Fitting and Verifying DSL v5.0 m[i/o]

The new pediatric standard

Fitting and Verifying Oticon Safran and Oticon Sumo DM to DSL v5.0 targets

DSL v5.0 is the latest update to the DSL method of fitting hearing instruments to children. Use this guideline if you do not have access to a test system which incorporates DSL v5.0 (eg. Affinity from Interacoustics). It allows you to verify your targets.

When fitting children, it is always crucial to compare the actual performance of the hearing aid to the intended prescribed targets. Directly comparing the DSL v5.0 target curves in Genie with those obtained through direct measurements provides the best method of verification. The DSL v5.0 target curves in Genie 7.0 are generated directly from the official DSL v5.0 software provided by the University of Western Ontario. To provide greater accuracy they have been adjusted for instrument specific properties such as channel resolution and style capabilities as well as the compensation required for vent size or different tube widths.

Fitting to target - step by step in Genie 7.0 or later versions

1. Prescribe Sumo DM/Safran for DSL v5.0 (default rationale in Genie when fitting children ages 16 years and under) using correct audiometric and vent data.
2. Use the RECD and REUR-dialogue in Personal Profile to input RECD corrections and the correct audiometry method.
3. Close the RECD and REUR dialogue and accept the changes by clicking OK in the dialogue (this will re-prescribe with the correct RECD values).
4. Place the hearing aid in the test equipment.
5. Go to the Fitting Step, use the Genie REM Tool, Settings for REM to temporarily de-activate automatic features (Noise Management, Directionality, and if measuring with pure or warble tones, also the Dynamic Feedback Cancellation).
6. Run test frequencies at predefined levels (i.e. what your guidelines recommend, e.g. 50, 65 and 80dBSPL, OSPL90).
7. Compare test curves to the coupler curves presented in Genie (select Gain, 2cc target and simulated, and make sure to select the same level(s) and input signal as you are using in your test equipment. The level can be selected from Genie preferences, signal type in the select input signal button next to the graph). See figure 1 on the opposite page.
8. Fine-tune as needed to match coupler target to Genie target - see figure 2 on the opposite page.

Figure 1

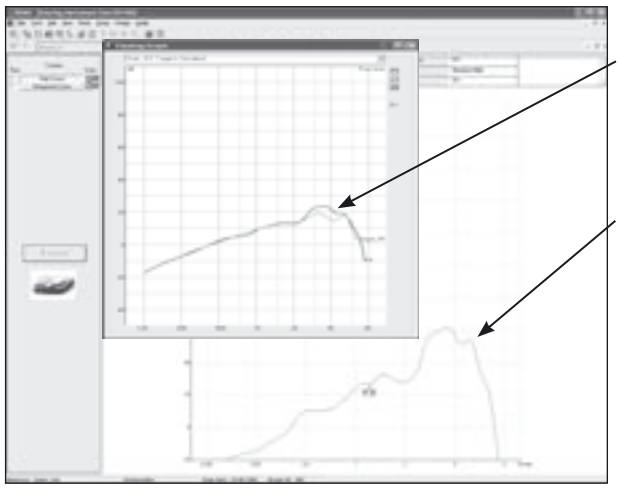
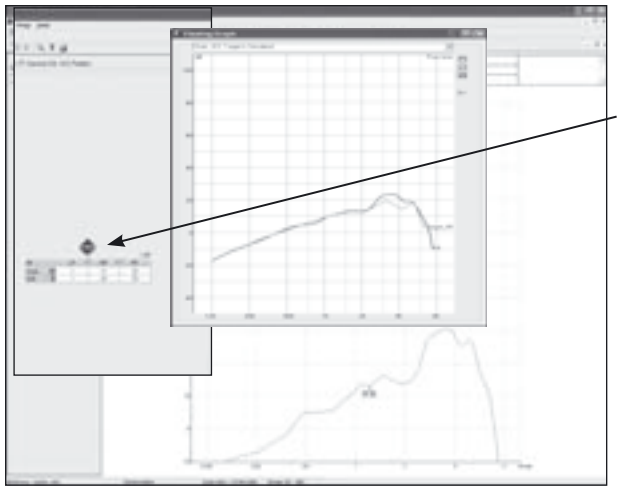


Figure 2



Fitting the child

9. Place the hearing aid(s) on the child with his/her own earmolds.
10. Run the Feedback Manager if needed. With Sumo DM it is essential to complete this step.
11. Assess where appropriate for loudness discomfort issues.
12. For an older child re-test speech tests, aided thresholds and functional assessment tools to ensure that performance is better or comparable to previous aids.

Verification of targets

13. It is always crucial to verify that the intended purpose of the DSL rationale is achieved - to place speech within the child's auditory area. To do so, run the hearing aids through the test box using DSL 4.1 SPL-o-gram or live speech mapping. This will provide you with the child's corrected thresholds, average level of speech and LDLs. Check to make sure that speech is placed within the child's auditory area. NOTE: DSL 4.1 targets will be different to DSL v5.0 targets. The aim is not to match or compare to those targets but to ensure that the overall goals of a DSL approach have been met, i.e. placing speech with the auditory area.

904 57 711 00 / 07.06 Printed in Denmark