

Liaison™ Programming Guide

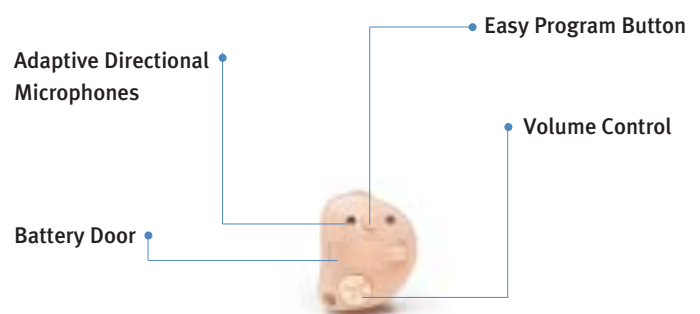
GETTING READY TO PROGRAM BTES:

- BTE hearing aids are Quick Fit at Unitron Hearing to a 40dB flat hearing loss
- Remove battery during programming
- Lift rubber port cover below the program button and insert cable
- Connect other end of the cable to the Hi-Pro box
- Program button and manual volume control (when present) will be deactivated during programming



GETTING READY TO PROGRAM ITES:

- ITE hearing aids are Quick Fit at Unitron Hearing if an audiogram is supplied
- Hearing aids with a manual volume control must be turned on
- Remove battery door and insert appropriate right or left cable
- Connect other end of the cable to the Hi-Pro box
- Program button and manual volume control (when present) will be deactivated during programming





Hearing Instrument Selection Screen



To detect the hearing instrument:



1. Under “**Detect Hearing Instrument**” select the icon for left, right or both hearing aids.



2. Fitting range overlays on the audiogram indicate if the selected hearing aids are appropriate for the degree of hearing loss.
3. To enter the fitting screen, select the Trim pot icon  or the green check  at the top of the screen.

To simulate a fitting:

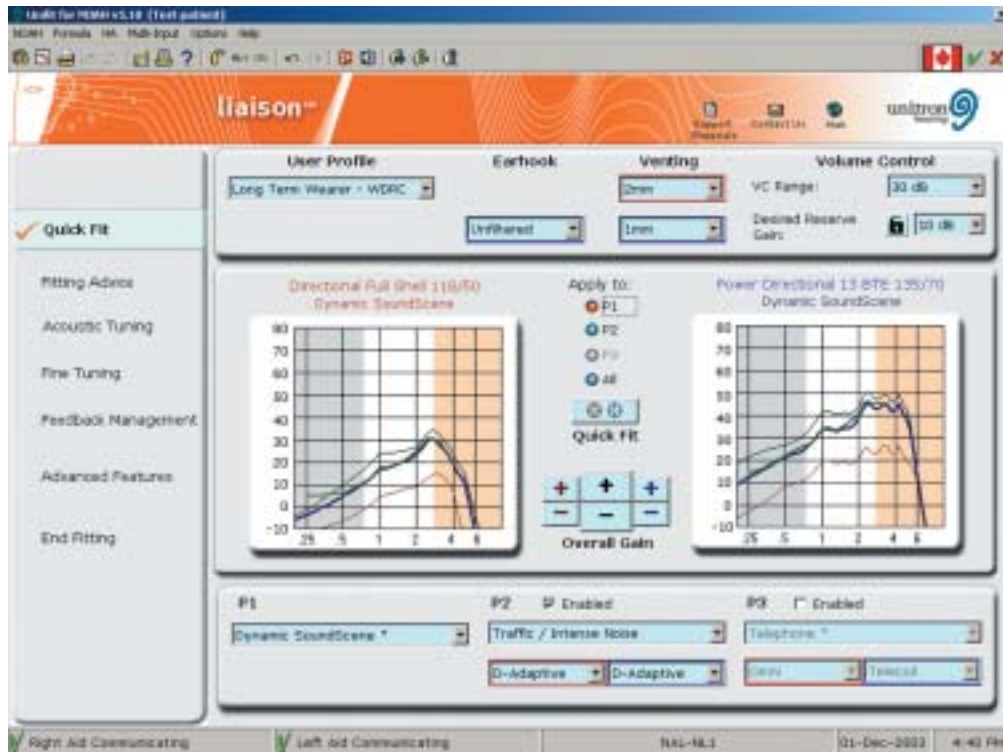
1. Select the “**Hi-Pro Enabled**” button to enter simulation mode.
2. Select the **Digital** tab.

3. Click on the photo of desired shell style, then the **brand** and **model** of hearing aids.
4. Fitting range overlays on the audiogram graph indicate if the selected hearing aids are appropriate for the degree of hearing loss.
5. To enter the fitting screen, select the Trim pot icon  or green check  at the top of the screen.

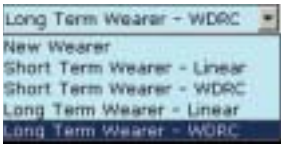

To access additional tools:


- View **Product Spec** data or **Programming Information** for the selected hearing aids by choosing the appropriate icons below the audiogram.
- Access Support Materials for all Unifit Hearing products by selecting **Support Materials** in the upper right corner of screen.
- In the upper right corner of screen, select **Contact Us** to view Unifit Hearing’s regional office contact information or select **Web** to access the Unifit Hearing web site.

Quick Fit Screen



To Quick Fit the hearing instrument:

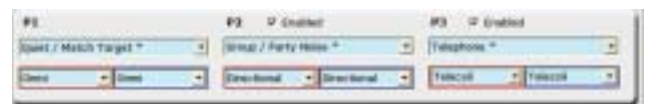
1. Select **Quick Fit** from the left navigation bar.
2. When prompted, select **Yes** to read the settings stored in the Liaison™ hearing aids.
3. For new fittings, if **No** is selected at the prompt, the hearing aids are automatically Quick Fit to the default settings. For previously saved fittings, the settings saved in the database are used.
4. Select the appropriate **User Profile** based on the client's hearing aid history.
 
5. For BTE fittings, under Earhook, select Filtered or Unfiltered.
6. Under Venting, select the appropriate amount of venting for each hearing aid or earmold from the drop-down list.
 

Note: Occluded represents no vent with average fit and some slit leakage while Tight represents no vent with tight fit and virtually no slit leakage.
7. For aids with manual volume control, select the desired volume control information for both **VC Range** and **Desired Reserve Gain**. To disable the manual volume control, select **Off** in the VC Range drop-down list.
8. Select the volume control lock button  if you want to ensure that Desired Reserve Gain will be maintained

during the fitting. This will restrict the maximum user gain that can be achieved.

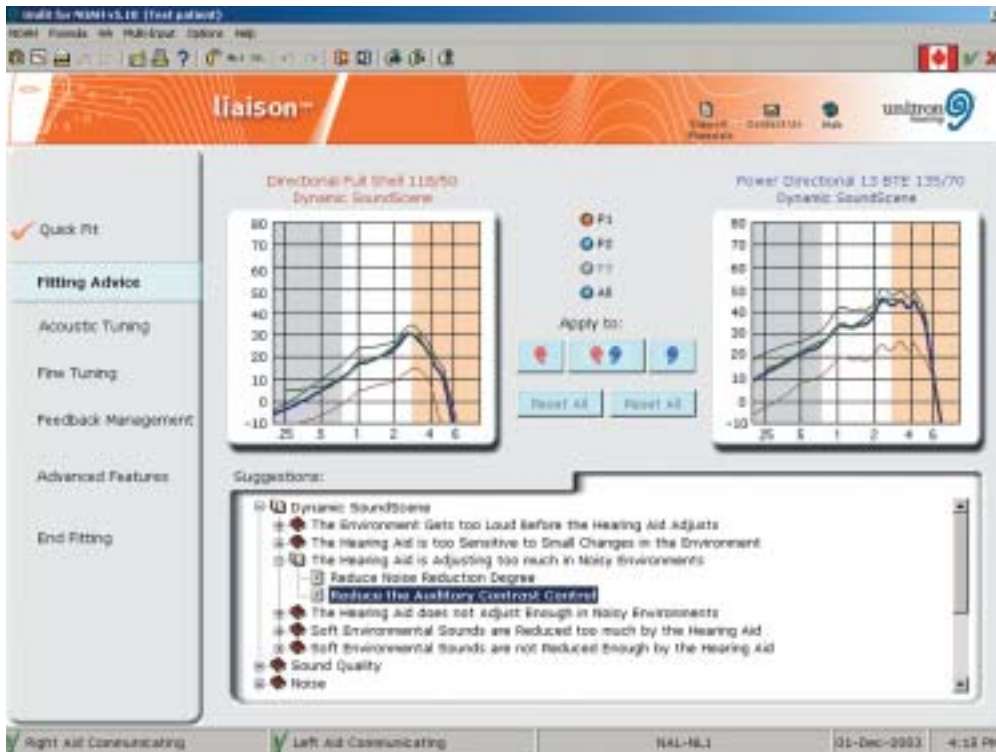
9. To Quick Fit all programs, select **All** and then the Quick Fit button. To Quick Fit one program select **P1**, **P2** or **P3** and then the Quick Fit button.

Note: For custom hearing aids without telecoil and for BTEs, Liaison's default settings are P1: Dynamic SoundScene, P2: Traffic/Intense Noise and P3: Disabled. For custom aids with telecoil, Liaison's default settings are P1: Dynamic SoundScene, P2: Traffic/Intense Noise and P3:Telephone.




10. Make appropriate selections across the bottom of the screen to choose environments for each program using the drop-down lists provided. **Enable** or disable programs by checking the Enabled check boxes beside P2 & P3. Unifit will automatically Quick Fit each program as you make changes to these selections.
11. Use the **Overall Gain** adjustment buttons for one or both aids to raise or lower the overall volume or improve binaural balance.
12. To move to the next screen in the fitting process, select the appropriate heading from the navigation bar along the left side of the screen.

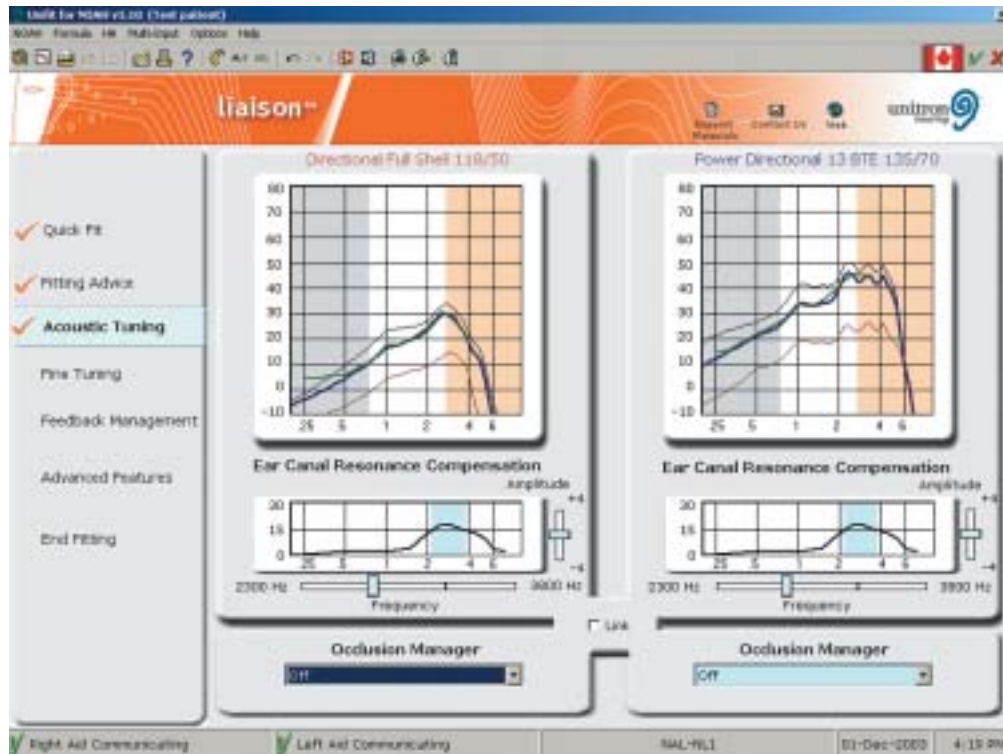
Fitting Advice Screen



To access Fitting Advice:

1. Select **Fitting Advice** from the left navigation bar.
2. Under the Suggestions section, double-click on the applicable folders until a list of suggestions appears. A category has been added for adjustments to the automatic Dynamic SoundScene program in Liaison.
3. Highlight the desired adjustment suggestion, then select **P1**, **P2**, **P3** or **All** to apply the change to one or all programs.
4. Under Apply to: choose the left ear, right ear or both ears button. If the ear or program buttons are not active or highlighted, the suggestion is not available for that selection.
5. To Undo your last change, select the Undo icon  from the top toolbar.
6. Select **Reset All** to remove all unsaved changes applied since entering the Fitting Advice screen.
7. To move to the next screen in the fitting process, select the appropriate heading from the left navigation bar.

Acoustic Tuning Screen



The Acoustic Tuning screen provides two tools to optimize Liaison fittings if there are general sound quality issues after the initial Quick Fit:

1. Ear Canal Resonance Compensation - customizes the peak frequency and amplitude of the ear canal resonance data used by Unifit.
2. Occlusion Manager - addresses occlusion and quality of own voice complaints.

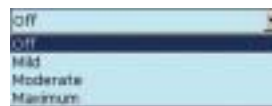
To apply ear canal resonance compensation:

1. Mute the non-test ear.
2. Adjust the Frequency slider control one step at a time while providing a speech stimulus to the client (live voice or recorded).
3. Determine which of the four settings the client prefers based on subjective sound quality judgements.
4. If further tuning is required, leave Frequency control at preferred setting and adjust the Amplitude slider control to determine the preferred setting.

5. Repeat the frequency and amplitude adjustments on the other ear.

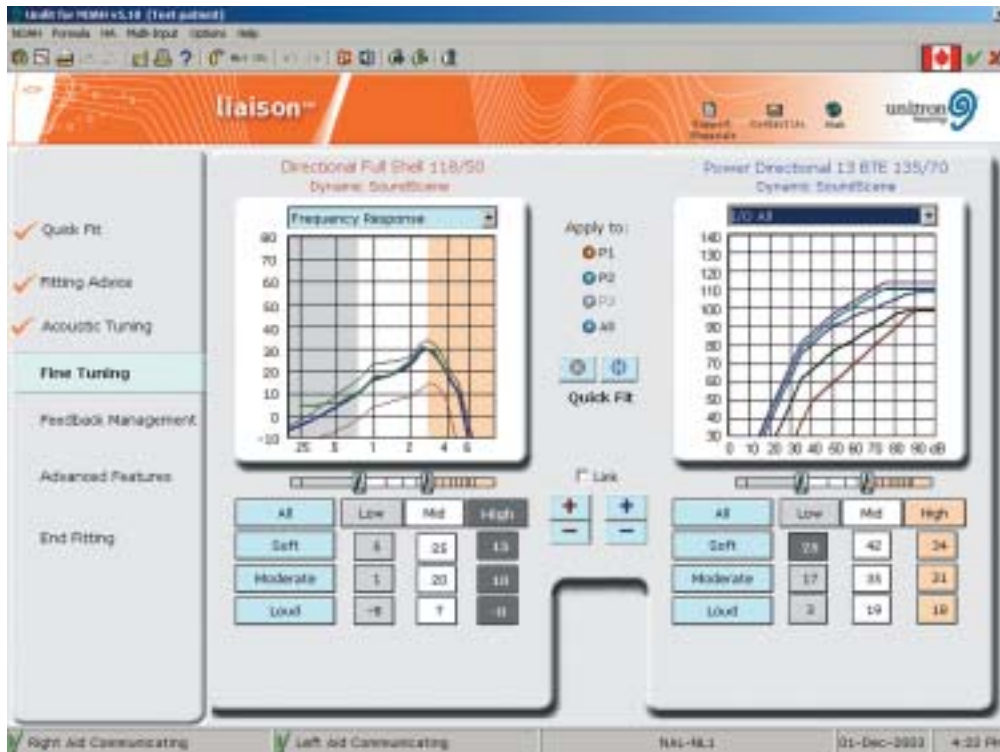
To apply the occlusion manager:

1. To make changes to both hearing aids simultaneously, select the Link check box.
2. Under the Occlusion Manager drop-down list, select Mild.
3. Check for improvement in the quality of the wearer's own voice.
4. Increase the setting one step at a time to determine the optimal level.



5. To move to the next screen in the fitting process, select the appropriate heading from the left navigation bar.

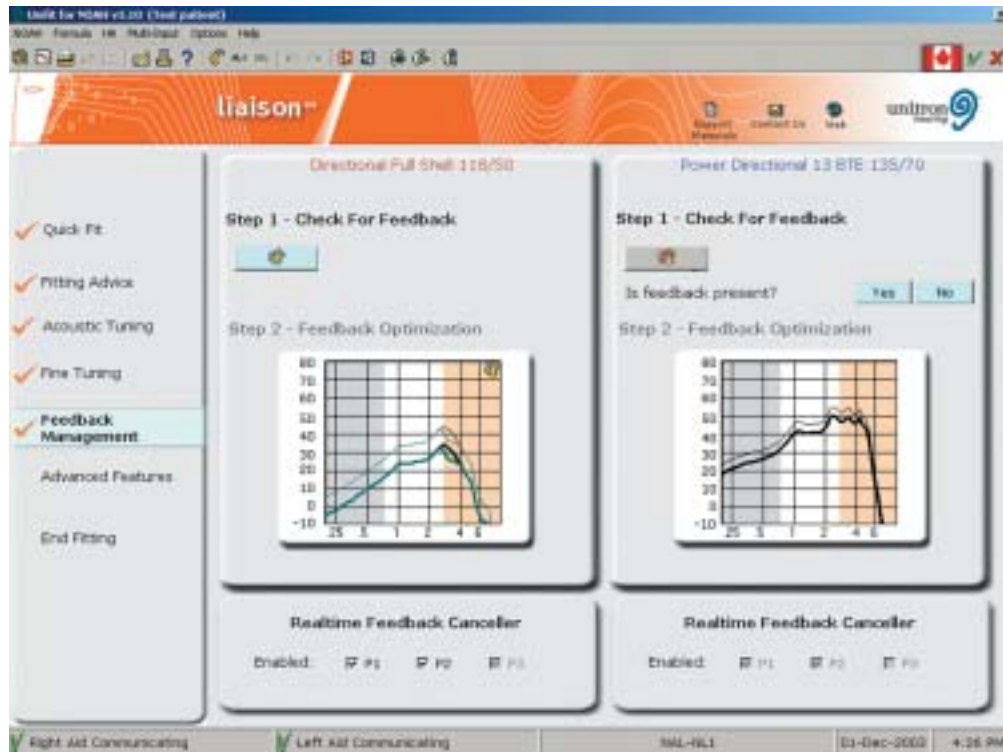
Fine Tuning Screen



To fine tune the hearing instrument:

1. Select **Fine Tuning** from the left navigation bar.
2. Click on the parameter to be adjusted. Options are:
 - **All** – to adjust all input levels across all frequencies
 - **Low, Mid or High** – to adjust only the selected frequency range (indicated by color) for all input levels
 - **Soft, Moderate or Loud** – to adjust only the selected input levels across all frequencies
 - **Individual Frequency and Input** – by clicking on an individual button, you can adjust the specific input level and frequency region.
3. Your selection will appear dark gray. The numbers displayed indicate the average gain or output for the frequency region included in that grouping.
4. To adjust the selected parameter, use the **+** and **-** buttons to increase or decrease gain.
5. To make changes to both hearing aids simultaneously, select the **Link** check box.
6. For more specific fine tuning, click and drag the arrows below the frequency response graph to change channel groupings for frequency adjustment.
7. To re-Quick Fit the frequency response for any of the programs, select **P1**, **P2**, or **P3** in the center of the screen and then **Quick Fit** for either the left or right hearing aid.
8. To view I/O graphs for one or all frequencies instead of Frequency Response graphs, choose the appropriate graph from the top drop-down list.
9. To move to the next screen in the fitting process, select the appropriate heading from the left navigation bar.

Feedback Management Screen



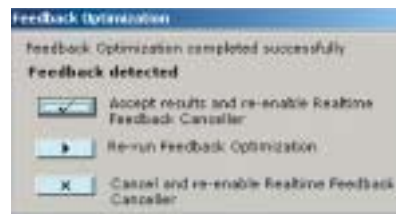
During fitting, the realtime feedback canceller is enabled by default. Even though the client may not hear feedback during the fitting, there may be fit-related feedback present which is being controlled by the realtime feedback canceller.

To check for fit-related feedback and ensure optimal performance of the realtime feedback canceller:

1. Select the **Check for Feedback** button. This turns off the realtime feedback canceller.
2. Listen for feedback.
3. If no feedback is present, select **No** and move to the next screen in the fitting process by selecting the appropriate heading from the left navigation bar. If feedback is present, instruct the client to sit quietly, and select **Yes** to automatically start the Feedback Optimization test.

Note: Notches may appear in the new frequency response graph (shown in blue) to reflect gain changes necessary to eliminate fit-related feedback. The room must be quiet for the test to run successfully.

4. Choose to **Accept, Re-run** or **Cancel** the results of the Feedback Optimization.

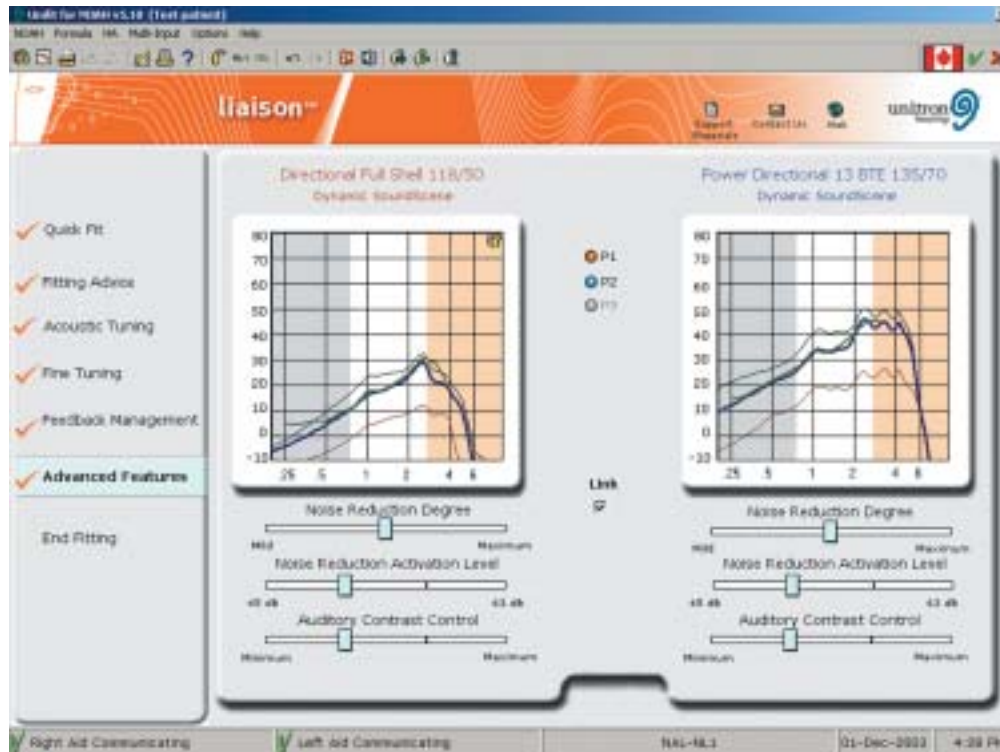


- If you choose to accept the results of the Feedback Optimization, the frequency response of the hearing aid will be altered to reflect the new response suggested by the software and the realtime feedback canceller will be re-enabled automatically.
 - If you choose not to accept the results of the Feedback Optimization, the frequency response of the hearing aid will go back to levels set before the Feedback Optimization test, and the Realtime Feedback Canceller will be re-enabled automatically.
 - If you are still experiencing feedback, re-run the Feedback Optimization.
5. To move to the next screen in the fitting process, select the appropriate heading from the left navigation bar.

Advanced Features

The Advanced Features screen takes on two different formats depending if the environment in the selected program is the automatic Dynamic SoundScene or one of the other manual mode environments (Traffic/Intense Noise, etc.)

Advanced Features Screen: Dynamic SoundScene Program



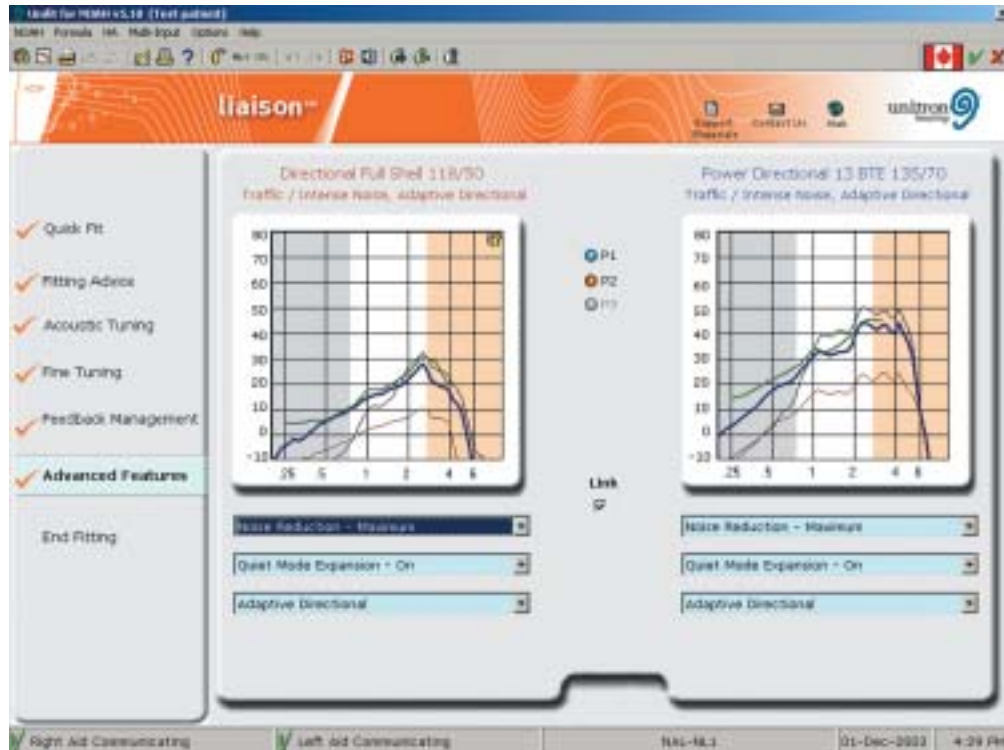
To adjust noise reduction degree, noise reduction activation level and auditory contrast control in the Dynamic SoundScene program:

1. To make changes to both hearing aids simultaneously, select the **Link** check box.
2. The **Noise Reduction Degree** control sets the amount of gain reduction to be applied to undesirable signals. To make changes to **Noise Reduction Degree**, click and drag the slider controls to the desired settings:
 - **Off, Mild** and **Moderate** are provided in directional Liaison products
 - **Mild, Moderate** and **Maximum** are provided in omnidirectional aids.
3. The **Noise Reduction Activation Level** determines the input level above which noise reduction will engage. To make changes, click and drag the slider controls to the desired settings:

- Set the Activation Level to a higher setting (i.e. 63 dB) for wearers who prefer to hear softer background sounds to stay connected to their environment.
 - Set it to a lower setting (i.e. 45 dB) for those who prefer not to hear even softer noises such as the hum of the microwave.
4. The **Auditory Contrast Control** adjusts the amount of change applied to Liaison's frequency response when moving from a quiet to a noisy environment, to reduce upward spread of masking. To make changes, click and drag the slider controls to the desired settings:
 - Select **Minimum** to provide the subtlest change to the frequency-gain function.
 - Select **Maximum** for a more audible and significant frequency response change.

Note: No adjustments to the Input options are provided in the Dynamic SoundScene Program because Liaison will automatically switch from omnidirectional to adaptive directional function as input levels increase.

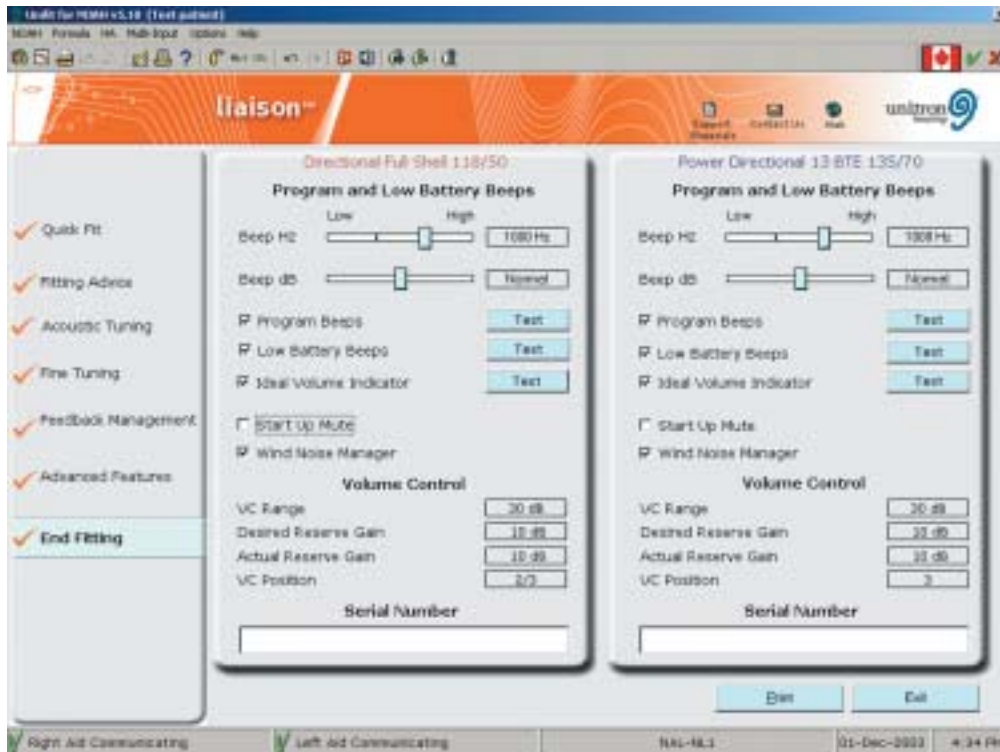
Advanced Features Screen: Manual Programs



To adjust noise reduction degree, quiet mode expansion and input options in the manual program:


1. Select the program you wish to adjust: **P1**, **P2** or **P3**.
2. Choose the desired **Noise Reduction** setting from the drop-down list: **Off**, **Mild**, **Moderate** or **Maximum**.
3. Select the desired **Quiet Mode Expansion** setting from the drop-down list: **On** or **Off**.
4. To make changes to both hearing aids simultaneously, select the **Link** check box.
5. From the third drop-down list, select the appropriate input option. Input options depend on the model of hearing aid as well as the environmental option chosen:
 - **Omni**
 - **Fixed Directional** which provides a fixed hypercardioid polar pattern
 - **Adaptive Directional** with a continuously adjusting polar pattern
 - **Telecoil**
 - **Mic + Telecoil**
 - **Direct Audio Input (DAI)**
 - **Mic + DAI**
6. Select a different program and repeat if required.
7. To move to the next screen in the fitting process, select the appropriate heading from the left navigation bar.

End Fitting Screen



To configure the end fitting settings:

1. Enable or disable program beeps, low battery beeps and ideal volume indicator by selecting or deselecting the appropriate check boxes. In hearing aids with a manual volume control, the ideal volume indicator produces a single beep when the wearer reaches his/her correct volume setting as determined by Unifit.
2. Use the slider controls to adjust the frequency (Beep Hz) and intensity (Beep dB) of the beeps if required. Use the **Test** button to demonstrate the beeps.
3. Enable or disable the Start Up Mute by selecting or deselecting the **Start Up Mute** check box. When enabled, the hearing aid will be in mute mode when powered on until the program button is pushed to advance the aid to Program 1.
4. Enable or disable the Wind Noise Manager for all programs by selecting or deselecting the **Wind Noise Manager** check box. When enabled, the Wind Noise Manager reduces output in affected channels to improve wearer comfort in high wind conditions. In moderate wind conditions, the Wind Noise Manager reduces gain in only the low frequency channels containing wind energy.

5. For hearing aids with a manual volume control, volume control information is displayed including **VC Range**, **Desired Reserve Gain**, **Actual Reserve Gain** and **VC Position**. Once the hearing aids are disconnected, match the manual volume control position to the VC position shown on the End Fitting screen to achieve the desired amount of gain. This position is indicated by the ideal volume indicator beep.
6. Select **Print** to print both a client report and a “Getting Started Guide” for the wearer.
7. To exit, select **Exit** or the **green check**  at the top right of the screen. You will be prompted to save settings to the hearing aids and/or to the database.
8. Select **OK**.



Notes:



CORPORATE OFFICE

Kitchener, Ontario, Canada
877 492 6244; 519 895 0100
fax 519 895 0108

U.S.A.

Plymouth, Minnesota
800 888 8882; 763 744 3300
fax 763 557 8828

CANADA

Cambridge, Ontario
519 650 9111; 800 265 8255
fax 800 949 6663

EUROPE

Bremen, Germany
49 421 43 87 90
fax 49 421 48 81 56

INTERNATIONAL

Kitchener, Ontario, Canada
877 492 6244; 519 895 0100
fax 519 895 0108

UNITED KINGDOM

Warrington, Cheshire, England
01925 247810
fax 01925 247818

NETHERLANDS

Nieuwegein, The Netherlands
+31 (0) 604 9325
fax +31 (0) 604 4589

www.unitronhearing.com