



FrontRo

Hybrid-Electrostatic-Loudspeaker

Experience the magic of an electrostatic speaker radiating in all directions to bring the performance into your room



frontro.co.uk



ELECTROSTATIC – AN IMMERSIVE EXPERIENCE

Nearly all loudspeakers currently use the age old 'dynamic' principle of a coil in a magnetic field pushing a cone or dome back and forth to produce sound. The moving parts are slow, heavy and very prone to producing unwanted vibrations of their own.

By contrast, with an electrostatic loudspeaker;

- The diaphragm is driven by the same electrostatic forces that make your hair stand on end when you rub a balloon and hold it near your head.
- The diaphragm is incredibly light and responsive (six times thinner than human hair) – it is the closest thing to moving air directly without any kind of mechanical structure.
- The diaphragm produces no unwanted vibrations because it is damped by the grille cloth at low frequencies and by the air load at high frequencies.
- The mechanism is almost perfectly linear so the sound isn't distorted.
- There is no box to spoil the sound.

LOOKS LIKE NO OTHER... SOUNDS LIKE NO OTHER...

FrontRo is a compact hybrid electrostatic loudspeaker that is designed and hand-built in England, using locally sourced materials and joinery, and embodies fresh design theory. After years of research and refinement, **FrontRo** uses the 'Oscillating sphere' concept to radiate sound as uniformly as possible in all directions, like dropping a pebble in a pond. It immerses you in reflected sound as well as direct sound and thus creates a holographic sound image – unique amongst high-end speakers for the true audiophile.



HANDMADE IN BRITAIN WITH THE FINEST MATERIALS

Our philosophy is that good audio technology should be like good food, using the only finest quality ingredients in simple recipes with no artificial additives. Also, hi-fi should complement a stylish interior rather than invade it. The elegant industrial design of **FrontRo** by Josh Ford echoes the curved form of the Paimio chair by Alvar Aalto.

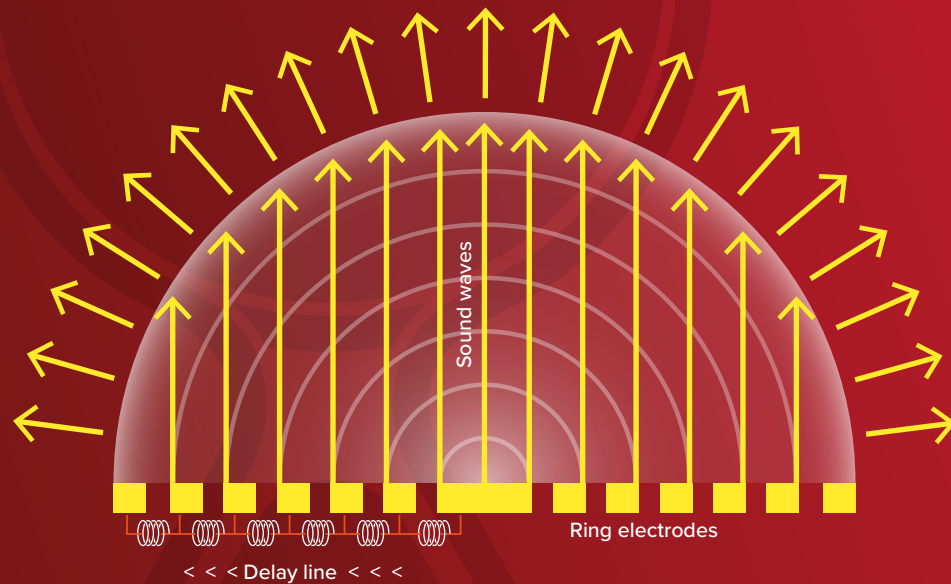
FrontRo is a passive loudspeaker, which means that you can choose whatever amplifier and partnering equipment, such as a turntable or streaming device, that you wish to use. It has a 12" electrostatic unit that handles the mid-range and treble frequencies, while the conventional 6.5" dynamic woofer handles the lower midrange and bass down to the lowest note on a double bass or bass guitar.

The standard wood finish is light oak, but for a small premium you may order a pair in a veneer of your own choice such as American walnut. Grille cloths are available in gunmetal, navy or burgundy. Underneath the cloth of the electrostatic unit is a special screen that excludes dust and moisture to ensure long term reliability.



OSCILLATING SPHERE CONCEPT

Author and designer Tim Mellow wanted to recreate the airy, spacious sound produced by his daughter practicing her flute which radiated sound in all directions producing multiple reflections from the walls and ceiling. Most loudspeakers don't do this because, in a real room, much of the sound we hear is reflected but as you walk around them, the sound changes drastically which means that the tonal character of the reflected sound will be different from the direct sound. That then impairs the stereo image as well as the sense of hearing a real live performance.



The breakthrough came with the “Oscillating sphere concept” in which ring electrodes are fed from tappings on a delay line to make the sound leave the centre first, followed by each successive ring, until it leaves the outermost ring, by which time the sound from the centre is already some distance from the diaphragm.

How this differs from previous designs is that the delay line is arranged to produce a hemispherical wave front that spreads out in all directions like that from an oscillating sphere. This approach is the most efficient because there is no discontinuity at the edge which means that the delay line needs no deliberate attenuation to smooth the response and thus enables a more compact design.

TECHNICAL SPECIFICATIONS

Overall dimensions (without feet):

762 mm (H) x 494 mm (W) x 291 mm (D)

Weight: 12 kg

Recommended amplifier power rating:

25 to 100 W

Frequency response: 35 Hz to 20 kHz

Input impedance: nominal 8 ohms.

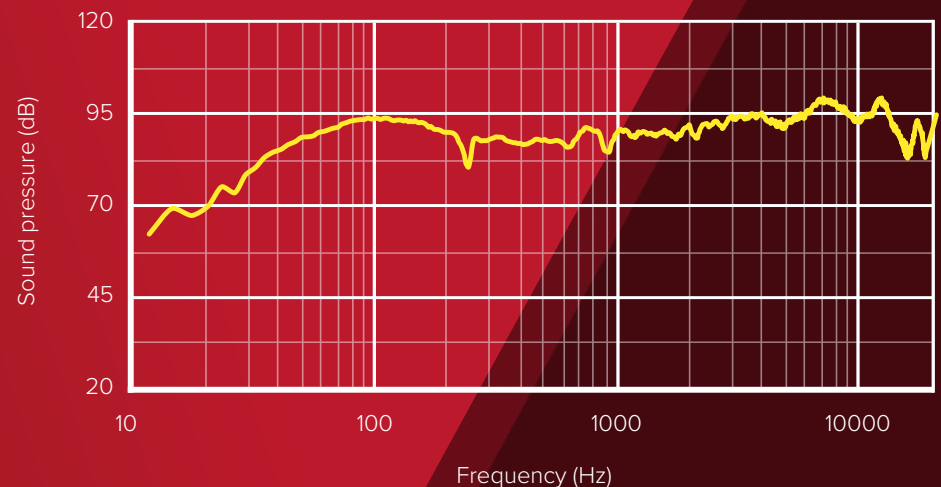
Sensitivity: 84 dB @ 1m for 2.83 VRMS.

Maximum output: 98dB SPL from electrostatic unit for 14 VRMS (input protected).

Crossover frequency: 500 Hz, 2nd-order

Mains connection: 240 V, 4 mA

On-axis response at 1 m in open air



David Price, StereoNET: "It possesses all the desirable traits of a great electrostatic – a superb, near translucent midband, super quick transients and no nasty boomy box sounds you get an excellent sense of spatiality; it's a truly expansive sound and not one that beams out at you"

Janine Elliot, Hifi Pig: "The speakers produced a full and detailed sound. Turning to Saint Saens 'Carnival of the Animals', this has very spacious orchestration ably shown off by the FrontRo, the two pianos performing side by side centre stage...a highly 3D performance with pin-sharp top end and extended bass. The FrontRo was simply excellent in portraying the composer's thoughts, working well at low level as well as loud. Birds and sea waves were equally real that my cat even pricked its ears to go hunting for game."

Paul Messenger, Hi-Fi+: "The bass line was invariably crisp, clear and well defined...The vocal talents of Joplin were portrayed well on the FrontRo, suggesting a speaker of rare detail, vocal clarity and dynamic range... This is a loudspeaker with a distinct focus on sound that simply does the business, supplying good sound quality wherever one sits and outstanding quality if you listen in the sweet spot."

Jess Marshall, Luxury Lifestyle Magazine: "(FrontRo) speakers are, an investment in music, an investment in entertainment, and an investment in interior design. For music lovers everywhere speakers don't get much better, or more stylish than this."

Jarone Ashkenazi, Upscale Living: "After five years of development paying meticulous detail to design and audio quality, FrontRo has positioned itself as possibly the world's most luxurious electrostatic audio units."

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Mellow Acoustics Ltd,
42 Hale Road, Farnham,
Surrey, GU9 9QH.



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