Audiological fitting bulletin no. 74

Changing the feature settings in REAL fittings using Compass V4.6
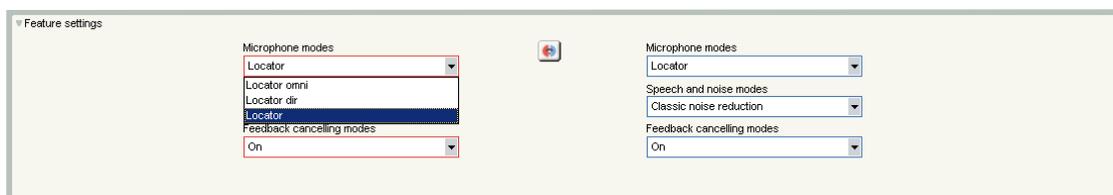
WIDEX®

high definition hearing

This bulletin describes the features you can change and how to do it using Compass V4.6. The descriptions refer to the feature setting options in the Fine Tuning section. The feature setting may be changed for the microphone mode, the speech and noise mode and the feedback cancelling mode. Please refer to Compass 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.

The feature settings may be changed individually for each of the listening programs in REAL. Such changes are easily made in the Feature settings panel in the Fine tuning section in Compass. In this panel you can change the mode in which the microphone works and select the speech and noise mode and feedback cancelling mode in the hearing aid.

The feature settings panel in the Fine tuning window of Compass

Microphone mode

The Microphone mode can be set to one of three settings: The default setting in the Master program is **Locator**. The Locator is a broad-band fully adaptive directional microphone system that exploits information about the listening environment to improve the signal-to-noise ratio. The **Locator** can also be set to **Locator dir** (fixed directional characteristic) and **Locator omni** (fixed omnidirectional characteristic). We recommend that these two modes are primarily used for demonstration purposes.

The microphone mode options

Speech and noise mode

The Speech and noise mode can be set to one of two settings. The default setting in the Master program is **Classic noise reduction**, but it can also be deactivated by choosing **Off**.

Classic noise reduction

In the Classic noise reduction setting, the system operates with optimisation of the signal-to-noise ratio in the three channels. The maximum attenuation that can be achieved in each channel is 14 dB. Different noise levels in different bands trigger the noise reduction system. These levels range from 19-31 dB SPL. The maximum effect of the noise reduction algorithm is reached for noise input levels in each band ranging from 65 to 71 dB SPL. The effect of this setting is that maximum comfort is provided in noisy environments and good speech quality is ensured when speech is present in noise.

Feedback cancelling modes

The REAL feedback cancelling feature integrates knowledge of the acoustic properties of the hearing aid in the ear with directional sensitivity for the Locator. Its mode of operation can be set to one of two settings. The default setting of the Feedback cancelling mode in the Master program is **On**, meaning that the hearing aid gives as much gain as possible without the risk of whistling. You also have the option to turn the feedback cancelling system **off**, in which case an extra adjustment parameter will appear. This parameter allows you to adjust the static max gain limit across frequencies in case of whistling. Deactivating the feedback cancelling feature is only recommended in fittings with considerable headroom in the maximum available gain without feedback. Otherwise recurring acoustic feedback may be a considerable problem for your client.