

## Architecture Notes: HDS Platform - NEW

### An Introduction to the new Peerless HDS Product Lines

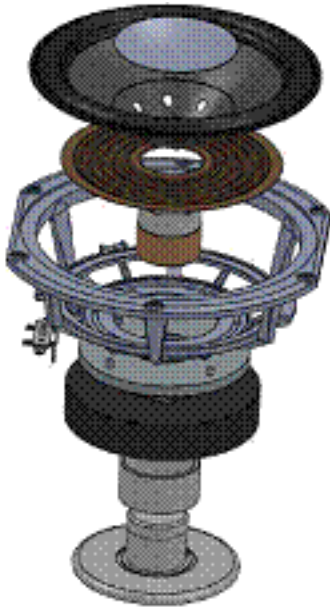
The new Peerless HDS product lines continue the proud Peerless High Definition Sound (HDS) tradition of high performance transducer technology offering exceptional value-for-performance for woofers and midrange drivers. Powerful, low-distortion ferrite magnet systems are coupled to finite element analysis designed suspension systems. The new HDS lines offer two choices of cone material each offering unique sonic characteristics: aluminium, and glass-fibre composite.

#### ***The Peerless HDS vision***

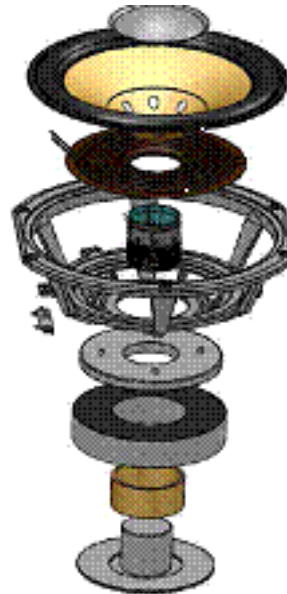
- Extended frequency response
- Linear suspension systems
- Low air compression
- High heat dissipation
- Low distortion motor design
- Finite element analysis optimized motors
- Designed for high excursion performance and reliability

#### **Product line summary – Woofers and Midrange Drivers**





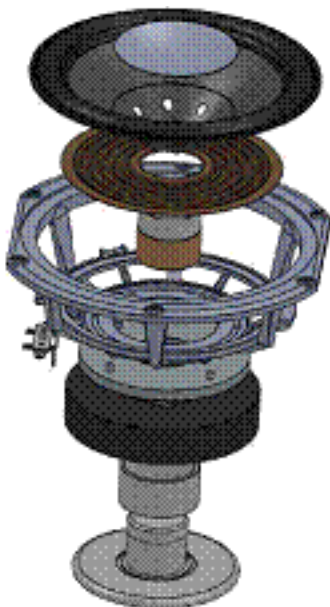
HDS driver with glass-fibre cone



HDS driver with aluminium cone

## Transducer Structure

- Inverted glass-fibre or standard aluminium dust cap.
- Glass-fibre or standard aluminium cone, with butyl rubber surround.
- Linear suspension design spider in low loss, low resonance composite fabric.
- Voice coil with rigid aluminium bobbin.
- Cast aluminium basket.
- Motor with ferrite magnet, low-carbon grade steel top plate and t-yoke, and aluminium shorting ring.
- Standard mating terminal.



## Design Features

- Powerful ferrite magnet motor systems deliver intense amounts of magnetic flux to the voice coil, while offering heat sinking capacity.
- Long-throw voice coils offer linear performance during high excursion conditions.
- Aluminium shorting rings linearize and reduce coil inductance, reducing distortion.
- Spider is designed by finite element analysis for linear performance under high excursion conditions.
- Cone neck is vented, reducing air compression under the dust cap while increasing air circulation and cooling.
- Butyl rubber surround offers robust, reliable braking of coil and cone motion.
- Rigid aluminium basket is vented under the spider, so as to decrease air compression and increase air circulation.
- Basket acts as a heat sink for the motor.
- Basket design is optimized for narrow cabinet designs, with non-round shape and recessed screw mounting points.

<b>Model</b>	<b>Size</b>	<b>Cone material</b>
P830992	4"	Glass-fibre
P830991	5.25"	Glass-fibre
P830990	6.5"	Glass-fibre
P835023	4"	Aluminium
P835024	5.25"	Aluminium
P835025	6.5"	Aluminium
P835026	8	Aluminium