

LOUD & CLEAR

KV2 AUDIO DEBUTS INNOVATIVE NEW PRODUCTS AT PRO LIGHT + SOUND 2013

Through one of Europe's coldest winters in recent history, we have been burning the candles at both ends at KV2 Audio. All the hard work has resulted in some brilliant new products that make their debut at Pro Light & Sound in Frankfurt this spring.

The new **K-RIG** draws on our tried-and-tested modular point source technology. This high output, actively-driven system, retains our renowned sound quality at a competitive and affordable price point.

The new **ESD15** passive three-way speaker system is one of the smallest of its type and delivers a big, full sound without the need of an added subwoofer.

Expanding our electronics range, we have delivered a technological breakthrough with the **SDD3 Delay Unit** which utilises our 20MHz PDM digital conversion for simply unmatched digital audio quality where time correction is needed for distributed audio signal. The new **COMPLEX System Controller** for use with our speaker systems, helps improve poor quality audio through our new special DHC - Dynamic Harmonics Control process, read all about it inside this edition of Loud & Clear.

The **SL Series** will once again be on demo outside Hall 8 at Pro Light and Sound, running with two of our double 21" subs. Last year it certainly caused a stir. No one could believe the output and clarity from such a compact system.

Pictured below: The SPL Meter hits 128dB at the SL demo in 2012.

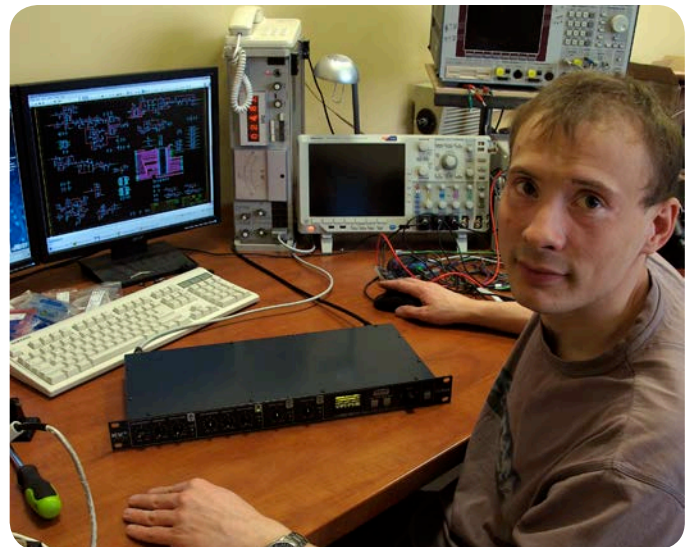


ESD15



KV2 RELEASE HIGHEST QUALITY DIGITAL AUDIO TECHNOLOGY EVER MADE!

Pictured Below: KV2 Engineer Radek Stohr, who headed the development of the SDD3 Digital Delay utilising 20MHz PDM conversion for digital sound that truly surpasses any other digital format.



K-RIG

The new K-RIG from KV2 draws from our popular ES Series, delivering high output from a compact, plug-and-play modular active system. It will rock your world at a price that won't rock your budget

KV²
audio

▶▶ Release at Pro Light + Sound, Frankfurt, April 10th 2013

K•RIG

ACTIVE DRIVEN MODULAR SYSTEM

The new **K-RIG** from KV2 embraces our tried-and-tested modular, *point source* technology, perfected through our popular **ES Series**. The **K-RIG** delivers output and clarity simply unmatched by *any* system at this price point.

The basic system consists of the **KT2.0**, a dedicated mid-high cabinet with a horn loaded 12" speaker and a large diaphragm 2.5" compression driver on a 80 x 60 horn. The KT2.0 has a frequency response of 180Hz to 20Khz and peak output of 137dB.

Bass frequencies are handled by the **KT2.15** which incorporates two asymmetrically opposed 15" drivers in a band-pass type sub. For maximum bass output two KT2.15 units can be used together or for extended low end response, a **KT1.8** single 18" sub can be coupled to the KT2.0/2.15 combination.

The **K-RIG** is a simple plug-and-play system with cables included in the **K-PAK** amplifier road case, which houses a 1.8kw sub amplifier, 1kw midrange amplifier and a 200-watt low intermodulation, class A/B amplifier for pristine highs. The **K-PAK** has level control for HF and LF along with a specially designed harmonic enhancer.

The **K-RIG** is the perfect solution where a quick ground stacked PA is required with the punch and clarity to cover the whole audience with ease.

SPECIFICATIONS

KT2.0

Max SPL Long-term	134dB
Max SPL Peak	137dB
-3dB Response	42Hz - 18kHz
Crossover Point	180Hz / 1.4kHz
Speaker Input	1 x Neutrik Speakon® - NL8
Height	700mm
Width	550mm
Depth	375mm

KT2.5

Max SPL Long-term	130dB
Max SPL Peak	133dB
-3dB Response	42Hz - 200Hz
Impedance	8Ω
Speaker Input	2x Neutrik Speakon® - NL4
Height	1000mm
Width	550mm
Depth	570mm

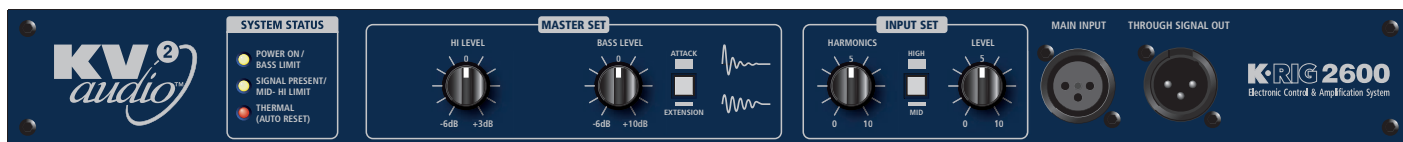
KT1.8

Max SPL Long-term	129dB
Max SPL Peak	132dB
-3dB Response	38Hz - 200Hz
Impedance	8Ω
Speaker Input	2x Neutrik Speakon® - NL4
Height	830mm
Width	550mm
Depth	570mm



K-PAK 2600





K-RIG 2600

The new **K-PAK 2600** which runs **K-RIG** has been developed from our original **E-PAK**, used with our popular **ES system**. Easily transported on a hand trolley, this amplifier pack comes in rugged case ready for the road, saving money on additional racks and cases.

It's unique design with large heat sink provides for optimum cooling, something difficult to achieve with normal rack mount designs. The large heat sink allows the electronics to be fully sealed from dust and other contaminants, ensuring reliability and low maintenance.

The **K-PAK** features high and low level controls along with a special bass extension circuit which varies the transient response of the bass program. It also includes a harmonics control which adds even order harmonics to increase presence and clarity when using the system with poor analog and digital sources.



SPECIFICATIONS

HF AMP

Class AB Push-Pull low inter-modulation Mosfet design with transformer balanced output

Rated Continuous Power	200W
Distortion	<0.05%
Operating Bandwidth	1.4kHz - 20kHz

MID AMP

Class H High Efficiency Low Distortion

Rated Continuous Power	600W
Distortion	<0.05%
Operating Bandwidth	180Hz - 1.4kHz

LOW AMP

High efficiency, Low frequency, Current-enhancing switch mode

Rated Continuous Power	1800W
Distortion	<0.05%
Operating Bandwidth	35Hz - 180Hz
Input Sensitivity	1.0V RMS
Input Impedance	20kΩ (balanced)
Speaker Output	NL-8 (Mid-Hi), NL-4 (Sub)
Power Connector	Neutrik PowerCon®

Operating Voltage Range
100-120V@60Hz | 205-240V@50Hz | 225-260V@50Hz
Recommended Amperage
20A 115V | 10A 230V | 10A 250V

ESD 15

SUPER COMPACT FULL RANGE THREE WAY SPEAKER

The new **ESD15 passive three way speaker** from KV2 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. New trends that use a coaxial mid/high driver result in the HF horn interfering with mid range response. The **ESD 15** also utilises KV2's special time corrected crossover network to provide optimum phase coherency, without the need of expensive external processors or compromising quality through DSP.

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.

Max SPL Peak	129dB
-3dB Response	48Hz - 18kHz
Recommended Power	500W
Sensitivity	97dB
Impedance	4Ω
Crossover Point	500Hz, 2.5kHz
HF Horn Coverage	80° x 60°

Throat Exit Diameter / Diaphragm Size	1" / 1.75"
Mid Horn Coverage Horizontal / Vertical	80° x 60°
Mid Speaker Size / Voice Coil Diameter	6" / 1.5"
Bass Speaker Size / Voice Coil Diameter	15" / 4"
(H)700mm x (W)450mm x (D)450mm • Weight	35kg

SPECIFICATIONS

NEW KV2 SOLUTIONS THAT IMPROVE AUDIO QUALITY



COMPLEX SYSTEM CONTROLLER WITH DHC

KV2's new **COMPLEX system controller** will be available exclusively for integration with KV2 speaker systems. This unit was developed after complaints from club owners regarding poor sound quality delivered by digital formats like MP3s. Incorporating our unique new process aptly named *DHC - Dynamic Harmonics Control*, the **COMPLEX** uses two special analog processes to improve sound quality.

The first is an *optical compressor*, the preferred tool of many engineers globally, due to their musicality and subtle compression characteristics. A light source and sensor are employed to control the gain reduction, and the characteristics of the photo cell make for very smooth compression without the rapid volume changes which can occur in other circuits. This optical compression circuit however is cleverly filtered to only affect certain frequencies which KV2 found to cause harshness in the digital signal. Bass frequencies and low mids are left untouched recreating warmth and fullness to the source. Users can switch between two different filters settings in compression mode to achieve the best sounding result achieved by simply raising the threshold knob to the required level.

The second part of the process is an *analog even-order harmonic generator*. This circuit adds harmonic content to parts of the signal to increase clarity and warmth, similar in ways to running through a valve pre amp. Working in conjunction with the compression circuit, the end result is a 'bigger not louder' more detailed audio signal that improves the audibility of the initial source considerably.



SPECIFICATIONS

-3dB Response	20Hz - 100kHz
Dynamic Range	>130dB
Channel Crosstalk	90dB
Signal to Noise Ratio	110dB
Total Harmonic Distortion	.001%
Input Impedance	20kΩ balanced
Output Impedance	50Ω
Level Control	-20 / +10dB
Equalisation	LPF 15kHz
Indicators	2 x LED Bar Graphs
Threshold	∞ to -20dB
Ratio	3:1
Compression Filters	Off/Low-Mid/Low
Indicators	2 x LED bar graphs
Harmonic Filters	High 1.4kHz, Mid 400kHz
Operating Voltage	115V / 230V



SDD3 DIGITAL DELAY FOR DISTRIBUTED AUDIO SIGNAL

The **SDD3** is a true technology statement by KV2. It utilises our ground breaking *20MHz PDM digital conversion process* developed for time alignment applications in our speaker range.

This super digital technology delivers clarity and detail equal to the finest analog equipment without the losses and distortion inherent in current PCM based digital converters.

The **SDD3** incorporates high quality line driver outputs to allow users to deliver pristine audio signal to delay speakers or under balcony fills over 100m from the source.

The ultimate choice for the distribution of time corrected audio signal, the SDD3 has two super digital channels that will deliver up to 400 milliseconds of delay. Each of these channels has an adjustable HPF and is easily programmed through the front panel menu where all settings can be stored and recalled for varying situations.

It also has a third channel with up to 10 milliseconds of delay for configuring cardioid subwoofer setups. Ideal for large stadiums, theatres, concert hall or any application where time correction is required to achieve optimum audio quality.

SPECIFICATIONS

-1dB Response	2Hz - 40kHz
-10dB Response	2Hz - 100kHz
Sampling Frequency	20MHz PDM
Dynamic Range	>105dB
Channel Crosstalk	90dB
Signal to Noise Ratio	105dB
Total Harmonic Distortion	0.005
Input Channels	2 + 1 Subwoofer
Input Impedance	20kΩ balanced
Max. Input voltage	+14dB
Output Channels	2 + 2 Subwoofer
Output Impedance	50Ω
Level Control	-10 / +10dB
Subwoofer Level Control	-10 / +10dB
System setup	Normal/Cardioid
Delay Range	0.012ms - 393.216ms
Full Range Mode	2 channels
Phase	0° / 180°
High Pass Filter	OFF to 200Hz
Memory	30
Operating Voltage	115V / 230V

SL412



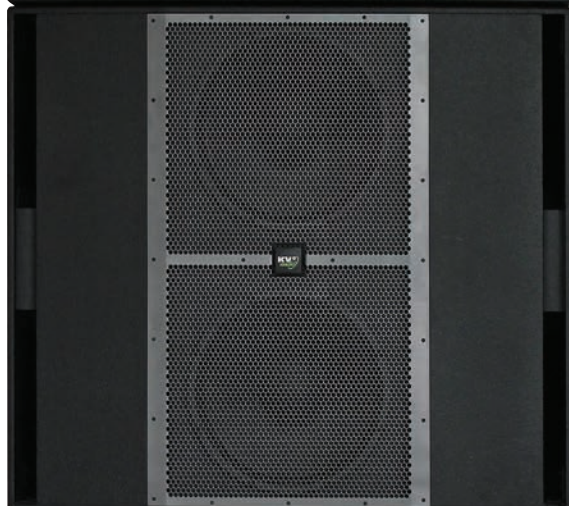
SL412 SHIPS WORLDWIDE

The new **SL412** slimline, wide-dispersion speaker system began shipping in September to Distributors who were keen to place it in front of customers - many of whom had read about it or saw it on demo in Frankfurt

While it is still early days, the initial reaction has been extremely positive as the box provides everything required for the high-end club install market, where both quality of sound and the overall look of the box is paramount. Without doubt the SL412 with its slim-design is one of the best looking cabinets we have designed, and again this has been highlighted by the positive response generated by both Distributors and their customers alike.

Stay tuned for news on SL412 installations on the website - as many are currently being written into quotes and designs around the globe.

SL2.15



SL2.15 BASS SYSTEM NOW READY TO SHIP

If you want to really get that mega-stack dance system - look no further than KV2's new **SL2.15** bass system which is the perfect addition to the SL412.

These double 15" cabinets provide tight, punchy bass and plenty of output. While their slim design matches the elegant look of the SL412, it does restrict the lower frequency reproduction. For *deep* low sub-bass we recommend that the SL2.51 is used with any of our 18" or 21" sub configurations. When utilised with the VHD2.21, the SL412 and SL2.15 deliver a five-way dance system that is truly impressive and should become a major contender in clubs around the world.



NOW AVAILABLE NEW CATALOGUE

Our new 48-page KV2 Audio Catalogue is now available. More than just a product catalogue - we detail the key aspects of our SLA Technology in this publication. Read the catalogue through to get an even better understanding of the factors that set KV2 Audio apart from the competition.

TRADE SHOWS 2013

KV2 has booked space at a number of major tradeshow around the world in 2013. These include:

PALME
Dubai, UAE
14-16th May 2013

INFOCOMM
Atlanta, USA
12-14th June 2013

PLASA
London, UK
6-9th October 2013

WE ARE ON FACEBOOK

You can connect to directly from our homepage or search for KV2 Audio. Please recommend our Facebook page to all your KV2 fans. It's a great way for us to keep people up to date with what's happening at KV2 Audio - quickly and at no cost... Please help us build the KV2 Audio community!





KV2 AUDIO'S VHD FOR CLASSICAL SUPERSTARS... **ALFIE BOE, HAYLEY WESTENRA & CS AUDIO**

Tasked with specifying a superior high quality PA system for the 23-date **Alfie Boe 'Bring Him Home' tour**, **Paul Hatt** of **CS Audio** began searching for the ultimate loudspeaker solution late in 2011.

Due to the huge trucking space requirement of a 31-piece orchestra, PA size was of upmost consideration as well as set up time with no opportunity to get it wrong in an awkward venue or allow several hours for a system engineer to re-calibrate and optimize the system each day.

Having worked extensively with many of the world's leading loudspeaker manufacturers, Paul was perfectly placed to understand what was out there and soon realized that a high quality point source solution was the best possible fit, not only for this tour, but for the type of venues he was visiting on a weekly basis.

His engineering of **Haley Westenra** had introduced him to the active **EX Series** of KV2 Audio some years earlier and VHD had been the talk of many of his industry friends, including **Geoff Clennell**, the Alfie Boe Tour accountant / Assistant production manager and **Tristan Mallett**, front of house engineer for the tour.

Upon specifying VHD, there was an initial apprehension as to whether it would cope with the larger venue sizes, predominantly running one mid-high box per side for the main auditoriums. Worries were allayed as **Jonathan Reece-Farren** of KV2 Audio demonstrated and explained the technologies behind KV2 Audio's *Super Live Audio* approach of delivering superior sound and transferring the atmosphere and emotion from a performance to the audience. Having also attended the first set up day in Bristol, Jonathan ensured that within 40 minutes the PA was unloaded, set up, and effortlessly filling the 2100 capacity venue.

As the tour progressed, even larger and more challenging buildings presented themselves, each time with a result that made both Alfie Boe and the audience smile. A visiting sound engineer at the Bournemouth venue emailing after the event to say it was the best sound he had ever heard in what is a notoriously difficult venue acoustically. A wake up call came three quarters of the way through the show when it was requested by a venue to use instead, their newly installed flagship line array system. Tristan Mallett commenting that "it had done a reasonable job, but there was certainly a very big difference in sound quality when we got the VHD back".

Since investing in VHD, the system has also been out with world famous soprano Hayley Westenra on her 2012 Tour. This is a new experience for FOH engineer Dave Preece adding "This is the first time I've used these speakers, and I was blown away with the clarity and coverage in some huge venues around the UK."

Commenting on his recent purchase, Paul Hatt added "Having had great results with KV2's EX Series products across a wide spectrum of projects, this led us to audition VHD when looking for a system to cover larger areas. We were pleased to find that same excellent sound quality, wide dispersion and even coverage is inherent in the VHD system, but we also had a requirement for a system that flies easily, throws a good distance and covers large events with fewer boxes, taking up less truck space - all of which VHD excels at. It also requires minimal set-up and is a great 'plug & play' solution. VHD has proven itself repeatedly as a useful and incredibly effective tool in our inventory and we are very pleased with our purchase".



KV2 ROCKS SINGAPORE'S WALA WALA BAR

The **Wala Wala Bar** is a popular live music Venue in the Bukit Merah district of Singapore. Like many venues in Singapore it is compact in size with a small stage, which at the Wala Wala is located midway in the long, but reasonably narrow room. The club runs live music most nights and the place packs out on Friday and Saturday night, so it needed a system that could get over the ambient crowd noise with ease while still providing clarity and atmosphere for the guests.

Mark Jason is house engineer and ensures the nightly acts are presented on a consistently high level. It was Mark's job to test systems from a number of distributors, but the KV2 system simply stood out from the competition. Mark was astounded by the amount of output the boxes produced yet all the while maintaining clear, warm, quality sound. Supplied by Singapore distributors, **Sindo Exports Pte Ltd**, two ceiling suspended ES1.0 speakers are supplemented by two floor mounted ES2.5 subwoofers powered by two PAK2500R amplifiers. Mounted via M10 suspension points, the three-way ES1.0 speakers provide good horizontal coverage. Mark says the reaction from the crowds and bands alike has been totally positive towards the new system.

The small stage meant that a compact yet powerful stage monitor was required. KV2 Audio had the perfect solution with four ESM26 dual six-inch monitors. Powered by an ESP4000 four channel amplifier, the ESM26 monitors have gleaned a multitude of praise from performers and made Mark's life so much easier. As one of the bands members commented "The best thing about these monitors is that you don't have to blast them to hear yourself. There's so much clarity without it being sharp."

KV2 AUDIO AT THE ASEAN HEADS OF STATE SUMMIT

In a recent high profile event at the **Rashtrapati Bhawan** (Hindi for President House), 240 musicians and dancers performed in a one hour extravaganza in front of the President, Prime Minister and the ASEAN Heads of State.

Local rental production company **Dhawan Electricals** supplied a single **KV2 Audio ES system**, and Director **Yogesh Dhawan** commented "The KV2 ES system proved it's worth as a compact, easy to use, excellent performer with awesome sound quality yet again."

The performance took place in the Ashoka Hall which is not very big in terms of depth, but most instruments were miked up "to give the audience a feel that almost everything is acoustic" stated Yogesh. "Thanks to the engineering at KV2 and the 20MHz processing, even at low amplification every detail is crystal clear, thereby giving the audience an effect of the sound they hear as almost acoustic."

The producers and designers of the show **Teamwork** also manage numerous international festivals including the Jaipur Literature Festival, Bonjour India Festival, META Awards and Indian Summer Festival among many others. They were so impressed with the sound that they have now stipulated that only KV2 speakers are to be used for all their projects.

KV2 Audio's Indian Distributor **Cinetekk – AG Acoustics** supplied the ES System to Dhawan Electricals. **Siddharth Sood** from AG Acoustics stated, "Dhawan Electricals are extremely happy with the system. They are adding a second KV2 ES System this month."

Yogesh Dhawan concluded, "I would like to thank KV2 for the excellent product they have created and I would like to continue spreading the word to who ever I meet."



FOUNDATION NIGHT CLUB SEATTLE + KV2



Opening in October 2012, the new Foundation Night Club in Seattle has rocketed into *DJMAG's TOP 100 Club* list. The club's main system consists of a **double ES rig** with a mixture of ES2.5 and 1.8 subs, installed by **Starborne Productions**, a major user of KV2 systems in the North West region of the USA.

Foundation has been hosting many of the world's leading DJs and rave reviews have confirmed that the KV2 system has more than met the task at hand. Installed on stage, EX12s and a EX2.2 sub ensure visiting artists get optimum monitoring that literally 'moves them' in the DJ booth. A mixture of ESD36s and ESD12s along with EX1.2 subs are positioned around the room to provide atmosphere in the front bar and chill zones.

KV2's US Distributors, **Lift Distribution** are located in the Seattle area and work closely with Starborne. Dave Christenson from LIFT commented, "The installation at Foundation by Starborne has been very successful and adds further credibility to the KV2 range which is coming up on the radar of some major club designers globally."

KV2 ESD10 SPEAKERS FEATURE IN NEW ZURICH 3D CLUB INSTALLATION

Local Zurich Pro Audio Installation company **PISO AG** recently installed **54 x KV2 ESD10** and **16 x KV2 ESD1.2** into Zurich's newest Event and Club venue, **Aura**. This high-profile installation utilized *Sonic Emotion's Absolute 3D sound technology*. Aura is a prestigious installation with a 360-degree visual environment, which provides the ultimate performance experience for both the entertainers and audience.

Stefano Trevisan, of **PLUSMUSIC AG**, KV2's exclusive distributor for Switzerland, added, "When it comes to the sound part of the installation, there were some important issues we had to consider and solve. The first was that the space between the screen and the walls was very limited. In a relatively short space we were to install a speaker, which would have high-quality sound, intelligibility, and of course power. The second issue related to the textile material the screen itself is made of, thus very sensitive to any air movement behind it that a speaker could produce."

KV2 Audio's European Sales Director comments, "After long conversations and testing by PLUSMUSIC AG staff and with the involvement of KV2's Technical Director, Andy Austin Brown a solution was finally found with KV2 ESD10."



KV2 Audio, Nádražní 936, Milevsko 399 01, CZ
Tel +420 383 809 320 Email: info@kv2audio.com
Web: www.kv2audio.com