

VIVID AUDIO INTRO

For a high-end speaker manufacturer to produce the worlds pre eminent loudspeaker systems, it was clear from the outset that such a company would have to deliver products featuring more than just innovative engineering and bespoke parts. They would need to design loudspeakers that would stand out visually from the ranks in the dealer's showroom and deliver an acoustic performance that would render them virtually invisible.

Vivid Audio wanted to achieve all these things but not just at any price. That's why they made considerable effort to extract the best performance imaginable from each component using customary materials wherever possible. Which is why there are no standard parts to be found in any of their loudspeakers. Every component is made to their own exacting specification. Most hidden away but quietly delivering a listening experience not to be forgotten.

Chief Engineer Laurence Dickie has been passionate music and the sciences from a young age but his particular obsession has been with loudspeaker design. With his insatiable zest for learning and discovering, he has been developing his passion from school days through University and beyond. Laurence (Dic) has honed his skills in the design of loudspeakers of extraordinary performance. His achievements to date are noteworthy, and include the Award winning Vivid Audio GIYA loudspeaker system, the B & W flagship Nautilus, The Turbosound Poly Horn and Dendritic Horn systems.

But, Dic does not simply design loudspeakers...

...he takes the proposed design concept and improves it beyond the point most designers are happy to "sign off".

Joining forces with South African Philip Guttentag forming Vivid Audio, was the ideal career move since he could now be involved in designing and engineering products in their entirety. It meant his having a say at every stage of development, from the acoustic performance to the aesthetic design of each product. Dic's involvement in the Vivid Audio story is one that started approximately twelve years ago when he set out to create a range of drivers for professional monitors after the premature truncation of the Nautilus project. He continued his work with these drivers which are now used in all Vivid Audio loudspeakers.

Aesthetics

The design of Vivid Audio products is rooted in the desire to generate innovative solutions which communicate meaning and emotion thus transcending form, structure and material.

Audio components impact visually and acoustically on our home environment and our daily lives. The defining elements of the aesthetic design response adopted are an informed understanding of internal space and the relationship of elements within space.

In the overt complexity of the 21st century technology, a key objective is simplification. Deployment of cutting edge analysis, design and manufacturing methods has facilitated the creation of a loudspeaker system which exhibits full integration of compositional components. The driver enclosures, stands and bases merge to become single holistic forms using the principles of visual entasis and complex spline curved surfaces.

This, together with intensive attention to detail delivers seamless sculptures of seductive, sensual organic forms.

The unique design of Vivid Audio's loudspeaker systems is intended to challenge the emotional aspects of perception and the tactile qualities of the unique products are intentionally poetic and profoundly persuasive.





















Giya is a loudspeaker system like no other.

Evocative of the special spirit of our newest design and proudly symbolic of Vivid Audio's African roots, the name Giya is derived from a classic form of Zulu dance. Wrapped within Giya's distinctive shell-like appearance lies an exceptional level of engineering detail and acoustic design sophistication that have become the hallmark of our company.

Its very shape is defined by proven acoustic principles taken to their logical conclusions, untethered by conventional wisdom and common construction techniques. Every element of the design has been refined to an extraordinary degree - from our patented hand-built drive units, to our advanced vacuum infused composite enclosure, to our relentless elimination of resonances and reflections.

Giya is defined by its remarkable sense of sonic transparency and tonal naturalness. A myriad of technical details must be skillfully combined to achieve such performance and no one design element in particular is largely responsible for Giya's uncommon appearance. Principal Vivid Audio designer Laurence Dickie pioneered

the application of tapered tube absorbers as a means to eliminate destructive resonances and reflections from within driver enclosures. With Giya, we apply this design technique to all four of the driver subsystems in the loudspeaker,including the low frequency section. It is exactly this tapered bass enclosure which coils around to such visually striking effect. But our story doesn't end here, because it is our innovative combination of this tapered absorption tube with a pair of reaction-canceling critically-tuned vents that is unique. Our patent-pending technology provides the benefits of near-complete elimination of internal resonances and reflections afforded by the tapered absorber, along with the low distortion, high efficiency, and moderate enclosure size courtesy of the vents.

A completely new high output bass driver was developed for Giya and is employed as a reaction canceling pair visible on either side of the enclosure. An impressive technical story in its own right, the C225 driver includes many of the proprietary technical innovations for which Vivid Audio has become recognised. When combined with our advanced enclosure and filter network design,

the result is incredibly tight, articulate bass without a trace of overhang, delivered with impressive authority and solidity.

There are in fact many technical details that are responsible for Giya's remarkable performance, many of them developed and patented by Vivid Audio: catenary dome profiles, open pole radially polarised rare- earth magnet systems, isolating compliant driver mounts, reaction-canceling bass driver mounts, short-coil long-gap motor systems, highly vented voice coil formers, highly aligned heat-conductive driver chassis, tapered tube absorbers, and a host of other engineering details

And so, with pleasure, we introduce you to our newest Vivid Audio design, The Vivid Audio G1 GIYA.

G1 Design Group: Laurence Dickie, Principal Designer Alison Risby, Industrial Designer, B&W Nautilus / George Elphick, Principal Architect, Elphic Proome Architects / Chris Stevens, Artist in Residence, St. Michael's Place / Roger Beecroft, Senior Lecturer Photography, University of Nottingham UK



G1GIYA SPECIFICATIONS

Configuration: 4-way 5-driver system
Cabinet: Reinforced advanced composite
Finish: Multi-component high-gloss automotive
High frequency driver:
Vivid Audio D26 (patented)

Catenary dome profile

Radially polarized super flux magnet structure Isolating compliant mount, Tapered tube loading

Mid frequency driver: Vivid Audio D50 (patented)

Catenary dome profile

Radially polarized magnet structure

Isolating compliant mount, Tapered tube loading Mid-bass driver:

Vivid Audio C125S (patented)

Short-coil long-gap motor design

50mm copper ribbon coil on highly vented former

Highly aligned chassis, Radial magnet structure Isolating compliant mount, Tapered tube loading

Bass drivers:

Two Vivid Audio C225 (patented)

Short-coil long-gap motor design

75mm copper ribbon coils on highly vented formers Highly aligned chassis, Radial magnet structures

Reaction canceling compliant mount

Bass loading:

Exponentially tapered tube absorber combined with critically tuned reaction canceling vents (patent pending)

Sensitivity: 91 dB @ 2.83Vrms and 1.0 meter on axis Impedance (Ω): 6 nominal, 4 minimum, low reactance Frequency range (Hz): -6 dB points 23 - 44,000 Frequency response (Hz):

30 - 41,000 +/- 2 dB on reference axis

Harmonic distortion: < 0.5% over frequency range Crossover frequencies (Hz): 220, 880, 3500 Power handling (music program) watts rms: 800 Dimensions (H, W, D) mm: 1700, 440, 800 Net mass (kg): 70





The K1 floor-standing model offers a similar performance to the B1 but with the potential for increased level and detail through the use of four low frequency drivers in conjunction with mid and high units in a 3 & 1/2 way system.

K1 employs a single D50 mid range driver (patented), between 900Hz and 4 kHz with the range beyond being handled by a D26 tweeter (patented). Below 900Hz the K1 uses four C125 mid-bass drivers (patented), two mounted on the front baffle and two mounted on the rear baffle of the cabinet. These four drivers are internally coupled in pairs via screw tensioning units for reaction cancelling. All drivers receive the same signal at frequencies below 100Hz while above this point the drive to the rear is progressively attenuated leaving only the front upper driver to operate all the way to 900Hz to ensure good vertical dispersion at crossover. Fourth order filters ensure phase coherence through both main crossover points resulting in a seamless and symmetrical polar performance.

Integral to the K1 enclosure is the stand. Made from the same cast carbon fibre reinforced polyester compound as the enclosure, the stand provides an exceptionally stable footing further guaranteed by the use of a total of five custom spikes mounted around the periphery of the base. Adjustment of the two rear spikes and that at the front sets the correct attitude while the remaining two can then be brought into contact with the floor for maximum safety.

Within each of the streamlined arms are hidden separate conduits to guide the Van den Hul® interconnecting cable away from the two internally mounted crossovers into the base. Precision machined WBT® gold plated terminals are discretely located at the rear of the base to allow a visually unobtrusive connection to the outside world.



K1 SPECIFICATION

Configuration

3 & 1/2 way vented cabinet

Cabinet material:

Complex loaded carbon fibre filled polymer

Finisl

High gloss automotive

Drive units:

26mm metal dome hf unit

50mm metal dome mf unit

158mm metal coned If unit (two pairs coupled)

Sensitivity: 89dB/1w @1m

Nominal Impedance ():6

Frequency range (hz): - 6dB points 35 – 44,000

Frequency response (hz):

39 - 41,000 + / - 2dB on reference axis

Harmonic distortion (2nd and 3rd harmonics):

< .0.5% over frequency range

Cross over frequencies (hz):

100, 900, 4000

Power handling (music program) watts rms:

600

Loudspeaker dimensions mm:

(H, W, D cabinet, D base) 1300, 280, 450, 488

Net mass (kg): 56





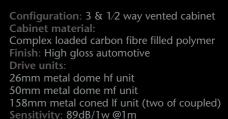


The B1 floor standing model incorporates four drivers in a 3 & 1/2 way system. B1 employs a single D50 mid range (patented) driver between 900Hz and 4 kHz with the range beyond being handled by a D26 tweeter (patented). Below 900Hz the B1 uses two C125 midbass drivers (patented), one mounted on the front baffle and one on the rear baffle of the cabinet. These two drivers are internally coupled via a screw tensioning unit for reaction cancelling. Both drivers receive the same signal at frequencies below 100Hz while above this point the drive to the rear is progressively attenuated leaving only the front driver to operate all the way to 900Hz in order to keep the distance between drivers at a minimum around crossover. Fourth order filters ensure phase coherence through both main crossover points resulting in a seamless and symmetrical polar performance.

Integral to the B1 enclosure is the stand. Made from the same carbon fibre loaded polyester compound as the enclosure, this considerable yet graceful design provides an exceptionally stable footing while not detracting from the acoustic environment surrounding the loudspeaker, thanks to the small frontal area of each arm. To further guarantee the stability of the complete system, a total of five custom spikes are mounted around the periphery of the base. Adjustment of the front and rear spikes sets the attitude while the remaining two can then be brought into contact with the floor for maximum stability.

Within each of the streamlined arms are hidden separate conduits to guide the Van den Hul® interconnecting cable away from the two internally mounted crossovers into the base. Precision machined WBT® gold plated terminals are discretely located at the rear of the base to allow a visually unobtrusive connection to the outside world.





Sensitivity: 89dB/1w @1m Nominal Impedance (): 4 Frequency range (hz): - 6dB points 35 – 44,000

Frequency response (hz):

39 – 41,000 +/- 2dB on reference axis

Harmonic distortion (2nd and 3rd harmonics):

< .0.5% over frequency range

Cross over frequencies (hz): 100, 900, 4000 Power handling (music program) watts rms:

300

Loudspeaker dimensions (H, W, D cabinet, D base)

mm: 1095, 265, 375, 420 Net mass (kg): 38

Shipping dimensions (H, W, D) mm:

1220, 410, 510

Shipping mass (kg): 50





While being two-way systems th loudspeakers maintain the Vivid philos operation throughout the frequency s

Available in two sizes, the smaller V1 are best suited to mounting near to l as wall or desktop use while the largmount will sit quite happily well away

All V1 models use the C125 aluminium handle the range up to 3kHz. soft silicone rubber o-rings in the proprifibre loaded polyester enclosure, struits kept to a minimum allowing these to deliver an exceptional mid-range trawith an articulate bass common to al

High frequencies are handled by the a variant specially adapted to sit at the waveguide unique to the V1. Not only c time align both frequency ranges I directivity control to match that of through crossover, a frequently overlow way designs, resulting in the smoothest

With its larger 22 litre enclosure, V1.5 free field use and is bonded to a stainles resin pedestal which gracefully comple of the enclosure while concealing the den Hul cabling. External connection four high quality WBT terminals discret the heavy cast polyester base.

V1.5 SPECIFICATION

Configuration

2 way vented cabinet Cabinet material:

Complex loaded carbon fibre filled polymer

High gloss automotive

Drive units:

26mm metal dome hf unit

158mm metal coned If unit

Sensitivity: 89dB/1w @1m Nominal Impedance (): 8

Frequency range (hz):

- 6dB points 40 - 42,000 Frequency response (hz):

42 - 39,000 +/- 2dB on reference axis

Harmonic distortion (2nd and 3rd harmonics):

< .0.5% over frequency range Cross over frequency (hz): 3000

Power handling (music program) watts rms:

150

Loudspeaker dimensions (H, W, D) mm:

1130, 255, 240 Net mass (kg) : 23

Shipping dimensions (H, W, D) mm:

1300, 430, 460

Shipping mass (kg): 37 (unit)







While being two-way systems the V1 range of loudspeakers maintain the Vivid philosophy of pistonic operation throughout the frequency spectrum.

Available in two sizes, the smaller V1s, V1w and V1h are best suited to mounting near to boundaries such as wall or desktop use while the larger V1.5 pedestal mount will sit quite happily well away from the walls.

All V1 models use the C125 aluminium cone driver to handle the range up to 3kHz. Mounted on soft silicone rubber o-rings in the proprietary cast carbon fibre loaded polyester enclosure, structural resonance is kept to a minimum allowing these patented drivers to deliver an exceptional mid-range transparency along with an articulate bass common to all Vivid products.

High frequencies are handled by the patented D26 in a variant specially adapted to sit at the apex of a shallow waveguide unique to the V1. Not only does this perfectly time align both frequency ranges but also affords directivity control to match that of the mid-range through crossover, a frequently overlooked issue in two way designs, resulting in the smoothest power response.

Specifically designed for wall mounting, the V1w includes a versatile and easy-to-use ball and socket bracket which allows 30 degrees of rotation in any direction.

Ideal as a desktop monitor the V1s features a built-in base moulded in solid resin for stability.

The horizontally mounted V1h is intended for use as a centre channel in home theatre installations but also permits the use of V1 in any low headroom situation.



V1 s,w & h SPECIFICATION

Configuration: 2 way vented cabinet Cabinet material: Complex loaded carbon fibre filled polymer Finish: High gloss automotive

Drive units:

26mm metal dome hf unit 158mm metal coned If unit

Sensitivity: 89dB/1w @1m

Nominal Impedance (): 8

Frequency range (hz): - 6dB points 42 - 42,000

Frequency response (hz):

45 - 39.000 +/- 2dB on reference axis

Harmonic distortion (2nd and 3rd harmonics):

< .0.5% over frequency range

Cross over frequency (hz): 3000

Power handling (music program) watts rms: 150

Loudspeaker dimensions (H, W, D) mm:

635, 255, 195

Net mass (kg):

V1s = 17 V1w = 13, V1h = 15

Shipping dimensions per pair (H, W, D) mm:

1420, 450, 560

Shipping mass (kg):

V1s = 47 (pair), V1w = 39 (pair), V1h = 22 (unit)

The V1w suitable for both dry and masonry type walling. As above without the moulded foot.



Vivid audio products have been designed with home theatre applications in mind from the start and the C1 is our answer to the crucial centre channel application.

C1 is a three-way system employing a single D50 mid range driver (patented), between 900Hz and 4 kHz with the range beyond being handled by a D26 tweeter (patented). Below 900Hz the C1 uses two C125 midbass drivers (patented), mounted on either side of the central mid and high domes. The two drivers are identically driven in order to preserve a symmetrical horizontal polar pattern at all frequencies. Fourth order filters ensure

phase coherence through both crossover points resulting in a seamless response. Optionally, the C1 may be mounted on its matched stand. Made from the same carbon fibre loaded polyester compound as the enclosure, it provides an exceptionally stable footing while holding the loudspeaker at a gentle angle to suit most floor mounted situations. To further guarantee the stability of the complete system, a total of five custom spikes are mounted around the periphery of the base.

Precision machined WBT® binding posts are recessed into the rear of the cabinet and linked internally to the crossover boards using Van den Hul® cable throughout.





C1 SPECIFICATION

Configuration: 3 way vented cabinet

Cabinet material:

Complex loaded carbon fibre filled polymer

Finish: High gloss automotive

Drive units:

26mm metal dome hf unit

50mm metal dome mf unit

158mm metal coned If unit (two of)

Sensitivity: 90dB/1w @1m

Nominal Impedance (): 8

Frequency range (hz): - 6dB points 35 – 44,000

Frequency response (hz):

39 – 41,000 +/- 2dB on reference axis

Harmonic distortion (2nd and 3rd harmonics):

< .0.5% over frequency range

Cross over frequencies (hz): 100, 900, 4000

Power handling (music program) watts rms: 300 Loudspeaker dimensions (H, W, D cabinet, D base)

mm: 268, 755, 330

Net mass (kg): 23

Shipping dimensions (H, W, D) mm: 370, 945, 450

Shipping mass (kg): 35

C1 STAND

Material: Complex loaded carbon fibre filled polymer

Finish: High gloss automotive

Dimensions (H, W, D): 350, 448, 292

Net mass (kg): 13

Shipping dimensions (H, W, D) mm: 440, 535, 380

Shipping mass (kg): 20

d26 TWEETER (patent pending)

Our goal in designing the D26 has been to create a driver with the highest efficiency and exceptionally high first break-up frequencies, while using well established diaphragm materials with a proven track record for stability and reliability.

It features an anodised aluminium diaphragm, formed by a unique fabrication technique, into a profile optimised by computer finite element techniques to give an exceptional first break-up frequency above 44 kHz!

A radially polarised magnet system, comprising eight segments of high energy Neodymium Iron Boron material, is employed to maximise the flux through the voice coil while having an intrinsically low stray field, essential if the driver is to be used anywhere near a cathode ray tube (CRT) video monitor. Finite element optimisation has again been used to make sure that the flux goes where it should resulting in an astonishing 2.4T in the gap! An edge wound aluminium voice coil ensures the best match between the aluminium diaphragm and gap flux.

Magnetic fluids are well established as a method of stabilising the voice coil temperature; however, the flux of the D26 is high enough to rip the magnetic particles out of suspension in conventional fluids. Vivid Audio has worked in co-operation with Ferroteck Corporation (USA) to formulate a fluid capable of withstanding the extreme conditions that exist in D26.

Our policy of ensuring that resonant effects are kept well out of the relevant frequency band applies not only to the high end but also to the fundamental resonance. Pressure from the rear of the diaphragm



d50 HIGH FREQUENCY DRIVER (patent pending)

Where the D26 sets a standard for high frequency reproduction, the D50 carries this philosophy down into the crucial mid band covering frequencies between 880Hz and 4kHz

Featuring a computer designed deep profile parabolic anodised aluminium diaphragm, D50 maintains pistonic behaviour for more than two octaves beyond its operating band having a first breakup frequency of 20kHz.

A radially polarised rare earth magnet system minimises the overall diameter of the driver allowing the D50 to be used in a narrow enclosure and with minimum separation from other drivers, while still allowing the use of a hollow central pole for an extended low frequency performance. The inherently low leakage of this arrangement also allows the driver to be used in close proximity to CRT monitors. An underhung edge-wound aluminium voice coil gives the best impedance match, and hence efficiency from the available magnetic flux while finite element design methods ensure that this flux remains constant throughout the gap

Magnetic fluid is used to stabilise the voice coil temperature with care being paid to the details of the pole design to prevent fluid separation under all conditions.

In order to keep the fundamental resonance of the driver well below the intended frequency band, the rear radiation from the diaphragm passes through a tapered hole in the central magnetic pole and into an inverted exponential horn. A graduated density fibre filling ensures that the wave is progressively



c125 LOW MID DRIVER (patent pending)

In keeping with the dome drivers in the rest of the Vivid range, the C125 has an anodised aluminium cone designed with the help of computer modal analysis to give the highest break-up frequency ensuring pistonic behaviour throughout the reproduced bandwidth.

Use of a large central dome helps to reduce the front cavity volume minimising the perturbations to the sound field from the higher frequency units.

Thermal management in the C125 begins with the use of a short coil in a long magnetic gap. The increase in magnet volume and the weight of the accompanying steelwork is the price paid for the superlative thermal performance which results from surrounding the 50mm diameter copper ribbon coil with cold steel throughout its range of linear travel. The generous thickness of high purity steel surrounding the coil also keeps the gap flux consistent along the whole of its length.

Where so many traditional driver chassis have taken the form of a metal cone with punched holes to 'let the sound out', C125 was designed from the outset to minimise the restriction of the emerging rear wave. To this end, the twelve struts of the diecast aluminium chassis have a width of just 3mm resulting in an open area in excess of 90%.

While the primary function of the chassis is to accurately locate the cone and coil assembly and suspensions to the magnet assembly, it also plays a vital part in the conduction and dissipation of heat from the motor system. The struts, while being slender in width, have a considerable depth and follow a parabolic area law





c225 LOW MID DRIVER (patent pending)

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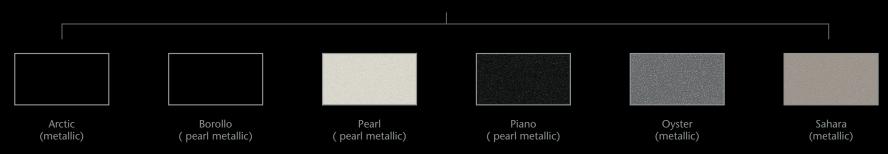
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Standard Finishes*



All VIVID AUDIO products are available in the finishes listed below. Special finishes however, are available at a premium. Although all efforts are made to ensure colour matching, VIVID AUDIO, its distributors, representatives, agents and retailers cannot be held responsible for variations that may occur in final production.



VIVID AUDIO and the VIVID AUDIO logo are registered trade marks. Patents registered on domed driver D26. Patents registered on domed driver D50. Patents registered on C125 bass-mid driver. Patents registered on compliantly mounted reaction cancelling drivers. Patents registered on reaction cancelling ports. Cabinet shape and construction techniques are registered designs.

All VIVID AUDIO products are in conformity with the EMC directive and the low voltage directive. Availability of models may vary from country to country.

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