Using the Tamper Resistant Earhook

The Cochlear™ Nucleus® CP800 Series Tamper Resistant Earhook allows you to lock the earhook to the processing unit. This reduces the risk of children detaching the earhook from the processing unit.

To attach the tamper resistant earhook:

1. Attach the tamper resistant earhook to the processing unit, ensuring that the hole on the earhook is aligned with the hole on the earhook end of the processing unit.

2. Insert the earhook fitting pin into the hole on the flat end of the earhook fitting tool.

3. Partially insert the earhook fitting pin into the hole on the earhook.

4. Push the earhook fitting pin in with the earhook fitting tool until the pin is fully inserted. Ensure that the pin does not protrude from either side of the earhook.
To remove the tamper resistant earhook:

1. Hold the processor between the thumb and index finger.
2. Insert the pointed end of the earhook fitting tool into the hole on the earhook.
3. Push the earhook fitting tool in to remove the earhook fitting pin. Do not use too much force when pushing the earhook fitting pin out as it could damage the earhook fitting tool.
4. Remove the tamper resistant earhook by pushing the lower end of the earhook towards the processing unit.

⚠️ Do not let children attach or remove the tamper resistant earhook without adult supervision.
Identifying your processors

If you are a bilateral recipient, you may want to use Cochlear™ Nucleus® CP800 Series Bilateral Identification Adhesive Labels to reduce the risk of mixing up processors. The labels are available in two colours to help identify your left (blue) and right (red) ear processors. For more information, contact your clinician.

To place the label on your processor:

1. Remove the earhook from the processing unit by pushing the lower end of the earhook towards the processing unit.
2. Place the label on the earhook end (tip) of the processing unit. It should stick easily.
3. Attach the earhook to the processing unit by pushing it back into place.

If you want to remove the label from the processing unit, you can easily peel it off with your fingers.
Using a coil spacer

If your coil magnet is too strong, it may cause discomfort or skin irritation. You can reduce magnet strength by using a weaker magnet. If this does not resolve the problem, you can use a Cochlear™ Nucleus® CP800 Series Coil Spacer. In some cases where the coil is too close to the implant, the coil spacer can improve coil performance.

Your clinician will let you know if you need to use a coil spacer.

To place the coil spacer on the coil:

1. Hold the coil between the thumb and index finger with the underside of the coil facing up.
2. Hold the coil spacer in the other hand and align the coil spacer clips with the slots on both sides of the coil.
3. Clip the coil spacer into place. Do not force the coil spacer into place. It should fit easily.
To remove the coil spacer from the coil:

1. Hold the coil between the thumb and index finger with the coil spacer side facing up.
2. Lift the coil spacer out with your fingers.
Detaching and attaching the battery module

You need to detach the battery module from the processing unit when:

- Changing the battery module to a different one (e.g. changing from a standard battery module to a rechargeable battery module).
- Changing the wearing option (e.g. using the LiteWear cable to attach the battery module to the processing unit).
- Charging the rechargeable battery module.

Detaching the battery module from the processing unit

To detach the battery module from the processing unit:

1. Hold the battery module and the processing unit as shown. If the battery module is locked, you need to unlock it as described in the section Locking and unlocking the battery module.
2. Gently twist the battery module to your left and the processing unit to your right until the two parts separate.
Attaching the battery module to the processing unit

To attach the battery module to the processing unit:

1. Hold the battery module and the processing unit so they touch. The battery module should face to the left and the processing unit to the right of the final position.

2. Twist the battery module and the processing unit until the two parts fit into place.

3. Make sure the battery module is correctly aligned. Check for broken or bent contacts between the battery module and the processing unit, which can cause misalignment. If any contacts are broken, return the processor to your clinician.
Using your processor

This section describes how to use the buttons on your processor. The sequence of button presses that are described in each of the sections below are part of the Simple user interface. If your processor has the Advanced user interface enabled, see Advanced user interface for information on the processor functions you can control and the button press sequences.

Turning your processor on and off

To be able to hear sound from your processor, the processor needs to be turned on and the coil needs to be connected to the implant. To turn on your processor, press and hold the lower button for at least one second until you either hear sounds (if your processor is in place on your head), or until you see short flashes of green. The number of flashes you see corresponds to the number of the current program (e.g. if your current program is program 2, you see two flashes). For more information on programs, see the following section.

To turn off, press and hold the lower button for at least one second, until the sound stops, or you see a steady orange light. Do not remove batteries, or detach the battery module to turn off your processor.

Changing programs

Programs help you hear better in different listening situations. Up to four programs can be enabled by your clinician, depending on your listening needs. The four programs are:

- **Everyday**: Ideal for the typical listening situations of everyday life. It can adjust the sounds you hear for maximum clarity and comfort.
- **Noise**: Suitable for environments with significant background noise, improving the audibility of wanted sound from all sides.
- **Focus**: Useful where there is significant background noise, but the focus is on hearing what one person or a small group of people are saying.
- **Music**: Used to listen to all types of music from any audio source.

You can change programs to suit your listening situation (e.g. use the Music program when listening to music).
To change the current program:

1. If the processor is turned off, turn it on.
2. Press the lower button until the program changes to the one you want.

Each successive button press changes the program to the next one (e.g. to change from program 1 to program 2, press once). The number of green light flashes you see corresponds to the number of the selected program (e.g. after you change from program 1 to program 2, you see two short flashes of green). If private tones are enabled, you hear two private tones.

The program you select operates until you change it. When you turn your processor off and on again, it will return to the program and settings you were using before you switched it off.

Understanding indicator lights

You see an indicator light when you perform a function (e.g. change the program), or when there is a problem (e.g. processor battery is empty).

<table>
<thead>
<tr>
<th>Indicator light</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Short flashes of green with a pause between flashes." /></td>
<td>You are turning on the processor. The number of flashes you see corresponds to the number of the selected program.</td>
</tr>
<tr>
<td><img src="image" alt="Short flashes of green with a pause between flashes." /></td>
<td>You are changing the program. The number of flashes you see corresponds to the number of the selected program.</td>
</tr>
<tr>
<td><img src="image" alt="Steady orange while the lower button is pressed." /></td>
<td>You are turning off your processor.</td>
</tr>
<tr>
<td><img src="image" alt="Short flash of green." /></td>
<td>You are changing volume or sensitivity level. This is available only with the Advanced user interface.</td>
</tr>
</tbody>
</table>
## Indicator light

<table>
<thead>
<tr>
<th>Indicator light</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅ Long flash of green.</td>
<td>You are changing from using:</td>
</tr>
<tr>
<td></td>
<td>• The microphones to using the telecoil.</td>
</tr>
<tr>
<td></td>
<td>• The telecoil to using the microphones.</td>
</tr>
<tr>
<td></td>
<td>• The microphones to using an audio accessory.</td>
</tr>
<tr>
<td></td>
<td>• An audio accessory to using the microphones.</td>
</tr>
<tr>
<td>✅ ✅ Flash of green followed by a flash of orange.</td>
<td>You are locking your processor buttons.</td>
</tr>
<tr>
<td>✅ ✅ Flash of orange followed by a flash of green.</td>
<td>You are unlocking your processor buttons.</td>
</tr>
<tr>
<td>✅✅✅✅✅ Flashes of green.</td>
<td>Indicates that the microphones are capturing sound.</td>
</tr>
<tr>
<td>✅✅✅✅ Flash of orange every second.</td>
<td>The coil may be off, or your processor is not connected to the correct implant.</td>
</tr>
<tr>
<td>✅ Steady orange.</td>
<td>Indicates a general fault.</td>
</tr>
<tr>
<td></td>
<td>This could mean:</td>
</tr>
<tr>
<td></td>
<td>• There is a fault with your processor.</td>
</tr>
<tr>
<td></td>
<td>• There is a corrupt program in your processor.</td>
</tr>
<tr>
<td></td>
<td>The Troubleshooting Guide provided with your processor documentation helps you troubleshoot basic processor problems.</td>
</tr>
<tr>
<td>✅ Flash of orange when you press a button.</td>
<td>Your processor buttons are locked.</td>
</tr>
</tbody>
</table>
### Indicator light

<table>
<thead>
<tr>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous flashes of orange with a short pause between flashes.</td>
</tr>
<tr>
<td>If a battery empty warning and general fault occur at the same time, you only see the battery empty indicator light (continuous flashes of orange).</td>
</tr>
</tbody>
</table>

Your processor battery is empty. You need to replace the disposable batteries, or recharge the rechargeable battery module.

### Understanding private tones

When private tones are enabled, you hear a tone when you perform a function (e.g. change the program), or when there is a problem (e.g. processor battery is empty). Private tones can be heard only by you.

<table>
<thead>
<tr>
<th>Tone</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎧 🎧 🎧 You hear short high tones.</td>
<td></td>
</tr>
<tr>
<td>You are changing the program. The number of tones you hear corresponds to the number of the selected program (e.g. when you change from program 1 to program 2, you hear two high tones).</td>
<td></td>
</tr>
<tr>
<td>🎧 You hear a single high tone.</td>
<td></td>
</tr>
<tr>
<td>You are changing volume or sensitivity level (Advanced user interface only)</td>
<td></td>
</tr>
<tr>
<td>🎧.. You hear a single long high tone.</td>
<td></td>
</tr>
<tr>
<td>You are changing from using:</td>
<td></td>
</tr>
<tr>
<td>• The microphones to using the telecoil.</td>
<td></td>
</tr>
<tr>
<td>• The telecoil to using the microphones.</td>
<td></td>
</tr>
<tr>
<td>• The microphones to using an audio accessory.</td>
<td></td>
</tr>
<tr>
<td>• An audio accessory to using the microphones.</td>
<td></td>
</tr>
</tbody>
</table>
### Tone and What it Means

<table>
<thead>
<tr>
<th>Tone</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎧..🎧..🎧 You hear a sequence of long low tones.</td>
<td>General fault.</td>
</tr>
<tr>
<td>🎧 You hear a short low tone when you press a button.</td>
<td>Your processor buttons are locked.</td>
</tr>
<tr>
<td>🎧 🎧 You hear two short low tones.</td>
<td>Your processor battery is low. You need to replace the batteries, or recharge the battery module.</td>
</tr>
<tr>
<td>🎧🎧 You hear a sequence of short low tones.</td>
<td>Your processor battery is empty. You need to replace the batteries, or recharge the battery module.</td>
</tr>
</tbody>
</table>

### Using the telecoil

The telecoil is used to receive sound signals from a telephone, roomloop, neckloop, etc. The telecoil can also receive sound signals from an amplifier, TV or Hi-Fi through an induction loop.

To turn on the telecoil, press the upper button. A single long flash of green confirms that the telecoil is activated.

To turn off the telecoil, press the upper button again. A single long flash of green confirms that the telecoil is deactivated.

When an audio accessory is connected to your processor, you will not receive any sound from the telecoil. To move back to using the telecoil, remove the audio accessory from the processor.

Turn off the telecoil when not in use, as it reduces the microphone volume.
Using your processor

Using Auto Telecoil

Your clinician can program your processor so that it automatically turns on the telecoil when you use the telephone, or when you are in a roomloop environment. The telecoil automatically turns off when:

- You move the telephone away from your processor (e.g. when the telephone call ends).
- You exit the roomloop environment.

When Auto Telecoil is turned on, you see the Auto Telecoil icon on the remote assistant Home screen.

![Auto Telecoil icon displayed on the remote assistant Home screen](image)

You can manually turn off Auto Telecoil by pressing the upper button on the processing unit. You can also manually turn this feature on or off using the remote assistant. For more information, see the Remote Assistant User Guide.

⚠️ Certain electronic devices or machinery may automatically turn on Auto Telecoil. If this occurs, either wait for about 10 or 20 seconds for Auto Telecoil to turn itself off, or manually turn it off using the processor buttons or the remote assistant.
Using the telephone with your processor

You may use your telephone and your processor with the:

• Microphones.
• Telecoil.
• Telecoil and microphones on at the same time.

When using the telephone, position the telephone so that its earpiece is aligned with your processor.

Changing loudness of sounds

Microphone sensitivity and volume control the loudness levels of the sounds you hear.

Depending on how your clinician has set up your programs, you can use the processor buttons (Advanced user interface only) to:

• Change microphone sensitivity only.
• Change volume only.

The new microphone sensitivity or volume levels you choose will be saved for each program.

Controlling microphone sensitivity

Microphone sensitivity controls the softest level of sound picked up by the microphones. If your clinician has enabled you to change the sensitivity, you can:

• Reduce the sensitivity of the sound to reduce background noise in noisy situations.
• Increase the sensitivity of the sound to hear very soft sounds in quiet situations.

If your clinician has enabled the Advanced user interface, you can press the upper button to increase sensitivity. To decrease sensitivity, press the lower button. When you change sensitivity level, you see a flash of green.
If your processor has the Simple user interface, you can use the remote assistant to change sensitivity.

**Controlling volume**

Volume controls your perception of loudness. If your clinician has enabled you to change the volume, you can:

- Reduce the volume if sounds are uncomfortably loud.
- Increase the volume if speech, including your own voice, is too soft.

If your clinician has enabled the Advanced user interface, you can press the upper button to increase volume. To decrease volume, press the lower button. When you change volume level, you see a flash of green.

If your processor has the Simple user interface, you can use the remote assistant to change the volume.

If you are adjusting the volume setting often, or if adjusting the volume causes you discomfort, consult your clinician.

**Locking and unlocking processor buttons**

You can lock the buttons on your processor to prevent children from changing the controls, or to avoid accidental button presses changing your processor settings.

To lock the buttons, briefly press both the upper button and the lower button at the same time.

A flash of green followed by a flash of orange confirms that your processor buttons are locked. If you press any button on the processing unit when it is locked, you see an orange flash.

You cannot turn off your processor while the buttons are locked.

To unlock the buttons, briefly press both the upper button and the lower button at the same time. A flash of orange followed by a flash of green confirms that the buttons are unlocked.
Advanced user interface

If your clinician has enabled the Advanced user interface, you can use your processor buttons to perform the following functions:

<table>
<thead>
<tr>
<th>Function</th>
<th>Button press sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn your processor on and off.</td>
<td>Press and hold the upper button and the lower button at the same time. Pressing and holding the lower button only will also turn on the processor.</td>
</tr>
<tr>
<td>Change your program.</td>
<td>Press and hold the lower button.</td>
</tr>
<tr>
<td>Turn the telecoil/audio accessory (when connected) on and off.</td>
<td>Press and hold the upper button.</td>
</tr>
<tr>
<td>Lock and unlock processor buttons.</td>
<td>Press the upper button and the lower button at the same time.</td>
</tr>
<tr>
<td>Adjust volume or sensitivity level</td>
<td>Press the upper button to increase volume or sensitivity level.</td>
</tr>
<tr>
<td></td>
<td>Press the lower button to decrease volume or sensitivity level.</td>
</tr>
</tbody>
</table>

Discuss with your clinician which user interface would be more suitable for you.
Checking the coil

The remote assistant has an in-built coil sensor that allows you to check if the coil connected to your processor is receiving sound signals from your processor.

To use the coil sensor:

1. Remove the coil from the head.
2. Place the coil on the coil sensor guides on the back of the remote assistant.

![Figure 14: Placing the coil on the back of the remote assistant](image)

If the coil is receiving sound signals, an animation will display on the remote assistant display. This, however, only provides an indication and does not confirm that the coil is functioning properly.

If the coil is not receiving sound signals, no response is displayed on the display.

For more information, refer to the Remote Assistant User Guide.

Auto Processor Off

Your processor automatically turns off when the coil is off (e.g. coil is not placed on your head) for more than two minutes. The coil-off indicator light (flashes of orange) flashes until the processor turns off.

If you change a processor setting (using either the processor buttons or the remote assistant) while the coil-off indicator light is flashing, the processor will turn off two minutes after making the change.

Your clinician can enable or disable the Auto Processor Off feature.
Replacing and recharging batteries

Replacing disposable batteries

The Standard Battery Module uses two disposable batteries. It is recommended that you use two p675 zinc air batteries for maximum battery life.

Replace disposable batteries when any of the following occur:

- You see continuous flashes of orange on your processor.
- You hear two short low tones (battery is low) or a sequence of short low tones (battery is empty).
- The processor battery low or battery empty icon displays on the remote assistant screen.
- You stop hearing sound.
- The sound you hear becomes intermittent.

An empty battery may not be the only cause for not hearing sound, or for sound becoming intermittent. For information on identifying and troubleshooting processor problems, refer to the processor Troubleshooting Guide you received with your processor documentation.

To remove disposable batteries:

1. Turn off your processor. If the battery module or battery cover is locked, unlock it.
2. Pull the battery cover away from the battery holder as shown.
3. To remove the batteries, tip the battery holder to one side (1), or lift each battery out with your fingers (2) as shown.

You can also use the coil magnet to remove batteries from the battery holder.

To remove batteries using the coil magnet:

1. Place the coil magnet over the batteries so that the coil magnet touches both batteries. The coil magnet will lift both batteries out of the battery holder.

2. Pull the batteries away from the coil.

To replace batteries:

1. Remove the new set of batteries from their pack. New batteries are sealed, usually with a seal or tab.

2. To allow the air to activate the batteries, remove their seals and let the batteries stand briefly.
3. Insert batteries with the positive terminal facing up and the negative terminal facing down. The batteries should fit into the curved recess in the battery holder. Do not force the batteries into place. When inserted correctly, they should fit easily.

4. Replace the battery cover by sliding it up from the bottom of the battery holder towards the processing unit. Do not force the cover upwards as it should fit easily.
Recharging the rechargeable battery module

Cochlear supplies a Cochlear™ Nucleus® CP800 Series Battery Charger to recharge the rechargeable battery module. A Cochlear™ Nucleus® CP800 Series Global Power Adaptor is also supplied to connect the battery charger to mains power. The battery charger also allows you to recharge the remote assistant at the same time.

To get the longest battery life, always fully recharge the rechargeable battery module before using it. A completely empty battery will take approximately four hours to recharge. As the battery ages, it may take longer to fully recharge it. The battery charger has four sockets allowing you to recharge four rechargeable battery modules at the same time.

To recharge the rechargeable battery module:

1. Remove the rechargeable battery module from the processing unit.
2. Insert the rechargeable battery module into the battery charger socket at a slight angle as shown.
3. Rotate the rechargeable battery module in a clockwise direction until it is fully aligned with the alignment indicator marking on the charger.

4. Connect the Global Power Adaptor to the battery charger.

5. Plug the other end of the Global Power Adaptor into a mains power outlet.

When a battery module is recharging, the indicator light corresponding to the battery module being recharged is orange. Once a battery module is fully recharged, the indicator light is green. For more information, see the following section.
Understanding battery charger indicator lights

The battery charger has a mains power indicator light and four individual indicator lights corresponding to the four battery charger sockets (see table below).

<table>
<thead>
<tr>
<th>Battery charger socket light</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steady orange</td>
<td>Rechargeable battery module is recharging.</td>
</tr>
<tr>
<td>Steady green</td>
<td>Rechargeable battery module is fully recharged.</td>
</tr>
<tr>
<td>Flashing orange</td>
<td>Indicates a problem with the rechargeable battery module being recharged.</td>
</tr>
<tr>
<td>Does not light up</td>
<td>Indicates a general fault. This could mean:</td>
</tr>
<tr>
<td></td>
<td>• Rechargeable battery module is not properly placed in the battery charger.</td>
</tr>
<tr>
<td></td>
<td>• There is no power.</td>
</tr>
</tbody>
</table>

When recharging the rechargeable battery module, the battery charger mains power indicator light is green.
General warnings and precautions for handling batteries and the battery charger

Batteries

• Do not recharge disposable batteries.

• When using disposable batteries, only use P675 zinc air batteries. Other types may not have sufficient energy to allow your processor to operate for a long time. Cochlear does not recommend the use of silver oxide or alkaline batteries.

• Change both disposable batteries at the same time. It only takes one low or empty battery to stop your processor from working.

• Do not mix brands or battery types (e.g. zinc air with silver oxide).

• Remove disposable batteries from your processor when they are empty, or when storing the battery holder or processor for a period of time. Empty batteries may leak corrosive fluids and cause damage if left inside the battery module for extended periods.

• If a battery has leaked fluid, do not allow the fluid or liquid to come into contact with skin or eyes. If contact is made, wash with a lot of water and seek medical attention. It is always a good idea to wash your hands after you have handled batteries.

• Store batteries separately to avoid them from shorting each other.

• Batteries can be harmful if chewed or swallowed. If chewed or swallowed, seek prompt medical attention at the nearest emergency centre or Poisons Information Centre.

• Make sure that batteries are kept out of reach of young children. Do not let children replace batteries without adult supervision.

• Carry spare batteries in a closed plastic bag. Batteries could short circuit and discharge if they come into contact with each other or any metallic objects (e.g. coins, hair clips, etc.).

• Do not expose batteries to heat (e.g. never leave batteries in sunlight, behind a window or in a car).

• Store batteries in a cool dry place.

• Never immerse batteries in water.

• Do not deform batteries.
Do not drop batteries on hard surfaces.

Never dispose of batteries in fire.

After storing rechargeable battery modules for an extended period, it may be necessary to recharge them.

Only use the battery charger supplied by Cochlear to recharge rechargeable battery modules.

When rechargeable battery modules no longer last for a reasonable period of time, dispose of them carefully, in accordance with local regulations.

Battery charger

Avoid touching the battery charger connectors and contacts.

Do not let children use the battery charger without adult supervision.
Using audio accessories with your processor

Cochlear supplies a range of audio accessories to help optimise hearing in different listening environments. You can connect the following audio accessories to your processor:

- **Cochlear™ Nucleus® CP800 Series Lapel Microphone**, to improve communication in noisy environments (e.g. meetings).

To use the Lapel Microphone, connect the processor end of the Lapel Microphone cable to your processor audio accessory socket and place the other end near the sound source.

![Figure 15: Sound source end (1) and processor end (2) of the Lapel Microphone](image)

- **Cochlear™ Nucleus® CP800 Series Monitor Earphones** for use by another person (with unaided hearing) to check that you can hear sound from the following sound sources:
  - Microphone signal.
  - Telecoil signal.
  - Accessory signal.
  - Mix of microphone and telecoil signal.
  - Mix of microphone and accessory signal.
  - Signal received from FM devices connected to the monitor earphones.

Monitor earphones do not indicate the quality of the sound heard by the recipient.
To use the monitor earphones:

1. Ensure that your processor is turned on.
2. Lift the accessory socket cover of your processor and connect the processor end of the monitor earphones to the accessory socket.
3. If you wish to test an accessory or FM system, connect it to the accessory socket on the monitor earphones. Ensure that you can hear sound through the monitor earphones before connecting an accessory or FM system.

- Cochlear™ Nucleus® CP800 Series Personal Audio Cable for connecting a battery-powered sound source (e.g. portable CD player) to your processor. The Personal Audio Cable produces monophonic sound.

To use the Personal Audio Cable, connect the processor end of the cable to your processor and the other end to the battery-powered sound source. Do not use the Personal Audio Cable to directly connect to a mains powered sound source (e.g. TV).
Using audio accessories with your processor

- Cochlear™ Nucleus® CP800 Series Bilateral Personal Audio Cable for connecting a battery powered sound source to two processors (bilateral use). Use the shorter side of the cable for the left ear and the longer side for the right ear. The cables are marked "L" (left) and "R" (right) to avoid mixing them up. The Bilateral Personal Audio Cable produces both monophonic and stereophonic sound, depending on the sound system.

To use the Bilateral Personal Audio Cable, connect the processor end of the cable to your processors and the other end to the battery-powered sound source. Do not use the Bilateral Personal Audio Cable to directly connect to a mains powered sound source.

![Figure 18: Sound source end (1) and processor end (2) of the Bilateral Personal Audio Cable](image)

- Cochlear™ Nucleus® CP800 Series Portable Phone Cable for connecting a phone or a battery powered sound source with a 2.5 mm socket.

To use the Portable Phone Cable, connect the processor end of the cable to your processor and the other end to the phone or the battery powered sound source.

![Figure 19: Phone or battery powered sound source end (1) and processor end (2) of the Portable Phone Cable](image)
Using audio accessories with your processor

- Cochlear™ Nucleus® CP800 Series Mains Isolation Cable for connecting the Personal Audio Cable or Bilateral Personal Audio Cable to a mains powered sound source (e.g. TV). The Mains Isolation Cable provides electrical protection from mains power.

![Mains Isolation Cable](image1)

**Figure 20: Mains Isolation Cable**

- FM Cables, to send sound signals from a commercially available FM listening system to your processor. FM systems are wireless communication systems that help enhance hearing performance and speech understanding in certain environments (e.g. noisy environments, at school, etc.). For information on available FM cables, contact your clinician. You can also refer to the FM cable packaging for a list of available FM cables.

![FM Cable](image2)

**Figure 21: FM listening system end (1) and Freedom Accessory Adaptor end (2) of the FM Cable**

- Cochlear™ Nucleus® CP800 Series Freedom™ Accessory Adaptor for connecting some audio accessories (FM Cables and Freedom Monitor Earphones) to your processor.

![Freedom Accessory Adaptor](image3)

**Figure 22 Freedom Accessory Adaptor**
• Cochlear™ Nucleus® CP800 Series Euro Accessory Adaptor for connecting a Euro FM receiver to your processor.

![Figure 23 Euro Accessory Adaptor](image)

Only use audio accessories supplied by Cochlear. All CP800 series accessories are compatible with the CP810 sound processor. Certain accessories may not be available in all countries. Please contact your clinician or local Cochlear office for confirmation.

You may also want to try commercially available assisted listening devices (e.g. FM systems). For more information, contact your clinician.

### Connecting and disconnecting audio accessories

All CP800 series audio accessories connect directly to your processor. Freedom accessories can be connected to the Freedom Accessory Adaptor.

To connect an audio accessory to your processor:

1. Carefully lift the accessory socket cover of your processor with a screwdriver.
2. Place your fingers over the finger grips on the audio accessory cable.
3. Align the audio accessory connector with the accessory socket.
4. Gently push the audio accessory connector into the accessory socket until it clicks into place.

To connect a Freedom accessory using the Freedom Accessory Adaptor:

1. Connect the audio accessory to the Freedom Accessory Adaptor. Ensure that you connect the audio accessory to the Freedom Accessory Adaptor before connecting it to your processor.

2. Connect the other end of the Freedom Accessory Adaptor to the processor accessory socket.

To connect a Euro FM receiver using the Euro Accessory Adaptor:

1. If your processor is turned on, turn it off.

2. Insert the Euro FM receiver into the three pin socket on the Euro Accessory Adaptor.

3. Turn on the Euro FM receiver by pushing the latch to the on position (see Figure 24 and Figure 25).

4. Turn on your processor.

5. Connect the Euro Accessory Adaptor to the processor accessory socket.
Using audio accessories with your processor

To use an FM cable:
1. Connect the FM cable to the Freedom Accessory Adaptor.
2. Connect the Freedom Accessory Adaptor to the processor accessory socket.
3. Connect the FM listening system end of the FM cable to the FM listening system as per manufacturer’s instructions.

To use the Mains Isolation Cable:
1. Connect the Personal Audio Cable or the Bilateral Personal Audio Cable to your processor.
2. Connect the Mains Isolation Cable to the Personal Audio Cable or the Bilateral Personal Audio Cable.
3. Plug the other end of the Mains Isolation Cable into the mains powered sound source, e.g. TV.

When you connect an audio accessory, your processor automatically detects it. When you are not using the audio accessory, you can disconnect it from the processing unit.
Changing from an audio accessory to microphones
You can change from using an audio accessory to using the microphones only, while leaving the audio accessory attached.

To change from using an audio accessory to using the microphones, press the upper button. A single long flash of green confirms that the microphones are enabled.

Changing from microphones to audio accessory
To change back from using the microphones to using the audio accessory, press the upper button again. A single long flash of green confirms that the audio accessory is enabled.

General warnings and precautions for the use of audio accessories
• Always use the Mains Isolation Cable when connecting the Personal Audio Cable or the Bilateral Personal Audio Cable to:
  • A mains powered sound source (e.g. TV).
  • A battery powered sound source connected to mains power (e.g. while connected to a PC for charging).

• The Freedom Accessory Adaptor and the Euro Accessory Adaptor are small parts and can be a choking hazard if swallowed. Cochlear does not recommend the use of these parts by children aged three years or younger.

• When using audio accessories, your processor will not be protected from water or dust penetration. For information on how to protect your processor from water and dust penetration, see Caring for your processor.

• Do not use excessive force when connecting or disconnecting audio accessories.

• Do not twist the accessory socket cover or pull or bend it too hard.
Using sound processor covers

You can use sound processor covers to personalise your processor. They can also help protect your processor from scratches. Sound processor covers are available from Cochlear in a choice of colours and designs to suit different lifestyles.

Attaching sound processor covers

To attach a sound processor cover to your processor:

1. Hold your processor in one hand and the sound processor cover in the other hand as shown.
2. Gently slide the sound processor cover upwards until it fits into place.

Sound processor covers cannot be used with the Compact Rechargeable Battery Module or the Snugfit.
Removing sound processor covers

To remove the sound processor cover from your processor:

1. Hold your processor as shown.

2. Slide the sound processor cover away from your processor. Pushing on the bottom of your processor with the thumb will help slide the cover away from your processor.
Caring for your processor

Your processor is a medical device requiring good care and maintenance to ensure that it provides optimal hearing performance. This section provides guidance on how to take care of your processor.

Wearing your processor in cold or hot temperatures

Your processor is designed to work in cold or hot temperatures. Generally, in cold temperatures your body heat is sufficient to keep your processor warm and working well. In very cold weather, wear a hat or headband over your processor.

When you are not wearing your processor, do not leave it in very hot areas (e.g. in direct sunlight, behind a window, in a car, etc.).

For information on operation and storage temperatures for your processor, see Technical information, Environmental Conditions.
Protecting your processor from dust and water damage

To protect your processor from dust and water damage, it is important that you follow the guidance provided in this section.

When using a rechargeable battery module, your processor has a dust and water damage protection rating of IP57. This protects the processor against the following:

- Penetration of solid foreign objects greater than or equal to 1.0 mm diameter.
- Failure from dust penetration.
- Failure from temporary immersion in water.

When using the standard battery module (disposable batteries), your processor will have a protection rating of IP44. This protects the processor against the following:

- Penetration of solid foreign objects greater than or equal to 1.0 mm diameter.
- Failure from splashing water.

When an audio accessory is attached, your processor is not protected from dust and water damage.

To protect your processor from dust or water damage:

- Ensure that microphone protectors are in place at all times.
- Ensure that the accessory socket cover is properly closed when you are not using an audio accessory.
- Ensure that the coil cable plug seal is not damaged and that the coil cable plug is properly inserted into the processor coil cable socket.
- Always keep the coil cable plugged into the processor to prevent moisture getting into the coil cable socket. It is also important that you keep the coil cable plugged into the coil.
- If the battery contacts on the battery module become loose, contact your clinician as the connector between the processing unit and the battery module could be broken.
Drying your processor

Remove your processor before applying cosmetics, skin care or hair products. These substances can get into your processor and damage it. If this happens, wipe the processor clean with a soft dry cloth.

Do not wear your processor while bathing, swimming or showering. If the processor does get wet, dry the processor as follows:

1. Wipe your processor with a soft dry cloth.

2. Place your processor in the Zephyr Dry & Store® for at least 12 hours.

The Zephyr Dry & Store helps remove moisture from your processor. Before using this dry aid kit, read the manufacturer’s instructions for use. It is recommended to only use the Zephyr Dry & Store supplied by Cochlear.

If your processor gets exposed to salt water or chemicals, wipe it with a damp cloth before placing it in the Zephyr Dry & Store.
Avoid getting sand or dirt into any part of the system. If this happens:
1. Shake out the sand or dirt as much as possible.
2. Wipe your processor with a damp cloth.
3. Place the processor in the dry aid kit.

Once your processor is dry, check if it is working. If your processor is not working, return it to your clinician for service. Cochlear cannot guarantee that they will be able to repair any water-damaged part.

Cleaning your processor parts

Regular cleaning of your processor parts prevents dirt from building up and degrading the sound quality. You can clean your processor parts as follows:

• Regularly check the contacts between the processing unit and the battery module to ensure they are clean. If the contacts are dirty, you can gently tap or blow on them to remove any dirt.

• If the battery module is dirty, wipe it with a soft dry cloth. Keep the battery module dry and free from moisture.

• If the earhook is dirty, clean it with a soft dry cloth. You do not need to remove the earhook from the processing unit when cleaning it. If you remove the earhook too often, it may become loose.

• Clean the coil cable with a dry cloth.

• Clean sound processor covers and the Snugfit with a soft dry cloth.

• If audio accessories are dirty, clean them with a soft dry cloth. You can blow on the processor accessory socket to remove any dust.
Cleaning the battery charger

If you notice any dust or dirt in the battery charger sockets, clean them as follows:

1. If the battery charger is plugged into the power adaptor, unplug it.
2. Remove any battery modules placed in the charger.
3. Hold the battery charger upside down and tap on it to remove any dirt from the battery charger sockets. Gently blowing on the battery charger sockets may also help remove dirt.
4. Wipe the battery charger sockets with a soft dry cloth.

If the battery charger gets splashed with liquid, shake out the liquid and dry it for approximately 24 hours. Do not use the battery charger until it is dry.

For a more even wear of battery charger sockets, cycle batteries in different sockets when recharging batteries.
Replacing microphone protectors

Microphone protectors are designed to protect the microphones from dirt and moisture.

A dirty or blocked microphone protector results in the gradual deterioration of sound quality. Replace the microphone protectors if you notice degradation in the sound quality, or if the protectors look dirty. Replace both protectors at the same time.

Removing microphone protectors

The Cochlear™ Nucleus® CP800 Series Microphone Protector Removal Tool allows you to remove the microphone protectors from the processing unit. You can also use a needle or pin (e.g. safety pin).

To remove the microphone protectors:

1. Hold the processor in one hand and the Microphone Protector Removal Tool (or needle or pin) in the other hand.

2. Align the Microphone Protector Removal Tool (or needle or pin) with the recess on either side of the microphone hole. Do not insert the Microphone Protector Removal Tool (or needle or pin) directly into the hole as it could damage the microphone.

3. Gently lift the microphone protector out with the Microphone Protector Removal Tool (or needle or pin).
Inserting new microphone protectors

You can insert the microphone protectors using the Cochlear™ Nucleus® CP800 Series Microphone Protector Applicator or your fingers.

To insert the microphone protectors using the Microphone Protector Applicator:

1. Hold the Microphone Protector Applicator sleeve between your thumb and index finger as shown.
2. Remove the Microphone Protector Applicator by gently squeezing on the sides of the sleeve until the Microphone Protector Applicator slides out.
3. Ensure the earhook and the coil cable are attached to your processing unit.
4. Hold the Microphone Protector Applicator with the microphone protectors facing down.
5. Thread the earhook through the top hole (side with no opening) on the Microphone Protector Applicator.
6. Position the Microphone Protector Applicator over the processing unit as shown.

7. Thread the coil cable through the bottom hole of the Microphone Protector Applicator.

8. Ensure the markings on the Microphone Protector Applicator are aligned with the buttons and the spine of the processing unit.

9. Press on the microphone protectors with your thumb, one at a time, until the microphone protectors are inserted into the microphone holes. When inserted properly, the top surface of the microphone protector should align with the top of the processing unit spine.
10. Remove the Microphone Protector Applicator by carefully lifting it upwards from the coil cable end.
To insert the microphone protectors using your fingers

1. Ensure that your hands and processor are clean, as dirt and oils can degrade the microphone protectors.

2. Hold the microphone protector between your thumb and index finger. The side with the tabs on the sides of the microphone protector should face up.

3. Place the microphone protector on the spine of the processing unit.

4. Gently push the microphone protector towards the microphone hole until the microphone protector is correctly positioned over the microphone hole. The tabs on the sides of the microphone protector should align with the recesses on the sides of the microphone hole.

5. Push the microphone protector into the microphone hole.

6. Check that the top surface of the microphone protector is aligned with the top of the processing unit spine.
Care and maintenance of standard battery modules (disposable batteries)

Without proper care and maintenance, moisture or sweat due to humidity or an active life style (e.g. sports) can damage your standard battery module. To protect your standard battery module, follow the guidance in this section.

Using the Zephyr Dry and Store to store your processor:

1. Wipe the processor with a soft dry cloth before removing the battery cover.

2. Remove the battery cover from the battery holder.

3. Remove the disposable batteries (zinc air batteries) from the battery holder.

4. Place the processing unit, coil and coil cable, battery cover and batteries in the Zephyr Dry and Store. The battery holder can remain attached to the processing unit.
If the processor gets wet:

1. Wipe the processor with a soft dry cloth before removing the battery cover.
2. Remove the battery cover from the battery holder.
3. Remove the batteries from the battery holder.
4. Wipe the battery holder and battery cover (inside and outside) with a soft dry cloth to remove any water, moisture or sweat.
5. Replace the disposable batteries with new ones.
If you notice any dirt or debris in the battery holder:

1. Remove the batteries from the battery holder.
2. Clean the battery contacts with a cotton bud.
3. If the contacts are still dirty, replace the battery holder with a new one.
Storing your processor when not in use

Moisture or humidity may cause your processor to cut-out or stop working.

Store your processor overnight or when you are not using it, in the Zephyr Dry & Store. The coil, coil cable, coil magnet and battery module (if it is not being charged) should remain attached to the processing unit. Turn off your processor before placing it in the Zephyr Dry & Store.

Using the Everyday Case

You can use the Cochlear™ Nucleus® CP800 Series Everyday Case for carrying your processor with you (e.g. when travelling). It is light and easy to carry, and has the flexibility to fit all components (e.g. coil, earhook, etc.). It has an air cushion for holding the components in place. A desiccant (drying chemical) is provided, allowing the case to be used as a dry aid kit for removing moisture from your processor.
General warnings and precautions for the use of your processor

Please read the following warnings and precautions before using your processor:

- Your processor, accessories, battery charger and tools contain small parts that may be hazardous if swallowed, or may cause choking if ingested or inhaled. If this occurs, seek prompt medical attention at the nearest emergency centre or Poisons Information Centre (e.g. if coil magnet is swallowed, seek prompt medical attention).

- Using the cables or parts of your processor in any way contradictory to their intended purpose (e.g. chewing) can cause injury.

- If your processor earhook hooks onto any part of your body, it may cause injury.

- Wearing a tight-fitting hat over the coil can cause skin damage beneath the coil.

- Do not remove the battery module from the processing unit while wearing the processor as your hair can get caught in the battery contacts.

- When operating machinery, ensure that the coil is securely in place to avoid the coil getting caught in the machine.

- Remove your processor immediately if it becomes unusually warm or hot, and seek advice from your clinician. Parents and caregivers should touch their child’s or recipient’s processor to check for heat if the child or recipient is showing signs of discomfort.

- Do not wear your processor while sleeping, as you may not become aware of your processor becoming unusually warm or hot.

- Do not allow children or recipients with disabilities to wear their processor while sleeping.

- When using retention aids such as the Snugfit or LiteWear cable, be aware that it may take longer to remove the processor if it the processor becomes unusually warm or hot. Do not attach the LiteWear cable beneath layers of clothing.

- Ensure all cables used by a child are securely attached to their body.
Caring for your processor

- Keep the drying chemical material away from young children. Swallowing this material can cause serious internal injuries.
- Do not place your processor in an oven (e.g. microwave oven).
- Do not use a drying aid that has an Ultra Violet C (UVC) lamp (e.g. Freedom Dry and Store).
- Store spare magnets safely and away from cards that may have a magnetic strip (e.g. credit cards, bus tickets, etc.)

Disposal of electrical components

Dispose of electrical components in accordance with your local regulations.
Other information

Your warranty and registration form

Your warranty is included in the document pack you received with your processor.

Please complete the registration form and return to Cochlear within 30 days of receiving the product.

For future reference, keep the CP810 Sound Processor User Guide in a safe place.

Storing your personal details

Your processor stores your first name, last name, implant type, program identifier and recipient identifier.

This allows you to:

• Attend another clinic for programming if needed.
• Identify your processor as your own.

When the clinician opens your programming session, they have access to this information. This information can only be accessed in a programming session.

Processor serial number

Your processor serial number is located on the inside curve of the processing unit. Make a note of the serial number for future reference.

Technical information

Specifications

Physical configuration

The CP810 Sound Processor is a modular device, made of three parts: the processing unit, battery module and coil. The complete device sits behind the ear during normal operation, with the coil aligned over the implant.
The processing unit comprises:

- Two omni-directional microphones for receiving sound.
- An internal telecoil for receiving magnetic fields radiated by phones, neckloops and roomloops (optimised for phone use).
- Custom analogue and digital integrated circuits with digital signal processing (DSP) and bi-directional wireless communication capabilities.
- A dual-colour light emitting diode (indicator light) for visual indication of processor function or processor problem.
- Two push-buttons to allow user control of key features.
- Custom 4-pin accessory connector for connection of audio accessories (e.g. Personal Audio Cable).
- Custom 4-pin coil connector for connection of the coil cable.
- A range of earhooks.

The batteries provide power to the processor. The following options are available for powering the processor:

- Two disposable batteries.
- Rechargeable battery module.

The coil acts as a transformer coupling that transfers energy and data information to the implant. It is connected to the processing unit by the coil cable. The coil cable is a separate cable, which can be detached from both the coil and the processing unit. It is connected to both the coil and the processing unit by custom 4-pin connectors. The connection forms a seal to prevent moisture ingress.

Materials

- Processing unit is made of polyester.
- Battery modules (all types) are made of polyester.
- Coil is made of elastomer. The coil cable is made of polypropylene, elastomer and PVC.
- LiteWear Cable is made of polyester, elastomer and PVC.
- LiteWear Retention Case is made of polyamide.
- LiteWear Fixing Aids are made of polycarbonate.
Product component dimensions

<table>
<thead>
<tr>
<th>Component</th>
<th>Length</th>
<th>Width</th>
<th>Depth</th>
<th>External diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing unit</td>
<td>23 mm</td>
<td>9 mm</td>
<td>19 mm</td>
<td></td>
</tr>
<tr>
<td>Standard battery module</td>
<td>28 mm</td>
<td>9 mm</td>
<td>19 mm</td>
<td></td>
</tr>
<tr>
<td>Compact rechargeable battery module</td>
<td>19 mm</td>
<td>9 mm</td>
<td>19 mm</td>
<td></td>
</tr>
<tr>
<td>Standard rechargeable battery module</td>
<td>28 mm</td>
<td>9 mm</td>
<td>19 mm</td>
<td></td>
</tr>
<tr>
<td>Coil</td>
<td></td>
<td>8 mm</td>
<td>32 mm</td>
<td></td>
</tr>
</tbody>
</table>

Weight

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing unit (including earhook)</td>
<td>5.5 g</td>
</tr>
<tr>
<td>Standard battery module with batteries</td>
<td>7.5 g</td>
</tr>
<tr>
<td>Compact rechargeable battery module</td>
<td>5.4 g</td>
</tr>
<tr>
<td>Standard rechargeable battery module</td>
<td>10.7 g</td>
</tr>
<tr>
<td>Coil (without coil magnet)</td>
<td>4.2 g</td>
</tr>
</tbody>
</table>

Operating characteristics

Processing unit

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value / range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range</td>
<td>100 Hz to 8 kHz</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>2 V to 4.5 V</td>
</tr>
<tr>
<td>Power consumption</td>
<td>20 mW to 100 mW</td>
</tr>
<tr>
<td>Push-button functions</td>
<td>Turn processor on and off, turn telecoil on and off, change program, lock and unlock buttons, change sensitivity or volume level.</td>
</tr>
</tbody>
</table>
Battery module

<table>
<thead>
<tr>
<th>Type</th>
<th>Capacity / voltage range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard battery module</td>
<td>Refer to battery manufacturer's specifications.</td>
</tr>
<tr>
<td>Compact rechargeable battery module</td>
<td>120 mAh / 3.0 V to 4.2 V</td>
</tr>
<tr>
<td>Standard rechargeable battery module</td>
<td>205 mAh / 3.0 V to 4.2 V</td>
</tr>
</tbody>
</table>

Coil

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value / range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating voltage</td>
<td>2.0 V to 2.6 V</td>
</tr>
<tr>
<td>Operating frequency</td>
<td>5 MHz</td>
</tr>
</tbody>
</table>

Environmental conditions

Processing unit, coil, coil cable and accessories

<table>
<thead>
<tr>
<th>Condition</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage temperature</td>
<td>-40 °C</td>
<td>+50 °C</td>
</tr>
<tr>
<td>Storage relative humidity</td>
<td>0% RH</td>
<td>90% RH</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>+5 °C</td>
<td>+50 °C</td>
</tr>
<tr>
<td>Operating relative humidity</td>
<td>0% RH</td>
<td>90% RH</td>
</tr>
</tbody>
</table>

Standard battery module

Check the battery manufacturer's recommended operating conditions for disposable batteries used in your processor.
Certification and applied standards

The CP810 sound processor fulfils the essential requirements listed in Annex 1 of the EC directive 90/385/EEC on Active Implantable Medical Devices as last amended by EC Directive 2007/47/EEC. It was approved for CE-Mark according to Annex 2 by Notified Body 0197 in 2009.

Equipment classification


IP rating of processor

The IP rating of your processor is as described in the section Caring for your processor.

FCC (Federal Communications Commission) and Canadian IC compliance

This device complies with part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

• This device may not cause harmful interference.
• This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made to this equipment not expressly approved by Cochlear Limited may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment
does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

FCC ID number: WTOCP81000
IC ID number: 8039A-CP81000
Labelling symbols

The symbols below are found on your processor components and packaging:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>![i]</td>
<td>See Instructions</td>
</tr>
<tr>
<td>![!]</td>
<td>Refer to warnings and cautions in related user documentation</td>
</tr>
<tr>
<td>![Glass]</td>
<td>Fragile</td>
</tr>
<tr>
<td>![Temp]</td>
<td>Storage Temperature Limits</td>
</tr>
<tr>
<td>![Humidity]</td>
<td>Relative Humidity Limits</td>
</tr>
<tr>
<td><strong>IP57</strong></td>
<td>Ingress Protection Rating</td>
</tr>
<tr>
<td>•</td>
<td>Protected against access of solid foreign objects greater than or equal to 1.0 mm diameter.</td>
</tr>
<tr>
<td>•</td>
<td>Protected against failure from dust penetration.</td>
</tr>
<tr>
<td>•</td>
<td>Protected against failure from temporary immersion in water.</td>
</tr>
<tr>
<td><strong>IP44</strong></td>
<td>Ingress Protection Rating</td>
</tr>
<tr>
<td>•</td>
<td>Protected against access of solid foreign objects greater than or equal to 1.0 mm diameter.</td>
</tr>
<tr>
<td>•</td>
<td>Protected against failure from splashing water.</td>
</tr>
<tr>
<td>![CE]</td>
<td>CE Registration Mark</td>
</tr>
<tr>
<td>![CE]</td>
<td>CE Registration Mark Certification - Europe</td>
</tr>
<tr>
<td>Symbol</td>
<td>Meaning</td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>![Fire Symbol]</td>
<td>Disposal - do not dispose in fire</td>
</tr>
<tr>
<td>![Recycle Symbol]</td>
<td>Disposal – dispose of electrical components in accordance with your local regulations</td>
</tr>
<tr>
<td>![Japan Certification]</td>
<td>Certification - Japan</td>
</tr>
<tr>
<td>![Australia Certification]</td>
<td>Certification - Australia</td>
</tr>
<tr>
<td>![New Zealand Certification]</td>
<td>Certification - New Zealand</td>
</tr>
<tr>
<td>![Serial Number]</td>
<td>Serial number</td>
</tr>
<tr>
<td>![Date of Manufacture]</td>
<td>Date of manufacture</td>
</tr>
<tr>
<td>![Type B Equipment]</td>
<td>Type B Equipment</td>
</tr>
<tr>
<td>![Rx Only]</td>
<td>This device restricted to sale by or on the order of a physician</td>
</tr>
<tr>
<td>![Mixed Sources]</td>
<td>Mixed Sources - Product group for well managed sources and other controlled sources.</td>
</tr>
<tr>
<td>![Mixed Sources]</td>
<td>FSC certification only applies to cardboard packaging.</td>
</tr>
<tr>
<td>![Recycle]</td>
<td>Recycle</td>
</tr>
</tbody>
</table>

CP810 Sound Processor  
Cochlear Limited  
14 Mars Road, Lane Cove  
NSW 2066, Australia  
Made in Australia
Legal statement

The statements made in this guide are believed to be true and correct as of the date of publication. However, specifications are subject to change without notice.

Nucleus® cochlear implant systems are covered by one or more international patents.

© Cochlear Limited 2010
### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessory socket</td>
<td>Four-pin connector to attach accessories to the processing unit.</td>
</tr>
<tr>
<td>Accessory socket cover</td>
<td>Cover that protects the accessory socket.</td>
</tr>
<tr>
<td>Advanced user interface</td>
<td>Allows you to use the processor buttons to perform the following functions:</td>
</tr>
<tr>
<td></td>
<td>• Turn your processor on and off.</td>
</tr>
<tr>
<td></td>
<td>• Change your current program.</td>
</tr>
<tr>
<td></td>
<td>• Turn telecoil on and off.</td>
</tr>
<tr>
<td></td>
<td>• Lock and unlock processor buttons.</td>
</tr>
<tr>
<td></td>
<td>• Change microphone sensitivity or volume.</td>
</tr>
<tr>
<td>Alert</td>
<td>Indicates a processor error or warning.</td>
</tr>
<tr>
<td>Audio accessories</td>
<td>Used to help optimise hearing in different listening situations.</td>
</tr>
<tr>
<td>Auto Telecoil</td>
<td>Automatically turns on/off the telecoil when using the phone or when you are in a roomloop environment.</td>
</tr>
<tr>
<td>Battery Module</td>
<td>Powers the sound processor. The processor can be powered by either a standard battery module or a rechargeable battery module.</td>
</tr>
<tr>
<td>Cochlea</td>
<td>The auditory portion of the inner ear, which the implant stimulates to create hearing.</td>
</tr>
<tr>
<td>Cochlear™ Nucleus® CP800 Series Battery Charger</td>
<td>Used to recharge the sound processor rechargeable batteries and/or your remote assistant.</td>
</tr>
<tr>
<td>Product Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Bilateral Personal Audio Cable</strong></td>
<td>Connects a battery-powered sound source to two sound processors (bilateral use).</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Coil Spacer</strong></td>
<td>Helps reduce magnet strength. In some cases where the coil is too close to the implant, the coil spacer can improve coil performance.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Euro Accessory Adaptor</strong></td>
<td>Accessory adaptor for connecting a Euro FM receiver to your processor.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Everyday Case</strong></td>
<td>A small case for carrying the processor.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Freedom™ Accessory Adaptor</strong></td>
<td>Connects accessories such as FM cables and Freedom™ Monitor Earphones to the sound processor.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Global Power Adaptor</strong></td>
<td>Connects the CP800 Series Battery Charger to mains power.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Lapel Microphone</strong></td>
<td>Improves hearing performance in noisy environments.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series LiteWear Cable</strong></td>
<td>Attaches the processing unit to the LiteWear wearing option.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series LiteWear Case</strong></td>
<td>Protects and holds the battery module securely when using the LiteWear wearing option.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series LiteWear Fixing Aid</strong></td>
<td>Attaches the LiteWear Case to your clothing.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series LiteWear wearing option</strong></td>
<td>Allows the battery module to be attached to the body.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Mains Isolation Cable</strong></td>
<td>Provides electrical protection when connecting the Personal Audio Cable or the Bilateral Personal Audio Cable to a mains-powered sound source.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Monitor Earphones</strong></td>
<td>For use by a person with unaided hearing to check that sound is being received by the processor microphones, telecoil or an audio accessory.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Personal Audio Cable</strong></td>
<td>Connects a battery-powered sound source to a single sound processor.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Portable Phone Cable</strong></td>
<td>Connects a phone or a battery powered sound source with a 2.5 mm socket.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Rechargeable Battery Module</strong></td>
<td>This is the rechargeable battery.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Standard Battery Module</strong></td>
<td>Holds two disposable batteries. The Standard Battery Module consists of a battery holder and a battery cover.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Snugfit™</strong></td>
<td>Holds the processing unit more securely behind the ear.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP810 Sound Processor</strong></td>
<td>Used together with a cochlear implant to transfer sound to the cochlea.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Tamper Resistant Battery Cover</strong></td>
<td>Allows the battery cover to be locked to the battery holder. This prevents children from detaching the battery cover from the battery holder.</td>
</tr>
<tr>
<td><strong>Cochlear™ Nucleus® CP800 Series Tamper Resistant Earhook</strong></td>
<td>Locks the earhook to the processing unit.</td>
</tr>
<tr>
<td><strong>Coil</strong></td>
<td>Part of the sound processor that lies on the side of the head. The processing unit transfers the digitally coded sound through the coil to the implant just under the skin.</td>
</tr>
<tr>
<td><strong>Glossary</strong></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td><strong>Coil cable</strong></td>
<td>The cable that attaches the coil to the processing unit.</td>
</tr>
<tr>
<td><strong>Coil magnet</strong></td>
<td>Holds the coil in place over the implant.</td>
</tr>
<tr>
<td><strong>CP810 Sound Processor</strong></td>
<td>See Cochlear Nucleus CP810 Sound Processor.</td>
</tr>
<tr>
<td><strong>CR110 Remote Assistant</strong></td>
<td>A hand-held remote control that enables you to communicate with your Cochlear Nucleus CP810 sound processor. It also provides diagnostic and troubleshooting assistance.</td>
</tr>
<tr>
<td><strong>Earhook</strong></td>
<td>Secures the processor to the ear. The earhook is attached to the processing unit.</td>
</tr>
<tr>
<td><strong>Everyday program</strong></td>
<td>Ideal for the typical listening situations of everyday life.</td>
</tr>
<tr>
<td><strong>FM Cable</strong></td>
<td>Used to send sound signals from a commercially available FM listening system to the sound processor.</td>
</tr>
<tr>
<td><strong>Focus program</strong></td>
<td>Useful where there is significant background noise, but the focus is on hearing what one person or a small group of people are saying.</td>
</tr>
<tr>
<td><strong>Implant</strong></td>
<td>An implanted electronic device that bypasses the damaged hair cells in the inner ear or cochlea and stimulates the hearing nerves directly. It consists of a receiver stimulator and electrode array.</td>
</tr>
<tr>
<td><strong>Indicator light</strong></td>
<td>A dual-colour light emitting diode. It provides a visual indication when you perform a function, or when there is a problem with the processor.</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>IP44</strong></td>
<td>This is the ingress protection rating of the CP810 Sound Processor when using disposable batteries. For more information, see <em>Protecting your processor from dust and water damage</em>.</td>
</tr>
<tr>
<td><strong>IP57</strong></td>
<td>This is the ingress protection rating of the processor when using the rechargeable battery module. For more information, see <em>Protecting your processor from dust and water damage</em>.</td>
</tr>
<tr>
<td><strong>Mic Lock™</strong></td>
<td>Helps hold the processing unit in place behind the ear.</td>
</tr>
<tr>
<td><strong>Microphones</strong></td>
<td>Capture sound for coding by the processing unit.</td>
</tr>
<tr>
<td><strong>Microphone protectors</strong></td>
<td>Protect the microphones from dirt and moisture.</td>
</tr>
<tr>
<td><strong>Microphone sensitivity</strong></td>
<td>Controls the softest level of sound picked up by the microphones.</td>
</tr>
<tr>
<td><strong>Music program</strong></td>
<td>Used to listen to all types of music from any audio source.</td>
</tr>
<tr>
<td><strong>Noise program</strong></td>
<td>Suitable for environments with significant background noise, improving the audibility of wanted sound from all sides.</td>
</tr>
<tr>
<td><strong>Nucleus®</strong></td>
<td>Nucleus is the brand name to reference the category of Cochlear Implant Hearing Solutions from Cochlear Limited.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Press</td>
<td>The action of pressing a button on the sound processor.</td>
</tr>
<tr>
<td>Private tone</td>
<td>You hear a tone when you perform a function, or when there is a problem with your processor.</td>
</tr>
<tr>
<td>Processor</td>
<td>See sound processor.</td>
</tr>
<tr>
<td>Processing unit</td>
<td>Component of the processor where sound signals are encoded for transfer to the implant.</td>
</tr>
<tr>
<td>Program</td>
<td>Settings that determine how a processor converts environmental sound into channel stimulation data for the recipient's electrode array. Up to four programs are available for your use, depending on how your clinician programmed your processor.</td>
</tr>
<tr>
<td>Simple user interface</td>
<td>Allows you to use the processor buttons to perform the following functions:</td>
</tr>
<tr>
<td></td>
<td>• Turn your processor on and off.</td>
</tr>
<tr>
<td></td>
<td>• Change your current program.</td>
</tr>
<tr>
<td></td>
<td>• Turn telecoil on and off.</td>
</tr>
<tr>
<td></td>
<td>• Lock and unlock processor buttons.</td>
</tr>
<tr>
<td>SmartSound™</td>
<td>SmartSound is a suite of four input sound processing technologies. These technologies are applied to four available programs, providing control over how sound is processed in different listening environments.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sound processor</td>
<td>Captures and codes sound which is then transferred through the coil to the cochlear implant. It consists of a processing unit, battery module, earhook, coil and coil cable.</td>
</tr>
<tr>
<td>Sound processor cover</td>
<td>Personalises the sound processor. Covers can also be used to protect the sound processor from scratches.</td>
</tr>
<tr>
<td>Telecoil</td>
<td>An in-built antenna that receives signals from a telephone, a room fitted with an induction loop, or personal induction loop, such as a neckloop or cushion loop (commercially available).</td>
</tr>
<tr>
<td>Volume</td>
<td>The volume controls your perception of loudness.</td>
</tr>
<tr>
<td>Zephyr Dry &amp; Store®</td>
<td>Unit that helps remove moisture from the sound processor.</td>
</tr>
</tbody>
</table>
Index

A

Advanced user interface  57

Audio accessories

changing from audio accessory to microphones  74
changing from microphones to audio accessory  74
connecting a Euro FM receiver  72–73
connecting a Freedom audio accessory  72
connecting and disconnecting  71
using  67–74
using an FM cable  73
using the Euro Accessory Adaptor  72–73
using the Mains Isolation Cable  73
using the monitor earphones  68
warnings and precautions  74

Auto Telecoil  54

B

Battery module  11

attaching  48
battery charger indicator lights  64
detaching  47
locking and unlocking  39
recharging  62–63
replacing  59–61
warnings and precautions  65–66

Buttons

changing programs  49–50
locking  56
turning off processor  49
Index

turning on processor 49
unlocking 56
using the Advanced User Interface 57
using the Simple User Interface 10

C

Caring for the processor

caring for standard battery modules 87–89
cleaning processor parts 80
cleaning the battery charger 81
drying the processor 79–80
protecting the processor from dust and water damage 78
replacing microphone protectors 82–86
storing the processor 90
using the Everyday Case 90
using the Zephyr Dry and Store 79–80
wearing the processor in cold or hot temperatures 77

Certification and applied standards 97

Cleaning

processor parts 80
the battery charger 81

Coil 12

attaching to the processing unit 16
checking 58

Coil cable 12

attaching to the coil 16
changing 21–22

Coil magnet 13

adjusting the depth 19
changing the strength 20–21
Coil Spacer

placing on the coil  44
removing from the coil  45

D

Drying

processor  79–80
using the Dry and Store  79

E

Earhook  10

changing  18

Environmental conditions  96

operating relative humidity  96
operating temperature  96
storage relative humidity  96
storage temperature  96

Euro Accessory Adaptor  71

connecting an FM receiver  72

Everyday case  90

F

FCC compliance  97–98

G

Glossary  103–109
I

Indicator lights  50–52

IP rating of processor  78

L

Labelling symbols  99–100

Legal statement  101

LiteWear option  27

LiteWear Cable  28
   attaching  28–29
   detaching  30
   locking the battery module to the LiteWear Cable  32
   locking the processing unit to the LiteWear Cable  31

LiteWear Case  33
   inserting the battery module into the LiteWear Case  34
   removing the battery module from the LiteWear Case  35

LiteWear Fixing Aid  36
   attaching  37
   detaching  38

Locking and unlocking

   battery module  39
   processor buttons  56
   tamper resistant battery cover  40

Loudness

   changing  55–56

M

Materials  94
Mic Lock

fitting 23–24

Microphone protectors 13

replacing 82–86

Microphone sensitivity

controlling 55

P

Portable phone cable 69

Private tones 52–53

Processing unit 9

attaching the battery module to the processing unit 48
attaching the coil to the processing unit 16
detaching the battery module from the processing unit 47

Processor

caring for 77–92
changing programs 49–50
changing wearing option 27
components 9
identifying processors 43
indicator lights 50–52
locking and unlocking buttons 56
options 14
placing on ear 15
private tones 52–53
serial number 93
specifications 93–96
turning off 49
Index

turning on 49
using 49–58
using the telephone with the processor 55
warnings and precautions 91–92
warranty 93
wearing 15–45

Programs

changing 49–50

Protecting

from dust 78–81
from water damage 78–80

R

Replacing microphone protectors 82–86

S

SmartSound 14

Snugfit 25

attaching 26
removing 26

Sound processor 7

Sound processor covers

attaching 75
removing 76

Storing

personal details 93
processor 90
Tamper resistant battery cover

locking 40
unlocking 40

Tamper resistant earhook

using 41–42

Telecoil 53

Telephone

using 55

Volume

controlling 56

W

Warranty 93

Wearing option

changing 27

Z

Zephyr Dry and Store 79