AB Advanced Bionics

SOUNDWAVE™ 3.1
Software Fitting Manual

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SoundWave™ fitting software

HiResolution™ bionic ear system

HiRes™ Optima sound processing

HiRes Fidelity 120™ software

ClearVoice™ sound processing

CII Bionic Ear™ system

HiRes 90K™ implant

HiRes 90K™ Advantage implant

HiRes™ Ultra implant

HiFocus™ 1j electrode

HiFocus Helix™ electrode

HiFocus™ MS electrode

IntelliLink™ safety feature

Platinum BTE™ sound processor

Auria™ Harmony™ BTE sound processor

Neptune™ sound processor

FireFly™ status indicator

T-Mic™ microphone

PowerCel™ batteries

Warnings

- In order to avoid delivering an overly loud stimulation to the patient:
    - Exercise caution when making large increases in M levels especially while stimulating the patient.
    - Exercise caution when making large increases in M levels in interpolation mode especially while stimulating the patient.
    - Note that patients should be advised to use the programmed Harmony sound processor only with the C1 implant that was stimulated during fitting.
- All instructions in this manual apply to both C1 and CII Family implants except where stated otherwise.
- You should instruct those patients capable of understanding your communications to remove the headpiece if uncomfortable stimulation is encountered.
- Any adjustment made to a new program may affect the perception of familiar sounds.
- Some patients accustomed to S-Series processors using the SAS strategy may not accept the sound quality. Sound quality issues may be resolved by counseling and/or extended use.

- Advanced Bionics has a toll free technical hotline phone number (877-271-6727) where AB audiologists may be contacted from 5:00AM to 5:00PM Monday through Friday Pacific Time to answer questions about SoundWave, related hardware or other technical issues.
- If you are outside the U.S. and Canada, technical support is provided locally. If you have any questions about SoundWave, related hardware or other technical issues, please contact your local Advanced Bionics representative.

Table of Contents

Welcome

What is New?

SoundWave 3.1, the latest version of fitting software from Advanced Bionics, introduces several new features and fitting possibilities while continuing to support legacy processors.

- Unilateral Naída CI Q70 and Q90 sound processors can now be initialized to receive input from a compatible wireless microphone worn on the contralateral ear.
- Simple fitting of auto DM input, allowing patients who use DM boots or other auxiliary receivers automatic access to input without a program change.
- Easily create progressive programs to your preferred increments without adding time or complexity to your fitting session.
- New program template configuration allows the professional the opportunity to set-up programs based on personalized fitting preferences.

SoundWave 3.1 software also delivers other minor changes and modifications that improve the overall performance of the application.

Using Help

This Help System allows you to easily navigate to topics that will provide explanation and instructions for accomplishing patient fittings.

Use the following headings to navigate to the information you seek.

Get Started (see page 13)

The Get Started topic provides information on setting up SoundWave for the first time, as well as information on the overall layout of the application.

How To (see page 73)

Step-by-step instructions for common tasks are organized by General Tools (those that affect more than one patient), Patients Data Manager, and Patient Management.

FAQs (see page 195)

The FAQs topic provides answers to Frequently Asked Questions.

Index (see page 197)

Use the Index to find information related to specific concepts.

Get Started

Set Up the Software and Associated Hardware

Database Connections

SoundWave Patients are contained in a database on a database server, running either locally or on a network. SoundWave allows you to configure the database connection, and to backup and restore the contents of a database.

Related Topics

Manage Databases

Fitting Hardware Setup

You will need the following fitting hardware in conjunction with the SoundWave software.

If you are using a ▭ **CPI-2**:

Equipment	Details
SoundWave (any version)	Installed and running on a PC.
Clinician's Programming Interface (CPI-2)	Connects the Sound Processor to the computer's serial or USB port.
Optional USB to serial adapter	Optional adapter that allows you to plug a CPI-2 into a USB port.
RS-232 Cable	Connects the computer to the CPI.
Sound Processor	Either the patient's own Sound Processor or the clinic's Sound Processor. *For all processor types except for Neptune, remove the battery to access the programming cable connector.*
Programming Cable	Connects the Sound Processor to the CPI.

If you are using a ⊙ **CPI-3**:

Equipment	Details
SoundWave (version 2.2 or later)	Installed and running on a PC.
Clinician's Programming Interface (CPI-3)	Connects the Sound Processor to the computer's USB port.
USB Cable	Connects the computer to the CPI.
Optional Powered USB Hub	Optional hub if additional USB ports are not available on the PC or to supply additional power to the CPI-3.
Sound Processor	Either the patient's own Sound Processor or the clinic's Sound Processor. *For all processor types except for Neptune, remove the battery to access the programming cable connector.*
Programming Cable	Connects the Sound Processor to the CPI.

NOTE: SoundWave supports connecting two sets of fitting hardware so that you can connect simultaneously to both left and right implants or to primary and backup sound processors.

To connect the **ComPilot** and **AB myPilot** accessories, you will also need a mini USB cable.

Use the Fitting Hardware Dialog to set ports for the CPIs

The Fitting Hardware Dialog is accessible from the Application Menu. This dialog indicates available COM Ports (used to connect CPI-2s) and available CPI-3s.

Selecting the **Auto Configure Ports** button will attempt to auto populate each Port for you.

Alternately, you can select the down arrow next to the Port display and select the appropriate Port manually.
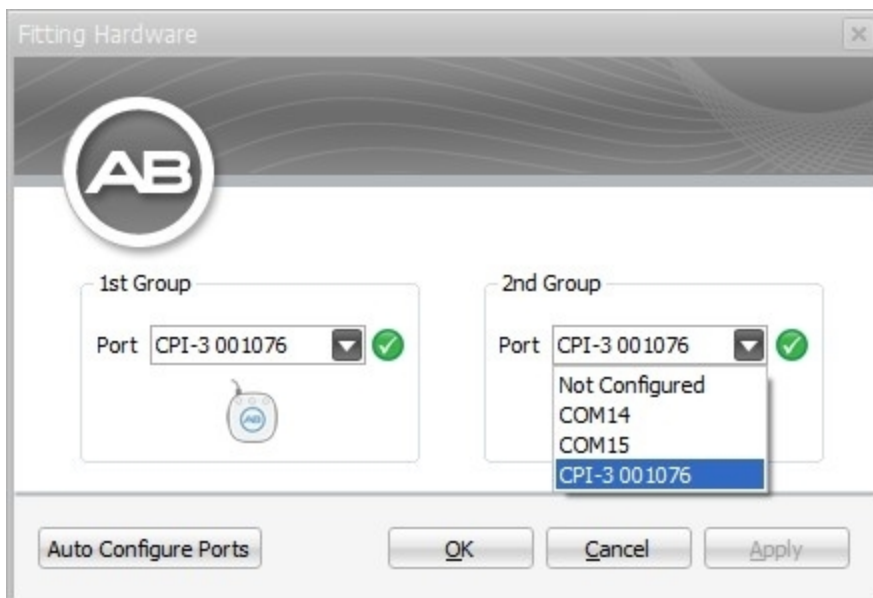
The CPI-3 has two ports. The CPI-3's serial number appears in the Port dropdown menu for both groups. The icon below the menus includes a cable. The location of the cable indicates the location of each port.

Due to power requirements, a single CPI-3 cannot be used to fit two PSP processors simultaneously. In order to fit two PSP processors at the same time, it is required to have two CPIs (in any combination of CPI-2 and CPI-3). If SoundWave is configured to use a single CPI-3 and two PSP processors are connected, the Fitting Hardware group in the Home Ribbon Page provides buttons to power up one PSP and power down the other.

Identify Fitting Hardware

To identify the Fitting Hardware:

1. Click on the dropdown menu for the CPI, the processor, or the implant in the Fitting Hardware Group.
2. Click on **Identify Fitting Hardware**.
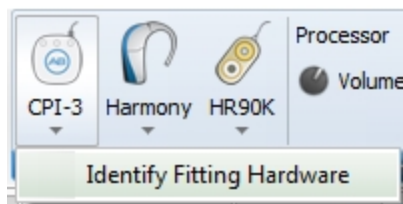
You will see an icon informing you that SoundWave is identifying the Fitting Hardware.

If the associated hardware chain is connected to a CPI-2, the LED on the CPI-2 will blink for several seconds, along with the LED on any connected processor (if the processor has an LED).

If the associated hardware chain is connected to a CPI-3, the LED on the corresponding port of the CPI-3 will blink for several seconds, along with the LED on any connected processor (if the processor has an LED).

Set Preferences

You can access the Preferences Dialog from the Application Menu.

The Preferences Dialog is where you can set preferences for fittings, the user interface, reports, program defaults, and general settings.
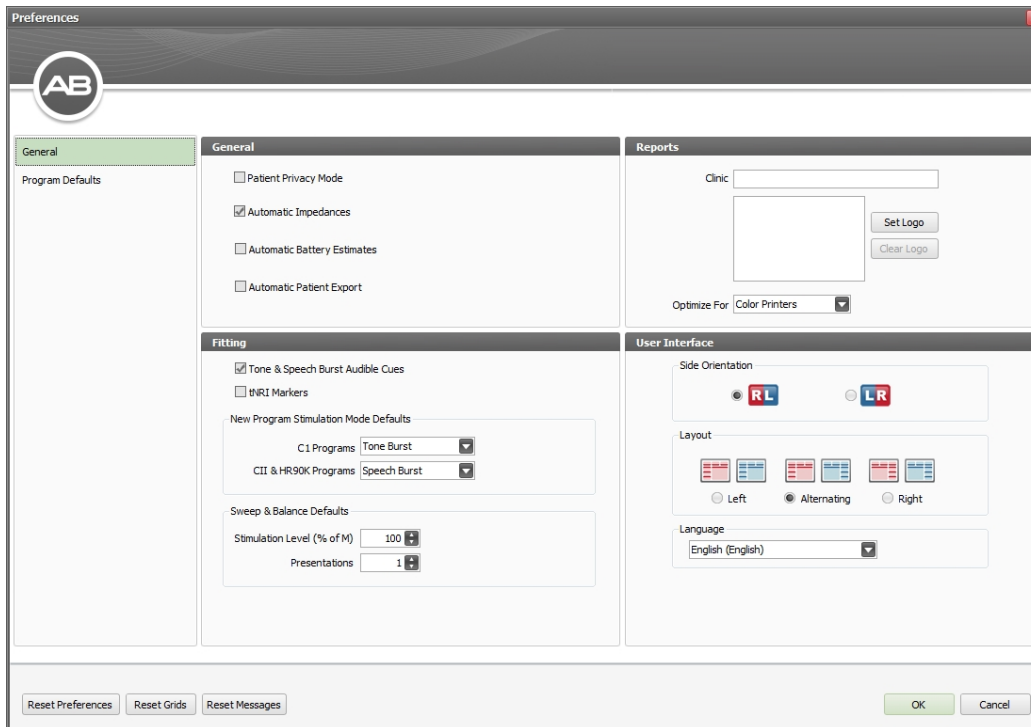
General tab:

Group	Field	Description	Options
General	Patient Privacy Mode	Sets whether identifying patient information is hidden in the Patients Data Manager.	Check or Uncheck* selection
	Automatic	Sets whether impedances are automatically	Check* or Uncheck selection

Group	Field	Description	Options
	Impedances	measured the first time you lock to a patient's implant during a fitting session.	
	Automatic Battery Estimates	Sets whether battery estimations are automatically performed when downloading processor and slot settings for Naída CI Q30, Q70, and Q90 processors.	Check or Uncheck* selection
	Automatic Patient Export	Sets the default folder location for patient export files.	Check or Uncheck* selection, use the Browse button
Fitting	Tone & Speech Burst Audible Cues	Sets whether the audible cues are played during Tone Burst or Speech Burst stimulation.	Check* or Uncheck selection
	tNRI Markers	Sets whether tNRI Markers are displayed in the Fitting Chart.	Check or Uncheck* selection
	New Program Stimulation Mode Defaults	Sets the default stimulation mode for C1 Programs and for CII & HR90K Programs.	C1 Programs: Live Speech or Tone Burst* CII & HR90K Programs: Live Speech, Tone Burst, or Speech Burst*
	Sweep & Balance Defaults	Sets the default Stimulation Level and number of Presentations for Tone Burst and Speech Burst stimulation modes.	Stimulation Level: 0-100%* Presentations: 1*-10
User Interface	Side Orientation	Sets the side orientation for the Bilateral Fitting Screens.	RL* or LR
	Layout	Sets the location of the Navigation Pane for Unilateral Fitting Screens.	Left, Alternating*, or Right
	Language	Sets the language used in SoundWave.	English, Chinese Traditional, Chinese Simplified, French, German, Italian, Japanese, Russian, Spanish
Reports	Clinic	Sets clinic information.	
	Logo	Sets the clinic logo.	Use the Set Logo and Clear Logo buttons
	Optimize For	Sets whether Reports should be converted to black and white.	Color Printers* or B&W Printers
Reset Preferences		Returns all preferences to default values.	

Group	Field	Description	Options
Reset Grids		Resets which columns are visible, their relative positions, and widths.	
Reset Messages		Resets all previously dismissed messages so that they are displayed.	

* Indicates the option selected by default.
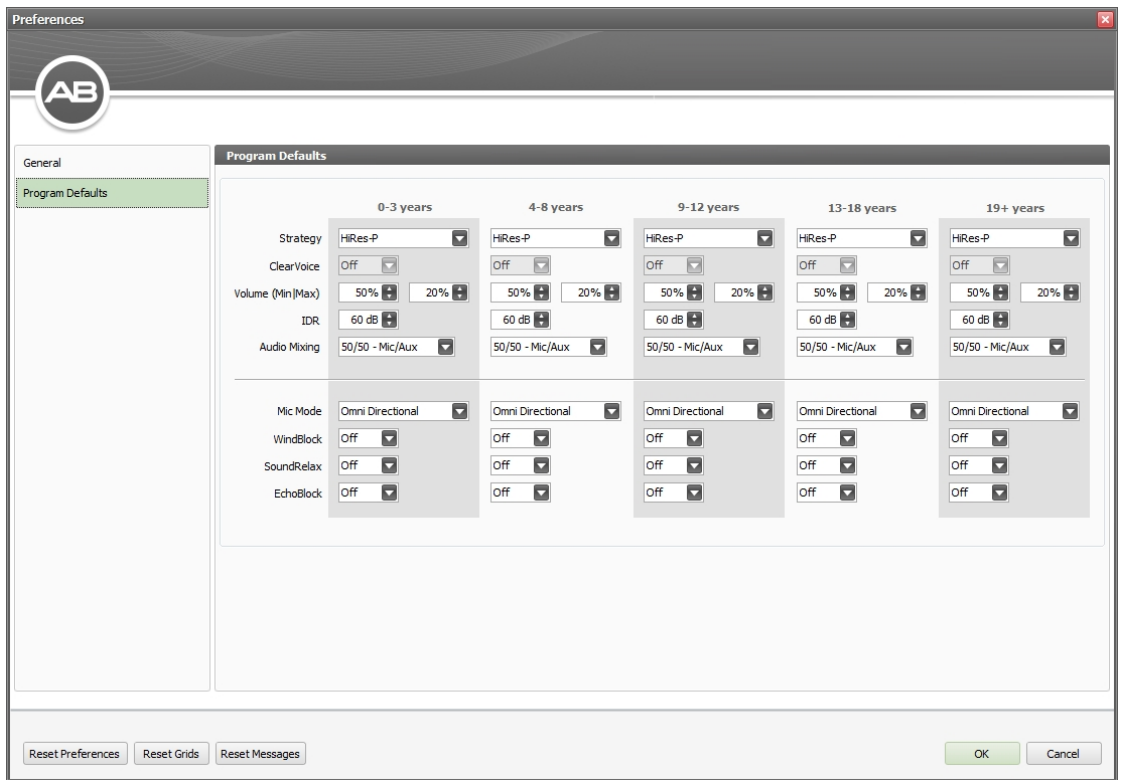
Program Defaults tab:

| Field	Description	Options
Strategy	Sets the default strategy for new programs depending on the age range.	HiRes-S, HiRes-P*, HiRes-S w/Fidelity 120, HiRes-P w/Fidelity 120, HiRes Optima-S, HiRes Optima-P,

Field	Description	Options
		CIS, MPS
ClearVoice	Sets the default setting for the ClearVoice feature.	Off* Low Medium High
Volume (Min | Max)	Sets the default minimum and maximum volume percentages.	Min: 0-100% (50%*) Max: 0-100% (20%*)
IDR	Sets the default IDR decibel levels.	20-80 dB (60 dB*)
Audio Mixing	Sets the default mixing percentages.	Aux Only (Atten.), Aux Only, Mic Only, 50/50 - Mic/Aux*, 30/70 - Mic/Aux
Mic Mode	Sets the default Mic Mode setting.	Omni Directional* UltraZoom auto UltraZoom
WindBlock	Enables or disables WindBlock.	Off* On
SoundRelax	Enables or disables SoundRelax.	Off* On
EchoBlock	Enables or disables EchoBlock.	Off* On

*Indicates the option selected by default.*

Overview of SoundWave

The SoundWave application is organized around a series of Data Managers arranged in tabs in the main window. Each Data Manager follows a common layout as shown below, with an Action Pane, a

Management Grid, and a Preview Pane. Within the Management Grid, you may select and highlight a record by clicking on it. You can select multiple records by pressing Ctrl on the keyboard and clicking with the mouse on each row. When rows are selected, available options (such as Open or Archive) will appear in the Action Pane. The Preview Pane provides detailed information on the record that you selected. If the Preview Pane is not visible, click on the bar with the triangles at the bottom of the Management Grid.
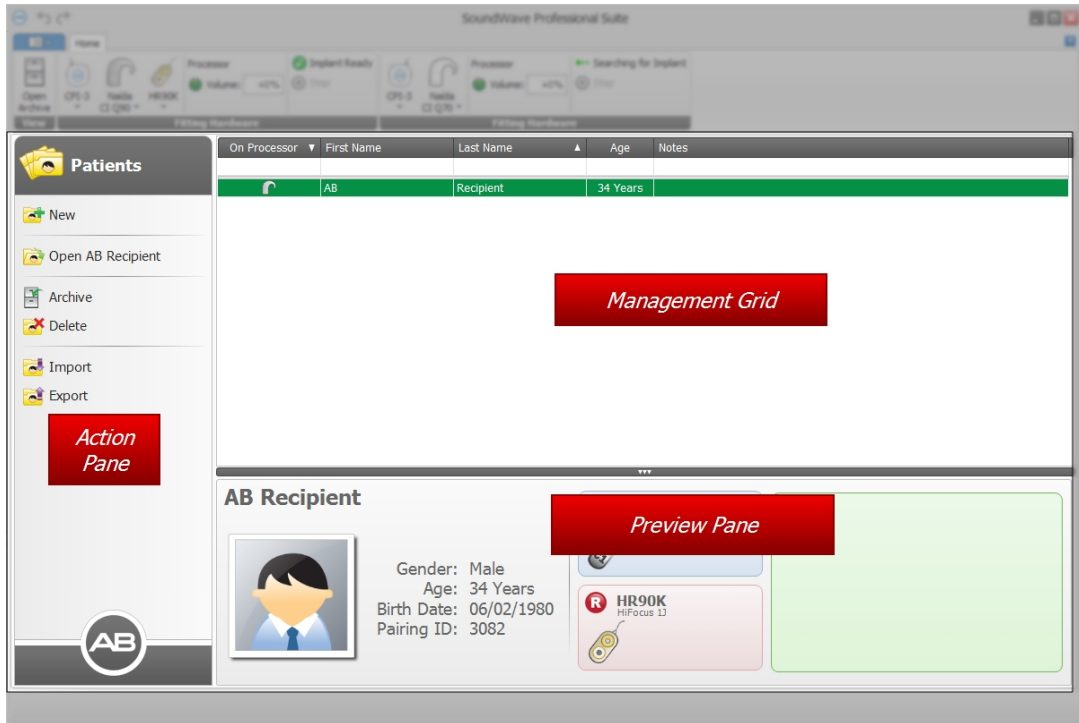
In addition to the Data Managers, there is a Ribbon Control across the top of the page. The Ribbon Control has context-dependent pages that provide functionality related to the current task.
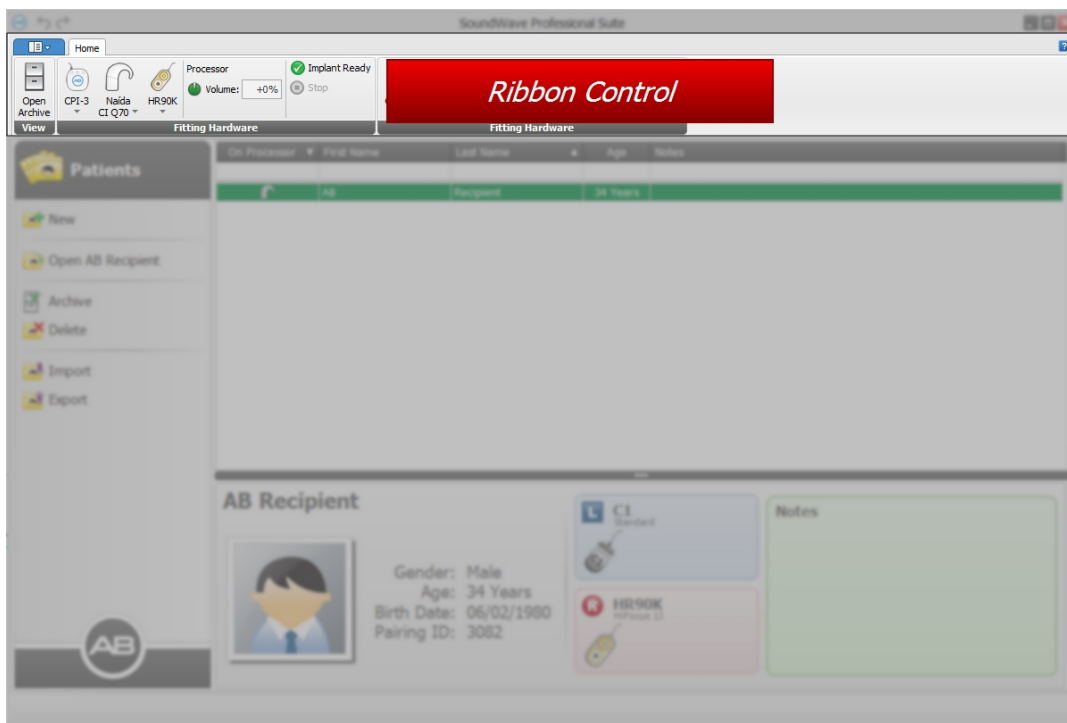
Finally, the Application Menu provides access to common functions that affect the overall application.
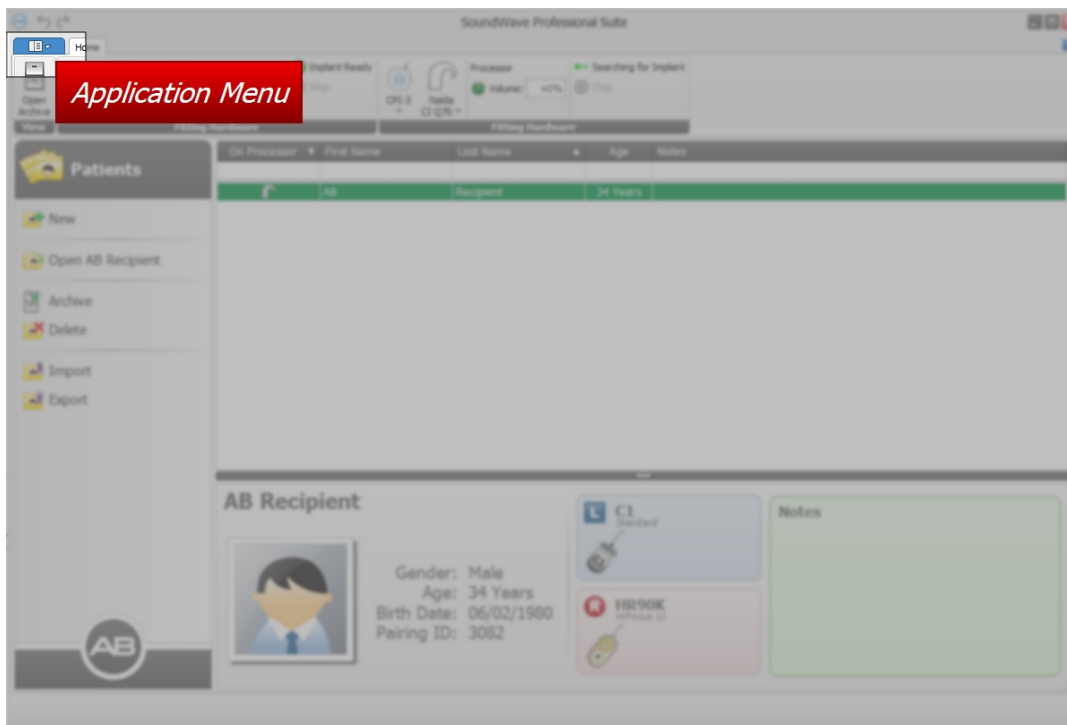
Related Topics

Application Menu

The Application Menu opens when you click the ⊞ Application tab, located to the left of the Ribbon Page Tabs.

This menu has the following items:

⚒ Configuration

Opens the Configuration Submenu where you can select from the following items:

⚙ Preferences

Opens the Preferences Dialog, where you can set your preferences for fittings, the User Interface, Reports, and general settings.

⊙ Fitting Hardware

Opens the Fitting Hardware Dialog where you can select the ports for the CPIs.

▤ Database Connections

Opens the Database Connections Dialog where you can manage the Database Connections.

⚷ Licenses

Opens the Licenses Data Manager, where you can view existing licenses and add or delete licenses.

Reference Implants

Opens the Reference Implants Data Manager where you can manage your Reference Implants.

Templates

Opens the Templates Data Manager where you can view the existing templates and use them to create new program or NRI measurements.

Help

Opens the electronic Help file which contains the topics in this document.
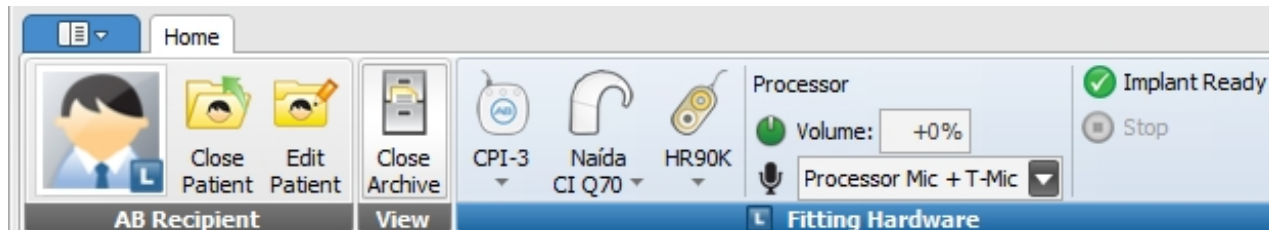
About

Opens a screen that shows information about the current version of SoundWave.

Exit

Closes the SoundWave application.

Home Ribbon Page

The Home Ribbon Page is always available.

Patient Group

The Patient Group has the following items:

Patient Image

Displays the Patient's name, photo, and the icons for which sides the patient has implants. Hover the mouse over the Patient image to display the patient information.
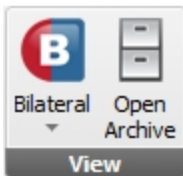
Close Patient

Closes the open Patient record and returns the display to the Patients Data Manager.

Edit Patient

Opens the Edit Patient Dialog, where you can update Patient information and set the Patient's photo.

View Group

The View Group has the following items:

Bilateral

Toggles among the options to view both implants (bilateral), the left implant, or the right implant.

Open/ Close Archive

Opens or closes the archive.

Fitting Hardware Group
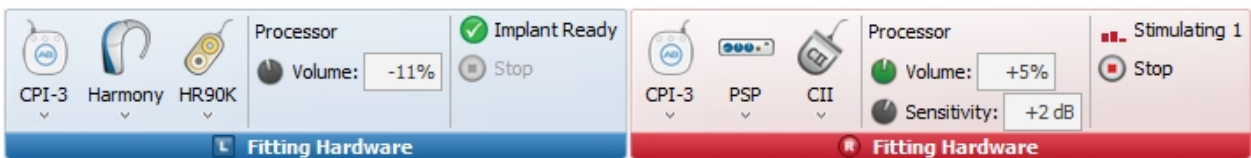
When a processor connected to a Fitting Hardware group is locked to an implant that is registered for the open Patient, the color of the group will indicate the designated side of the implant. The group will be colored red for a Right implant and blue for a Left implant.

The Fitting Hardware group has the following items:

CPI

Clicking on the item displays the option to Identify Fitting Hardware. Hover the mouse over the CPI image to display the CPI information.

Processor

Clicking on the item displays the options to Identify Fitting Hardware, Initialize Processor, Backup Processor, and Restore Processor. Hover the mouse over the processor image to display the processor information. If the connected processor was initialized in a supported version of SoundWave prior to SoundWave 2.0, there will also be an item to Import Version 1 Patient.

Implant

Clicking on the item displays the options to Identify Fitting Hardware, Measure Impedances, and Run Conditioning. Hover the mouse over the implant image to display the implant information. If the implant status indicates an "Unsupported Implant", please update to the newest version of SoundWave.

Processor

Displays the current settings for the volume and sensitivity dials and for the Mic Source selection, as applicable for the connected processor.

Hardware Status

Displays the hardware status. This area also includes current status of ComPilot, DuoPhone, and ZoomControl functionality, as applicable. If the hardware status indicates an "Unsupported Implant", please update to the newest version of SoundWave.

Stop Stimulation

Stops stimulation to the connected processor if the connected processor is currently stimulating.

Accessories Group

> NOTE: The Accessories group displays only when one or more supported accessories are connected.
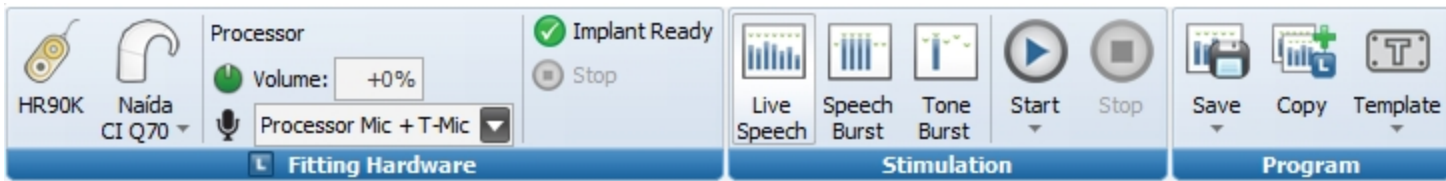
The Accessories Group can have the following items:

myPilot

Clicking on the item displays the option to configure the AB myPilot accessory.

ComPilot

Clicking on the item displays the option to configure the ComPilot accessory.
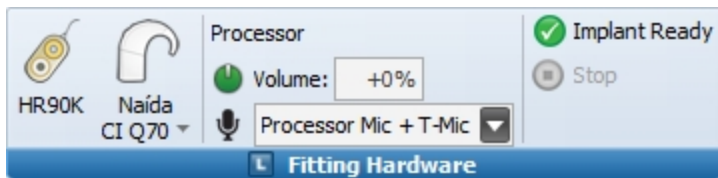
Fitting Ribbon Page

The Fitting Ribbon Page overlays the Home Ribbon Page when a fitting screen is open.

There are actually two Fitting Ribbon Pages. The Unilateral Fitting Ribbon opens when fitting a Patient who has one implant, or when you select a unilateral view for a Bilateral Patient from the Home Ribbon Page.

The Bilateral Ribbon Page opens during fitting for a Bilaterally implanted Patient when you have selected a bilateral view on the Home Ribbon Page.

The only difference between these two Fitting Ribbon Pages is the number of Fitting Hardware Groups displayed. A Bilateral Fitting Ribbon Page displays Fitting Hardware Groups for both right and left implants.

Fitting Hardware Group

As with the Fitting Group on the Home Ribbon Page, the color of the Fitting group is blue for a Left implant and red for a Right implant. When viewing both implants for a Bilateral Patient, both right and left groups display.

The Fitting Hardware Group has the following items:

Fitting Hardware

Hovering your mouse over the icon displays the fitting hardware connected to your computer, the type of CPI, the side of the CPI that is connected to the processor, and the port that is connected to the CPI. From the dropdown menu, you can identify the fitting hardware.

Processor

Displays the connected processor type. Hover the mouse over the processor image to display the processor information. From the dropdown menu, you can enable or disable any optional features or accessories.

Processor Info

Select one of several microphone options from the dropdown, and adjust the microphone volume in the Volume field above the dropdown when allowed by the connected processor.

Implant

Hovering your mouse over the implant icon displays the implant type, IntelliLink ID, which side(s) the patient has an implant, and the name of the patient assigned to the implant. From the dropdown menu, you can identify the fitting hardware, measure impedances, and run conditioning.
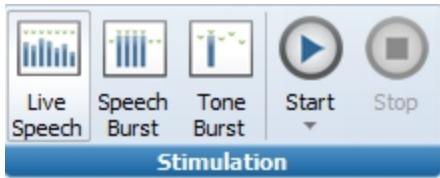
Hardware Status

Displays the hardware status.

Stop Stimulation

Stops stimulation to the connected processor if stimulation is in progress.

Stimulation Group

The Stimulation Group has the following items:

 Live Speech

Chooses the Live Speech media file associated with the selected fitting program.

 Speech Burst

Chooses the Speech Burst media file associated with the selected fitting program.

 Tone Burst

Chooses the Tone Burst media file associated with the selected fitting program.
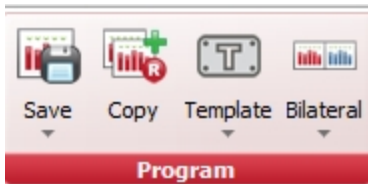
 Start

Starts stimulation to the connected processor.

 Stop

Stops stimulation to the connected processor if the connected processor is currently stimulating.

Program Group

 Save

Click the down arrow to open a dropdown menu containing:

- Save: saves the open program.
- Save and Close: saves and closes the open program.

Copy

Opens a copy of the selected program.

Template

Apply an existing Template to the Program. Click the down arrow below the icon to select New and save the current program as a Template, or to apply an existing template.
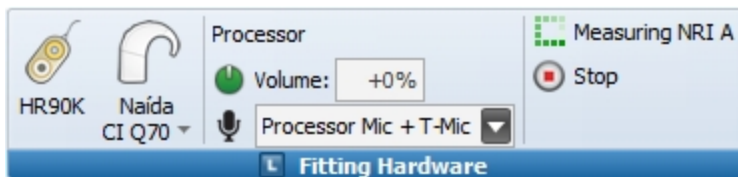
Bilateral

Displays when the Patient has two Implants and the Bilateral View is selected on the Home Ribbon Page. Click the down arrow to select Open Bilateral with New Program.

NRI Measurement Ribbon Page

When an NRI Measurement is in focus, you will see the NRI Measurement Ribbon Page under the NRI Tools Ribbon Page Category.

Fitting Hardware Group

The Fitting Hardware Group has the following items:

Implant

Displays the implant type.

Processor

Displays the connected processor type. Hover the mouse over the processor image to display the processor information. From the dropdown menu, you can enable or disable any optional features or accessories.

Processor Info

Displays the current settings for the volume and sensitivity dials and for the Mic Source selection, as applicable for the connected processor.
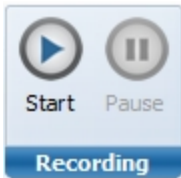
Hardware Status

Displays the hardware status.

Stop Stimulation

Stops stimulation to the connected processor if the connected processor is currently stimulating.

The Fitting Hardware displayed in this Group is from the perspective of the patient's implant. To view the complete set of Fitting Hardware, see the Home Ribbon Page.

Recording Group
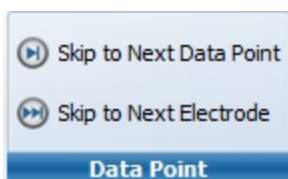

The Recording Group has the following items:

Start

Starts recording the NRI Measurement.

Pause

Pauses recording of the NRI Measurement.

Data Point Group
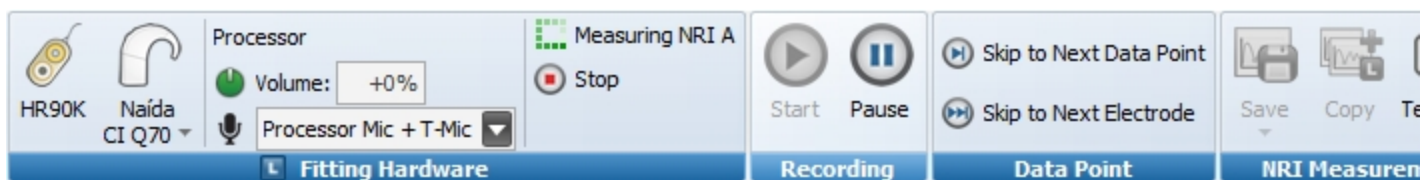

The Data Point Group has the following items:

⏭ Skip to Next Data Point

Skips to the next Data Point for the same electrode without taking any more measurements for the current stimulation level.

⏭ Skip to Next Electrode

Skips to the next Electrode and discontinues measurements for the current electrode.

NRI Measurement Group

The NRI Measurement Group has the following items:
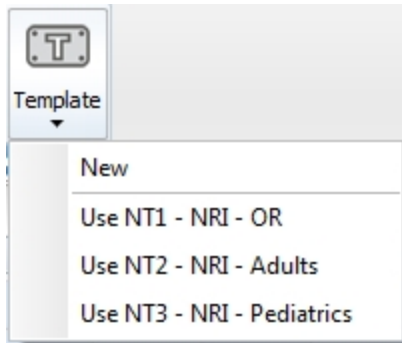
💾 Save

Saves the NRI Measurement.
Clicking on the dropdown displays the options to Save or to Save and Close.

Copy

Makes a copy of the NRI Measurement.

Template

Clicking on the dropdown displays the options to create a new template or apply an NRI Measurement template to the NRI Measurement window.

Work with Data Managers

Data Mangers access the SoundWave database. What is displayed changes according to which Data Manager you are looking at, but all Data Managers display a list of what information is available in the Management Grid. And on all Data Managers, you can customize how that information is displayed by changing column widths, filtering, and choosing which columns you want to display.

Related Topics

Column Chooser

Clicking on the Column Chooser opens the Customization dialog in the Management Grid of a screen. SoundWave allows you to drag and drop the different column headings to and from the dialog so that you can customize which columns are displayed and the display order.

You can access the Column Chooser by right-clicking in the column headings of the Management Grid.
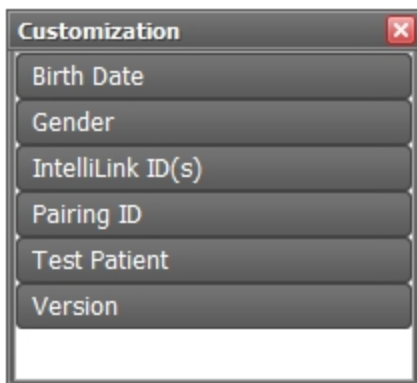
Adding a Column

You can select which columns you want to have visible in the Management Grid by using the Column Chooser. To add a column, either double-click on the column name in the Column Chooser to add it as the last column or select the column of choice and drag it to the desired location in the title row.

Moving a Column

You can move a column by dragging the column to where you want it to be in the title row.

Removing a Column

You can remove a column either by dragging the column outside the title row until an X appears or by right-clicking on the column heading and choosing Remove This Column.

Filtering

When you are working in the Management Grid of any screen, SoundWave allows you to filter the different columns.

You can filter a given column by:

- Typing a value in the text fields below the filter row
- Using the Filter Editor to enter a value for a specific field
- Using the built-in filters for a column

You can sort by:

- Clicking on a specific heading to sort
- Right-clicking on a heading to Sort Ascending or Sort Descending

These options will allow you to customize the filters in the Management Grid to work well with your needs.
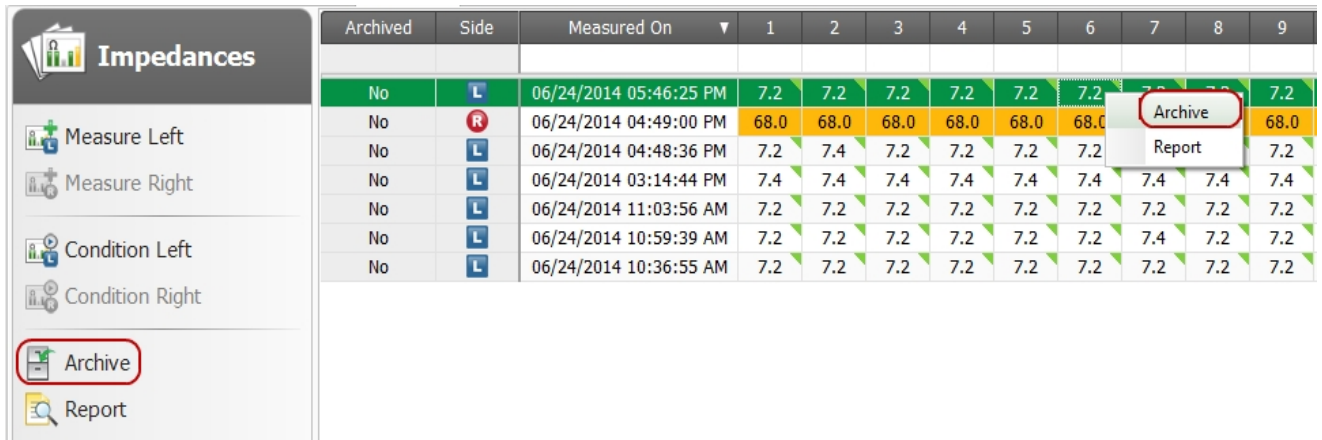
Related Topics

Archive One or More Records

The data managers for Patients, Implants, Programs, Visit History, Impedances, NRI Measurements, Templates, and Data Logs allow you to archive individual records so that they are hidden from view whenever the Archive is closed.

To archive a record:

1. Select the record(s) you want to archive.

2. Click ▥ **Archive** in the Action Pane, or Right-click to open the right-click menu and select **Archive**.

The record(s) will be hidden from view if the Archive is closed.
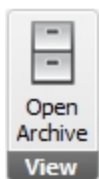
Once a record has been archived, you have the option to retrieve it.

Retrieve One or More Records

Once a record has been archived, you have the option to retrieve it.

To retrieve one or more records:

1. Click ▤ **Open Archive** in the View Group of the Ribbon Page. Archive is a toggle: if the button in the View Group reads ▤ **Close Archive**, then the Archive is already open.

You will see all of the records in the Management Grid, and the archived records will be labeled with a "Yes" in the "Archived" column.

2. Click on the archived records(s) you wish to retrieve.

3. Click ⬚ **Retrieve** in the Action Pane, or right-click on one of the selected records and then select **Retrieve** from the right-click menu.

   ⬚ **Retrieve** is shown only if the focused record is archived.

After records are retrieved, the "Yes" label in the Archived column will change to "No", and the records will be visible at all times, regardless of whether the Archive is open or closed.
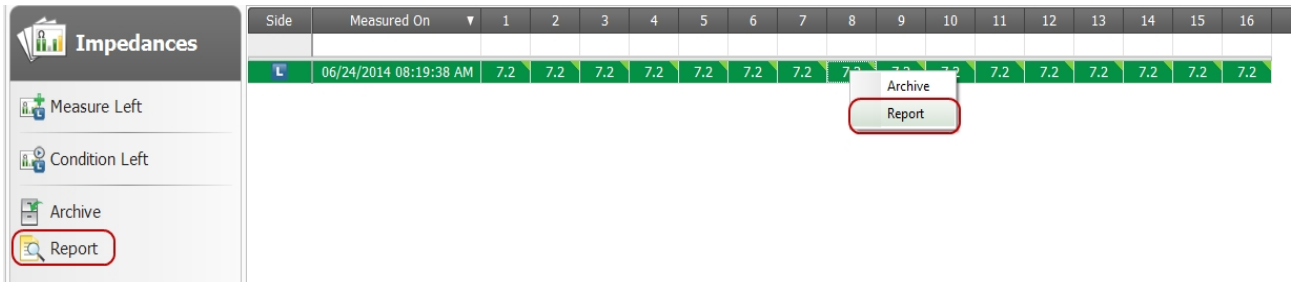
Related Topics

Preview and Print Reports

The data managers for Programs, Visit History, Impedances, and NRI Measurements allow you to preview and print reports for their records.

Generate Report Previews

1. You may either:
   - Click on 🔍 **Report** in the Action Pane, or
   - Right-click on the record(s) and click on **Report**.

A preview of the report opens in a new tab.

2. Click on the tab containing the report preview.

Work with Reports

NOTE: Always generate reports for use in a paper file. Reports will not be retained in this software.

Use the controls at the top of the report tab to work with a report.
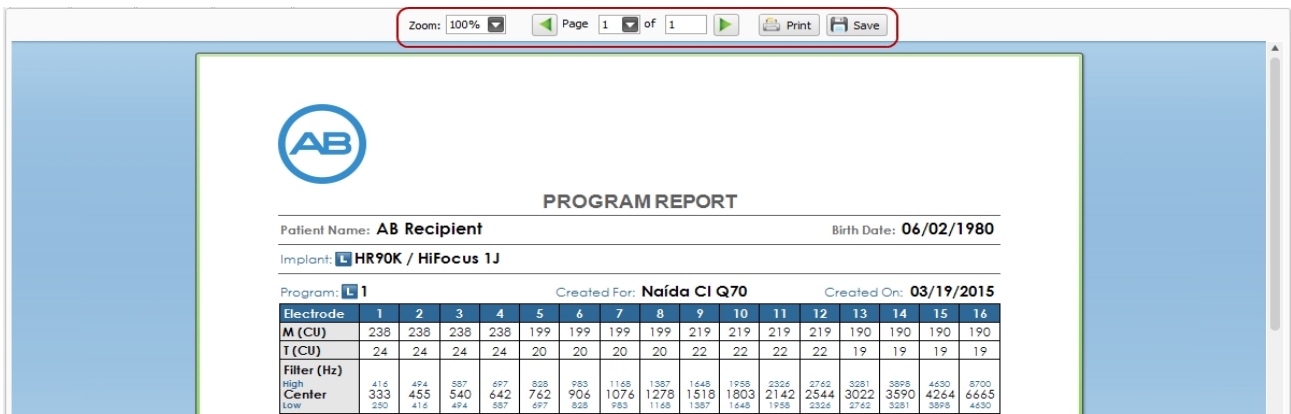
- Use the **Zoom** dropdown to change the zoom level.
- Use the **Page** controls or the scroll bar on the right to scan through a multi-page report.
- Use the **Print** button to bring up a dialog to print the report.
- Use the **Save** button to bring up a dialog to save a PDF version of the report.

A Typical Patient Fitting

A patient fitting session typically includes the following tasks:

1. Create a New Patient (see page 76): For a new patient, create a database record specific to the Patient. For an existing patient, open the patient's record. The patient record includes the patient's name, date of birth, and gender, and links to patient details such as implants, Programs, impedances, NRI measurement results, and data logs.

2. Add an Implant to an Existing Patient (see page 92): Specify which implant(s) the patient is using or has used in the past.

3. Run Conditioning (see page 106): Prepare the electrodes for stimulation prior to programming.

4. Measure Impedances (see page 103): Collect information relating to the status of the patient's electrode array.

5. Set Up NRI Measurements (see page 111): Ensure the Fitting Hardware is working during surgery and provide a basis for fitting a patient from whom subjective feedback is difficult to obtain.

6. Create a Program (see page 123): Create Programs to fit to your patient.

7. Specify Programs for Download (see page 161): Specify programs and options for download to a processor.

8. Preview and Print Reports (see page 35): Preview and print reports for Programs, the Visit History, Impedances, and NRI Measurements.

General Tools

General Tools describes the Data Managers that affect all Patients. This includes the Licenses Data Manager, the Templates Data Manager, and the Reference Implants Data Manager.

Changes made to these Data Managers are applied to all Patients in the Patients Data Manager.

Related Topics

Manage Data Templates (see page 42)

Manage Databases (see page 54)

Manage Reference Implants (see page 66)

Manage Licenses

Licenses are used to unlock some features in SoundWave.

They are usually installed along with the software installer. Otherwise, they can be obtained through release letters, which have licenses printed on them, or through support from your local AB Representative.
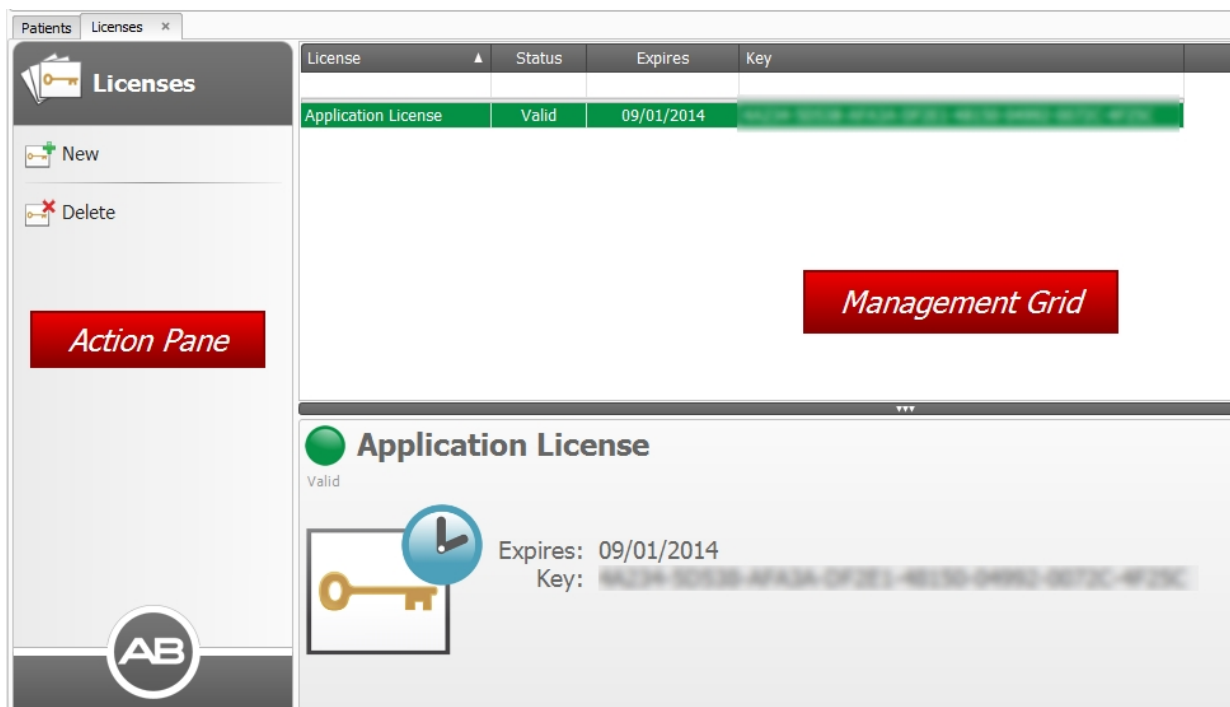
Related Topics

Add a License (see page 40)

View Installed Licenses (see page 40)

Delete a License (see page 41)

Licenses Data Manager

The Licenses Data Manager lists your software licenses and allows you to add and delete licenses.

To open the Licenses Data Manager, click the **Application Menu** button, then choose **Configure** and then **Licenses**.

Management Grid

The Licenses Management Grid lists any licenses that have been entered in SoundWave. SoundWave displays the following columns by default:

Column Heading	Description
License	Displays the name of the license
Status	Displays the License status as Valid or Invalid
Expires	Displays either the Expiration Date or "Never"
Key	Displays the License key

You can customize the information displayed in the Management Grid by using the Column Chooser and by filtering.

Preview Pane

The Preview Pane displays the details for the license that has focus.

View Installed Licenses

You can view your installed licenses from the Licenses Data Manager.

To open the Licenses Data Manager:

1. Close any open Patient. The Licenses Data Manager is not available when a Patient record is open.
2. Click on **Application Menu** at the top left corner of the application window.
3. Select **Configuration** on the Application Menu.
4. Select 🔑 **Licenses** to open the Licenses Data Manager.

Add a License

To add a License:

1. Close any open Patient. The Licenses Data Manager is not available when a Patient record is open.
2. Click on **Application Menu** at the top left corner of the application window.
3. Select **Configuration** on the Application Menu.
4. Select 🔑 **Licenses** to open the Licenses Data Manager.
5. Click 📇 **New** in the Action Pane to open the New License dialog.
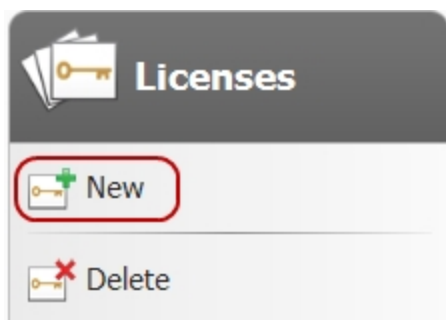
6. Enter the License Key in the **Key** field. You can type the key, or you may cut-and-paste. The OK button becomes enabled when a valid license key is entered.

> NOTE: Advanced Bionics may ask for the Computer ID the new license is machine-specific.

7. Click **OK**. The new license is added to the Management Grid.

Delete a License

WARNING: Deleting a license will result in a corresponding loss of application functionality and should be done only under the direction of AB personnel.

To delete a License:

1. Close any open Patient. The Licenses Data Manager is not available when a Patient record is open.
2. Click on **Application Menu** at the top left corner of the application window.
3. Select **Configuration** on the Application Menu.
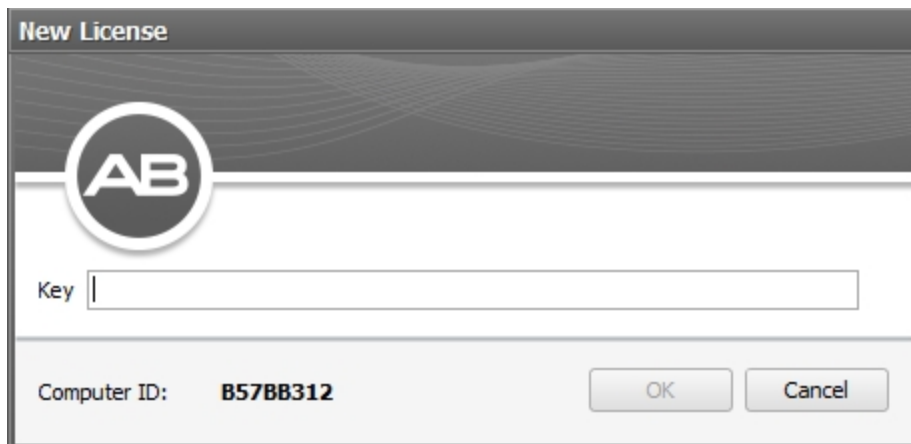4. Select 🔑 **Licenses** to open the Licenses Data Manager.
5. You may either:

   ○ Select the License in the Management Grid, and click on 🔑 **Delete** in the Action Pane, or
   ○ Right-click the License in the Management Grid to open the right-click menu, then click **Delete**.
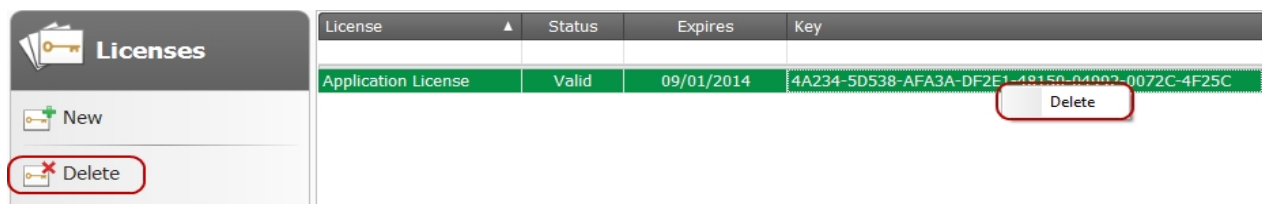
Both methods open the Delete License dialog.
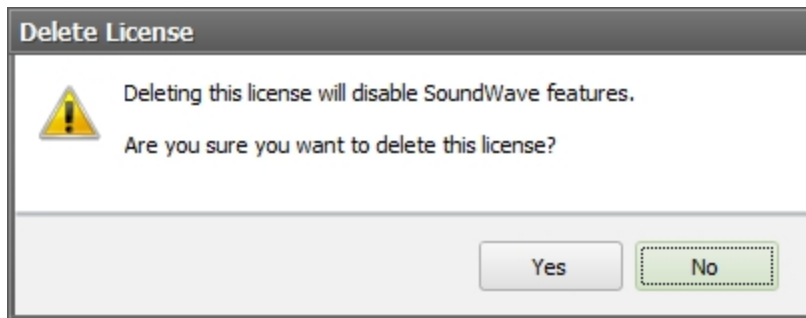
6. Click **Yes** to delete the license, or click **No** to close the dialog without deleting the license.

Related Topics

Add a License (see page 40)

Manage Data Templates

Templates are predefined programs that can be used as the basis for any Patient Program or NRI Measurement. Use the templates provided by Advanced Bionics or create your own.

Related Topics

Create a Program Template (see page 45)

Apply a Program Template (see page 48)

Create an NRI Measurement Template (see page 50)

Apply an NRI Measurement Template (see page 52)

Templates Data Manager

The Templates Data Manager allows you to use Program and NRI Measurement Templates to create new programs and NRI measurements and delete, archive, import, and export templates.
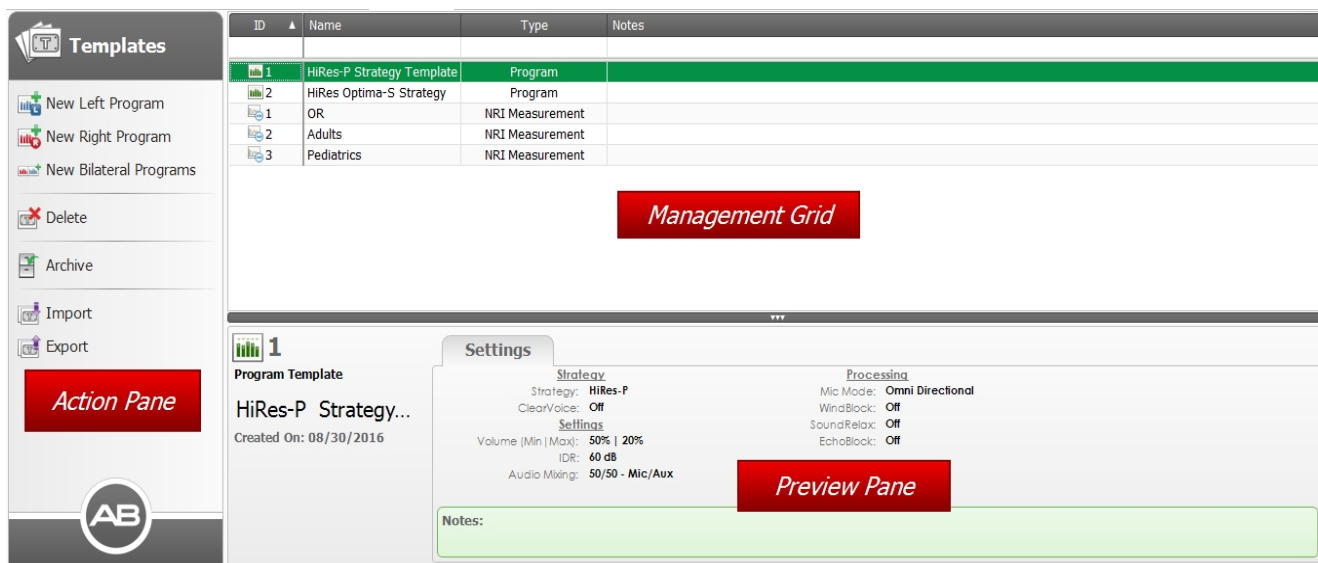
Action Pane

The Action Pane has the following items:

New Left Program

Opens a new Unilateral Fitting Window for the left side using the settings in the selected Program template.

New Right Program

Opens a new Unilateral Fitting Window for the right side using the settings in the selected Program template.

New Bilateral Programs

Opens a new Bilateral Fitting Window using the settings in the selected Program template.

New Left NRI

Opens a new NRI Measurement Screen for the left side using the settings in the selected NRI Measurement template.

New Right NRI

Opens a new NRI Measurement Screen for the right side using the settings in the selected NRI Measurement template.

✖ Delete

Deletes the template that has focus.

📤 Archive/📤 Retrieve

Archives or, if already archived, retrieves the selected template.

📥 Import

Displays a dialog to select one or more templates to import.

📤 Export

Exports the selected template.

Management Grid

The Management Grid displays Templates, the type of Template, and other information such as the Created On date.

To select a single template, click on one template record. To select multiple templates, hold the Ctrl key while clicking on each record.

Column Heading	Description
Archived	Visible when the Archive is open. Displays whether the Template is currently archived.
*ID**	Displays the Template ID
*Name**	Displays the Template name
*Type**	Displays the Template Type (e.g., C1, Program, or NRI Measurement)
*Notes**	Optional field for adding any additional information

* Indicates a column that is displayed by default.

Use the Column Chooser, sorting, and filtering to customize how SoundWave displays the information in the Management Grid.

Preview Pane

The Preview Pane provides a summary of the selected Template.

The Preview Pane contains template identifier info.

When a Program Template is selected, one tab is available:

- The **Settings** tab contains basic information about the template's baseline settings.

When an NRI Measurement Template is selected, two tabs are available.

- The **Details** tab contains High (CU), Low (CU), Data Points, and the Recorded On values in a table format.
- The **Settings** tab contains all Program or NRI Measurement parameters that are not specific to a particular channel and that were selected for the template.

Related Topics

Create a Program Template

New program templates are created from any Patient program.

To create a Program Template:

1. Open a Program:

    ○ Open a patient's program and click the down arrow below the **Template** icon in the Program Group. Select **New**.
2. The New Template dialog opens.
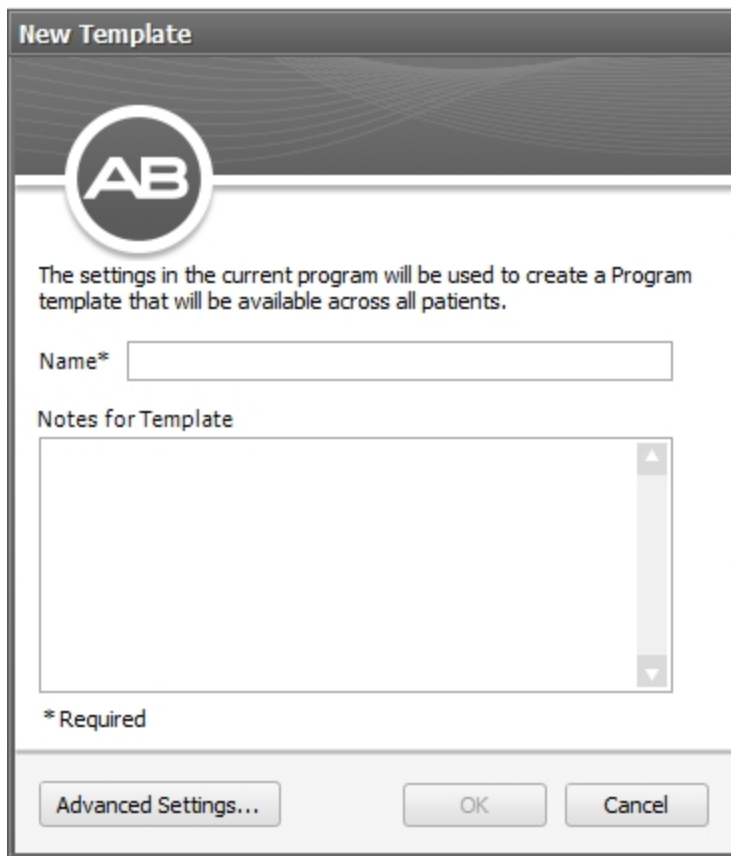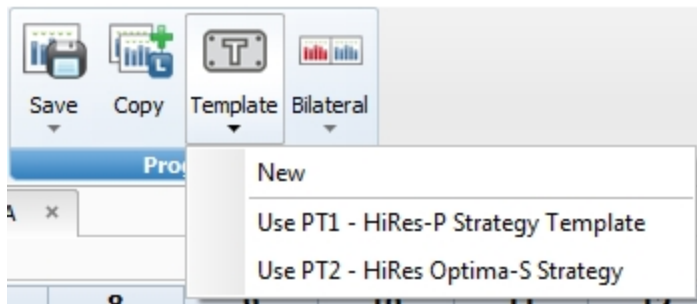
3. Enter Template Name in the **Name** field.
4. (Optional) Click the **Advanced Settings** button to expand the New Template dialog and select the Program settings to apply when using the template.

5. When all entries have been made, click **OK** to save the Template and close the dialog, or click **Cancel** to close the dialog without saving.

6. The new Template appears in the Templates Management Grid.

Related Topics

Apply a Program Template

There are several ways to apply a Program template.

A. From a Unilateral Fitting Window:
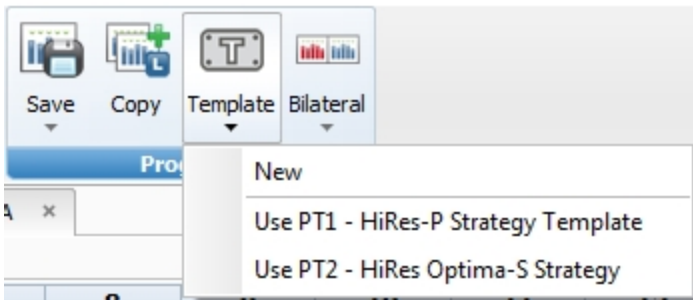
1. Click **Templates** in the Program Group.
2. Select an available Program Template from the list. This opens the Use Template dialog.
3. Click **Yes** to apply the selected template and close the dialog, or click **No** to close the dialog without applying the template.
4. This applies the values in the selected Program Template to the current Fitting Window.
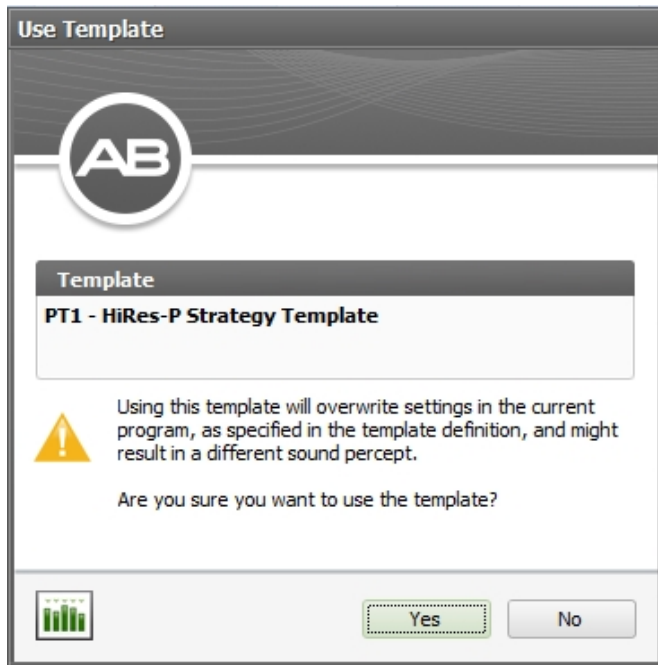
B. From the Programs Data Manager:

1. In the Action Pane, click arrow next to **New Left**, **New Right**, or **New Bilateral** to open a dropdown list.
2. The dropdown list displays a list of Program Templates that are applicable to the implant.
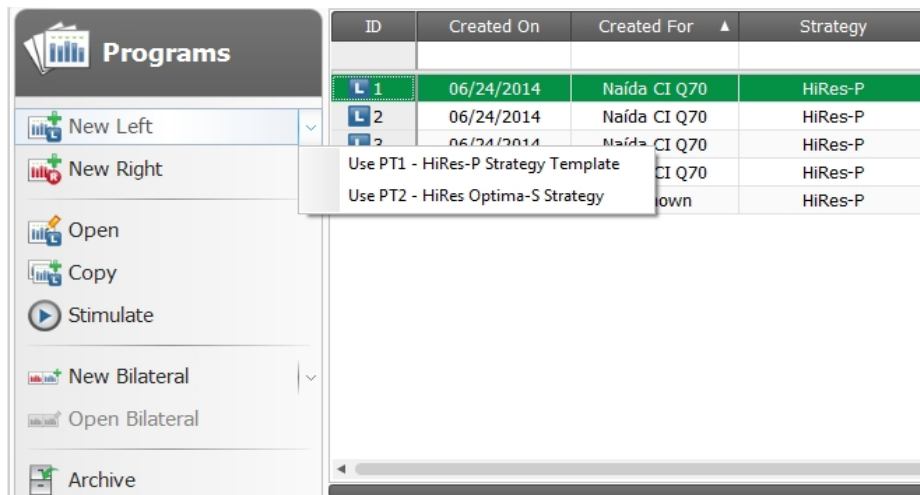
3. This opens a new Fitting Window using the values in the selected Program Template.

C. From the Templates Data Manager:
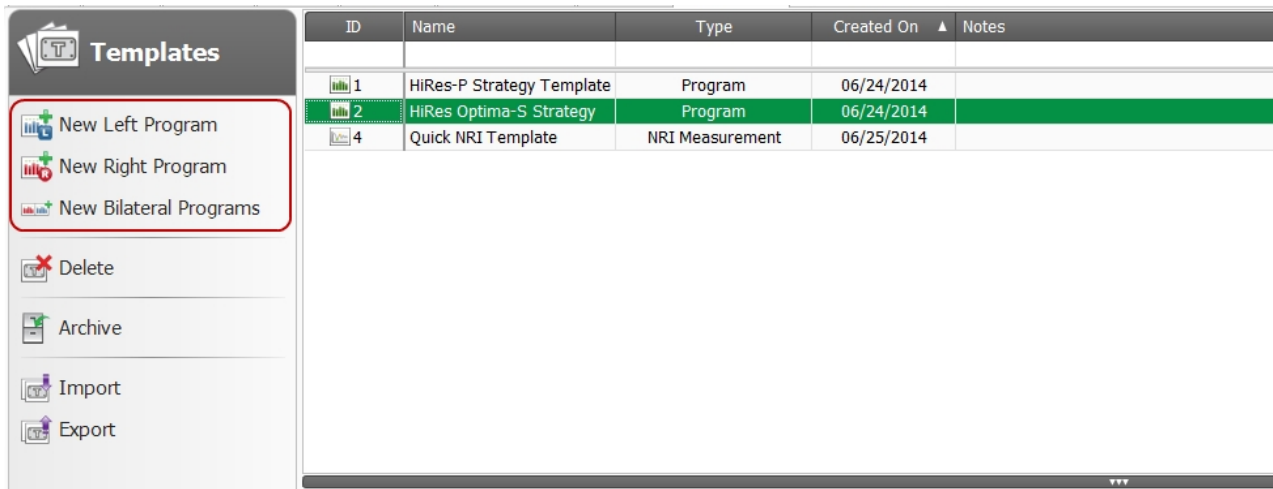
1. Select the appropriate Program Template in the Management Grid.
2. Click **New Left Program**, **New Right Program**, or **New Bilateral Programs** in the Action Pane.
3. This opens a new Fitting Window using the values in the selected Program Template.

NOTE: Template parameters or values that cannot be applied to the Fitting Window cause a Use Template dialog to open. The dialog displays a list of settings that cannot be applied.

Related Topics

Create an NRI Measurement Template

To create an NRI Measurement Template:

1. Open an NRI Measurement screen, then click the down arrow below the **Template** icon in the NRI Measurements Ribbon Page and click **New**.
2. The New Template dialog opens.
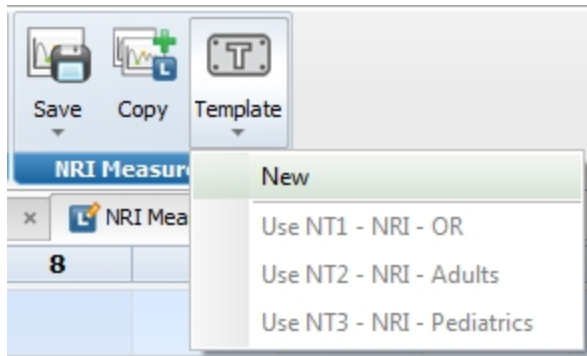
3. Enter the Template Name in the **Name** field.
4. The new Template appears in the Templates Management Grid.

Related Topics

Apply an NRI Measurement Template

There are several ways to apply an NRI Measurement template.

A. From an NRI Measurement Window:
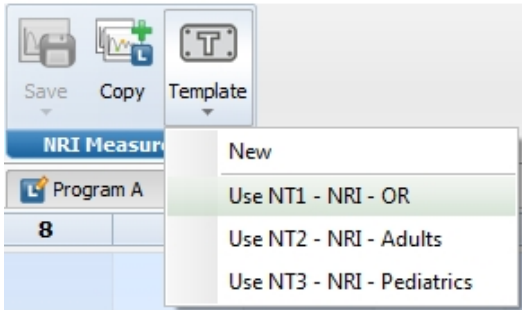
1. Click **Templates** in the NRI Measurement Group to open a list of available templates.
2. Click one of the NRI Measurement Templates. This opens the Use Template dialog.
3. Click **Yes** to apply the template and close the dialog, or click **No** to close without applying the template.
4. This applies the values in the selected NRI Measurement Template to the current NRI Measurement Window.

B. From the NRI Measurements Data Manager:

1. In the Action Pane, click the down arrow next to **New Left**, **New Right**, or **New Bilateral**.
2. This opens a list of available NRI Measurement Templates. Select one.
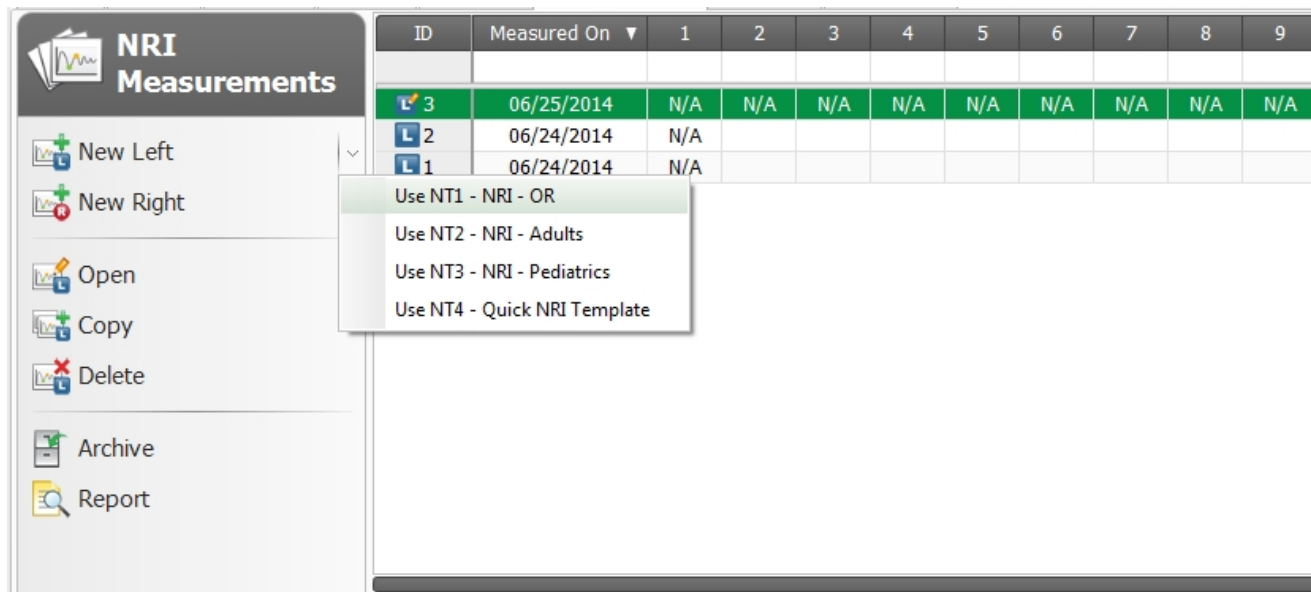
3. This opens a new NRI Measurement Screen using the values in the selected NRI Measurement Template.

C. From the Templates Data Manager:
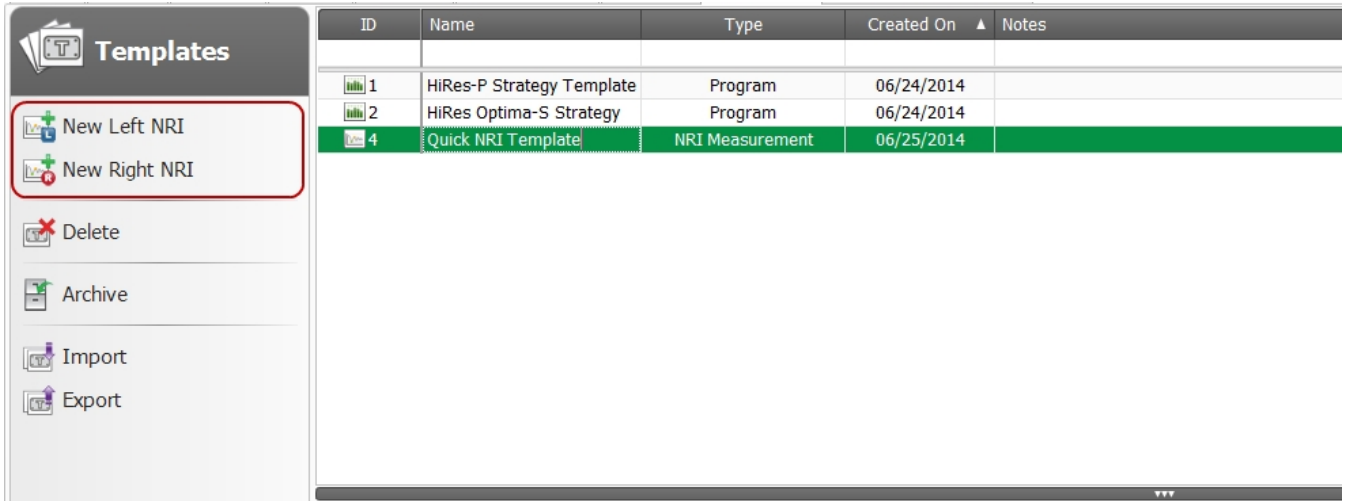
1. Select an NRI Template in the Management Grid.
2. Click **New Left**, **New Right**, or **New Bilateral** in the Action Pane.
3. This opens a new NRI Measurement Screen using the values in the selected NRI Measurement Template.

Related Topics

Create an NRI Measurement Template (see page 50)

Create a Program Template (see page 45)

Apply a Program Template (see page 48)

Manage Databases

While running, SoundWave communicates with a single database at a time. This database can be stored locally or at a network location. SoundWave has the capability of disconnecting from one database and connecting to a different one. To manage this behavior, SoundWave uses the notion of *Database Connections*. A Database Connection is the combination of a unique name, along with the name a database server and the name of a database hosted on the server. The database itself contains the actual patient data, whereas the Database Connection is used by SoundWave to manage its connections to one or more databases.

Create or Edit a Database Connection

To set up a new Connection or to edit an existing Connection:

1. Close any open Patient.
2. Click **Application Menu** at the top left corner of the application window, then click **Configuration** to open the Configuration submenu.
3. Click ▤ **Database Connections** to open the Database Connections dialog.
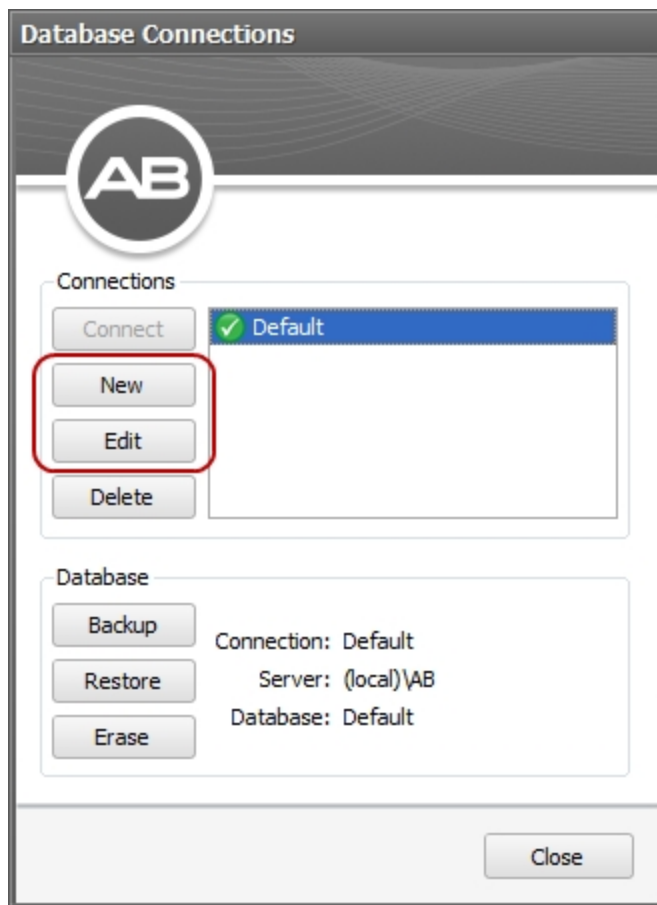
4. Click **New** to open the New Connection dialog and create a new Connection. Click **Edit** to open the Edit Connection dialog and edit an existing Connection.

5. Enter or update the Connection information.

Field	Description
Name	A name of your choice for the Database Connection. Spaces are not allowed in the Name.
Server	The name of the Server hosting the database. You can either type the name of the server directly or click on the **List Servers** button to let SoundWave find available servers.
Server Login Information	Access information based on the security settings for the database server. Contact your IT support personnel if you need assistance in entering this information.
Database	The name of the database you would like to connect to or create. You can either type the name directly or click on the **List Databases** button to let SoundWave find available databases on the selected Server.

6. Click on **Test Connection** to have SoundWave attempt to connect to the designated Server and to access the designated Database on that server. SoundWave will display one of several dialogs indicating one of the following:

- The server connection was successful and the database was accessed.
- The server connection was successful but the database does not exist and will need to be created upon connection.
- The server connection was not successful.

Related Topics

Connect to a Database (see page 57)

Back Up a Database (see page 62)

Restore a Database (see page 63)

Delete a Database Connection (see page 60)

Connect to a Database

To connect to a database:

1. Close any open Patient.
2. Click **Application Menu** to open the Application Menu, then click **Configuration** to open the Configuration submenu.
3. Click **Database Connections**. SoundWave opens the Database Connections dialog.

4. Select a Connection from the list.
5. Click **Connect**.

6. If the database specified by the Connection does not exist, the Connect to Database dialog opens, asking if you want to create the database. Click **Yes**.

   NOTE: Your Windows account must be set up as an Administrator in order to be able to create databases.
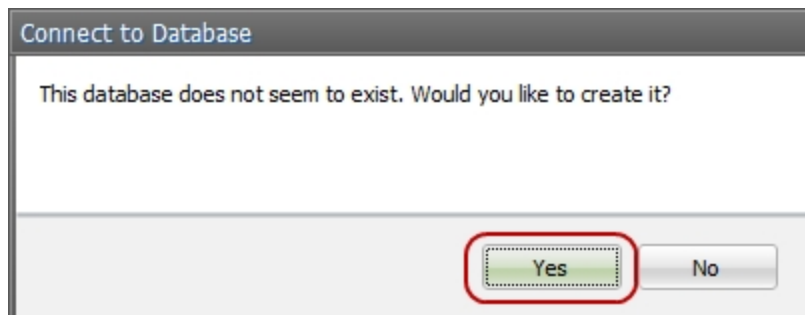
7. When the database connects successfully, the Connections group displays a checkmark next to the Connection name.
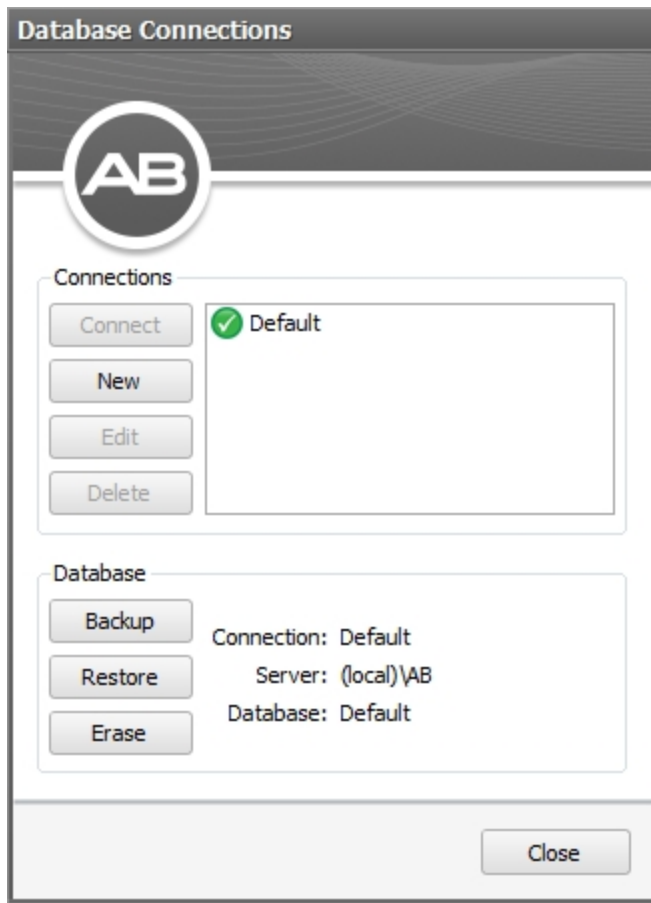
Related Topics

Create or Edit a Database Connection (see page 55)

Delete a Database Connection

To delete a connection:

1. Close any open Patient.
2. Click **Application Menu** to open the Application Menu, then click **Configuration** to open the Configuration submenu.
3. Click ▤ **Database Connections** to open the Database Connections dialog.
4. Select the connection you want to delete.
5. Click **Delete**. The Delete Database Connections dialog opens.
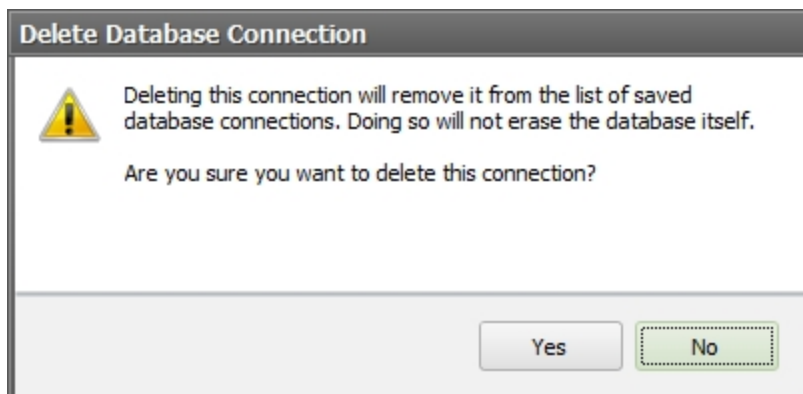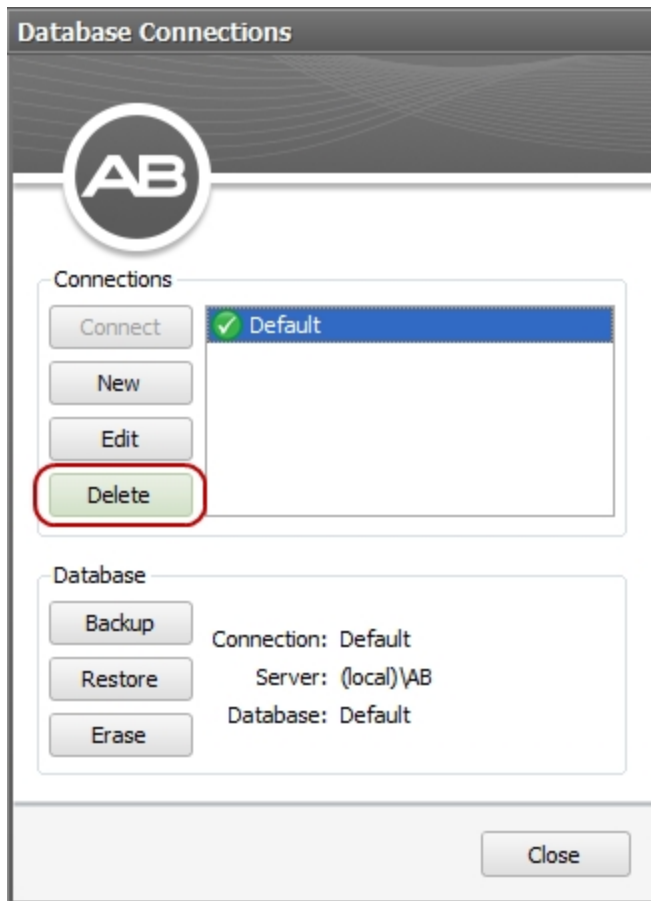
6. Click **Yes** to delete the database connection. Click **No** to close the dialog without deleting the connection.

The connection will be removed from the list of connections.

NOTE: Deleting a connection does not erase the information in the database itself. Only the connection is deleted.

Related Topics

Back Up a Database

Backing up a database copies all Patient information, and reference Implant information to a database backup file.

Backups are recommended to safeguard your database contents and should be done regularly. Backups are also done when updating software, to troubleshoot problems, and if you need to transfer the database to a different computer.

NOTE: SoundWave cannot back up a Network Database. To back up a Network Database, please contact your IT support personnel.

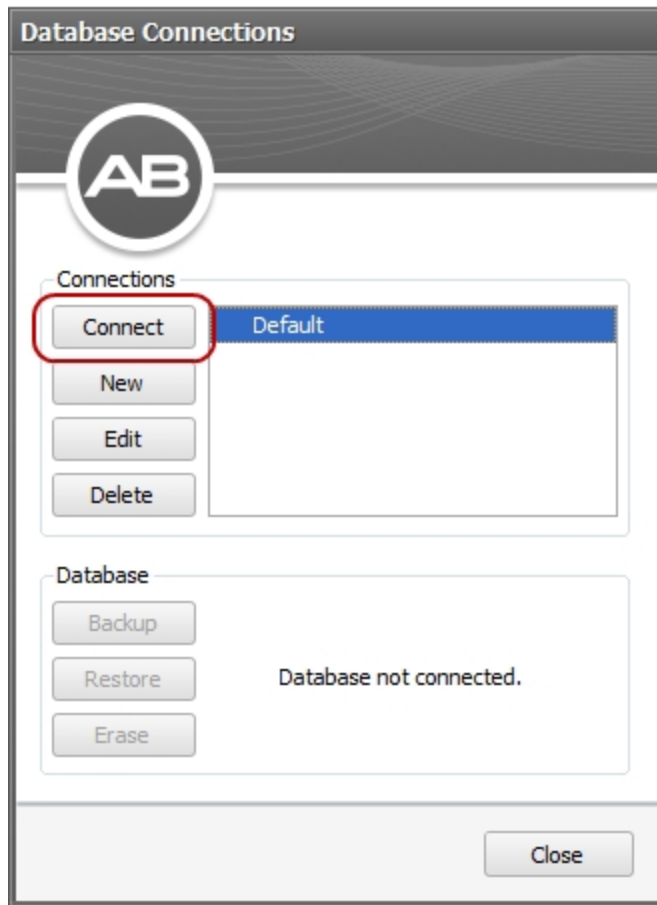NOTE: Your Windows account must be set up as an Administrator in order to be able to back up databases.

To back up a database:

1. Close any open Patient.
2. Click **Application Menu** to open the Application Menu, then click **Configure** to open the Configuration submenu.
3. Connect to the desired database. See .
4. Click **Backup** to initiate the backup.
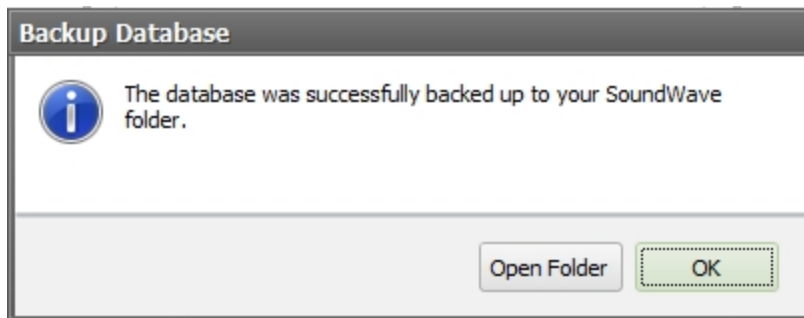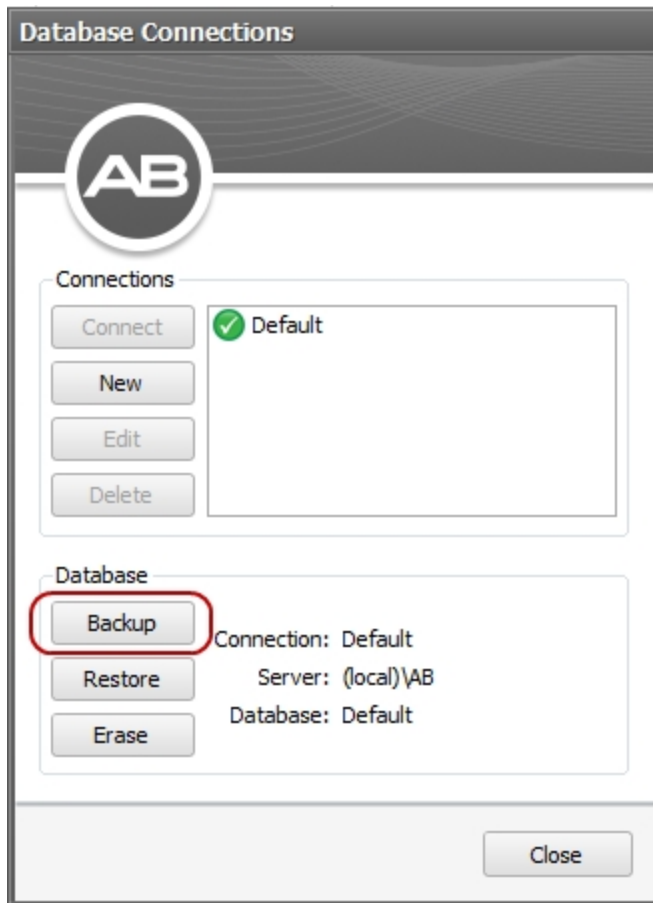
5. The Backup Database dialog opens when the backup is complete.
6. Click **Open Folder** to view the folder where the backup file was saved. Click **OK** to close the dialog.

After backing up a database, it can later be restored.

Restore a Database

Restoring a database retrieves the previously backed up information.

> NOTE: Restoring a database overwrites the contents of the current database with the contents of backup file.

> NOTE: Your Windows account must be set up as an Administrator in order to be able to restore databases.

To restore a Database:

1. Close any open Patient.
2. Click **Application Menu** to open the Application Menu, then click **Configuration** to open the Configuration submenu.
3. Connect to the desired database. See .
4. Click **Restore** in the Database group. This opens the Restore Database File Chooser.

5. Select the backup file you want to use.
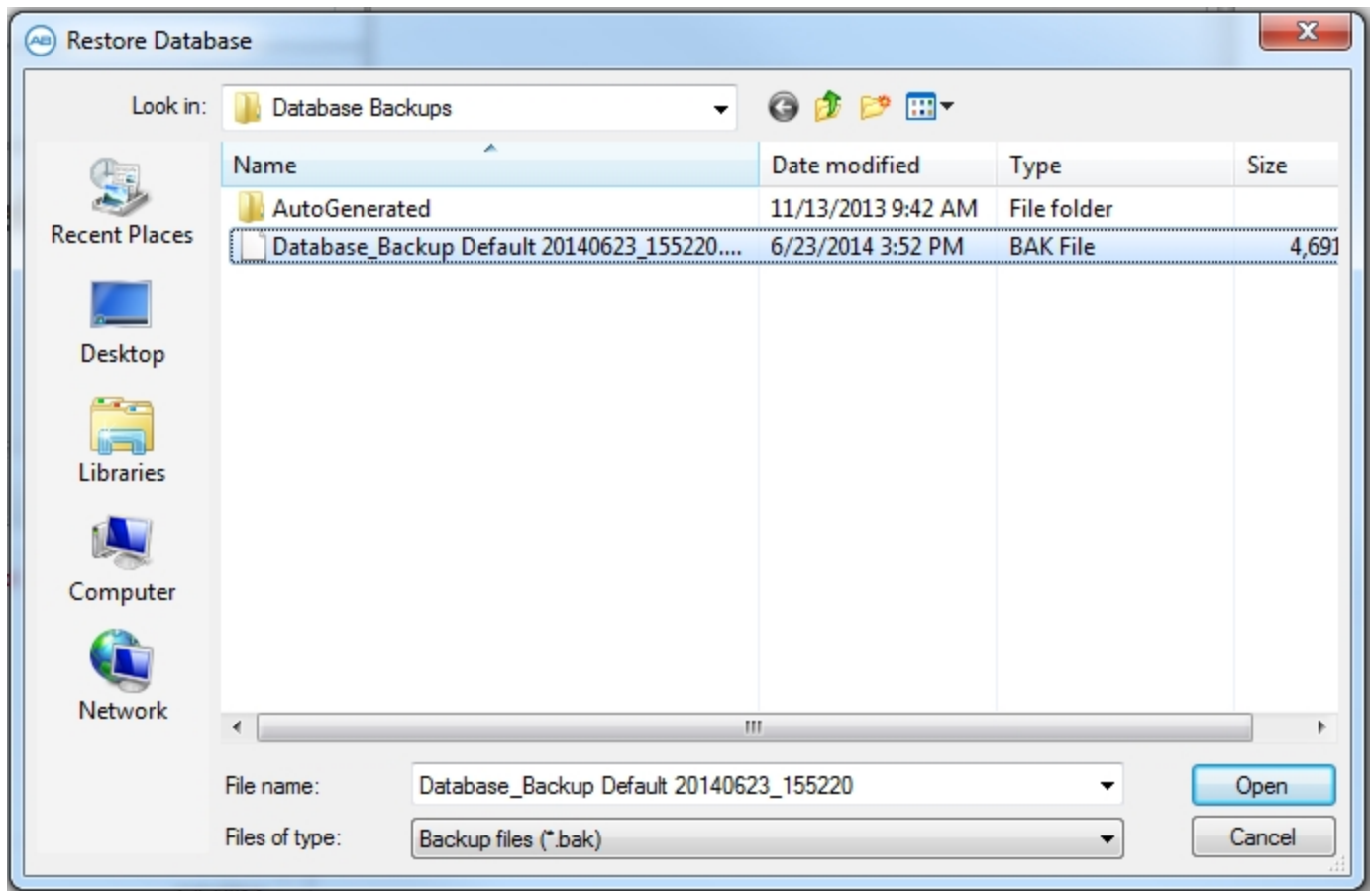
6. Click **Open**. This opens the Restore Database dialog.
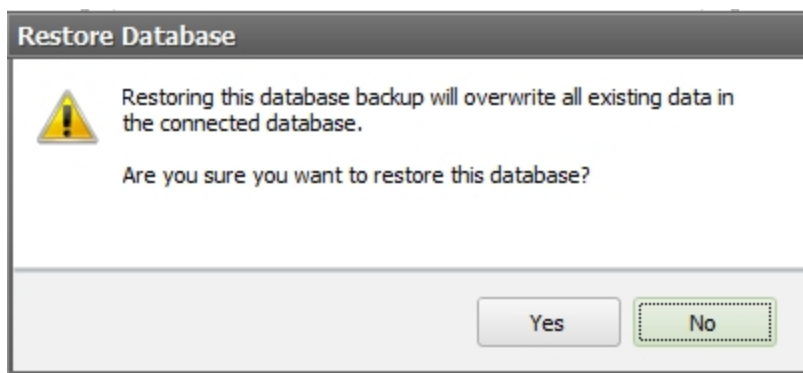
7. Click **Yes** to replace the current database with the backup. Click **No** to close the dialog without restoring the database.

Related Topics

Manage Reference Implants

Reference Implants are used for troubleshooting and training.

When you lock a processor to an implant registered as a Reference Implant in the SoundWave database, the software uses the Reference Implant in place of an implant already associated with the patient. Impedances and NRI Measurements made with the Reference Implant **are not saved** in the Patient record.

The Reference Implants Data Manager allows you to add, edit, or delete reference implants. To open the data manager:

1. Click the **Application Menu** tab, then click **Configuration** to open the Configuration submenu.
2. On the Configuration submenu, click **Reference Implants**.

Related Topics

Reference Implants Data Manager

Action Pane

The Action Pane has the following items:

New

Opens the New Reference Implant dialog where you can enter a new Reference Implant.

Edit

Opens the Edit Reference Implant dialog where you can edit the Reference Implant.

Delete

Deletes the selected Reference Implant.

Management Grid

The Reference Implants Management Grid lists any implants that have been added as Reference Implants.

Column Heading	Description
Implant Type*	Displays the type of implant
Serial #*	Displays the serial number that can be found on the reference implant *Note: The serial # is different from the IntelliLink ID*
Notes*	Optional field for adding any additional information
IntelliLink ID	Displays the unique identification number associated with an implant

* Indicates a column that is displayed by default.

You can customize the information displayed in the Management Grid by using the Column Chooser and by filtering.

Preview Pane

The Preview Pane displays the details for the selected Reference Implant.

Related Topics

Add a Reference Implant

To add a Reference Implant:
1. Close any open patient records.
2. Click on the Application Menu at the top left corner of the application window and select the Configuration Submenu.
3. Click on **Reference Implants**. SoundWave will open the Reference Implants Data Manager.
4. Click on **New** in the Action Pane. This opens the New Reference Implant dialog.
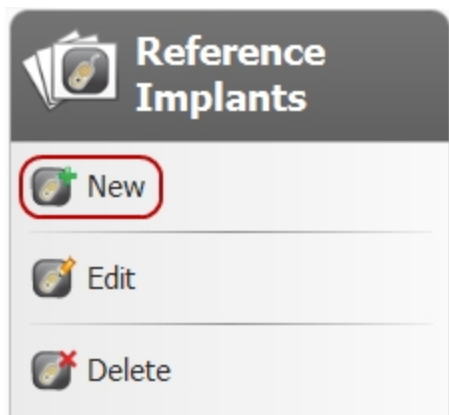
> NOTE: SoundWave may prompt you to disconnect and reconnect the implant you want to assign as a Reference Implant.

5. Enter the implant type in the **Type** field. If known, also enter the Serial Number in the **Serial #** field.

6. Click the **OK** button to save the entries and close the dialog, or click **Cancel** to close the dialog without saving.
7. Once saved, the new reference implant appears in the Management Grid.

Edit a Reference Implant

You can always edit a Reference Implant.

1. Close any open patient record.
2. Click on the Application Menu at the top left corner of the application window and select the Configuration Submenu.
3. Click on **Reference Implants**. SoundWave will open the Reference Implants Data Manager.
4. There are several ways to open the implant you want to edit:
   - Right-click the Implant in the Management Grid and then click **Edit** in the right-click menu.
   - Select the implant in the Management Grid, then click **Edit** in the Action Pane, or
   - Double-click the Reference Implant in the Management Grid.
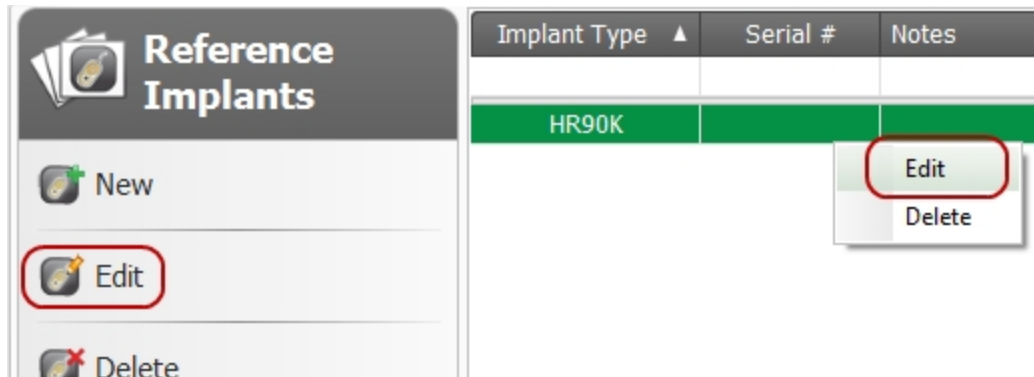
5. The Edit Reference Implant dialog opens. Make any changes necessary to the existing information.

6. Click **OK** to save and close, or click **Cancel** to close without saving any changes.

Related Topics

Delete a Reference Implant

To delete a reference implant:

1. Close any open patient record.
2. Click on the Application Menu at the top left corner of the application window and select the Configuration Submenu.
3. Click on 🔘 **Reference Implants**. SoundWave will open the Reference Implants Data Manager.
4. There are several ways to delete a reference implant:

   ○ Select the Reference Implant in the Management Grid, then click 🔘 **Delete** in the Action Pane, or
   ○ Right-click the Reference Implant in the Management Grid and then click **Delete** in the right-click menu.
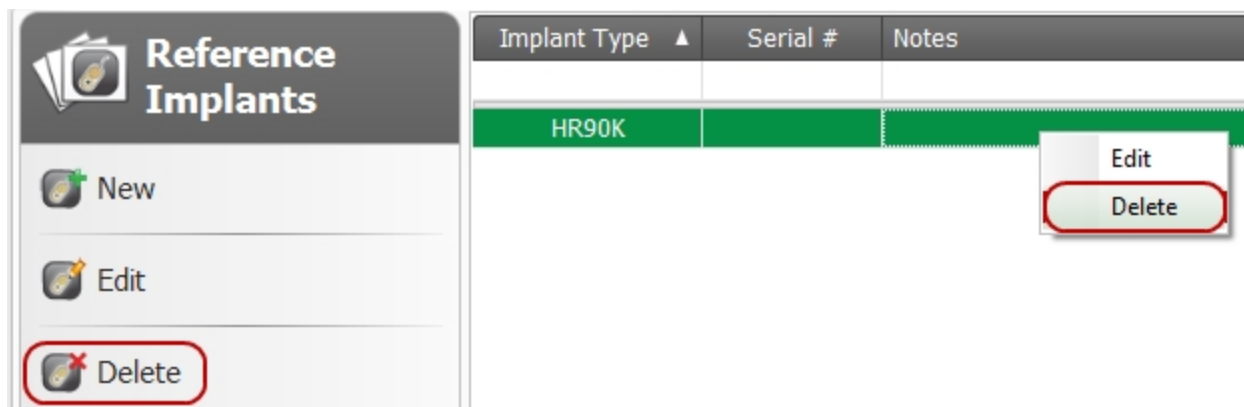
Related Topics

Reference Implants Data Manager (see page 67)

Add a Reference Implant (see page 68)

Edit a Reference Implant (see page 69)

How To

How To describes the tools you use and the tasks you perform to manage a specific Patient.

Manage Patients

The Patients Data Manager accesses a list of all Patients and basic information about them and their Implant and Processor. Opening a Patient accessed details about their Evaluations, Programs, and other information.

These topics describe the tasks you will typically perform to create a new patient record and to manage existing patient records.

Related Topics

Create a New Patient (see page 76)

Create a Test Patient (see page 78)

Open a Patient (see page 84)

Close a Patient (see page 85)

Add a Photo for an Existing Patient (see page 81)

Clear a Patient's Photo (see page 83)

Edit an Existing Patient (see page 79)

Import One or More Patients (see page 87)

Export One or More Patients (see page 86)

Delete One or More Patients (see page 88)

Patients Data Manager

The Patients Data Manager allows you to create, archive, delete, import, and export Patient records.
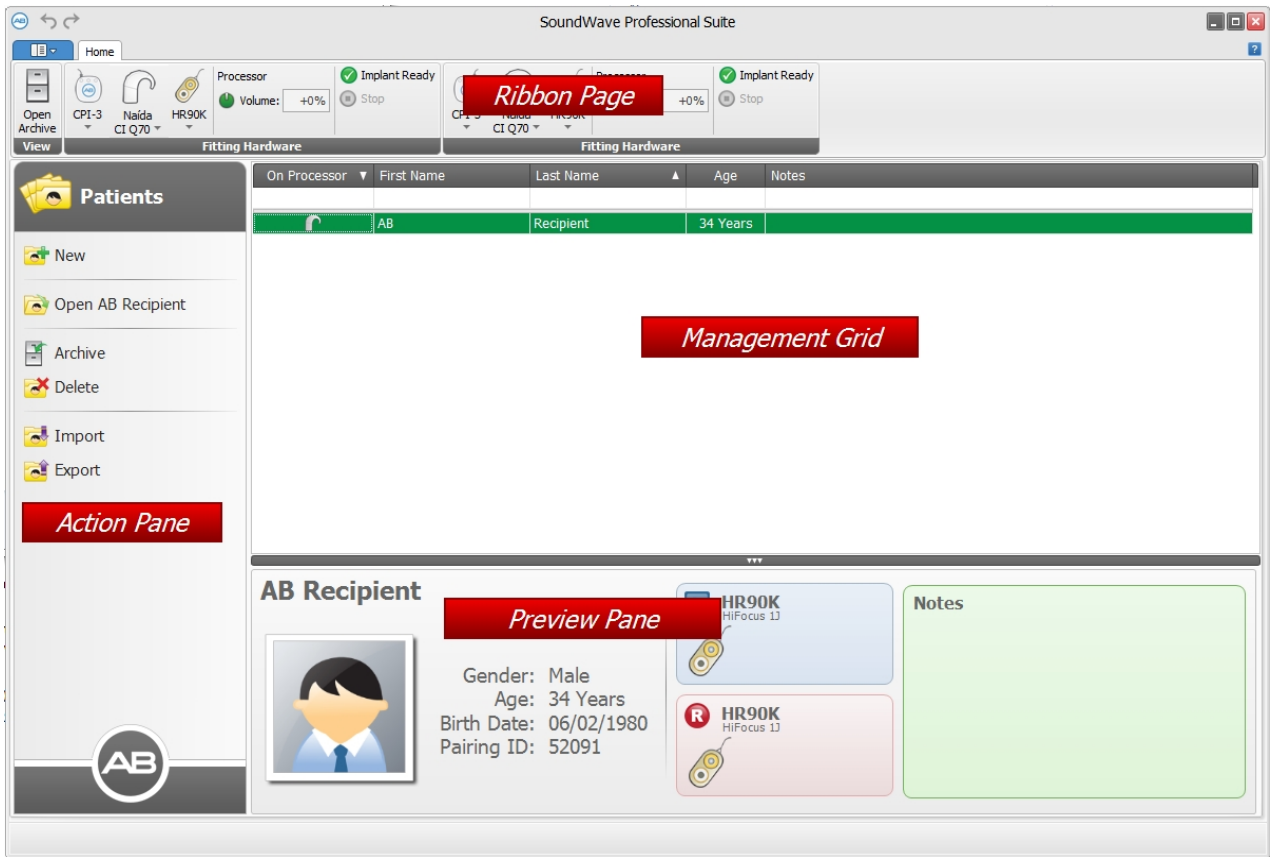
Ribbon Pages

When the Patients screen is selected, the Home Ribbon Page will be available.

Action Pane

The Action Pane, located on the left side of the Patients Data Manager, displays a list of commands that you will use for a patient.

The Action Pane has the following items:

New

Opens the New Patient Dialog where you can enter a new patient.

Open

Opens the patient that has focus.

Open

Opens the patient that is on the connected processor.

Archive/Retrieve

Archives or, if already archived, retrieves the patient that has focus.

Delete

Deletes the patient that has focus.

Import

Displays a dialog for selecting one or more patients to import.

Export

Exports the patient that has focus.

Management Grid

The Management Grid displays a list of all patients that have been entered into your SoundWave database. If Patient Privacy Mode is enabled in the Preferences, the First Name and Last Name will be hidden in the Management Grid. Each row represents a single patient. Clicking on a row selects and highlights that patient. To select multiple patients, hold down the 'Ctrl' key while clicking on each patient. You can view details of the patient demographics, and you can also open a patient by double-clicking on a row.

Column Heading	Description
Archived	Visible when the Archive is open. Displays whether the patient is currently archived.
*On Processor**	Displays an icon if one of the currently connected processors corresponds to the selected patient.
*First Name**	Displays the patient's first name.
*Last Name**	Displays the patient's last name.
*Age**	Displays the patient's age.
*Notes**	Optional field for adding any additional information.

Column Heading	Description
Birth Date	Displays the patient's birth date.
Gender	Displays the patient's gender as Male, Female, or Not Specified.
ID	Optional field that can be used for any additional identification information.
IntelliLink ID(s)	Displays the unique identification number associated with an implant. *Note: C1 implants are not assigned IntelliLink IDs.*
Pairing ID	Displays the identification number that allows for the patient's processors to be paired with HiBAN compatible devices, such as the AB myPilot and the Phonak ComPilot. This number is computer generated for the patient.
Test Patient	Displays whether the patient is being used as a Test Patient.
Version	Displays the version of SoundWave with which the Patient is associated. *Note: Patients from SoundWave 1.x will require additional information to be entered when first opened in SoundWave2.x.*

* Indicates a column that is displayed by default.

You can customize the information displayed in the Management Grid by using the Column Chooser and by filtering.

Preview Pane

The Preview Pane displays a summary of the information that was entered in the Patient Demographics screen for the selected patient.

Related Topics

Work with Data Managers (see page 32)

Set Preferences (see page 16)

Create a New Patient

Before a patient can be fit using SoundWave, a new Patient must be created so there is a place to store the patient's information.

1. Close any open patient records.
2. Click **New** in the Action Pane. This opens the New Patient dialog.

3. Enter the patient's **First Name** and **Last Name**.
4. Select the patient's **Birth Date** by clicking the down arrow and using the calendar popup to select the month, day, and year of birth.
5. Select the patient's **Gender** by clicking the down arrow and choosing Male or Female.
6. Enter any additional information you have, including any **Notes**.
7. Click **OK** to save the Patient information, close the dialog, and open the Implant Data Manager for this Patient. Click **Cancel** to close the dialog without saving.

Available Setting Options for the New/Edit Patient Dialog

Field	Description	Options
*First Name**	Sets the patient's first name	

Field	Description	Options
Last Name*	Sets the patient's last name	
ID	Optional field that can be used for any additional identification information	
Birth Date*	Sets the patient's birth date	Enter or select a date
Gender*	Sets the patient's gender	Not Specified, Male, or Female
Test Patient	Sets whether this Patient will be used as a Test Patient	Yes or No
Vaccinated	Sets whether or not the patient has been vaccinated	Yes, No, or Unknown
Vaccination Notes	Optional field for adding any notes regarding vaccinations	
Patient Notes	Optional field for adding any additional information	

When complete, the new Patient will open to the Implants Data Manager.

You can now add an implant to the Patient.

Related Topics

Create a Test Patient

A Test Patient can be used for troubleshooting or training.

Identifying a Patient as a Test Patient also allows you to invoke automated NRI stimulations.

NOTE: The record for a real Patient should never be marked as a Test Patient. This field is not editable once you create and save the Patient. A Test Patient cannot be changed to a non-Test Patient.

To create a Test Patient, select "Yes" in Test Patient field of the New Patient dialog.

Related Topics

Create a New Patient (see page 76)

Edit an Existing Patient

Once you have created a patient record, you can always edit the patient's basic information.

1. Open a Patient (see page 84).

2. Click 🗝️ **Edit Patient** in the Patient Group of the Ribbon Page. This opens the Edit Patient dialog.

3. You will see the Edit Patient Dialog where you can edit the existing information.

4. Click on **OK** to save the change and close the dialog. Click **Cancel** to close the dialog without saving. When complete, you will return to the Patient record.

Related Topics
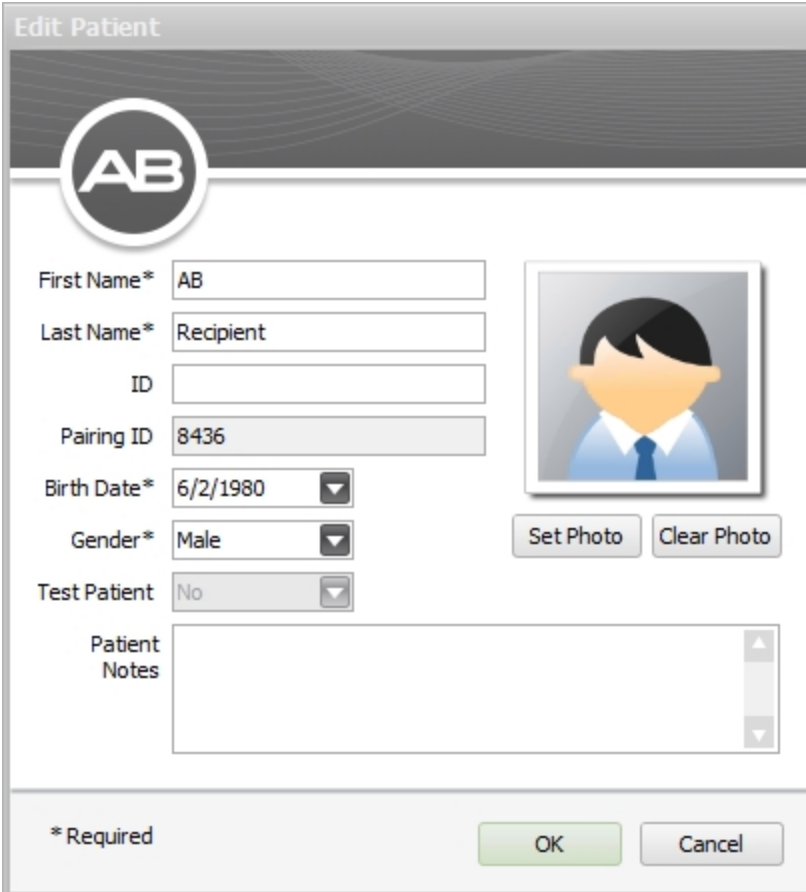
Add a Photo for an Existing Patient

You have the option of using actual Patient photos instead of the default male/female and child/adult icons.

To set (add) a photo:

1. Open a Patient (see page 84).

2. Click ⬛ **Edit Patient** in the Patient Group to open the Edit Patient dialog.

3. Click **Set Photo**. This opens a File Chooser.
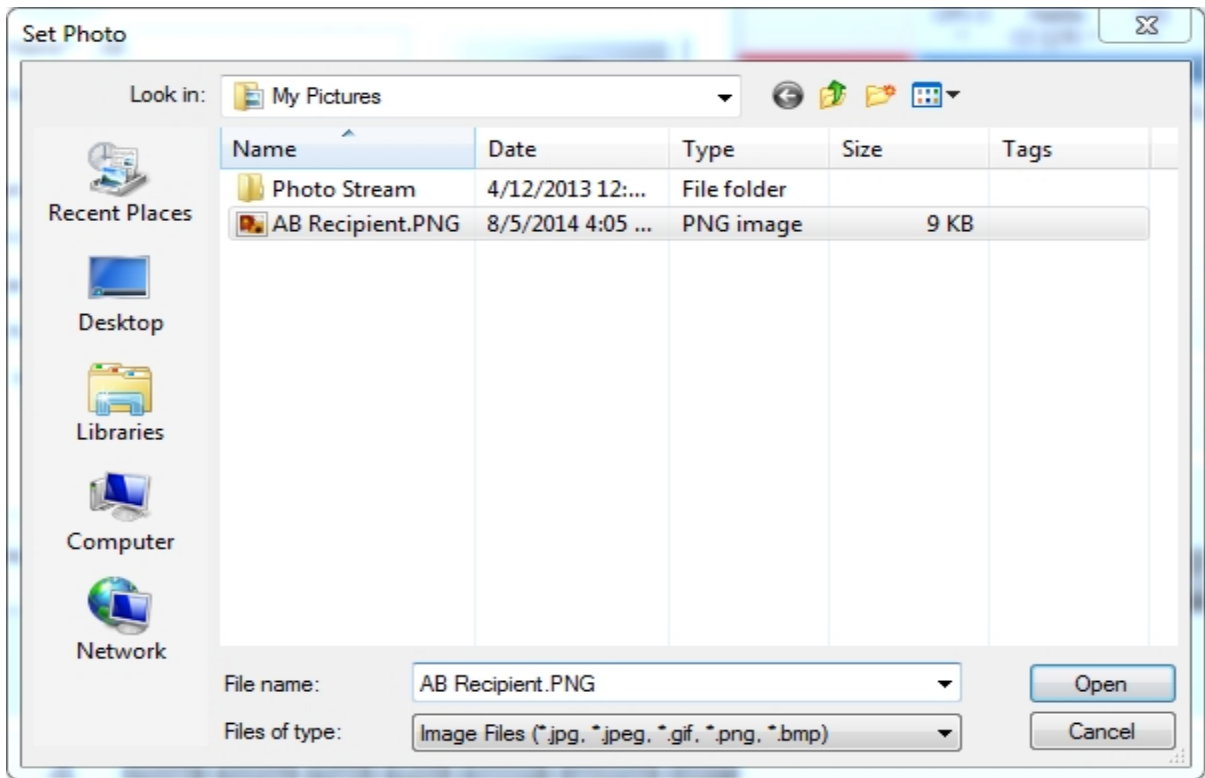
4. Select the file you want to use for your patient and click **Open**. The Set Photo dialog opens.
5. The Set Photo dialog provides instructions on how to center the patient's face in the frame. Follow the instructions to position the face within the frame.
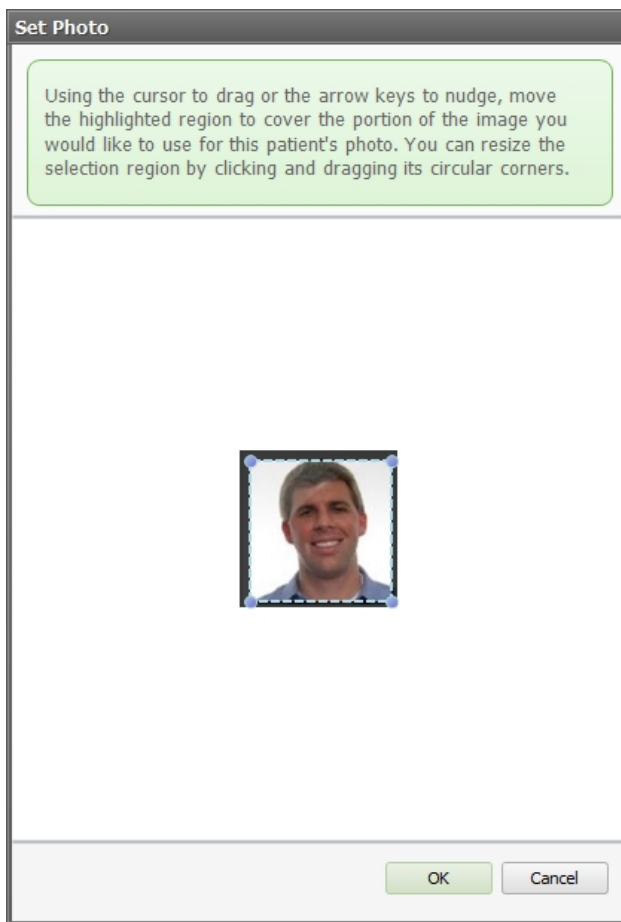
6. Click **OK** when the patient's face is well positioned to save and close the Set Photo dialog. Click **Cancel** to close without saving.

   You will return to the Edit Patient Dialog where you will see the image you have selected in the display.

7. The Edit Patient dialog is still open. Click **OK** to save the photo and close the Edit Patient dialog, or click **Cancel** to close without saving the photo.

Clear a Patient's Photo

A photo can be removed (cleared) at any time. Doing so will display the default person icons.

To clear a photo:

1. Open a Patient (see page 84).

2. Click 🖼️ **Edit Patient** in the Patient Group of the Ribbon Page. This opens the Edit Patient dialog.

3. Click **Clear Photo** below the current Patient photo. The photo is replaced with the default person icon.
4. Click **OK** to save and close the dialog, or click **Cancel** to close without clearing the photo.

> NOTE: It is not necessary to clear a photo in order to replace it with a more recent photo. Set Photo will replace the old photo with the new selection automatically.

Related Topics

Add a Photo for an Existing Patient (see page 81)

Open a Patient

To begin working with a Patient, you will need to open the patient's record.

There are three ways to open a patient record:

- Double-click the patient from the Patients Management Grid.
- Select the patient from the Management Grid and click on **Open** in the Action Pane, or

- Right-click on the Patient in the Management Grid and click on **Open**.
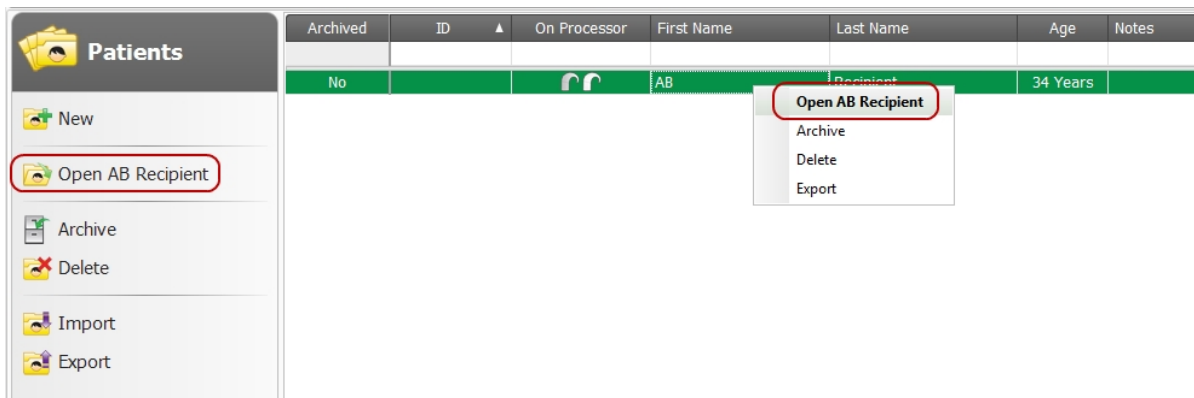
Related Topics

Add an Implant to an Existing Patient (see page 92)

Close a Patient

To close a patient record, you can do one of the following:

- Click **Close Patient** in the Patient Group.
- Click the X button just above the Ribbon Page.
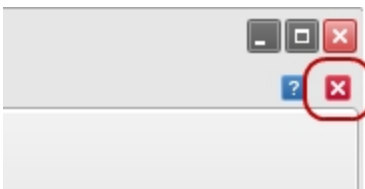
After closing the Patient, the Patients Data Manager opens.

Related Topics

Export One or More Patients

Exporting a Patient is useful when Patients need to be transferred to another database or their information must be backed up.

Multiple Patients can be exported at a time.

Exported Patients are saved to a file in XML format. The name of the file is automatically generated from the patient's name as well as the current date and time.

To export one or more patients:

1. Select in the Management Grid the Patient(s) you want to export.
2. Either:
    a. Click on **Export** in the Action Pane, or
    b. Right-click on a selected Patient in the Management Grid and click on **Export** from the dropdown menu.
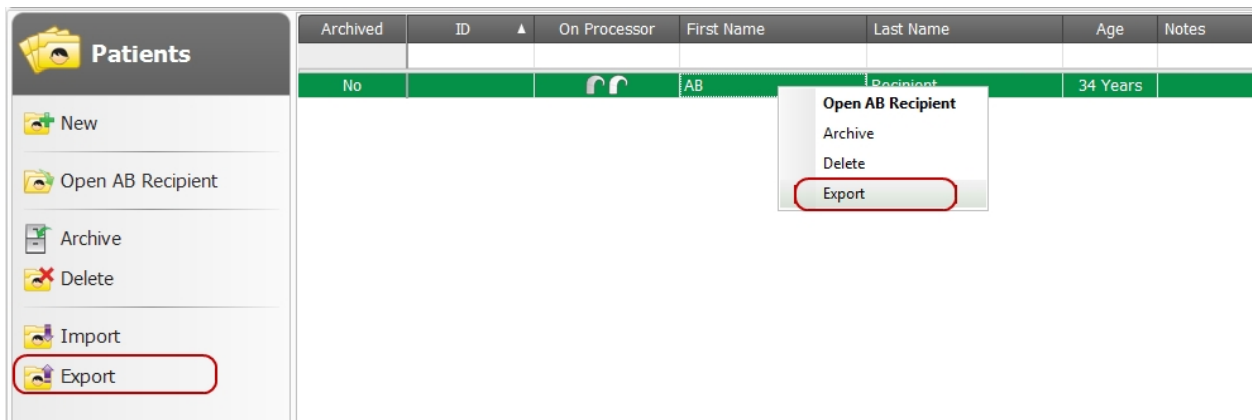
The Export Patient dialog opens with a successful export message. **Click** OK to close the dialog, or click **Open Folder** to close the dialog and open Windows Explorer to view the file.
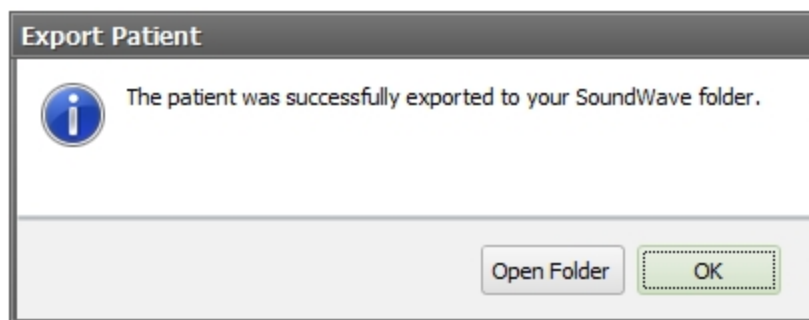
Import One or More Patients

Importing a Patient merges the information in the import file with the information in the current database.

To import a patient,

1. Click **Import** in the Action Pane. This opens the File Chooser.
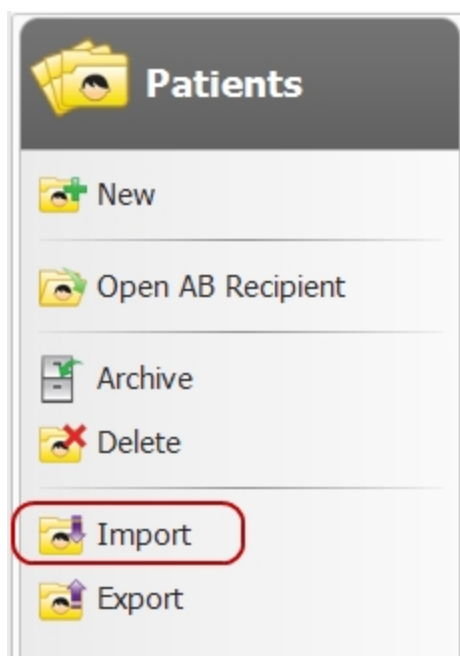
2. Select the file(s) and click **Open**.
3. When the import completes, the imported patients are listed in the Management Grid.

NOTE: When an imported Patient is new to the Database, SoundWave creates a new record. When an imported Patient corresponds to one already in the Database, SoundWave merges the two records, even when the original record is archived (hidden from view).

Related Topics

Delete One or More Patients

To delete one or more patients from the database:

1. Select the Patient(s) you want to delete in the Management Grid.
2. Either:
   - Click **Delete** in the Action Pane, or
   - Right-click a selected Patient in the Management Grid, and click **Delete** from the right-click menu.
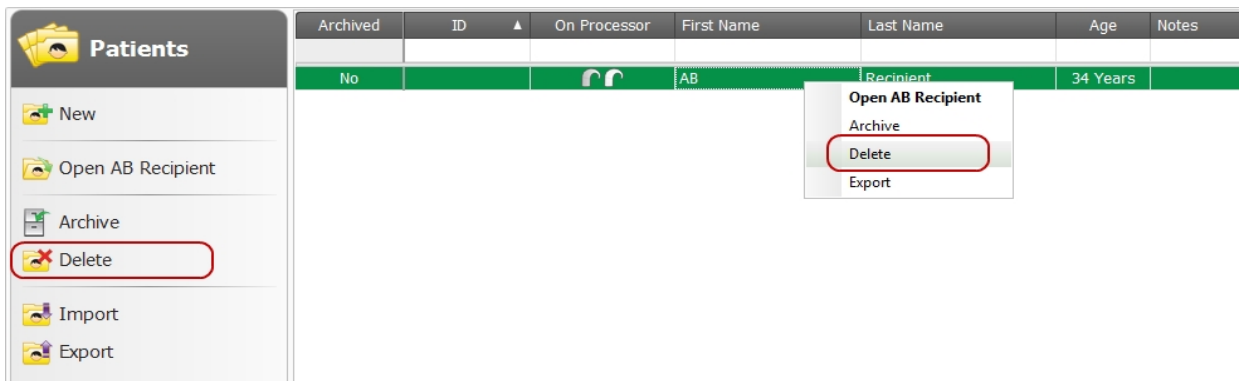
This opens the Delete Patient dialog, warning you that the selected Patient(s) will automatically be exported before being deleted.
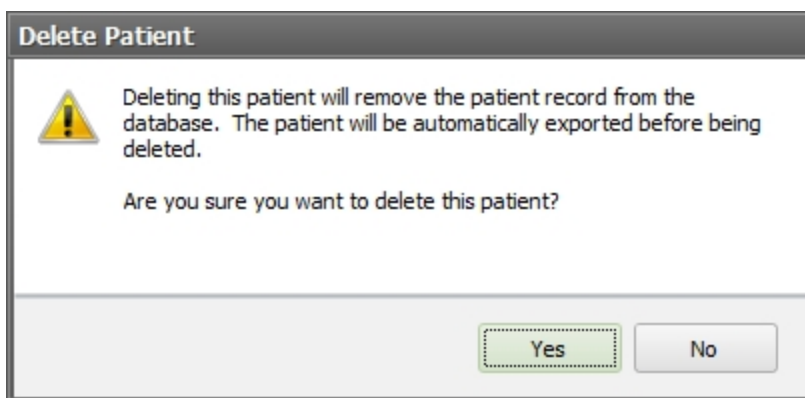
3. Click **Yes** to delete the Patient(s) and close the dialog. **Click** No to close the dialog without deleting the Patient(s).

Related Topics

Manage Implants

The Implants Data Manager accesses information about the Implant(s) a specific Patient has. It also allows you to manage the patient's implants.

Related Topics

Implants Data Manager

The Implants Data Manager allows you to add, edit, and delete implants.
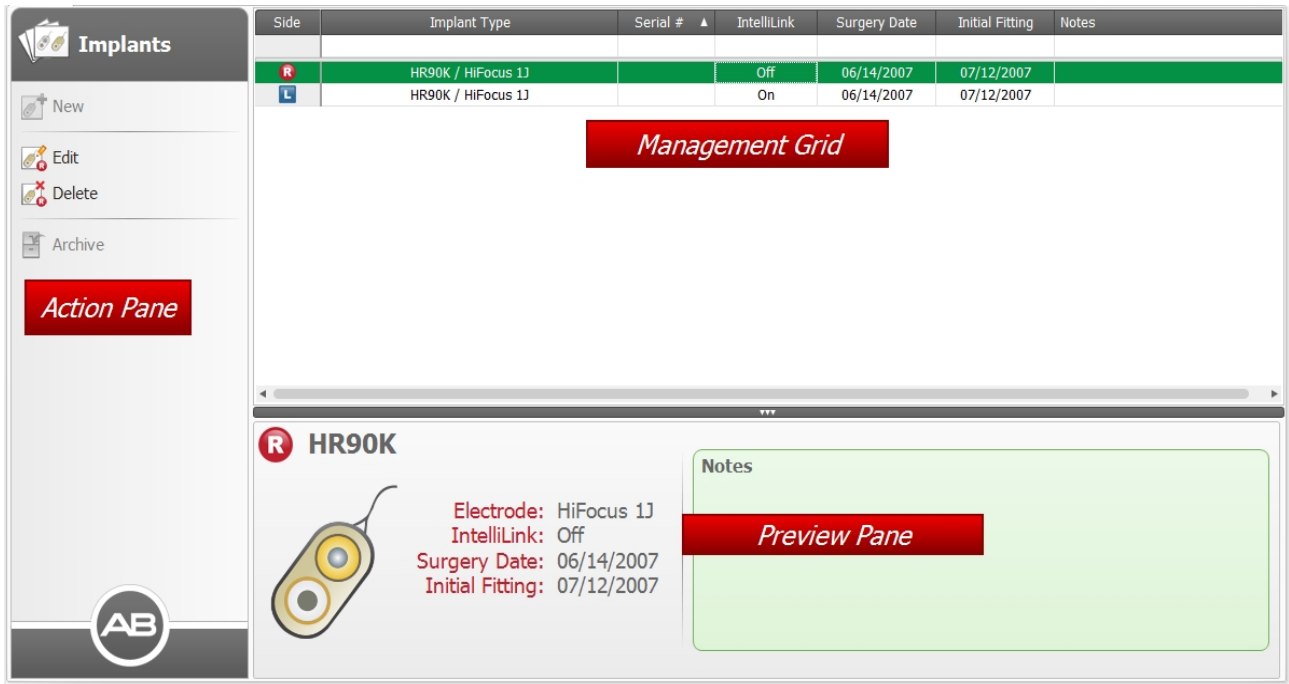
Action Pane

The Action Pane allows you to edit or add an implant to the Patient or to view implants.

The Action Pane has the following items:

New

Opens the New Implant Dialog where you can enter information for a new Implant.

Edit

Opens the Edit Implant Dialog where you can edit the Implant.

Delete

Deletes the Implant that has focus.

Archive/ Retrieve

Archives or, if already archived, retrieves the selected Implant.

Management Grid

The Implant Management Grid lists any implants that have been added to the Patient. Each row represents a single Implant record. Clicking (selecting) a row highlights the record. To select multiple records, press and hold the Ctrl key while selecting each Implant.

Column Heading	Description
Archived	Visible when the Archive is open. Displays whether the implant is currently archived.
Side*	Displays the side the implant is associated with as R or L.
Active*	Displays the Active status as Yes or No.
Implant Type*	Displays the type of implant.
Serial #*	Displays the serial number as entered by the clinician. *Note: The serial # is different from the IntelliLink ID.*
IntelliLink*	Displays the IntelliLink feature as On or Off.
Surgery Date*	Displays the date of the CI surgery.
Initial Fitting*	Displays the date of the initial fitting.
Revision Date*	Displays the revision date that is set when an Implant is made inactive.
Notes*	Optional field for adding any additional information.
IntelliLink ID	Displays the unique identification number associated with an implant. *Note: C1 implants are not assigned IntelliLink IDs.*

* Indicates a column that is displayed by default.

Use the Column Chooser, sorting, and filtering to customize how information is displayed in the Management Grid.

Preview Pane

The Preview Pane displays the details for the Implant that has focus.

Related Topics

Work with Data Managers (see page 32)

Add an Implant to an Existing Patient

Once you have created a Patient, you can add one or more Implants to it.

Adding an Implant requires that you Open a Patient (see page 84).

There are two methods to add an Implant:

A. Connect the patient's Implant to the Fitting System

1. Connect the patient's Implant and processor to the Fitting System.
2. If the implant was not already associated with a Patient in the database, the New Implant Dialog opens.

B. Create an Implant manually

1. Open the ⬚ Implants Data Manager.
2. Click **New** in the Action Pane, or right-click in the Management Grid and click **New** from the right-click menu to open the New Implant Dialog.

Fill out the New Implant Dialog as follows:

New Implant

Side* R Right
Type* HR90K / HiFocus 1J
IntelliLink ID 7175
Serial #
Surgery Date
Initial Fitting
Active* Yes
Ground Electrode Case
Check Interval 20 ms
Notes

The connected implant is unassigned. In order to use it with the patient, it must be assigned.

*Required   OK   Cancel

1. Choose the **Side** and implant **Type**. These are required fields.

NOTE: Options for changing Type after saving this entry are limited. Be careful to select the correct Type for the implant and electrode, if possible.

2.

3. Click **OK** to save the entries and close the dialog, or click **Cancel** to close the dialog without saving.

When complete, the new Implant appears in the Management Grid.

Available Setting Options for the New/Edit Implant Dialog

Field	Description	Options
Side*	Sets the side with which the implant is associated	Left or Right
Type*	Sets the type of implant and electrode	C1 / Standard C1 / Enhanced C1 / HiFocus CII / HiFocus 1J HR90K / HiFocus 1J HR90K / HiFocus Helix[‡] HR90K Advantage / HiFocus 1J[‡] HR90K Advantage / HiFocus Helix[‡] HR90K Advantage / HiFocus MS[‡] HiRes Ultra/HiFocus MS[‡]
Serial #	Sets the serial number, which can be found along with the manufacturing paperwork. *NOTE: The serial # is different from the IntelliLink ID*	Enter the number
Surgery Date	Sets the Date of the CI surgery	Enter or select the date
Initial Fitting	Sets the Date of the initial fitting	Enter or select the date
Active*	Sets the status of the implant. Defaults to Yes and not selectable until after the record is saved.	Yes or No
Ground Electrode	Sets which electrode is used for the ground path during stimulation.	Ring Case*
Check Interval	Sets how often the processor polls the implant to ensure that lock is still established.	10ms 20ms* 30ms 40ms 50ms *If RF Lock is set to AutoVoltage, Check Interval is set to 20ms.*
Notes	Optional field for adding any additional information	

* Indicates a required field.

[‡] Indicates a licensed feature.

Edit an Implant

Once you have added an Implant, you can always edit the Implant.

1. record.
2. Close any open programs for the implant.
3. Open the ⬜ Implants Data Manager.
4. Select the implant you want to edit, then either:
   - Right-click the Implant in the Management Grid and click **Edit** in the right-click menu, or
   - Click ⬜ **Edit** in the Action Pane, or
   - Double-click on the Implant in the Management Grid.

	Archived	Side	Implant Type	Serial # ▲	IntelliLink	Surgery Date	Initial Fitting	Notes
Implants								
	No	Ⓡ	HR90K / HiFocus 1J		Off	06/14/2007	07/12/2007	
New	No	Ⓛ	HR90K / HiFocus 1J		On	06/14/2007	07/12/2007	
Edit				Edit				
Delete				Archive				
Archive				Delete				

5. The Edit Implant dialog opens.

6. Make the necessary changes.
7. Click **OK** to save the changes and close the dialog, or click **Cancel** to close the dialog without saving.

When complete, you will return to the [image] Implants Data Manager for the open Patient.

Related Topics

Change an Implant's Active Status

The active status of a patient's implant will not change unless they receive a replacement for that side. When that happens, you change the active status of the original implant before adding the new implant.

To change an Implant's Active status,

1. Open a Patient (see page 84).
2. Open the ⬚ Implants Data Manager.
3. Select the old implant.
4. Do one of the following:
    ○ Right-click the Implant in the Management Grid and click **Edit**, or
    ○ Click ⬚ **Edit** in the Action Pane, or
    ○ Double-click the Implant in the Management Grid.

   The Edit Implant dialog opens.

5. In the Active field, select **No**.
6. Click **OK** to save the change, archive the implant, and close the dialog. Click **Cancel** to close the dialog without saving or archiving.

NOTE: An inactive Implant is automatically archived.

Related Topics

Delete One or More Implants

To delete one or more Implants,

1. Open a Patient (see page 84), and close any Programs that are open for the Implant.
2. Open the ⬚ Implants Data Manager.
3. Click the Implant(s) in the Management Grid.
4. Click ⬚ **Delete** in the Action Pane.
5. You can either:

   ○ Select the Implant in the Management Grid, and then click ⬚ **Delete** in the Action Pane, or
   ○ Right-click the Implant in the Management Grid and click **Delete** the right-click menu
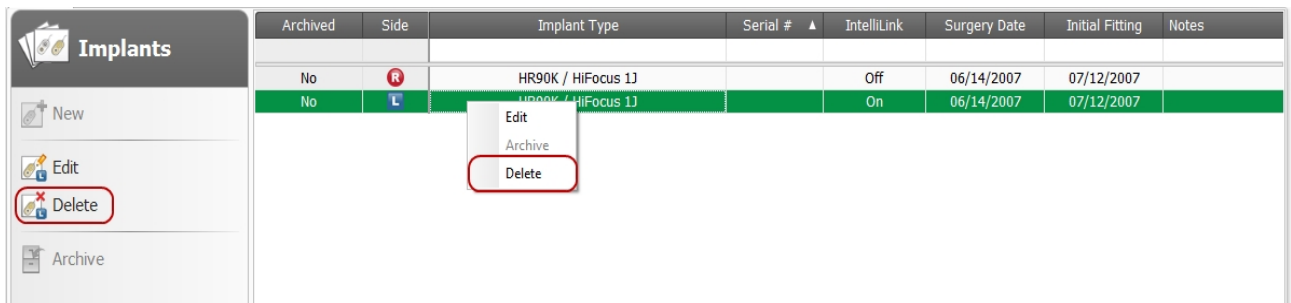
This opens the Delete Implant Dialog.

6. Click **Yes** to delete the Implant(s) and close the dialog, or click **No** to close the dialog without saving.

Stimulate an Implant

Stimulation of a patient's implant using a specified program can be started in multiple ways.

There are several ways to stimulate an implant:

From the Programs Data Manager

- Right-click the row containing the program you want to start, then select **Stimulate** from the right-click menu, or
- Click the row containing the program you want to start, then click **Stimulate** in the Action Pane.
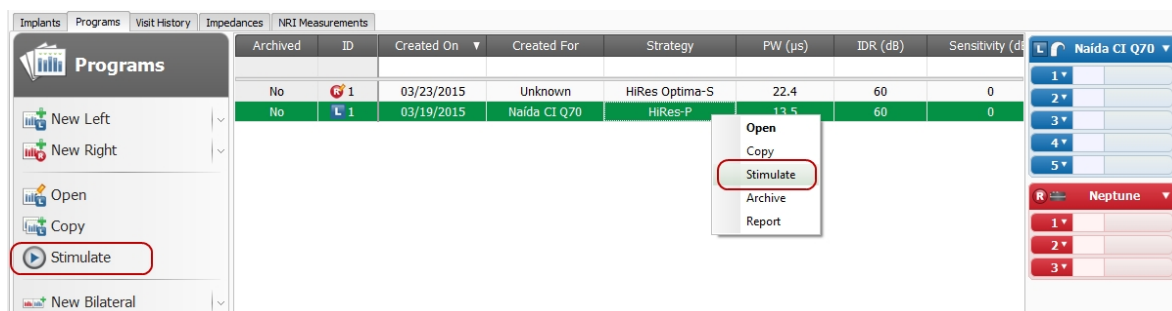
From a Fitting Screen

1. Open the program you want to start into a fitting screen.
2. Click the **Start** icon in the Stimulation Group of the Ribbon Page.

You will see the stimulation reflected in the Fitting Chart and in the Ribbon Page.

From the Processor Download Pane

1. View the Processor Download Pane by selecting the Programs Data Manager or the Visit History Data Manager.
2. Place the program you want to start into a slot and set slot options as desired.
3. Click the slot dropdown menu and select **Stimulate**.
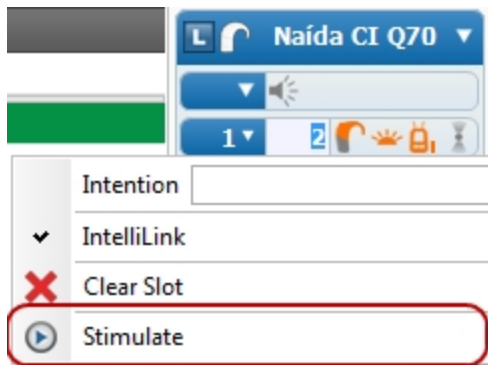
Related Topics

Stop Stimulation

There are several ways to stop stimulation:

- Click the **Stop** button in the **Stimulation Group** of the Ribbon Page. If you are stimulating bilaterally, this button stops all stimulation.

- Click the **Stop** button in the right or left **Fitting Hardware** group of the Ribbon Page to stop stimulation for only the right or left side.
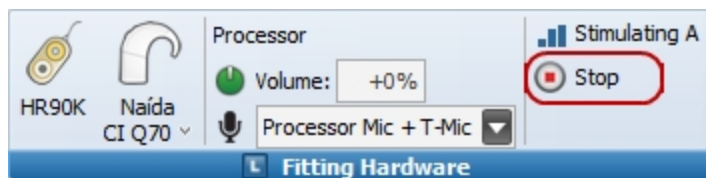
- Press the **spacebar** on your keyboard to stop all stimulation.

Related Topics

Manage Impedances

Measuring Impedances provides information relating to the status of a patient's electrode array.

Impedances affect the calculation of pulse width by the auto pulse width algorithms.

The Impedances Manager manages the measurement history.

Related Topics

Impedances Data Manager

The Impedances Data Manager allows you to measure and view Impedances. You can also run electrode conditioning from the Impedances Data Manager.
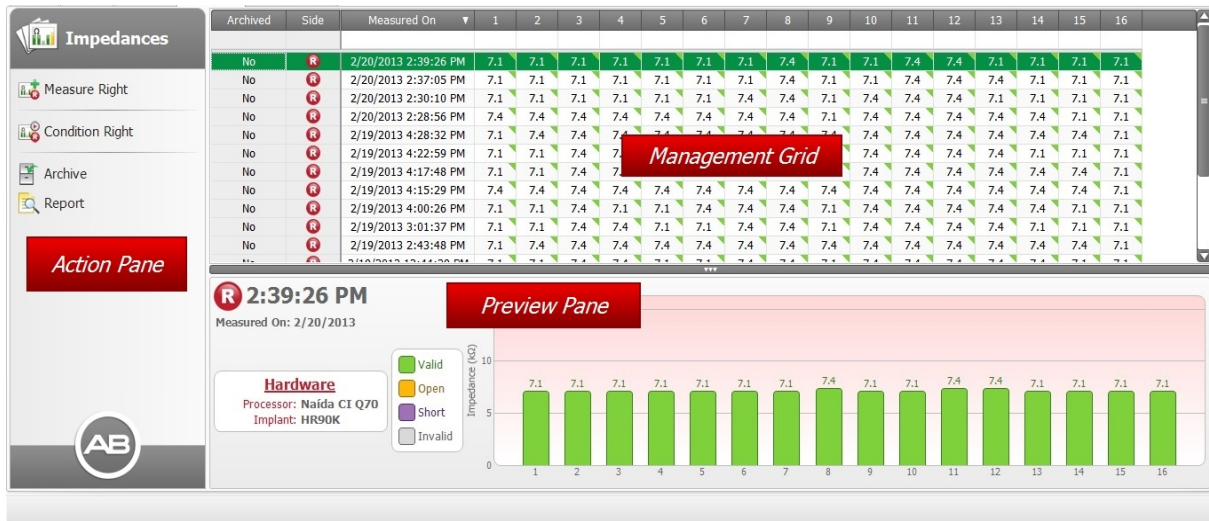
Action Pane

The Action Pane has the following items:

Measure Left/ Measure Right

Measures the impedances for the selected Implant (right or left).

Condition Left/ Condition Right

Conditions the electrodes for the selected Implant (right or left).

Archive/ Retrieve

Archives or, if already archived, retrieves the selected Impedance record.

Report

Generates and opens an Impedance Report.

Management Grid

The Management Grid displays all of the impedance measurements that have been taken for the open Patient. Each row represents a measurement, and clicking (selecting) a row highlights it. To select multiple measurements, press and hold the Ctrl key while selecting additional records.

Every row displays the following information:

Column Heading	Description
Archived	Visible when the Archive is open. Displays whether the Impedance record is currently archived.
*Side**	Displays the side as R or L.
*Measured On**	Displays the Date and Time.
*Electrode Number**	Displays the measurement for the electrode.
Measured With	Displays the Processor type.

* Indicates a column that is displayed by default.

You can customize the information displayed in the Management Grid by using the Column Chooser and by filtering.

Preview Pane

The Preview Pane displays the measurement details for the selected measurement, complete with the Impedance classifications.

Related Topics

Work with Data Managers (see page 32)

Measure Impedances

There are two ways to measure Impedances.

Measure from the Data Manager

1. Open a Patient (see page 84).
2. Open the Impedances Data Manager.
3. Click **Measure Right** or **Measure Left** in the Action Pane.
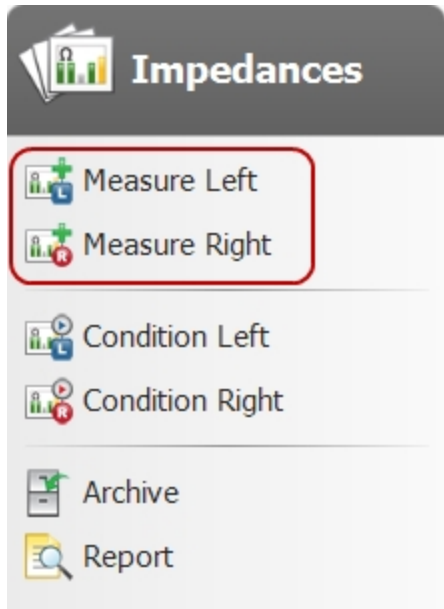
Measure from the Ribbon Page Fitting Hardware Group

1. Open a Patient (see page 84).
2. The Fitting Hardware Group appears in several Ribbon Pages, including the Home, Fitting, and NRI Measurements Ribbon Pages.
3. Select **Measure Impedances** from the dropdown menu.
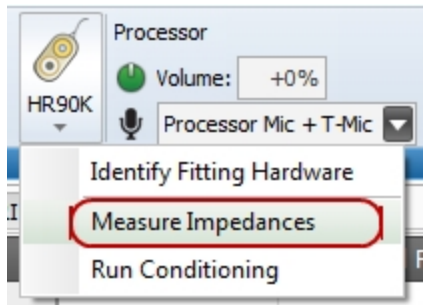
The Hardware Status displays as while SoundWave takes the measurement. When the measurement is complete, the Hardware Status displays Implant Ready and the measurements are logged with the time and date in the Management Grid of the Impedances Data Manager.

Impedance Classifications

Impedance measurements are color-coded to indicate their classification.

Classification	Color	Range for CII/HiRes-Family	Range for C1
Valid	Green	$1.0k\Omega \leq Z \leq 30.0k\Omega$, where Z is the impedance measurement	$1.0k\Omega \leq Z \leq 150.0k\Omega$, where Z is the impedance measurement
Open	Yellow	$z > 30.0k\Omega$	$z > 150.0k\Omega$
Short	Purple	$0.5k\Omega \leq Z < 1.0k\Omega$, and a detection of a direct electrical connection between two or more electrodes	N/A
Invalid	Gray	$z < 0.5k\Omega$	$z < 1.0k\Omega$

Manage Automatic Impedance Measurement

When a patient is opened and an implant is locked to the first time during a session, SoundWave automatically measures impedances. This is a global setting that you can change.

To change the Automatic Impedances setting:

1. Click **Application Menu** top open the Configuration submenu, then click **Preferences** to open the Preferences dialog.
2. Select or unselect the **Automatic Impedances** checkbox in the **General** group.
3. Click **OK** to save the change and close the Preferences dialog, or click **Cancel** to close the dialog without saving the change.
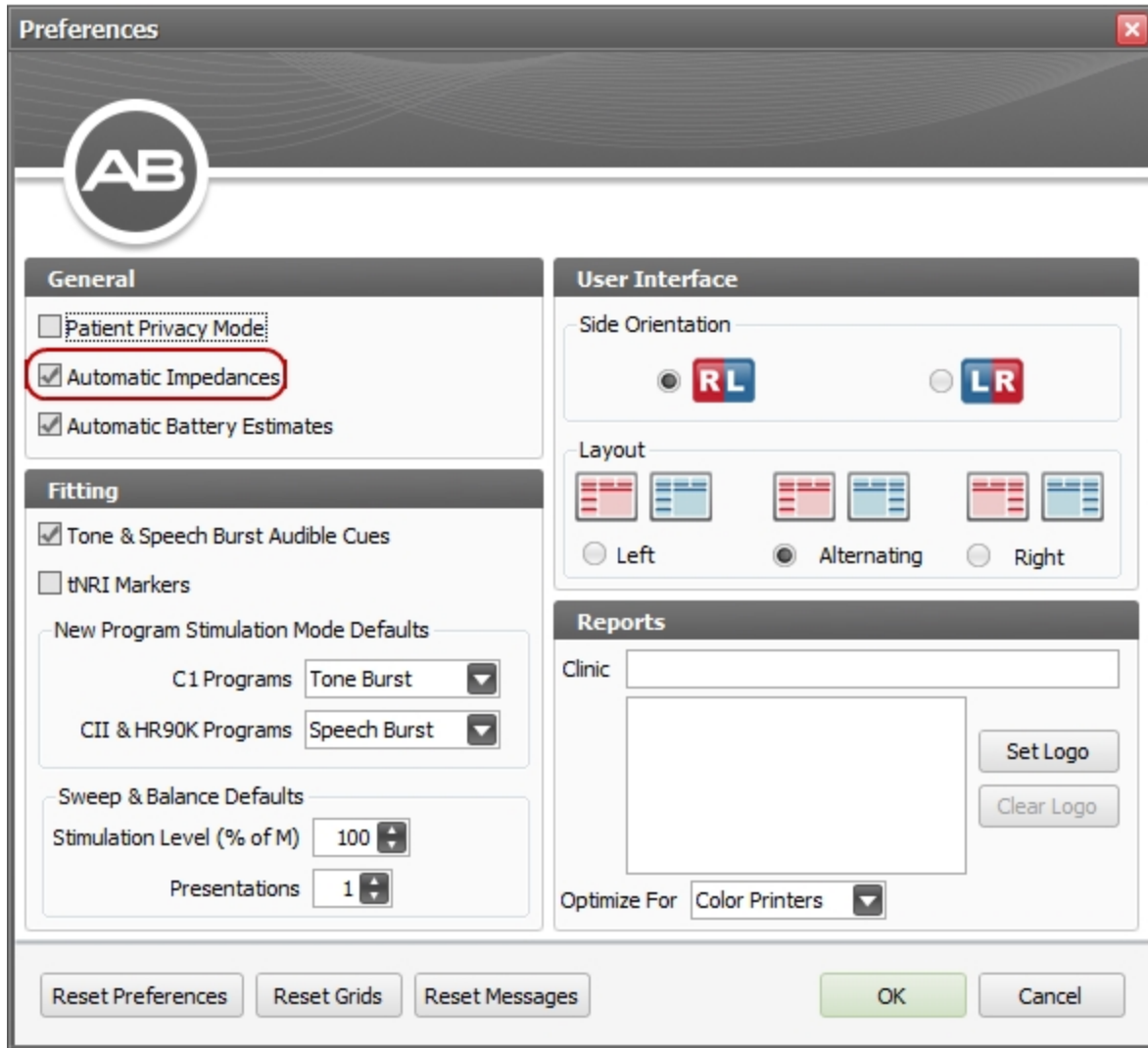
If the box next to Automatic Impedances is unchecked SoundWave will no longer automatically measure impedances when a Patient is opened.

Related Topics

Run Conditioning

Running Conditioning is a method for reducing impedances on electrodes.

Electrode Conditioning can be run prior to a patient's first fitting in SoundWave or when turning on electrodes which had been previously disabled for an extended period.

There are two ways to run conditioning:

From the **Impedances Data Manager:**

1. Open a Patient (see page 84).

2. Open the Impedances Data Manager.

3. Click **Condition Right** or **Condition Left** in the Action Pane.
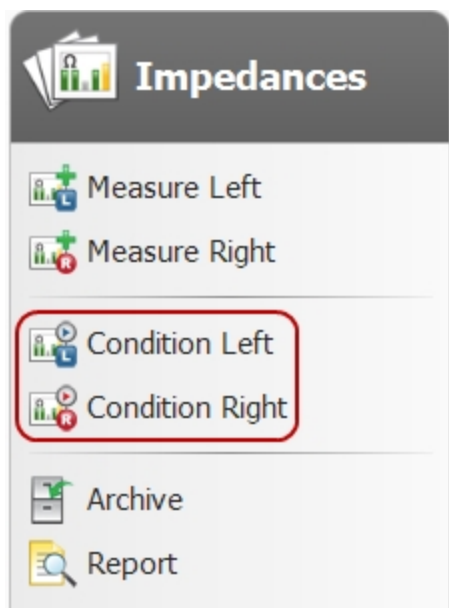
The Hardware Status displays as while SoundWave runs conditioning. When conditioning is complete, the Hardware Status displays Implant Ready.

From the Implant dropdown in the Fitting Hardware Group in the Home Ribbon Page:

- With a Patient open, click the down arrow below the Implant icon, and select Run Conditioning from the dropdown menu.
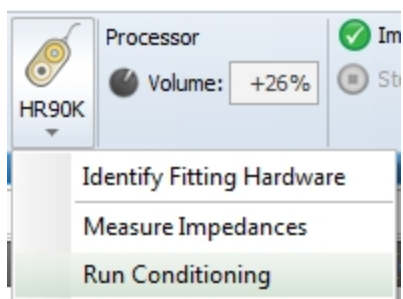
Manage NRI Measurements

The NRI Measurements Data Manager manages the NRI Measurements history for the Patient.

Related Topics

NRI Measurements Data Manager

The NRI Measurements Data Manager allows you to measure and view NRI Measurements.

Action Pane

The Action Pane has the following items:

New Left/ New Right

Opens a new NRI Measurement Screen for the selected implant (Left or Right). If there are any non-archived NRI Measurement Templates that may be used to create a NRI Measurement for the selected side, a dropdown will be shown. By selecting a template from this dropdown, SoundWave will use the selected template to create a new NRI Measurement Screen pre-populated with the settings from the selected template.

Open

Opens the NRI Measurement that has focus.

Copy

Opens a copy of the NRI Measurement that has focus.

Delete

Deletes the NRI Measurement that has focus.

Archive/ Retrieve

Archives or, if already archived, retrieves the NRI Measurement that has focus.

Report

Generates and opens an NRI Measurement report.

Management Grid

The Management Grid displays any existing NRI Measurements, the date the measurement was taken, and other information regarding the measurement, such as the number of points or any notes associated with the measurement.

Clicking (selecting) a measurement highlights it. Each row represents a single Measurement record. To select multiple records, press and hold the Ctrl key while selecting additional records.

Column Heading	Description
Archived	Visible when the Archive is open. Displays whether the NRI Measurement is currently archived.
ID*	Displays the NRI Measurement ID (e.g., L1).

Column Heading	Description
Measured On*	Displays the date of the NRI Measurement.
Electrode Number*	Displays the calculated tNRI for the electrode.
Notes*	Optional field for adding any additional information.
Gain	Displays the recording gain for the measurement.
Measured With	Displays the type of processor used to make the measurement.
Ordering	Displays the Stim Level Ordering as Low to High or High to Low.
Averages	Displays the Averages Per Data Point value for the measurement.
Sequence	Displays the Stimulation Sequence for the measurement.

* Indicates a column that is displayed by default.

NOTE: For details about NRI Measurement settings, see Set Up NRI Measurements (see page 111).

Use the Column Chooser, sorting, and filtering to customize how SoundWave displays information in the Management Grid.

Preview Pane

The Preview Pane displays information regarding the highlighted measurement. To view different aspects of the measurement, click the **Chart**, **Details**, or **Settings** tabs.

NOTE: Opening a new or existing NRI Measurement also opens the NRI Measurement Ribbon Page of the NRI Tools Grouping. See *Ribbon Pages* for more information.

Related Topics

Work with Data Managers (see page 32)

Set Up NRI Measurements

There are two ways to measure NRI for your CII/HiRes-Family implants.

A. From the NRI Measurement Screen:

1. Open a Patient (see page 84).
2. Select the 🗒 NRI Measurements Data Manager.
3. Click on 🗔 **New Right** or 🗔 **New Left** in the Action Pane.
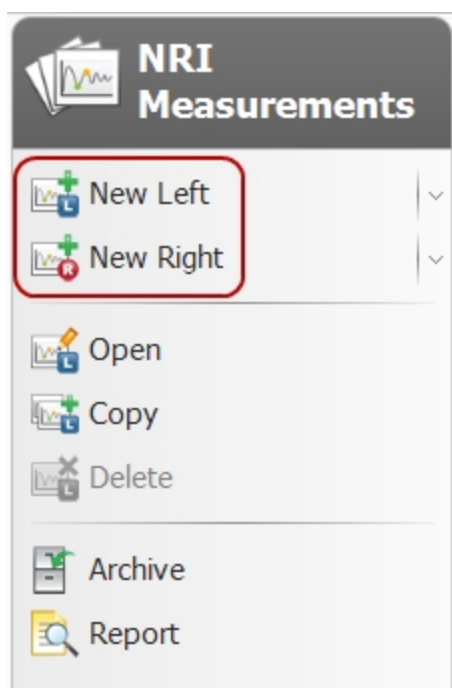
An NRI Measurement screen will open in a separate tab.

B. From a Fitting Screen:

1. Open a Patient (see page 84).
2. Open a Program.
3. Right-click on the electrode channel for which you want to measure tNRI.
4. Select **tNRI** from the menu and click on **Measure #**, **Measure Selected**, or **Measure All**.

SoundWave will open an NRI Measurement screen in a separate tab, with High and Low levels based on the M and T levels from the selected electrodes on the Fitting Screen.

NOTE: If you enabled clipping on any electrodes in a program, SoundWave ignores the clipping settings while measuring tNRIs.
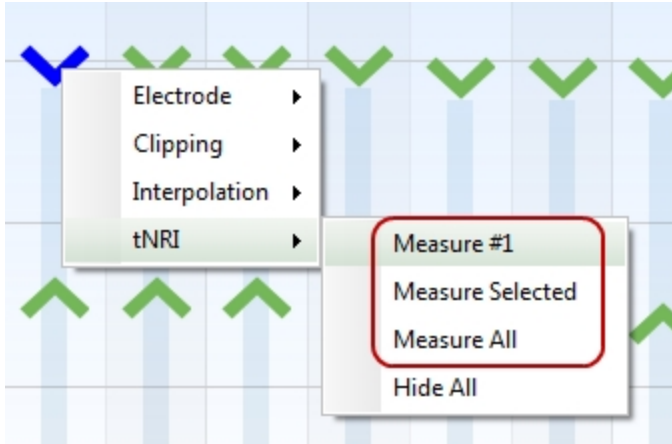
NRI Measurement Screen
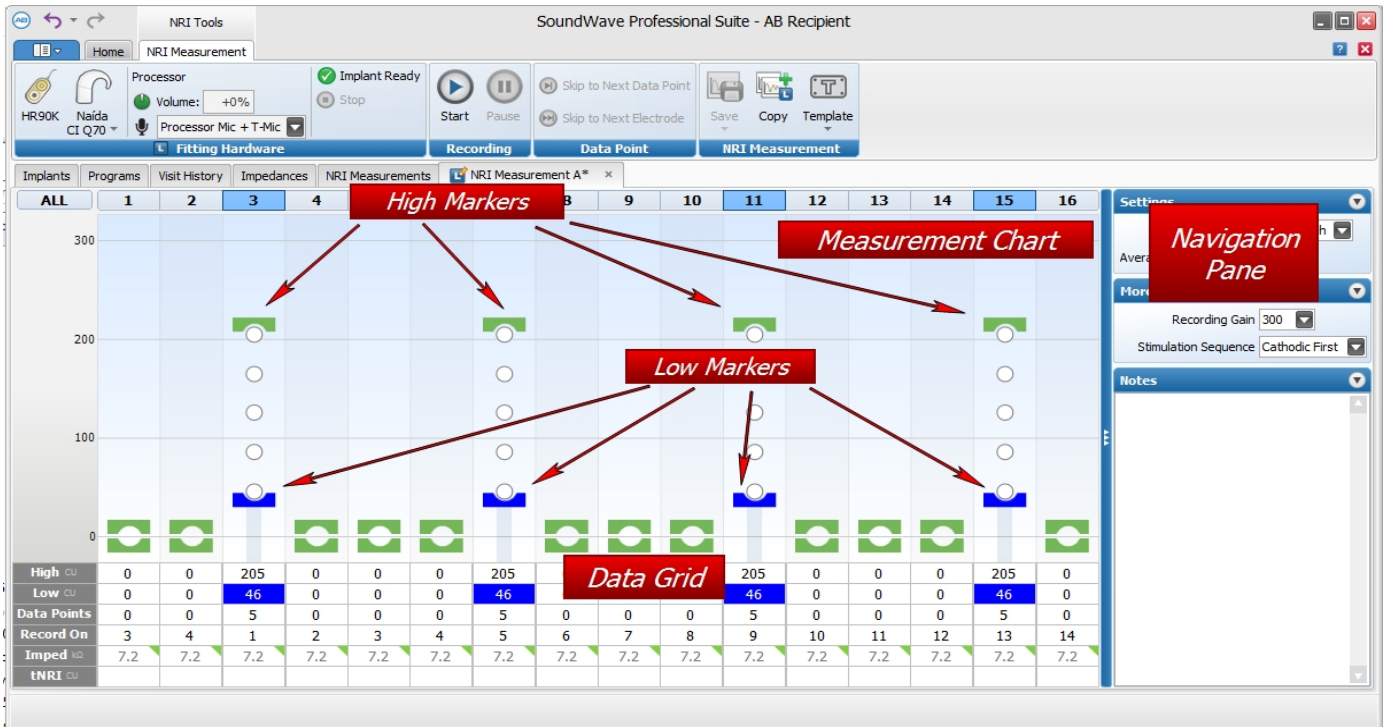
When an NRI Measurement Screen is in focus, you will have access to the following Ribbon Pages:

- Home Ribbon Page
- NRI Measurement Ribbon Page

The Measurement Screen has several regions, including the Navigation Pane, the Measurement Chart, and the Data Grid.

The Navigation Pane provides access to settings that affect measurements on all electrodes.

The Measurement Chart and Data Grid allow for setting of channel-specific parameters, including High level, Low level, number of Data points, and Recording Electrode.

Channels on the Measurement Chart and Data Grid can be selected by clicking on a channel. Multiple channels can be selected by clicking on the channel numbers at the top of the Fitting Chart or by clicking and dragging the mouse cursor over multiple markers. Pressing the Shift key while clicking on a channel adds it to the current selection. Pressing the Alt key while clicking on a channel removes it from the current selection. Pressing the Control key while clicking on a channel toggles whether the channel is included in the current selection.

NRI Settings

You can select and modify the following parameters when you take an NRI measurement.

Parameter	Description	Options
Settings		
Stim Level Ordering	Determines whether measurements are made from the lowest CU level to the highest CU level or vice versa.	Low to High* High to Low
Averages Per Data Point	Determines the number of stimulus presentations that will be delivered and averaged at each stimulation level.	16 32* 64 128 256
Simulated Dataset	This field is displayed only when the open Patient is a Test Patient. Determines which set of included data are used for the	1* - 8, with measurement quality going from best to

Parameter	Description	Options
	Measurements.	worst
More Settings		
Recording Gain	Determines the gain applied by the recording amplifier.	300* 1000
Stimulation Sequence	Determines the order in which pulses will be delivered within a single presentation at a given stimulation level.	Anodic First Cathodic First*

* Indicates a default setting

For keyboard shortcuts that can be used while running an NRI Measurement, see .

Related Topics

Adjust NRI Measurement Levels

There are multiple ways to adjust Low and High levels when setting up measurements in an NRI Measurements Screen.

A. Typing in the Data Grid

1. Click the appropriate box for any of the highlighted channels.
2. Enter the numerical value, then either:
   - Type the value in the cell
   - Use the onscreen Up and Down arrows to change the value
   - Use Up and Down arrow keys on the keyboard to change the value
3. Press **Enter** key.

   SoundWave sets the value of the markers for the highlighted channels to the value you entered.

B. Dragging markers in the Measurement Chart

1. Click the appropriate marker for any of the highlighted channels.
2. Drag the marker up or down until the marker reaches the value you want to specify.

C. Scrolling up or down with the mouse

1. Click the appropriate marker for any of the highlighted channels.
2. Scroll up or down with the mouse to move the marker until it reaches the value you want to specify.

D. Using the keyboard

1. Click the appropriate marker for any of the highlighted channels.
2. Use the Up and Down keyboard keys to move the marker until it reaches the value you want to specify.

To clear any data already collected for one or more electrodes and reset measurement parameters for those electrodes, right-click the Measurement Chart and select **Data**. This opens a menu.

Choose from:

- **Clear #x** to clear data and settings for the selected channel.
- **Clear Selected** to clear data and settings for all currently selected channels.
- **Clear All** to clear data and settings for all channels. A confirmation dialog asks you to confirm this choice before clearing data for all channels.

Related Topics

NRI Measurement Screen Keyboard Shortcuts

Function	Key
Stop All Stimulation	Spacebar
Adjust All Markers Down	Page Down
Adjust All Markers Up	Page Up
Adjust Markers Down	Down Arrow
Adjust Markers Up	Up Arrow
Data Entry	0-9
Move Entire Channel Selection to the Left	Alt + Left Arrow
Move Entire Channel Selection to the Right	Alt + Right Arrow
Move Selection Left	Left Arrow
Move Selection Right	Right Arrow
Select All Markers	Ctrl + A
Select High Marker	H
Select Low Marker	L
Select Multiple Channels to the Left	Shift + Left Arrow
Select Multiple Channels to the Right	Shift + Right Arrow
Toggle Measurement On/Off	S

Run NRI Measurements

To start NRI measurement after you have Set Up NRI Measurements (see page 111):

1. Click **Start** in the **Recording** Group of the NRI Measurements Ribbon Page.
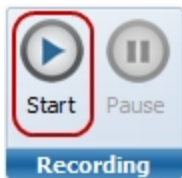
2. The **Pause** button becomes available once measurement starts. Use **Start** and **Pause** to interrupt and restart the measurements as needed. You can also pause and restart by pressing the keyboard's space bar.
3. Click **Skip to Next Data** point in the Data Point Group to skip to the next data point.
4. Click **Skip to Next Electrode** in the Data Point Group to skip to the next electrode. This stops measurement on the current electrode and goes to the next one.
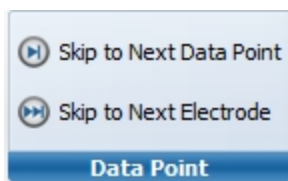
Once measurements have started, the individual response waveforms appear at the bottom of the screen to the right. The EP Growth Function appears to the left. Response waveforms are ordered by stimulation level. For each response waveform, N1 is indicated with a green dot and P2 with an orange dot. To adjust N1 and/or P2, click to select the appropriate point, and then use the Down Arrow key or Left Arrow key to move the point to the left, or the Up Arrow key or the Right Arrow key to move it to the right.

High and Low measurement levels, number of Data Points, and Averages Per Data Point are adjustable while an NRI Measurement is being done. SoundWave returns to previously measured electrodes to incorporate any changes that you have made prior to completing the NRI measurement process.

To view the Growth Function and response waveforms for any measured electrode:

- Click the corresponding numbered tab.
- A ✅ symbol on a tab indicates the measurements for the electrode are complete.
- An animated 〽 symbol on a tab indicates that measurements for the electrode are currently in progress.

Clicking a black data point within the Growth Function highlights the associated response waveform. You can include or exclude data points for the tNRI calculation as needed.

To exclude a data point, simply click the point once, and it changes to an **X**. Click a second time to include the point.

Delete One or More NRI Measurements

To delete one or more NRI Measurements:

1. You can either:

    a. Click on the NRI Measurement from the Management Grid, and click on **Delete** in the Action Pane, or

    b. Right-click on the NRI Measurement from the Management Grid, and click on **Delete** from the dropdown menu.
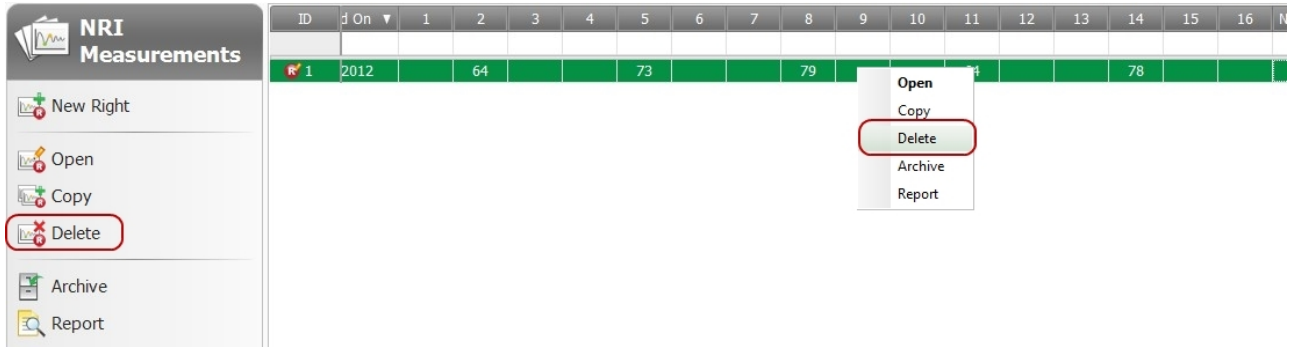
You will see the Delete NRI Measurement Dialog informing you that the NRI Measurement will be permanently removed if you proceed.
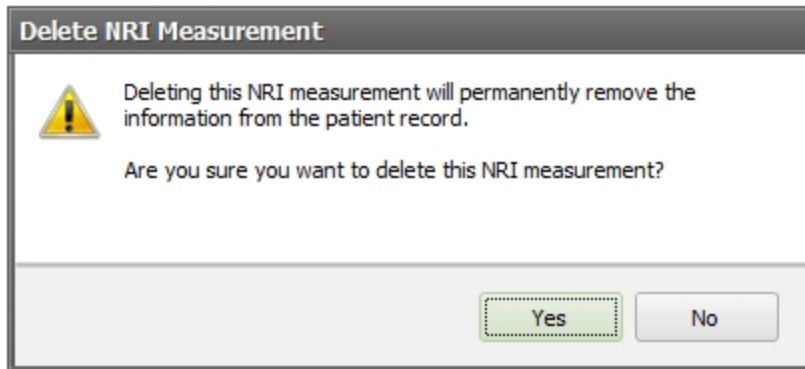
2. Click on **Yes** to delete the NRI Measurement(s).

Work with Programs

You create programs that are loaded onto the patient's processor to customize (fit) how their implant and processor function. These topics describe how to perform those tasks.

Related Topics

Create a Program (see page 123)

Save a Program (see page 150)

Adjust Program Parameters (see page 135)

Stimulation Modes (see page 150)

Unilateral Fitting Screen (see page 127)

Undo or Redo Changes to a Unilateral Program (see page 125)

Bilateral Fitting Screen (see page 131)

Bilateral Fitting with PSP Processors (see page 133)

Adjust Fitting Levels on the Fitting Screen (see page 139)

Enable or Disable Clipping (see page 144)

Enable or Disable Electrodes (see page 142)

View or Hide tNRI Markers When Fitting a Program (see page 146)

Set Processor-Specific Features (see page 148)

Programs Data Manager

The Programs Data Manager allows you to create programs, make copies of programs, and stimulate a program.

> NOTE: Opening a Program or a copy of a Program will open the Fitting Ribbon Page of the Program Tools Category. See Ribbon Pages for more information.

Action Pane

The Action Pane allows you to initiate common program-related tasks with single button clicks.

The Action Pane has the following items:

New Left/ New Right

Opens a new Fitting Screen for the selected implant (left or right). If there are any non-archived Program Templates that may be used to create a program for the selected side, a dropdown will be shown. By selecting a template from this dropdown, SoundWave will use the selected template to create a new Fitting Screen pre-populated with the settings from the selected template.

Open

Opens the selected Program.

Copy

Opens a copy of the selected Program.

Stimulate

Stimulates within the selected Program.

New Bilateral

Opens a new Bilateral Fitting screen.

Open Bilateral

If a Left program and a Right program are selected in the Data Grid, opens those programs together in a Bilateral Fitting screen.

Archive/ Retrieve

Archives or, if already archived, retrieves the Program that has focus.

Report

Generates and opens a Program Report.

Management Grid

The Management Grid displays all of the Programs that have been created for the open patient. Each row represents a single Program. Clicking (selecting) a row highlights that Program. Double-clicking a row opens the Program. To select multiple Programs, press and hold the Ctrl key while clicking each Program.

The following table shows the available columns for the Programs Management Grid along with a description of the content. For further details about specific Program parameters, see the section describing how to Adjust Program Parameters (see page 135).

Column Heading	Description
Archived	Visible when the Archive is open. Displays whether the Program is currently archived.
ID*	Displays the Program ID (ex. R4)
Created On*	Displays the date created
Strategy*	Displays the strategy type
ClearVoice*	Displays the ClearVoice setting
PW (µs)	Displays the PW setting
Rate (pps)	Displays the Channel Rate value
IDR (dB)	Displays the IDR value
Sensitivity (dB)	Displays the Sensitivity value
Audio Mixing*	Displays the Audio Mixing setting
Mic Mode*	Displays the Mic Mode setting
Notes*	Optional field for adding any additional information
AGC	Displays the AGC setting
Check Interval (ms)	Displays the Check Interval value
ClearVoice	Displays the ClearVoice setting
Coupling	Displays the Coupling setting
Created For*	Displays the Processor type
EchoBlock*	Displays the EchoBlock setting

Column Heading	Description
Filter	Displays the Filter setting
Ground Electrode	Displays the Ground Electrode setting
High Power	Displays the High Power setting
Internal Telecoil	Displays the Internal Telecoil setting
Min ICS Voltage (V)	Displays the Min ICS Voltage value
PW Type	Displays the PW Type setting
Rectification	Displays the Rectification setting
RF Lock	Displays the RF Lock setting
*SoundRelax**	Displays the SoundRelax setting
Spectral Bands	Displays the Spectral Bands setting
Use Thresholds	Displays the Use Thresholds setting
Volume Max (%)	Displays the Volume Max setting
Volume Min (%)	Displays the Volume Min setting
*WindBlock**	Displays the WindBlock setting

* Indicates a column that is displayed by default.

Use the Column Chooser, sorting, and filtering to customize how information displayed in the Management Grid.

Preview Pane

The Preview Pane provides a summary of the selected Program.

The Preview Pane contains program identifier information and the implant type and processor with which the program was created. The tabs display values defined in the program:

- **Levels** contains the M, T, and Clipping levels in a graphical view.
- **Details** contains values M, T, Clipping, Filter Center frequency, and Gain in a table format.
- **Settings** contains all program parameters that are not specific to a particular channel.

Related Topics

Work with Data Managers (see page 32)

Processor Download Pane (see page 154)

Create a Program

To create a Program,

1. Open a Patient (see page 84).

2. Click the **Programs** tab to open the Programs Data Manager.

3. Click on **New Right**, **New Left**, or **New Bilateral*** in the Action Pane to open a new Fitting Screen.

   *Available only for patients with two active CII/HiRes-Family implants.
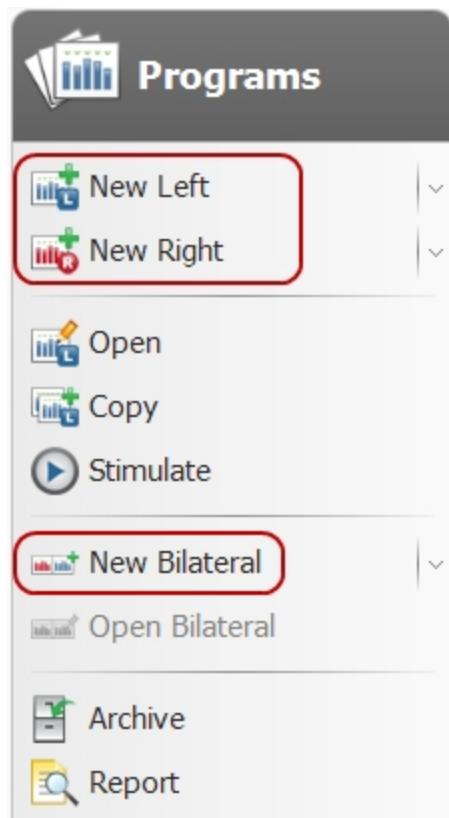
4. The Fitting Screen displays with a tab labeled Program X* (where X is the next sequential letter, starting from A, and * indicates the program has not been saved).
5. Adjust the settings to fit the Program for your Patient.
6. When you are finished with the program, click the Save Button or the down arrow below the Save icon in the Ribbon Page and select an option:
   - Save
   - Save and Close

NOTE: Each program applies only to a specific implant.

Related Topics

Adjust Program Parameters (see page 135)

Save a Program (see page 150)

Specify Programs for Download (see page 161)

Preview and Print Reports (see page 35)

Undo or Redo Changes to a Unilateral Program (see page 125)

Undo or Redo Changes to a Unilateral Program

To undo or redo changes made during fitting within the current session, click the Undo or Redo button, respectively, on the Application Bar. Alternatively, you may hit Ctrl+Z or Ctrl+Y, respectively, on your keyboard.

You can preview all available changes by clicking the dropdown. The dropdown is enabled if there are at least two changes to display. Apply one or more changes at a time by highlighting the appropriate row.
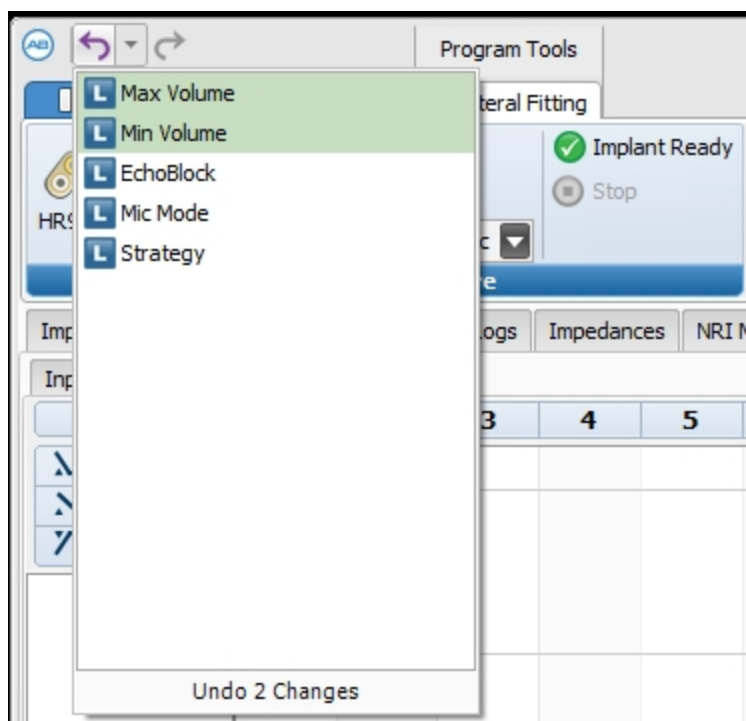
NOTE: While stimulating, only changes that were made after stimulation started can be undone or reapplied. Once stimulation is stopped, changes made prior to stimulation may then be undone or reapplied.

Related Topics

Adjust Program Parameters (see page 135)

Save a Program (see page 150)

Specify Programs for Download (see page 161)

Preview and Print Reports (see page 35)

Supported Implant / Processor / Strategy combinations

Processor	Implant/electrode	Strategy
BTE, Platinum BTE, and Auria	CII/HiFocus 1J HR90K/HiFocus Helix HR90K Advantage/HiFocus 1J HR90K Advantage/HiFocus Helix HR90K Advantage/HiFocus MS	HiRes-S/P Emulated CIS Emulated MPS
PSP	CII/HiFocus 1J HR90K/HiFocus Helix HR90K Advantage/HiFocus 1J HR90K Advantage/HiFocus Helix HR90K Advantage/HiFocus MS HiRes Ultra/HiFocus MS	HiRes-S/P Emulated CIS Emulated MPS HiRes-S/P w/Fidelity 120
Harmony	C1/Standard C1/Enhanced C1/HiFocus	CIS MPS SAS
	CII/HiFocus 1J HR90K/HiFocus Helix HR90K Advantage/HiFocus 1J HR90K Advantage/HiFocus Helix HR90K Advantage/HiFocus MS HiRes Ultra/HiFocus MS	HiRes-S/P Emulated CIS Emulated MPS HiRes-S/P w/Fidelity 120 HiRes-S/P w/Fidelity 120 and ClearVoice HiRes-S/P Optima HiRes-S/P Optima w/ClearVoice
Neptune, Naída CI Q30, and Naída CI Q70	CII/HiFocus 1J HR90K/HiFocus Helix HR90K Advantage/HiFocus 1J HR90K Advantage/HiFocus Helix HR90K Advantage/HiFocus MS HiRes Ultra/HiFocus MS	HiRes-S/P Emulated CIS Emulated MPS HiRes-S/P w/Fidelity 120 HiRes-S/P w/Fidelity 120 and ClearVoice HiRes-S/P Optima HiRes-S/P Optima w/ClearVoice
Naída CI Q90	CII/HiFocus 1J HR90K/HiFocus Helix HR90K Advantage/HiFocus 1J HR90K Advantage/HiFocus Helix HR90K Advantage/HiFocus MS HiRes Ultra/HiFocus MS	HiRes-S/P HiRes-S/P w/Fidelity 120 HiRes-S/P w/Fidelity 120 and ClearVoice HiRes-S/P Optima HiRes-S/P Optima w/ClearVoice

NOTE: C1 Implants working with older generation processors must be programmed using SClin2000.

Unilateral Fitting Screen
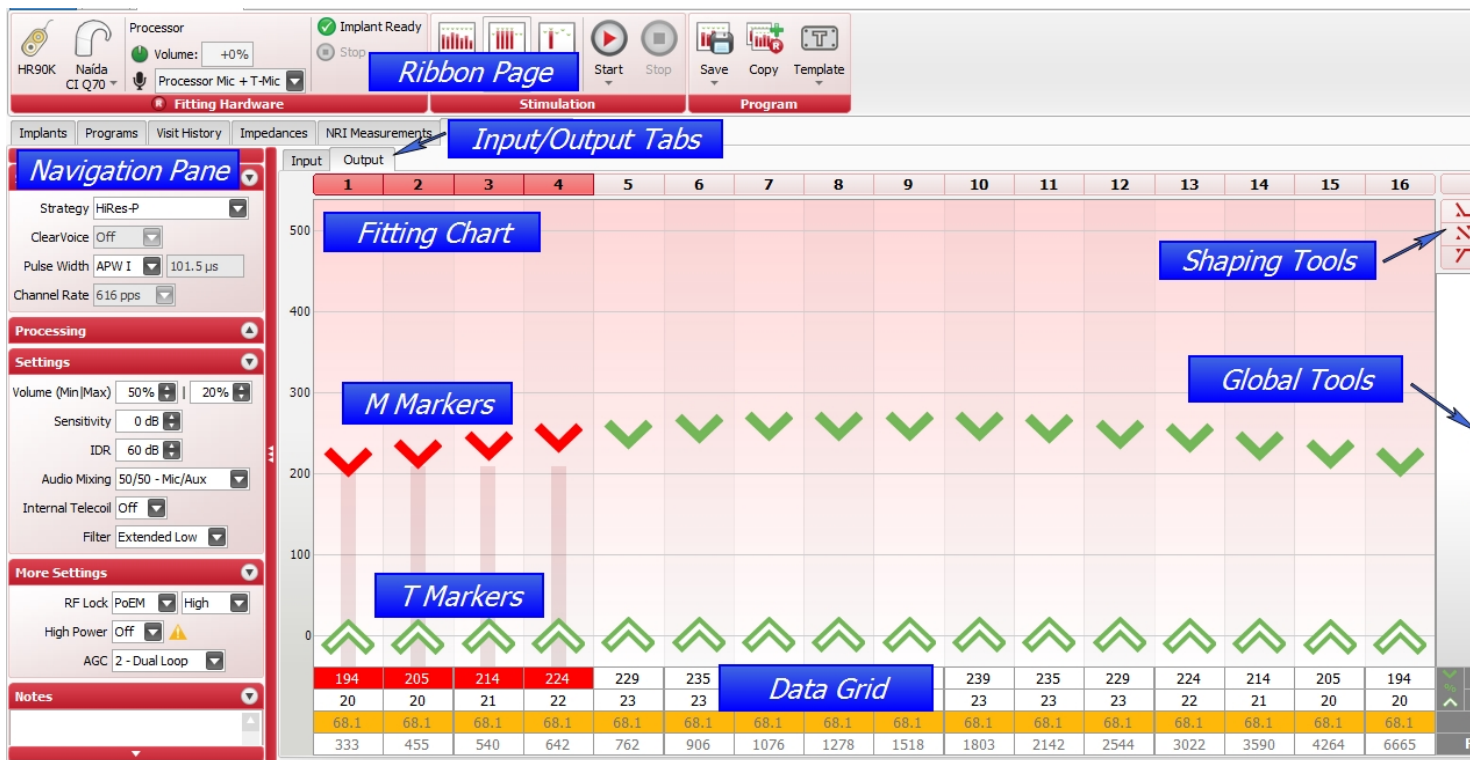
When a Unilateral Fitting Screen is in focus, you will have access to the following Ribbon Pages:

- Home Ribbon Page
- Unilateral Fitting Ribbon Page

The Fitting Screen has several regions, including the Navigation Pane, the Fitting Chart, the Data Grid, Global Tools, and Shaping Tools.

The Navigation Pane provides access to program-wide settings, explained further in the topic Adjust Program Parameters (see page 135).

The Fitting Chart and Data Grid allow for setting of channel-specific parameters. M, T, and Clipping Markers are located on the Output Tab, and Gain Markers are located on the Input Tab.

Select channels on the Fitting Chart and Data Grid by selecting the channel number(s) at the top of the Fitting Chart or by selecting the channel columns within the Chart. Pressing the Shift key while clicking a channel adds it to the current selection. Pressing the Alt key while clicking a channel removes it from the

current selection. Pressing the Control key while clicking a channel is a toggle to include or not include a channel in the current selection.

The Shaping Tools and Global Tools can be used to make adjustments to all channels simultaneously.

Related Topics

Unilateral Fitting Ribbon Page

When a Unilateral Fitting Screen is in focus, the Unilateral Fitting Ribbon Page will be visible under the Program Tools Ribbon Page Category.
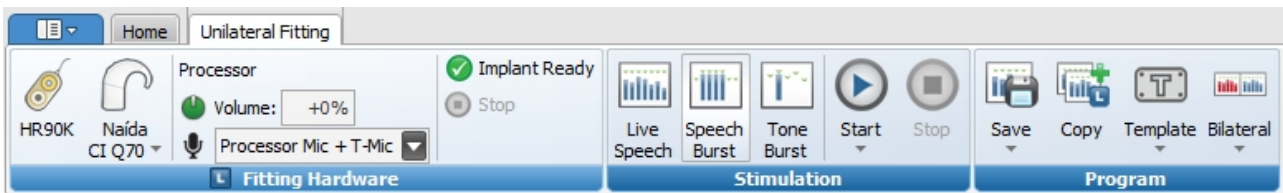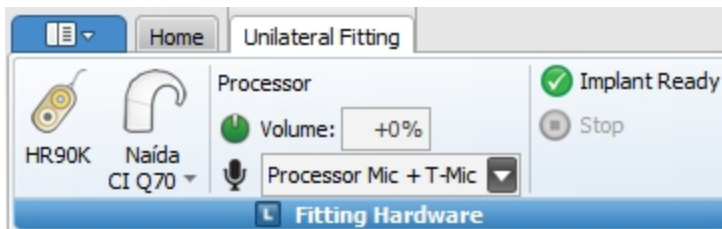
Fitting Hardware Group

The Fitting Hardware Group has the following items:

Implant

Displays the implant type.

Processor

Displays the connected processor type. Hover the mouse over the processor image to display the processor information.

Processor Info

Displays the current settings for the volume and sensitivity dials and for the Mic Source selection, as applicable for the connected processor.

✅ Hardware Status

Displays the hardware status. This area also includes current status of ComPilot, DuoPhone, and ZoomControl functionality, as applicable.

⏹ Stop Stimulation

Stops stimulation to the connected processor if the connected processor is currently stimulating.

The Fitting Hardware displayed in this Group is from the perspective of the patient's implant. To view the complete set of Fitting Hardware, see the Home Ribbon Page.

Stimulation Group
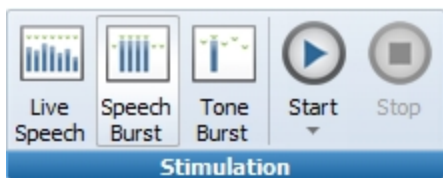
The Stimulation Group has the following items:

Stimulation Mode

Displays the options for fitting in **Live Speech**, **Speech Burst**, or **Tone Burst**.

Stimulation Controls

Displays the options to **Start** and **Stop** stimulation.

The Start button dropdown menu includes **Sweep & Balance** options, including the **Stimulation** percent (% of M level at which to stimulate), and the number of **Presentations** per channel (1-10).
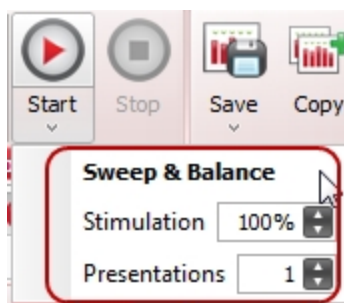
These options are relevant only when you are stimulating in Speech Burst or Tone Burst mode.

In a Bilateral Fitting Screen, the Start button dropdown menu includes items for starting stimulation bilaterally, for the left side only, or for the right side only.
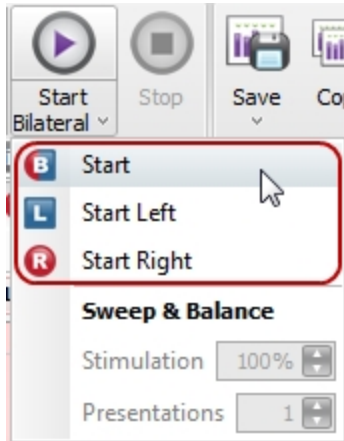
Program Group
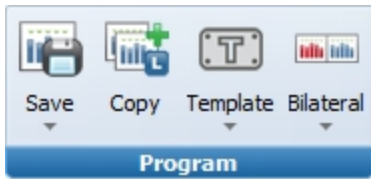
The Program Group has the following items:

Save

Saves the Program.

Clicking on the dropdown displays the options to Save, to Save and Close, and to Save Measurement.

Copy

Makes a copy of the Program.

Bilateral/ Unilateral

Moves the current program from a unilateral fitting screen into a bilateral fitting screen, or vice versa. If currently on a unilateral fitting screen, the dropdown will include options for opening the

current program either with any currently open contralateral program or with a new contralateral program.
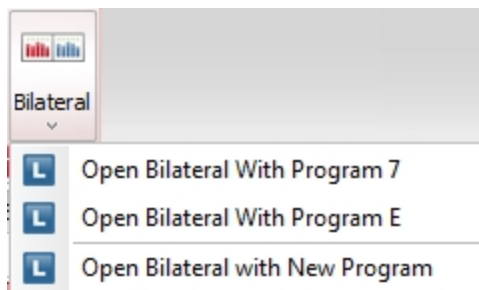
Template

Clicking on the dropdown displays the options to create a new template or apply a Program template to the Unilateral Fitting Screen.
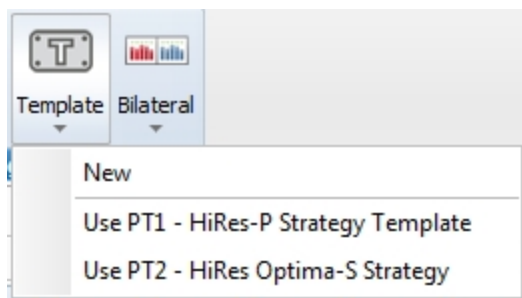
Bilateral Fitting Screen
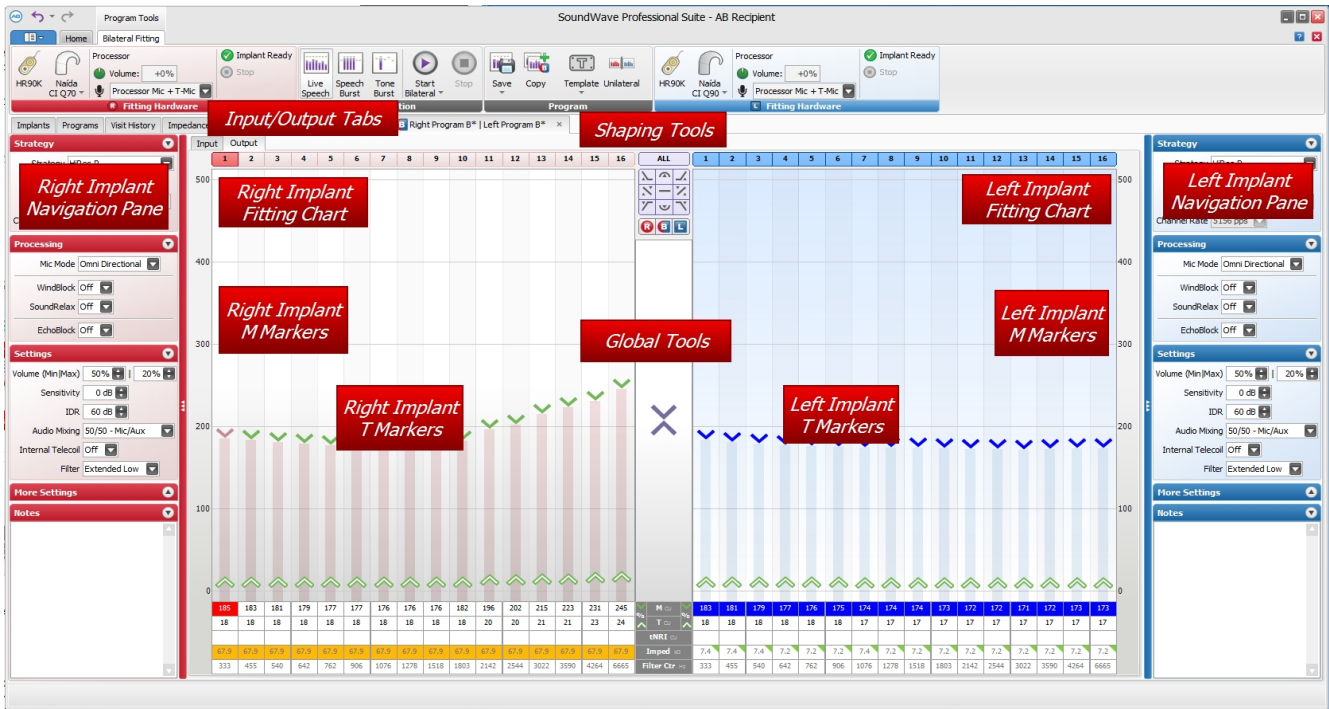
When a Bilateral Fitting Screen is in focus, you have access to the following Ribbon Pages:

- Home Ribbon Page
- Bilateral Fitting Ribbon Page

The layout of the Bilateral Fitting Screen is similar to that of the Unilateral Screen, but with a separate Navigation Pane, Fitting Chart, and Data Grid for each side. There is one set of Shaping Tools and Global Tools. The scope of these tools is determined by the Side Selection Control.
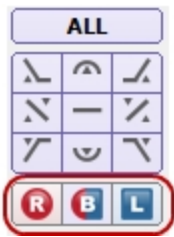
The shading and color of the Shaping Tools and Global Tools will let you know the scope. If the shading is purple, adjustments made with these controls will affect both programs. If the shading is blue and red, adjustments made with these controls will affect the program for the left implant and the program for the right implant, respectively.

NOTE: To accommodate the power requirements of the PSP Processor, bilateral fitting for two PSP processors requires an adjustment to the procedure. Refer to Bilateral Fitting with PSP Processors (see page 133).

Related Topics

Bilateral Fitting with PSP Processors

The two ports on a CPI-3 allow two processors to be fit at the same time, but the PSP processor has specific power requirements that do not allow this. A single CPI-3 cannot fit two PSP processors at the same time.

There are two ways to fit two PSP processors in the same session:

Method 1 – Power both PSP processors simultaneously

This method requires two configured CPIs, in any combination of CPI-2 and CPI-3.

Fit using a Bilateral or a Unilateral Fitting Window and your usual procedure with one processor attached to each CPI.

Method 2 – Power one PSP processor at a time

This method uses one configured CPI-3.

1. The two Fitting Hardware Groups identify which processor is powered:
   - One group displays normally, as shown on the right.
   - The other group identifies the processor, but displays a "No Power To PSP" warning, a "Power This PSP" command, and places a "No Power" symbol over the PSP icon.
2. After you complete fitting the powered processor, click **Power This PSP** for the other processor. The second processor's Fitting Hardware group now displays normally, and the first processor's group now displays the no power labels.

Program Window Keyboard Shortcuts

You can use the following keyboard shortcuts when you are fitting a patient in an open Program Window.

Function	Key
Stop All Stimulation	Spacebar
Adjust All Markers Down	Page Down
Adjust All Markers Up	Page Up
Adjust Markers Down (M, T, Clipping, Gains)	Down Arrow
Adjust Markers Up (M, T, Clipping, Gains)	Up Arrow
Bilateral Window: Focus Left Side	L or Ctrl + Left Arrow
Bilateral Window: Focus Right Side	R or Ctrl + Right Arrow
Data Entry	0-9
Move Entire Channel Selection to the Left	Alt + Left Arrow
Move Entire Channel Selection to the Right	Alt + Right Arrow
Move Selection Left	Left Arrow
Move Selection Right	Right Arrow
Select All Markers	Ctrl + A
Select Clipping Marker	C
Select Gain Marker	G
Select M Marker	M
Select T Marker	T
Select Multiple Channels to the Left	Shift + Left Arrow
Select Multiple Channels to the Right	Shift + Right Arrow
Toggle Input/Output Tab	I/O
Toggle Stimulation On/Off	S

Related Topics

Adjust Program Parameters

Strategy

Strategy	HiRes-P
ClearVoice	Off
Pulse Width	APW I 226.3 µs
Channel Rate	276 pps

Processing

Mic Mode	Omni Directional
WindBlock	Off
SoundRelax	Off
EchoBlock	Off

Settings

Volume (Min|Max)	50% | 20%
Sensitivity	0 dB
IDR	60 dB
Audio Mixing	50/50 - Mic/Aux
Internal Telecoil	Off
Filter	Extended Low

More Settings

RF Lock	PoEM High
High Power	Off
AGC	2 - Dual Loop

Notes

You can set the following parameters:

Parameter	Description	CII/HiRes-Family Options	C1 Options
Strategy Group			
Strategy	Sets the type of program used for processing the sound input and delivering stimulation.	HiRes-S HiRes-P* HiRes-S w/ Fidelity 120 HiRes-P w/ Fidelity 120 HiRes Optima-S HiRes Optima-P CIS[5] MPS[5]	CIS* MPS SAS
Coupling	Sets the pairing configuration for electrodes on the array.	N/A	Lateral (default for C1 / Standard) Medial (default for C1 / Enhanced)
ClearVoice	Sets the gain of the ClearVoice feature, which is designed to improve listening in challenging everyday listening environments for users of HiRes Fidelity 120 and HiRes Optima sound processing.	Off* Low Medium High	N/A
Pulse Width Algorithm	Sets how pulse width is managed.	Manual APW I* APW II	N/A
Pulse Width Value	Sets the pulse width, which indicates the duration of each phase of the biphasic pulses delivered during stimulation. Editable only if the Pulse Width Algorithm is set to Manual.	**HiRes-S and HiRes-P** 10.8μs* to 229μs **HiRes -S w/ Fidelity 120, HiRes-P w/ Fidelity 120, HiRes Optima-S, and HiRes Optima-P** 18.0μs* to 229μs **CIS and MPS** 75.4μs*, 150.9μs, and 226.3μs	75.4μs* 150.9μs 226.3μs 301.7μs
Channel Rate	Displays pulses per second per channel.	*Display only.*	N/A
Processing Group			
Mic Mode	Sets the mode for the Mic portion of the Audio Mixing.	Omni Directional* UltraZoom [3]	N/A

Parameter	Description	CII/HiRes-Family Options	C1 Options
	UltraZoom works adaptively, designed to allow the listener to focus on voices coming from the front. Even as noise from the side and back moves or changes, it is reduced to allow for easier listening.	auto UltraZoom[2]	
EchoBlock[1]	Sets whether to enable EchoBlock, which is designed to remove the disturbing reflections of reverberant sound in places like large halls and places of worship.	On Off*	N/A
SoundRelax[1]	Sets whether to enable SoundRelax, which is designed to soften sudden loud sounds, such as slamming doors or clanking dishes.	On Off*	N/A
WindBlock[1]	Sets whether to enable WindBlock, which is designed to reduce interference caused by windy conditions and improve comfort for the listener.	On Off*	N/A
Settings Group			
Volume (Min)	Sets how much the volume can be decreased from the baseline setting.	0% to 100% 50%*	0% to 100% 50%*
Volume (Max)	Sets how much the volume can be increased from the baseline setting.	0% to 100% 20%*	0% to 100% 20%*
Sensitivity	Sets additional gain before the AGC.	-10dB to 10dB 0dB*	-10dB to 10dB 0dB*
IDR	Sets the range of captured acoustic input that is mapped into the patient's electrical dynamic range.	20dB to 80dB 60dB*	20dB to 80dB 60dB*
Audio Mixing	Sets the relative proportion of input from the auxiliary microphone / accessory and input from the built-in processor microphone.	Aux Only (Atten.) Aux Only Mic Only 50/50 - Mic/Aux* 30/70 - Mic/Aux	Aux Only (Atten.) Aux Only Mic Only 50/50 - Mic/Aux* 30/70 - Mic/Aux
Internal Telecoil	This parameter is specific to the Harmony and Naída Q30, Q70, and Q90 processors and sets whether the built-in telecoil is used for the Aux portion of the Audio Mixing.	On Off*	On Off*
Filter	Sets the overall profile of frequencies that are used for input to the strategy.	Standard Extended Low*	Standard Extended Low*

Parameter	Description	CII/HiRes-Family Options	C1 Options
			S-Series
More Settings Group			
RF Lock	Sets the mode by which processor power is controlled. PoEM applies to non-HiRes Optima strategies while AutoVoltage applies to HiRes Optima strategies.	Manual PoEM* AutoVoltage	N/A
Manual RF Setting	Sets the value for Manual RF Lock.	0 to 15 7*	0 to 15*
PoEM Target	Sets the PoEM Target for when the RF Lock algorithm is set to PoEM.	Low Medium High*	N/A
Minimum ICS Voltage	Sets the minimum required voltage for a C1 family implant to continue providing stimulation.	N/A	0V to 20 V 14.5V*
High Power	Sets whether the program will run in a mode that provides a larger range of power available for locking to the implant, at the potential expense of shorter battery life. This parameter is relevant only for Harmony and Neptune processors.	On Off*	N/A
AGC	Sets the type of gain control applied to the sound input.	0 - Linear 2 - Dual Loop*	0 - Linear 1- Single Loop 2 - Dual Loop* S-Series
Rectification	Sets the input rectification for CIS and MPS strategies in conjunction with C1 family implants.	N/A	Half Wave* Full Wave (If the Strategy Type is SAS, this will be N/A)
Use Thresholds	Sets whether T levels are used for the SAS strategy in conjunction with C1 family implants.	N/A	Yes* No

*NOTE: * Indicates a default setting*

    [1] *Available only for Naída CI Q70 and Naída CI Q90*

    [2] *Available only for Naída CI Q90.*

    [3] *Available only for Naída CI Q30, Q70, and Q90*

For keyboard shortcuts that can be used while fitting a patient, see Program Window Keyboard Shortcuts .

Adjust Fitting Levels on the Fitting Screen

When you are creating a program in a Fitting Screen, there are multiple ways you can adjust the fitting levels.
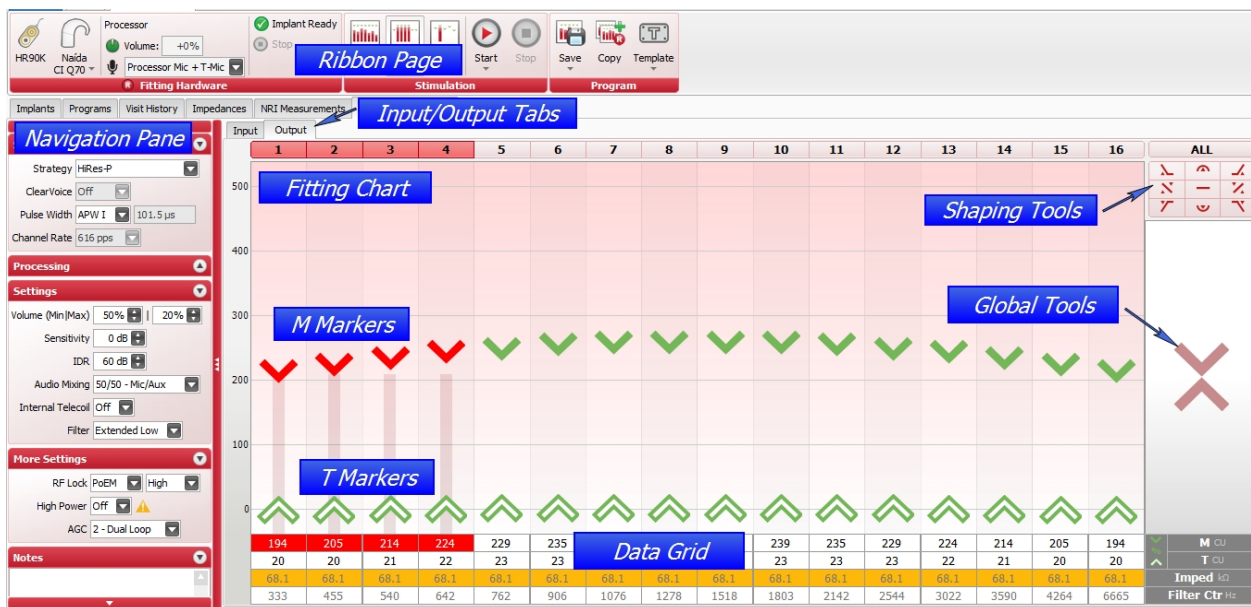
A. Typing in the Data Grid

1. Click on the appropriate box for any of the highlighted channels. If you're using the Live Speech or Tone Burst modes, you can change values for each individual box. If you're using the Speech Burst mode, the value you enter in one box affects all of the highlighted boxes in the selected row.
2. Enter the numerical value, use the Up and Down arrows, or use the Up and Down keyboard keys to specify the value.
3. Press the Enter key.

   SoundWave will set the value of the markers for the highlighted channels to the value you entered.

B. Dragging markers in the Fitting Chart

1. Click on the appropriate marker for any of the highlighted channels.
2. Drag the marker up or down until it reaches the value you want to specify.

C. Dragging markers in the Global Tools

1. Click and drag the appropriate marker in the Global Tools section.
2. Dragging the marker either Up or Down will increase or decrease the values for representative markers of all the enabled channels.

D. Scrolling up or down with the mouse

1. Click on the appropriate marker for any of the highlighted channels.
2. Scroll up or down with the mouse to move the marker until it reaches the value you want to specify.

E. Using the keyboard

1. Click on the appropriate marker for any of the highlighted channels.
2. Use the Up and Down keyboard keys to move the marker until it reaches the value you want to specify. You can also move selected markers globally by pressing the Page Up and Page Down keys.

NOTE: Default T level values are set to 10 percent of the M level values.

NOTE: If no impedance has been calculated for the implant, the impedance will be listed at the default value of 7.5.

Related Topics

Enable or Disable Interpolation of M Levels

NOTE: Interpolation is enabled only in Live Speech and Tone Burst modes. It is not available for Speech Burst.

To enable or disable interpolation,

1. Start in the open program for which you want to enable or disable interpolation.
2. Right-click anywhere in the Fitting Chart or in the lane of a specific electrode.
3. Select **Interpolation** and click **Enable #**, **Enable Selected**, **Enable All**, **Disable #**, **Disable Selected**, or **Disable All**.
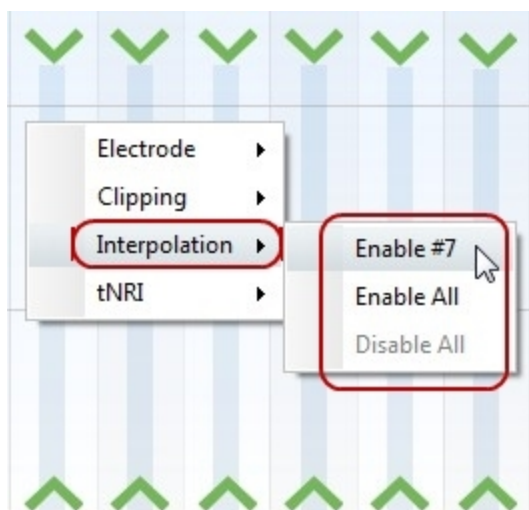
4. Alternatively, double-click an M Level marker to toggle interpolation.

The markers for interpolated levels display without a solid fill.
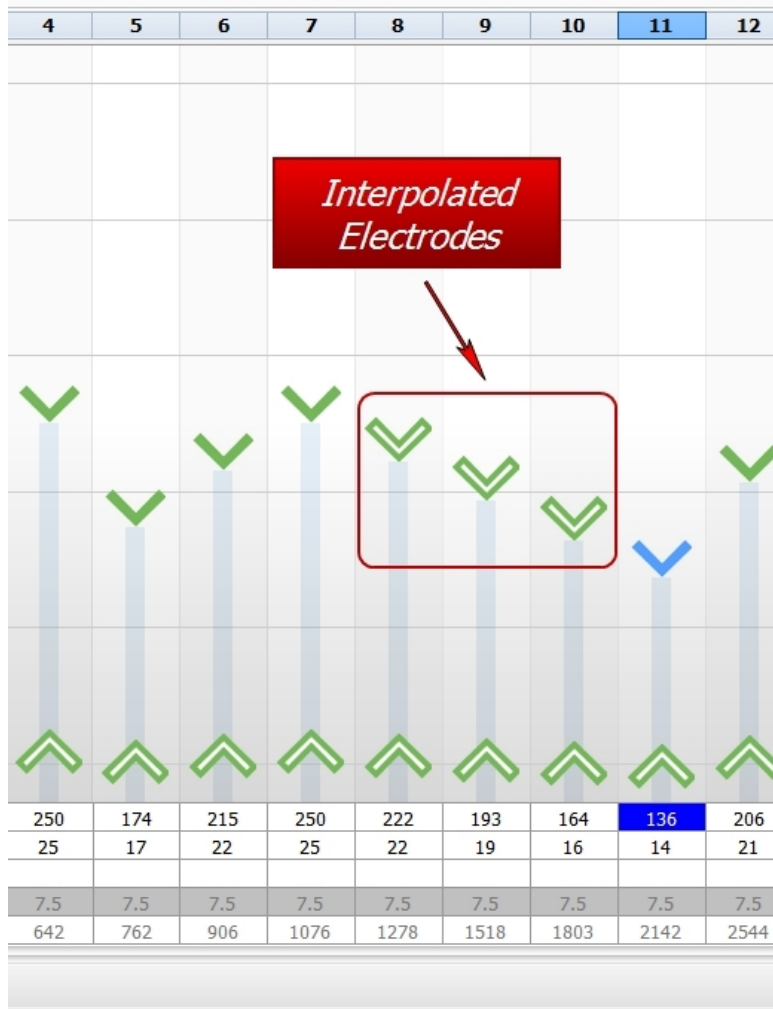
NOTE: T level markers are set at 10% interpolation by default.

Enable or Disable Electrodes

To disable electrodes:

1. Start in the open program for which you want to disable electrodes.
2. Right-click the electrode(s) you want to disable.
3. Select **Electrode** from the dropdown menu and click **Disable #** or **Disable Selected**. The electrode(s) become shaded and are disabled.
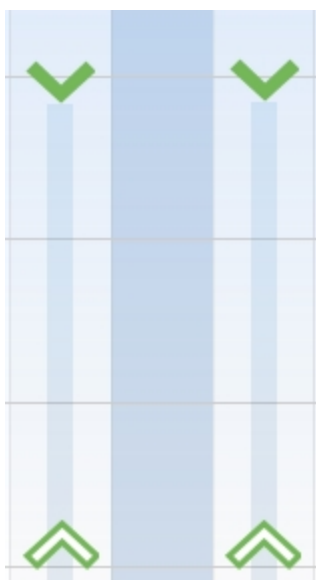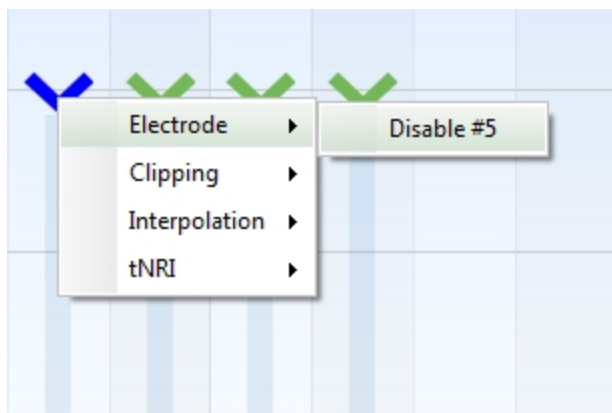
NOTE: When disabling one or more electrodes, SoundWave automatically adjusts the frequencies for the remaining electrodes.

To enable electrodes:

1. Start in the open program for which you want to enable one or more electrodes.
2. Right-click the electrode(s) you want to enable.
3. Select **Electrode** from the dropdown menu and click **Enable #** or **Enable All**. The shading for the electrode(s) is removed and the electrode(s) are enabled.
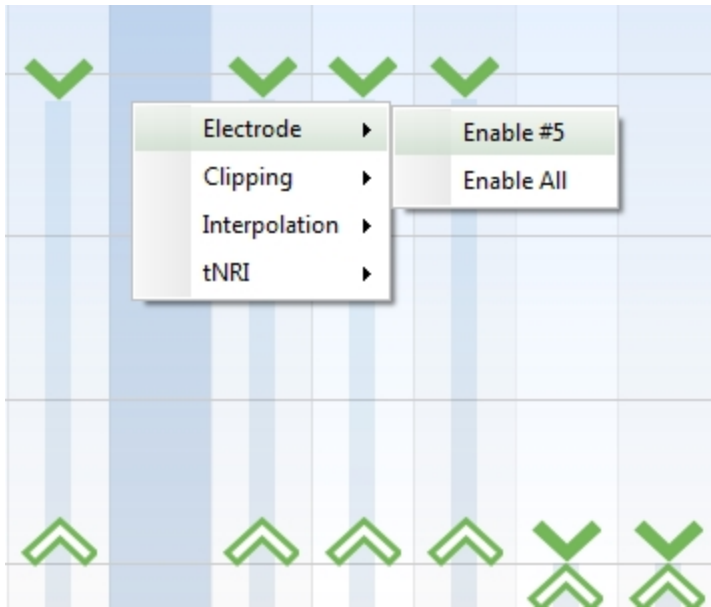
Enable or Disable Clipping

To enable clipping:

1. Start in the open program for which you want to enable one or more electrodes.
2. Right-click the electrode(s) for which you want to enable clipping.
3. Select **Clipping** from the dropdown menu and click **Enable #**, **Enable Selected**, or **Enable All**. Clipping markers display and clipping is enabled.
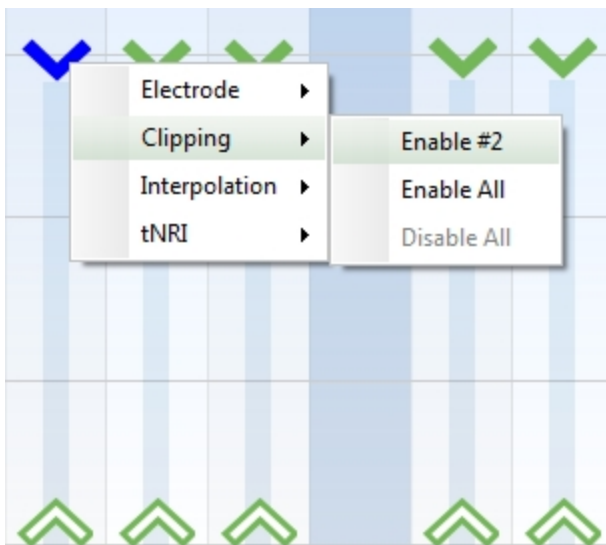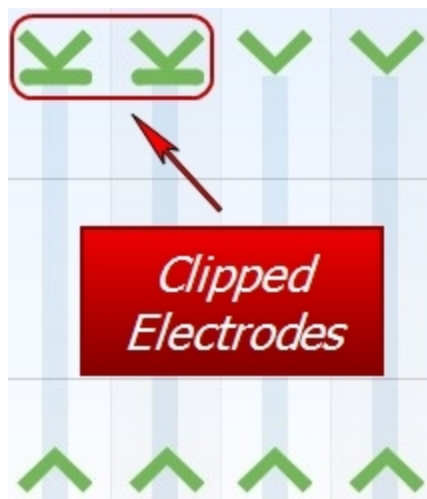
To disable clipping:

1. Start in the open program for which you want to disable clipping.
2. Right-click the electrode(s) for which you want to disable clipping.
3. Select **Clipping** from the dropdown menu and click on **Disable #**, **Disable Selected**, or **Disable All**.
   Clipping markers are removed and clipping is disabled.
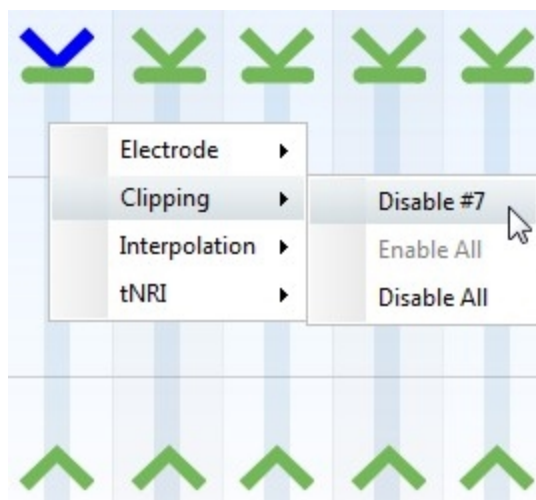
Related Topics

Enable or Disable Electrodes (see page 142)

View or Hide tNRI Markers When Fitting a Program

To view the tNRI markers in the Fitting Chart:

1. Open a Patient (see page 84).
2. Open a Program.
3. Right-click anywhere in the Fitting Chart.
4. Select tNRI.
5. Click on **Show All**.

To set an option to view tNRI markers by default when a Program is opened:

1. Click the **Application Menu** to open the **Configuration** submenu, then click ⚙ **Preferences** to open the Preferences dialog.
2. Check the box for tNRI markers under the heading "Fitting".
3. Click **OK** to save the change and close the dialog, or click **Cancel** to close without saving.
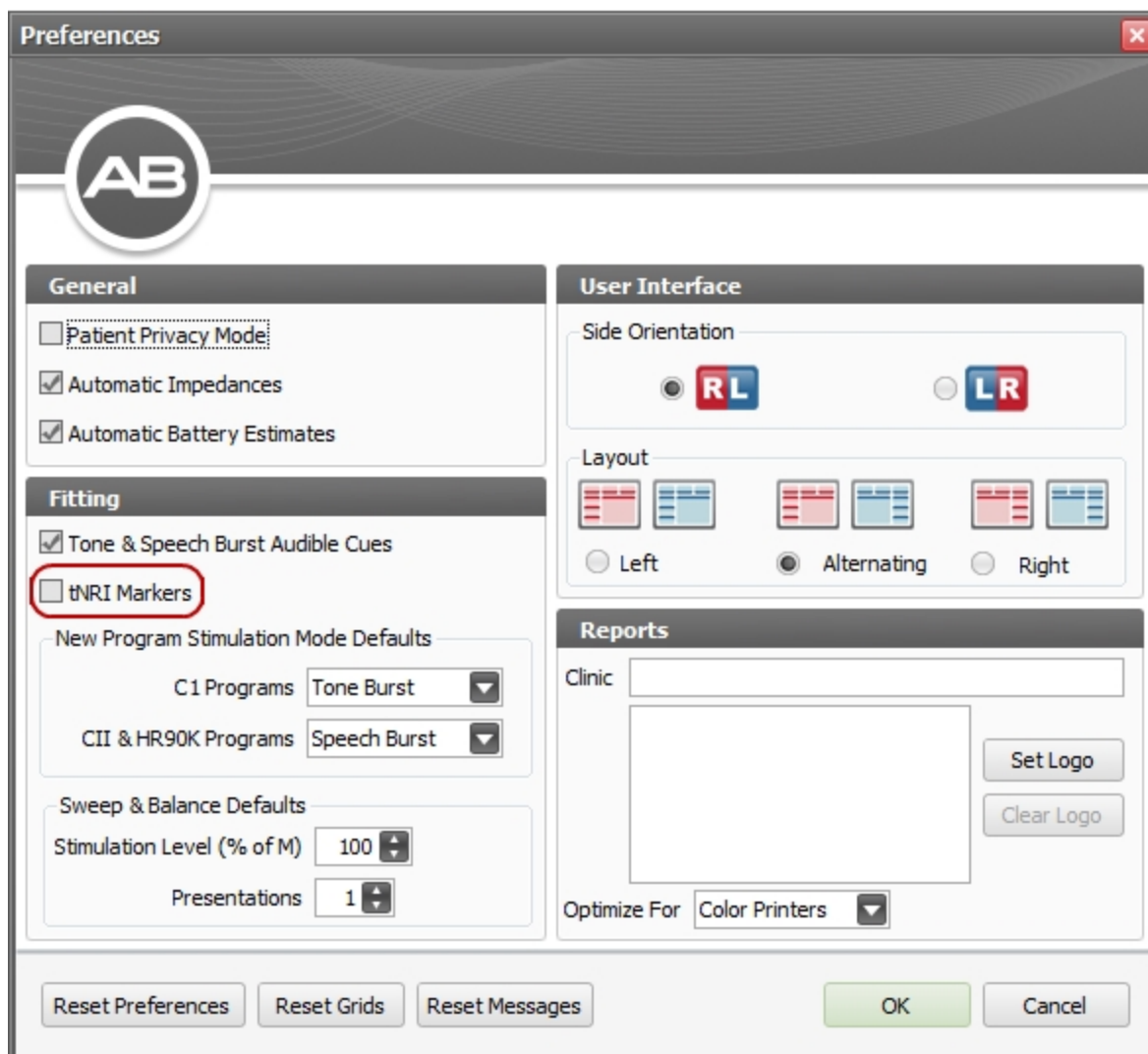
When you open a Program, you will automatically see the tNRI markers for the measured electrodes.

To hide the tNRI markers:

1. Right-click anywhere in the Fitting Chart.
2. Select **tNRI**.
3. Click **Hide All**.

You will no longer see the tNRI markers in the Fitting Chart.

Related Topics

Set Up NRI Measurements (see page 111)

Set Processor-Specific Features

For some processor types, certain features that are available for configuration on a slot-specific basis prior to downloading are not available for configuration on the Fitting Screen. These features can be set during the fitting session through the Fitting Hardware group in the Ribbon Page.

NOTE: When downloading a program to a sound processor, the settings selected on the Processor Pane override any options set in the Ribbon Page.

Naída Processor-Specific Features

The following features are available for the Naída processors in the Fitting Hardware Group of the Fitting Screen.
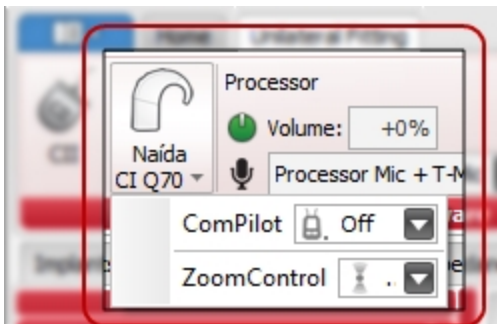
Option	Description	Options	Supported Processor
Mic Source	This parameter is specific to the Naída processors and sets the microphone that is used for the Mic portion of the Audio Mixing.	Processor Mic Processor Mic + T-Mic* T-Mic Headpiece Mic	Naída CI Q30 Naída CI Q70 Naída CI Q90
ComPilot Streaming	Enables or disables the ComPilot Streaming feature during fitting.	Off* On	Naída CI Q30 Naída CI Q70 Naída CI Q90
ComPilot Mix	Sets the ratio of audio streaming that is received from the ComPilot during fitting.	25% 50%* 75% 100%	Naída CI Q30 Naída CI Q70 Naída CI Q90
DuoPhone	Enables or disables the DuoPhone feature, and sets the default direction during fitting.	Off* Phone on Left Phone on Right	Naída CI Q70 Naída CI Q90
ZoomControl	Enables or disables the ZoomControl feature, and sets the default direction during fitting.	Off* Focus Left* Focus Right* Focus Front Focus Back	Naída CI Q70 Naída CI Q90
StereoZoom	Enables or disables the StereoZoom feature.	Off* On	Naída CI Q90

Indicates a default setting.

If stimulation has been started, the current status of ComPilot Streaming, DuoPhone, ZoomControl, and StereoZoom, as applicable, will be shown in the Fitting Hardware group.
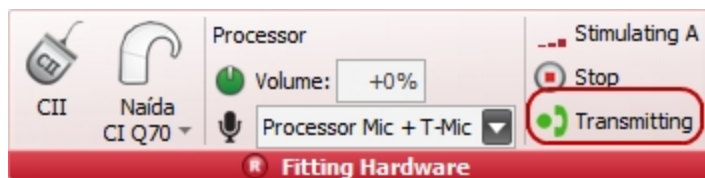
Related Topics

Stimulation Modes

SoundWave allows you to fit a patient in any of three Stimulation Modes that are independent of the program itself. The default stimulation mode for new programs is set from the Preferences Dialog.
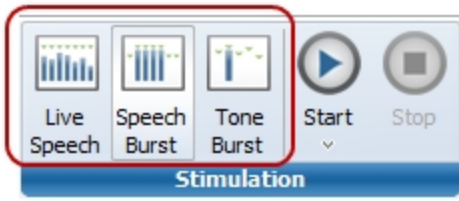
Live Speech

Live Speech stimulation uses the patient's active device microphone, permitting sound stimulation from the acoustic environment during the fitting session.

Speech Burst

Speech Burst stimulation uses band-pass filtering white noise. The signal is delivered to multiple electrode contacts that have been grouped together for fitting. Speech Bursts are delivered at rates equivalent to live speech stimulation and retain the spectral characteristics of the input signal.

The default Stimulation Mode for CII/HiRes-Family implants is Speech Burst.

Tone Burst

Tone Burst stimulation provides a pure tone at the center frequency of each channel.

The default Stimulation Mode for C1 implants is Tone Burst.

Related Topics

Save a Program

When you open a new program or make a copy of a program, it is labeled with a letter (such as "Program E"). As soon as any changes are made, an asterisk (*) is added to the program label, indicating that the program is unsaved.
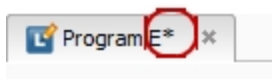
To save a Program, use the **Save** button or its dropdown menu on the Program group of the Fitting Ribbon Page.
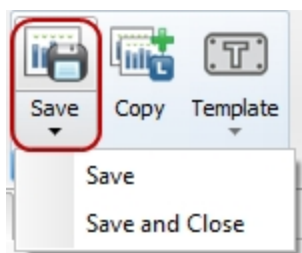
Save saves the program and leaves it open.

Save and Close saves the program and also closes it.

Once saved, the program is labeled Program X, where X is the next sequential number in order of existing programs for the side. When additional changes are made to a saved program, the asterisk reappears after the number, again to indicate changes have not been saved.

A program remains editable until

- It is stimulated from the Data Grid of the Programs Data Manager
- It is stimulated from a slot on the Processor Download Pane
- A report is generated from the Program
- the Patient is closed
- SoundWave is closed

A small pencil icon next to the Program ID in the Program Management Pane indicates when a program is editable. When there is no pencil icon, the program must be copied to be edited.

Work with Sound Processors

The Sound Processors are programmed to stimulate the implant in the best way to allow the Patient to hear.

Related Topics

Prepare a Processor

Preparing a processor allows you to use the processor with the current version of SoundWave.

To prepare a processor:

1. Open a patient record.
2. From the Home Ribbon Page, click the down arrow below the processor icon in the Fitting Hardware Group to open the dropdown menu.
3. From the menu, select **Prepare Processor** to open a confirmation dialog.
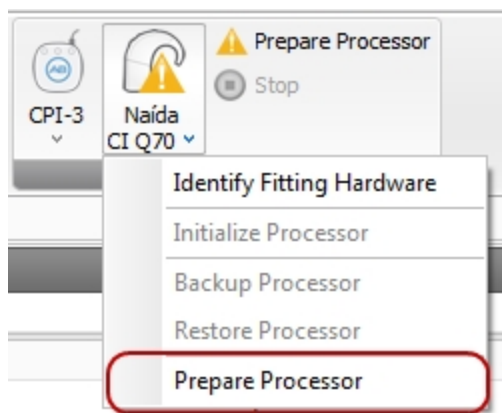
4. Click **Yes** to prepare the processor and close the dialog, or click **No** to close the dialog without preparing the processor.
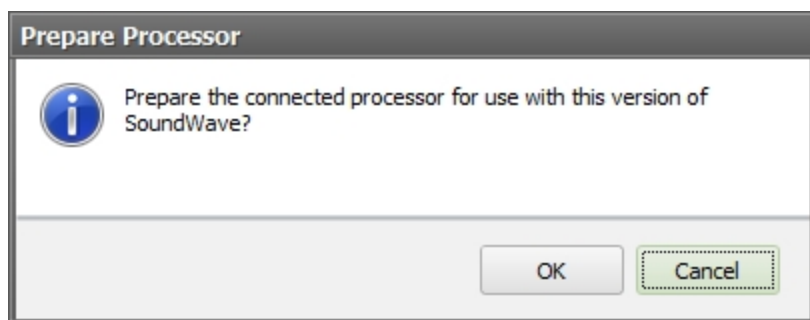
5. When the processor contains programs and/or patient information that might be erased during the Prepare operation, a different confirmation dialog opens. This may occur if the processor is initialized for a different patient.
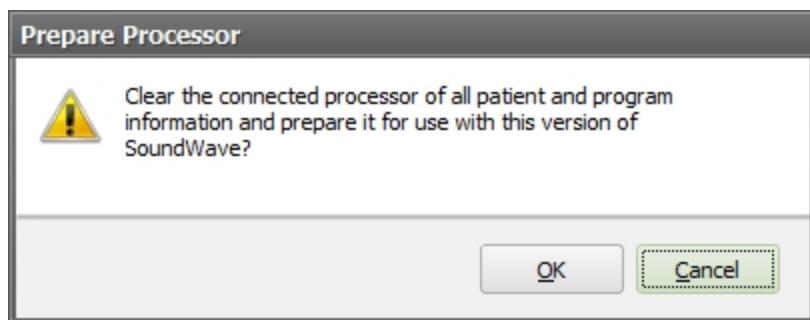
6. Click **Yes** to prepare the processor and close the dialog, or click **No** to close the dialog without preparing the processor.

7. The Hardware Status icon displays ⬚ Preparing processor until prepare is complete.

Processor Download Pane

The Processor Download Pane is located on the right side of the Application window when the Programs Data Manager tab or Visit History Data Manager tab is selected.

The Processor Download Pane displays the type of processor connected and what programs and processor-wide and slot-specific features are set.

Use this pane to download programs to the processor and to set processor-wide and slot-specific features.

Identifying Processor Information

The title row of the Processor Download Pane displays the processor type. Pause the mouse over this row to view more detailed information.

Processor Actions

Click the down arrow in the Processor Download Pane's title area to display available actions.

Action	Description
Identify Fitting Hardware	Identifying the Fitting Hardware causes the attached CPI to blink. If an attached processor has an LED, the processor LED also blinks.
Initialize Processor	Initializing a Processor clears the Processor of all patient and program information.
Backup Processor	Backing up a Processor saves any Programs and any associated information to a Processor image file.
Restore Processor	Restoring a Processor replaces the existing information on the processor with the previously backed up information.

Processor-Wide Settings

Processor-wide settings are chosen from the dropdown menu on the second row. Click to view the options available for the processor.
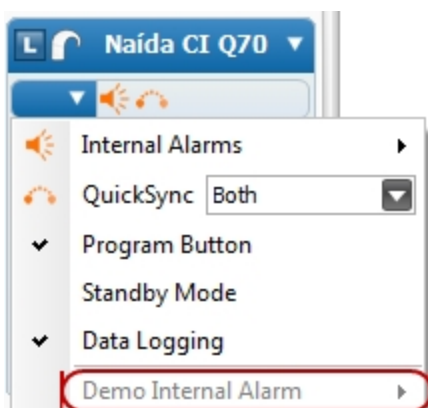
Action	Description
Demo Internal Alarm	Selecting items from the submenu will result in playing of the corresponding Internal Alarm. To access this action, stimulation must be started from a slot.

Other actions open from the bottom of the Processor Download Pane.

Action	Description
X	Restores all of the displayed settings and programs to those currently on the processor.
Download	Writes programs to the processor, along with the processor-wide and slot-specific features.
Estimate Battery & Download	Estimates battery life and writes programs to the processor.

Slot Actions

Some actions are available at the slot level. The following table shows the actions available in the dropdown menu accessible from each slot:
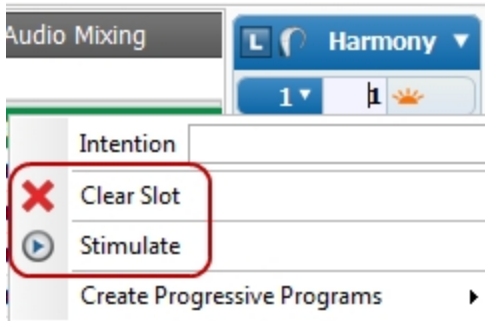
Action	Description
Clear Slot	Clearing a slot will result in removing any program numbers from the slot and in resetting all slot-specific options to their default values.
Stimulate	Stimulating will result in starting the program(s) designated in the slot, using the currently selected processor-wide and slot-specific features. To stop stimulation at any time, press the spacebar or click on the Stop button in the Fitting Hardware Group.
Create Progressive Programs	Select additional programs to assign to the remaining empty slots, which incrementally increase in M values.

Related Topics

Backup a Processor

Backing up a processor in SoundWave saves programs and associated information to a processor image file.

Backing up a processor is mainly used for troubleshooting.

There are two ways to back up a processor:

A. To back up a processor from the Ribbon Page:

1. Click the **Processor** in the **Fitting Hardware** Group of the Ribbon Page, or on the dropdown menu of the **Processor Pane**.
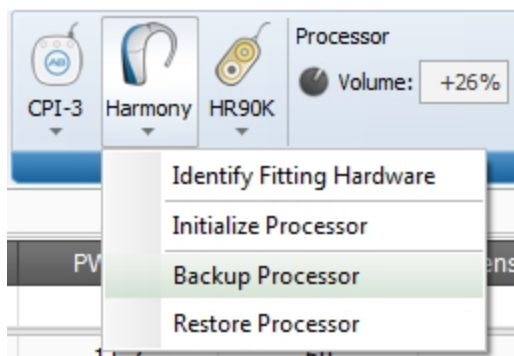
2. Click **Backup Processor**.

   The Hardware Status icon changes to ▦ during the backup.

B. To back up a processor from the Processor Pane:

1. Click the dropdown menu of the Processor Pane.

2. In the Processor Pane for a single processor, click **Backup Processor**. In the Processor Pane for two processors, click on **Backup Processors**; note that you only have the option to back up both processors simultaneously from the Processor Pane.

   The Hardware Status icon changes to ▦ during the backup.

When backup is complete, the Backup Processor dialog opens with the message that the Processor was successfully backed up. Click **Close** to close the dialog.

The backup image file is used to restore program and other information to a processor.

Restore a Processor

After backing up a processor to a processor image file, the image can later be restored to any other processor of the same type.

Restoring a processor replaces all of the existing information on the processor with the previously backed up information.

There are two ways to restore a processor:

A. To restore a Processor from the Ribbon Page:

1. Click on the Processor icon in the Fitting Hardware Group of the Ribbon Page.
2. Click on **Restore Processor**.
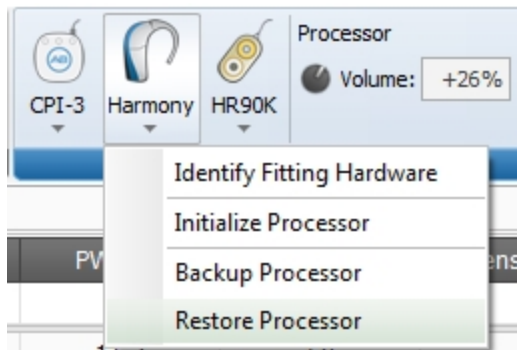
You will see the Restore Processor File Chooser.

3. Select the file and click on **Open**.

You will see an icon informing you the Processor is being restored.

B. To restore a processor from the Processor Pane:

1. Click on the dropdown menu of the Processor Pane.
2. Click on **Restore Processor**.

You will see the Restore Processor File Chooser.

3. Select the file and click on **Open**.

You will see an icon informing you the Processor is being restored.

Related Topics

Initialize a Processor

Initializing a processor clears it of all patient and program information.

A processor can be initialized with or without an open Patient.

To initialize a processor:

1. Click the down arrow below the processor you want to initialize.
2. Choose **Initialize Processor** from the dropdown list. This opens the Initialize Processor dialog.
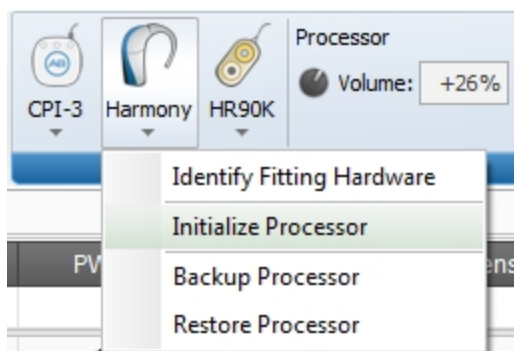
3. The following options are available based on the patient's implant configuration:

Implant Setup	Available Options
Left implant only	Left Left + HA Right Left + CROS Right*
Right implant only	Right Right + HA Left Right + CROS Left*
Bilateral (implants on both sides)	Left Right Bilateral

Only available on Naída Q70 and Q90 processors.

4. For non-Naída processors, you may also enter or change the serial number. This is not required.
5. Click **Yes** to initialize and close the dialog, or click **No** to close without initializing.
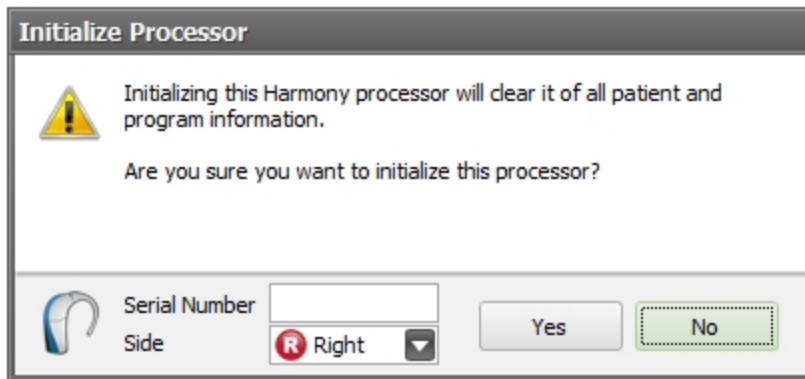
NOTE: Initializing a processor for Bilateral use can be useful for programming a patient's backup processor. A bilaterally-initialized Naída CI Q30, Q70, or Q90 processor is capable of containing 10 programs, five for the right and five for the left, with automatic recognition of the connected implant. The Bilateral option is available only if IntelliLink information has been captured for both of the patient's active implants.

NOTE: For Naída CI Q30, Q70, or Q90 processors, the serial number field is read only.

During initialization, the Hardware Status icon is .

> NOTE: SoundWave displays the prompt below when it recognizes that the processor needs to be initialized. This always appears in an initial fitting.
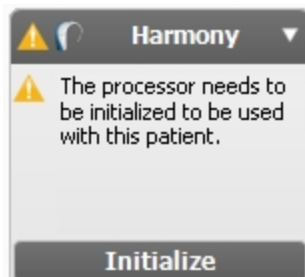
Related Topics

Resolve Processor

Resolving a processor means correcting certain internal parameters so the processor can be configured in the Processor Download Pane. It may also be required when changes to the implant configuration and some features are no longer compatible, or if there are new features to be added to the processor.

SoundWave will determine if a processor must be resolved and display an alert in the Processor Download Pane.
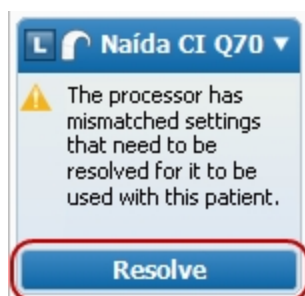
To resolve the processor, click the **Resolve** button.

Specify Programs for Download

Downloading programs to a processor requires that:

- The Patient record is open.
- The processor has been initialized for the Patient.

There are three ways to specify programs for download.

Enter the Program numbers in the Processor Pane

1. Open the Programs Data Manager or the Visit History Data Manager.
2. In the Processor Download Pane, click the entry field next to the slot number you want to program.
3. Enter the Program Number in the entry field.

> NOTE: When the processor is not a Naída CI Q30, Q70, or Q90, but is initialized for bilateral use, you must type an "R" or "L" in front of the program number.

Drag Programs from the Programs Data Manager

1. In the Programs Data Manager, select the program you want to download.
2. Drag the program to the desired slot.

Drag a Visit History record from the Visit History Data Manager

1. In the Visit History Data Manager, select the visit record that contains the programs and settings you want to download.
2. Drag the visit history to the slot.

When dragging a Visit History record, processor-wide and slot-specific options contained in that record overwrite any corresponding settings already in the Processor Pane. When the record contains more programs than are supported by the currently connected processor (for example, the new processor has fewer slots than the original processor), only available slots fill in with the first programs, and remaining programs are not downloaded.

When there are fewer slots in the original processor than in the new processor, all available programs are downloaded and the remaining slots are cleared.

Once the Programs have been selected, adjust slot settings for each Processor as needed.

To clear all changes, click the X next to the download button.

NOTE: For Naída CI Q30, Q70, or Q90 processors, if the programs are not assigned to contiguous slots, SoundWave automatically compresses the programs into contiguous slots upon download.

Related Topics

Set Processor-Wide and Slot-Specific Features for a Processor

Some processor features are slot-specific (apply to a single slot), and others are processor-wide (apply across all slots).

Available features display as icons on the main panel or as items in dropdown menus. An orange icon means that a feature is turned on. A gray icon means that a feature is turned off.

BTE, Platinum BTE, Auria

Feature	Location	Description	Options
Create Progressive Programs	Slot Dropdown	Select additional programs to assign to the remaining empty slots, which incrementally increase in M value.	5 CU 10 CU 15 CU
IntelliLink	Slot Dropdown	Enable or disable the IntelliLink feature. IntelliLink limits stimulation to a particular CII/HiRes-Family implant.	On* Off

* Indicates the default setting for a feature.

PSP

Feature	Location	Description	Options
Create Progressive Programs	Slot Dropdown	Select additional programs to assign to the remaining empty slots, which incrementally increase in M values.	5 CU 10 CU 15 CU
IntelliLink	Slot Dropdown	Enable or disable the IntelliLink feature. IntelliLink limits stimulation to a particular CII/HiRes-Family implant.	On* Off
🔒 *Lock Alarm*	Slot Main Panel	Enable or disable an alarm for a given slot when the headpiece falls off or a communication problem occurs between the Processor and implant (no lock).	On Off*
🔋 *Low Battery Alarm*	Slot Main Panel	Enable an alarm for a given slot that sounds when the processor has a low battery.	On Off*

* Indicates the default setting for a feature.

Harmony

Feature	Location	Description	Options
Create Progressive Programs	Slot Dropdown	Select additional programs to assign to the remaining empty slots, which incrementally increase in M values.	5 CU 10 CU 15 CU
IntelliLink	Slot Dropdown	Enable or disable the IntelliLink feature. IntelliLink limits stimulation to a particular CII/HiRes-Family implant.	On* Off
☀ *Status LED[1]*	Slot Main Panel	Enable or disable the Status LED on the processor for a given slot.	On* Off

* Indicates the default setting for a feature.

[1] Enable/disable Low Battery Indicator, Change Battery Indicator, Mic/System Status, and Lock Status LEDs as a group.

Neptune

Feature	Location	Description	Options
Aux Source	Slot Dropdown	Set the input source for the Aux portion of the Audio Mixing for a given slot.	EXT FM

Feature	Location	Description	Options
			Auto-Detect*
🔋 *Battery Status*	Slot Main Panel	Enable an alarm for a given slot that sounds when the processor has a low battery.	On* Off
Create Progressive Programs	Slot Dropdown	Select additional programs to assign to the remaining empty slots, which incrementally increase in M values.	5 CU 10 CU 15 CU
IntelliLink	Slot Dropdown	Enable or disable the IntelliLink feature for a given slot. IntelliLink limits stimulation to a particular CII/HiRes-Family implant.	On* Off
🔒 *Lock Status*	Slot Main Panel	Enable an alarm for a given slot when the headpiece falls off or a communication problem occurs between the Processor and implant (no lock).	On* Off
Sensitivity Dial	Slot Dropdown	Enable or disable the Sensitivity control on the processor for a given slot.	On* Off
🔆 *Status LED*[1]	Slot Main Panel	Enable or disable the Status LED on the processor for a given slot.	On* Off

* Indicates the default setting for a feature.

[1] *Enable/disable Low Battery Indicator, Change Battery Indicator, Mic/System Status, and Lock Status LEDs as a group.*

Naída CI Q30

Feature	Location	Description	Options
🔋 *ComPilot*	Slot Main Panel	Enable or disable ComPilot for a given slot.	On* Off
ComPilot Mix	Slot Dropdown	Set the ratio at which the ComPilot stream is mixed with the Mic Source for a given slot.	25% 50%* 75% 100%
Create Progressive Programs	Slot Dropdown	Select additional programs to assign to the remaining empty slots, which incrementally increase in M values.	5 CU 10 CU 15 CU

Feature	Location	Description	Options
Data Logging	Processor Dropdown	Enable or disable Data Logging on the processor.	On* Off
IntelliLink	Slot Dropdown	Enable or disable the IntelliLink feature for a given slot. IntelliLink limits stimulation to a particular CII/HiRes-Family implant.	On* Off
Internal Alarms	Processor Main Panel	Enable or disable the Internal Alarms feature.	On* Off
Internal Alarms	Processor Dropdown	Set Internal Alarm types, intensity, and frequency. When Internal Alarms are turned off on the Processor Main Panel, this dropdown option is disabled.	Volume Change Program Change Low Battery Intensity (Soft, Medium*, Loud) Frequency (Low, Medium*, High)
Mic Source	Processor Main Panel	Set the input source for the Mic portion of the Audio Mixing for a given slot.	Processor Mic Processor Mic + T-Mic* T-Mic Headpiece Mic
Program Button	Processor Dropdown	Enable or disable the Program Button. When Program Button is turned on, the program button on the processor functions normally. When Program Button is turned off, the program button on the processor is ignored (both for changing programs and for entering or exiting Standby Mode).	On Off*
Roger Ready	Slot Dropdown	Enable or disable the Roger Ready feature for a given slot.	Enabled* Disabled
Standby Mode	Processor Dropdown	Enable or disable the Standby Mode feature. When Standby Mode is turned on, the processor can enter Standby Mode. When turned off, the processor cannot go into Standby Mode (either manually or automatically). Standby Mode is automatically disabled if Program Button is disabled.	On Off*
Status LED[1]	Slot Main Panel	Enable or disable the Status LED on the processor.	On* Off

Indicates the default setting for a feature.

[1] *Enable/disable Low Battery Indicator, Change Battery Indicator, Mic/System Status, and Lock Status LEDs as a group.*

For Naída CI Q30 processors, the second row (below the processor type display) sets processor-wide features.

Naída CI Q70

Feature	Location	Description	Options
🔋 *ComPilot*	Slot Main Panel	Enable or disable ComPilot for a given slot.	On* Off
ComPilot Mix	Slot Dropdown	Set the ratio at which the ComPilot stream is mixed with the Mic Source for a given slot.	25% 50%* 75% 100%
Create Progressive Programs	Slot Dropdown	Select additional programs to assign to the remaining empty slots, which incrementally increase in M values.	5 CU 10 CU 15 CU
🔘 *CROS*	Slot Main Panel	Enable or disable CROS for a given slot.	On* Off
Data Logging	Processor Dropdown	Enable or disable Data Logging on the processor.	On* Off
DirectTouch	Slot Dropdown	When either DuoPhone or ZoomControl is enabled for a given slot, enable or disable the DirectTouch feature to control where hearing should be focused.	On Off*
⬤⬤⬤ *DuoPhone*	Slot Main Panel	Enable or disable the DuoPhone feature for a given slot, and sets the default direction.	Disabled* Phone on Left Phone on Right
IntelliLink	Slot Dropdown	Enable or disable the IntelliLink feature for a given slot. IntelliLink limits stimulation to a particular CII/HiRes-Family implant.	On* Off
🔊 *Internal Alarms*	Processor Main Panel	Enable or disable the Internal Alarms feature.	On* Off
🔊 *Internal Alarms*	Processor Dropdown	Set Internal Alarm types, intensity, and frequency. When Internal Alarms are turned off on the Processor Main	Volume Change

Feature	Location	Description	Options
		Panel, this dropdown option is disabled.	Program Change Low Battery Intensity (Soft, Medium*, Loud) Frequency (Low, Medium*, High)
Mic Source	Processor Main Panel	Set the input source for the Mic portion of the Audio Mixing for a given slot.	Processor Mic Processor Mic + T-Mic* T-Mic Headpiece Mic
Program Button	Processor Dropdown	Enable or disable the Program Button. When Program Button is turned on, the program button on the processor functions normally. When Program Button is turned off, the program button on the processor is ignored (both for changing programs and for entering or exiting Standby Mode).	On Off*
QuickSync	Processor Main Panel	Enable or disable the QuickSync feature.	On* Off
QuickSync	Processor Dropdown	Set QuickSync for program changes, volume changes, or both.	Program Change Volume Change Both*
Roger Ready	Slot Dropdown	Enable or disable the Roger Ready feature for a given slot.	Enabled* Disabled
Standby Mode	Processor Dropdown	Enable or disable the Standby Mode feature. When Standby Mode is turned on, the processor can to enter Standby Mode. When turned off, the processor cannot go into Standby Mode (either manually or automatically). Standby Mode is automatically disabled when Program Button is disabled.	On Off*

Feature	Location	Description	Options
☀ *Status LED[1]*	Slot Main Panel	Enable or disable the Status LED on the processor.	On* Off
ZoomControl	Slot Dropdown	Enable or disable the ZoomControl feature for a given slot, and set the default direction.	Disabled* Focus Left Focus Right Focus Front Focus Back

* *Indicates the default setting for a feature.*

[1] *Enables/disables Low Battery Indicator, Change Battery Indicator, Mic/System Status, and Lock Status LEDs as a group.*

For Naída CI Q70 processors, the second row (below the processor type display) sets processor-wide features.

Naída CI Q90

Feature	Location	Description	Options
🔋 *ComPilot*	Slot Main Panel	Enable or disable ComPilot for a given slot.	On* Off
ComPilot Mix	Slot Dropdown	Set the ratio at which the ComPilot stream is mixed with the Mic Source for a given slot.	25% 50%* 75% 100%
Create Progressive Programs	Slot Dropdown	Select additional programs to assign to the remaining empty slots, which incrementally increase in M values.	5 CU 10 CU 15 CU
🔶 *CROS*	Slot Main Panel	Enable or disable CROS for a given slot.	On* Off
Data Logging	Processor Dropdown	Enable or disables Data Logging on the processor.	On* Off
DirectTouch	Slot Dropdown	When either DuoPhone or ZoomControl is enabled for a given slot, enable or disable the DirectTouch feature to control where hearing should be focused.	On Off*
◖••◗ *DuoPhone*	Slot Main Panel	Enable or disable the DuoPhone feature for a given	Disabled*

Feature	Location	Description	Options
		slot, and sets the default direction.	Phone on Left Phone on Right
IntelliLink	Slot Dropdown	Enable or disable the IntelliLink feature for a given slot. IntelliLink limits stimulation to a particular CII/HiRes-Family implant.	On* Off
Internal Alarms	Processor Main Panel	Enable or disable the Internal Alarms feature.	On* Off
Internal Alarms	Processor Dropdown	Set Internal Alarm types, intensity, and frequency. When Internal Alarms are turned off on the Processor Main Panel, this dropdown option is disabled.	Volume Change Program Change Low Battery Intensity (Soft, Medium*, Loud) Frequency (Low, Medium*, High)
Mic Source	Processor Main Panel	Set the input source for the Mic portion of the Audio Mixing for a given slot.	Processor Mic Processor Mic + T-Mic* T-Mic Headpiece Mic
Program Button	Processor Dropdown	Enable or disable the Program Button. When Program Button is turned on, the program button on the processor functions normally. When Program Button is turned off, the program button on the processor is ignored (both for changing programs and for entering or exiting Standby Mode).	On Off*
QuickSync	Processor Main Panel	Enable or disable the QuickSync feature.	On* Off
QuickSync	Processor Dropdown	Set QuickSync for program changes, volume changes, or both.	Program Change Volume Change Both*
Roger Ready	Slot Dropdown	Enable or disable the Roger Ready feature for a given slot.	Enabled* Disabled
Standby Mode	Processor Dropdown	Enable or disable the Standby Mode feature. When Standby Mode is turned on, the processor will be able	On Off*

| Feature	Location	Description	Options
		to enter Standby Mode. When turned off, the processor does not go into Standby Mode (either manually or automatically). Standby Mode is automatically disabled when Program Button is disabled.	
☀ **Status LED**[1]	Slot Main Panel	Enable or disable the Status LED on the processor.	On* Off
StereoZoom	Processor Main Panel	Enable or disable the StereoZoom feature, which is designed to focus on the person directly in front of the listener to allow them to listen in very noisy situations. Using both Naída sound processors reduces noise even further.	On Off*
ZoomControl	Slot Dropdown	Enable or disable the ZoomControl feature for a given slot, and set the default direction.	Disabled* Focus Left Focus Right Focus Front Focus Back

Indicates the default setting for a feature.

[1] *Enables/disables Low Battery Indicator, Change Battery Indicator, Mic/System Status, and Lock Status LEDs as a group.*

For Naída CI Q90 processors, the second row (below the processor type display) sets processor-wide features.

Error States and Resolution

Error states may occur when various features are activated. If so, an error icon will be displayed, with an associated tooltip describing the issue, as illustrated below.
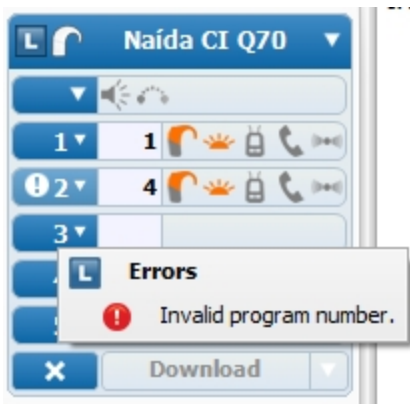
Download will not be permitted until all errors are resolved.

Bilateral Settings Mismatch and Resolution

Bilateral Settings Mismatches occur when two unilaterally-initialized Naída processors are connected and any slot-specific or processor-wide options are set to different values for the right and left sides. The mismatched settings are indicated by a question mark symbol, as illustrated below. Hover over the symbol to view the mismatch.
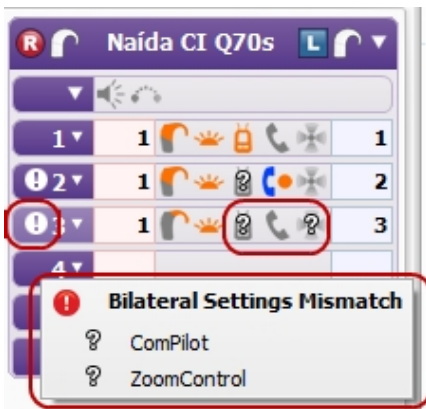
Download is not allowed until all mismatched settings are resolved. To resolve, set each mismatched option to the correct value. Note that mismatched settings can be in either the processor or the slot dropdown menus.

Related Topics

Bilateral Naída Options

Several options are available only on the Naída family of processors.

A bilaterally initialized Naída processor can hold 5 programs per side, up to 10 total programs.

QuickSync

The QuickSync setting provides your bilateral patients with the instantaneous broadband transfer of data between Naída CI Q70 and Naída CI Q90 processors. It ensures that volume and program settings are always balanced and synchronized. One touch of the program selection button or volume control results in instant identical change in the other instrument. (Not available on the Naída CI Q30.)

DuoPhone

The DuoPhone setting allows you to indicate a preferred phone ear for your Naída CI Q70 and Naída CI Q90 bilateral patients. This feature allows your patient to hear a phone call in both processors simultaneously. (Not available on the Naída CI Q30.)

ZoomControl

The ZoomControl setting allows you to indicate a preferred direction to focus sound for your Naída CI Q70 and Naída CI Q90 bilateral patients. This setting is ideal for situations where they cannot face the speaker. (Not available on the Naída CI Q30.)

StereoZoom

The StereoZoom setting allows you to enable your Naída CI Q90 bilateral patients to focus on the person directly in front of them to allow them to listen in very noisy situations. (Not available on the Naída CI Q30 or Naída CI Q70.)

Manage Internal Alarms

Internal alarms are available on Naída CI Q30, Q70, and Q90 processors to indicate Volume Change, Program Change, and Low Battery.
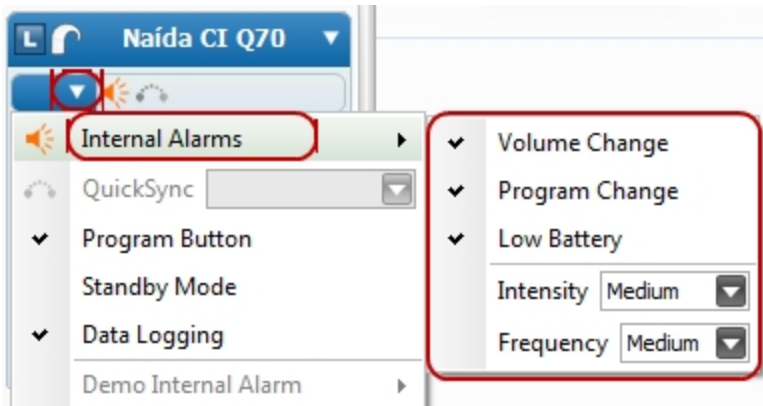
To enable/disable Internal Alarms:

1. Click the **Internal Alarms** icon in the processor-wide options area of the Processor Pane. The icon turns orange when Internal Alarms are enabled.

By default, Volume Change, Program Change, and Low Battery alarms are all enabled, and both Intensity and Frequency are set to Medium.
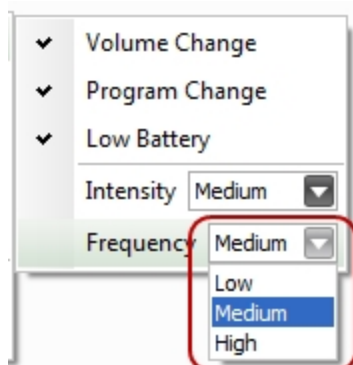
2. To customize Internal Alarms, hover over **Internal Alarms** in the processor dropdown menu and the following options will appear: enabling/disabling of Volume Change, Program Change, and Low Battery, and setting of Intensity and Frequency.

3. Check/uncheck each alarm type to enable/disable as desired.
4. Use the **Intensity** dropdown menu to choose between Soft, Medium, and Loud alarms.
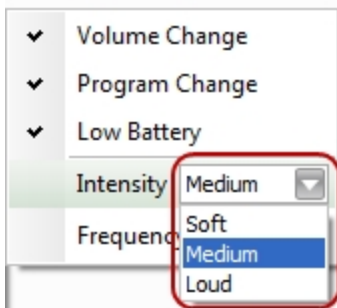
5. Use the **Frequency** dropdown menu to choose between Low, Medium, and High pitched alarms.

To demonstrate Internal Alarms:

1. Stimulate from a slot by clicking on **Stimulate** in a slot dropdown menu.

2. Hover over **Demo Internal Alarm** in the processor dropdown menu and the following options will appear: **Volume Change**, **Program Change**, and **Low Battery**.
3. Click on the desired alarm type. The Volume Change and Program Change items each have an additional submenu for demonstrating individual alarm types.

Related Topics

Estimate Battery Capability

Battery capability can be estimated for Naída CI Q30, Q70, and Q90 processors.

To estimate battery capability:

1. Ensure the following:
   - All desired programs and slot options have been selected.
   - The processor is connected to the recipient's implant.
   - Stimulation has been stopped.
   - Optional) Automatic Battery Estimates is selected on the Preferences Dialog.
2. If Automatic Battery Estimates is selected, select Download on the Processor Download Pane.
3. Alternatively, select "Estimate & Download" on the Download Dropdown.

Measurements will then be made to estimate battery capability for each slot. After the measurements are complete and changes have been successfully downloaded to the processor, select the Visit History record to view the estimation results. Estimates will be shown for the Zinc Air Cartridge*, PowerCel 110, PowerCel 170, and PowerCel 230 batteries for each slot.

*Note that if the recipient has high power needs, Zinc Air Cartridge use may not be recommended. If so, the Estimate Battery Capability window will indicate "Not Recommended."

Stimulate from a Slot

Once you have specified a program for download, you can stimulate an implant from the program in a slot in the Processor Pane.

To stimulate from a slot:

1. Start in the Processor Pane that holds the program from which you want to stimulate.
2. Click the arrow next to the slot number of the program from which you want to stimulate.

3. You will see the Slot Actions Dropdown Menu.
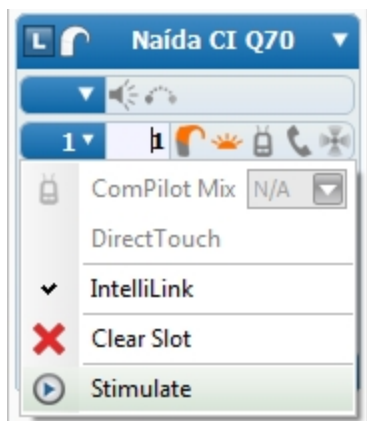
4. Click on **Stimulate**.

Note that if lock to the implant is lost during stimulation, the slot-specific settings are no longer applicable. Accordingly, even if the Status LED is disabled on the slot, upon loss of lock the no-lock LED will become active.

Related Topics

Download Programs to a Sound Processor

After you have specified the programs to download and set the processor-specific and slot-specific features, you can download the programs to the processor.

To download the programs to the processor, click on **Download** in the Processor Pane.

You will see an icon in the Fitting Hardware Group of the Ribbon Page informing you that SoundWave is downloading the Programs.

When complete , the recent download is recorded in the Visit History Data Manager.

Related Topics

Binaural VoiceStream Technology for Unilateral Patients

Binaural VoiceStream Technology allows a cochlear implant (CI) processor on one side to communicate with a compatible device on the other side. In particular, this technology allows for use of ZoomControl, DuoPhone, StereoZoom, DirectTouch, and QuickSync. Binaural VoiceStream Technology is available for Naída CI Q70 and Q90 processors. In order to set up a unilateral patient to use Binaural VoiceStream Technology, the following steps are performed:

1. Set up programs as usual for the patient.

2. Initialize the compatible Naída processor by selecting Left + HA Right or Right + HA Left in the Initialize Processor dialog. See for more information.
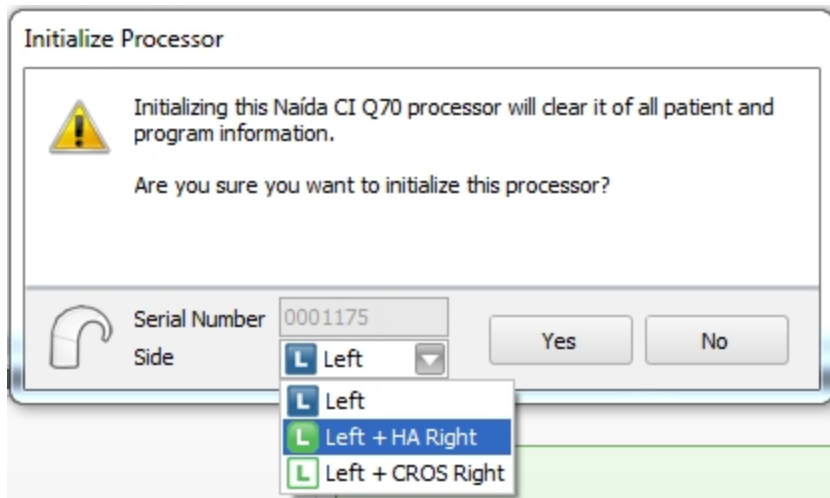
3. Place programs on the processor as usual and set all slot options as desired.

4. Click on Download. A Verify Slot Intention dialog will appear. Each programmed slot has a dropdown list with several options to choose from, depending on what program and options are assigned to each slot. Slots without programs are designated as empty.
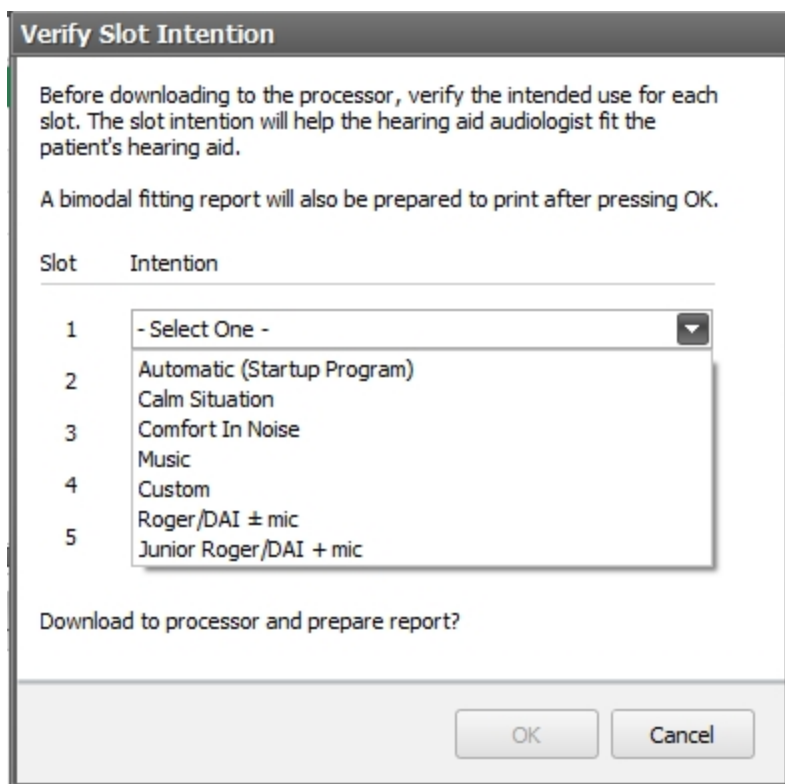
5. Select the desired intention for each slot and click Download.
6. After the download completes, a customized report will automatically be generated.
7. A printout of this report should be provided to the patient, who can give it to the professional who will program their contralateral device.
8. The report can also be generated manually by going to the Visit History Data Manager and using the Report functionality.

NOTE: The myPilot accessory should not be used for unilateral patients taking advantage of Binaural VoiceStream Technology.

Related Topics

Visit History Data Manager

Use the Visit History Data Manager to see what Programs you have previously downloaded and how the processor options were configured. You can also download them again to a new processor in order to duplicate the previous configuration.

A Visit History record is a "snapshot" of the state of the processor at a moment in time. SoundWave creates a Visit History record each time you download to a sound processor. SoundWave displays these Visit History records in the Management Grid in the Visit History tab.

Each record contains the side the processor is initialized for, the date and time of the download, the processor type, the processor serial number, the program ID in each program slot, and the processor-wide and slot-specific options (if applicable).

Each record contains the side for which the processor is initialized, the date and time of the download, the processor type, the processor serial number, the program ID in each program slot, and the processor-wide and slot-specific options (if applicable).
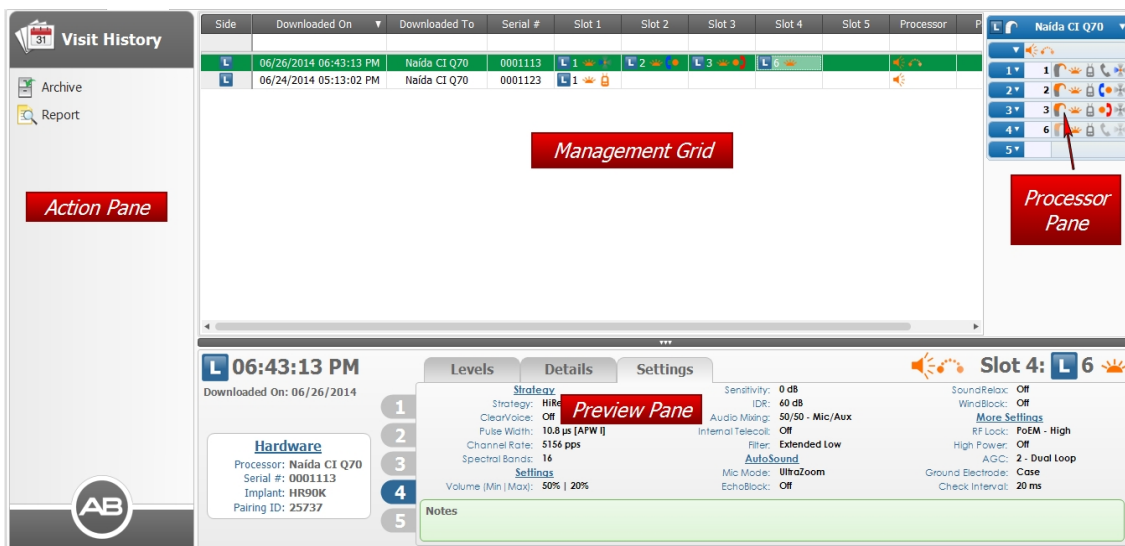
Action Pane

The Action Pane has the following items:

Archive/ Retrieve

Archives or, if already archived, retrieves the Visit History record that has focus.

🔍 Report

Generates and opens a Visit History Report.

Management Grid

The Management Grid displays all of the Visit History records. Each row represents a single record. Clicking a row selects and highlights that record. To select multiple records, hold down the 'Ctrl' key while clicking on each record.

Column Heading	Description
Archived	Visible when the Archive is open. Displays whether the Visit History record is currently archived.
*Side**	Displays the side as 🅡 Right, 🅛 Left, or 🅑 Bilateral.
*Downloaded On**	Displays the date and time at which the processor download occurred.
*Downloaded To**	Displays the Processor type.
*Serial #**	Displays the processor serial number. *Note: The serial # is different from the IntelliLink ID.*
*Processor***	Displays the processor-wide features that were enabled.
*Slot 1**	Displays the Program downloaded to slot 1 and any slot-specific features that were enabled.
*Slot 2**	Displays the Program downloaded to slot 2 and any slot-specific features that were enabled.
*Slot 3**	Displays the Program downloaded to slot 3 and any slot-specific features that were enabled.
*Slot 4***	Displays the Program downloaded to slot 4 and any slot-specific features that were enabled.
*Slot 5***	Displays the Program downloaded to slot 5 and any slot-specific features that were enabled.
Pairing ID	Displays the identification number that allows for the patient's processors to be paired with HiBAN compatible devices, such as the AB myPilot and the Phonak ComPilot. This number is computer generated for the patient.

NOTE: * Indicates a column that is displayed by default. **Indicates a column that is displayed only when any of the records for the patient are for downloads to a Naída CI Q30, Q70, or Q90.

Customize the information displayed in the Management Grid by using the Column Chooser, sorting, and by filtering.

Preview Pane

The Preview Pane provides an overview of the Visit History that has focus, displaying details for the programs in each slot. For a given slot, the layout is similar to that for the Preview Pane in the Programs data manager, with tabs for Levels, Details, and Settings (see Programs Data Manager, page 123). In addition, you are able to click through vertical tabs to switch to programs on the different slots on the processor. When you change the highlighted slot, the corresponding slot is highlighted in the Management Grid. For a Visit History for a bilaterally-initialized Naída CI Q30, Q70, or Q90 processor, there is a control to switch sides for the preview. Lastly, the upper right corner of the Preview Pane indicates the slot number and icons indicating the chosen slot features. Hover over the icons to see a tooltip providing further details on processor wide features.
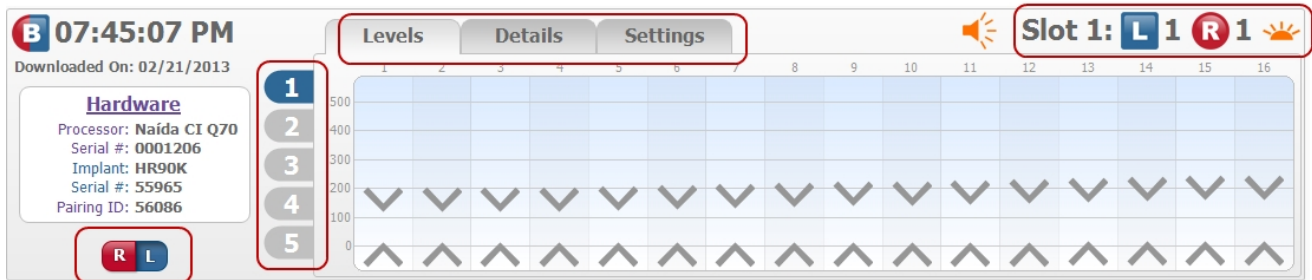
Related Topics

Processor Download Pane (see page 154)

Work with Data Managers (see page 32)

Work with Data Logs

Some processors are able to log usage, which can then be used to identify the programs most often used and to adjust programs. This data is automatically retrieved when the processor is connected to SoundWave, and saved in the Data Logs Data Manager.

Related Topics

Manage Data Logging (see page 184)

View Data Logs (see page 184)

Data Logs Data Manager

The Data Logs Data Manager allows you to view details on device utilization for supported processors.

Action Pane

The Action Pane allows you to initiate common data log-related tasks with single button clicks. The Action Pane has the following items:

Archive/ Retrieve

A toggle that Archives or, if already archived, retrieves the selected Data Log.

Report

Generates and opens a Data Log Report for the selected log.

Management Grid

The Management Grid displays all Data Logs captured for the current patient. Each row represents data collected for the processor and time period shown. Clicking (selecting) a row highlights the record, which can then be opened, archived/retrieved, or a report generated. Press and hold the Ctrl key while selecting multiple records.

The following table shows the available columns for the Data Logs Management Grid along with a description of the content.

Column Heading	Description
Archived*	Visible when the Archive is open. Displays whether the Data Log is archived.
Side*	Displays the side as R Right or L Left.
Time Period*	Displays the time period in which data was collected.
Logged On*	Displays the Processor type.
Serial #*	Displays the serial number.
Notes*	Optional field for adding any additional information

Indicates a column that is displayed by default.

Preview Pane

The Preview Pane displays the details for the selected data log.

Related Topics

Manage Data Logging

Data Logging provides details on device utilization.

To enable/disable Data Logging:

Data Logging is enabled by default. To disable Data Logging, uncheck Data Logging in the processor-wide options area of the Processor Pane.
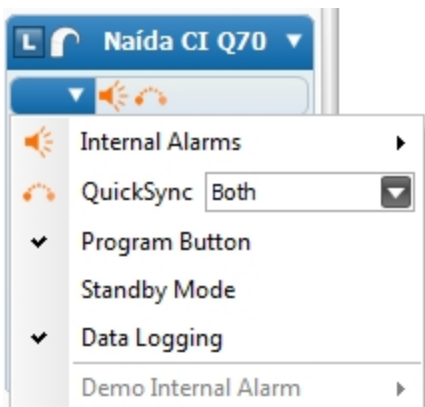
Related Topics

View Data Logs

Data Logs are automatically retrieved from a processor if at least one day has passed since it was last downloaded with one or more programs and the connected processor has the Data Logging feature enabled.

To view Data Logs, open the Patient, then select the Data Logs Data Manager.

The Data Log Report contains information in multiple categories. Several examples are shown below.

Daily Usage

Estimations on daily processor use, including standby, lock/unlock events, and daily slot usage.
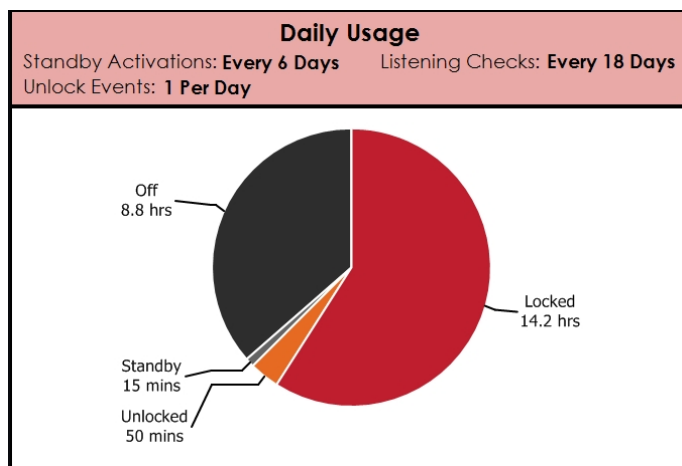
Battery Usage

Battery usage and estimated battery life for each battery type.
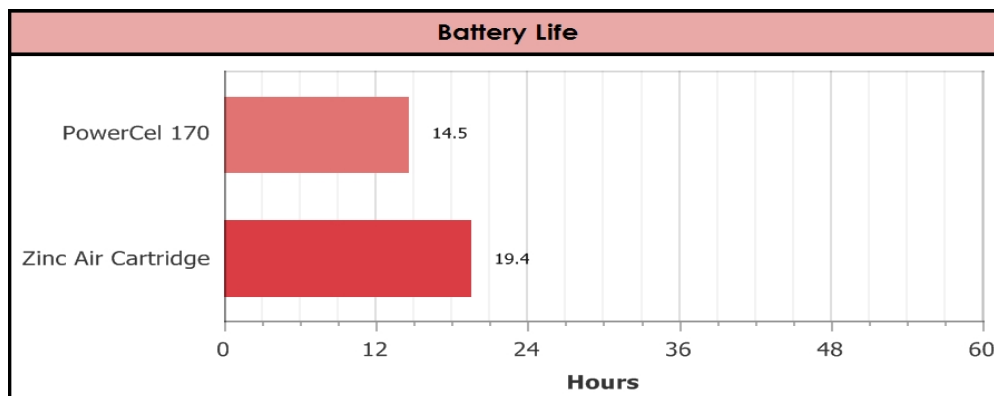
> NOTE: Battery life is not displayed for a battery type unless the available data are sufficient to provide a reliable estimate.

Environment

Estimates on environment volume and sound classifications.
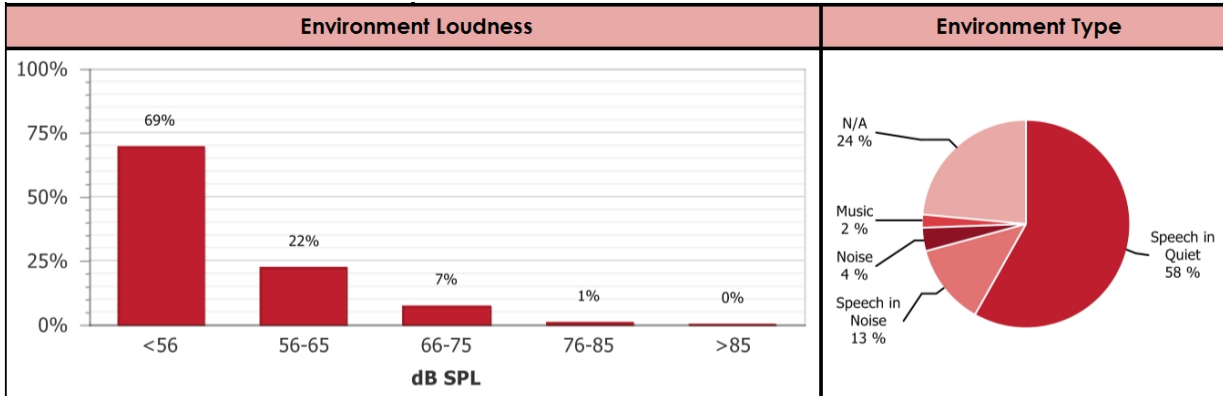
The Environment Type chart shows the time spent in Speech In Quiet, Speech in Noise, Noise, and Music for most programs. ComPilot streaming time or time spent in programs using DuoPhone, ZoomControl, or Internal Telecoil display as N/A.

Feature Usage

Estimated daily usage of certain features and wireless streaming, such as from a ComPilot or DECT phone.
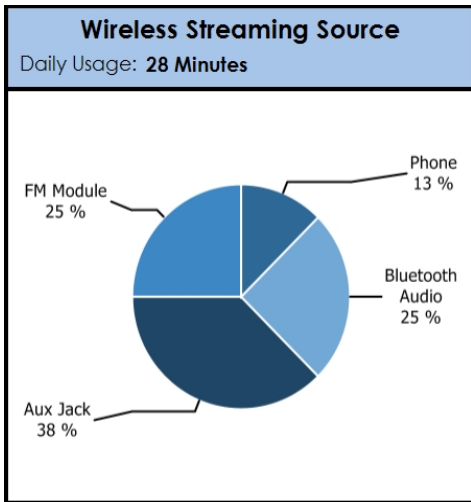
Volume Settings

Average volume setting and available volume range by slot number.

Average User Volume & Available Range
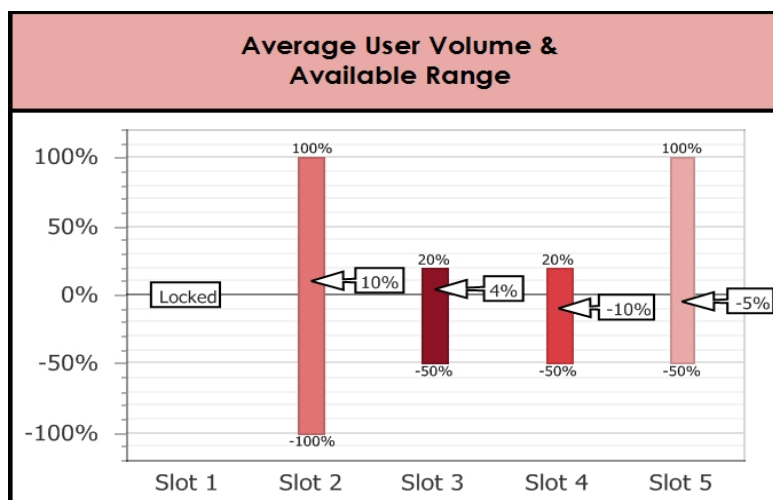
Related Topics

Data Logs Data Manager (see page 183)

Manage Data Logging (see page 184)

Set Processor-Wide and Slot-Specific Features for a Processor (see page 163)

Manage Accessories

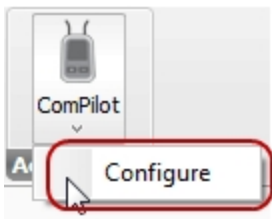**Related Topics**

Configure an AB myPilot (see page 191)

Configure a ComPilot (see page 187)

Configure a ComPilot

The ComPilot connects to the PC with a mini USB cable.
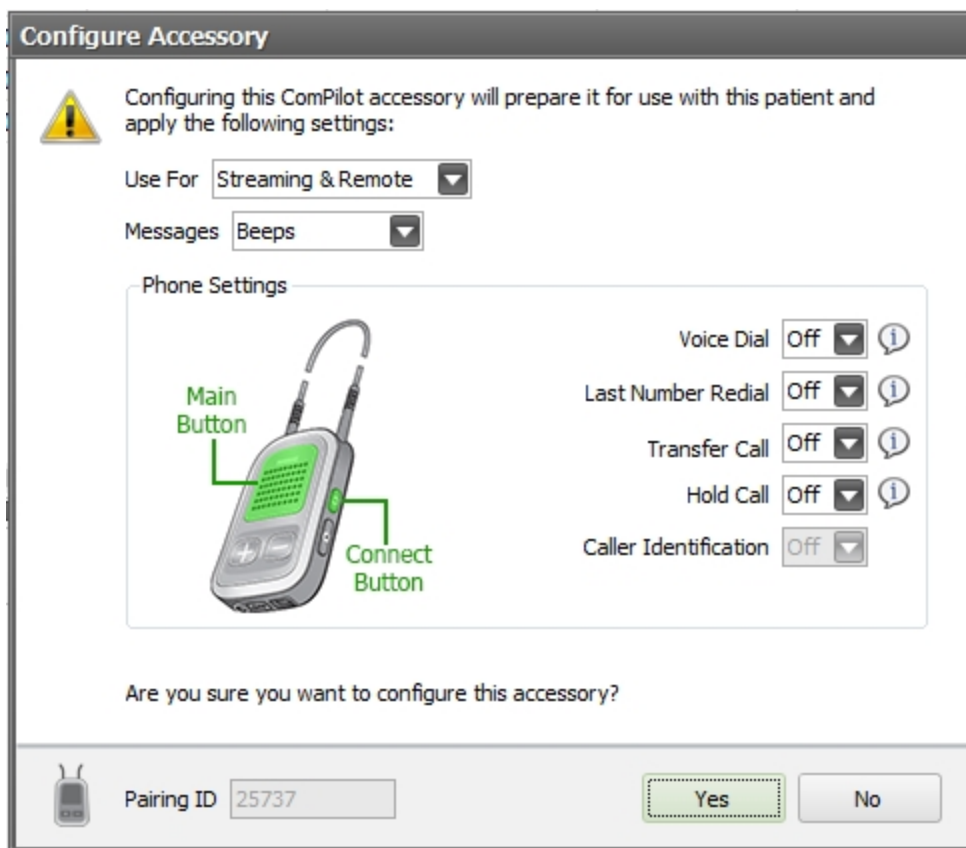
Configure ComPilot for Use with a Specific Patient

1. Connect the ComPilot to the computer.
2. Open the Patient.

3. Click the down arrow below the ComPilot icon ▮ in the Accessories Group of the Home Ribbon Page.

4. Click **Configure** to open the Configure Accessory Dialog.

5. Choose the desired options by clicking the down arrow in the **Use For** and **Messages** dropdown lists. Click the **Phone Settings...** button to see additional options.

(All options are described in the following table.)

Parameter	Description	Options
Use For	Specifies whether the ComPilot is used for streaming content only, or for streaming and remote control of the patient's processor(s). This parameter is forced to "Streaming Only" if no patient is open.	Streaming & Remote* Streaming Only
Messages	Specifies whether messages from the ComPilot are sent in the form of beeps or spoken prompts.	Beeps* VoiceAlerts
Language	Specifies the language for the ComPilot. *This option is available only if the Messages parameter is set to "VoiceAlerts".*	Brazilian Portuguese Chinese (Mandarin) French German Italian Japanese

Parameter	Description	Options
		Polish Spanish US English*
Phone Settings		
Voice Dial	Sets the Main Button Long Press action to initiate the Voice Dial option.	On Off*
Last Number Redial	Sets the Connect Button Long Press action to initiate the Last Number Redial option.	On Off*
Transfer Call	Sets the Main Button Long Press action to transfer a call back to the phone.	On Off*
Hold Call	Sets the Connect Button Long Press action to hold a call.	On Off*
Caller Identification	Enables or Disables the Caller Identification option.	On Off* (If "Messages" is set to "Beeps", the default will be "Off" and the control will be disabled)

* Indicates a default setting.

6. When all options are set, click **Yes** to save the settings, configure the ComPilot, and close the dialog. Click **No** to close the dialog without saving options or configuring the ComPilot.

Configure ComPilot for Streaming with Any Patient

1. Connect the ComPilot to the computer.
2. Close any open Patient.
3. Click the down arrow below the ComPilot icon in the Accessories Group of the Home Ribbon Page.
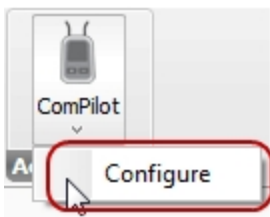
4. Click **Configure** to open the Configure Accessory Dialog.
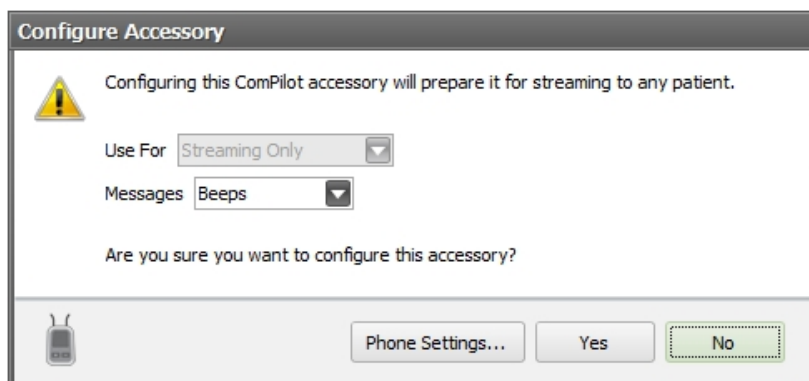
5. Note that **Use For** is not available. **Messages** defaults to Beeps. When you click **Phone Settings**, all options default to Off. These settings should not be changed until the ComPilot is configured for a Patient.
6. Click **Yes** to close the dialog and configure the ComPilot. Click No to close the dialog without configuring.

Configure an AB myPilot

You will need to connect the AB myPilot to the PC using a mini USB cable. For access to all of the latest features, be sure to configure the myPilot using the same version of SoundWave used to program the patient's processors.

NOTE: The myPilot accessory should not be used for unilateral patients taking advantage of Binaural VoiceStream Technology .

Set Up myPilot with Pairing ID for a Specific Patient

Open the Patient, click on the myPilot icon in the Accessories Group of the Home Ribbon Page, and click on **Configure**.
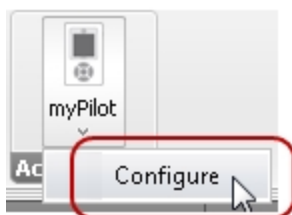
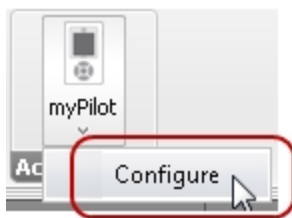You will see the Configure Accessory Dialog shown below.
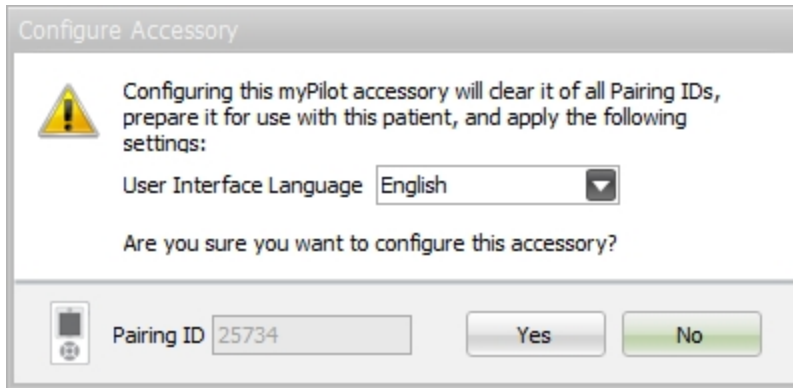
Set the User Interface Language as desired.

| Parameter	Description	Options
User Interface Language	Specifies the language for the AB myPilot.	Dutch English* French German Italian Spanish

After the User Interface Language is set as desired, click on **Yes**. Any Pairing IDs that were previously on the myPilot will be cleared and the Pairing ID for the current patient will be added. Note that you can later add additional Pairing IDs using dynamic pairing on the myPilot.

Set Up myPilot with all Pairing IDs Cleared

Close any open Patient, click on the myPilot icon in the Accessories Group of the Home Ribbon Page, and click on **Configure**.

You will see the Configure Accessory Dialog shown below.
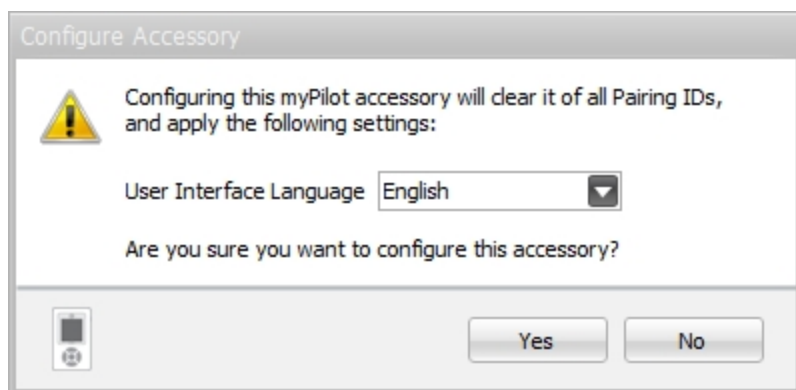
After the User Interface Language is set as desired, click on **Yes**. Any Pairing IDs that were previously on the myPilot will be cleared. You can later add Pairing IDs using dynamic pairing on the myPilot.

FAQs

Do C1 Implants support IntelliLink?

The C1 Implant does not support IntelliLink, and therefore, patients are advised to use processors programmed for a C1 implant only with the implant with which it was fitted. The application does implement implant type linking so that a processor programmed for use with a CII/HiRes-Family implant will not stimulate a C1 implant, and vice versa.

How do I evaluate the various Aux inputs when programming a Patient with a Neptune processor?

When used in conjunction with a Neptune Control Header and any Audio Mixing ratio other than Mic Only, the Neptune processor can be used to receive input from an auxiliary line source or from an FM receiver.

To evaluate an auxiliary line source or an FM receiver during fitting, connect an input to the appropriate connector on the programming header for the Neptune and then use the physical switch on the header to select which input the patient will hear during the fitting.

For a line source, set the switch to EXT, and for an FM receiver set the switch to FM.

How do I evaluate the various Mic, Aux, and Streaming inputs when programming a Patient with a Naída processor?

Mic Inputs

To evaluate different microphone options during fitting, ensure that Audio Mixing for the program is set to anything other than Aux Only or Aux Only (Atten.). Then, change the Mic Source setting in the appropriate Fitting Hardware group to the desired microphone option and start Live Speech Stimulation.
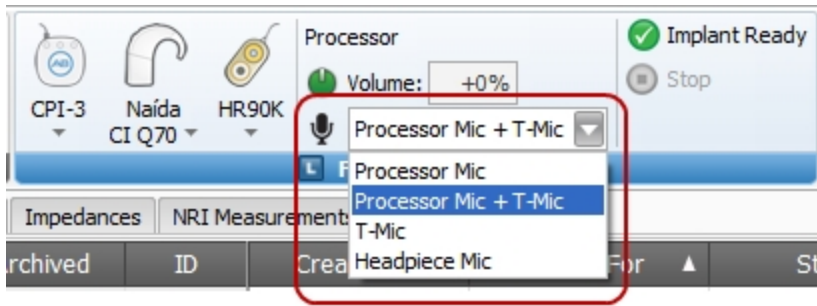
Aux Inputs

To evaluate the Internal Telecoil during fitting, ensure that Audio Mixing for the program is set to anything other than Mic Only and that Internal Telecoil is set to On. Then, start Live Speech Stimulation and evaluate with a telecoil compatible device.

Streaming Inputs

To evaluate a streaming input during fitting, ensure that the patient is wearing the ComPilot neckloop appropriately and that the ComPilot device is turned on. Then, go to the processor dropdown menu in the appropriate Fitting Hardware group, set ComPilot Streaming On, and select the desired ComPilot Mix. Start Live Speech Stimulation and begin streaming from the ComPilot.
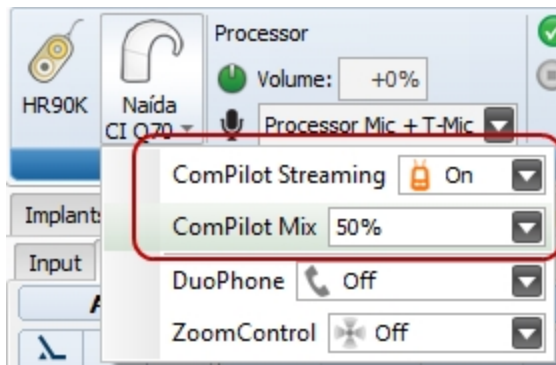
Note that if the recipient loses lock, you must ensure that streaming from the ComPilot is turned off prior to attempting to re-lock to the implant.

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