**APPLICATIONS**

- 2" (54 mm) midrange driver
- soft dome tweeter
- 500 Hz to 5000 Hz
- HIFI Systems
- PA and commercial use
- facelift for OEM use possible

**FEATURES**

- high power handling
- wide bandwidth
- low THD
- smooth frequency response
- aerodynamically damped
- Hexacon technique
- Magnetics damping/cooling
- vented magnet motor

The construction of the D-52 AF incorporates all the DYNAMO features which have made DYNAMO domes well known worldwide. The resonance is well damped below each critical point so that the unit may be used even in this area without creating sharpness or any kind of phase problems. In respect to the price/feature relation the D-52 AF is quite inexpensive.

The STEPFUNCTION should be much more popular than it is today as it is one of the most important tools for the development of high-quality speakers. Its use in the D-52 AF shown on the screen to the right is clear, also in acceleration and deceleration phase. The aperiodic damping of the unit results in a slope without any peak or bump after ringing.

Tone bursts are the best way to obtain an accurate picture of overall acoustic performance. Regrettably they are mostly used only to test rise-time and ringing - which shows much more clearly with a step function test. With a tone burst, all the moving parts of a speaker can be loaded without burning the voice coil. With a given frequency the SPL should be 30 dB higher at 100 W input when compared with a 1 W input. This test shows the driver's ability to reproduce the transients without compression. The right picture shows that even a 1000 W input is not the limit: the dynamic response is absolutely linear. Data given in catalogues and even test reports are normally calculated figures and not measured values.

This compression effect is either under-rated or ignored very often. That is why many speakers do not produce SPL's above 100 dB, in spite of higher theoretical specifications. However, this test exposes such anomalies between calculations and actual measurements.

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**D-52 AF**

The curve indicates wide dispersion and smooth dropping at both ends which is the correct behaviour of a midrange.

Breakup of diaphragm not measurable. The acoustical phase is as straight as a ruler.

These figures and dates prove that the soft dome is today's ultimate material.

**Compliance**

- Nominal: DIN 2001 W
- Full range: DIN 600 W

**Overall dimensions:**

- Ø 145 x 78 mm

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**Normal suppliers are often unable to fill our quality demands; so we were forced to build our own machinery for production of various important key parts. As we are making all the voice coils in the Hexacon technique we have to make even the aluminum frames at our factory. This is a must to secure the high quality standard.**