

epos



encore 50

There is no substitute for the pure musical involvement and enjoyment to be experienced when listening to the new Epos Encore 50. This unique Epos Flagship loudspeaker has been 3 years in the making but, there is no doubt the time taken to develop this exceptional loudspeaker has been well worth the wait.

Each and every part of the Epos Encore 50 has been developed by Epos engineers to a standard not previously achieved by the company. From the original design concept through to the cabinet construction, speaker drive units, crossover and final voicing, the Encore 50 stands superior in every way.

It is tall and imposing yet exhibits elegance synonymous with Epos. Standing 1.2 metres high, it is deeper rather than wide and is supplied with a strong stylish painted MDF plinth to support its 50kg weight and spread its footprint for improved stability and mechanical decoupling. Fully adjustable turned aluminium and steel spiked feet can raise or lower the speaker to adjust or tilt the level. The cabinet itself is made from a composite of birch-plywood and MDF which has been extensively strengthened internally using plywood bracing within the mid-range and bass enclosures.

To ensure the lowest colouration, the cabinet and bracing have been optimised, following accelerometer measurements and listening tests. Hand selected and book-matched real wood veneer has been chosen give the most luxurious finish on an Epos speaker so far.

Separate Bass, Mid-range and Crossover sections of the cabinet are hermetically sealed and allow the Crossover to be located in a convenient section at the bottom of the cabinet, accessed via the large, ventilated terminal panel on the bottom rear with a letter box opening in the plinth. All drive units are separately wired to the crossover section, using custom Epos solid core wire.

The bass enclosure has a volume of 43 litres. Two 220mm woofers are bass-reflex loaded by one large diameter 90mm port, positioned mid-way between the woofers and flared at both ends to minimise port turbulence and harmonic distortion. The height and spacing of the woofers has been chosen to minimise the 'floor-bounce' cancellation, optimise bass output and ensure a smooth bass-mid range transition in room. The mid-range unit is in its own, braced, 8 litre sealed-box enclosure.

A custom made MDF plinth helps to extend the footprint of the speaker and decouple mechanical vibrations from the cabinet. This makes the speaker more stable in a domestic environment and improves low frequency performance.

It also allows access to the crossover adjustment patch-board. Adjustable metal feet allow the height and angle of the speaker to be adjusted. This enables a custom skateboard to fit underneath so the speaker can be transported on wheels to a different position and then carefully lowered into place. This is supplied with the speakers.

The 2 x 220 mm woofers and 158 mm mid-range cones are made from a Kevlar/carbon fibre/pulp mixture to combine high rigidity, with good inherent damping and feature concave dust caps coupled tightly to the cone. Frequency responses of both woofer and mid-range are inherently very smooth. They each incorporate a copper shorting ring in the magnetic circuit to reduce and linearise inductance and therefore, reduce harmonic and inter-modulation distortions at high sound pressure levels. The two woofer cones couple acoustically at low frequencies and are port loaded for extremely high power handling.

The tweeter is a specially developed version of the Epos Mi tweeter, with anodised aluminium dome, Kapton voice coil former, braided lead-out wires and Ferro-Fluid damping. The centre pole is damped under the dome and vented into a contoured, felt-filled, rear chamber to damp the fundamental resonance frequency.

The crossover design of the Epos Encore 50 is revolutionary. It allows the user unparalleled flexibility to compensate for individual room acoustics, without compromising sound quality in any way. The tonal balance of the speaker may be easily changed by the user to increase or decrease the tweeter and midrange output in 1.5dB steps, via an aperture in the bottom of the speaker and plinth. The crossovers use high-grade customised 'Epos' polypropylene capacitors and non-polarised electrolytic capacitors, which are bypassed with polypropylene capacitors on the mid-range and tweeter. It also uses air-core inductors, a tapped autotransformer for adjusting the mid-range output and laminated steel-core inductors. Metal-oxide resistors are paralleled where necessary to achieve high power rating and a custom heatsink is used to reduce the temperature.

The high sensitivity mid-range is attenuated by a tapped auto transformer, which doubles as the high-pass crossover inductor. The tweeter network also has variable attenuation via metal-oxide resistors. The maximum sensitivity treble position by-passes all attenuation. Passive components are mounted on a high quality, glass fibre PCB, mechanically isolated from the cabinet.

The crossover PCB's are designed to be completely, or partially, by-passed, to enable the user to configure the speaker in passive or active mode. Epos, was going to offer a custom DAC with programmable digital crossover to suit any make of amplification system. In short, it has unparalleled flexibility.

The ongoing development for a future user upgrade to the Epos Encore 50 will represent yet another great leap forward in Epos speaker design and will have music lovers giving it a 'standing ovation' whilst applauding this exceptional speaker.

Design 3 way, floor standing, reflex port loaded, with user adjustable crossover.
Power Handling 500 W max. Speech and Music.
Frequency Range 28 Hz – 30 kHz. -6dB

Impedance 4 Ohm nominal
 Sensitivity 89db @ 2.83V/1m
 Amplifier Compatibility 25- 600 Watts
 Finish Black Ash or Cherry Real wood veneer

Woofers 2 x 220mm diameter on an aluminium chassis, 38.5mm voice coil with +/- 8mm excursion Light weight, Kevlar/carbon fibre/pulp cone piston material, with inverted dust cap.

Mid Range B1 x 158mm with 25mm voice coil and +/- 3.5mm excursion light weight, Kevlar/Carbon fibre/pulp cone piston material, with inverted dust cap.

Tweeter 1 x 25mm metal dome, Ferro-fluid cooled and custom Epos suspension. Ferrite magnet system

Crossover 250 Hz and 3.5 kHz. High-grade, glass fibre PCB's with 2 ounce copper tracks. Gold plated 4mm plugs and sockets for user configuration. Separate PCB for Bass filter to isolate it inductively from Mid-range and tweeter filters.

Optional Passive or Active configuration. Active operation requires a separate custom crossover. Check with Epos user manual for full details.

Size Speaker W x D x H 265 x 385 x 1230 mm
 Includes plinth and spikes
 Plinth maximum footprint W x D 410 x 540 mm
 Packaged One per carton
 Weight Net per single speaker 45 kg
 Gross per single speaker 56 kg
 Net skateboard 4 kg
 Gross skateboard 5 kg