

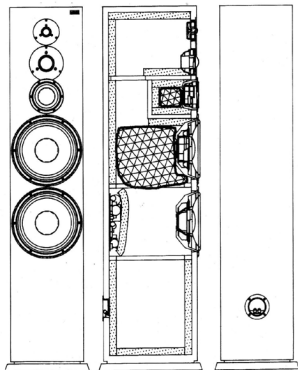
The Cabinet- The Woofers

► The FINALE uses a new and special version of the 30 W-100 as the woofer. The parameters have been adapted for the cabinet of the FINALE in combination with a specially designed passive radiator. The passive radiator resonance has been set to a low frequency range, so that the woofer is employed only in the very low bass range. This prevents the precision of the upper bass reproduction from being at risk. In this way, the physical advantage of a large loudspeaker is used profitably without restriction.

All crucial parts of the cabinet have been reinforced to reduce cabinet resonances as drastically as possible, and to shift any remaining resonances to frequencies which have no influence on the sound.

The arrangement of the drivers has been examined thoroughly to achieve a perfect frequency and phase response. The acoustically effective sound sources are all located within a range of 50 cm on the speaker baffle. The woofer has been installed in such a way that the distance between the floor and the woofer is as large as possible to prevent annoying reflections which would result in a muddy bass sound.

All voice coils in the FINALE drivers - a Dynaudio feature - have been made of aluminium wire. Compared to copper coils, this allows for a reduction in weight of more than 65%, and is the basis for the fast response of Dynaudio systems.



The Midrange

► The midrange utilizes the 15 W-75 and the D-52 AF. The lower midrange is reproduced by the relatively large diaphragm surface of the 15 W-75 - and driven by a 75-mm voice coil. The unique design principle of this driver allows for a wide dynamic range and an airiness in reproduction which can master even the most complex musical passages with ease.

The upper midrange is covered by the D-52 AF. This concept offers the advantage that all drivers are allowed to work in their optimum ranges of transmission. None of the system is squeezed into limited frequency ranges by radical filter circuits. The dome midrange harmonically fills the gap between the 15 W-75 and the tweeter.

Due to the consistent dimensioning of the driver parameters, both midrange drivers can be operated with 6 dB slopes. The overall phase response is of such linearity that it is impossible to discern that there are two drivers operating in this range - a quality crucial to the overall tonal balance of the system.