



# References

**Theaters**

**Houses of Worship**

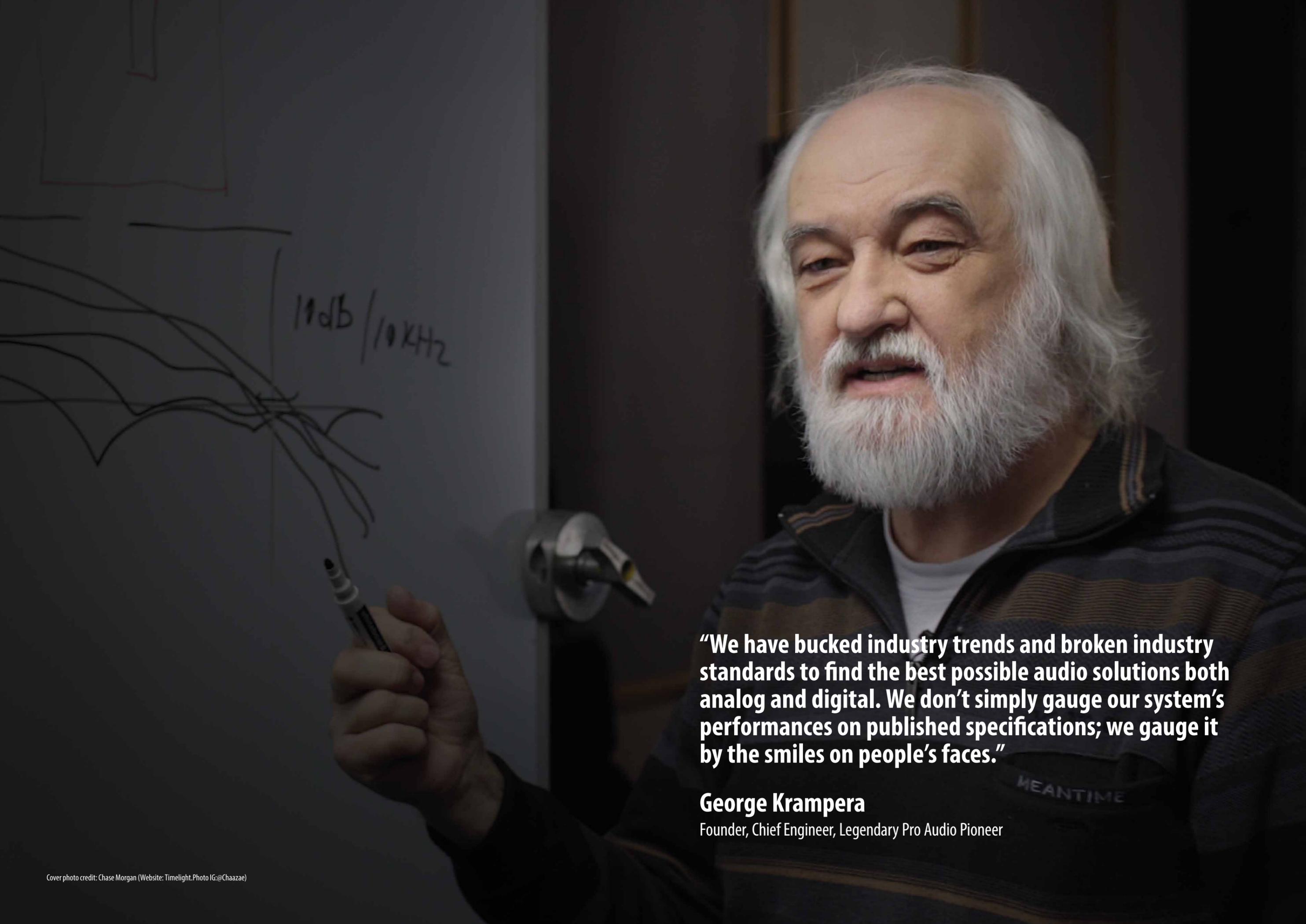
**Stadiums / Sport Arena**

**Live Events**

**Restaurants**

**Hotels**

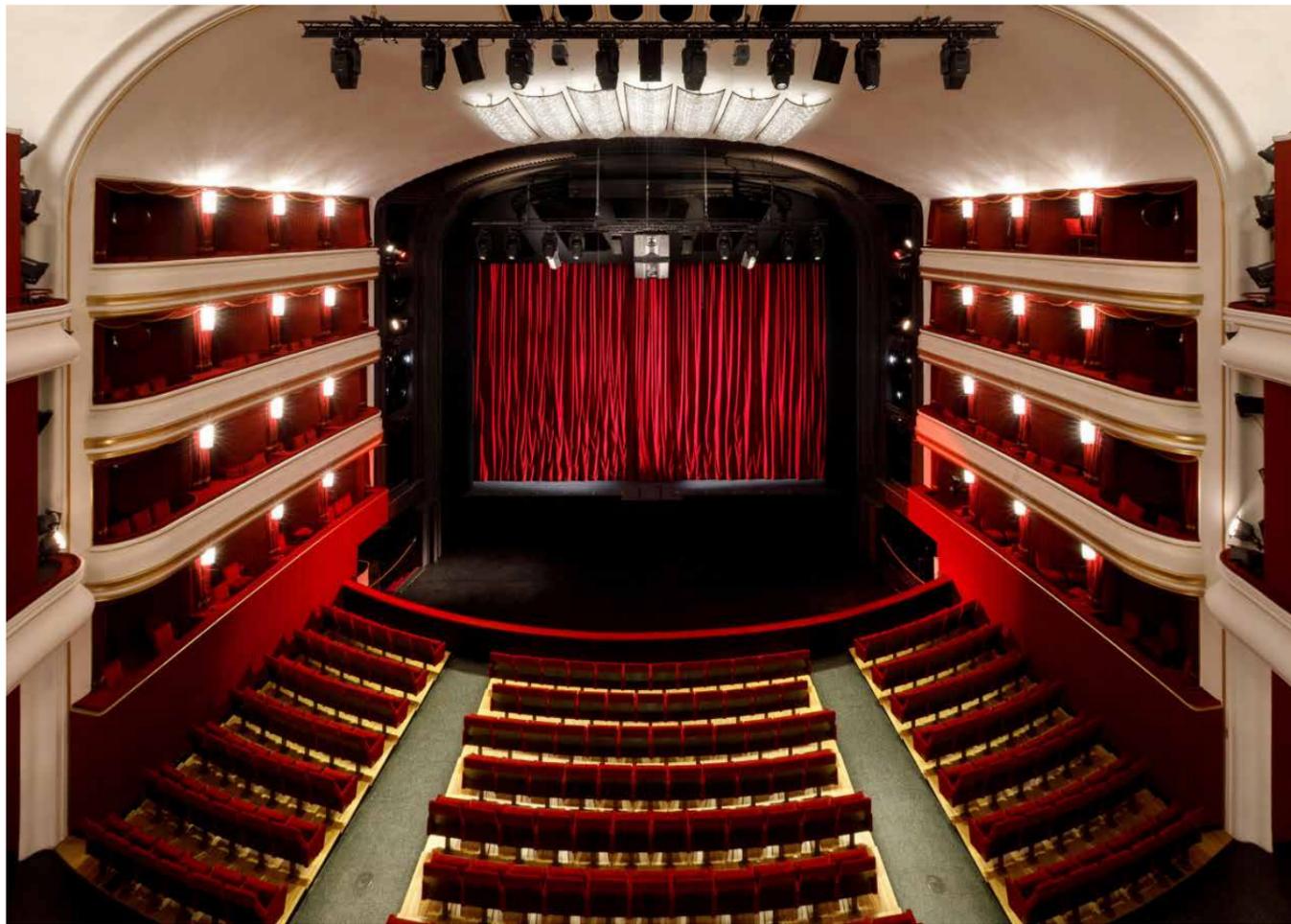
**Clubs**



**“We have bucked industry trends and broken industry standards to find the best possible audio solutions both analog and digital. We don’t simply gauge our system’s performances on published specifications; we gauge it by the smiles on people’s faces.”**

**George Krampera**

Founder, Chief Engineer, Legendary Pro Audio Pioneer



## Vienna Volksoper heralds new season with all-new KV2 system, Vienna, Austria

The Vienna Volksoper, or People's Opera, is Europe's leading operetta house and Vienna's largest theatre for opera, musicals, classical concerts and ballet. Indeed, Vienna Volksoper offers one of the most diverse musical programs in the country, ranging from Carmen to Kiss Me Kate, and Coppelia to Cabaret, as well as productions for schools, lots of local German operetta performances and much more besides. The venue is also the first in Vienna to open its doors to the public after the summer break, but more importantly in the wake of the COVID-19 crisis, with a performance of Strauss's Die Fledermaus on 1st September followed by a revival of Cole Porter's classic musical, Kiss Me Kate on 2nd September. Both will be benefitting from the pristine audio reproduction of a brand new, carefully designed KV2 audio system, which also happens to be the first ever to use KV2's new Control & Diagnostics Tool for remote system management and control.

The new sound system for the 1339-capacity venue was designed by Martin Lukesch, director of sound and media technology at Vienna Volksoper, which is part of the largest theatre organisation in the world. "Here, it's all about the music!" explains Lukesch. "As a repertory theatre with a hugely varied performance range – we can be staging a rock musical one night and a classical ballet the next – the demands on the sound system are enormous. Our season starts on 1st September and we have rehearsals every morning and performances every evening, non-stop, until 30th June. This was my starting point when it came to designing a new system. It had to be able to fulfil the needs of all the different types of show we stage and deliver the best possible audio experience for our audiences."

Lukesch had been a fan of point source technology even before coming across KV2, convinced that it was the solution for Volksoper, but he took a while to find what he was looking for. However, once he'd found KV2 – he particularly recalls the first time that he heard the VHD system demo'd at an outdoor stage at the Frankfurt Musik Messe – there was no going back. "I need point source loudspeakers for my designs, and KV2 makes excellent point source loudspeakers. Better still, they have a huge variety of sizes and formats. Whatever it is you need, KV2 has the right speaker for the job. So yes, when we decided to renew the sound system at Volksoper, for me it was an easy choice!" For the main system Lukesch selected three active, full-range ESR215S per side for the stalls, circle and upper circle. "I wanted a real full-range system with the -3dB point below 40 Hz," he says. "The ESR215 is ideal with its wide 110-degree horizontal dispersion and smooth frequency response across the range. We chose the S slimline version to minimise visual impact. The centre cluster comprises two SL412 active, wide dispersion loudspeakers flanked by an ESD10 and an ESD12 per side. Frequency and phase response are matched to the side system."

"There is also a second proscenium system of 12 smaller, wide dispersion boxes (ESD10s), mainly for sound effects. We have another effects system, known as 'The voice of God' located in the dome of the auditorium, which is two of the big ESR212s plus a full surround system throughout the theatre – there are at least 60 speakers, mainly ESD5s which are used for 'room simulation' to create ambience, or for special sound effects that require high diffusion. Finally, we have six more big point sources – ESR212s again – for the stage; if you

need thunder or explosions on or behind the stage, then you need powerful speakers on or behind the stage. The ESR212s are perfect, just as they are for the voice of God! There are also delays, frontfills, outfills and other speakers for effects or monitoring throughout the auditorium."

"The vast majority of our equipment is permanently installed," he continues. "We effectively have several systems in one, and it's much easier and faster for us to switch between shows when 90% of what you need is already in place. However, there are times when you still need to supplement with mobile systems, so we also have a large stock of additional point sources that we can use as required; we have ESDs in every size, from the tiny ESD Cube up to the ESD15, plus a number of ESM stage monitors."

When it comes to subwoofers, Lukesch hasn't stinted either. "You can never have enough subs!" he declares. "There will always be a show where you need more low end – sometimes you have to feel the bass and the seats need to shake! If your subwoofers are placed correctly, you can achieve that quite easily." Volksoper Vienna offers the ideal placement for subwoofers that can literally move the earth. Like many old buildings, heating and cooling is achieved via a double floor system; in the case of Volksoper, this means there is an entire room under the auditorium which is the perfect place to house earth-moving subs. Lukesch has opted for four of KV2's most powerful and dynamic subwoofer solution, the VHD4.21 active/passive system, for under the stalls, plus eight single 18-inch woofers under the balconies and two flown VHD2.18J dual 18-inch systems in the dome for the boxes. "With these solutions, we can really make audiences feel completely involved the performance, especially as we have wooden floors that react to the vibrations. If we wanted to make people believe they were experiencing an earthquake, we could. In fact, with the amount of power we've got, we could probably even create one!"

When it comes to amplifiers, Volksoper Vienna is the first installation to utilise KV2's brand new diagnostic, monitoring and control tool, which adds an essential level of comfort and security when managing a large, complex system. "In 2020, large installations like ours – we have 56 amplifiers in use full-time and five spare – have to be accurately controlled and monitored, or we simply can't operate efficiently," says Lukesch. "Our previous system used network-controlled amplifiers, which was perfectly reliable, but old technology. KV2's solution is most definitely next generation and offers us much more flexibility. All amplifiers, drivers and speakers are monitored in real time, so any anomalies are instantly located and reported. It also enables me to configure and switch between systems in no time. For example, for one show I'll be using small speakers, and for the next I'll have a completely different system with all of the subs involved. This enables me to load all of the amp settings for a particular show in just one click – it's virtually plug and play which makes my life much easier!"

"I'm delighted with the new KV2 system at every level. Our audiences deserve the best, and as far as I'm concerned, this is it."

Photo credit: Petr Zikmund

### KV2 Audio system setup

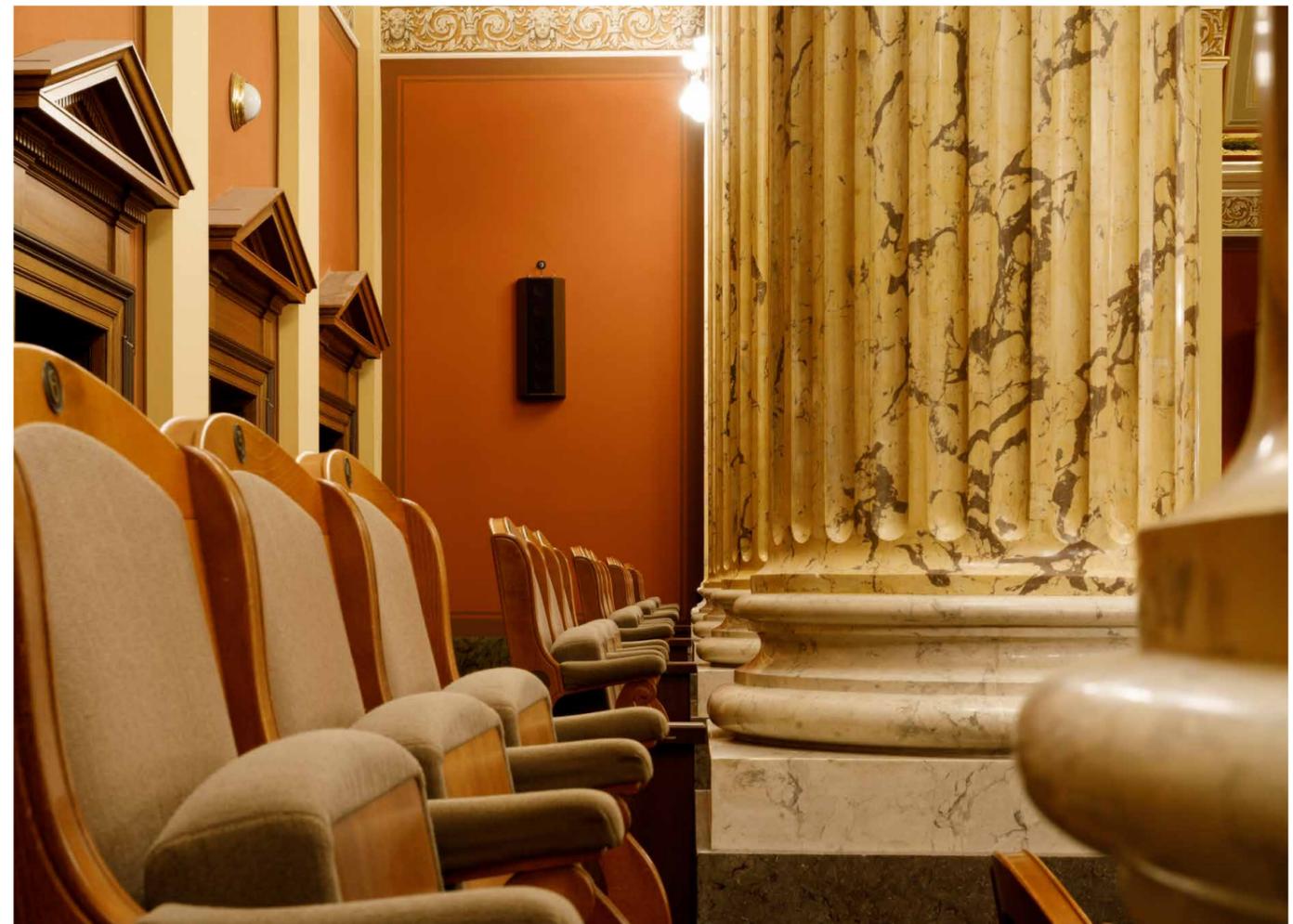
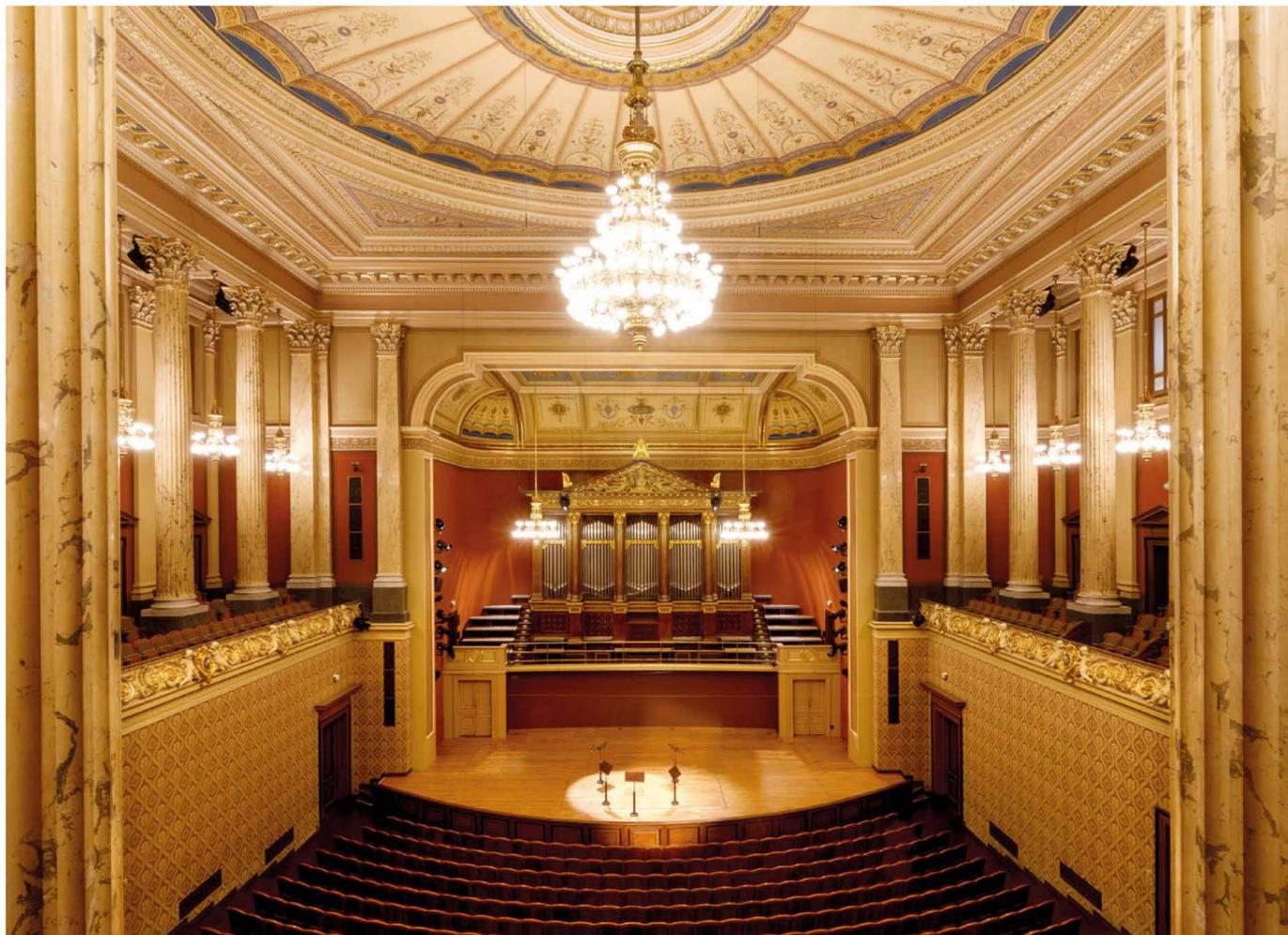
- 6x ESR215S
- 10x ESR212
- 2x SL412
- 2x ESD25
- 2x ESD12
- 10x ESD10
- 12x ESD6
- 6x VHD2.18J
- 2x VHD4.21 Active
- 2x VHD4.21 Passive
- 40x ESP2000D
- 6x ESR2800D
- 4x ESR3000D
- 2x SL3000D
- 7x VHD3200D



**“To believe that line arrays are the solution to all PA problems is simply wrong. In my business, where we compete every day with natural sound sources, the concept of using point source speakers is the true measure of all things in reproducing the highest level of that naturalness. They just need to be very good point source speakers.”**

**Martin Lukesch**  
*Head of Sound, Volksoper Wien*

**CALIFORNIA**  
**HOLLISTER**



## KV2 delivers tailor-made audio solution for Prague's most prestigious concert hall, Czech Republic

Conceived as a multi-purpose cultural centre combining exhibition rooms with concert halls, the Rudolfinum is one of the most architecturally remarkable buildings in Prague. It is also the home of the Czech Philharmonic Orchestra, which first performed in the Rudolfinum's world-famous concert hall in 1896 under the baton of Antonín Dvořák. Today it is still the most prestigious concert hall in Prague and offers a dense and varied program of exceptional classical music concerts. The 1,100-capacity Dvořák Hall, named after the famous Czech composer, is renowned for its remarkable acoustics and is sought after for its unique atmosphere and for recording classical works.

Ahren Prohmann, world-renowned producer, music director, and winner of several Grammy Awards, remarked after making a complete recording of Dvořák's symphonies in 2014 that none of the world's famous old halls, such as the Musikverein in Vienna, the Concertgebouw in Amsterdam or the Symphony Hall in Boston, have such a highly recognizable sound as the Dvořák Hall. The acoustics are characterized by a very long reverberation, most notably in the mid frequencies and the distinctiveness of the sound in the Dvořák Hall is enhanced by other unique elements, such as the construction of the auditorium.

For many years, however, sound masters have struggled with the reproduction of amplified speech, especially with intelligibility and even coverage of the entire space. Efforts to resolve this have always run up against limitations in technology and the very strict requirements of the Rudolfinum's listed building status, which do not allow technical installations that are not in keeping with the architectural aesthetics. "We have been struggling for a long time with insufficient intelligibility of the spoken word in the Dvořák Hall; it was never ideal due to the particular nature of the acoustics," admits Radomír Stöhr, technical administrator of Rudolfinum.

George Krampera, the world-famous designer of sound systems and the founder of the Czech company KV2 Audio, undertook the task of resolving these issues with his team. His career spans over five decades in the development of professional audio technologies, many of which have become industry standards. His company's philosophy is built on a unique technological approach, which is focused on achieving the highest possible dynamic range and the lowest possible losses caused by distortion and signal change when passing through individual parts of the sound chain. "Our technology respects many factors that are important for sound quality, whether we are talking about electronic integrity, sampling of digital systems, pulse response, dynamic range or acoustic design," says Krampera.

David Mareček, CEO of the Czech Philharmonic, also welcomed the cooperation with KV2 Audio: "We have excellent experience with KV2 sound systems, in particular with the annual Open Air concert, which heralds the end of the Czech Philharmonic's concert season in June. It is traditionally broadcast live on Czech Television."

The physical constraints of the building meant that the spaces available for loudspeaker placement were

not optimal for standard loudspeaker coverage patterns, so a bespoke solution had to be developed. The team, led by George Krampera, designed and built a fully customized system, not available in the KV2 catalogue, with custom horns designed to meet the unique dispersion requirements of the room. Equal emphasis was placed on both controlled dispersion and minimizing the effects of reverberation from above, by designing the system in such a way that it would not disperse towards the ceiling, but play directly towards the audience.

Built into the fabric of the building where possible the stalls are covered by two three-way custom install passive column systems with very high resolution and controlled dispersion, equipped with six 10" speakers for low-mid frequencies, two 5" for midrange and one 1" speaker for highs. The balcony is served by a similarly designed three-way system with additional custom sidefills comprising four 6" speakers for low-mids, one 5" speaker for mid-high frequencies and one 1" for highs.

Two ESP4000 amplifiers provide amplification for the passive full-range speakers in the Dvořák Hall, and two analog SAC2 analog controllers provide sound processing.

"At KV2, we try to minimize the distortion of the entire electroacoustic chain, which is why we have maintained the complete signal path in the highest possible, fully analog quality. We completely avoid any digital processing here, which really helps" emphasizes Krampera.

The sound booth for the Dvořák Hall is equipped with a pair of active EX6 speakers from the standard KV2 production portfolio and a Soundcraft analog mixing console, which has been specially modified in KV2's labs for high-resolution sound. The choir benefit from a pair of passive ESD10 monitors, as well as a pair of ESD6s in the backstage area, all powered by ESP amplifiers.

"I am very proud of the work of my team who faced difficult conditions with this assignment, necessitating a majority of tailor-made, unique solutions. We were able to capitalize upon our many years of experience in building sound systems and fully respect the technological principles on which our company stands in order to deliver the audio experience they have been dreaming of for so long," adds George Krampera.

In the vast majority of cases, the new sound system is used to reproduce the spoken word. Audiences and technicians alike are thrilled with the results, especially for televised broadcasts.

Photo credit: Petr Zikmund



**“KV2 offers an accuracy and transparency practically unequaled in the professional audio system market today.”**

**“I can’t say enough about KV2 Audio’s exceptional audio speaker products and systems. I have been extremely pleased with the incredibly pristine sonic and robust build quality of every product I have had the pleasure of using. They offer an accuracy and transparency practically unequaled in the professional audio system market today. In addition to superb audio quality, the cost effectiveness of the KV2 point source system verses a line array system is also something to seriously consider when specifying a system.”**

**John Shivers**  
Sound Designer  
Tony Award Winner

**Kinky Boots, Royal Alexander Theater, Toronto, Canada**

KV2 Audio is extremely proud to have the ESR series, (ESR215, ESR3000) delivering the experience of a lifetime at the Royal Alexander Theater in Toronto via the incredible production of Kinky Boots. The current show has already been extended because of enormous interest and demand. Live performances require a response that will deliver extreme intelligibility, whilst remaining natural, warm and full to all audience members. No other system, regardless of size evidently could provide such results.

Kinky Boots is a captivating show, filled with energy, dynamism and an engaging story drawing attention with an eye popping design. For such a performance to deliver this complete circle of pleasantries, it is a very satisfying experience to acknowledge that the KV2 Audio ESR system in place is a strong and important part of such a complex puzzle.

The KV2 Audio ESR series was hand selected by the audio engineers who put their names to the performance, and did so with condence after having taken due diligence in sampling countless manufacturers and series of each Loudspeaker system. The added benefit, welcomed by all, was the small footprint, ease of installation and simple configuration for the venue filling sound system. Being able to do more with less was yet another show stopper which KV2 Audio was able to deliver upon.

*“I continue to be impressed with the overall sound quality of the ESR215. They are capable of accurately reproducing extremely natural sounding vocals and solid, tonally balanced music at pretty much any SPL,”* says John Shivers, the main sound designer for the production. *“With excellent performances, from the actors on stage and the musicians in the pit, the system sounds nothing less than spectacular”*, adds Shivers.

The design team for Kinky Boots includes Tony Award nominee David Rockwell (Scenic Design), Tony Award-winner Gregg Barnes (Costume Design), Tony Award-winner Kenneth Posner (Lighting Design), Tony Award-winner John Shivers (Sound Design), Josh Marquette (Hair Design), Stephanie Gorin and Telsey + Company/Justin Hu, CSA (Casting), with Musical Supervision and Arrangements and Orchestrations by Tony and Grammy Award-winner Stephen Oremus.

**KV2 Audio system setup**  
2x ESR215  
1x ESR3000



## Cirque du Soleil, New York, US

Playing at the Lyric Theater, PARAMOUR features three stereo sets of ESR215 Full Range Enclosure – one for each of the three levels of seating. For low end reinforcement, the installation features 4x VHD2.16 double 15" subwoofers flown from the balcony level truss, and two pairs of VHD1.21 double 21" subwoofers – one pair located in the box seating area of the dress circle and the other pair located in the orchestra pit. For fills, surrounds and imaging support, there are two SL412 three-way wide dispersion speakers alongside an extensive distributed network of ESD5 and EX6 fills.

The KV2 systems were specified for PARAMOUR by Tony Award winning sound designer John Shivers and long-time collaborator David Patridge in association with Masque Sound. Shivers and Patridge have previously specified ESR215 systems for KINKY BOOTS in Toronto, London and New York. On DAS WUNDER VON BERN in Hamburg, Germany they put together a comprehensive system comprised of SL412, SL2.15 and a large number of EX6 and EX12 speakers for fills and surrounds.

*"We continue to be very impressed by the horn design in both the ESR215 and SL412. It provides a very true 110°x40° coverage with very little falloff around the edges and a clarity and coherency which is unparalleled in other products with a similar power rating," says Patridge, adding "the ESR215 offers a really rich powerful low end which practically negates the need for subwoofers other than for extreme low-end extension."*

With a seating capacity of 1,896 the Lyric is the second largest theater on Broadway – great for the acrobatics that Cirque du Soleil is famous for. While a line array would be the go-to choice for the majority of designers in such a space, Patridge explains, "Our major worry in shifting away from line array system designs was the lack of vertical pattern control on point source boxes and how the overlapping ESR215 coverage would interact within the room. We have grown used to being able to reduce the interactions of systems in the vertical domain by manipulating array geometry and certainly sound system alignment principals dictate that overlap is a bad thing generally. In truth, the shorter line arrays that we use in theatre don't offer much pattern control in the low-mid and low frequency range and so we can only avoid overlap in the high end. This leads to a confluence of muddiness that can tend to overwhelm the clarity of the system and with point source, you get 100% of the frequencies overlapping! While the shorter wavelength frequencies suffer some cancellation effects in the overlapping zone, the precedence of SPL for each zone i.e. if you're in the Orchestra Level, the overlap from the Dress Circle level will occur at lower SPL and therefore its importance to the ear is lessened vs the closer, higher SPL of the Orch. system. The 'musicality' of the full-range overlapping signal is much less of an issue than we envisioned. Hey... it's what we used to have before the line array and it wasn't all that bad!"

### KV2 Audio system setup

- 62x ESD5
- 3x ESP4000
- 6x ESR215
- 3x ESR3000
- 12x EX6
- 2x EX12
- 2x SL412
- 1x SL3000
- 4x VHD2.16
- 4x VHD1.21
- 3x VHD3200



**"KV2 has returned Point Source Speakers to their rightful place as the best possible solution for audio clarity, soundstage and spectral balance."**

**"KV2 has returned point source speakers to their rightful place as the best possible solution for audio clarity, soundstage and spectral balance. Products such as the ESR215 have reinvented our ability to provide audiences with unsurpassed detail in the mix - a major improvement over the small and medium format line arrays which we have been using in the theatre over the past 15 years. The low extension available in the 215 practically makes subwoofers optional and I still look forward to the reactions that I get from fellow audio professionals when I demonstrate our KV2 rig."**

### David Patridge

*Production Sound Engineer, Associate Sound Designer, Mixer*



## THE LION KING on Broadway Celebrates its 20 Year Anniversary With a KV2 Audio Upgrade, New York, US

After 20 landmark years on Broadway, THE LION KING continues ascendant as one of the most popular stage musicals in the world. Since its premiere on November 13, 1997, 24 global productions have been seen by more than 95 million people. Produced by Disney Theatrical Productions (under the direction of Thomas Schumacher), THE LION KING is the only show in history to generate six productions worldwide running 15 or more years. The internationally acclaimed, six-time Tony Award® winning Broadway musical, and highest-grossing Broadway production of all time celebrated its 20th Anniversary on Broadway in November, 2017. The production, which first opened in 1997 at Broadway's New Amsterdam Theatre, moved venues to the nearby Minskoff Theatre, where it has been since 2006. Performing eight performances a week, THE LION KING is the third longest running production in Broadway history, surpassed only by *Chicago* and *Phantom of The Opera*, the latter of which entered its 30th year in January 2018.

The Broadway score features Elton John and Tim Rice's music from The Lion King animated film along with three new songs by John and Rice; additional musical material by South African Lebo M, Mark Mancina, Jay Rifkin, Julie Taymor and Hans Zimmer; and music from "Rhythm of the Pride Lands," an album inspired by the original music in the film, written by Lebo M, Mark Mancina and Hans Zimmer. The resulting sound of THE LION KING is a fusion of Western popular music and the distinctive sounds and rhythms of Africa, ranging from the Academy Award®-winning song "Can You Feel the Love Tonight" to the haunting ballad "Shadowland."

The 20th anniversary system overhaul was a collaborative design effort by Steve Kennedy, John Shivers, Hugh Sweeney and David Patridge. As the show did not halt performances for this overhaul, the team had to install the system in phases on "dark days" so as to not disturb the performers and showtimes. On completion, Shivers remarks: "We have received positive comments from pretty much everyone involved with THE LION KING's 20th anniversary. Mark Mancina (composer) and Dave Metzger (orchestrator) both commented that the sound of the production was the "best we have ever heard on any production of THE LION KING". This is nothing new of course... frequently, fellow audio professionals, musicians, producers and audience members hear KV2 speakers and comment on how amazing they sound."

Shivers remarks: "THE LION KING and much of its success can be attributed to the beautifully composed, orchestrated and executed music. The subtlety, nuance and wide dynamics in the score, vocal arrangements, orchestrations and effects all lead to an evocative and at times visceral experience. The newly installed system enables us to accurately present every detail as it was intended. The KV2 system reveals every nuance."

The Minskoff Theatre stands in the very heart of New York's Times Square, with spectacular views across the urban landscape. As you enter the room, the large size is immediately striking as Broadway houses can often be quite small in comparison. Where typically a large format Line Array system might have otherwise been applied in an equivalent sized installation, the physical size of the KV2 system appears very neat and surprisingly unobtrusive in the room. The main system, is a dual hanging A/B left and right



comprising of ESR215 full range three way cabinets, with a center cluster of 4x SL412. The balcony delays are again an A/B L+R hang of ESR212 with an A/B center cluster of 2x SL412. As under-balcony fills and throughout the theater there are hangs of EX6, ESD6 and ESD10. On his experience with the system, Mixing Engineer Alain Van Achte adds "the detail and accuracy of the KV2 system makes mixing the show easier and more rewarding. I am able to hear more nuances and respond accordingly. As if I were listening to reference monitors for example. I am confident that with the KV2 system I am delivering the soundscape that has been envisioned for THE LION KING."

On the decision to hang the system with a dual hang configuration the designers commented: "For THE LION KING in New York we wanted to maintain many of the original design concepts, one of which was the A/B speaker system design. This offers the advantage of minimizing the phasing effect that occurs when two open omnidirectional microphones are presented to the same physical speaker cabinets at the same time. When the actors microphones are combined acoustically through the redundant speaker systems, as opposed to electronically, the objectionable phasing artifacts are greatly reduced."

This production marks the 10th show design for Shivers using KV2 and now represents a history built on success implementing the product. On these repeated specifications, Shivers remarks "I have been a fan of KV2 since I first heard and subsequently specified them on the Stage Entertainment production of Das Wunder Von Bern in 2013. The Point Source design offers precise clarity and musicality that few if any other profession speaker systems currently achieve". It is like using a 'hi-fi reference speaker' for a pro-sound application."

This questioning and re-education of the best approach to modern day system design in theatre sound is one that KV2 users are regularly undergoing, with results confirming that Point Source technology, when executed well, is the superior approach to achieving transparent natural sound. "George has one of the largest anechoic testing chambers in Europe and he is meticulous in ensuring that drivers, horns, cabinets and amplifiers work together to provide a series of speakers which are second to none. I would say it is the attention to meticulous detail which differentiates the KV2 loudspeakers from the rest," adds Patridge, "KV2 speakers are designed as a comprehensive system of custom components, cabinet designs and amplification with a holistic approach. George Krampera Sr. has a long track record as a transducer designer and even his historical designs for manufacturers (such as RCF and B&C) are very much in demand by other loudspeaker manufacturers. When compared to deploying a Line Array system, KV2 offers similar coverage and SPL, but with a greatly reduced physical footprint, weight and cost."

In addition to the flagship New York City production, THE LION KING, is also touring the US with KV2's EX and ESD lines. The Broadway production continues with 8 performances a week to consistently sold out crowds.

Photo credits: © Joan Marcus

### KV2 Audio system setup

8x ESR215  
6x SL412  
4x ESR212  
28x ESD6  
4x ESD10  
5x EX6  
3x SL3000  
6x ESP4000  
2x ESR2800  
4x ESR3000



## Pretty Woman Opens on Broadway to Rave Reviews Powered by KV2 Audio, New York, USA

Following a successful limited run world premiere at the Oriental Theatre in Chicago in March and April of 2018, PRETTY WOMAN – THE MUSICAL made its expected move to Broadway in the summer of 2018 enhanced by a comprehensive Point Source audio system from KV2 Audio.

During four weeks of preview performances at the Nederlander Theatre, it became clear Broadway was in for a treat. Even before it's official opening on August 16, 2018, the musical broke the Nederlander Theatre box office record for an eight-performance week.

Based on the 1990 film Pretty Woman, the book for the musical was written by the film's director, the late Garry Marshall, and screenwriter J.F. Lawton. PRETTY WOMAN – THE MUSICAL opened on Broadway in August 2018, directed and choreographed by Jerry Mitchell and featuring an original score with music and lyrics by rock icon Bryan Adams and his songwriting partner Jim Vallance. Orchestration was by Will Van Dyke with sound design by renowned Broadway sound designer, John Shivers, and long-time collaborator, sound designer and audio engineer, David Patridge.

Having used KV2 Audio gear for more than 10 Broadway musicals - including the audio refit of THE LION KING - Shivers and Patridge once again chose KV2 because of the extraordinary high quality, definition, ease of deployment and economy. They specified a system based around KV2s powerful and dynamic SL412 point source speaker system for the center and two actively driven, narrow footprint full range ESR215s at left and right and supplemented by a variety of application-defined loudspeakers from the KV2 portfolio, including the passive ESD Series and the active EX Series.

According to Patridge, "Working in Broadway theatre is always a challenge physically. Locations for speakers are often dictated by architecture such as box seats and sight lines. Fortunately, the narrow width of the ESR215 is a real asset. It has become our go-to loudspeaker for a main system at the proscenium."

Shivers and Patridge also commented on the benefit of Point Source design:

According to Shivers it can be distilled to "Clarity, clarity, clarity. The challenge is always to make it sound good for everyone, from the on-stage performers, to the orchestra, to the audience. As is typical with every design for musicals, the devil is in the details."

Patridge adds, "Clarity and detail of the soundstage is most noticeable. Point source also ends up being more economical and easier to deploy in a theatre environment. Another benefit is the rejection of feedback when forward of the PA as compared to a line array. On PRETTY WOMAN this came in handy because much of the action is staged on a passerelle located where the railing of the orchestra pit would normally be – downstage of the speakers! We find KV2 loudspeakers are closer to working with something hi-fi."

KV2's superior audio has been received well by everyone involved with PRETTY WOMAN – THE MUSICAL. Says Shivers, "We got raves from everyone involved. Everyone from the producers to the director, choreographer, music supervisor, orchestrator/arranger and music contractor has commented on how amazing the system sounds. The smiles on the faces of the patrons and critics confirms it."

Results from PRETTY WOMAN – THE MUSICAL once again verify that point source technology, when executed well, is the superior approach to achieving transparent natural sound in the theatre environment.

Photo credits: © Matthew Murphy, 2018

### KV2 Audio system setup

- 3x ESD36
- 58x ESD5
- 9x ESP4000
- 2x ESR215
- 2x ESR3000
- 14x EX6
- 2x EX10
- 2x EX15
- 2x SL412
- 2x SL3000
- 4x VHD2.18J
- 3x VHD3200



## Mamma Mia Musical, London, UK

Having delighted audiences since its debut in 1999, Mamma Mia! has embarked on its first ever UK tour and it is with great pride that we can report that KV2 Audio loudspeakers have been chosen to replace the outgoing Line Array system for yet another high-profile Theatre production. As part of the Creative team behind the original West End production, renowned Sound Designer Bobby Aitken decided to "Take a Chance on KV..." for the tour.

Bobby's notable West End and Broadway credits include Dirty Dancing, We Will Rock You, Grease and Ghost amongst countless others and he was the Sound Designer for the Opening and Closing Ceremonies of the London 2012 Olympic / Paralympic Games as well as consultant for the Sochi 2014 Winter Olympics and the 2016 Opening Ceremony in Rio.

The Mamma Mia! International Tour has been on the road for almost eleven years. It is an English speaking version and was designed to play territories that could not justify an "own language" production. It has toured very successfully through Europe, Asia and the Far East playing mainly arenas and the larger soft-seat theatres. Last year, the producers decided to bring the package home and to re-format it for a two year U.K. tour. One of the principal areas they looked at changing was the loudspeaker package. The tour takes in a wide range of venues of different sizes and layouts. As such Bobby and the design team needed to come up with an equipment "tool-box" that could handle any eventuality. After evaluating much of the rest of today's Loudspeaker market, Bobby was recommended to audition the KV2 product ranges. Following a critical listening session, Bobby and the team decided unanimously to specify KV2 Audio for Mamma Mia!"

### KV2 Audio system setup

4x ESR215  
2x ESR3000  
4x EX15  
2x EX12  
2x EX10  
6x ESD6  
16x ESD5

**"It's often hard to find the vocabulary to express the listening experience... The system sounded sensational – almost too good to believe."**

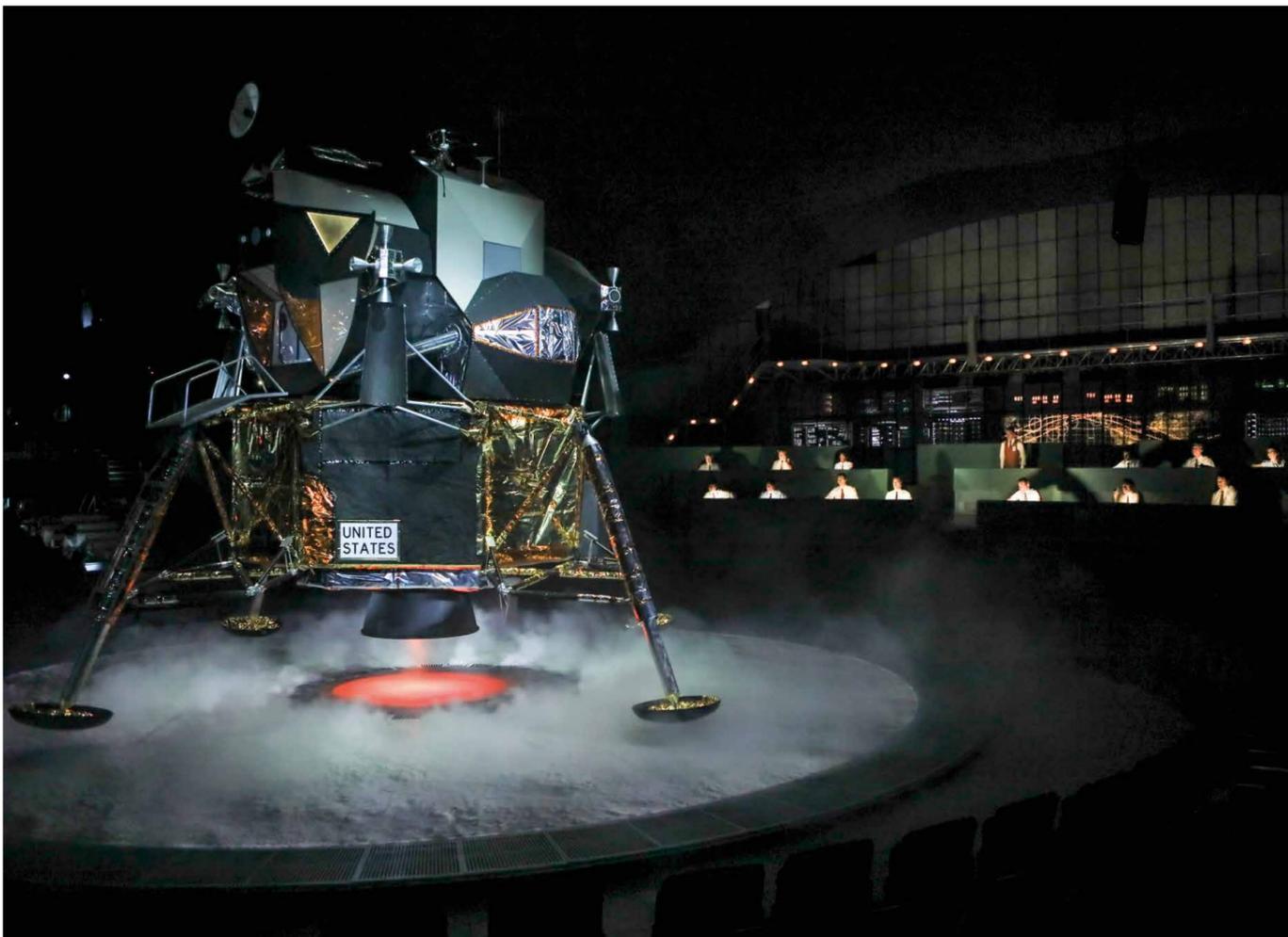
**The Mamma Mia! International Tour had always used Line Array, but for some time I had been keen to move away from this technique, as I have become increasingly aware of the compromises. Around this time a well-respected friend of mine invited me to hear a KV2 System that he had specified for a Broadway and West End show. The system sounded sensational - almost too good to believe. Two weeks later we were on a plane to visit KV2 in the Czech Republic and after two days of critical listening to both recorded program and live musicians, we agreed to specify KV2 for Mamma Mia!**

**It's often hard to find the vocabulary to express the listening experience, however, I would describe the effortless manor in which the sound is developed by the system, even over distance and with a refreshing "airiness" or "openness" about the HF. The room never feels "too loud".**

**Bobby Aitken**

*Sound Designer*

*43rd Annual Daytime Emmy Awards Winner*



## KV2 Audio takes audiences to the moon and back with APOLLO 11, Pasadena, CA, US

As the world celebrates the 50th anniversary of the moon landing in 1969, a new play endeavours to recreate the thrill of this historic event with a unique, immersive theatrical experience. APOLLO 11 tells the story of the 400,000 men and women who worked to accomplish this extraordinary mission.

Told through the eyes of a retired NASA aerospace engineer as he recounts the story to his teenaged granddaughter, APOLLO 11 is staged in ground-breaking, purpose-built venue that plays host to twenty actors, 40,000 square feet of 360-degree video projection, a life-sized rocket and a powerful KV2 Audio sound system designed by renowned Broadway and West End theatre sound designer, Bobby Aitken, and supplied by Stage Sound Services in Cardiff. The first run has just finished in Pasadena, CA, with the next shows scheduled in Houston, TX in December.

*"This was a very interesting production to work on as it shifts in scale enormously from what is a fairly domestic drama where the sound is simply the spoken voice to these massive moments of immersive, 360-degree interstellar projection where all of a sudden the sound is everywhere and all-enveloping,"* recalls Aitken. *"I was charged with System Design as well as the Sound Design. I worked with Fergus O'Hare on the content."*

The TiMax spatial reinforcement and tracking system was a key part of Aitken's design and required a lot of work in the programming stage. *"Everything came through the console and straight out from the faders into TiMax,"* explains Aitken. *"That gave us 64 outputs for around eighty loudspeakers in total, meaning that a very high percentage of the speakers were independently addressable. That gave us a lot of scope to move sound around the room. Also, all the actors were wearing trackers which enabled us to sort out levels and delay times on an actor-per-actor basis - one of the inherent issues of working in the round is that the cast member speaking inevitably has their back to someone, so there's a lot of correction to do."*

Aitken also pointed out that hanging loudspeakers was far from straightforward on this production, which added further complexity to the sound design. *"One of the drawbacks of having such a huge amount of projection is that wherever you want to fly a loudspeaker, you're inevitably cutting through a projection cone. We all had to make compromises, but fortunately the projection department has lots of clever ways of mapping their way around obstacles."*

So what of the loudspeaker system itself? *"I love the sound of KV2 loudspeakers,"* declares Aitken. *"There's nothing they produce that I don't like, so it was an easy choice for me. I made the decision about four years ago that actually, point source systems in many venues makes a lot of sense, and I needed to go back to using point source equipment as much as possible. If I'm using point source, then I'll try to use KV2 because they sound great, and frankly, they represent good value."*



For the vocal system, Aitken specified a drop of eight EX26 high intelligibility active speaker systems around the 280-degree playing circle and twenty EX6s cut into the floor to cover the first three rows before the overhead speakers come into play. *"Each of these speakers was individually addressable via the TiMax system to enable the actors to be tracked, as the geometry of the space is pretty complicated, and that worked super well."* A further 20 EX26s were flown behind the last row as a surround sound system which Aitken used for effects, reverb and a bit of music reverb as well.

The main music system was situated upstage on a walkway above a pair of huge gantry doors that formed part of the set. Aitken chose five wide dispersion, full range ESR212s – the outer pair mounted horizontally due to the architecture of the set, whilst the middle three were mounted vertically. *"We didn't have room for the bigger ESR215s which would have been my first choice, but the 212s actually worked really well. Better than I expected, in fact. They had to throw about 60m which is pushing it a bit for that sized box, so we touched in some of the vocal system as well just to brighten things up a bit towards the back and centre of the room. It sounded great."*

The 'piece de resistance' was perhaps the system – and the effects – used for the life-sized lunar lander which flies down from the roof amidst much CO2. *"We used four EX10s to really localise the sound to the lander, but we also had four of KV2's enormous VHD4.21 subs spaced at intervals under the seating up to about 3m off the ground. I've never used them before, but they are just ridiculous – they're the size of a small car!"* Aitken is laughing now: *"Honestly, they are just hysterical – we didn't use them that much, but when we did, Jesus, you knew about it...! They were just great, they moved the whole place."*

Aitken is thoroughly pleased with the results. *"We had a really tight get-in on site, so really, the only way to guarantee that it would go smoothly was to do a technical build to prove the concept first. As all of the creative team and the equipment came from the UK, we did the technical build at Pinewood Studios. Once it had been fully tested, we containered it all up, shipped it to California and then re-built everything at the Rose Bowl in Pasadena. From a technical perspective, this is an amazing show, and I'm delighted to say that it sounded absolutely fantastic. In fact, it sounded a lot better than it should have done given the constraints that were imposed upon us. So yes, I'm pleased, and yes, it's another great show with KV2."*

Photo credits: © Jim Cox

### KV2 Audio system setup

- 28x EX26
- 20x EX6
- 2x ESR212
- 4x EX10
- 4x VHD4.21



## “Believing that Line Array has to be the Standard in Theatres is a Big Mistake.”

**“I have to honestly say that after decades of using line array loudspeaker systems – no matter which manufacturer – this was a big mistake in musical theatre. Line Array is almost taken for granted as a solution for sound reinforcement in musical theatre but KV2’s point source speakers with their unique sonic qualities and enormous headroom opened my mind again. They put the engineer back to where he belongs in to a listening position to concentrate on making the right adjustments without being distracted by technical aspects of a system.”**

**Andreas Hammerich**  
*Theatrical Sound Coordinator*  
*Stage Entertainment GmbH*



## SI Centrum Palladium, Stuttgart, Germany

Nestled firmly in the modern SI Centrum complex, the Palladium, an 1800 plus seat venue, sits opposite the equally grand Apollo Theatre. The brief was to design a new sound system that could take this production to a new level by delivering clear and concise dialogue, combined with dynamic orchestration.

Andreas Hammerich and Michel Weber, Theatrical Sound coordinators for large German Production Company Stage Entertainment had been really astounded by the ability of KV2 products to capture and deliver the stage presence, atmosphere and mood of the show directly into the auditorium.

Andy Austin-Brown, KV2 Audio's technical projects director, helped them to design a system that would achieve exactly that. Utilizing KV2 Audio's ESR215 full range theatre solution, enhanced by ES2.6 subwoofers and EX12 center and stage infills, Andy also implemented multiple EX6 enclosures for stage monitoring and front fills.

*“The results of our cooperation are impressive”, says Andreas Hammerich. “We have been receiving just positive feedback from the official opening night and I'd like to thank all parties concerned”.*

### **KV2 Audio system setup**

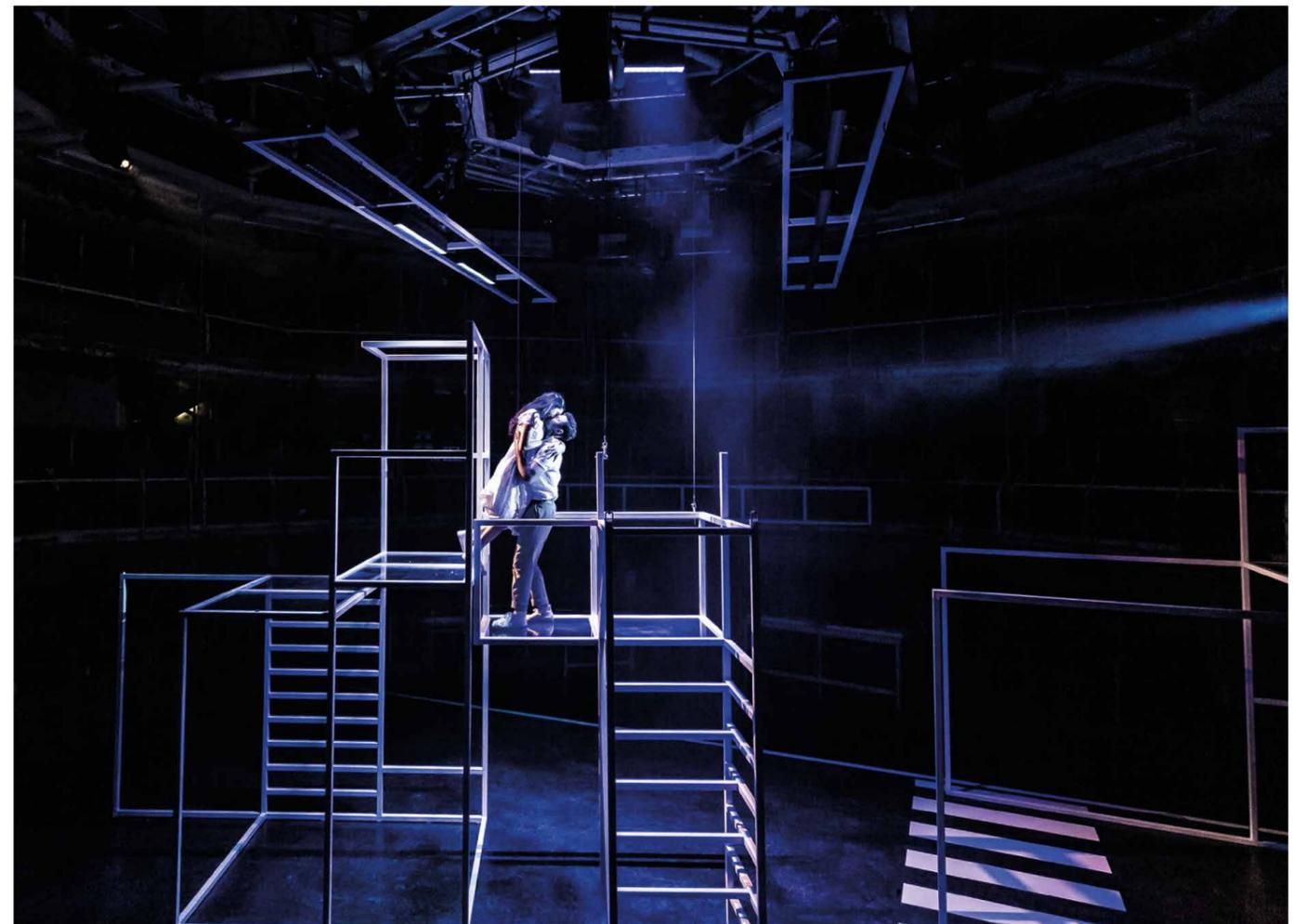
4x ESR215  
1x EX2.5MkII  
1x ES2.6  
4x EX12  
5x ESD6  
2x ESR3000



**“There is no other speaker range on the market today that has the detail and clarity of sound that KV2 offers.”**

**“In my humble opinion, there is no other speaker range on the market today that has the detail and clarity of sound that KV2 offers. I started using KV2 speakers in 2013 and have never looked back. I am fortunate enough to be asked to design a very wide range of shows, all having different dynamic requirements. KV2 has a speaker for every occasion and not a single product has ever disappointed. They have such a clear and detailed sound that delivers in such a musical way, from the smaller in-fill boxes (ESD5 and EX6) right up to the larger cabinets and subs. KV2 speakers also throw over distances in a very impressive way, not normally associated with point source solutions. All of the above have made the deployment of a point source the most obvious and appropriate choice, where in the past we may have considered line array as our only option. I am a real fan of the EX range, self powered boxes, however all the product range are sublime to listen to.”**

**Richard Brooker**  
*Sound Designer*



## West Side Story at Manchester Royal Exchange, Manchester, UK

West Side Story ranks as one of the most popular musicals of all time and continues to delight audiences sixty years after its Broadway debut. Leonard Bernstein's score remains as timeless as ever, and Arthur Laurents' storyline, based on Shakespeare's Romeo and Juliet transposed to gang-ridden 1950's America, also remains hauntingly relevant. However, the production at Manchester's Royal Exchange theatre is the first ever not to feature Jerome Robbins' original choreography, having been adapted for the theatre's in-the-round configuration by Aletta Collins. The re-imagined production – directed by Sarah Frankcom and mixed by associate sound designer, Owen Lewis - has received rave reviews from every quarter and for just about every aspect, including the superb sound which was designed by Richard Brooker and delivered by KV2 Audio.

*"As a theatre, the Manchester Royal Exchange is brilliant because it's so intimate,"* says Brooker. *"There are 700 seats, but not one is further than 9m away from the stage, so it's a wonderful experience for audiences. However, it's a very challenging venue in which to deliver good sound, especially for a musical, and particularly when the majority of the audience already knows every word and every note of every song!"* Nevertheless, Brooker clearly got it right as the reviews proved, with his design receiving specific accolades from the Guardian, the Times and Mancunian Matters amongst others. Indeed, the show has proved so popular that, for the first time in over 40 years, it will be coming back for a second run in 2020.

Brooker has been using KV2 Audio loudspeakers almost exclusively since 2013 and had absolutely no hesitation in specifying KV2 for West Side Story. *"I simply can't imagine how I could have achieved the same results using anything else,"* he says, shrugging. *"One of the biggest issues in the Royal Exchange is that you're extremely limited as to where you can put speakers, so as a designer it helps to know that the tools at your disposal are the very best and that you're used to using them."*

Brooker's design is based on concentric rings of loudspeakers to serve each of the three tiers of seats that are divided into seven separate blocks all the way around the stage. There are fourteen front fills sunk around the edge of the stage floor, while the main vocal system, comprised of seven KV2 Audio EX10 compact, high-output, full range active loudspeakers, is flown in a ring above the stage. 41 vocal delay speakers form part of the concentric rings to supplement the frontfills and main EX10 vocal ring. *"The EX10s are phenomenal speakers,"* declares Brooker. *"They deliver unbelievable vocal clarity and a true, natural sound. Combined with the front fill speakers, I can pull the image down to the stage to make it appear as though the sound is coming from the actors rather than the speakers above their heads."*

A ring of seven compact, low-profile ESD25s flown above the EX10s serves the upper gallery. *"Space restrictions meant that we couldn't put in another ring of EX10s – we had to have something physically smaller, so the low-profile, wide dispersion ESD25s were perfect. They have the same amazing vocal clarity and natural voice as the EX10s, so they are a great extension to the main system in a physically discreet format."*

### KV2 Audio system setup

- 9x EX10
- 6x EX26
- 20x EX6
- 7x ESD25
- 2x EX2.5MkII
- 2x ESP2000

In addition to the vocal system, Brooker specified a pair of EX10s in a L/R configuration for the band system. Interestingly, due to the in-the-round nature of the venue, the 11-piece orchestra is not located inside the theatre itself, but rather in a specially designed sound-proof booth in the foyer equipped with a video relay so that the musicians can see the stage and the cast can see the conductor. *"The band system is completely separate from the vocal system,"* he explained. *"We went for a L/R configuration as we decided that we'd like to have the sound of the band coming from somewhere other than the stage as is the case for the actors, and coming from a specific place, as if the band was in the theatre with the audience. The band system also acts as foldback on stage and avoids any nasty timing issues we may otherwise have encountered."*

As a complement to the main L/R system, Brooker has also provided for a comprehensive delay system based on the compact EX6 2-way active loudspeaker. *"EX6s are just another part of the amazing KV2 Audio toolbox – they deliver fantastic quality and power for such a little box, so they're a perfect delay system for EX10."* Brooker specified a total of 16 EX6s across the three levels of seating, supplemented by six wide-dispersion, under-balcony EX26s for the upper circle. Finally, a pair of EX2.5 dual 15-inch subwoofers flown up in the roof complete the design. *"The result is a superbly rounded, powerful yet totally natural sound that enables the audience to lose themselves completely in the music and the atmosphere. I'm really proud of what we've all achieved here."*

Sorcha Steele, head of sound at the Manchester Royal Exchange and associate sound designer, is in full agreement. *"Having worked with Richard Brooker on four previous productions here at the Royal Exchange, it's been great to have the opportunity to build on the successes we've had with his system designs and take it another step further. For all but one of the previous shows he had specified KV2 for the band system and we used our in-house system for the vocals, which worked well for us but on this occasion having the opportunity to use KV2 for both the band and vocals was quite exciting and I think it really has taken the sound for the production to another level. In a space that can be very unforgiving with sound, having clarity in the vocals and definition in the music is hugely important, especially with the complex scores of West Side Story. KV2 Audio has been instrumental in being able to deliver that. It sits well in the space, moving between dialogue and musical numbers feels very natural and not overly processed. Overall, I think it has been a huge success and I look forward to the production returning to us again next year."*

*Photo credits: Richard Davenport at The Other Richard*



## Don Camillo & Peppone, Ronacher Vienna, Austria

DON CAMILLO & PEPPONE celebrated his Austrian premiere on 27. January 2017 at the Ronacher! Their stories are well-known from the legendary film versions of Giovannino Guareschi's "Mondo Piccolo" novels. The VBW (Vereinigte Bühnen Wien) developed the world premiere stage production of this literary classic as a co-production with the Theater St. Gallen (Switzerland).

The musical's book and lyrics are by Michael Kunze, the German language's premier writer and translator of musicals, books and lyrics, whose works have so far been honoured by 79 gold and platinum records. The composer is Dario Farina – familiar to many from his cult pop songs like "Felicità" and his highly respected film scores ("Rossini") - and together they have created an entertaining, fun piece of musical theatre, imbued by the composer with Mediterranean flair and romance. The musical supervision and orchestration are by the VBW's Musical Director Koen Schoots.

The director is Andreas Gergen, Opera Director of the Salzburger Landestheater, who has directed more than 75 operas, operettas and musicals internationally ("Carmen" / Salzburger Felsenreitschule, "La Traviata" / Haus für Mozart, Salzburg, THE VISIT), including numerous world premieres. The choreography is by Dennis Callahan (MOZART!, ELISABETH, DANCE OF THE VAMPIRES), the set design by Peter J. Davison, who has worked on dance, drama, opera and musical productions all over the world (REBECCA, THE VISIT). The costumes are by Yan Tax (MOZART!, ELISABETH), while Michael Grundner (LES MISERABLES, JESUS CHRIST SUPERSTAR) created the lighting design and Thomas Strebel (MOZART!, DANCE OF THE VAMPIRES, THE VISIT) is behind the sound design.

Sound Designer Thomas Strebel from audiopool in Basel, Switzerland comments on why he has chosen KV2 Audio "As the Sound Designer of this show it was my choice to use KV2 Audio products having already used them successfully on two previous tours as well as the resident productions of "Dance of the Vampires" and "Ich war noch niemals in New York" which performed in Stuttgart, Hamburg and Moscow. As well as the sonic performance the secondary reason for choosing KV2 Audio was the size of the speakers which fit perfectly in the set design of DON CAMILLO & PEPPONE at the Ronacher musical theatre where there is generally not much space."

The system consists of 4 ESR215 with 2 ESR3000 amplifiers which are rented from the German tour "Ich war noch niemals in New York" which is now playing in Hamburg using VHD2.0 from the former production "Wunder von Bern". The system is used as music system left and right of the proscenium divided into a lower and an upper part.

Musical director Koen Schoots was very happy with the sound of the orchestra. "The excellent sound" was encouraged by the press. Thomas Strebel explains: "From my point of view as a sound designer, I would say that the system reproduces exactly what you want to hear." "I will keep on using KV2 Audio speakers", Thomas Strebel concludes.

### KV2 Audio system setup

4x ESR215  
2x ESR3000  
1x VHD2.0  
1x VHD2000



## Stage Theater an der Elbe, Hamburg, Germany

A multi-million investment, the Stage Theatre was specially designed and built for Stage Entertainment productions and initially showcased an exciting new show about Germany winning the 1954 World cup, called "Das Musical WUNDER von BERN".

Being relatively new to KV2 Audio, multi-award winning sound designers, John Shivers and David Patridge requested a visit to KV2 Audio's Czech Republic facility, where they could conduct a full evaluation of the system being proposed. This included an outdoor demo where they also invited a famous German loudspeaker brand to pitch their own products against KV2. The results were very clear and following discussions and assistance from Andy Austin Brown, John Shivers and David Patridge committed to an imaginative KV2 Audio system built around a wide dispersion Point Source 5-way SL system.

Andy had the following to say about the installation: "I soon realised through my discussions with John and David that this show required a very bold, dynamic and big sounding system. Once again this needed to deliver atmosphere, image and depth along with a true natural focus on the performers throughout the venue at all levels. The main front of house system utilised 'column erect placement' of combined KV2 Audio SL412 and SL215 system enclosures, accompanied by very low frequency VHD2.21 subwoofers. Complemented with a centre SL412, multiple ESD6 and ESD12 in/ls and monitors, the system has proved itself to present a vivid realistic performance, whilst creating full coverage and extremely high definition sound throughout the venue".

"It's an outstanding success to have such consistent performance of both systems, in totally different environments with different demands", explained Andreas Hammerich and Michel Weber, Theatrical Sound coordinators for Stage Entertainment, completely validating their decision to apply and use a KV2 Audio point source solution with the technical merits and attributes that such a system brings. On the back of this success a forthcoming third KV2 Audio system is now being specified by Stage Entertainment for a further new show in an established Berlin Theatre over the coming months.

### KV2 Audio system setup

6x SL412  
8x SL215  
4x VHD2.21  
2x EX12  
22x ESD6  
12x EX6  
4x ESD12  
3x SL3000  
6x VHD3200  
7x ESP2000  
2x JK1



## The Ricardo Montalbán, Hollywood, LA, US

Grand old theatre from the late 20's, owned at one stage by the famous and eccentric billionaire, Howard Hughes. It was saved from demolition and decline in the late 90's by debonair and svelte actor, Ricardo Montalbán well known for Fantasy Island, Wrath of Khan, and numerous other roles that filled both our film and television screens.

When The Montalbán decided to invest in a new audio system the management wanted one that would satisfy the highest expectations of the most critical audiences. The Montalbán is used for a very wide range of productions, from spoken word, plays, conferences, film festivals, film shoots, and photo shoots to full blown music concerts. The need for a robust, powerful system that could be utilized for such a diverse range of applications was a key requirement in the specification. They looked towards KV2 Audio due to the number of recommendations he received about the brand when searching for a high quality and affordable system. Theatre Manager, Gilbert Smith said:

*"The decision to invest in KV2 Audio was based around the comments word of mouth and growing respect for the brand that I continue to see and hear, first hand from engineers, performers and listeners alike."*

The Montalbán system consists of four ESR215 full range column speakers and eight ES2.6 Subwoofers, four mounted centrally close to the ceiling just in front of the stage and two on the floor on each side of the stage. ESD36s were utilized for under balcony infill, and ESD15s for the upper balcony coverage. ESM12s and ESM26s were also utilized for stage monitoring. All control, alignment and amplification was done via KV2 Audio SAC2 controllers, SDD3 delay lines, Compex dynamic control and ESR3000, VHD3200 and ESP2000 amplifiers.

### KV2 Audio system setup

- 4x ESR215
- 8x ES2.6
- 6x ESD36
- 2x ESD15
- 4x ESM12
- 4x ESM26
- 2x SAC2
- 2x SDD3
- 2x ESR3000
- 3x VHD3200
- 2x ESP2000



## Princess Alexandra Auditorium, Yarm School, UK

The Princess Alexandra Auditorium is a stunning 750-seat performance venue based on the banks of the River Tees at Yarm School. The final piece of the jigsaw was to upgrade the sound system to one that matches the quality of the Civic Trust Award and RIBA Award winning auditorium.

The space is fully flexible with tiered retractable seating and hosts an incredibly varied and versatile program of material – from school productions and lectures to touring bands and some of countries best known comedians. The existing system was struggling to put across the clarity and detail needed for such work and the decision to audition a variety of loudspeaker brands was taken.

The unique space - described by the press as "...Sydney Opera House, Gateshead's Sage and a bit Starship Enterprise..." - is a very wide auditorium that can be configured in many ways and the new system needed to offer full coverage, high SPL and clarity throughout whilst also being sensitive to sightlines.

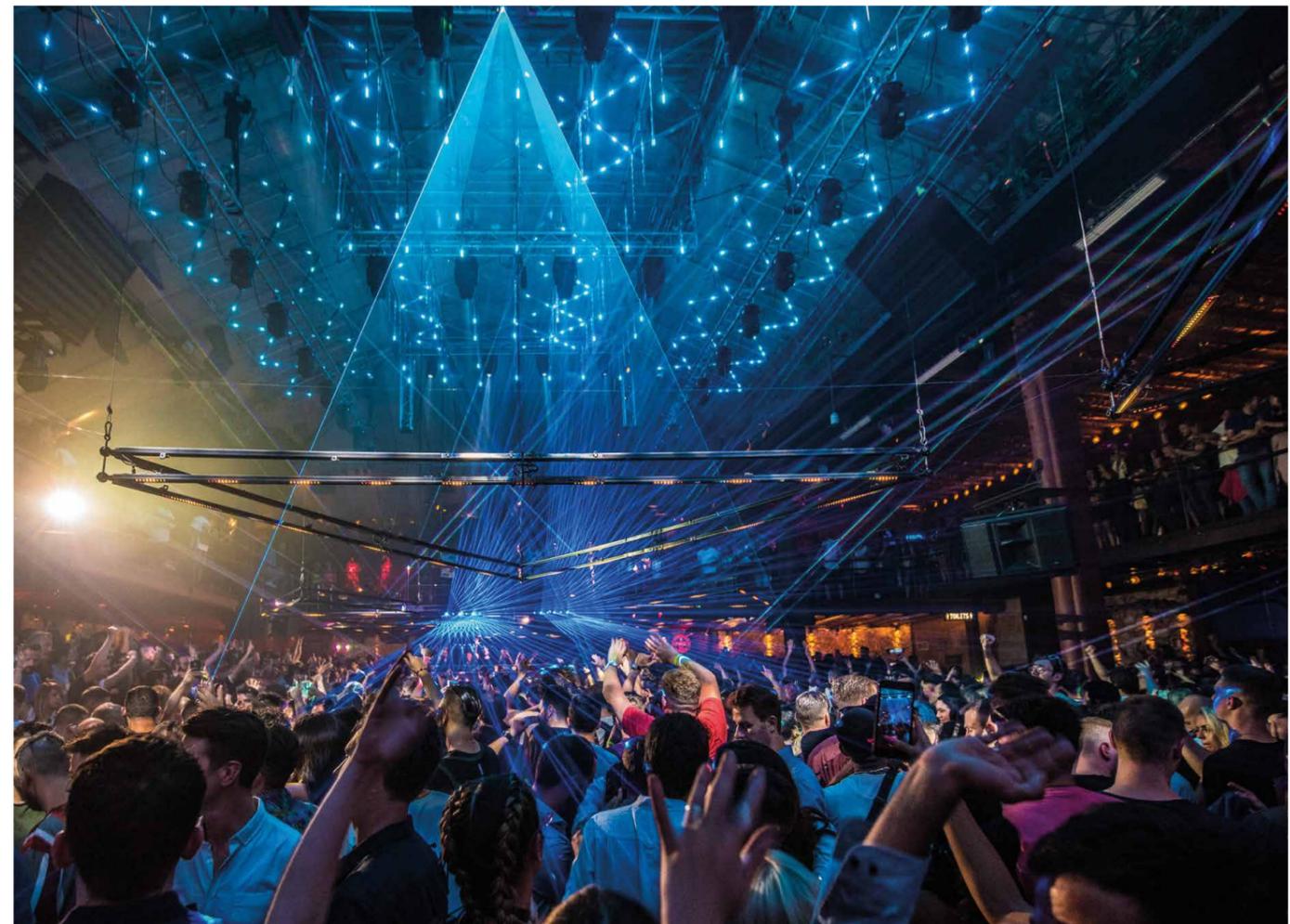
Steering away from the existing distributed speaker concept KV2 were brought in by Richmond based audio suppliers Sound Hire to show what could be achieved by a more simplified Left Right Point Source approach. Whilst other systems would struggle to tackle such a space with just a single mid/hi and sub per side KV2's now legendary ES System did just that.

Dan Brookes, Princess Alexandra Theatre Auditorium Manager picks up the story. "We looked at a number of different systems for the auditorium and KV2 were head and shoulders above the rest in terms of clarity and overall sound. The system really allows the nuances of the music and vocal work we do at the school to stand out and take centre stage." Speaking of the decision to bring in KV2, Sound Hire's Joe Mitchell comments. "I was approached by Dan to give my thoughts on a new system for Yarm School's Princess Alexandra Auditorium. Having already achieved amazing results with KV2 in both fixed install projects and events courtesy of my own hire stock of KV2 products I had no hesitation in recommending KV2. KV2 brought in a single ES System with just ES1.0 and ES2.5 per side with their bespoke EPAK2500 amplifiers and all agreed that this was the ultimate choice for this venue."

To say the system has impressed since its install is an understatement with Dan, Joe and School Headmaster David Dunn effusive in their praise. "We have had some wonderful feedback on the system from both parents and visiting artists alike. We now have a system that matches the quality of our venue." Says Dan. Headmaster David Dunn comments, "We are delighted that we invested in the KV2 system. Since the system has been installed we have held a wide range of events, from School concerts to high-profile comedians and the sound quality is excellent!" Joe from Sound Hire even goes as far as stating, "Now it's been installed I have to say that without exception it's the finest sounding loudspeaker system I've heard in my 25 years in the business."

### KV2 Audio system setup

- Main System:
- 2x ES1.0
- 2x ES2.5
- 2x EPAK2500R
- 1x LD4
- Delay / Portable speakers:
- 2x ESD5
- 2x ESD25
- 2x ESD6



## Amnesia Club, Ibiza, Spain

Amnesia is perhaps Ibiza's most iconic club and has a global reputation to match. First opened in 1976, Amnesia has been voted Best Global Club no fewer than four times and is never far from the top five of DJ Magazine's Top 100 Clubs list. This year its ratings have taken yet another boost with the inauguration of a brand new, state-of-the-art KV2 Audio sound system. Billed as 'the most advanced sound system in the world,' the new system is housed in the bigger of the 4000-capacity club's two spaces, the Terrace; originally open to the elements, the Terrace now sports a roof but remains a light and airy space famous for its sunrise sessions, flooding with sunlight as night becomes day.

The KV2 system replaces a bespoke sound system that had served the venue well for the last decade but was starting to show its age. The club's owners decided that the time had come to upgrade. Already familiar with the quality of the KV2 audio experience thanks to the system already installed in another of their venues, Cova Santa, the decision was as good as made.

The brief was simple – the owners wanted the best club sound on the island. Designed by the team from KV2 Audio's German office in Berlin with the cooperation of Johannes Kraemer (sound engineer for techno legend, Richie Hawtin, the Time Warp festival and New York's Avant Gardner club amongst others), the system is based around eight of KV2's ultra-slim, high power, 3-way active SL412s coupled with twelve VHD2.18J subs from the company's flagship VHD range. The VHD2.18J is a direct radiating bass-reflex speaker containing two high performance 18" transducers designed to withstand extremely high power levels. KV2's unique SLA technology delivers unprecedented levels of dynamic range, ultra-low distortion, extreme clarity and, crucially, unparalleled definition over distance thanks to the use of hybrid electronics matched to each of the fastest and lowest distortion transducers available today, and digital electronics with the highest sampling rate ever used in a professional loudspeaker system.

*"My intention was to give Amnesia's technicians a versatile tool that allows them to run shows in three directions depending on where the DJ is situated, either at the front, back or side of the room," says Kraemer. "I programmed a solution where they can do that simply by recalling a scene from the desk. Also, each VIP zone can be controlled individually."*

*"Another intention was to design a system that can deliver a variety of different sound experiences, ranging from hyper-loud, to clean analytical, right through to bass-heavy Detroit style. Also, a perfectly time-aligned sound design suitable for bands is possible when the top speakers are switched to delay line mode. In other words, the system is flexible enough to cater for anything Amnesia wants to do."*

After the official opening and the Cocoon night with Richie Hawtin, Kraemer was touched by the praise from clubbers and even other venues on the island. But, he says, for him, the highest testament was that, *"They all danced until daylight. And the vibe felt wonderful."*

Amnesia's regular and resident DJs have noticed the difference: *"KV2 is, without a doubt, one of the best and most innovative sound systems that I have worked with."* says

Hector Couto. *"It preserves sound quality without compromising musical nuances. It's a pleasure playing with such frequency precision."*

Resident DJ CAAL, who was nominated as breakthrough artist in the 2018 DJ Awards, agrees: *"It's the perfect sound system for our Terrace. I love to be able to listen to music in its purest state, from low to high frequencies, without any processes altering the sound. That is exactly what KV2 delivers."*

Five-time DJ Award winner and ten-time nominee, Luciano, adds: *"Sound is one of the key elements in a club. It allows you to feel the music, a tool to reflect art and expression. For me, it's important to have a system that can translate those feelings in the best possible way. I think Amnesia's Terrace totally achieves that through its KV2 sound system."*

Ricardo Villalobos, icon of the minimal techno scene, is more succinct: *"After 20 years at Amnesia, I can now say we have a loud and clear sound system at the Terrace."*

The final word goes to Amnesia's artistic director and long-term resident, Martin Vega, aka Mar-T: *"For the last 10 years, Amnesia has been using a custom sound system that people loved but it was time to change as technology improved. KV2 was the best option for us - it's the only professional sound system that's still analogue and the sound on the Terrace is perfect."*

The DJ booth has also been given the KV2 treatment with two full range, 3-way ESR212s combined with a pair of VHD2.18J subs. Its residents are loving the results, claiming that the clarity of the sound has enabled the detail of their mix to stand out in a way that 'recreates the music,' adding a whole new dimension to their work. An ESR system also resides in the VIP area, although this time the larger ESR215s - the ultimate full range 3-way system with a wide 110-degree horizontal dispersion – replace the need for separate subwoofers to deliver a high quality audio experience in more intimate surroundings.

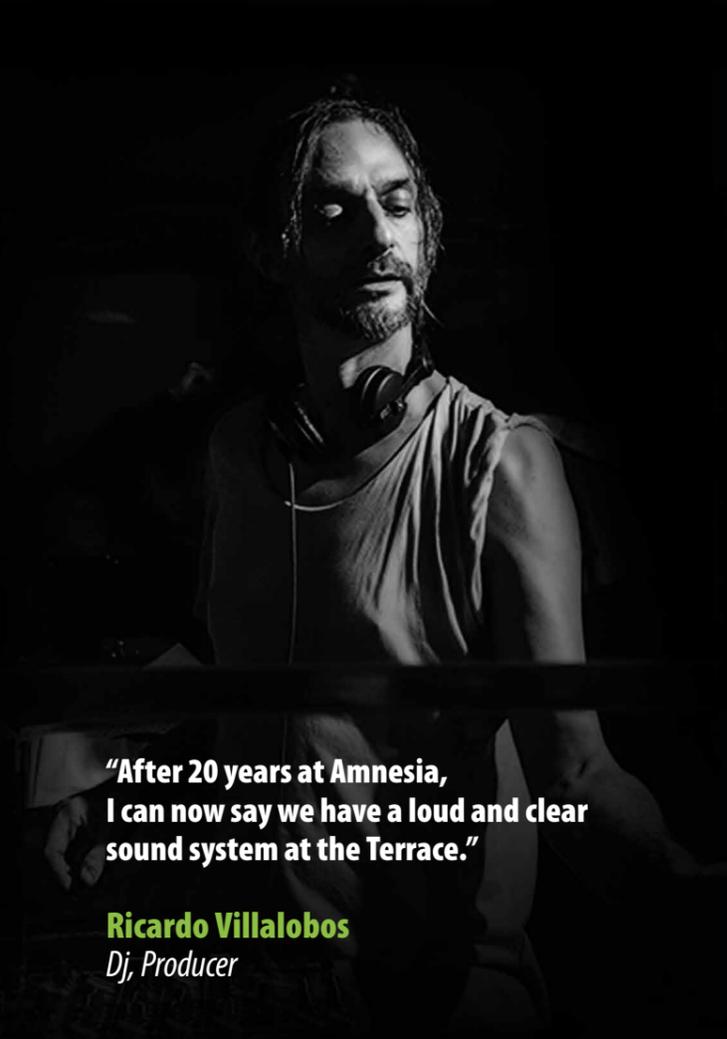
*"There are far too many disappointing or average audio experiences these days, so it has been really refreshing to work with the Amnesia team who genuinely care, truly understand and completely appreciate the KV2 difference in delivering something new and exceptional for Ibiza,"* says George Krampera Junior, CEO at KV2 Audio.

*"Our revolutionary technologies allow Club and Dance music to be presented in a way previously not experienced,"* he continues. *"The lowest distortion levels on the planet and the highest dynamics allow every nuance of a DJ's mix to be delivered, absorbed, understood and enjoyed. The concept of audiences staying longer in areas of high SPLs without ear fatigue or 'ringing ears' offers an amazing clubbing experience and, most importantly, it makes everybody smile. We're very proud that we've been able to achieve that in Amnesia, one of the highest profile clubs in the world, and that they are happy with the results."*

KV2 Audio systems are in use in high profile clubs around the world as well as on major theatrical productions and Broadway shows such as The Lion King, Pretty Woman, Mamma Mia!, and West Side Story.

### KV2 Audio system setup

- 8x SL412
- 4x SL3000
- 14x VHD2.18J
- 7x VHD3200
- 5x ESR212
- 3x ESR2800
- 2x ESR215
- 1x ESR3000



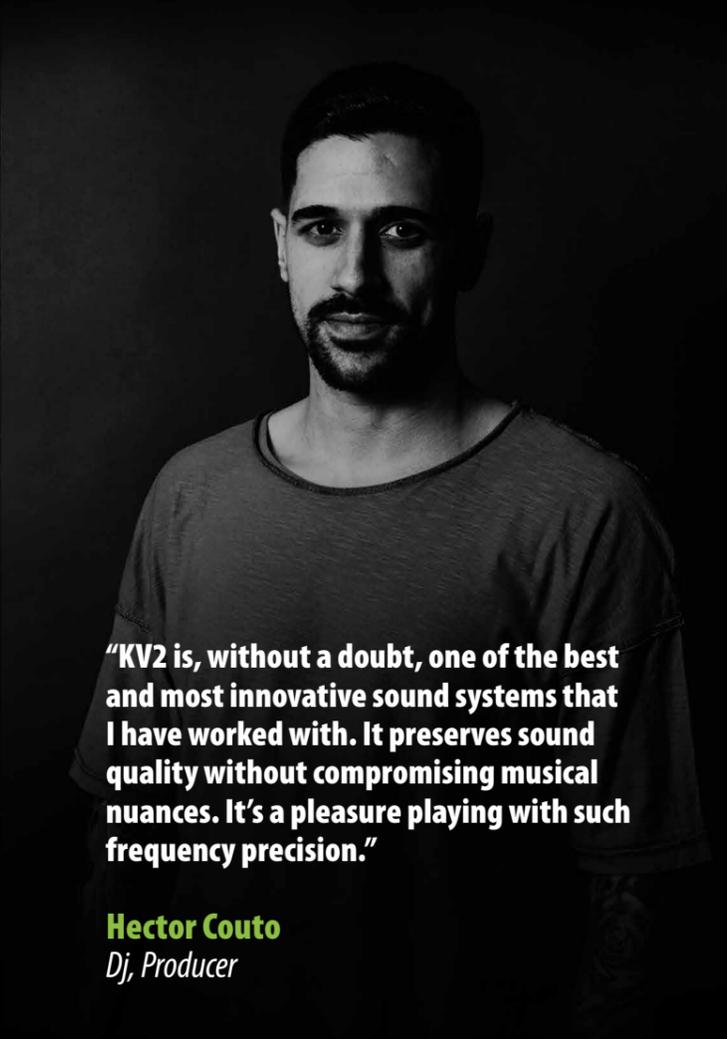
**"After 20 years at Amnesia, I can now say we have a loud and clear sound system at the Terrace."**

**Ricardo Villalobos**  
*Dj, Producer*



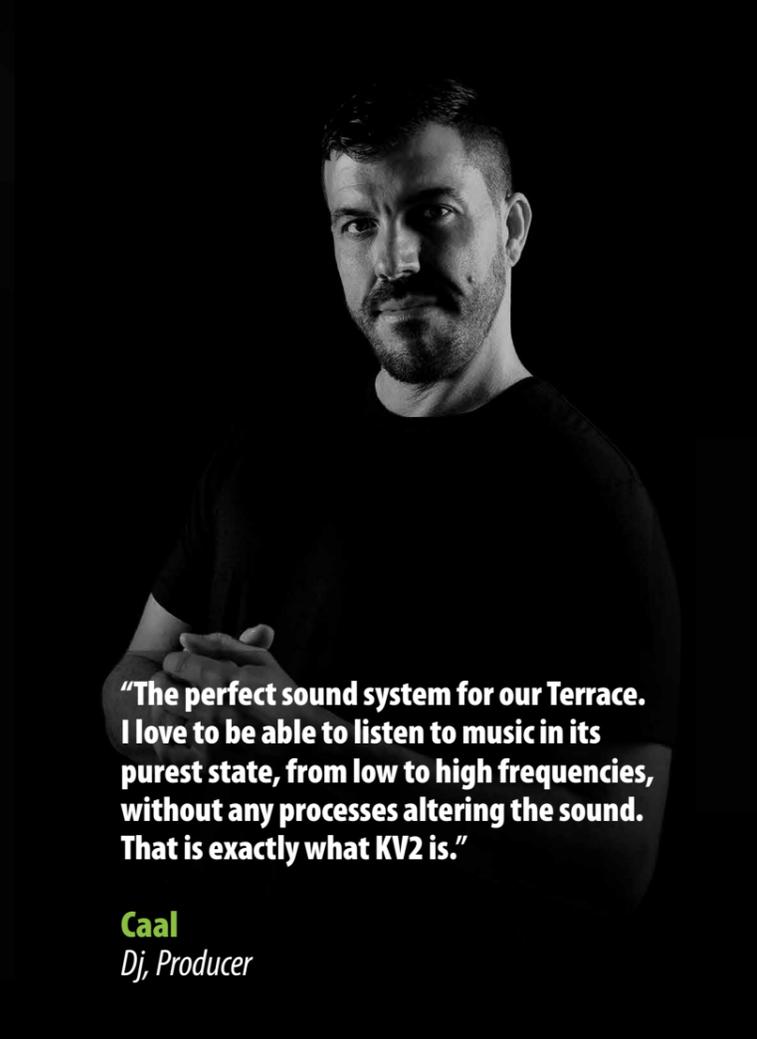
**"Sound is one of the key elements in a club. It allows you to feel the music, a tool to reflect art and expression. For me, it's important to have a system that can translate those feelings in the best possible way. I think Amnesia's Terrace totally achieves that through its KV2 sound system."**

**Luciano**  
*Dj, Producer*



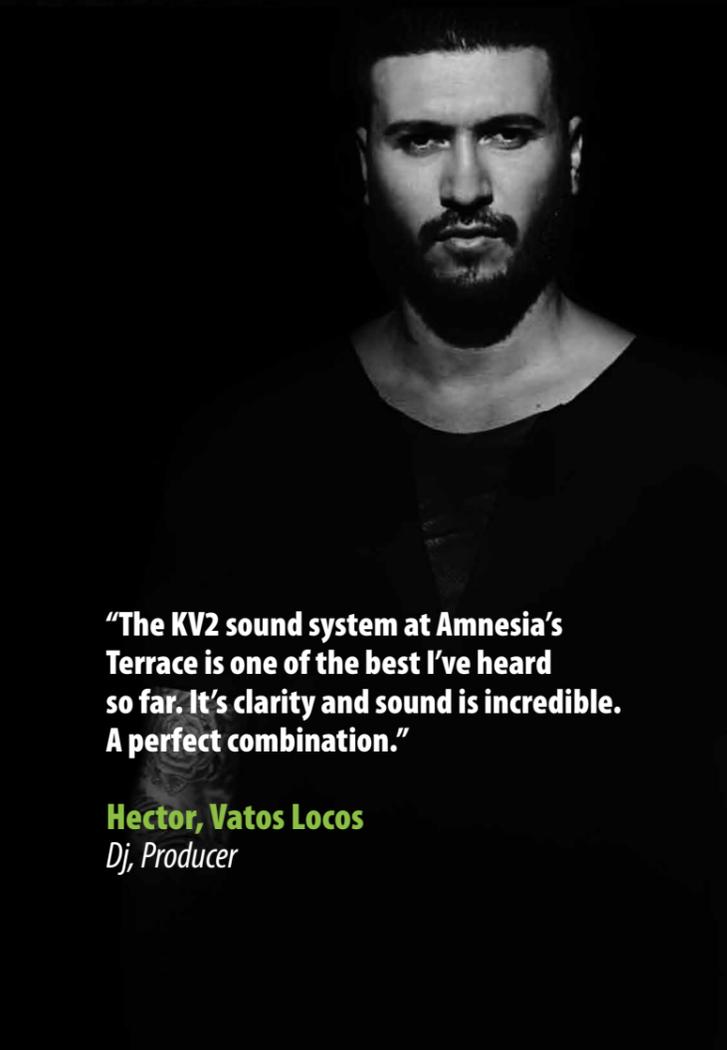
**"KV2 is, without a doubt, one of the best and most innovative sound systems that I have worked with. It preserves sound quality without compromising musical nuances. It's a pleasure playing with such frequency precision."**

**Hector Couto**  
*Dj, Producer*



**"The perfect sound system for our Terrace. I love to be able to listen to music in its purest state, from low to high frequencies, without any processes altering the sound. That is exactly what KV2 is."**

**Caal**  
*Dj, Producer*



**"The KV2 sound system at Amnesia's Terrace is one of the best I've heard so far. It's clarity and sound is incredible. A perfect combination."**

**Hector, Vatos Locos**  
*Dj, Producer*



**"KV2 has been a great improvement for Amnesia's Terrace. A perfect sound with all musical nuances."**

**Cuartero**  
*Dj, Producer*



**"For the last 10 years, Amnesia has been using a hand made sound system that people loved but it was time to change as technology improved. KV2 was the best option for us, it's the only professional sound system that's still analogue and the sound on the Terrace is perfect."**

**Mar-t**  
*Amnesia's Artistic Director, Dj, Producer*





## LUNCHMEAT festival Prague, Czech Republic

### KV2 Audio system setup

- 2x VHD2.0
- 2x VHD2.21
- 2x VHD2000
- 7x VHD3200
- 4x ES1.0
- 12x ES1.8
- 4 x ES1.5
- 8x ES2.6
- 4x EPAK2500
- 2x EX10
- 6x EX12
- 4x EX26
- 3x SAC2
- 1x SDD3
- 2x SL412
- 4x SL2.15
- 1x SL3000

Having begun life as a small A/V Session in Prague during 2010, Lunchmeat Festival has since developed into a well curated experimental Arts Festival creating a platform for people who believe Club Culture should not be taken lightly.

Considered to be on the same level as some of the worlds best Electronic music, visual and new media festivals, Lunchmeat again relied on KV2 Audio systems for the 5th year in a row.

The event offers an astonishingly diverse line-up of top-tier musicians paired with a roster of some of the most innovative visual artists working today and takes place in a former business complex-turned underground Cinema and Rave space.

Lunchmeat festival connects the dots between quality electronic music, visual shows and new media while creating a truly synesthetic experience. It brings together carefully selected creators from different artistic disciplines on one stage – Artists who are often meeting for the first time.

Prague's LUNCHMEAT Festival 2016 put together an impressively diverse lineup of headliners that filled three floors. This roster included dark and noisy techno veterans like SHXCXCHXSH, Samuel Kerridge and Silent Servant as well as more abstract, deconstructed fare from the likes of patten, Ziúr, Amnesia Scanner and Kablam.

The LUNCHMEAT team decided this year to organise the festival on 3 stages with opening party at the Convent of Saint Agnes all equipped with following KV2 Audio systems supplied by long-time KV2 partners WildtAudio.



## Czechoslovakia Got Talent, Slovakia

The hugely successful global TV format "Got Talent" has seen the Czech Republic and Slovakia reuniting as one nation in the regions adaptation of the show since 2010. For the very first time the current series is now benefiting from powerful audio reinforcement provided by local Czech-based manufacturers KV2 Audio. Prolight + Sound 2014 saw Czechoslovakia's Got Talent's Main Sound Engineer Alex Molcanov witness a live demonstration of KV2 Audio's large format True Point Source VHD System.

*"I remember the exact moment when the VHD System took over the stage. I was just blown away and staring at such a compact box with so much power and clarity", Alex remembers fondly. "We have been shooting Czechoslovakia's Got Talent for a number of years and have always used a Line Array solution for the main PA and a separate set of smaller boxes for the judge's speeches". "I went back and persuaded my partner and Producer of the show Jeffo Minařík to come to Prolight + Sound 2015 to have a listen. Although Jeffo has always been more concerned about the production and artistic aspects of the show - leaving me to take care of the sound - he felt the difference immediately as well. After that there was no going back, we both fell in love with KV2!"*

Like every new KV2 user the pair were amazed by the ease and speed of set-up, clarity and intelligibility delivered to every corner of the venue. *"The principal requirement in Got Talent is to transfer emotions from the stage to the audience in the studio. Only then can you create intense interaction which is so essential in audio post-production so you can pass these emotions and feelings to the viewers at home", Jeff Minařík explains.*

The venue for the show is equipped with a flown VHD System comprising one VHD2.0 mid/hi and dedicated VHD1.0 down-fill enclosure complimented by two VHD2.16 subwoofers per side with dedicated VHD2000 and VHD3200 amplification and control units. In addition to this the recently released VHD4.21 Subwoofer System featuring one active 2x21" subwoofer powering a second passive enclosure was deployed for added low frequency reinforcement.

As well as the simple set-up and ease-of-operation there is another benefit that Alex loves about his new system. *"In previous years I had to use a completely separate smaller speaker system for the judges comments. With KV2's VHD System all I do is just lower the main PA and because of the unbelievable intelligibility the audience can clearly understand every word they say. This also guarantees perfect intelligibility of the judges speeches in post-production due to the very low level of unwanted room reflections recorded in the judges mics. The positive feedback and acclaim is not only received from audience members but the cast and crew are always highlighting the clarity and resolution achieved."*

### KV2 Audio system setup

- 2x VHD2.0
- 2x VHD1.0
- 4x VHD2.16
- 2x VHD2000
- 2x VHD3200
- 1x VHD4.21



## Blackpool's Pier Jam, Blackpool, UK

KV2 Audio's stunning range of products have played a key part in some of the UK's most high profile Dance music events. Production company Just Lite have grown their formidable stock of KV2 products over the past three years and have been providing audio and production services to a range of high profile Dance events throughout the UK. These events include regular nights at Sankey's Warehouse, Victoria Warehouse Manchester featuring Basement Jaxx and Arman Van Helden, Dublin's Metropolis Music Festival and Blackpool's Pier Jam amongst countless others.

Having formed predominantly as a lighting-based company over 20 years ago, KV2 Audio have worked with Just Lite since the inception of its audio division in 2012. Director Paul Smith and Head of Audio Evin Doyle recognised KV2's clarity, definition and incredible output to footprint ratio would be a great foundation to build this side of their business on. Initially Just Lite invested in one of KV2's legendary ES System – capable of astounding audiences of up to 1,000 people with just one ES1.0 mid/hi enclosure per side. Over a comparatively short time scale their KV2 hire stock has expanded dramatically. Just Lite now boast four complete ES Systems, the full range ESR212 system, active EX10's and passive ESD6's and ESD10's. They also stock two of KV2's flagship complete VHD "Very High Denition" Systems capable of tackling events of 5,000 people with just one VHD2.0 per side and up to 20,000 when doubled. Just Lite can complement any of these systems or products with six of the jaw-dropping ultra low frequency VHD2.21 2x21" subwoofers. Speaking about Blackpool's Pier Jam 2015 which was beset with terrible weather conditions Evin remarked "The weather conditions were so bad that the main stage was downgraded to the second stage on the day of the event. However, as weather conditions improved slightly we were asked to re-instate the main stage, which involved moving the system mid-show. The compact Point Source nature of KV2's products meant that this was achievable with minimum disruption – something that couldn't be achieved with a Line Array approach. The audio was clear and defined and carried down the 500mtr Pier with no trouble – even at the very end of the Pier you could really feel the energy and atmosphere created by the prestigious DJ's playing!" "The tight focus of all the mid/hi's used across both outdoor stages ensured that there was no audio spill between the stages even though the stages were side by side. Several smaller indoor spaces were also covered by KV2 products and we had such faith in them that we even left these unmanned."

Speaking about KV2 in general Evin states "Whether we are providing audio reinforcement for our large scale Dance events and club nights, TV shows in notoriously bad sounding environments or providing live systems for Irish music sensations Celtic Women KV2 products always deliver. The crystal clear delivery of the source material and the simple set-up nature have been an invaluable tool as we continue to grow our Sound division."

### KV2 Audio system setup

VHD Series  
ES Series  
ESD Series  
EX Series



## Cream Tour, Belfast, Ireland

KV2 have once again been chosen as the system of choice for a hugely successful and high profile Dance event taking place on April 30th in Belfast.

Cream – one of the world's most iconic Dance brands - took their "Cream Tours" to the T13 warehouse where a host of acts were all experienced courtesy of KV2 Audio's flagship VHD products. The T13 warehouse is a former shipbuilding warehouse and the sold-out event saw almost 5,000 revelers take in sets from John O'Callaghan, Bryan Kearney, Will Atkinson and Standerwick amongst many more. Production was overseen by KV2 Audio's Irish partners Just Lite who supplied a complete double VHD System from their substantial KV2 hire inventory.

In spite of the size of the venue – also notorious for noise problems – just two VHD2.0 mid/hi's were deployed per side. The clarity and definition of such a compact system always astounds audiences and industry professionals alike with considerably more enclosures of alternative manufactures required to do the same job.

Taking into account the nature of the event Just Lite's Head of Audio Evin Doyle specied an impressive subwoofer conguration of 12 x VHD2.15/2.16 double 15" subwoofers and 6 x VHD2.21 – KV2's ultra low frequency and hugely impressive 2x21" subwoofer.

For Cream and their reputation of cutting edge Dance vibes, Clarity, Emotion and Atmosphere are critical elements of a nights success and In spite of the known noise issues with the venue the organiser's were overjoyed with the results achieved by using KV2 Audio's True Point Source approach to large format PA design.

Reports from the event commented on the high SPL levels achieved and incredible definition of the low frequency. The bass energy was not only heard but could be felt at over 60meters.

It is yet another testimony to KV2's products ability to excite and inspire Dance events of such a large scale.

### KV2 Audio system setup

4x VHD2.0  
4x VHD2.15  
8x VHD2.16  
6x VHD2.21  
10x VHD3200  
4x VHD2000  
2x ES1.0  
2x ES1.8  
2x ES2.6  
2x EPAK2500R  
2x ES1.0  
2x EX10



**“VHD5.0 changes the game. I didn’t expect that something like that can be done.”**

**“VHD5.0 was maybe the biggest surprise for me in the last 10 years. For a long time, the result of Point Source vs Line Array comparisons seemed to be clear. VHD5.0 changes the game. It delivers by volume the same as an 6 - 9 top 12” based line array. But with the quality of point source sound, I didn’t expect that something like that can be done. Until I heard it with my own hi resolution sound files and a live band on faders. That was simply amazing and I haven’t heard something better in that size.”**

**Johannes Krämer**

*Sound Engineer*

*Time Warp*



**“The monitors and the front of house KV2 speakers have taken my studio stage to the next level!”**

**“The KV2 DI’s made my instruments sound richer than ever before. My keyboards sound so full that I feel like they’ve took on a whole new life now! The monitors and the front of house KV2 speakers have taken my studio stage to the next level. With the clientele that I have there often (Foo Fighters, Hollywood Vampires, The Wallflowers, etc.), I finally have the sound they deserve!”**

**Rami Jaffee**

*Studio Owner, Producer, Keyboardist*

*(Fonogenic Studios, Foo Fighters, The Wallflowers)*



## Kaufleuten Klub, Zürich, Switzerland

On 1 April 1915, the commercial school and offices of the Swiss Commercial Association moved into its new building on Pelikan Street. This new building featured an auditorium designed for 850 guests with a ground floor restaurant/student canteen and basement housing a gym and two-lane bowling alley.

In the nineties the historic building became the new meeting place of the city of Zurich. With its imposing Club hall, extravagant courtyard, stylish ballroom and the elegant restaurant, Kaufleuten remains amongst the most popular meeting places in Zurich. The historic building on Pelikan Place is considered an attraction in urban Zurich and a symbol of cosmopolitanism.

For this year's Street Parade on August 12, 2017 a brand new KV2 audio system was set up for the first time and since then the Kaufleuten Klub has played host to high profile international DJs such as Jamie Jones, Andrea Oliva, Mousse T, Deborah de Luca, Butch, Magdalena, Joey Negro and Karmon to name a few – all playing through products from KV2 Audio's SL, VHD, ESR and EX ranges.

Events such as Disco Party, Kaufhouse, Glitterbox, Sanapa and Wave cover a wide range of different of genres.

### KV2 Audio system setup

4x SL412  
6x VHD8.10  
10x VHD2.18J  
2x SL3000  
8x VHD3200  
2x SL412  
1x SL3000  
4x ESR212  
2x ESR2800  
2x EX15  
2x VHD2.18J  
1x VHD3200



## Sri Lanka's Derana Dream Star Grand Finale, Sri Lanka

Derana Dream Star is the hottest reality show in Sri Lanka whilst also being the biggest ever youth reality singing show. Having taken the country by storm it was only fitting that the final of such a prestigious musical spectacle should have a Sound System befitting of the event.

Courtesy of Sara Entertainment, KV2 Audio products were specified for the show which took place on December 9th 2017 and ensured that the stunning performances were enjoyed by the audience in the highest possible quality and detail.

Sara Entertainment are KV2 Audio's primary user in Sri Lanka and they had no hesitation in turning to KV2's VHD and ES range of products to tackle the 4,000 capacity Sugarhadasa Indoor Arena. In spite of the complicated nature of the venue - with unusual seating arrangements and aesthetic visual staging to consider - every seat in the audience experienced every nuance of the performances loud and clearly.

A flown VHD system comprising of just 1 x VHD2.0 mid/hi per side with dedicated VHD1.0 down-fill enclosure was deployed. Side and front fill duties were covered with ES1.0 mid/hi enclosures and a total of 16 VHD4.18 subwoofers ensured the audience could feel and enjoy the musical bass lines to their maximum with all products powered by their dedicated VHD2000, VHD3200 and EPAK2500R amplification and control units.

Since being introduced to KV2 Audio products Chandana Sameera - a fine Sound and Touring Engineer and owner of Sara Entertainments - has been a prominent advocate of the brand throughout the country, flying the flag and getting astonishing results with KV2 products. This was the latest in a long line of exceptional events enhanced by KV2!

### KV2 Audio system setup

2x VHD2.0  
2x VHD1.0  
16x VHD4.18  
6x ES1.0  
for side fill and front fill  
2x VHD2000  
4x VHD3200  
6x EPAK2500R



## 10th Anniversary of Ibiza Sonica Radio, Kumharas, Ibiza

The 22nd of August 2016 was a day to remember. It was the day when radio station Ibiza Sonica celebrated its 10th Anniversary at Kumharas. A day full of festivities, celebration and music began early with people sharing delicious paella, beers, Hierbas Ibicencas as well as countless memories and anecdotes whilst not forgetting the most important thing of all - and what we couldn't be without - the MUSIC!

Big name DJs who have been a part of the annals of Ibiza Sonica history during its last 10 years dropped in to play their favourite Sonica sounds and boy did it sound great thanks to the excellent KV2 Audio equipment!

A big thanks goes to Ibiza Plug & Play, PLUSMUSIC Ibiza and Resonance Ibiza for the great collaboration!

### **KV2 Audio system setup**

4x ES1.0 white  
8x ES2.6 white  
2x EPAK2500R  
2x EX12 white  
2x EX1.8 white



## Supermarket Club, Zürich, Switzerland

The Supermarket club has been operating in the West End of Zurich since 1998. As a pioneer in the Swiss party scene, it was also the first club in Switzerland to use a KV2 sound system.

With its focus set firmly on the music content and its delivery quality, the Supermarket forms part of a small elite of Swiss clubs in which contemporary electronic music has been raised well beyond its early beginnings.

The Supermarket has always strived to operate in an international context and to form strong bonds with DJs and Club artists, offering them an attractive performance platform and a welcome home from home in Zurich. In view of the countless internationally acclaimed DJs that have performed within its walls, the Supermarket club has most certainly achieved that goal.

The availability of high quality music to the general public caused an increase in the demand for quality performance spaces in the clubs scene. The Supermarket's proprietor, Sandro Bohnenblust, understanding this need grasped the initiative and incorporated a complete KV2 sound system in the Supermarket. Sandro, who has a vested interest in the production of quality analogue oriented music, wanted to create a listening environment in which club-goers would be able to experience the same atmosphere as in their own living rooms but with much superior quality. A warm and pure sound that is characteristic of Underground, Techno and House music.

The KV2 sound system installed in the Supermarket is over-dimensioned and capable of delivering quality sound in a much larger structure. When questioned about that Sandro said "installing just enough equipment to deliver an adequate sound would not enable us to deliver uncompromising quality and that goes against the philosophy of the Supermarket club". He went on to say that "Not compromising our philosophy has helped us remain successful, despite the many changes in our environment and the marketplace, over many years."

### KV2 Audio system setup

- 4x SL412
- 4x SL2.15
- 4x VHD1.21
- 4x VHD4.18
- 2x ES1.0
- 2x ES1.5
- 2x EPAK2500R
- 2x SL3000
- 3x VHD3200
- 2x VHD2000
- 3x SAC2
- 2x ESD15
- 1x EX1.8
- 1x ESP2000
- 1x SAC2



## Aura Zürich, Zürich, Switzerland

Set among the Paradeplatz business district in downtown Zurich is a unique, breath-taking event space, offering versatility beyond imagination. Aura is a dynamic venue, which boasts a fine dining restaurant serving sumptuous European cuisine, a bar and smoker's lounge featuring chic and stylish interiors and a multi-functional event hall stretching across 450 sq metres, which benefits from nine metre high ceilings and exceptional technical facilities that encompass 360° projections and 3D sound.

Aura was realised by Zurich gastronome, Philippe Haussener of Aura Group, after he won a competition to convert an existing building in the famous Paradeplatz square with his design for a modern multi-purpose event venue using cutting edge technology. Philippe had a clear vision from the beginning, a 360° projection system would be the central focus, while the audio, lighting and video content would work in harmony. Live compositing and real time rendering of the projected video content was also a necessity, and start-up, shut-down and settings of the system, the architectural lighting and basic settings all needed to be controllable by several touch panels. Knowing it was the stand out feature at Aura, Marcel Widmer from PISO AG and Philippe considered the visual dimensions of the space first and decided to install six metre high projection screens around the perimeter of the room, covering 80-metres in length.

In order to bring the projection screens to life, Stefano Trevisan, CEO of PLUSMUSIC AG, installed a Coolux system to manage, compile, control and display three-chip DLP projectors using 8 Barco RLM-W12. The lighting system from Aura includes accessories from DTS, Briteq and SGM, which is controlled by a Jands Vista T2 lighting console.

Once the eyes were satisfied, it was time to turn the attention to the ears. The aim was to create a 3D sound environment using a Sonic Emotions Sonic Wave I Madi HD 24/64 processor, which allows all the loudspeakers to benefit from the unit's algorithms based on wave field synthesis. Preprogrammed presets allow the use of either all loudspeaker systems together, or any combination of them dependent on the application: live performance, live with 3D surround sound, club or 7.1 surround sound. The Sonic Wave I controls all the loudspeakers in a room to reproduce sound sources that are virtually outside the room. If these sound sources are placed far away, the characteristics of plane waves can be reproduced. With plane waves, the angle at which someone perceives a sound source remains the same everywhere, enlarging the sweet spot to the entire room and enabling a spatial sound experience for all listeners. Reproduced sound sources can be moved around allowing the production of creative sound designs. In Aura all of the system's capabilities to reproduce either plane waves or point sources and moving sources are used." At Aura, Marcel Widmer and Stefano Trevisan specified 54 KV2 ESD10 compact, full-range loudspeakers, mounted on dampers behind the screen where acoustic treatments have been applied to reduce reverb time. While a total of 16 KV2 ESD1.12 12-inch passive subwoofers have been placed along the length of the sidewalls. "The KV2 ESD10's have a smooth and even roll-off in the horizontal plane which complements the sonic emotion processing."

### KV2 Audio system setup

- 54x ESD10
- 16x ESD1.12
- 2x EX10
- 2x EX12
- 2x EX2.5



## Living Word Christian Churches of Cebu International Inc's New Sanctuary, Cebu, Philippines

Living Word Christian Churches of Cebu International, Inc. (LWCCCI) is a corporation organised exclusively for spiritual and religious purposes. They are a family of churches founded and built on the gospel of Jesus Christ. Currently there are 90 outreach churches throughout the Philippines and in some other parts of the world under the LWCCCI umbrella.

Living Word Christian Churches of Cebu International Inc. main church located in Cebu in the Philippines carried out an expansion last year of its existing building to cater to the growing congregation. The new sanctuary was built on the third floor of the building to accommodate 2500 worshippers.

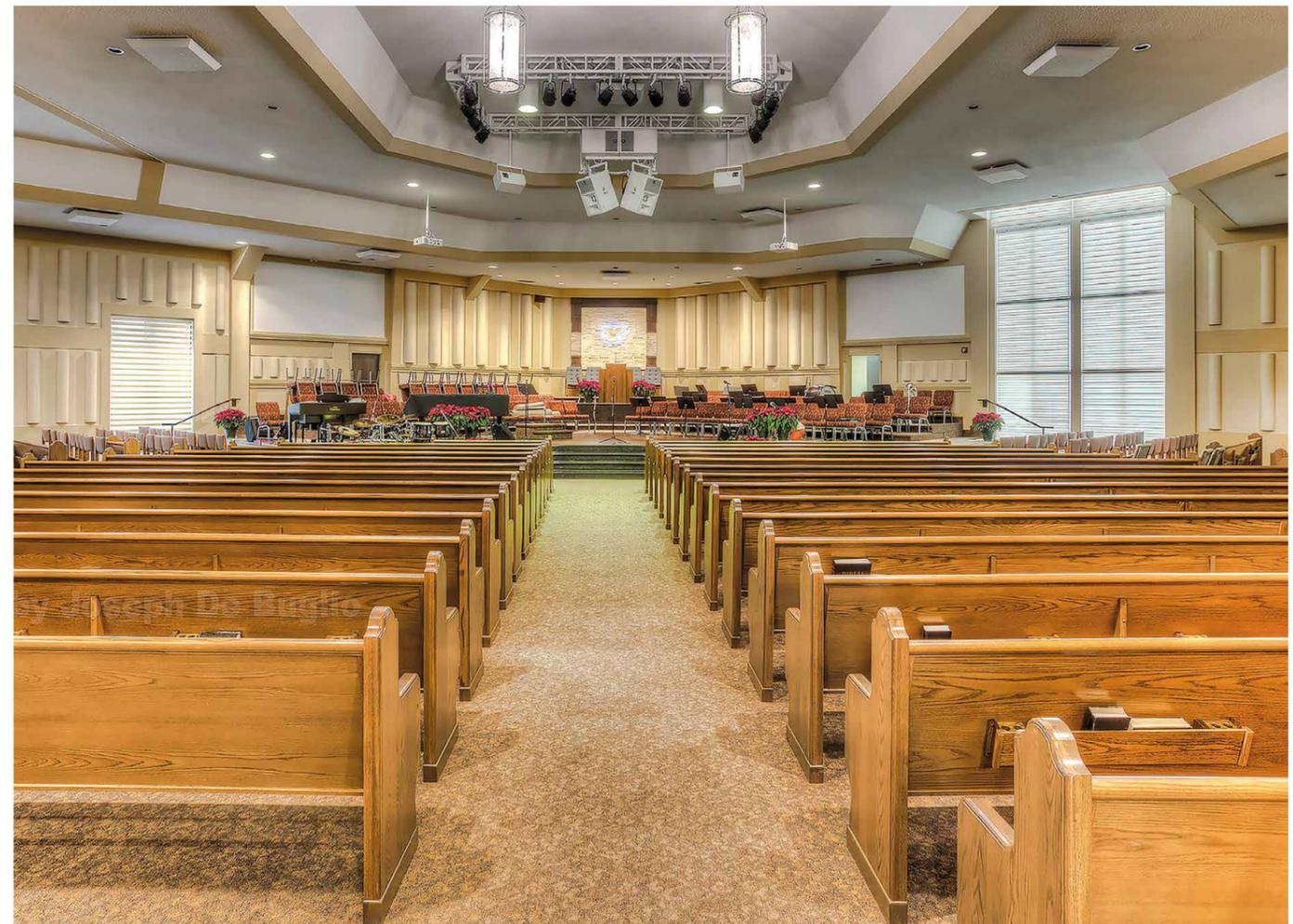
The church was keen to ensure that their new sanctuary will provide the right ambience for the congregation. One of their key objectives was to ensure wide clear dispersion of quality sound. The church formed a committee to look into a system that will meet their objectives. One of the brands that showed up for evaluation was KV2 Audio. The challenge was the building was an existing one which meant that structure wise, the audio system employed had to work within any constraints. Furthermore the church called in the sound system only after the structural work was confirmed. The new sanctuary was fan shaped and there were design elements for example like the ceiling with its wave like design that could not be touched. Regardless the demonstration by KV2 showcased to the church committee its ability to provide near perfect sound, which won them over.

*"Due to limitations on the structure of the truss, the VHD system was chosen because it provides huge cost savings in terms of size, weight as compared to the popular trend of line array technology and at the same time offers unparalleled quality, power, coverage and a new level of sound reproduction previously unheard of in large scale audio systems. The VHD being an efficient system provides the High SPL while still providing superb clarity with NO Distortion,"* said Mr Tony Kwan, Director of Montecruz Enterprises, Inc. who supplied and installed the KV2 Audio speakers.

The congregation and the church has showered praises on the new audio system. *"KV2 is the best audio system that I know as compared to the different brands and models that I used for more than 25 years. Dispersion is wide, clear, consistent and reliable. I am also very happy and grateful of KV2's continuing support to us that started from audio planning to installation and even in our actual use. KV2 audio is the clearest and cleanest sounding system I have ever heard. This allows us to convey God's words and wishes to our congregation,"* said a very pleased Mr Roy.S.Ricacho, Technical Team-Ministry Head.

### KV2 Audio system setup

- 2x VHD2.0
- 2x VHD1.0
- 2x VHD2000
- 1x VHD4.18
- 1x VHD3200
- 1x ESM26
- 1x ESP4000
- 1x SAC2
- 1x SDD3



## Romanian Pentecostal Church of God Kitchener, Ontario, Canada

The 900-seat church is typical of a church that has no acoustical management. The low ceiling fan shaped room had issues with standing waves, excessive noise from too many early reflections, and lots of bass stored in the corner. As with most typical churches, carpeted floor and padded seating give the room the performance of the room being 50% full when it is empty. What is also typical is that the carpeting and padded seating do enough absorption above 2000Hz that adding more absorption panels to manage the lower frequencies would also mean killing the room even more for congregational singing and any hope for quality acoustical performances. With the reverberation above 2K already less than 1.4 seconds and the frequencies below 1K were almost 2 seconds, there were not too many options available. In this case, it was found that frequency specific diffusion would be the best way to go. The performance of the diffuser system was enough to reduce bass energy, midrange energy and eliminate standing waves. This would bring the overall reverb time down to an average of 1.3 seconds from 200 to 4000 Hertz, which makes it a great room for a Pentecostal type worship program. Short enough RT60 for a high quality contemporary worship service and live enough for great congregational singing. Eight and twelve inch diffusers were used in a detailed system to cut over 25dB between 200 to 800 Hertz. This design also absorbs bass energy down to 40 Hertz. Since most of the bass energy is diffused or scatter along the walls, there is no bottom end buildup in the corner and therefore no need for bass traps in the corners. This system makes it easier to hear that low note below 100 hertz. They come across as cleaner, clearer sounds at a lower volume. As a bonus you can feel more bass.

With the transformation of the room completed it was time to review the sound system. The existing speaker was old and they were not really speakers meant for installation work. Portable plastic speaker boxes are not really suited for fixed church installations. The options were limited. The ceiling was too low for any type of line array system, so it was necessary to stick with well-controlled brute force full range boxes. With the drop ceiling and limited suspension points, the lightest boxes that can move air the best were at the front of the line. Being familiar with a number of speaker brands, a not so well known speaker brand call KV2 Audio was brought to attention. Speakers with horns that crossover below 1000Hz always move to the front of the line. In this case, the ES1.0 speakers have a horn crossover at 500Hz – which means better gain before feedback by default. When you have a low ceiling, directivity control is very important. Not because the acoustical treatment was not good enough but because of the proximity of the loudspeakers to open microphones on stage. When loudspeakers are within 15 ft of open mics and you are trying to mic a choir, you need speakers that are well controlled and these speakers have that kind of control. What is also helpful is that the ES1.0 is a Three-way speaker. Most three-way speakers tend to be heavy but the ES1.0 is only 74 pound or 34kg. The KV2 Audio "Less is More" truly hit the mark on this.

These loudspeakers had been compared to other well know speaker and each time, the KV2 speakers out performed what the churches had on hand or other speakers they were considering as replacements. The KV2's sounded better and performed better. It is seamless system that is matched up to an amplifier/processor (EPAK2500R) that is all built by KV2 Audio.

### KV2 Audio system setup

- 2x ES1.0
- 2x ES1.5
- 2x EPAK2500R
- 2x ESD10
- 2x ESD6
- 1x ESP2000



## The Rock Cathedral, Lagos, Nigeria

The Rock Cathedral is the multipurpose facility that houses the headquarters of The Rock Foundation and the House on the Rock. The building with a total floor area of 32,000 m<sup>2</sup>, (the largest footprint for a single building in Lagos State) accommodates facilities for worship, education, healthcare, community development, reformation training, recreation and social rehabilitation among many other initiatives. The user-friendly main auditorium, multi-purpose halls and overflow spaces comfortably seats up to 14,000 people at full capacity. The state-of-the-art ergonomically designed facility is structured to permit the efficient evacuation of human traffic in just less than 10 minutes.

### KV2 Audio system setup

- 5x VHD2.0
- 6x VHD1.0
- 4x VHD2.15
- 8x VHD4.18
- 4x VHD2.21
- 6x VHD2000
- 8x VHD3200
- 6x ES1.0
- 6x EPAK2500R
- 6x ESM12
- 6x ESM 26
- 8x EX10
- 10x EX10
- 2x ES1.8
- 2x EX12

HOTR was seeking to cooperate with a European Company for Acoustics, Audio, Light and Video. After screening and shortlisting they finally chose the Greek company Audigys to design, supply and overview installation for these large and demanding systems. Africa has a passion for the art of music and sound. Audigys designers and engineers had approached their proposal with this same passion, and it was a success.

The main concern was to create systems that would be powerful, accurate, flexible, easy to operate and fitted to the complex's various requirements of zones for different uses. It was not an easy set of tasks given that there were several construction and architectural constraints. The Main Auditorium accommodates 12,000 people, Prayer Chapel 700 people, the foyer, the corridors, utility rooms etc., are areas of traffic of congregation, visitors, and staff. Audigys implemented the acoustic, sound reinforcement system, lighting system, audio and video studios. The second most important element of a good system is the choice of loudspeakers and their placement in the building. In contrast with the trends and to what one would expect to see in such a place, Audigys designed and installed single point source systems instead of a line array ones, the current 'best practice' in large-scale PA.

*"KV2 was our inspiration and supporter in this project. Our synergy and synchronicity together achieved spectacular results. There is not a Sunday that goes by, when someone doesn't remark about the quality of the sound"* G. Theodoropoulos chief installation engineer of Audigys. The House on The Rock project was delivered at the end of 2013.



## Jerash Festival, Jerash, Jordan

For the seventh year in a row, Triad Live Productions were appointed to provide sound production and reinforcement services for the 2017 Jerash Festival. Following previous successful festivals they chose to tackle the event exclusively with KV2 Audio systems.

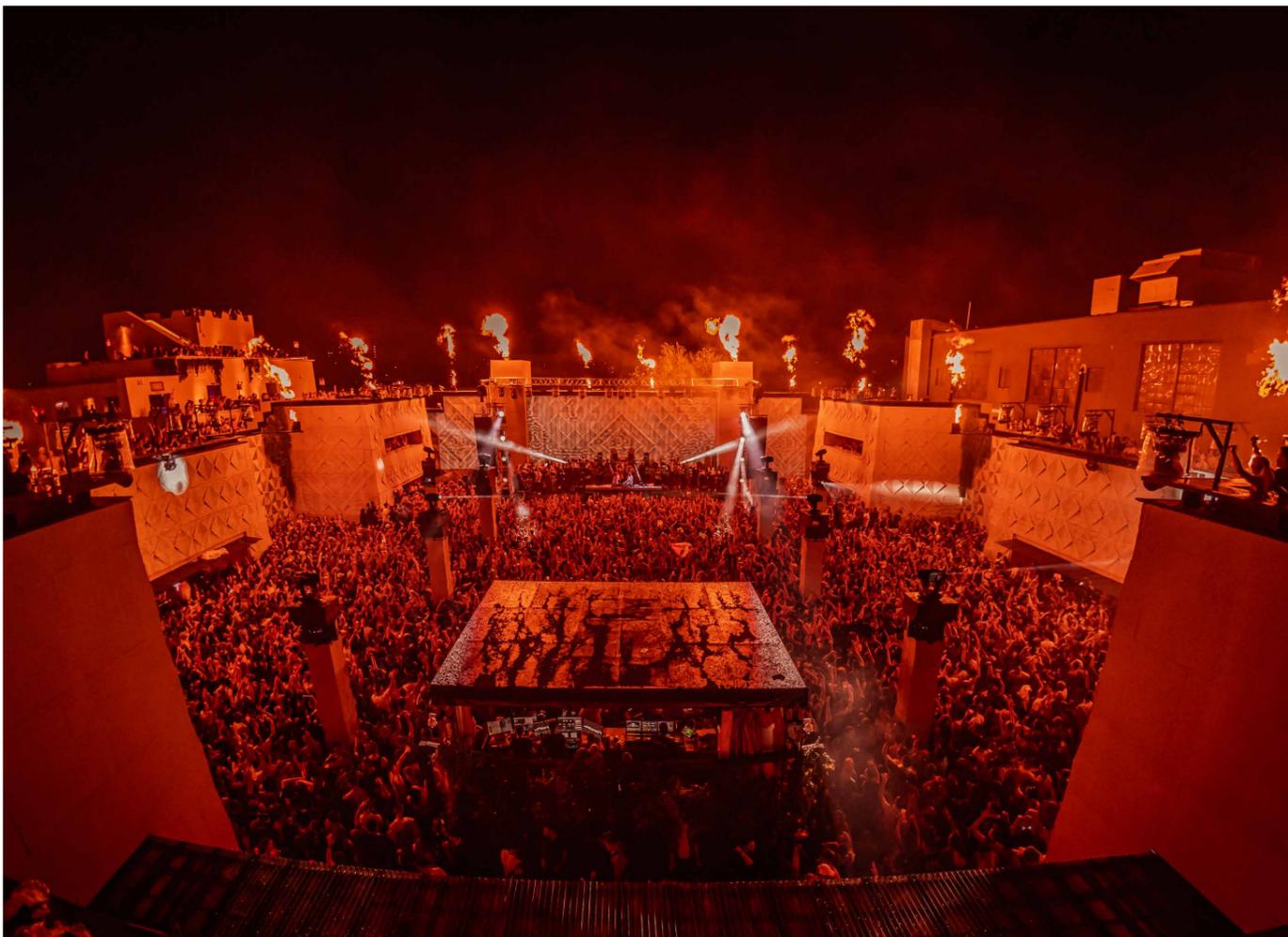
The main South Theatre featured an audience capacity of around 7,000 and was covered by one of KV2 Audio's flagship VHD Systems. This system comprised of the VHD2.0 mid/hi with VHD1.0 down-fill enclosure with low frequency reinforcement courtesy of VHD4.18 and VHD2.15 subwoofers. Associated VHD2000 and VHD3200 amplification and control units were used.

ES1.0's were used for out fill and a complete monitor system made up of EX12's was deployed. The smaller North Theatre was covered by an ES System comprising ES1.0 mid/hi's, ES2.6 subwoofers and EPAK2500R amplification and control units.

This year's Festival program featured renowned Arab artists such as Wael Kfouy, Ragheb Alama, Nawal Zoughbi, Nancy Ajram, Fares Karam, Hani Shaker, Omar Abdallat, Diana Karazon and many others.

### KV2 Audio system setup

- 2x VHD2.0
- 2x VHD1.0
- 4x VHD4.18
- 2x ES1.0
- 4x ES2.6
- 2x EX12
- 2x VHD2000
- 1x VHD3200
- 2x EPAK2500R



## The Avant Gardner, New York, US

To get a handle on the party's sheer enormousness, it was best to ascend the breezy battlements of the four-story, castlelike structure. High-definition projectors beamed pink and purple images on the fortress walls. Rays of light sliced through fog like Bat signals. And a sea of tiny heads, as big as a city block, bobbed beneath palm trees and airborne KV2 Audio speakers.

After a year of false starts and legal imbroglios, the contentious nightclub Brooklyn Mirage opened on Saturday 1th of July 2017 as a huge, architecturally ambitious destination for deep house and techno parties. It is the outdoor component of Avant Gardner, an 80,000-square-foot development at 140 Stewart Avenue in an industrial corridor of the East Williamsburg neighborhood, a few grubby blocks from Queens. By fall, a warehouse (now filled with sacks of cement mix and construction equipment) will be transformed into an event space. Another area will become a 5,000-square-foot club. All told, it will hold 6,000 visitors.

"People think we're trying to open a nightclub, but that's not economically viable," said Simar Singh, the head of strategy, marketing and development for Cityfox Experience, the party promotion company behind Avant Gardner. Along with raves, he said, the space could host corporate bookings, fashion shows, weddings and film screenings. "I want to do 'Big Lebowski' and make a Facebook invite for thousands of people," he said.

"In the two decades of designing and curating venues worldwide I have experienced numerous top end systems and had yet to come across a company that provided a full range sonic experience that complimented the design of the spaces. In my line of work the design of the space is only as rich as the foundations of the room and the sonic details is what really makes a space come to life, as it's the heartbeat of a room. The moment I've heard the VHD5 I was immediately impressed by the full spectrum of sound and how it maintains the warmth of an analog experience. I used the system in the development of an open-air venue that would program both live and recorded performances. The installation was scrutinized by KV2 engineers and integrated closely with the design of the venue. The result is a 54,000 sq ft multi-level completely open-air venue that has the sonic experience of an indoor concert hall, with a rich immersive sound experience," says Marc Dizon, the architect with Dizon Collective who collaborated on the design of this venue.

### KV2 Audio system setup

- 2x VHD5.0
- 6x VHD8.10
- 6x VHD4.21
- 40x VHD4.18
- 10x VHD3200
- 2x VHD5000
- 2x VHD5000s
- 2x SL412
- 1x SL3000
- 6x ESD10
- 4x SAC2
- 5x SDD3
- 6x SD8
- 4x LD4
- 3x LD4 mix

**"The moment I've heard the VHD5 I was immediately impressed by the full spectrum sound and how it maintains the warmth of an analog experience."**

### Marc Dizon

Architect

Dizon Collective, New York

Projects portfolio includes: Summit Series, Megu at the Dream Hotel, Hakkasan Las Vegas, Revel in Atlantic City, Brooklyn Mirage, Up and Down, Brooklyn Mirage 2.0, Marquee, Output in New York and Aria, Technogym in India, Goodroom Dubai, a Live Concert Venue in Downtown LA, Megu in Rome Central, 49 room Catskill Retreat Hotel, etc.



## Lucie Bílá, Fifty Fifty Tour Bratislava, Slovakia

KV2's revolutionary new VHD5.0 Large Format Concert System proved its enormous potential for changing the world of large scale sound reinforcement as we recognize it today. The system was successfully applied for three sell out concerts in Bratislava for the country's leading singer, Lucie Bílá, celebrating her 50th birthday and being acknowledged with multiple awards as the most popular singer of the last 25 years at the same time.

To date, there has not been a larger production in the history of Czech and Slovakia show business. Over 300 production personnel were employed for the show and involved in preparation over a year, with monumental scenes and an incredible Soundscape being created in the largest stadium in the Slovakian capital.

Producer and director of the show - Jeffo Minarik commented on his long term hunt for the best sound system that would have matched the highest criteria for the planned production: *"We wanted the best sound system available, with crystal clear resolution and high dynamics, not only to reproduce Lucie's amazing voice, but also to cover the large, varied broad instrumental portfolio we planned to use."*

Each part of the VHD5.0 system is proportional in size to the frequency wavelengths it reproduces. The radiated power of each bandwidth therefore remains consistent and balanced in relevance to the overall frequency response. This was one of the main benefits as the same consistent sound was delivered to every seat in the house. *"I was literally shocked during the first test of this system. I have never heard both vocals and instruments so directly, but more importantly - naturally, directly in front of my face and what is more incredible, unlike other systems we used before, with the VHD5.0, the sound stays clear, fast, powerful and dynamic everywhere,"* adds Jeffo.

The concert's system setup consisted of 5x VHD5.0 (2x doubles per side including 4x SL412s as down-fill, 1x single in the middle) as main PA, a single VHD2.0 per side as side-fill and 10x VHD4.21 Active Passive Subwoofers uniquely flying alongside the VHD5.0s. For monitoring purposes of the orchestra, 4x ESM26 and 2x ESM12 were used. The whole audio chain was analog controlled throughout by two modified 48-channel Audient Aztec mixers.

*"You can't actually localize the source of the sound since it stays balanced and goes from the stage wherever you move,"* say Alex Molcanov, main sound engineer of the concert. *"When you look at the proportion of the system including all subs flying and at the same time have 110dB of crystal clear sound in 70 meters you don't believe it,"* says Alex.

Photo credits: Ctibor Bachratý

### KV2 Audio system setup

- 5x VHD5.0
- 4x SL412
- 10x VHD4.21
- 5x VHD5000
- 5x VHD5000S
- 4x SL3000
- 2x VHD2.0
- 2x VHD3200
- 4x ESM26
- 2x ESM12
- 4x EX12
- 10x ESD5
- 1x ESP4000



## Czech Philharmony with Jazz at Lincoln Centre Orchestra, at Prague's Open Air Concert, Czech Republic

A Unique joint performance by the Czech Philharmony and world famous jazz promoter - Wynton Marsalis, alongside his Jazz at Lincoln Centre Orchestra, was held within the traditional Open Air Concert at Prague Castle. In what is becoming the norm, KV2 Audio was chosen to provide the excellent sound system.

Marsalis first tuned the audience with three standard pieces by Duke Ellington and then both orchestras played in unison, Marsalis symphony conducted by Wayne Marshall. This had to be unfortunately terminated just before its end due to the sudden adverse weather conditions. However this piece acted like a history guide through various forms of swing. It needs to be highlighted that members of the Czech Philharmony were the absolute equivalent companions to the star performer, especially trumpets and clarinets.

Unlike previous years, when promoters chose the KV2 Audio VHD2.0 Large Format Point Source System, this year the new revolutionary system VHD5.0 was utilized. It is a matter of course that the whole acoustic chain was kept analogue, including mixing consoles Audient Aztec 48 for the orchestra and Audient Aztec 32 for the jazz ensemble.

Photo credits: Czech Philharmony

### KV2 Audio system setup

- 2x VHD5.0
- 6x VHD8.10
- 2x SL412
- 2x VHD5000
- 2x VHD5000S
- 2x SL3000
- 2x EX10
- 2x SL412
- 2x EX12



## Grolsch Blues Festival, Schöppingen, Germany

On Saturday 3rd and Sunday 4th of June 2017, the 26th annual Grolsch Blues Festival took place in Vechtebad, Schöppingen (Germany) and this year saw the highest number of visitors recorded.

*"It was a breathtaking festival with a great atmosphere,"* commented Richard Hölscher, organizer of the Kulturring Schöppingen, *"I was really pleased with the course of the festival especially as we were a little bit nervous because of the different music styles".*

There needn't have been any concerns as the record crowd numbers were blown away by the acts on show. Even a violent weather outbreak couldn't dampen spirits and hotel rooms are already being booked up for the festival in 2018.

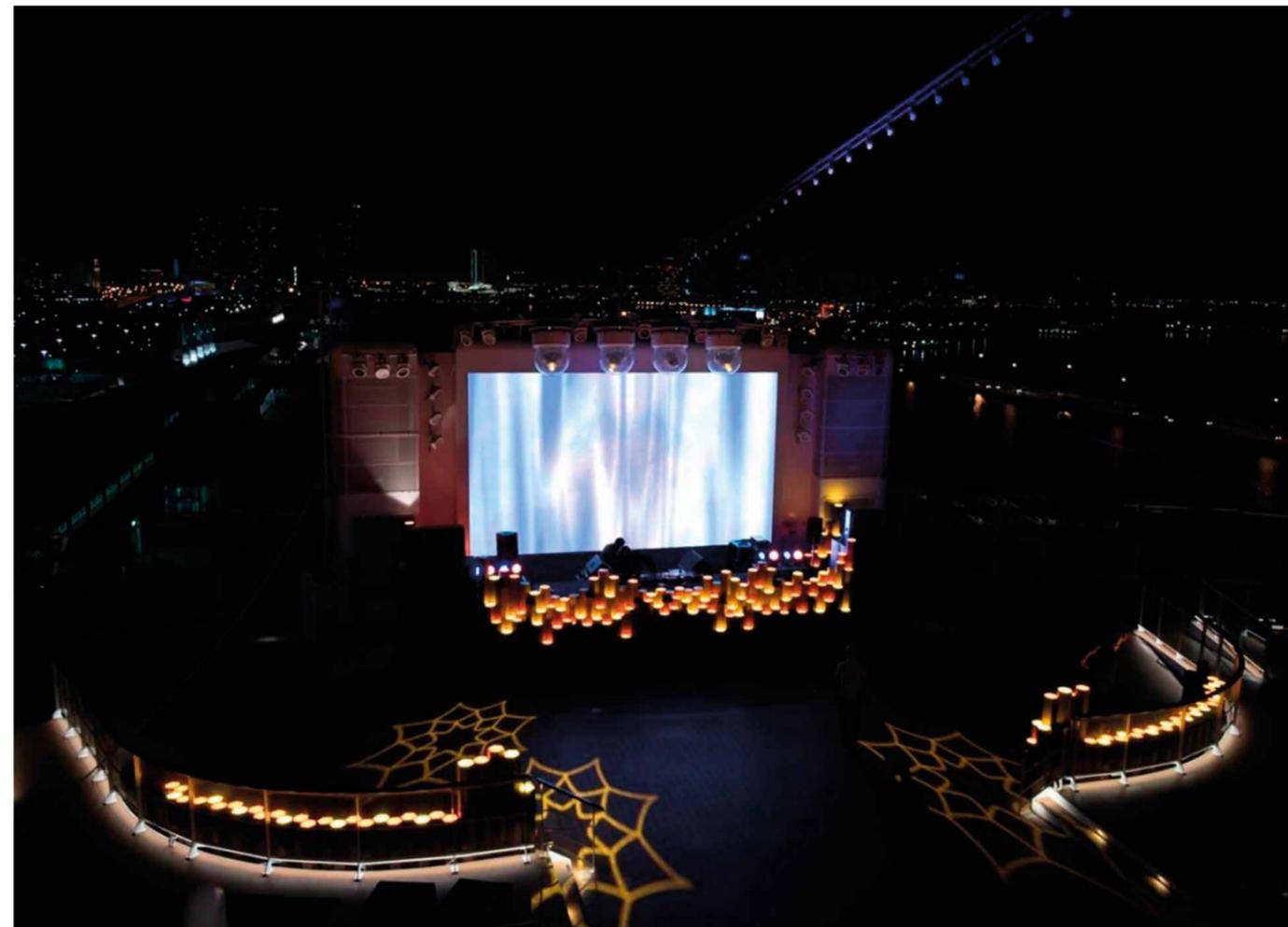
A colorful musical mixture of blues, funk, folk and psychedelic rock was offered to the music fans: Eric Gales, Doyle Bramhall II, Ruthie Foster, Grace Love, Indigenous, Walter Wolfman Washington & The Roadmaster, My Baby, Delgres, Future Thieves, Chubby Buddy, The Grand East ... to name just a few.

KV2 Audio products were yet again used for main Front of House and sidefill applications.

*Photo credits: © Flashed-Photo Matthias Höing Photography*

### KV2 Audio system setup

4x ES1.0  
6x ES2.6  
8x ES 1.5  
4x EPAK 2500R



## Summit at the Sea, Miami, Florida, US

MIAMI – From November 9th to 12th 2016, the Norwegian Escape Cruise Ship was taken over by Summit, a Utah based conference series that hosts a broad range of attendees for its events across the US and internationally. For Summit's flagship event, Summit At Sea, KV2 Audio systems were the speakers of choice to deliver multiple stages of content across the ship.

Summit At Sea hosted over 4000 attendees, artists, performers, speakers, and entrepreneurs who were taken to international waters for a conference at sea that felt like a floating incubator of minds, creating one of the most unique networking and interactive experiences just about anywhere.

Notable performers and speakers included Tony Hawk, Eric Schmidt of Alphabet (Google), Quentin Tarantino, Kendrick Lamar, Erin Brockovich and more. On the main pool stage US Distributors, PLUSMUSIC US, provided a VHD2.0 system which saw a great headlining performances by Theivery Corporation, Foster the People, Bob Moses, Quantic, and more. The aft rooftop deck, featured a wide dispersion SL412 system with DJ performances by Satori, Powel, Rampue, Jermaine Dupri, Chances with Wolves among others. There were two smaller EX12 systems provided for a meditation and wellness room as well as for a late-night club environment below decks.

Summit will continue with their KV2 gear for future events held at their headquarters at Powder Mountain in Eden, Utah as well as at their next flagship event to be held in downtown Los Angeles in the fall of 2017.

### KV2 Audio system setup

2x VHD2.0  
4x VHD2.16  
4x VHD2.21  
12x VHD4.18  
4x ES1.0  
8x ES1.8  
2x ESR215  
2x SL412  
2x EX15  
2x EX10  
8x EX12  
2x EX1.8  
2x ESD15  
2x VHD2000  
6x VHD3200  
4x EPAK2500R  
1x ESR3000  
2x SL3000  
1x ESP4000



## Queen's 80th Birthday Celebration, Balmoral Castle, UK

Set within the grounds of Balmoral Castle amongst the stunning scenery of the Scottish Highlands, a concert took place to celebrate the Queen of England's Birthday.

The concert was put together by George Walker Events to not only celebrate with Her Majesty, but also to raise funds for the Anthony Nolan Trust for Leukaemia. The line up featured a north of the border flavour - Fiona Kennedy, The Scottish Fiddle Orchestra, The Graham Geddes Scottish Dance Band, Mass Pipes and Drums, Celtic Scottish Dancers, with the highlight of the evening being a stunning performance by renowned classical singer Katherine Jenkins. Presented by BBC2's Ken Bruce, the concert was attended by a crowd of almost 10,000 people and lasted over a five-hour period, including a spectacular reworks display and an air display by the 2Excel Blades aviation team. The system quality was paramount for this most prestigious of Events and as a result KV2 Audio were approached after the head of sound for the project heard a demonstration of the VHD system at Frankfurt's Pro Light & Sound exhibition, where it featured in the Live Sound Forum outdoors in a comparison to competitor's line arrays.

Commenting on this experience he explains further: *"In Frankfurt the VHD system was stunning; I've never really heard anything quite like it, clarity, coverage, it was all there and it's so physically small in comparison to other systems. I knew instantly it was the system to use for Balmoral."*

After consulting with Jonathan Reece-Farren and Andy Austin-Brown of KV2, it was decided to utilise a system configuration of just two VHD 2.0 Mid/High cabinets per side and a ground stacked mix of four VHD4.18 subs and two VHD2.15 subs per side, powered by KV2's VHD amplifiers.

Upon arriving on site for the first time he knew the audio consultants knew there may be some initial apprehension about the small physical size of the system, commenting *"When we arrived, we were not surprised to see and hear the expressions of several of the experienced event organisers questioning the supposed small amount of PA that appeared to be available, however this quickly changed to universal acceptance and broad smiles once the system was switched on and the first sound checks came through. The quality was truly amazing and far from struggling to cover the area, the only problem we encountered during sound check was a little bit of 'slap-back' from a mountainside over a mile away! So we turned it down a little!"* Great success all round and a Royal seal of approval for KV2.

### KV2 Audio system setup

4x VHD2.0  
8x VHD4.18  
4x VHD2.15  
4x VHD2000  
4x VHD3200



## Further Future Festival, Las Vegas, Nevada, US

LAS VEGAS – PLUSMUSIC US was proud to partner with the Further Future festival, April 29th – May 1st which took place on a remote patch of desert 60 miles north of Las Vegas, Nevada at the Moapa Valley Indian Reservation. PLUSMUSIC brought an extensive set of KV2 Audio equipment for use on three stages.

The festival, founded by the team behind the popular Burning Man art car "ROBOT HEART" featured a number of bands, electronic acts, DJs and a daytime lecture series. Despite some tough weather conditions, KV2's weather sealed cabinets were able to keep the speakers dry, and the show going. Skies cleared mid-weekend leaving festival-goers a picturesque view and 3 stages of crystalline KV2 Audio sound.

### KV2 Audio system setup

2x VHD2.0	2x ES1.8
2x VHD1.0	12x VHD4.18
8x VHD2.21	2x VHD1.0
2x ESR215	2x ESD1.18
2x ES1.0	2x ESD15
4x ES2.6	4x VHD2000
2x ESR212	1x ESR3000
2x ES1.8	4x EPAK2500R
2x SL412	1x ESP4000
4x SL215	16x VHD3200
2x VHD2.21	1x ESR2800
1x ES1.0	1x SL3000



**“When I first heard the KV2 speaker system, I was totally impressed. The quality of the sound coming out of the speakers was amazing. After listening to them I had to reach out to KV2 Audio and asked for a pair for my studio. I’m also now going to change my tech rider and ask for KV2 Audio speakers.”**

**David Morales**  
*Grammy Award-winning DJ and Producer*



**“The EX10 and EX2.2 system in my studio has brought a kind of clarity I haven’t had in other monitors. I’m even taking the KV2 gear out as monitors on club gigs!”**

**Louie Vega**  
*DJ, Producer*



## Yanni at Jordan Festival, Amman, Jordan

Many argue that the battle between Line Array and Point Source loudspeaker systems has been won by line arrays. Attend a concert anywhere and it will more than likely be reinforced by a line array setup. So, when a rental company, such as Triad Technical Services, opts to exclusively work with point source systems, such as those from KV2 Audio, it finds itself often having to educate the sound engineers at an event of the advantages that those systems deliver over their line array cousins.

This was no different when it recently when the Triad supplied the full technical setup at the Jordan Festival, which comprised three concerts taking place over a week-and-a-half period with an eclectic mix of performers taking to the stage at the Amman Citadel, upon the highest hill in Amman and overlooking the city. The opening night was dedicated to the singing of Lebanese composer Marcel Khalifeh, while Turkish dance troupe The Fire of Anatolia performed during the second event. The headlining act closing out the festival during the third and final night was Yanni.

Triad made the decision to exclusively work with KV2 Audio after Mr Marar heard the Czech manufacturer's VHD point source systems in action. "We came about working with KV2 Audio when they first launched the VHD system", Mr. Marar confirms. "We decided to work with KV2's point source technology exclusively and to educate people on the benefits of working with it. We were used to using line array systems in our rental stock, which we worked with on a regular basis until we heard the VHD system, which was a game-changer."

Putting the VHD system to use for the festival was never in doubt for Triad, but it did raise queries from Yanni's FOH sound engineer and tour director, Anthony Stabile. This proved a bigger obstacle to overcome than that of the outdoor and historically significant hilltop venue.

That system, which Triad supplied for all three of the festival's events comprised four VHD2.0 loudspeakers, flown two per side, a pair of VHD1.0's serving as down-fills, four ES1.0 units for out-fills and four EX12's providing front-fill. To take care of the lows, four VHD2.16 subs were flown, while eight VHD4.18 and eight VHD2.16 cabinets were ground stacked. Four VHD2000 and four EPAK2500R control and amplification units were implemented and four VHD3200's powered the subwoofers. A pair of SDD3 Super Digital Delay Line processors were also deployed.

"The sold-out Yanni concert was a huge success", reflects Mr. Marar. "We received positive comments from a lot of people praising the sound in particular. Everyone in the audience was raving about the sound and, most importantly, Yanni's team was impressed".

### KV2 Audio system setup

- 4x VHD2.0
- 2x VHD1.0
- 4x ES1.0
- 4x EX12
- 4x VHD2.16
- 8x VHD4.18
- 8x VHD2.16
- 4x VHD2000
- 4x EPAK2500R
- 4x VHD3200
- 2x SDD3



## The Preservation Hall Jazz Band concert for Summit LA17 on Broadway, Los Angeles, US

Summit LA17 was a three day festival held in the heart of Downtown Los Angeles. The festival hosted a diverse array of live performances, seminars and wellness classes alongside offerings of gourmet food with all experiences designed to foster relationships and inspire new perspectives.

Taking place between November 3rd and November 6th 2017 this was the 11th edition of the festival.

A highlight of the event took place on Saturday November 4th where the Preservation Hall Jazz Band (New Orleans Septet) played a great Concert at the Los Angeles Theatre, Broadway. Every nuance of the incredible musicianship was accurately transferred from the stage to the crowd through the distinctive crystal clear sound of KV2 Audio products.

### About The Preservation Hall Jazz Band

*At a moment when musical streams are crossing with unprecedented frequency, it's crucial to remember that throughout its history New Orleans has been the point at which sounds and cultures from around the world converge, mingle, and resurface, transformed by the Crescent City's inimitable spirit and joie de vivre. Nowhere is that idea more vividly embodied than in the Preservation Hall Jazz Band, which has held the torch of New Orleans music aloft for more than 50 years, all the while carrying it enthusiastically forward as a reminder that the history they were founded to preserve is a vibrantly living history.*

### KV2 Audio system setup

- 2x SL412
- 4x SL2.15
- 2x VHD2.21
- 1x SL3000
- 4x VHD3200
- 2x SAC2
- 1x SDD3
- 2x ESM12



## Annual Sinfonic Rock Night, Nordhorn, Germany

Organized by „Alte Weberei“ and in cooperation with the music school of Nordhorn, the 17th annual Sinfonic Rock Night in Nordhorn took place during the last week of November 2015. The Sinfonic Rock Ensemble consists of more than 120 musicians, divided into a classical orchestra of strings, brass, woodwind and percussion, a mixed choir, a rock band and 5 solo vocalists and seven church bells - all performing on 4 different stages at a time.

The concert hall is a former weaving mill with a square footprint. This doubles in to a similar empty hall behind a modest rear wall. The challenge was to cover this problematic room with even coverage for each member of the 650 strong audience. The KV2 system easily managed the task and the whole audience enjoyed a balanced and even sonic experience.

Andreas Grotenhoff first experienced KV2 audio products a year ago during an event held in a Church. He was so surprised and impressed with the level of performance that he proceeded to hire KV2 products for some of his smaller concerts. This led to him wanting to trial KV2 on a larger show and the Sinfonic Rock Night 2015 was the perfect opportunity.

*“These speakers are really fascinating. They are able to reproduce exactly the sound coming out of my mixing desk and to deliver it to every corner of the concert hall. The concept from Rüdiger Wolbeck (RW Sound) and his KV2’s proved to be very convincing to the whole audience and me!”*

### KV2 Audio system setup

- 4x ES1.0
- 4x ES2.6
- 4x EPAK2500
- 4x ESM12
- 4x ESD6
- 6x ESM26



## Al Ahliyya Amman University Arena, Amman, Jordan

The 5,000-seat Al Ahliyya Amman University Arena is one of very few indoor venues in Jordan's capital that has been designed to host concerts and events. A variety of international acts, such as Sting and Bryan Adams, have played the arena, so when the time came to replace its aging sound system, it stood out as a prestigious reference for any company to win.

*“They were considering which system to put in there and this is where we came in,” recalls Amjad Marar, general manager of Triad Technical Services. “We approached the university and they wanted to listen to options from all of the major manufacturers. They listened to all of these line array options and then they heard the KV2 point source solution. We sat with the owners and they asked me what we use in our sister production company, called Triad Live Productions, we told them KV2 Audio so then they decided to go with KV2.” This is not to say that the selection of KV2 was a straightforward one, as the university did have some reservations. “The only thing they were worried about is that most technical riders do not feature KV2 Audio. The answer I have for that is that they are the only ones who have mastered single point source for large concerts and quite honestly have become widely accepted by artists based on their excellent delivery,” explains Mr Marar. “These guys are just amazing, George Kampera is a genius. KV2 is the most amazing company I have come across, and I’ve been in the business for a long time.”*

### KV2 Audio system setup

- 2x VHD2.0
- 2x VHD1.0
- 16x VHD4.18
- 2x ES1.0
- 2x VHD2000
- 4x VHD3200
- 2x EPAK2500R
- 14x EX12 active monitors
- 4x ESR215
- 1x ESP4000

Triad worked in partnership with the engineering team of the arena. The result is based around KV2’s VHD2.0 three-way point source speakers. *“The VHD2.0 is such an amazing system,”* enthuses Mr Marar. *“First of all, it is plug and play. Second, the dynamics are spectacular, I’ve never heard a system like it in my life. “We ended up installing a double VHD2.0 system with the VHD1.0 as downfill plus 16 VHD4.18 subwoofers, along with ES1.0 speakers for outll duties,”* continues Mr Marar. *“Amplification for the system consists of four VHD2000 controller amplifiers for the mains four VHD3200 amplifiers for the subwoofers, and two EPAK2500R controller amplifiers for the outll speakers. For the stage monitors we used 14 EX12 active monitors, sidefills are a three-way ESR215 system, we used four of them just to cover the sides of the stage powered by a single ESP4000 power amplifier.”* The installation itself was a relatively smooth process. *“Andy Austin-Brown who is the technical projects director of KV2 came to Jordan and he supervised the installation,”* recalls Mr Marar. *“Because this is a point source system, it is so critical to know exactly where to put the speakers. If you move it to either side by even a little bit it is all wrong. It had to be exact. It was own at 8.93m exactly and two days were spent just to be able to allocate the perfect height and the perfect position so that the sound is seamless for the crowd. To get that just right was a challenge. You can estimate the right direction to deliver sound, but we really wanted something that delivers precision into every seat in the house, and this is the only way to do it.”*

With everything installed and commissioned, the end result is something Mr Marar is very proud of. *“The sound is seamless. You can walk from one end of the hall to the other, left, right, back and forwards and you will never be able to say a spot is louder than another,”* he enthuses. *“If you walk through every seat in the house with a dB meter it is the same everywhere. The only thing is there is a bit more bass energy in the front, but that is understandable as there are 16 subs in there.”*



## KV2 Audio at Global Eclipse Gathering, Oregon, US

A projection of one million visitors were expected to head to Oregon to see the solar eclipse in totality. One of the many festivals, but by far the biggest in Oregon, was the Oregon Eclipse Festival located about an hour outside of the small town of Prineville. Fourteen global collaborators came together to produce a festival, unlike any other festival before.

Symbiosis (California), Lightning in a Bottle (California), Bass Coast Festival (Canada), Beloved (Oregon), Envision Festival (Costa Rica), Hadra (France), Noisily (UK), Origin (South Africa), Ometeotl (Mexico), Rainbow Serpent (Australia), Re:Birth (Japan), Sonic Bloom (Colorado), Science and Non Duality (California) and Universo Parellelo (Brazil) brought the best of their events to create an out of the box world that has a little something for everyone. For the week of August 17th through the 23rd, attendees were completely off the grid on the Big Summit Prairie near the Ochoco National Forest without cell phone reception or internet.

5 stages were outfitted with KV2 Audio. Multiple companies came together sharing knowledge and gear to provide various system configurations. Live Instrumentation, Electronic Music, Theater, and Speech were all covered, the largest of which was a Indigenous Peoples ceremony for over 20,000 people during the Solar Eclipse.

Kori Piatt of Aesthesis had this to say about the Solar Temple stage: *"when the technical production team asked for a sound system that could provide for the most amount of people with the smallest footprint for speech, I knew the ES System would be the perfect choice. Everyones expectations were exceeded, including my own. We had crystal clear coverage well over 100m away, and not a single moment of feedback."*

Photo credits: © Jacob Avanzato

### KV2 Audio system setup

SL Series  
ES Series  
EX Series  
VHD subwoofers  
K-Rig



## Adlib Fashion Show, Ibiza

Adlib is an artisan fashion brand that works in traditional embroidery techniques with natural fabrics and lace. The brand is always copied despite the ever-changing styles and trends in the world of fashion. Created in 1971, Adlib took its inspiration from typical Ibizan folk-style clothing and dresses and was directly influenced by the hippy movement of the time.

One of the main promotional aspects of Adlib's brand is the annual "Adlib Fashion Show". The event has become one of the essential dates in the fashion calendar. The 2016 Adlib Fashion show took place in the Recinto Ferial de Ibiza, Eivissa and began on June 9th 2016.

Ibiza Plug & Play were responsible for providing audio for the event and chose to specify one of KV2's SL Systems with additional low-frequency reinforcement from the VHD2.21 2x21" subwoofer system.

The KV2 System offered great sound quality and coverage across the whole auditorium and runway with Omar Gisbert taking care of the smooth production process alongside his technical team.

### KV2 Audio system setup

2x VHD2.21 white  
2x SL2.15 white  
2x SL412 white  
2x SL3000  
2x VHD3200



## Opera Café, Budapest, Hungary

KV2 Audio are pleased to announce that yet another premium venue in Hungary has chosen KV2 products as the ideal choice to enhance the experience of its new client base.

Situated in the former Cigar Saloon of the unique Opera House, Budapest - which used to host meetings of the countries aristocrats - the chamber was transformed by the Zsidai Group in to what is now a top Gastronomic restaurant and bar called the Sarastro Bar.

As well as being open to members of the public, the venue also caters for spectators visiting the Opera. Customers can enjoy refreshments before shows and during intervals in the Bar which has a capacity of up to 800 evening visitors - all of whom can also enjoy music reinforcement courtesy of KV2 Audio's EX products.

András Kárpáti, CEO of Megatone Ltd., was tasked with specifying a system of which "world class sound quality" was demanded. Explaining his decision he comments "KV2's EX products have an incredible sound and the quality is exceptional - especially considering the reasonable pricing. The EX1.2 single 12" subwoofer has such a deep response it feels like many other manufacturers 18" subwoofers".

A total of six EX6 active 2-way 6" loudspeakers were mounted above the bar at the centre of the Opera Café with two EX1.2 active single 12" subwoofers hidden from view. It was important to hide the subwoofers but maintain the systems clear sound image.

We are delighted to report that the system met the expectations and that the top class venue now boasts a top class sound system.

### KV2 Audio system setup

6x EX6  
2x EX1.2



## Exhibitionism by Rolling Stones, UK

It is with great Satisfaction that KV2 can report that the incredible Rolling Stones exhibition "Exhibitionism" is relying heavily on KV2 Audio loudspeakers to invite audiences in to the hedonistic Rock n' Roll world of the legendary band. Set in London's Saatchi Gallery, Exhibitionism takes visitors through the sprawling history of one of the worlds biggest bands via nine individually themed rooms ranging from an immersive and realistic reconstruction of their first shared at culminating in a mind-blowing backstage and 3D surround sound concert experience.

With an established reputation for an uncompromised approach to audio reinforcement – especially within the field of Live Music – it is no surprise that Sound Designer Carolyn Downing specied KV2 products for such an important project of musical heritage. A total of 30 products from the passive ESD range and active EX range were deployed throughout all primary playback areas with 7 ESP 2000 amplifiers powering the ESD products.

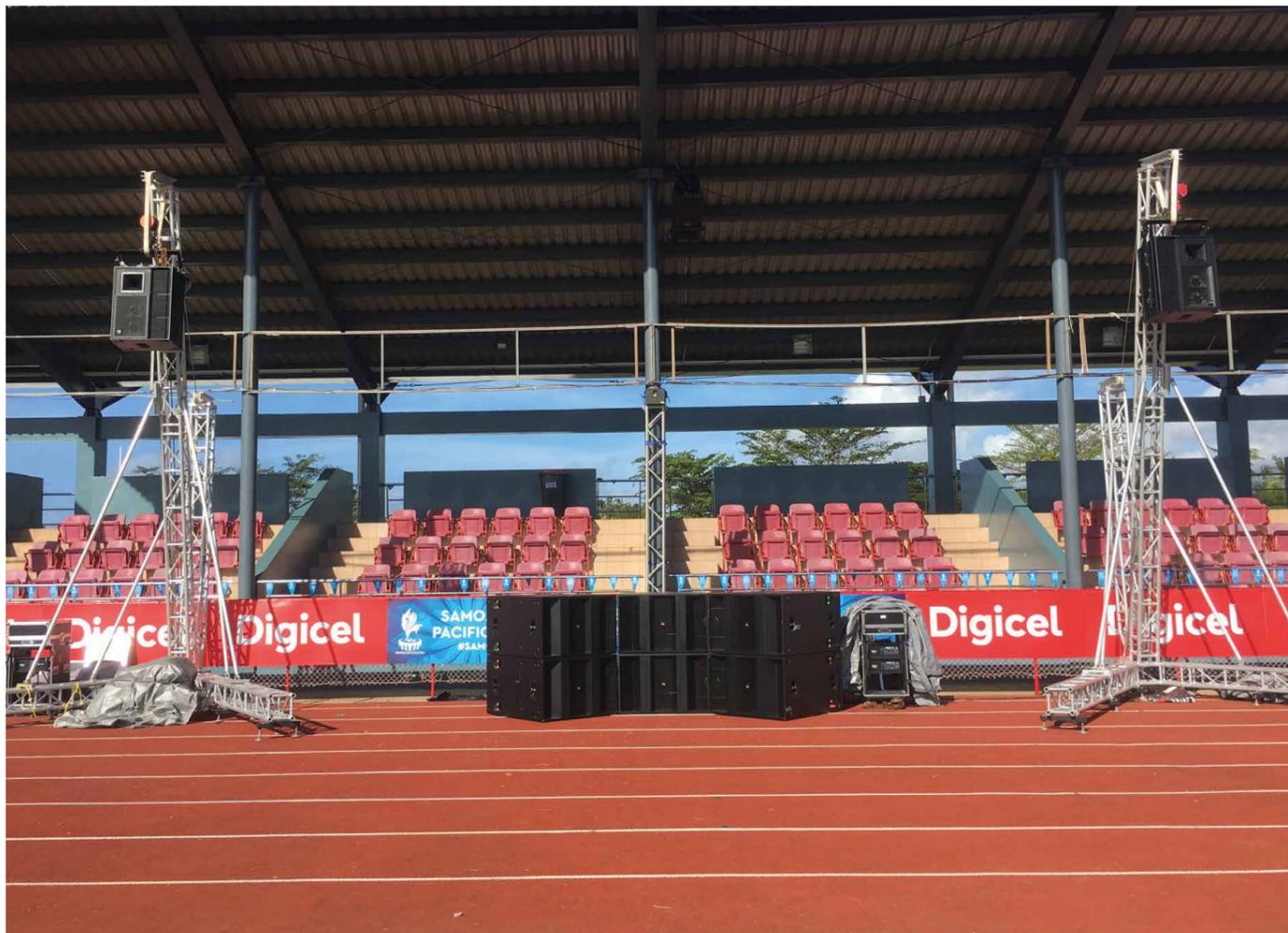
Carolyn's decision to specify KV2 products came on the back of KV2's recent and high-profile successes within the Theatre market, where many noted Sound Designers have moved away from traditional Line Array solutions in favour of the sonic results achieved through point source. As pioneers of point source technology KV2 Audio aim to offer better coverage along with improved clarity and definition from a more compact loudspeaker solution. A day spent in Carolyn's local Theatre discussing the brief of each room whilst evaluating the various options took place to settle on the exact specification.

Carolyn commented "Discovering KV2 Audio has been a revelation for me. This was my first opportunity to get to know and work with KV2 products and was a key turning point in my design process for Exhibitionism. I was stunned by the audio quality on oer as well as the customer service and personal interaction I received from Jonathan Reece and his team. KV2 were more than happy to accommodate the flexible ever-changing and demanding requirements of such a complex high profile venture. Being my first experience of working with KV2 products Jonathan ensured I felt secure in my choices every step of the way. The Rolling Stones' story is incredibly multi-faceted, from humble blues beginnings to electrifying mega stadium gigs encompassing art, fashion and cinema inuences in their immense body of work. This meant that I needed a loudspeaker manufacturer who could accommodate the range of story-telling opportunities that the Sound Design was required to fulfill."

Carolyn concludes "I was grateful to have KV2 products by my side providing the delicacy and warmth required for intimate speech playback during documentary content and also confident in the knowledge that I could rely on the kit to deliver high SPLs packing a real punch but giving a pleasurable and invigorating experience for the performance content. I am very excited to have KV2 in my arsenal for future projects!"

### KV2 Audio system setup

16x ESD6  
4x ESD10  
2x ESD12  
4x EX1.8  
4x EX1.2  
11x ESP2000



## KV2 delivers for Opening and Closing ceremonies of 2019 Pacific Games, Samoa

Samoa is a small island in the middle of the Pacific. This year it plays host to the sixteenth edition of the Pacific Games which sees over 4000 athletes competing in 27 different sports. It is also home to DAWG Professional Audio whose success with their world-class KV2 Audio inventory was sufficient to win the audio tender for the opening and closing ceremonies of the 2019 Pacific Games.

DAWG is owned by Corey Keil who also owns Samoa's Radio Polynesia and TV3. Passionate about sound, Keil's love affair with KV2 began when he heard a pair of KV2 SL412s running with four double 21" subs on the demo stage at ProLight & Sound. "I was literally blown away," he recalls. "I just couldn't believe what was coming out of two such small boxes! I walked straight onto the KV2 stand where I met sales director, Dave Croxton, and said, 'I want the system you have outside!'"

Fast forward to the Pacific Games 2019: DAWG Professional Audio came up against strong competition from both Australian and New Zealand companies bidding on the event. After months of negotiation the contract was awarded to DAWG in an effort to support local business but with a heavy mandate that the sound and coverage of the stadium must be world class. Dave Croxton from KV2 flew in to assist along with New Zealand sound engineer, Mack Tane. "Initially when Corey sent the stadium plans across to KV2 we looked at a time-aligned distributed system pointing out into the stands," says Croxton. "When I arrived, however, we realised that there was also a requirement to fill the field where the athletes would sit, and hundreds of school kids would perform. As we had limited inventory, it was decided we would set up a physically time-aligned system in a line on one side of the stadium shooting across the field to the main grand stands. Two single VHD2.0s were flown off 6m towers to throw across the field while two SL412 wide dispersion cabinets were placed on lower towers to cover the main field. Two single groundstacked ES systems were placed at each end of the main system angled out at 45 degrees to cover each end of the field. These systems consisted of two ES2.6 double 15" subwoofers with a three-way ES1.0 mid-high."

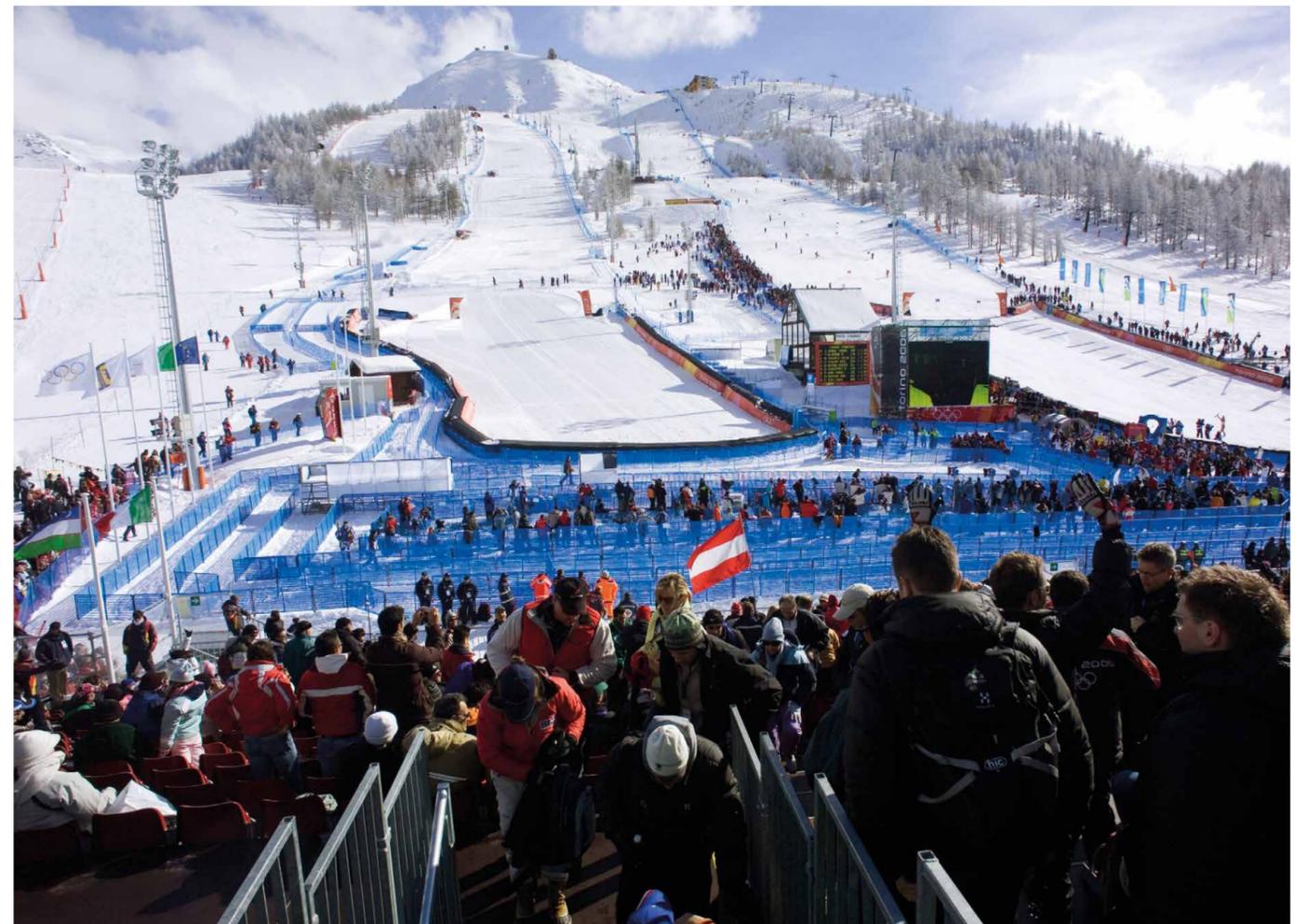
A sub bass cannon consisting of three VHD4.21s was centrally located to provide even bass distribution across the whole stadium. The creative director wanted strong bass reinforcement of the native drumming in the ceremony's soundtrack.

As the main system was around 130m from the main grandstand, four ESR212 three-way cabinets were positioned on top of VHD2.16 double 15" subs at 110m on delay to cover the main stadium. The end result was simply astounding.

"We measured 100db peaks with amazing full range clarity at the top of the main grandstand and the whole stadium was covered perfectly," recounts Keil. "The level dropped off a little out on the ends where the ES systems were shooting, but it was still perfectly clear and audible. The sound in the main stand was just fantastic - really clean and punchy for the performances. Even though we had the ESR212s hooked in as delays, the VHD2.0 system is just amazing and the VHD4.21 sub cannon satisfied the Samoans love of bass without compromise."

### KV2 Audio system setup

- 2x VHD2.0
- 2x SL412
- 2x ES1.0
- 4x ES2.6
- 4x ESR212
- 4x VHD2.16
- 3x VHD4.21



## Winter Olympics 2006, Turin, Italy

At the Turin Winter Olympics, KV2 Audio was selected as the key manufacturer for sound reinforcement at Sestriere, host to the Alpine Skiing events, and the company's flagship VHD system found itself fulfilling the roles of a sound triathlete.

By day, the several thousand athletes and visitors attending the events heard single stacks of VHD ensured announcements, presentations, and the occasional live act loud and clear. By night, a purpose-built nightclub in the Olympic village converted from a cinema specifically for the Olympic events, played host to the second VHD system.

Installed by KV2's Italian partners (for a total of four weeks with temperatures regularly dropping below -10°C) this was the first time the system has been used for such a prestigious event in the Italian marketplace, and "a testament to the increasing profile and reputation of KV2 as a premier audio manufacturer" say the company.

So what of the results? The company says: "Within a few minutes of switch-on, there were big smiles all round as the sound penetrated every corner of the assembly square, attracting the interest of some very frustrated shop owners several hundred metres away who claimed they could hear every word."

### KV2 Audio system setup VHD Series

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