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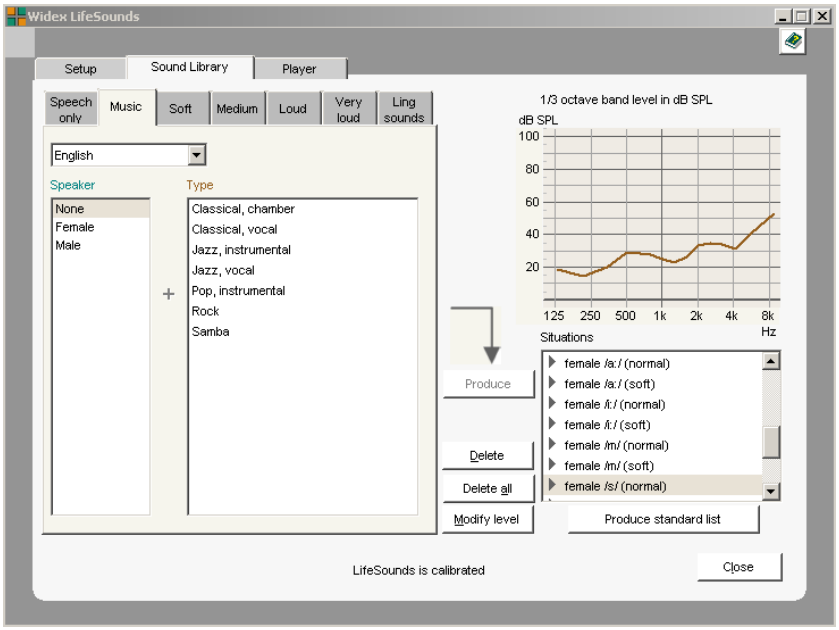
USING THE WIDEX LIFESOUNDS IN COMPASS V5.1

This bulletin describes Widex LifeSounds v.1.2 and the new sounds which can be used in Compass V5.1 when fitting hearing aids to children. The description refers to the LifeSounds MicroPlayer in the Toptool bar. Please refer to Compass in order to see 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 Handbook.

Along with the introduction of ChildFit, new sounds have been added to *LifeSounds*, which can be used when fitting the hearing aids to children. These new sounds include real-life sounds recognisable from the child's own experience, such as representations of different instruments and as familiar animals. Furthermore six different speech sounds, the *Ling sounds*, have been added to *LifeSounds*, which can be helpful when verifying the fitting.

LifeSounds

The *Widex LifeSounds* is a module designed to run together with Compass. You get access to LifeSounds from the Toptool bar by clicking the icon .



The Widex LifeSounds

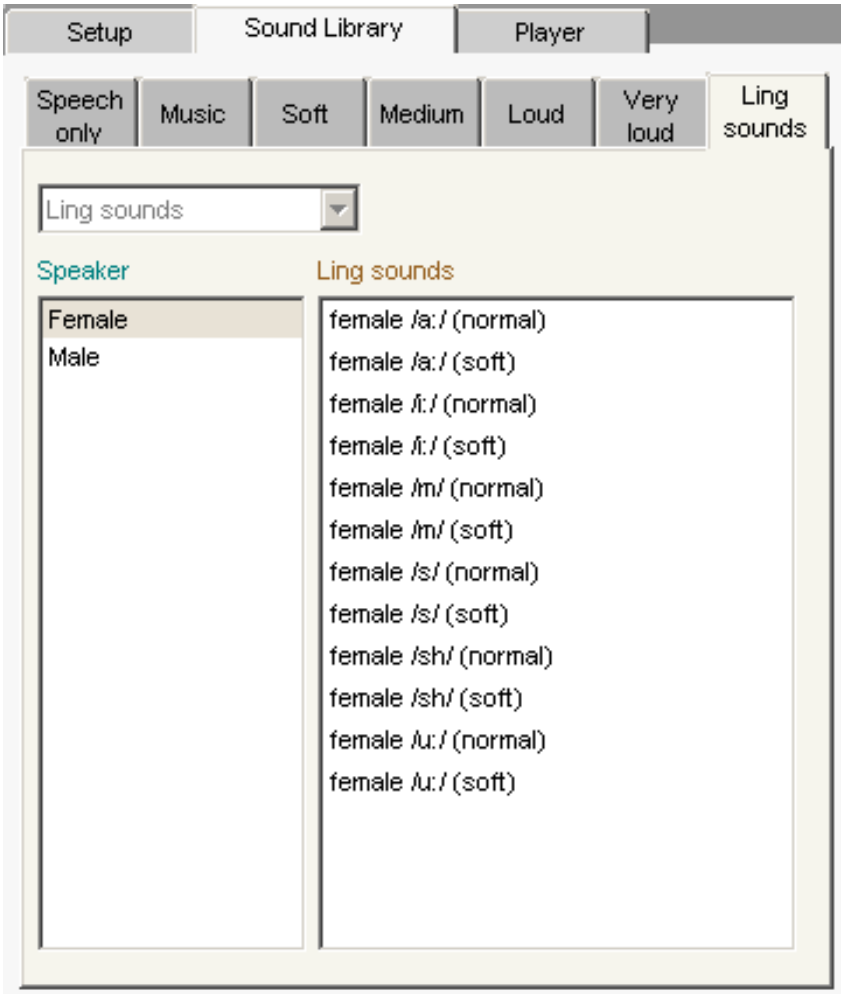
Using the *LifeSounds* – especially the *Ling sounds* - when fitting hearing aids to a child allows you to demonstrate the effect and benefit of the hearing aid. The *LifeSounds* may also be helpful in verifying the fitting and may ensure that the child gets the most optimum speech perception needed for speech and language development.

Please note that it is recommended to make an initial calibration ensuring that all sounds are represented at their true and optimum levels. You can read more about how to make a calibration and how to use the *Widex LifeSounds* in the *Handbook*, which is accessible when clicking the icon in the *LifeSounds* window .

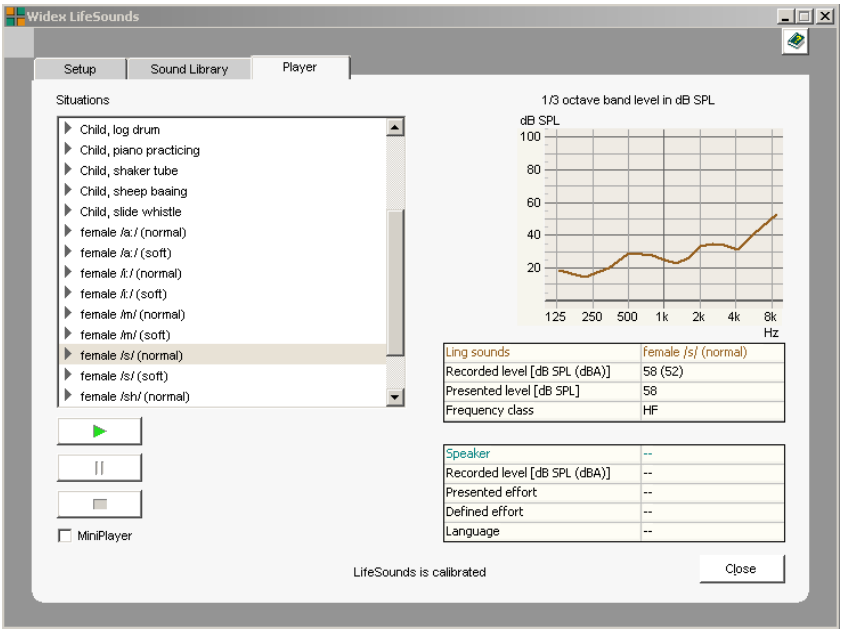
Ling sounds

Six different speech sounds (phonemes) together represent the range of sounds in the speech spectrum from 250 – 8000 Hz.

The *Ling sounds* are found in the *Sound Library* in *LifeSounds* and you can choose between a female and a male talker. It is recommended using the normal level, when using *Ling sounds* in ChildFit, since the normal level represents the level of conversational speech.

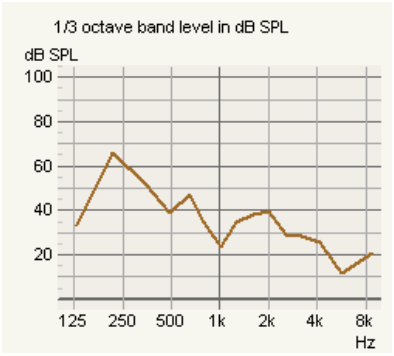


The Ling sounds in the Sound Library in Widex LifeSounds

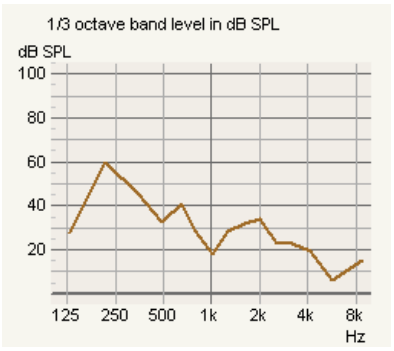


The Player in LifeSounds, showing a Ling sound.

The right side of the *LifeSounds* window shows the graphics matrix of the Ling sounds. Here you find the characteristics of the sound – the sound pressure level across frequency bands. For example you can see that /s/ is a high frequency sound, because the sound pressure (dB SPL) is greatest in the high frequencies compared to, for example, the /m/ sound, whose frequency characteristics show a greater sound pressure level in the low frequency regions. The differences between the normal and the soft level are seen by a difference of 6 dB SPL between the two curves.



Female /m/ normal



Female /m/ soft

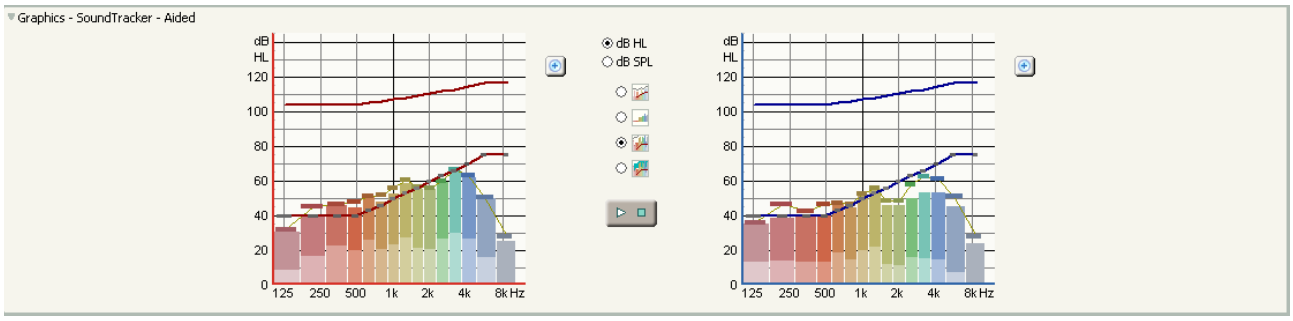
SoundTracker

The *SoundTracker Aided* view shows you the real-time performance in the hearing aid, displaying both the input and the output when you play a Ling sound. You can also see the child's hearing threshold. In this way you can establish whether the Ling sounds are audible or not.

Playing the six Ling sounds from *LifeSounds* (make sure that the LifeSounds are calibrated) with the *SoundTracker* active and using the information from the *SoundTracker* you can check/verify that the fitting has the right amplification needed for speech perception. If the Ling sounds are audible for the child, it is likely that all other speech sounds are audible too. If the child hears /m/ but not /s/, it is likely that the hearing aid should be fitted with more amplification in the high frequencies.

In general, if the child responds to /m:/, it is likely that it can detect low frequencies. If the child responds to /a:/, /u:/ and /i:/, it is likely that it can detect mid frequencies. If the child responds to /sh/ and /s/, it is likely that it can detect high frequencies. If the sounds are not heard, you can adjust the hearing aid until they are audible. If you use the *SoundTracker* to verify the Ling sounds, they should be presented above the child's hearing threshold as shown in the *SoundTracker*.

Using the *SoundTracker* together with the Ling Sounds may also be a valuable tool if you wish to prefit a WIDEX BABY440 hearing aid before the child enters the clinic.

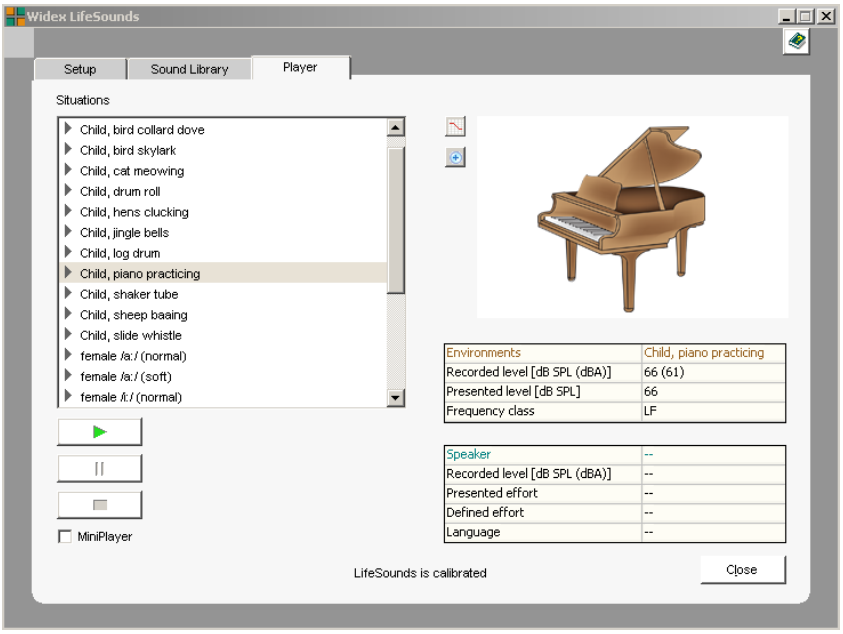


The SoundTracker in the Fine tuning window

Sounds especially suited for small children

In *Lifesounds* you also find sounds especially suited for small children. These sounds consist of instruments and animal sounds at soft and normal levels. The sounds relate to the child's typical world with well known objects, and will hopefully enable the child to feel comfortable.

You can choose the sounds in the *Sound Library* and play them from the *Player* in *LifeSounds*. As something new a picture appears when you play one of the sounds suited for small children. You are able to maximize the picture by clicking the icon  .



The Player in Widex LifeSounds, showing one of the sounds especially suited for small children.