HOW TO USE THE ISTS TEST MODE IN CHILDFIT.

This bulletin describes how to use the ISTS test mode in ChildFit to verify that the fitting is within the audible range of the child. The descriptions refer to the ISTS test mode in the Fine tuning window. Please refer to Compass V5.1 in order to see the details of the screen. Remember that Compass offers several help functions to explain the different options in the program: Tooltips, Solution guide, Using this window panels and the Help Manual.
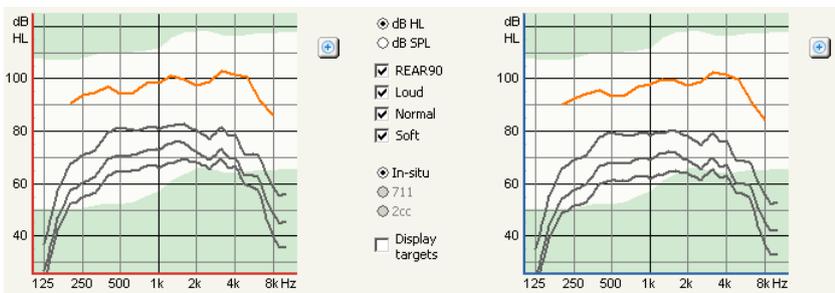
ISTS TEST MODE
The International Speech Test Signal (ISTS) is a standard speech signal corresponding to a general speech signal. The signal consists of small segments of speech from different languages.

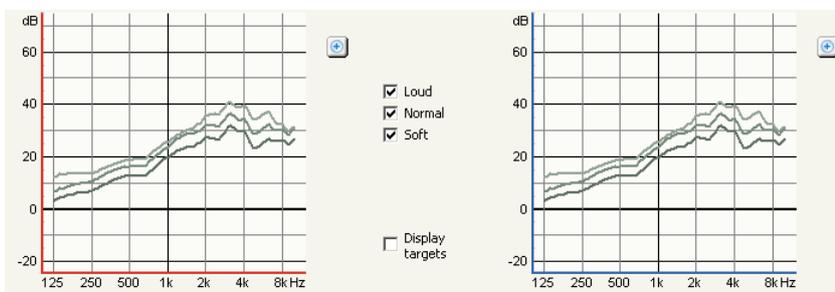You get access to the *ISTS test mode* window through the *Fine tuning* window in the left menu.

The ISTS test mode panel under ChildFit showing the Output vs. Frequency curve
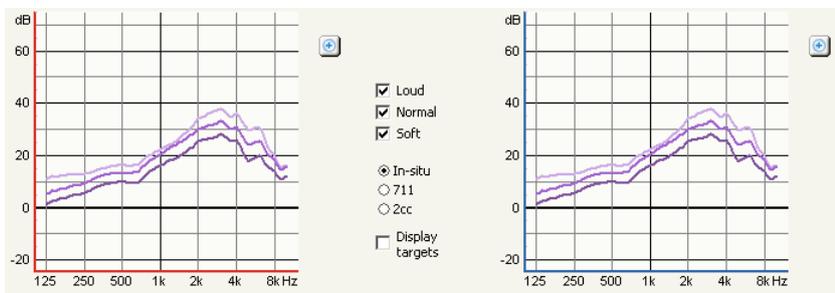
GRAPHICS

By default the *ISTS test mode* window shows the *Output vs. Frequency* curves, but you can change the curves to either the *Insertion gain vs. Frequency* curve or the *Aided gain vs. Frequency* curve by choosing the type of display in the *Graphics* drop-down list in the Toptool bar.

Output vs. Frequency curve

Insertion gain vs. Frequency curve

Aided gain vs. Frequency curve

Between the two graphics displays you can define what to show in the graphics. You will find different options depending on the type of graphics you have chosen as illustrated below.

Options for the different curves	View the data in dB HL or dB SPL	Curves for Loud, Normal and Soft	Curve for REAR90	Measurement volume	Display targets
Output vs. Frequency	X	X	X	X	X
Insertion gain vs. Frequency		X			X
Aided gain vs. Frequency		X		X	X

FINE TUNING SETTINGS

Below the graphics you can see the present fine tuning settings in the hearing aid that have been made. You cannot change any settings from the *ISTS test mode* window, but have to open the Fine tuning window if you wish to change them.

The fine tuning settings in the ISTS test mode window

ACTIVATE ISTS TEST MODE

To run the test you select the *Activate ISTS test mode* button.

While the test is running, the microphone is changed to Hd Locator omni, since this is the correct setting for performing free field or coupler measurements. Other feature settings are fixed in the hearing aid, while the *ISTS test mode* is active.

Select *OK* in the *test mode active* dialog box displayed on the screen, when you have finished using the test mode.

PROCEDURE

To make a test using the *ISTS test mode*, do the following:

1. Set up your external test system so that it is ready.

2. Open the *ISTS test mode* window in Compass.

3. Make sure that you have selected the desired graphics view, and that you display the graphics in the way that you need for your test. You may, for instance, need to only display *Loud* input signals.

4. When you are ready to start the test, select the *Activate test mode* button for the left or the right ear.

5. Make the measurements as needed with your external test system. Gain and output from the hearing aid should be verified at 55, 65 and 80 dB SPL RMS level measured at the hearing aid microphone, with the International Speech Test Signal (ISTS) (*) or a modulated signal with similar acoustic characteristics. The REAR90 should be verified with a narrow-band signal at 90 dB SPL input level.

6. When you have finished, select *OK* in the *Test mode active* dialog box. The test mode stops, and the Locator in the hearing aid returns to the setting defined under *Feature settings*.

(*) IEC (2010). Electroacoustics - Hearing aids - Part 15: Methods for characterising signal processing in hearing aids with a speech-like signal. *International Electrotechnical Commission* (in preparation).