## LEEDH E 2

## A totally revolutionary technology for a simply lifelike sound

The ABD (Acoustical Beauty Driver) module was created from a blank sheet to eradicate defects of traditional loudspeakers:

Iron free motor to transform the electrical signal into mechanical signal without distortion

Ferrofluid suspension to transform the mechanical signal into acoustic signal without distortion and

remove the speaker cabinet

• Pistonic membrane in UHM Carbon (Ultra High Modulus) to eliminate standing waves in the pistonic membrane which could otherwise cause colouration of the sound. Because of the small size of our driver and the stiffness of its material the frequencies of colorations are up to 1500Hz instead of 50Hz for a conventional driver which in effect means that there is no audible colouration.

Distortion reduced to the same level as the best amplifiers (less than 0.02% above 500 Hz with 50W power) Sound source controlled directivity and the compactness of the acoustic modules ABD ensures there are no faceplate or baffle diffraction and this leads to a 3D sound image (holophonics)

The LEEDH E2, built with 5 ABD modules, is the first destructured High End Speaker! Low frequency reproduction (-3dB at 50 Hz) without speaker cabinet (total volume of acoustic load 1, 5L). Listening space integration optimised: organic design - no acoustic coupling at low frequencies - No parasitic vibration transmitted to the floor of the room, giving the opportunity to place the speaker near the wall. The Leedh E2 is also very light (15Kg) and so very easy to pick up and move to find its optimum position in your room.



THE LEEDH SYSTEM

Composed of a pair of LEEDH E2, the UNIVERSEL speaker cable and one 20.1 subwoofer, each of which could be used individually to optimize a system or together to allow a musical approach without artefacts.

The UNIVERSEL has been designed not to create the usual vibrations due to the currents within the wires of the cable, and to eliminate the usual preferential connecting direction.

Its filter eliminates the capacitive effect so it could be connected with every kind of amplifiers even with long cable lenghts.

Each wire has its own electric armor plating which are polarised by a lithium battery to eliminate parasitic electronic charges optimizing the connection of all every speakers with all amplifiers as the name suggests: UNIVERSEL.

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The 20.1 is a subwoofer uses a revolutionary technology to optimize the push-push operation of two 15' drivers into an acoustic load volume of 16L.

This infinite load simulator technology used in our subwoofer is original as it mounts one giant excursion 9' driver behind each 15' driver. In this configuration the two 9' and the two 15' work in push-push and each pairing of 15' / 9' drivers work in push-pull.

The two 9' drivers, loaded by 16L volume inside the box, work together to displace exactly the same volume of air in amplitude and in phase as the two 15' would in open air, i.e., making them work as they were in an infinite volume.

A 300W amplifier is used for each couple of drivers, both equalized to reach 20Hz at -1dB.

This technology eradicates the boomy effect and the low frequency ringing, by simulating a box of infinite volume, but also to meet the dynamic range by simulating a box of infinite mass, as the four drivers cancel each others mechanical reactions on the box.

The result is an ultracompact and powerful subwoofer able to reach 20Hz at -1dB that we logically baptised : 20.1

With the 20.1, each system sounds more natural because the ears are accustomed to listen to the sound and music without attenuation and compression down to 20Hz, at the same time improving significantly the reproduction of the high and medium ranges.

