

HOLOGRAPHIC SOUND DEVICES - Air Motion Transformer

AMT 2730 / 2930
185*125*25 mm (l*w*h)

AMT 2530
150*102*20 mm (l*w*h)

AMT 2330 / 2340
AMT 2440
130*102*20 mm
(l*w*h)

With the **HOLOGRAPHIC SOUND DEVICES** we introduce you to the latest product line from our establishment: Sound transducers of the highest quality from our own development and production. Stimulated by and based on the know-how of more than 20 years of successful development and manufacture of audiophile components, we have rethought progressive and successfully applied concepts such as the Air Motion Transformer or magnetostatic transducers and optimised them step by step. Our **Air Motion Transformer (AMT)**

potential. Of course, the finest dynamic nuances are reproduced, as well as the greatest dynamic leaps are brilliantly mastered.

For instance, Qualified Engineer Bernd Timmermanns from the HOBBY HiFi measuring laboratory also reported the following about our AMT 2340: „...with perfect linear sound pressure frequency response and excellent decay behaviour... as a result, this tweeter is one of the most low-distortion tweeters that Hobby HiFi has ever examined in the

	AMT 2330	AMT 2340	AMT 2440	AMT 25xx	AMT 2730	AMT 28xx	AMT 2930
Dimension (mm)	102*130*20			102*150*20	125*185*25		
Purpose	HiFi / Studio						PA
Impedance	3,1 Ohm	3,9 Ohm	4,0 Ohm	folgt	3,0 Ohm	folgt	3,0 Ohm
Frequency range (Hz)	2.200-23.000	2.200-23.000	2.600-30.000	1.700-30.000	1.200-20.000	1.300-25.000	1.200-20.000
Sensitivity (dB) (1watt/1meter)	92	90	90	90	104	104	108
Power handling	100 Watt (cross over 12 dB)		100 Watt	80 Watt	150 Watt	100 Watt	150 Watt
Measurements	page 2	page 2	page 3		page 4		page 5

series consists of seven models: The AMT 2330 with 3.1 ohm impedance shows a correspondingly higher nominal sound pressure than the AMT 2340 with 3.9 ohm; the joint utilisation range for both models is ca. 2.200 Hz up to over 20.000 Hz with minimal distortions.

Based on principle, Air Motion Transformers boast a much greater distortion-free dynamic range than other types of transducers (linear dynamic). The given nonlinearity in the high frequency range was finally able to be virtually completely eliminated with constructive innovations.

The result is an extraordinarily neutral transducer with considerable dynamic

laboratory“ (HH 1/2005, Page 17), and he writes further about the musical qualities: „What makes the ‚debut‘ so special is its ability to allow music to flow. This flow lives from the fine overtones, from gentle nuances that do not languish between the major signals, but stand their ground in an entirely unencumbered and matter-of-fact manner. ...of course, the piano, with its astoundingly perceptible outlines also seems to be so close you can touch it... in particular, live recordings gain enormously“.

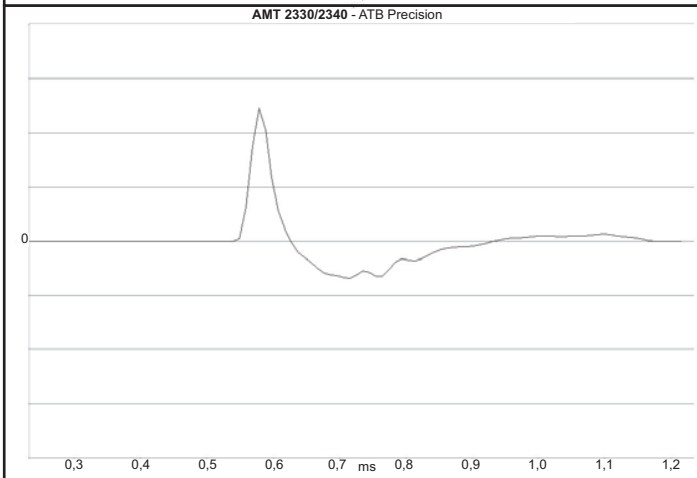
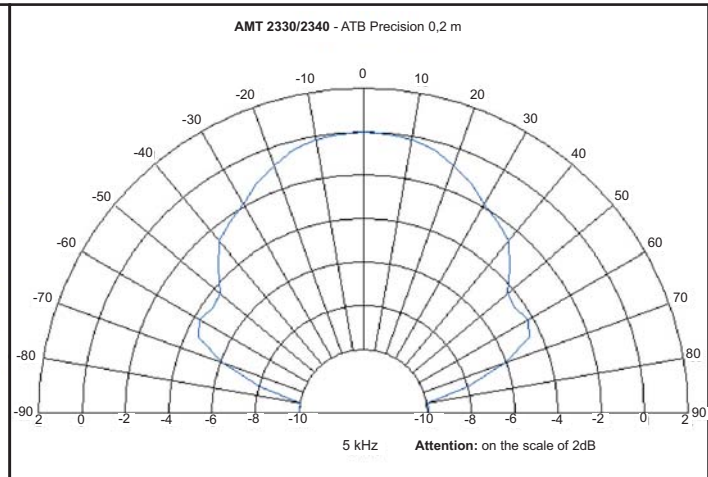
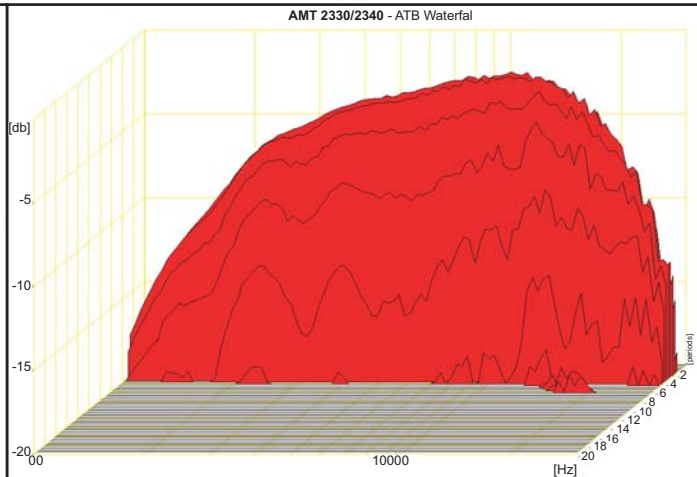
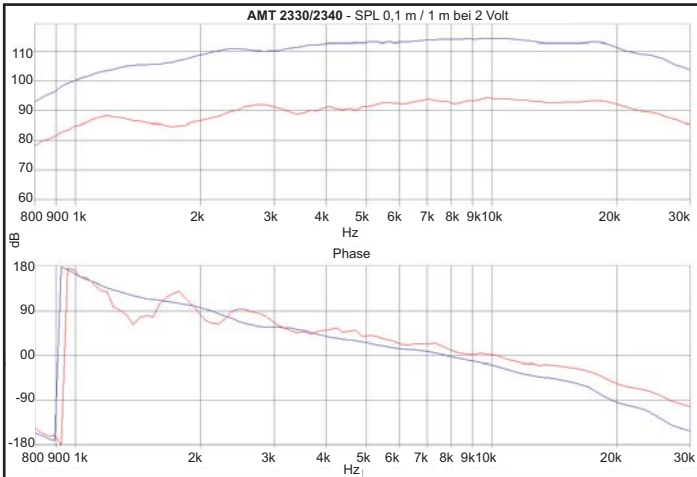


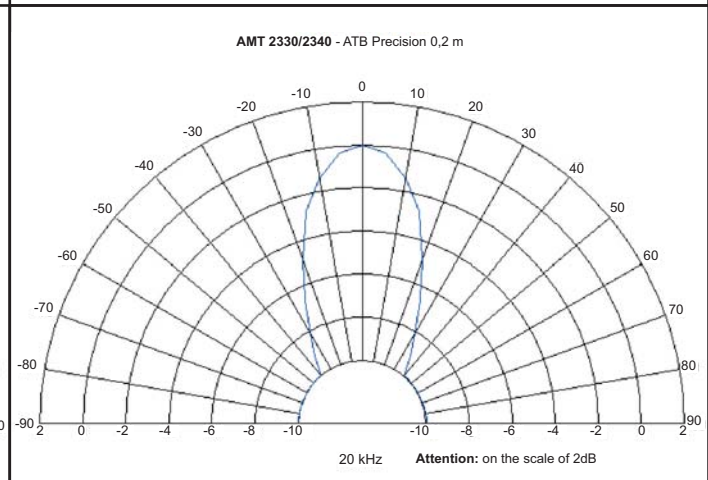
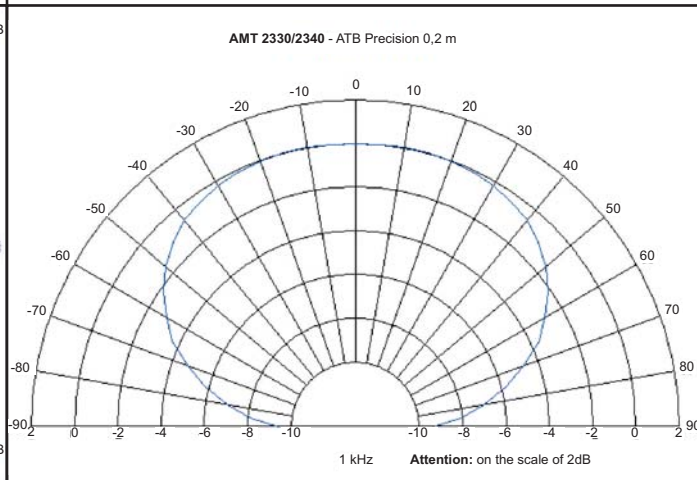
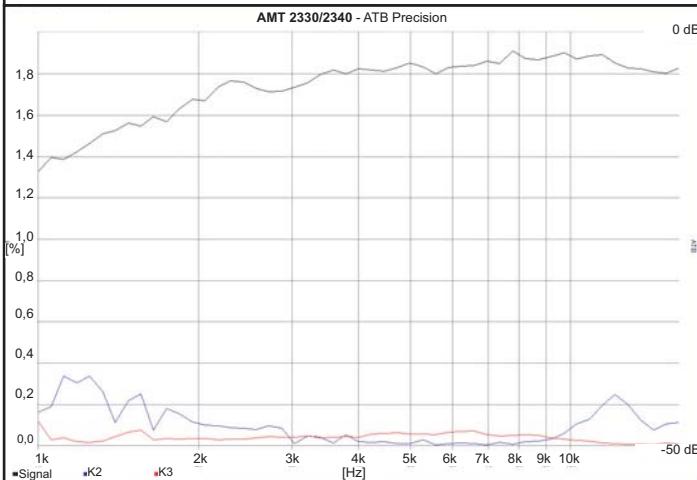
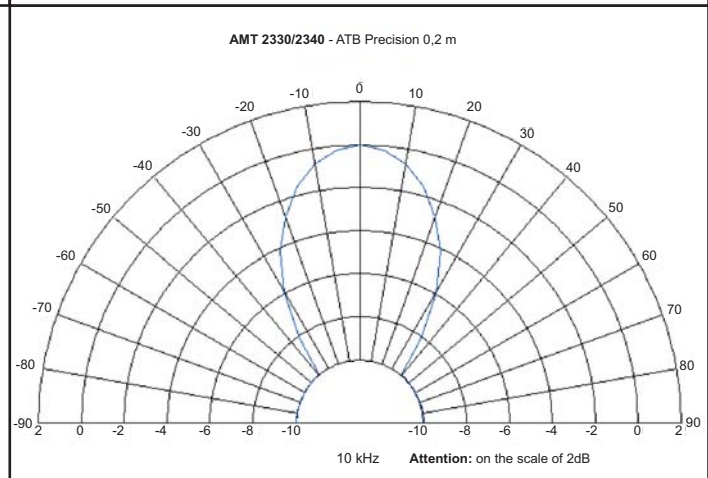
Diagram of: AMT 2340 (3,9 Ohm), AMT 2330 (3,1 Ohm): +2-3dB

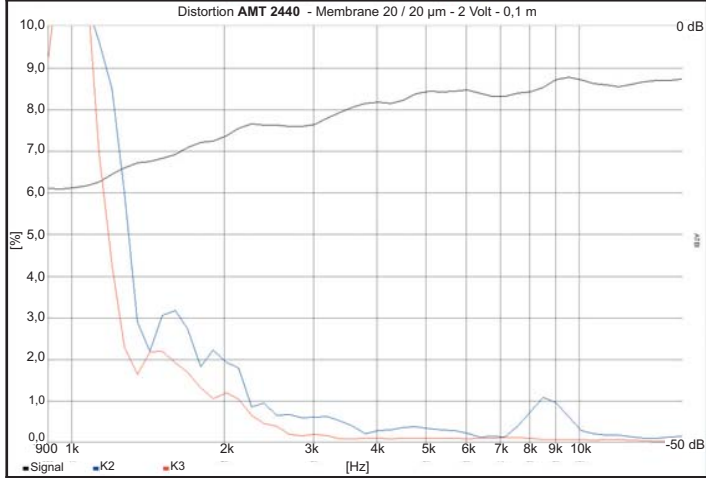
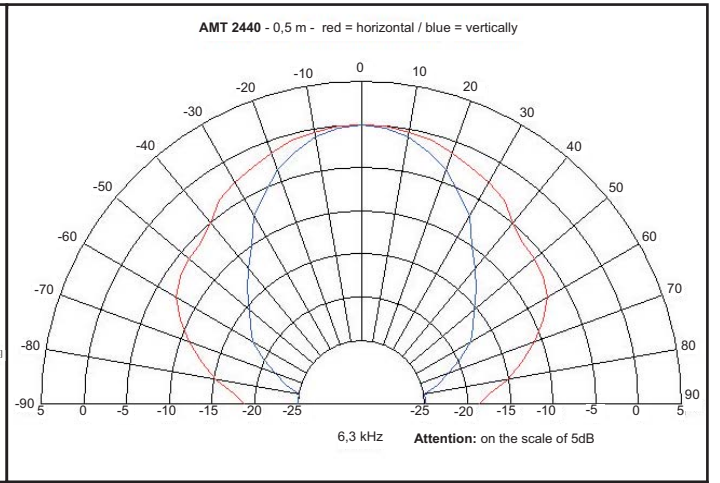
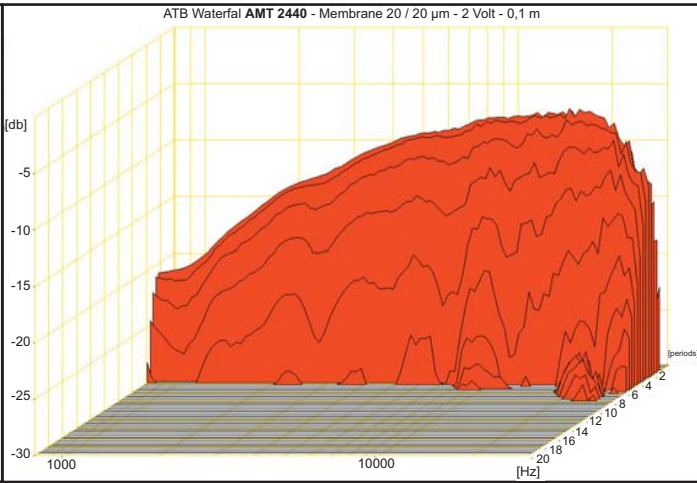
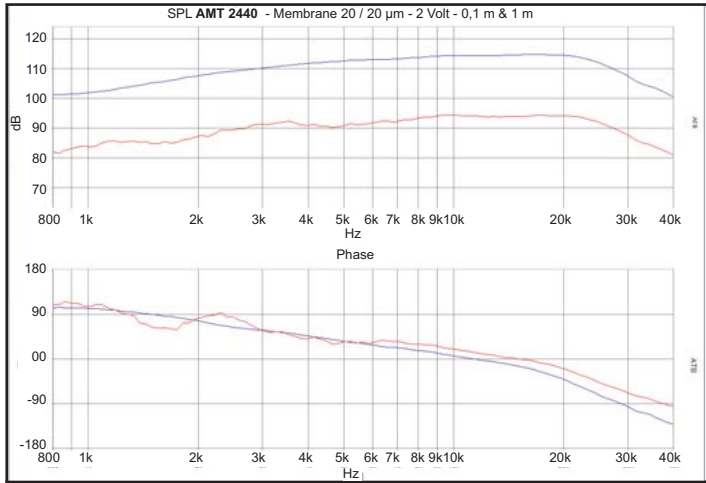
The **AMT2330** and the tested **AMT2340** are of identical construction, except for the impedance. Due to its lower impedance (3.1 Ohm), the **AMT2330** is approximately 2-3 dB louder than the indicated frequency response of the AMT 2340 across the whole frequency range.

The excellent qualitative properties of the tested **AMT2340** also characterise the other models.

measuring equipment	ATB Precision / USB
system	Mikrotech Gefell MK 202
microphone	Mikrotech Gefell MV 203
	Mikrotech Gefell MN 900
rotary table	Outline - ET 2 & ST 2
Amplifier	Linn LK1 Preamp
	Linn LK 280 Amp 2 x 80 Watt / 8 Ohm
	2x160 Watt / 4 Ohm

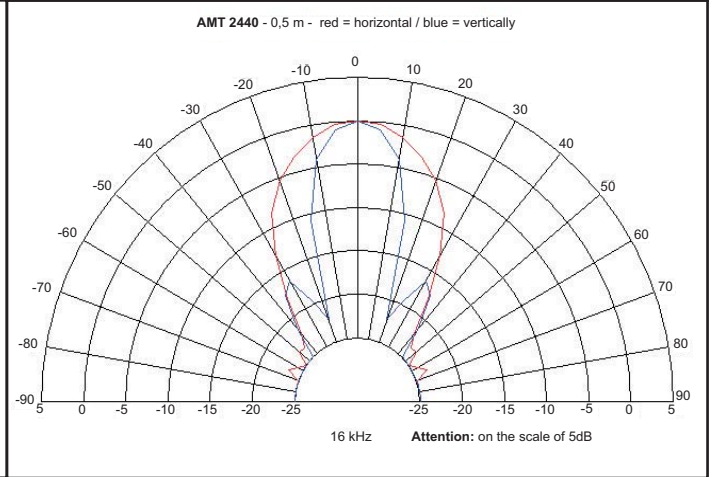
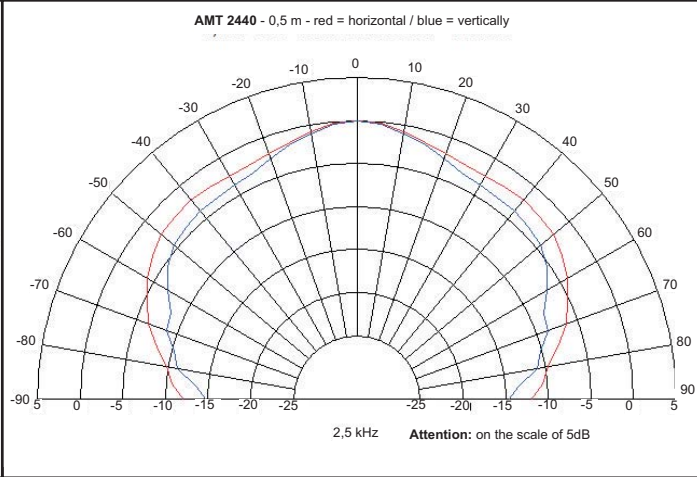
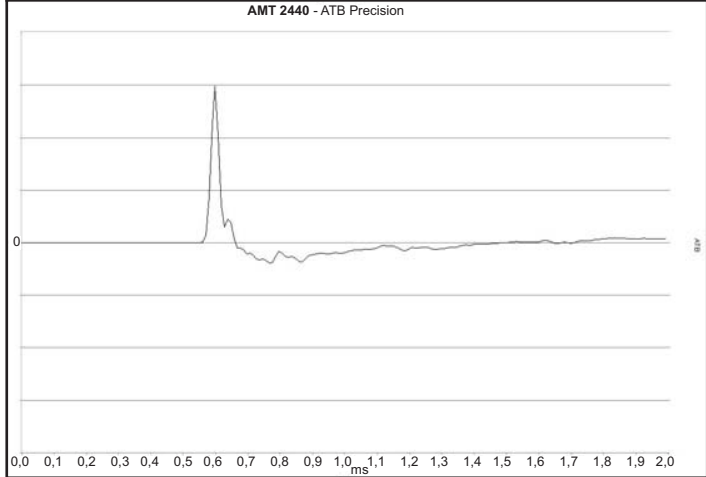
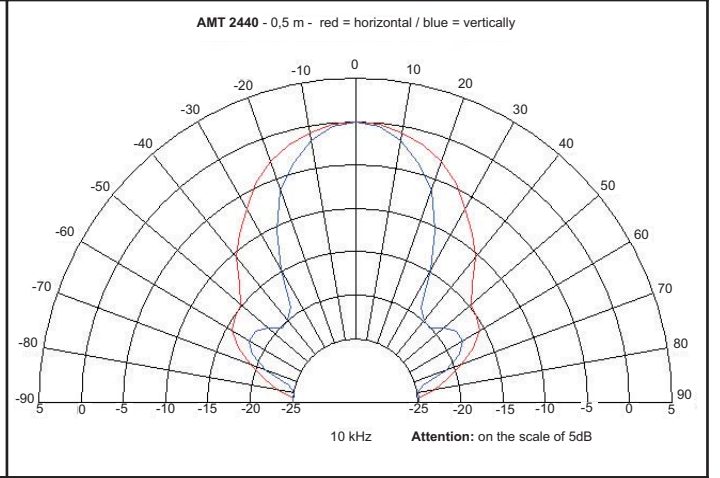
The driver unit was mounted on a baffle 30 x 30 cm with an additional volume. The volume encloses the magnet system and 15 mm of felt (33 mm total depth x 90 mm x 150 mm).





The **AMT 2440** and the **AMT 2340** have identical dimensions, but the **AMT 2440** has a strongly expanded frequency response for higher frequencies. The lower frequency limit is also somewhat higher.

The **AMT25xx**, which is being developed currently, is designed for a frequency response of approx. 1,600-1,800 Hz to 30,000 Hz. The measured values will be available by the end of May.



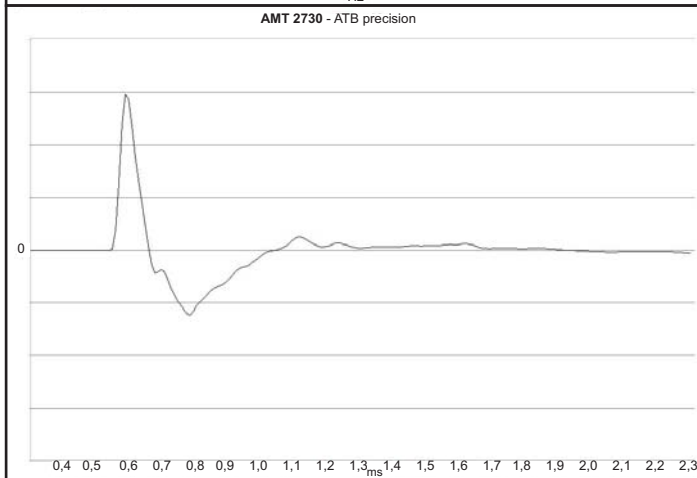
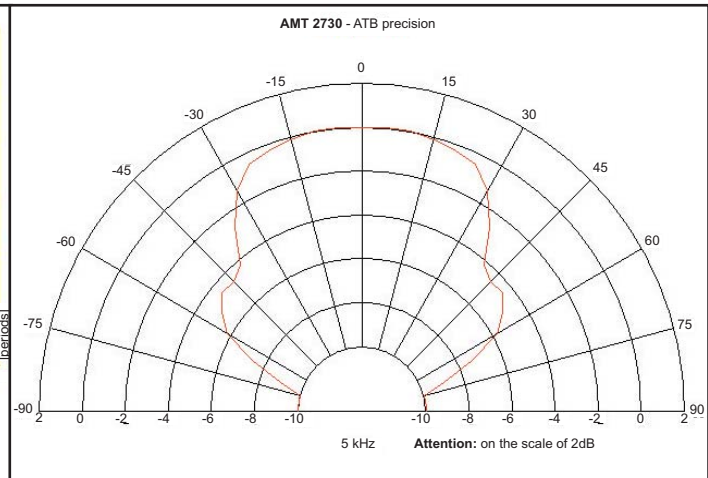
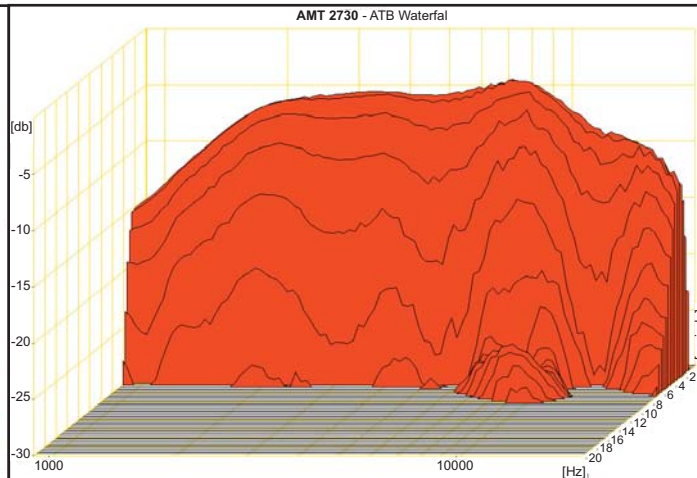
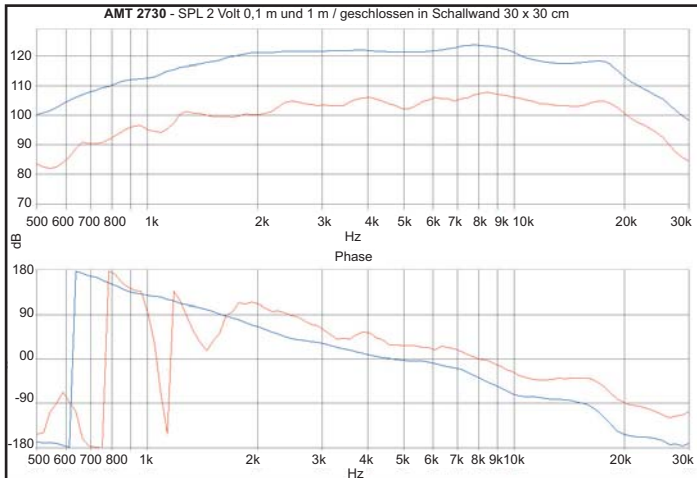
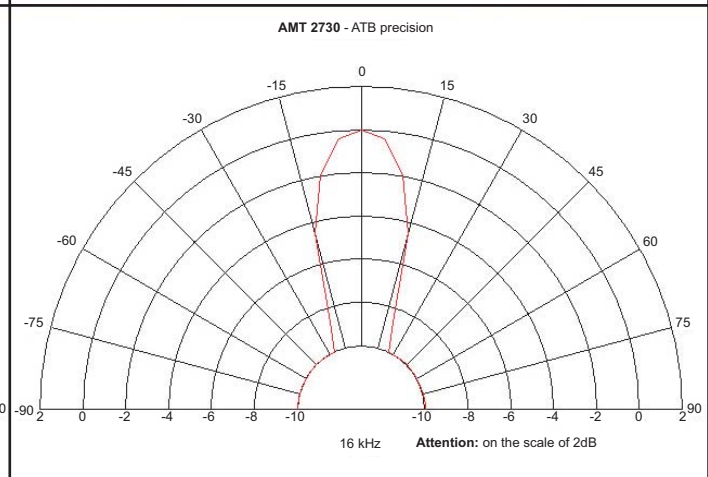
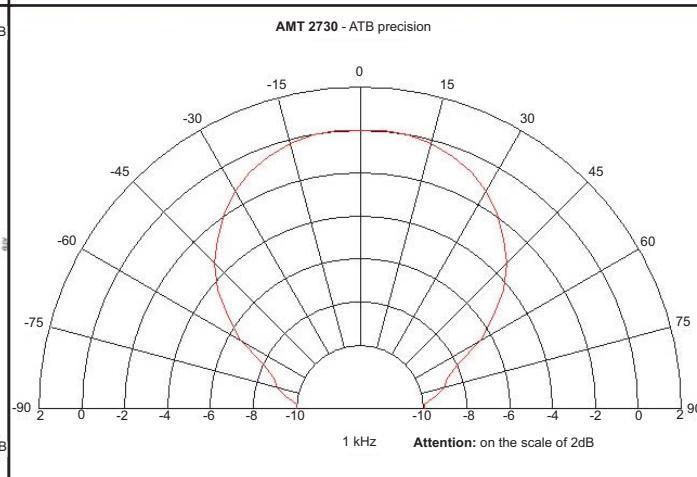
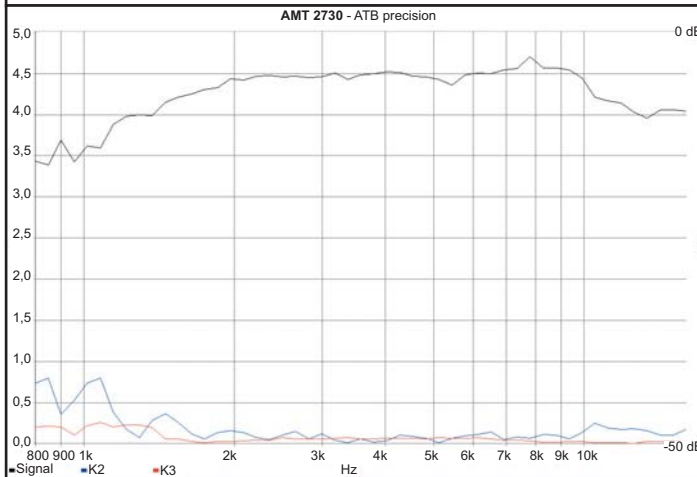
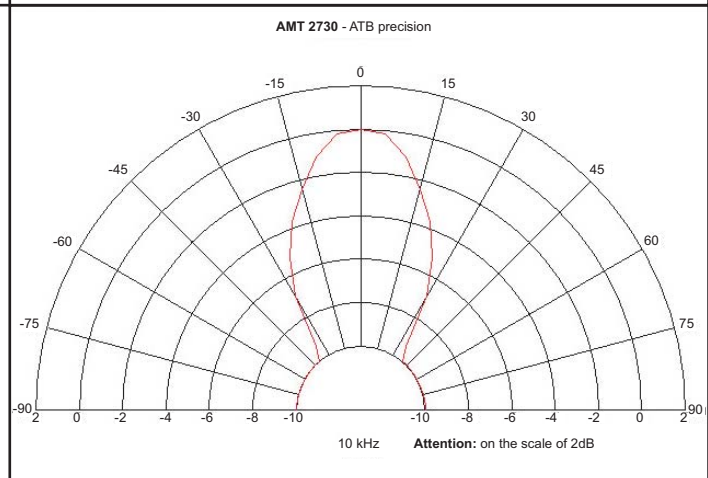
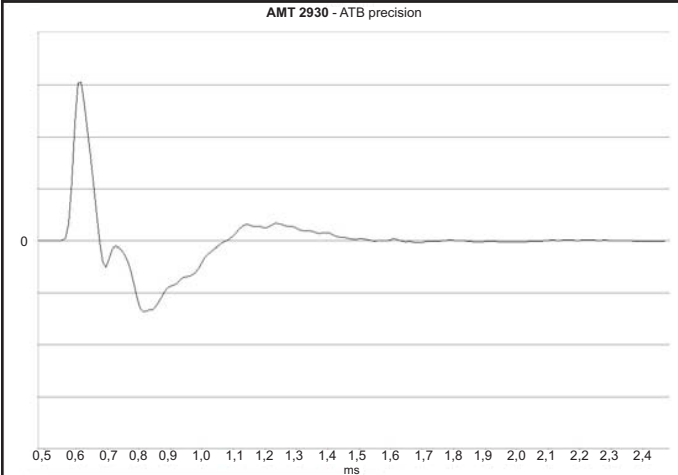
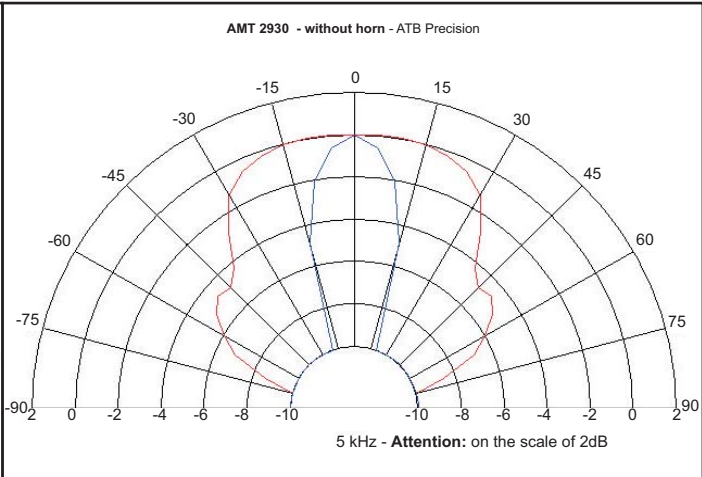
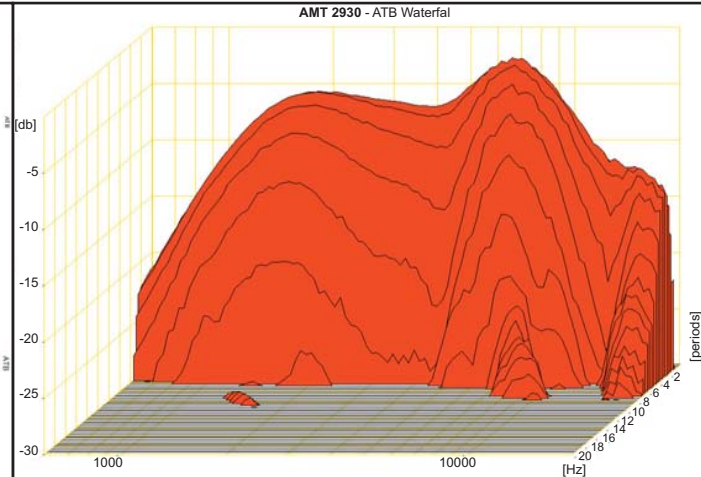
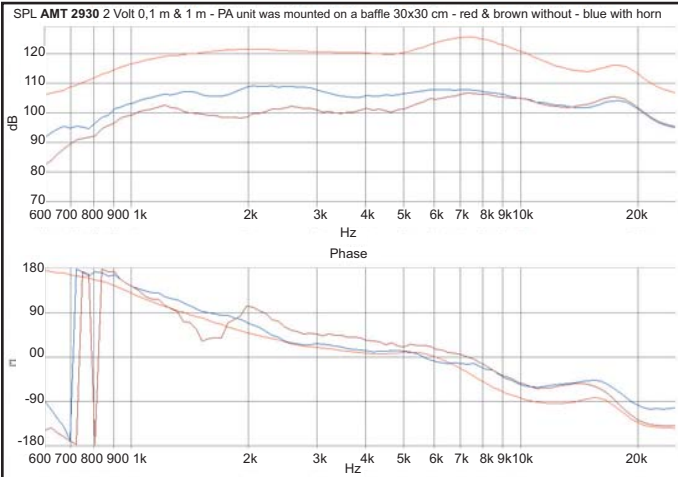


Diagram of: AMT 2730 (3,0 Ohm), +2-3dB

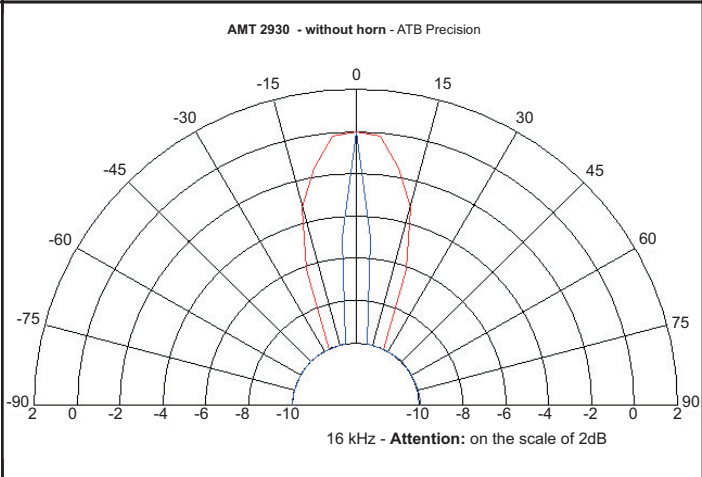
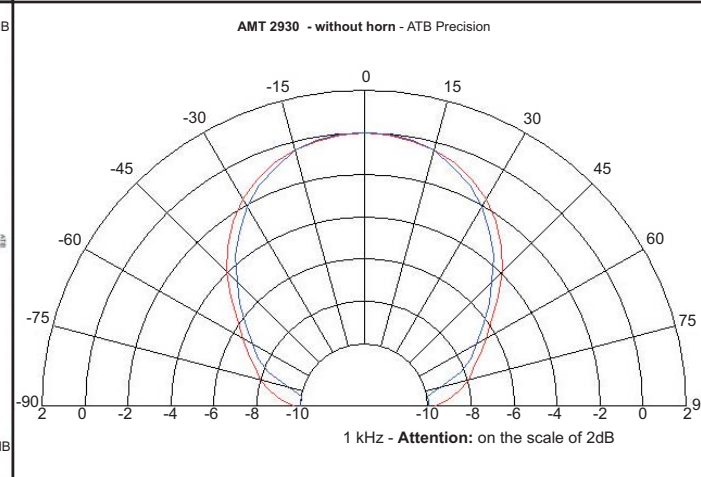
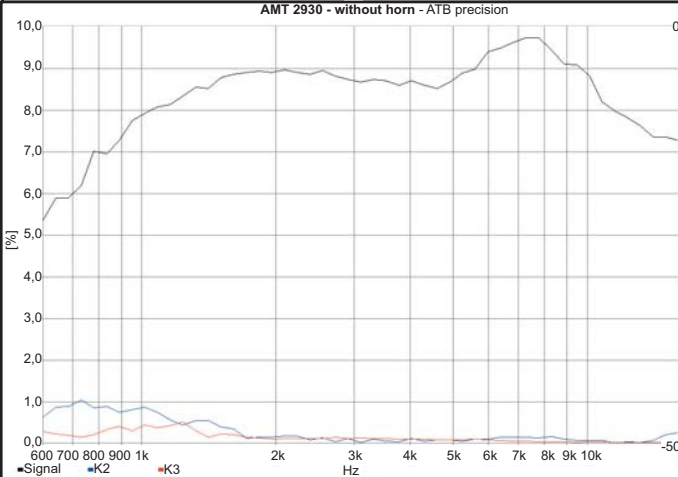
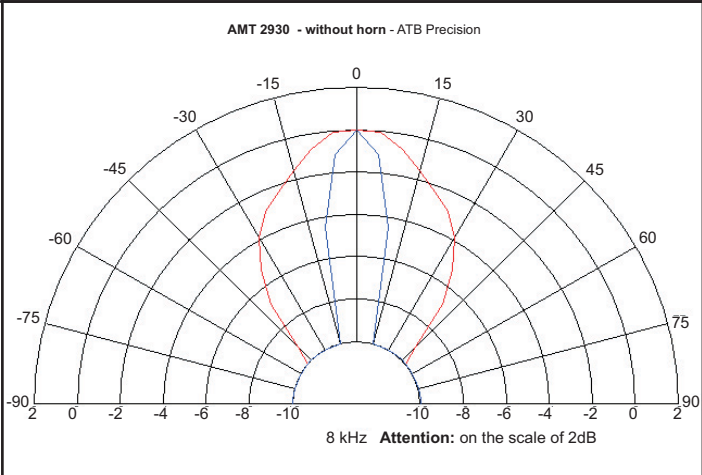
The „large“ AMT is offered as **AMT 2730** for Hifi applications. The frequency range goes from approx. 1,200 Hz to 20.000 Hz. Soon a version with a higher and expanded frequency range of approx. 1,400 Hz to approx. 25.000 Hz will be available as **AMT 28xx**.

Both versions are extremely sensitive (approx. 104 dB with 1 Watt/ 1 meter).





The **AMT 2930** has been optimised for utilisation as a horn accessory, and thus attains a sound pressure of nearly 110 dB/ 2 Volts/1 metre. The distortion values ascertained for that purpose speak for themselves: far below 0.5% K2 and K3 at 17 Volts with 3 Ohm (130 dB with horn accessory)! The diagram above on the left shows the sound pressure of the **AMT 2930** with (blue) and without (brown) horn accessory. The increase in the lower frequency range due to the horn is clearly visible.



HOLOGRAPHIC SOUND DEVICES - Magnetostatic Drivers



Typ	Impedance	Dimension
MagS 0.5	3,2 Ohm	84,5 * 89 mm
MagS 2	3,3 Ohm	106 * 156 mm
MagS 3	4 Ohm	106 * 236 mm
MagS 5	7 Ohm	106 * 378 mm

Our series of magnetostatic transducers comprises a whole model range. A large number of details have been newly constructed and implemented with the use of state-of-the-art materials.

The utilisation of an ultra lightweight and heavy-duty membrane enables a widely extended frequency range, even in the areas of high frequency. In addition, an unprecedented distortion freedom has been put into practice in these transducers.

Generally, our magnetostats are designed

as dipole or for coupling to a volume. Models with a closed back are also available.

The largest version can be used within a range of approx. 800-1,000 Hz to far above 20,000 Hz. The smallest version is designed as a tweeter, with a frequency range of approx. 3,000 – 4,000 Hz to more than 30,000 Hz.

As an example, the measurements of the MagS 2 and the MagS 5 are indicated here.

