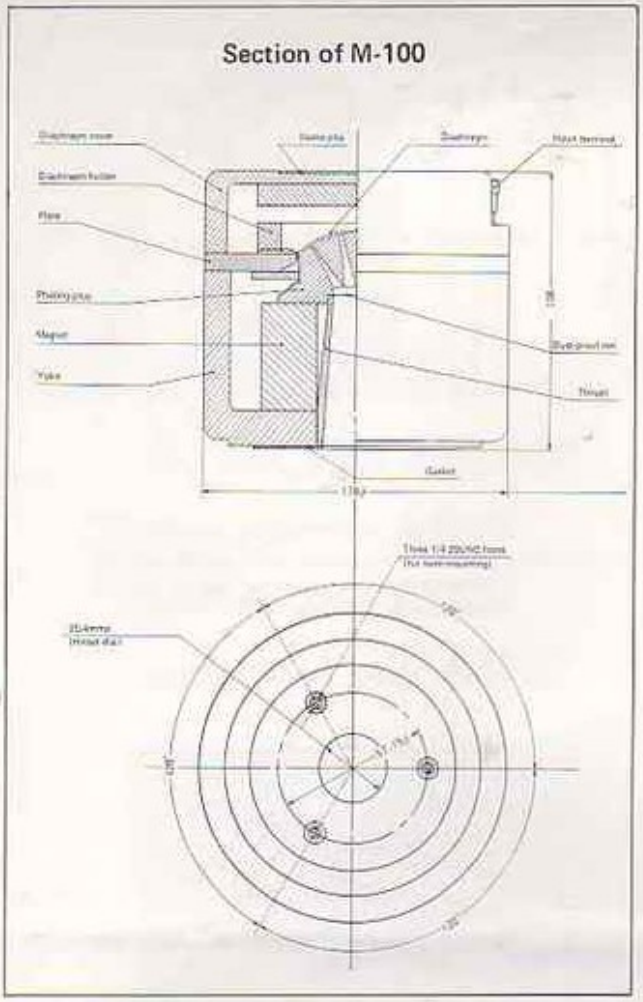
Section of M-100



TWEETER H-100

Tones produced by various musical instruments are composed of an infinite number of harmonics, all of which must be fully and clearly reproduced with high fidelity. The ultra-light vibration system, powerful magnetic circuit, finely finished aluminum horn, and equalizer of the H-100 demonstrate superior transient characteristics, efficiency, and dynamic range, permitting the reproduction of the complete harmonics of the original sounds. It is the top-quality super-tweeter that reproduces the natural tones most pleasing to your ears.

• DIAPHRAGM

The harmonics that comprise the tones of musical instruments are for the most part very complex and have sharp wave forms that extend to the ultra-high sound range. A diaphragm, which reproduces these wave forms as sounds, must have high rigidity and be light in weight. The H-100 diaphragm uses extremely thin super Duralmin (weighing only 15 microns) that is completely hardened in a high precision hot-blast stove—thereby achieving the ideal stabilized physical properties of light weight and hardness—and enabling the diaphragm to possess the complete follow-up capability necessary for complex wave forms.

• VOICE COIL

Aluminum ribbon wire is wound edgewise in order to utilize the magnetic flux of the air gap to maximum effectiveness. The use of high-conductivity aluminum alloy as the raw material for the voice coil produces a powerful driving and braking force, excellent transient characteristics and high conversion efficiency (110dB).

• HORN & EQUALIZER

The horn and equalizer, which must radiate sound waves with efficiency, are as important as the diaphragm in affecting the performance of the tweeter. They are precisely machined in accordance with values that have been accurately calculated. The throat, which has been choked to the limit possible, and the clearance from the diaphragm, which has been finely adjusted to near zero, provide ample air load for the vibration system, and the complete resistance control permits outstanding transient characteristics.

• MAGNETIC CIRCUIT

The powerful NKS-5DG casting magnet is employed in the magnetic circuit. The magnetic circuit, which has an internal magnetic field, uses highly permeable pure iron for the pole piece and yoke plate of the magnetic path, and is provided with an extremely high magnetic flux density of 19,500 gauss since there is less magnetic flux leakage. This powerful magnetic field provides an ample drive force and strong magnetic braking for the vibration system. The capacity of the vibration system is thereby fully realized, permitting the reproduction of high-quality sounds with excellent resolution ability.

• H-100 SPECIFICATIONS

Frequency response	7,000Hz~30,000Hz
Impedance	8Ω
Maximum input (music)	30W
Magnetic flux density	19,500 gauss
Voice coil diameter	18mm
Dimensions (Dia. × Depth)	98mmφ×115mm
Weight	3.8kg
Sound pressure	110dB

Frequency response diagram of the H-100