



Without ADEL™ - When a device is inserted into the ear, the canal is literally sealed and pneumatic pressure stiffens the column of air in the ear canal – just like if your finger were to seal the tip of a syringe. Now speaker motion moves the column of air which directly moves the eardrum. This excessive motion of the eardrum causes a self-protecting stapedius reflex that dampens eardrum motion and lowers the volume. The more the volume is turned up to compensate, the more the eardrum tightens.

With ADEL™ - a micro component of the ear piece houses a “bio-mimicked” or secondary artificial eardrum that absorbs the pneumatic pressure. Meanwhile, the pure acoustic pressure is still transmitted to the eardrum, which will behave naturally since the pressure is now regulated. And since the ear drum is free to move properly, less volume is needed to actually listen and the sound is presented with an improved dynamic range, because both the speaker and eardrum are working under optimum conditions - much like in an expensive piece of audiophile equipment.

Manually Adjustable – ADEL™ modules come in adjustable or non-adjustable models. Manually Adjustable Modules (MAMs) can be individually set to optimize listening for each of your ears and your environment. By turning the knob, you can adjust the tension of the membrane and to what extent pneumatic pressure is released, while at the same time allowing ambient sound to enter the ear canal.

