

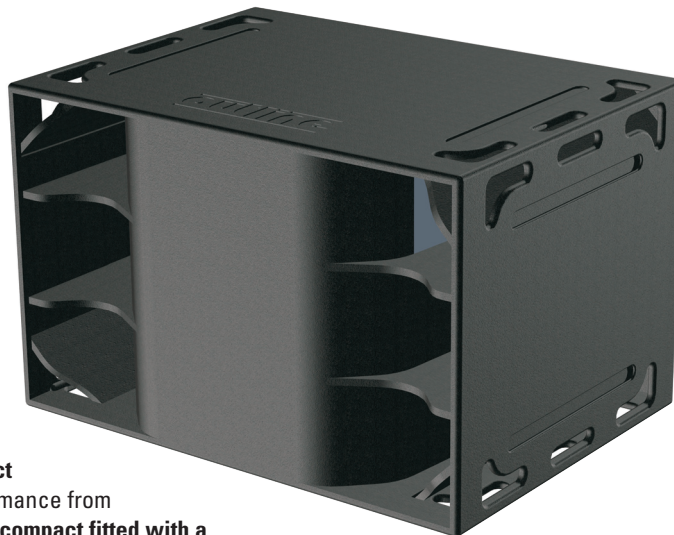
Outline LAB 21

LAB 21 INFRA-SUB: SIZE DOESN'T MATTER.

Fortunately, Outline has absolutely no experience in designing and building LARGE and HEAVY SUBWOOFERS. LAB 21 is another of these contraptions in perfect sync with the "mission" at Outline, where – since 1973 – products have been based on the following motto: "building **SPECIAL audio equipment and components**". For Outline, designing and building a **SPECIAL** subwoofer meant a lot. The aim was to obtain the most precise natural reproduction possible of the infra-low frequency range, but (obviously) with record-breaking dimensions and weight.

LEADING EDGE ACOUSTIC ARCHITECTURE

LAB 21 stands out from ordinary enclosures because it features ingenious acoustic architecture (a **hybrid waveguide and indirect radiation system**). So ingenious that it ensures top-grade performance from an enclosure that is objectively very compact: **the world's most compact fitted with a 21" woofer** (just read competitors' data sheets for confirmation).



TWO MASSES OF AIR MOVED BY JUST ONE DIAPHRAGM

The fact that the sound is generated by the two masses of air being moved by a single diaphragm, with a great advantage for the attack velocity of the transitory frequencies, results in very deep "solid" low frequencies, due to a response to the impulse with a very small "ripple".

DIMENSIONS:SPL RATIO

On the world market, subs generating high SPL at infra-low frequencies with the necessary precision can be counted on one hand (or maybe two). The few that exist are much bulkier and heavier than the LAB 21, which has a volume of **just 600 litres and measures 110x70x80 cm (27.6 x 43.3 x 31.5 inches)**.

23 Hz: "DEEP" SPL...

A lot of SPL, yes... But exactly where? Down to **23 Hz** (-10dB). So an "abyssal" frequency. A value that is already exceptionally low in absolute terms, but even more formidable when compared to the objective compactness of the LAB 21 (read competitors' data sheets to understand).

WEIGHT:EXTENSION RATIO

The LAB 21 cabinet exploits the principles of the "shape factor" to obtain leading edge structural characteristics in terms of solidity. The material used is reduced to the absolute essential and overall weight benefits from that. Result: 112 kg (246.9 lb) with 145 dB SPL (peak).

APTITUDE FOR PRECISION

The figures speak for themselves. But they don't enable to understand the ease with which the LAB 21 manages to reach way down and the precision with which it feeds out the lowest notes; the way they are reproduced is a real revelation: the resulting sound is truly impressive (**23 Hz**), but at the same time harmonically complete and featuring unprecedented precision.

ZERO TURBULENCE

Thanks to the particular care taken with the lines, the internal construction details and the generous dimension of the ducts, it has been possible to achieve an unrivalled extension down to very low frequencies, and without any noise due to turbulence caused by air passing at high speed.

BOLD BUT AUSTERE LINES

For Outline, overall design and looks have always played a key role. LAB 21 commands respect... not only when listening to it. It's sufficient to look at it - its lines are bold and austere at the same time. This collection of qualities make it an exclusive object from every point of view. We had no other choice...

Outline LAB 21

TECHNICAL SPECIFICATIONS

Transducer & Loading

LOW 1 x 21" NdFeB woofer
 MAXIMUM LINEAR EXCURSION ± 16 mm
 MAXIMUM EXCURSION ± 30 mm peak (2.5")
 LOADING Hybrid waveguide indirect radiation system
 IMPEDANCE (MINIMUM) 4 Ohms (4.3 Ohms)
 RATED POWER 2000 WAES - 8000 WPeak

Acoustical - On-axis, Half-Space (2π) measurement

FREQUENCY RANGE (-10 dB) 23 Hz \div 170 Hz
 MAX PEAK (SHORT TERM) SPL⁽¹⁾ @ 1 m 145 dB-SPL

Angular Dispersion

VERTICAL AND HORIZONTAL Omnidirectional

Audio Input

CONNECTOR 1 x NLT4 Speakon
 SUGGESTED AMPLIFIER Outline T Eleven
 (one enclosure per channel)

(1) Measured with music

Physical

MATERIAL High stiffness, light weight structure
 in high grade Baltic birch plywood
 FINISH Scratchproof, fire-retardant black paint
 HANDLES Six integral handles on both side panels
 OTHER FEATURES Four non-abrasive plastic sliders and
 stacking cavities on the top and on one side
 DIMENSIONS (H x W x D) 70 x 110 x 80 cm
 (27.6 x 43.3 x 31.5 inches)
 WEIGHT 112 kg (246.9 lb)

Shipping Dimensions and Weight

DIMENSIONS (H x W x D) 78 x 118 x 88 cm
 (30.7 x 46.5 x 34.6 inches)
 WEIGHT 122 kg (269 lb)

