Passive Speakers & Amplifiers

ESD
ESM
ESP

KV2 audio™

ESD Time Aligned Passive Speaker Range

The world is full of passive speakers using basic and often inefficient passive networks with the simple aim of offering an affordable easy to install solution when attached to any amplifier available. The results however are often far from acceptable due to poor phase coherency through a minimal crossover circuit and time misalignment between components. Add to this high distortion from low cost amplifier designs and you have a speaker highly susceptible to feedback with very poor fidelity. The growth of active speaker technology has provided suitable advances in resolving some of these issues, however there are economical advantages in installing passive speakers that can still provide high quality reproduction if done properly.

When KV2 Audio decided to add a passive line to our growing range of speakers we looked at how we could improve the design of a passive crossover network to achieve the best possible sound quality. Drawing on our deep experience in active technology we developed an analog delay line circuit that would provide time alignment and phase correction passively, substantially improving clarity and definition. Combined with our Active Impedance Control, the results are simply stunning.

Secondly we know that one size does not fit all applications so we had to ensure that a variety of models installed into a venue would not require multiple processors to try and achieve an even sound balance across the venue.

We carefully tailored the frequency response and sensitivity of each model so that they would simply compliment each other when installed in a venue with little or no outboard control. While matching frequency response and sensitivity, we also provided varied impedances for the different sized cabinets to suit a variety of applications.

Enclosed within Baltic Birch cabinets, the conservative aesthetic presentation and tactile feel create an atmosphere of quality that matches the audio performance. All in all, true to our philosophy of achieving the best sound quality possible, we have created in the ESD range, a speaker range that incorporates all of the economical and easy installation aspects of passive speakers without the need for expensive external processors.

KV2's unique passive crossover network

KV2's unique passive crossover network incorporates an extensive analog delay line (ADL) circuit to correct time alignment between components providing perfect phase coherency and clarity unheard from a passive speaker system before.

ESD Speakers have multiple M10 fly-points and a wide range of brackets for easy installation.

ESD5

The ESD5 is a very high quality 2-way full-range compact low profile passive loudspeaker with performance that defies its size. Delivering exceptional clarity for speech and program reproduction, the ESD5 is perfect for discreet installations and audio visual presentations where sound quality is paramount, but aesthetic dimensions are of equal importance. The ESD5's high impedance capability means that up to sixteen units can be run from a single suitable quality stereo amplifier, to provide a high fidelity background program throughout a venue.

New ESD25

The ESD25 is a very high quality 2-way full-range compact low profile passive loudspeaker with increased lower bass extension than the smaller ESD5. Its opposing driver design assists with pattern control of the low mid frequencies reducing reflections in reverberant spaces and improving intelligability. Delivering exceptional clarity for speech and program reproduction the ESD25 is ideal for under balcony or front stage fill applications in theatres and performing arts spaces where transparent supplementation of the main system is required. As with the already widely acclaimed ESD5 the ESD25 is shaped to fit discreetly into these applications and comes with its on integral bracket for quick installation.

		ESD5	ESD25
System Acoustic Performance	Max SPL Long-term	115dB	120dB
	Max SPL Peak	118dB	123dB
	-3dB Response	130Hz to 22kHz	120Hz to 22kHz
	Crossover Point	3.0kHz	3.0kHz
	Dimensions H/W/D	150 mm (5.9") x 316 mm (12.4") x 224.7 mm (8.84")	100 mm (3.94") x 432 mm (17") x 260 mm (10.24")
	Weight	7 kg (15.4lbs)	9.6 kg (21.2lbs)

ESD6

The ESD6 is a high quality 2-way full-range compact passive loudspeaker with output that defies its size. Delivering amazing clarity for speech and program reproduction, the ESD6 is perfect for discreet installations and audio visual presentations where sound quality is paramount but size also matters. The ESD6's high impedance capability means that up to sixteen units can be run from a single suitable quality stereo amplifier to provide a high fidelity background program throughout a venue.

ESD36

One of the more unique loudspeakers offered by KV2 Audio the ESD36 is a passive, full-range 3-way speaker system for speech and music reproduction. The ESD36 features a 6" driver dedicated to high-quality mid-range reproduction and a further two low frequency 6" drivers for enhanced bass extension. Alongside the same compression driver as featured in the popular EX6, the ESD36 offers comparable performance to many 12" cabinets with an enhanced vocal performance from this 3-way design.

		ESD6	ESD36
System Acoustic Performance	Max SPL Long-term	117dB	122dB
	Max SPL Peak	120dB	125dB
	-3dB Response	68Hz to 20kHz	65Hz to 25kH
	Crossover Point	2.0kHz	600Hz, 2.5kHz
	Dimensions H/W/D	390 mm (15.35") x 220 mm (8.66") x 240 mm (9.45")	730.5 mm (28.76") x 220 mm (8.66") x 244 mm (9.60")
	Weight	9.5 kg (20.9lbs)	17.6 kg (38.8lbs)

ESD10

The ESD10 is a compact passive 2-way, high output, full-range loudspeaker incorporating a 10" trans-coil woofer and a wide dispersion rotatable horn. The ESD10 provides a smooth hi fidelity response and delivers sound quality and level that is superior to many larger competing products. Ideal as a main system speaker or as and adjunct to a larger FOH cabinet to cover those hard to reach areas. The ESD10 is an all round affordable passive solution that simply exudes quality.

ESD12

The ESD12 is a high quality 2-way, passive full range loudspeaker that provides unmatched clarity and definition in a simple elegant package. The ESD12 utilizes a 12" trans coil woofer and the same 3" NVPD large format compression driver found in our flagship VHD products, which has one of the lowest distortion ratings on the planet. Combined with our unique delay line technology the ESD12 delivers a beautifully balanced, phase coherent and accurate compact, 2-way passive solution that is adaptable to a wide range of applications.

		ESD10	ESD12
System Acoustic Performance	Max SPL Long-term	125dB	127dB
	Max SPL Peak	128dB	130dB
	-3dB Response	65Hz to 20kHz	55Hz to 22kHz
	Crossover Point	1.8kHz	1.2kHz
	Dimensions H/W/D	514 mm (20.32") x 310 mm (12.20") x 324 mm (12.76")	619 mm (24.37") x 368 mm (14.48") x 368 mm (14.48")
	Weight	16.5 kg (36.38lbs)	23 kg (50.7lbs)

ESD15

The new ESD15 incorporates a unique coaxial 15″ transducer with a 1.75″ Nitride Titanium Neo Compression Driver on a wide dispersion 80 X 60 degree horn. While most coaxial speakers will cover the full frequency response, the ESD15's coaxial driver only covers bass and highs leaving the all important mid range to a 6″ neo speaker mounted on a large 80 x 60 degree horn. This resolves the issue of the 15″ driver trying to reproduce the all important mid range, a common problem with conventional coaxial designs.
The ESD15's unique design provides extremely flat, full range reproduction from a compact yet powerful package that out performs speakers twice its size, weight and price.

ESD1.12

The ESD1.12 is a passive version of the active EX1.2 12″ subwoofer and features the same high quality neodymium woofer. This subwoofer's low profile and size makes it ideal for discreet applications. With power handling of 600 watts the ESD1.12 is capable of delivering tight, fast, controlled bass response at high output levels from a compact cabinet.

		ESD15	ESD1.12
System Acoustic Performance	Max SPL Long-term	126dB	124dB
	Max SPL Peak	129dB	127dB
	-3dB Response	48Hz to 18kHz	38Hz to 150Hz
	Crossover Point	500Hz, 2.5kHz	80Hz to 150Hz
	Dimensions H/W/D	700 mm (27.55″) x 450 mm (17.71″) x 450 mm (17.71″)	379.5 mm (14.94″) x 800 mm (31.49″) x 400 mm (15.75″)
	Weight	35 kg (77.2lbs)	26.7 kg (58.8lbs)

ESD1.15

The ESD1.15 is a passive subwoofer system featuring a single 15" neodymium woofer with a 600 watt power handling capability. Offering peak SPL of 130dB the ESD1.15 produces considerable output yet in true KV2 style retains a compact footprint. Multiple units of ESD1.15's can be stacked together to create a powerful and scalable subwoofer system.

ESD1.18

The ESD1.18 is the passive version of the incredible active EX1.8. The ESD1.18 features a revolutionary VHD technology neodymium woofer. With power handling capabilities of 1000 watts it makes a firm foundation from which to build an incredibly powerful ESD system, or as a stand alone subwoofer to enhance any existing passive or active system.

		ESD1.15	ESD1.18
System Acoustic Performance	Max SPL Long-term	127dB	131dB
	Max SPL Peak	130dB	134dB
	-3dB Response	37Hz to 150Hz	30Hz to 150Hz
	Crossover Point	80Hz to 150Hz	80 to 150Hz
	Dimensions H/W/D	510 mm (20.08") x 550 mm (21.65") x 570 mm (22.44")	612 mm (24.1") x 700 mm (27.56") x 750 mm (29.5")
	Weight	34.2 kg (75.4lbs)	52 kg (114.7lbs)

ESM Time Aligned Foldback Monitors

For years people have been asking KV2 to produce foldback monitors that had the same sound characteristics as EX and ESD ranges. Many foldback wedges utilise on board active technology or bi-amping and external processing to achieve optimum output. At KV2 we opted for a full passive design utilising our revolutionary onboard analog delay for perfect phase coherency. This meant that single speaker leads only need to be run to each monitor, not power cables for active designs and no expensive external processing was required.

We also knew they had to be durable to handle the rigours of touring and the on stage environment of heavy feet and various liquids. A sturdy mesh grill was engineered for the range and a special acoustically neutral liquid resistant cover placed over the horn, along with specially coated water resistant woofers. The resulting ESM range of monitors makes performing a pleasure, delivering clarity and detail at high SPL from a robust and durable package.

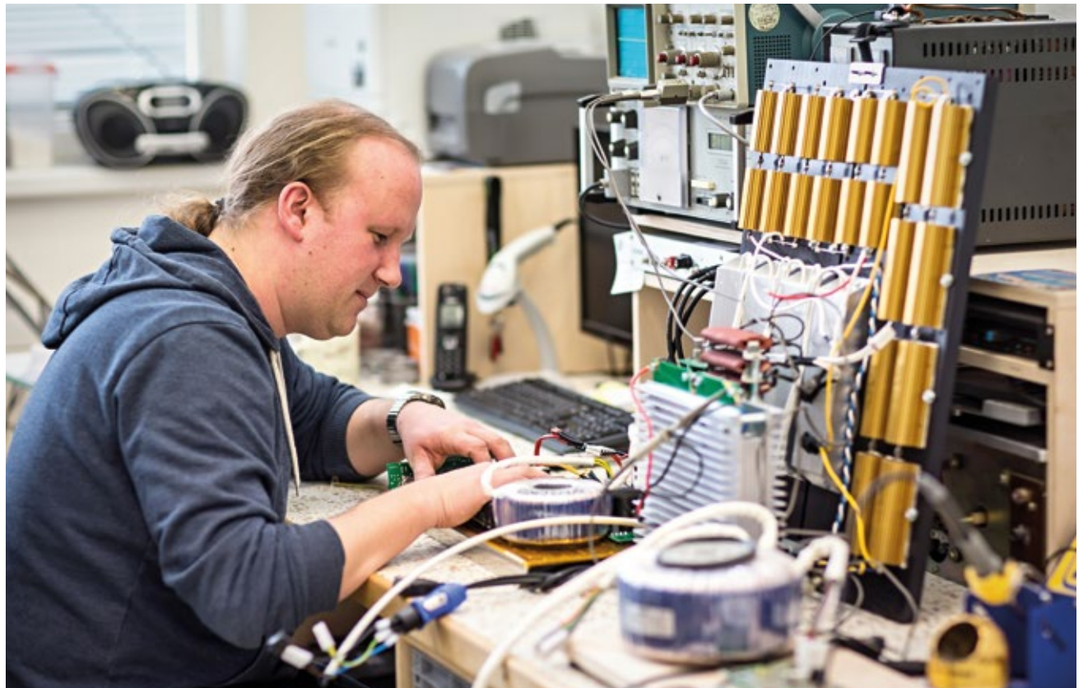
ESM26

The ESM26 is a purpose built stage monitor with incredible clarity and presence, especially in the all important vocal range. Incorporating two high quality 6" drivers and a 1.75" compression driver on a 100x100 degree horn flare. The ESM26 utilises KV2's revolutionary delay line technology for optimum output and feedback rejection. A full width bass port along the bottom of the cabinet couples with the floor to deliver bass response comparable to monitors twice its size. Under 400mm wide this small monitor takes up minimal room on stage and is ideal for visually critical applications like TV and theatre.

ESM12

The ESM12 is a full-range low profile 2-way, passive monitoring solution with a 12" trans-coil neo woofer and the same 3" NVPD large format compression driver found in our flagship VHD products. The ESM12 also features our revolutionary passive delay line, which dramatically reduces feedback. Housed in a professional Baltic Birch cabinet, with a protective Polymer coating and heavy-duty grill, the ESM12 can be utilized for FOH applications with the inclusion of a pole mount. Truly one of the most impressive monitoring solutions on the market today, the ESM12 is available in left and right configurations.

		ESM26	ESM12
System Acoustic Performance	Max SPL Long-term	123dB	127dB
	Max SPL Peak	126dB	130dB
	-3dB Response	70Hz to 16kHz	55Hz to 22kHz
	Crossover Point	2.5kHz	1.2kHz
	Dimensions H/W/D	337.3 mm /13.28" x 370 mm /14.57" x 454.5 mm /17.89"	368 mm (14.48") x 606 mm (23.86") x 368 mm (14.48")
	Weight	15 kg	23 kg (50.7lbs)



ESP High Definition Amplifiers

As speakers can only reproduce the quality of the signal they are fed the quality of the amplifier driving them is paramount to the resolution of the reproduction achieved. After we developed the ESD range, we knew it was important to design amplifiers that would provide the best possible results from these speakers. Our acclaimed amplifier topologies used in our active speakers were refined into two dedicated amplifiers, the ESP2000 and ESP4000. These amplifiers incorporate KV2 SLA design principles with exceptionally fast settling times and high quality toroidal transformers that create a dynamic, super-fast response resulting in extremely clean and smooth sound characteristics at all levels as well as providing very high feedback rejection. The ESP range of amplifiers will breathe new life into your speakers but its reproduction capabilities when combined with KV2's ESD range of speakers is truly remarkable. If you want uncompromised quality through a variety of different speaker solutions that integrate and combine seamlessly, then try the ESD/ESP combination from KV2.

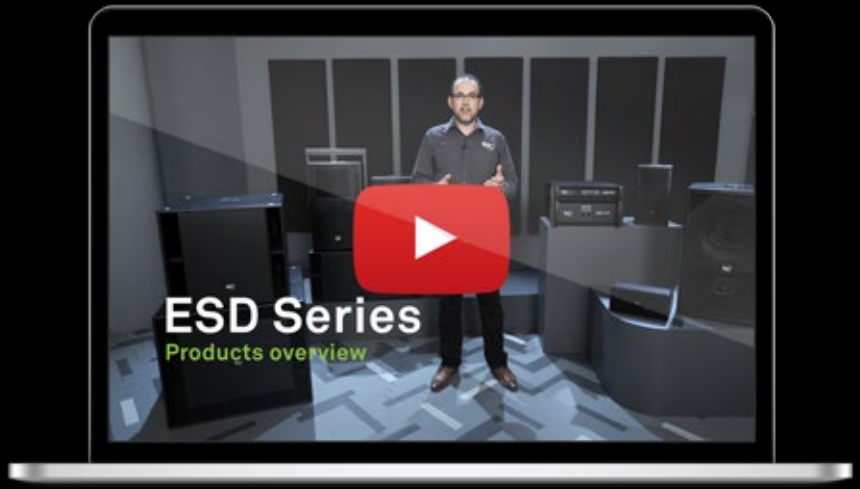
ESP2000

The ESP2000 two channel power amplifier incorporates KV2's SLA design principles, delivering very low distortion characteristics, even under extreme operation. Equally at home as a reference amplifier in a high-end recording studio or driving a large-scale live audio system, the ESP2000 is a sonically superb unit. Improving on the common Class A design, this superb Class H amplifier is built like a tank with an easy to clean filter system. The ESP2000 incorporates the same cooling system as other KV2 amplifiers where only the heat sinks are exposed protecting the internal electronics. Robust enough for the harshest touring or installation environments the ESP2000 will provide years of trouble-free performance, delivering absolutely pristine audio.

ESP4000

The ESP4000 is an ultra high definition 4-channel rack mountable power Amplifier. All the ESP4000 electronic circuit boards are first mounted on individual aluminum heat sinks, then on a secondary, internally sealed chassis that leaves only the heat sink fins exposed. Two shock mounted fans move air across the fins but never directly across the electronic components. This minimises maintenance cycles and improve reliability. Two separate power supplies ensure continuous delivery of full power. The ESP4000 is housed in a professional 4U road rugged steel metal case with aluminum handles and evenly distributed weight.

		ESP2000	ESP4000
System Acoustic Performance	-1dB Response	3Hz to 40kHz	3Hz to 40kHz
	Channel Crosstalk	>70dB	>60dB
	Signal to Noise Ratio	>115dB	>115dB
	Total Harmonic Distortion	<0.005% (1W) / <0.01% (clip -1dB)	<0.005% (1W) / <0.01% (clip -1dB)
	Dimensions H/W/D	88 mm (3.5"), 2RU x 483 mm (19.00") x 496.4 mm (19.54")	177.8 mm (7.0"), 4RU x 481.4 mm (18.95") x 495 mm (19.5")
	Weight	16 kg	37.5 kg (82.7lbs)



Watch our product videos on YouTube.
www.youtube.com/c/KV2Audiocom