



Small Size, Premium Sound – Knowles’ Balanced Armature Advantage

Knowles’ tiny balanced armature drivers occupy less than ½ the volume of the smallest dynamic speakers while providing premium sound

Knowles is the leading manufacturer of balanced armature (BA) drivers. These drivers, originally developed for hearing aids and other critical listening applications, offer improved fidelity, realism and detail over traditional dynamic drivers. They are incredibly small and lightweight, and provide greater output with less power.

Knowles’ BAs are small enough to fit in the ear tip, allowing for more room in hearables for sensors, additional features, or a larger battery, without sacrificing comfort. Their high efficiency means longer battery life in the coming next generation of hearables as they do for hearing aids today.

FEATURES:

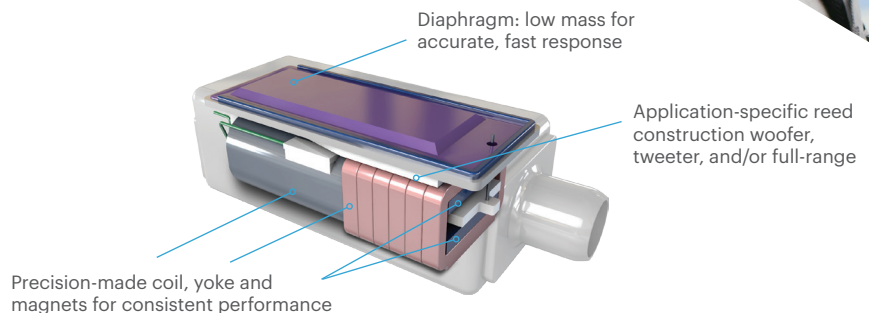
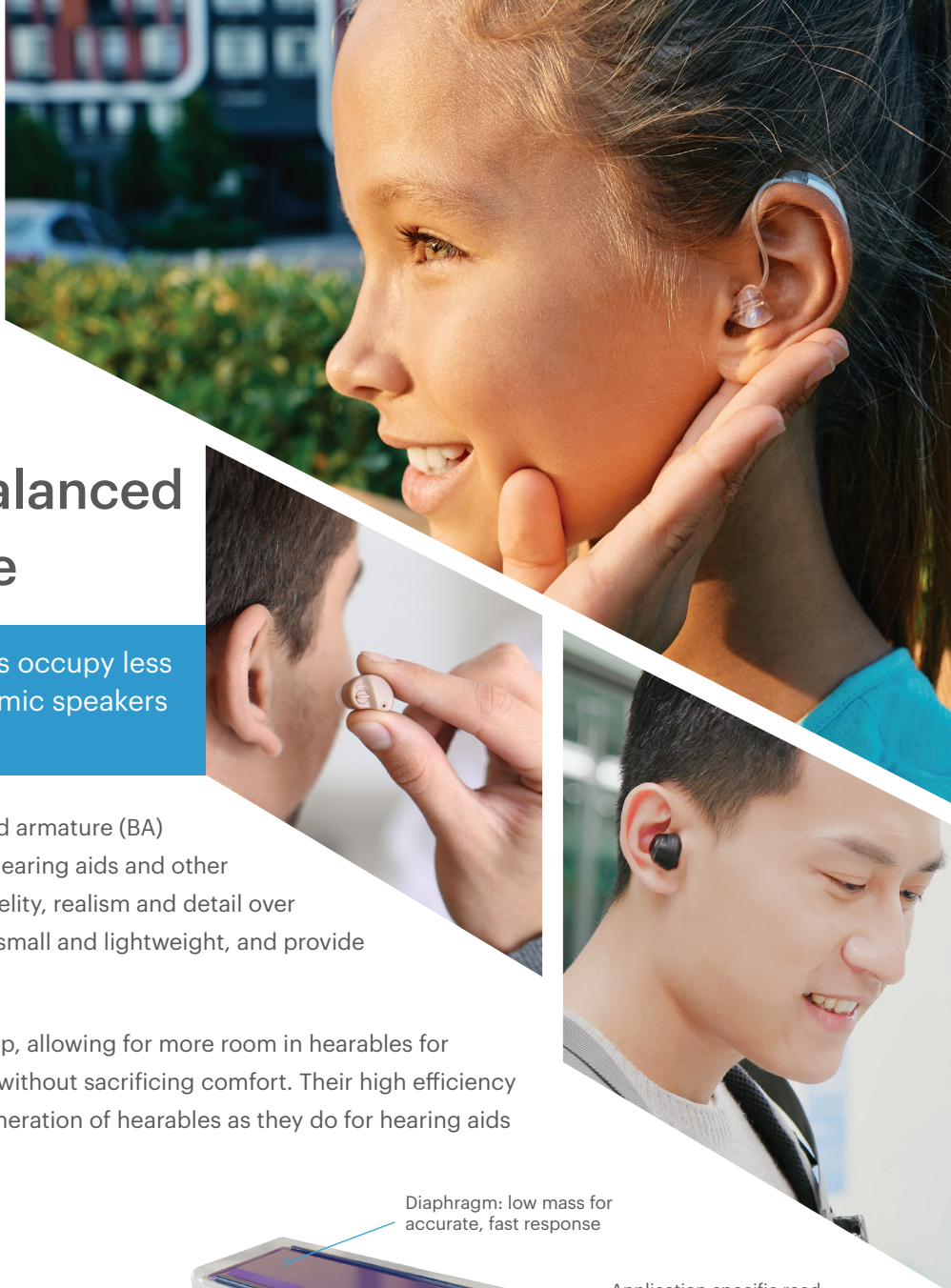
- ▶ Small size
- ▶ Low power consumption
- ▶ Various form factors
- ▶ Better acoustic performance

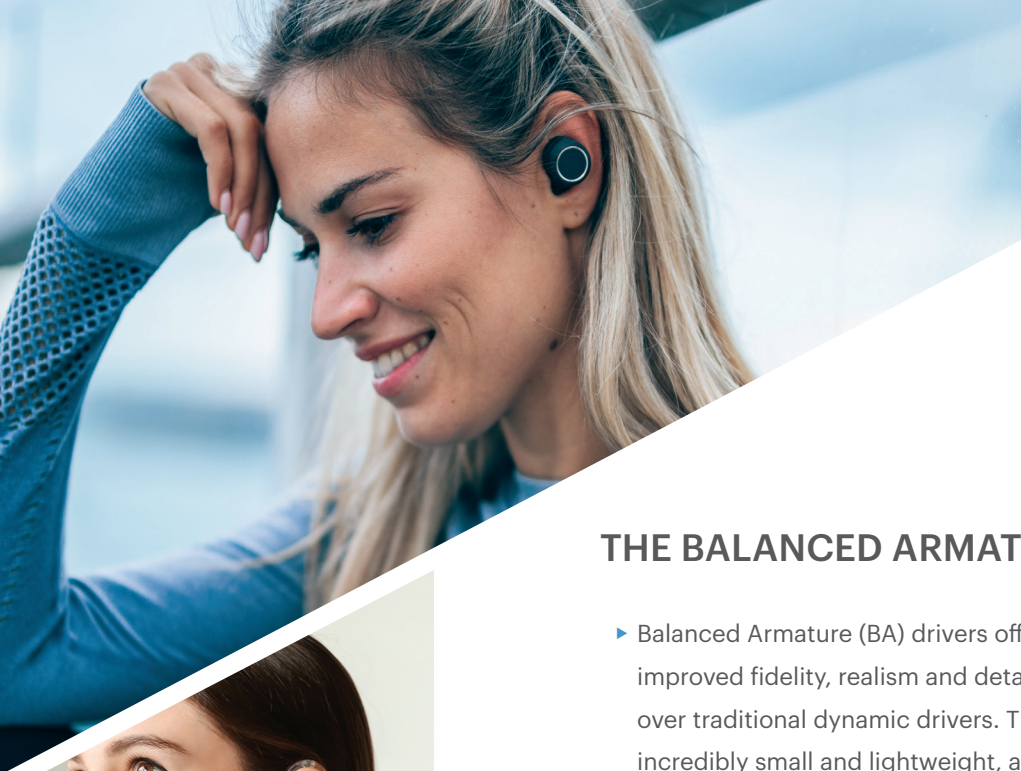


In the **hearing health sector**, Knowles’ BAs support the full spectrum of hearing augmentation for both traditional and OTC hearing devices. Knowles’ BA technology platform uplifts the design and development of receivers for more advanced hearing aid solutions. Precise, custom-crafted performance is facilitated by such proprietary design possibilities as Pantograph™ higher audio output, Ferrofluid™ damping, Wide Bandwidth for high-frequency hearing loss, D-Amp™ internal power management, and Vibration Isolation for superior gain-before-feedback.



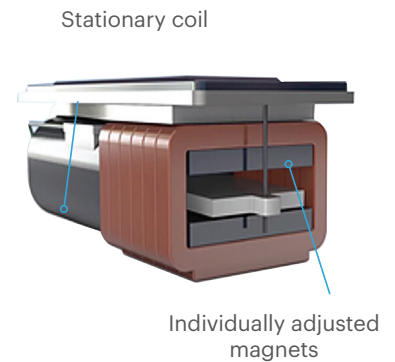
In **wired or wireless earphones**, balanced armature drivers are small enough to replicate the performance of premium loudspeakers by allowing separate woofers, mid-range drivers, and tweeters to be combined in a single package.





THE BALANCED ARMATURE ADVANTAGE

- ▶ Balanced Armature (BA) drivers offer improved fidelity, realism and detail over traditional dynamic drivers. They are incredibly small and lightweight, and provide greater output with less power.
- ▶ A BA driver can also be combined with a dynamic speaker to form a hybrid earphone. In this configuration, the BA drivers focus on the critical high end portion of the audio spectrum, bringing a new level of clarity and realism.



DUAL DIAPHRAGM TECHNOLOGY

- ▶ Patented design includes two separate diaphragms driven by a single motor
- ▶ Each diaphragm has its own chamber, resulting in rich sound
- ▶ Demonstrated to provide significant output improvement while maintaining a small footprint
- ▶ Multiple configuration options



RLI



RLQ

