



## MEET THE F1 SERIES



The F1 series represents the pinnacle of Fyne Audio's long-standing audio experience and engineering expertise in the Hi-Fi industry. This no-compromise series of high-end transducers hone cutting edge point source loudspeaker technology to define what is currently possible. Designed, manufactured, hand finished and tested at Fyne's HQ and manufacturing facility in Glasgow, the F1 series represents state of the art UK loudspeaker design.

The truly unique design and innovative feature list is second to none. From the massive machined metal plinths to the intricate burr walnut inlay on the front and top of the wood finished cabinets, every element of F1 speakers has been meticulously considered to ensure stunning audio performance and exquisite aesthetic appeal for the audiophile.

Bristling with many of Fyne Audio's patented technologies, the no-compromise F1 specification includes top of the range Isoflare point source drivers, twin cavity reflex loading and Fyne's signature BassTrax Tractrix profile LF diffuser system. The heavyweight machined aluminium plinth provides exceptional stability for the high density pressed birch plywood cabinet, which is extensively braced and finished to bespoke furniture standard throughout.

# ISOFLARE POINT SOURCE DRIVER

Fyne Audio's signature IsoFlare driver is a point source system whereby the bass/midrange driver shares a common centre with the high frequency unit. Providing outstanding stereo imaging even off axis, energy is radiated isotropically with constant directivity following the flare of the driver cone. Sound is produced from a single point, giving truly spherical and time-aligned wave front. This preserves the harmonic structure of complex instruments and vocals, recreating the true acoustic sound field from a loudspeaker that is far less dependent on room location.



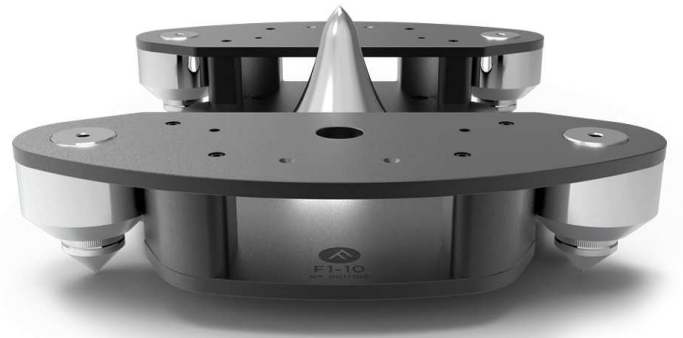
For the flagship F1 series IsoFlare drivers, the high frequency unit features a highly rigid 3" titanium HF diaphragm for smooth and unstressed performance, with a massive Neodymium magnet incorporating a vented rear chamber to place low frequency resonance well below the crossover region. This enables a very low 750Hz crossover point for the most realistic rendition of vocals. The HF driver uses a high power handling edge wound aluminium voice coil on a Kapton former with pure copper shorting ring for lowest distortion. It's unique IsoFlare annular waveguide has computer optimised geometry to provide linear expansion into the room for the smoothest frequency response.

On the low frequency section, a multi-fibre paper cone gives natural sounding midrange and extremely clean transient behaviour even at concert realistic SPLs. The twin roll fabric cone surround (floorstanding models) and FyneFlute surround (standmount models) effectively terminates cone energy without time-smearing, remaining cohesively integrated to the HF driver irrespective of listening volume. The high power LF motor system uses a giant ferrite magnet with rectangular copper voice coil on

aluminium former for class leading power handling. The complete F1 series IsoFlare driver is built into a rigid cast aluminium chassis to eliminate unwanted vibrations and coupled to the cabinet's internal bracing spars through a semi compliant bonding material for exceptional damping at the driver/cabinet interface.

# BASSTRAX TRACTRIX DIFFUSER SYSTEM

The F1 series boasts Fyne Audio's ultimate iteration of the patent pending BassTrax Tractrix profile LF diffuser system. This complex yet refined approach to bass loading and reflex porting incorporates a twin cavity cabinet design with a tuned waveguide port firing downwards from the reinforced lower panel of the cabinet. This loading technique broadens the tuning frequency to reduce cone excursion and acts as a damping system that blocks



potential standing wave resonances produced by the main internal port between cavities.

The lower cavity bass port vents downwards onto the BassTrax Tractrix profile diffuser. The unique, mathematically derived tractrix profile maintains a true 90 degree angle at each intersection of the expanding wavefront, so converts plain wave LF energy into a horizontally expanding spherical 360-degree wavefront with no loss of total energy. The result is seamlessly uniform LF integration into the room and a loudspeaker that is far less critical of room positioning.

Tractrix profile wave-guides were originally applied to horn loudspeakers by Voight in the 1920's but the application to an LF diffuser of this type is unique to Fyne Audio.

## CROSSOVER

The F1 series crossover is a no-compromise design, hand built onto vibration damping fibreboard panels using the world's finest electronic components and cables and fine tuned to deliver truly class-leading performance. Leaning on decades of premium loudspeaker design experience, the design team refined the component list through finite element analysis, computer modelling, measurement and critical auditioning by Fyne's top engineering and acoustic personnel.

The component roster includes low loss LF laminated core inductors, non-inductive thick film resistors and Claritycap's highest grade HF polypropylene capacitors. Neotech™ PC-OCC internal wiring provides highly transparent signal transfer, connecting to the loudspeaker cable through WBT Nextgen™ gold plated bi-wire terminals. Once fully assembled and tested, every F1 crossover is Deep Cryogenically Treated. This super



freezing and slow thawing process relieves microstresses in components, wiring and solder joints, maximising signal transfer and delivering greater transparency to the sound.

Further F1 series refinements include a fifth earth terminal that grounds the driver chassis to prevent radio frequency interference effects from masking fine detail. For seamless room integration, HF output controls are available on the front baffle of F1 series models, offering user

adjustment of high frequency energy and presence.

