## CAMERTON

## **BINOM-A**

## Specifications sheet

Binom-A, an updated version of the unique wideband flat diaphragm driver, is a great start to your music immersion with Camerton. The driver is capable of covering the entire auditory range with a very large dispersion angle. Its diaphragm now also features a wood front surface made from a special composite of ultra-light balsa wood and aerospace aluminum-beryllium alloy. Weighing only 3.5 grams, this design has well-matched mechanical parameters to ensure an even transmission of sound energy across its entire surface. Thus, the complete absence of the zone mode of operation is ensured. Instead, the diaphragm acts in pistonic mode at low frequencies and becomes a bending wave device at medium and high frequencies. Thanks to this solution, high frequencies are devoid of sharp directivity. The large diaphragm thickness, combined with the high internal loss of the diaphragm material, provides a super-linear frequency response of the system. The use of an inverted rubber surround prevents distortion caused by the "horn" effect of the latter. The two-layer voice coil is made of copper-plated aluminum. This solution ensures its constant resistance regardless of frequency, while maintaining a minimum mass. The proprietary symmetrical magnetic system is constructed on the basis of neodymium magnets. This solution allows for maximum linearity in the movement of the voice coil, providing it with the same conditions both at the bottom and at the top. The parts of the magnetic circuit are made of low-carbon steel with high electrical resistance. This prevents distortion caused by eddy currents. To achieve an even greater effect, the air gap elements are additionally equipped with specially designed electrolytic copper inserts. The constant value of the magnetic induction in the working gap ensures the linear movement of the voice coil in the range of + -11 mm. The driver basket is made of CNC milled solid piece aluminum alloy with low internal stresses, followed by anodizing in black. The use of this material avoids its deformation after machining, thus ensuring the exact positioning of all driver elements. The driver is mounted using a single screw hole on the back of the magnetic system. Its tightness is ensured by a precision rubber O-ring and is only possible with a perfectly flat mounting surface.



	Technical specifications:		
Frequency response:	35-28000 Hz	Qms	4,63
Efficiency:	87dB/mW	Qes	0.76
Impedance:	80hm	Qts	0.60
Power handling:	35Wnom/50Wmus	Mms	7.7g
Resonance frequency:	48Hz	Rms	0.769 kg/s
THD:	<1%(20-20000Hz)	Vas	4.41
Conductor material:	CCA15	Sd	63.62cm2
Diaphragmmaterial:	Balsa-ALBe composite	В	6.07Tm
Mass:	2.5 kg	ETA	0.11%





