Custom Sound® Suite version 5.1

Custom Sound Suite version 5.1 is an upgrade to the Custom Sound Suite version 5.0 commercial release. Custom Sound Suite version 5.1 is a complete Custom Sound Suite installation and continues to support existing Cochlear™ sound processors and implants. It also introduces product improvements to address recently identified issues.

These release notes support Custom Sound Suite 5.1.12.57 or later.

What’s new in Custom Sound Suite version 5.1

- Custom Sound 5.1 supports programming the CP1000 – Nucleus 7 Sound Processor with Nucleus® 24 implants (Contour Advance CI24R (CA), 24K CI24R (ST), Contour CI24R (CS), ABI, Double Array, CI24M).
- Custom Sound 5.1 is compatible with SQL Express 2014, 2016 and 2017.
- The Objective Offset Method has been refined and now uses a dynamic range of 40CL to optimise fitting, and not 2CL as in previous releases. After measuring NRT, when you change the programming method to the Objective Offset method, the profile of the T- and C-levels reflects the NRT measurements with a dynamic range of 40 CL.

The Objective Preset Method is no longer available.
• The battery estimation function is updated to include estimations for mercury-free batteries.

• When a MAP is upgraded to CP1000 – Nucleus 7 Sound Processor through the Product Lifecycle Management and Support program, the Auto power level setting from the existing MAP is retained in the upgraded MAP and the new power level is estimated. The recipient is not required to be present for a fitting session to set the power level.

• A new setting for CP1000 – Nucleus 7 Sound Processors, Allow ForwardFocus, is added to the Processor Configuration Clinician-Adjustable Settings which gives clinicians the ability to turn the ForwardFocus option on or off for recipients (the default is off for adults and paediatrics). ForwardFocus is an additional user controlled feature designed to help recipients hear face-to-face conversations better in challenging listening environments by reducing distracting sounds occurring from behind the recipient.

ForwardFocus should only be enabled for users 12 years and older who can reliably provide feedback on sound quality and understand how to use the feature when moving to a different or changing environments.

An updated version of the Nucleus Smart App is required for recipients to be able to turn Forward Focus on and off.
Tips for programming CP1000 – Nucleus 7 Sound Processors

When programming CP1000 – Nucleus 7 Sound Processors, be aware that the processor light settings are different from CP900 Series Sound Processors. The light settings available for the CP1000 – Nucleus 7 Sound Processors are:

- **Child**: This setting shows all lights at all times, when the coil is on or off the implant. This allows parents and carers to see the state of the sound processor.

- **Adult**: This setting shows lights for alert states or program changes when the coil is on or off the implant. Lights indicating auxiliary input are only shown when the coil is off the implant.

The functionality of the Monitor setting that is available for CP900 Series Sound Processors is included in the Adult setting for CP1000 – Nucleus 7 Sound Processors.

Note that Aqua+ coils are **not** for use in fitting. Attempting to use an Aqua+ coil to program a Nucleus 6 or Nucleus 7 sound processor produces an error message, "No communication with implant".

When creating or upgrading MAPs for CP1000 – Nucleus 7 Sound Processors and enabling the Soft MAP Start Duration note that there is a known issue associated with the feature:

- After the sound processors is turned on the first time, there is a gradual ramp up to full volume set in the MAP as expected, but the ramp up also occurs in the following situations:
  - Removing the coil and placing the coil back on the implant
  - Streaming audio from a wireless accessory or smart phone
  - Turning on ForwardFocus

If you want to enable Soft MAP Start for your recipient, counsel the recipient to bypass any subsequent ramp up by pressing the sound processor button during ramp up.

Tips for bimodal fitting

When linking a CP1000 – Nucleus 7 Sound Processor with a Made for iPhone hearing aid, be aware that there is a time limit of 2 minutes after turning on the hearing aid and linking it with the sound processor. If the limit is exceeded, you need to repeat the linking process.
Improvements in Custom Sound Suite version 5.1

- In the CP1000 – Nucleus 7 Processor Configuration Window, Recipient Hearing Adjustments are renamed to MySmartSound Settings.

As with previous releases of Custom Sound, Nucleus 24 implants are not compatible with Master Volume or Bass and Treble control.

Issues fixed in Custom Sound Suite version 5.1

The following issues have been resolved in this release:

<table>
<thead>
<tr>
<th>Issue Description</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The message, “Battery information not estimated. Check Coil.” appears when the coil is on the implant.</td>
<td>The message does not appear when the coil is on the implant.</td>
</tr>
<tr>
<td>For CP800 Series Sound Processors, the ADRO and None options are not available in the Live Program Settings window.</td>
<td>The ADRO and None options are now available in the Live Program Settings window for CP800 Series Sound Processors.</td>
</tr>
</tbody>
</table>
Installation and upgrade notes for Custom Sound Suite version 5.1

When installing or upgrading Custom Sound Suite, the computer may need to be restarted. Ensure you close any applications before installing the software.

When installing Custom Sound Suite, the user account used for installation must be added to the Windows Administrator group. When creating a database connection using the Windows integrated security option, use the CochlearClinical user account so that clinicians can start Custom Sound without experiencing any errors related to connecting to the database.

Upgrading to Custom Sound Suite version 5.1 from Custom Sound Suite version 5.0 or earlier requires a database upgrade. If your clinic uses a network database, careful planning is required to ensure that all computers with Custom Sound can connect to the database.

System requirements

Supported operating systems:

- Windows 10
- Windows 8
- Windows 7 (SP1)

Note that Custom Sound Suite 5.1 no longer supports the Windows Vista operating system.

Supported database servers:

- SQL Server 2008 Full and Express (SP3)
- SQL Server 2008 R2 Full and Express (SP2)
- SQL Server 2012 Full and Express (SP2)
- SQL Server 2014 Full and Express
- SQL Server 2016 Full and Express
- SQL Server 2017 Full and Express

When installing Custom Sound for the first time, or upgrading an existing Custom Sound to v5.1:

- If SQL Server 2008 R2 is not already installed then SQL Server 2012 is installed.
- If SQL Server 2008 R2 is already installed then there is no need to install SQL Server 2012.

Recommended computer system requirements:

- Processor: Intel® Core i5™ or later
- RAM: 4 GB or greater
- Hard drive: 10 GB of available space
- CD-ROM: Required for software installation only
- Screen resolution: 1280 x 1024 or greater
- USB port: 2 x USB ports
- Wireless: Bluetooth® 4.0 or higher, required for Cochlear Wireless Programming Pod

Any computer system connected to the Cochlear system, when used in programming mode, should meet FCC 47CFR Part 15 Class B and CISPR22 Class B emissions requirements. Consult the documentation provided by the computer system manufacturer to ensure compliance, prior to connecting any Cochlear device.

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### Known issues in Custom Sound software version 5.1

The following known issues exist in the Custom Sound software version 5.1:

<table>
<thead>
<tr>
<th>Issue Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Display issues</strong></td>
<td></td>
</tr>
<tr>
<td>The icons on the Set Levels toolbar do not display correctly when using the Windows Classic theme.</td>
<td>Change the theme to a standard Windows or aero theme.</td>
</tr>
<tr>
<td>On some computers that support high resolution monitors, text and controls such as buttons are not fully visible.</td>
<td>In Windows Control Panel, lower the screen resolution. If this issue remains, decrease the font size to 100% in Control Panel &gt; Display.</td>
</tr>
<tr>
<td>The impedance measurement graph on the Impedance Measurement Details window appears greyed out.</td>
<td>Click the Report button to see a clear graph of the impedance measurements.</td>
</tr>
<tr>
<td><strong>General programming issues</strong></td>
<td></td>
</tr>
<tr>
<td>When the batteries in the CP950 Kanso Sound Processor are drained (have a voltage &lt; 1V), the warning message &quot;Batteries not inserted properly&quot; appears instead of a message describing low battery charge.</td>
<td>The clinician can perform fitting session once a charged battery (voltage &gt;1V) has been fitted which Custom Sound will detect.</td>
</tr>
<tr>
<td>When fitting a recipient with CP1000 – Nucleus 7 Sound Processors, sometimes if the coil is removed from the implant during live voice testing and you stop live voice testing, the connection to the sound processor is lost when you place the coil back on the implant and go live.</td>
<td>If the coil is removed, place the coil back on the implant without stopping live voice testing. If you have stopped live voice testing, disconnect the sound processor from the programming pod and then reconnect the sound processor to the programming pod to resume the fitting session.</td>
</tr>
<tr>
<td>When fitting a bilateral recipient with the same model of sound processor on both sides and both sound processors are connected to Custom Sound, if any processor settings are different the combined Processor Configuration window shows the different settings for the processor on the left side. The correct settings are written to both processors.</td>
<td>Disconnect one side to see the processor settings for the other side to confirm which settings have been configured for the sound processor.</td>
</tr>
<tr>
<td>When fitting a bilateral recipient with a Nucleus 24 implant on the left side and with both sound processors connected to Custom Sound, the MVBT settings do not appear in the combined Processor Configuration window.</td>
<td>Disconnect the sound processor for the left side and configure MVBT settings for the sound processor on the other side.</td>
</tr>
<tr>
<td>When fitting a bilateral recipient with CP1000 - Nucleus 7 Sound Processors on both sides, the message “The volume settings between the left and right sound processors are different…” appears. This message appears in error if the number of programs written to each sound processor is different.</td>
<td>If the volume settings are the same, you can ignore the message.</td>
</tr>
<tr>
<td>Issue Description</td>
<td>Workaround</td>
</tr>
<tr>
<td>-------------------</td>
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</tr>
<tr>
<td><strong>Hybrid programming issues</strong></td>
<td></td>
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<tr>
<td>If the recipient’s audiogram has no measured response at 125 Hz or has a measured response of 90 dB or higher at 125 Hz or 250 Hz, you cannot create a hybrid MAP.</td>
<td>If the audiogram has a &quot;No Response&quot; point delete it from the audiogram. Add a threshold of at least 85 dB at 125 Hz.</td>
</tr>
</tbody>
</table>
Known issues in Custom Sound EP software version 5.1

The following known issues exist in the Custom Sound EP software version 5.1:

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<tr>
<td>Where default settings are used, obtaining triggered threshold measurements in Custom Sound EP software for a CP810 Sound Processor can generate a sync pulse with too long duration.</td>
<td>The setup can be tested prior to executing the measurements by selecting the 'Test Setup' button on the Settings window.</td>
</tr>
</tbody>
</table>

If you identify an issue not mentioned in the preceding summary, please use the Provide Feedback function in the Help menu in the Custom Sound software to inform Cochlear.

Please contact your Cochlear representative if you require any additional information.

Legal statement

The statements made in these Custom Sound Suite Release Notes are believed to be true and correct as of the date of publication. However, specifications are subject to change without notice.

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