



# E100HD

*Esoteric Audio Devices Sweden AB*



**With the capacity to embrace a range of nine octaves in a system, the E100HD offers among the widest bandwidth of any single drive unit on the market. This not only provides a seamless, crossover free sound, but allows for a wide range of applications and simplifies high quality designs as well.**

The E100HD can be successfully used with all types of enclosures including closed or vented boxes, transmission lines and horn loaded designs. It is very suitable for high quality, home cinema, hifi and custom installations.

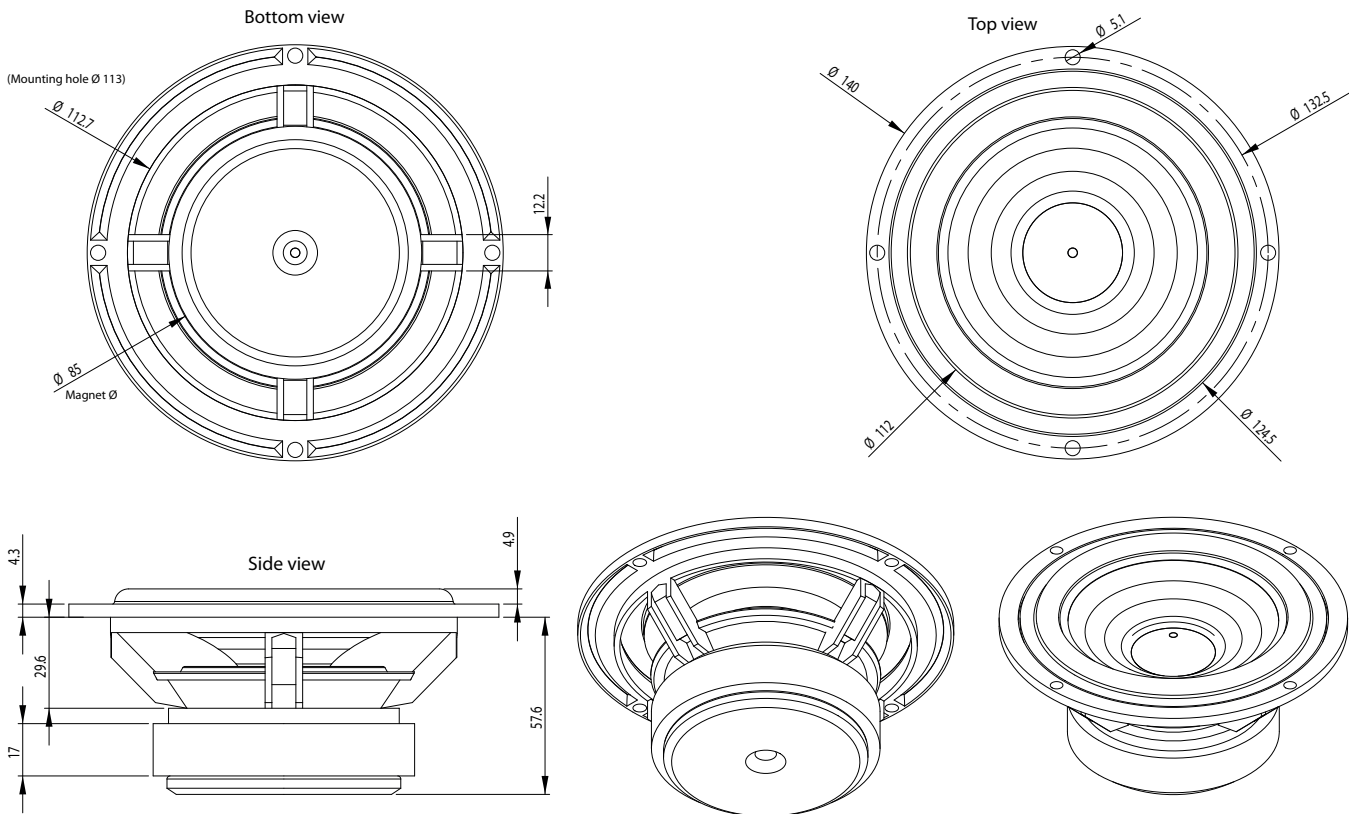
The rise above 4KHz can advantageously be compensated by using a toe in and off axis listening, which widens the horizontal soundstage as well.

As a full range unit, the E100HD is also very suitable for 2 or 3 way systems, e.g. crossing over to a ribbon unit, where the wide band performance simplifies a 1st order cross over and the aluminium cone blends in seamlessly with the ribbon unit.

The main difference between the E100 and E100HD is the tailored, Cu plated T-yoke, carefully handmade in a selected facility, to meet our specifications. This extends and improves the high frequency response to 25KHz, lowers high frequency impedance, Eddy currents as well as distortion.

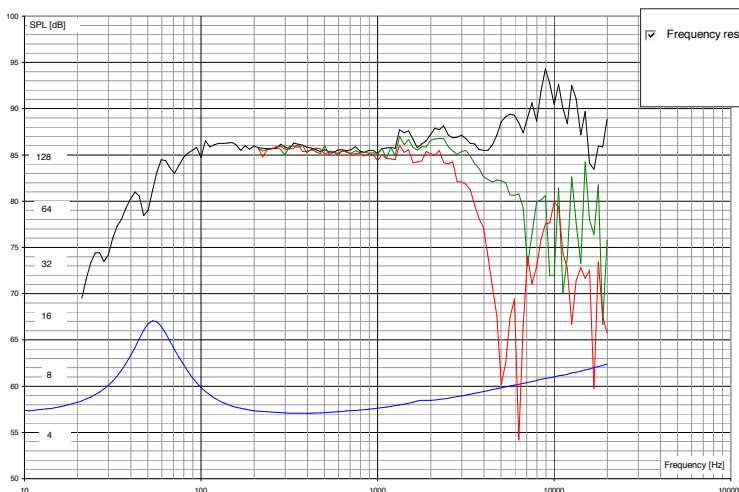
Optionally the unit can be magnetically screened, enabling it to be used in close proximity to equipment sensitive to magnetic radiation. (The shield is a separate item which can be added at any time.)

## Technical specifications



Note, since we now use a new factory and measuring conditions, the measures are updated. We also recommend pairing drivers from the same factory. Please see our web site for replacement and upgrade policies. Measuring conditions: Factory new driver, not "broken in". Half space free-field (2 pi) above 100 Hz. Anechoic room 6x7x8 meters. IEC specs. refer to IEC 60268-5 third edition. All EAD products are RoHS compliant. Sensitivity/2.83V/1m/ 300-1000Hz.

Note, parameters and curves are subject to changes and will change when the driver is played for some time too (e.g.  $F_s$  and  $Q_t$  will drop some 5%):



### Technical specifications

Free air resonance $F_s$	Hz	52.0
Mechanical Q	$Q_m$	1.97
Electrical Q	$Q_e$	0.77
Total Q	$Q_t$	0.55
Force factor	$B_1$	3,8
Resistance DC	Re ohms	5.36
Dynamic mass	Md grams	6.3
Equiv air volume	Vas litre	12.8
Cone area	Sd sq. cms	79
SPL (0.3-1KHz), 2.83V	1m 1w	85,6
Min box volume (lB)	litres	3.0
Ch	$\mu F$	440.2
Le	mH	0,15
Lh	mH	21.3
Rh	Ohm	13,7
Power handling 100h	watts RMS	TBA
Power handling Long term	watts RMS	75
$X_{max}$ (WW-TP)/2	m.m.	+/- 3.4
$X_{max}$ lin (WW-TP)/2+(25% $\times$ TP)	m.m.	+/- 4.6
X mech	m.m.	+/- 8.8
Freq. range, free air	Hz	50-25K