Full Range (modified) Speakers



What are Full Range "Modified" Speakers?

Background:

Since 2002 Icon Audio have been making complete loudspeakers, cabinets and drive units. From the experience gained during this time in conjunction with our successful valve amplifiers has taught us many things including:

- The best spatial image and sound stage comes from full range or a simple design of speaker, without a complex crossover. Generally efficient design.
- Most speakers waste a large proportion of the amplifier power in order to "flatten" the frequency response. Especially with smaller speakers where the midrange and treble power is "dumped" (as heat in resistors) to make the bass louder as a proportion.
- Full range often have hugely powerful magnets in the drive units, this severely restricts the cone movement to as low as +/- 1mm, necessitating the use of a large horn for bass.

FRM3 cabinet. 1" audio quality MDF. 3 internal braces. Audiophile foam damping. Audio Quest heavy duty pure copper wire.



Full Range or Multi Way is their a Middle Way?

We think so! This is how we do it:

We think so. In the same way a very simple valve amplifier can be very "musical", a good full range speaker can also sound inherently "musical" in character. We have designed a wide range efficient drive unit that has excellent sonic properties using both new and old technologies to achieve the sonic footprint we wanted

Our special 8" drive unit was then matched up to 3 cabinets that get the best overall acoustic sound. This is then further "tweaked" to get the desired response by using a special attenuator, rather than a "crossover". This way no power is wasted or dumped as heat as resistors, maintaining the high efficiency.

The FRm 3 uses two closely matched units that work in parallel to give effortless bass reproduction that is well suited to a larger room, for large orchestral works, big band jazz rock music etc.

The result

- Very musical sound with seamless transition between bass, mid-range and treble.
- No need for a tweeter
- Sound stage and spaciousness like no other speaker
- No harshness or metallic quality to cause listening fatigue
- Deeper bass than any other design for the size.
- Is efficient enough to work with any low powered Single Ended or Push Pull design amplifier from about 6 watts (depending upon required sound level and room size)
- Very easy load for an amplifier to drive
- Small footprint for the sound/bass output
- 3 designs to choose from depending upon room size and budget
- Sound can be easily tailored to suit you installation

Are there any shortcomings?

All types of loudspeakers have shortcomings, they have the highest distortion of any part of the hi fi chain. Each type of design having its own set of problems. Like other electrostatic and co-axial speakers the FRm range are a little more directional and have a more tightly defined listening area.

Specifications and Features

- Icon unique 8" Full range drive unit
- Rare earth high frequency dome
- Custom paper cone for optimum bandwidth
- Long throw coil and roll surround for extended bass
- 96db approx output, 1 watt @1 meter sensitivity
- Designed and tested with low power valve amplifiers
- Suitable for amplifiers 6 to 90 watts, @ 8 ohms
- · Audio grade MDF cabinet
- · Real wood veneer finish
- Braced cabinet (3 in the floorstanders)
- Standard finishes cherry or walnut
- Internal wire: high purity, low impedance copper
- Plinth and adjustable spikes included (FRm 2/3)
- FRm 3 Size in cm W29, D28, H104, 29kg ea
- FRm 2 Size in cm W29, D28, H104, 21kg ea
- FRm 1 Size in cm W30, D33, H51, 12kg ea

(Specifications subject to change)