Jordan Eikona TL Array Loudspeaker

The Eikona TL Array is a floor-standing enclosure designed to provide low bass and high power handling. Coupled with high sensitivity, the TL Array is designed to handle the full power and majesty of orchestral music.

The carefully-optimised transmission line extends the Eikona’s bass response to 30 Hz in-room. The use of four Eikonas in series/parallel enables faster transient response than a conventional transmission line with a single, larger bass unit. The line array principle maintains a stable stereo image from all listening positions.

This enclosure is designed to be straightforward to build, with only one partition dividing the line. The line itself is straight, rather than tapered, to avoid difficult angles in the construction process. No reflectors should be fitted at the bend in the line as this will have no effect on the bass and only serve to reflect midrange sound up towards the port. The line exits at the top of the enclosure which further improves the sound. The height of the enclosure is designed to fit the standard 1.2m sheet size of MDF and plywood.

The recommended stuffing should be well teased and spread evenly throughout the two line sections. Work the stuffing around the braces; it will expand after placement and hold its position without further support. Depending on flooring, spikes or a base plate can be fitted to the foot of the enclosure to aid stability.

We recommend fitting grilles over the Eikonas and the ports to prevent damage to the cones and to deter unwanted ingress of domestic pets and smaller children through the ports.

Specifications:

Drivers
4 x Jordan Eikona 2 full-range drive units

Mounting
cutout 115mm diameter, rebate 150 mm diameter, 4.8mm deep.

Fixing
4 x 5mm screws or Allen bolts into captive t-nuts.
Eikonas are supplied already fitted with foam gaskets.

Material
18 mm MDF or 12mm Baltic birch ply (recommended). Fit braces where shown.

Stuffing
Mundorf Angel Hair, 200gm per enclosure.

Size (ext)
1200 mm (h) x 240 mm (w) x 354 mm (d)

Sensitivity
92 dB/watt

Power
5 - 200 watts (400 watts peak)

Impedance
8 ohms nominal (6 ohms minimum)

Array wiring
GREEN = wiring between Eikonas
RED and BLUE = wiring to cabinet speaker terminals
The holes are optional but help with air movement and keeping the line damp in place.

Line partition runs across width of the cabinet, as shown in plan view below.

The transmission line is closed at the speaker end A and open at B.

150 x 150 mm bracing panels placed in centre of line, bracing front, back and partition.
**Pentagonal Transmission Line Array**

This variation on the TLA reduces acoustic reflections within the cabinet and will sound slightly cleaner as a result. Measurements are external. Material - 18 mm ply (recommended) or MDF.

The line is open at the top (shown in yellow on plan view). Vertical braces can be fitted to bridge the sides and partition; these can be small panels of 18 mm ply (shown in blue) or dowels. These also help support the stuffing material.

There is no need to build pairs as mirror-image but to do so only requires moving the line partition. The angled partition helps spread reflections from the back of the Eikonas.