



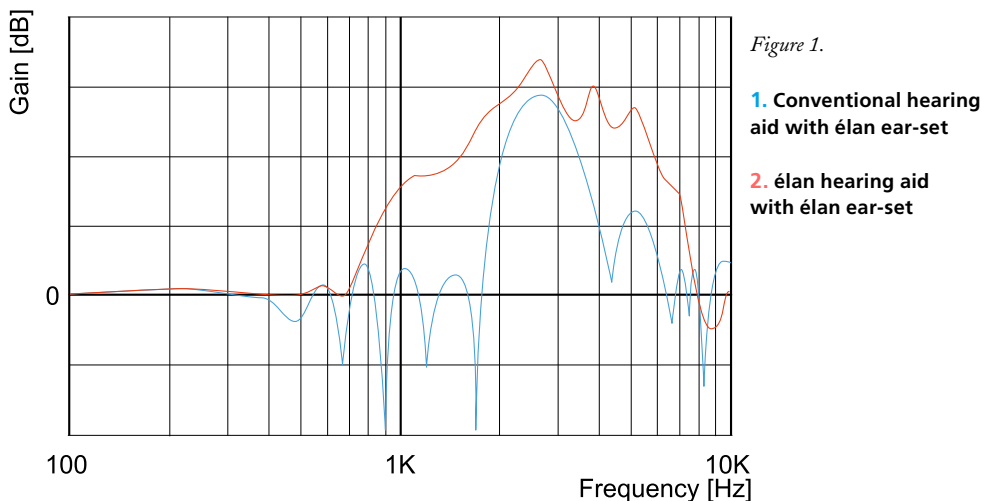
Audiological bulletin No. 7:

Widex' recommendation regarding use of the élan ear-set with conventional hearing aid models

Only Widex élan hearing aid models have Sound Harmony™, the unique sound processing strategy that optimises hearing aid performance for the open fitting with an élan ear-set. Sound Harmony is not available with other models. If the élan ear-set is used with hearing aid models that do not include Sound Harmony, it will result in compromised hearing aid performance.

The beneficial effect of Sound Harmony on hearing aid performance can be illustrated in a measurement in an open coupler with the élan ear-set connected to a conventional hearing aid model and to an élan model (figure 1). Here it can be seen that the performance of a conventional hearing aid without Sound Harmony attached to an élan ear-set is compromised by a number of factors:

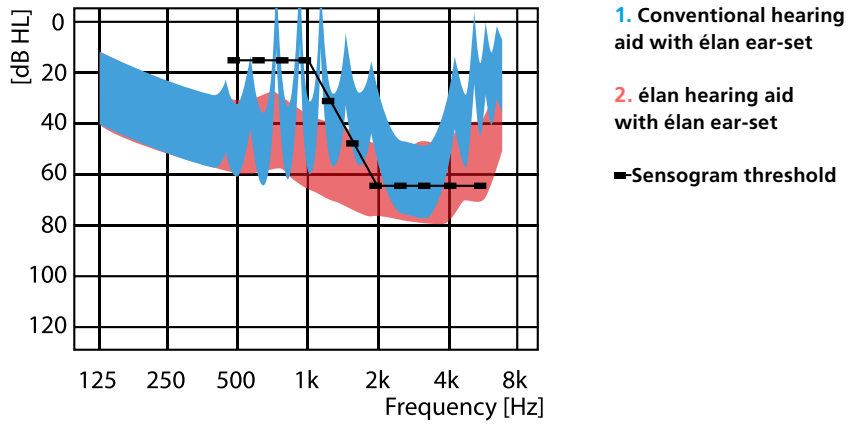
- There is not sufficient amplification to fulfil the gain prescribed by the rationale.
- There is no compensation for the ear canal resonance with the élan ear-set.
- Direct and amplified sound cause dips in the response.



Another way of viewing the effect of Sound Harmony on hearing aid performance is to plot the long-term aided speech spectrum for a normal input level in a way similar to that of a Compass performance graph. In figure 2 the effect of the dips in the frequency response are evident. In some frequency regions the output does not exceed the threshold. This means that some frequency regions of normal speech will be inaudible.



Figure 2.



Therefore, to give your client optimum hearing aid benefit, Widex strongly recommends that only hearing aid models with Sound Harmony be used with the élan ear-set.