

# Hi-Vi Research

## F8 Bass-Midrange



### Overview

- Using leading technology of Small/Thiele parameters
- Light and extremely rigid cone made from Kevlar? Paper composite
- Germany special manufactured anti-tired high loss natural rubber surround: fully absorb unnecessary vibration energy!
- Britain produced high-transparent and high-steady spider-can improve the characteristic of compliance air compressing.
- Full sealed double magnet high performance antimagnetic system: dynamical linear drive resource.
- Hi-Vi Symmetric Motor Drive (SMD) technology makes the voice coil into a symmetrical driving magnetic field, thus acquiring symmetrical driving force, reducing the mutual modulation of voice coil inductance and back electromotive force, improving the controllability of the speakers, achieving low distortion degree
- Finite Element Analysis for high density aluminum frame, prevents the parasitic structural resonances
- High power handling, heat-resistant Kapton?voice coil former: the guarantee of high quality bass.
- Sound Features: natural, accurate, high analysis, energetic.
- Suitable for bass unit of two-way vented loudspeaker system, and also suitable for mid-range unit of 3-way loudspeaker system

An accurate and uncompressed sound performance at realistic loudness levels represents the ideology implemented in this driver. The design of the F8 has been optimized for balanced and dynamic low bass reproduction in compact or medium vented systems. Midrange clarity and tonal balance is remarkable. The F8 utilizes a newly developed matrix of Kevlar and paper fibers. As a result the cone weighs less, is more rigid, and has an improved dampening factor over conventional Kevlar materials. The back of the cone is hand-coated with a special dampening compound to further maximize performance stability and control of structural resonances.

The driver utilizes a vented Kapton voice coil former and air transparent spider to avoid air compression and ensure maximum power handling. The massive aluminum die-cast basket has been developed to minimize parasitic structural resonances. A shielded magnet structure allows the F8 to be easily incorporated into audio/video applications. Recommended crossover frequency for two-way system design is 1.8-2.2 kHz.

## Specifications

General Data	
Nominal Power Handling (Pnom)(W)	60
Max Power Handling (Pmax)(W)	120
Sensitivity (2.83v/1m)(dB)	88
Weight (M)(Kg)	2.9
Electrical Data	
Nominal Impedance (Z)( $\Omega$ )	8
DC (Re)( $\Omega$ )	6.5
Voice Coil and Magnet Parameters	
VC Diameter (mm)	35
VC Length (H)(mm)	17.5
VC Former	SV
VC Frame	Kapton
Magnet System	Shielded
Magnet Former	Ferrite
Force Factor (BL)(N/A)	10.3
Gap Height (He)(mm)	7.5
Linear Excursion (Xmax)(mm)	5
T-S Parameters	
Suspension Compliance (Cms)(uM/N)	593.7
Mechanical Q (Qms)	4.71
Electrical Q (Qes)	0.44
Total Q (Qts)	0.4
Moving Mass (Mms)(g)	30.5
Effective Piston Area (Sd)(m <sup>2</sup> )	0.0214
Equivalent Air Volume (Vas)(L)	38.8
Resonance Frequency (Fs)(Hz)	37

## Pictures of F8

