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DUC NGUYEN

Director Leatcon Exhibition & Convention www.leatcon.com

Touch & Try

From October 22 to 24, 2024, Leatcon in Hamburg will once again be the central meeting point for professionals in the live and entertainment industry. Our central idea: a special networking convention where technology is not just presented but made tangible. The trade fair invites you to experience modern technologies up close, try them out, and deepen your knowledge.

nstead of just observing new technologies from a distance, you'll have the opportunity to get hands-on and practically experience the latest developments in event technology. In special experience zones, practical trainings, and interactive setups, technology will be made tangible. A highlight of this year's Leatcon is the Tracking Area, where visitors can try out various trackin solutions. This technology, which captures the movements and positions of people, objects, or cameras in real-time, is crucial for live broadcasts, event productions, and interactive installations. Different systems can be tested, and their versatile applications discovered, offering exciting insights for both newcomers and experienced professionals.

Another area is the HDR Experience Zone: it showcases the enormous visual possibilities of High Dynamic Range (HDR) and Wide Color Gamut (WCG). After a theoretical introduction by

Editorial

experts Matthias Wilkens and Johannes Grieb, who will give a lecture on the Main Stage on October 22, visitors can experience the effects of HDR/WCG on interactive exhibits in a live setup.

The Training Area offers a great opportunity for operators and event technicians to deepen their knowledge of lighting technology. In hands-on training sessions, four relevant lighting consoles will be presented. Whether in Avolites Titan Training, GrandMA 3 User Training, ETC Hog Training, or Chamsys MagicQ Training - the sessions offer exciting insights and help bring skills up to date.

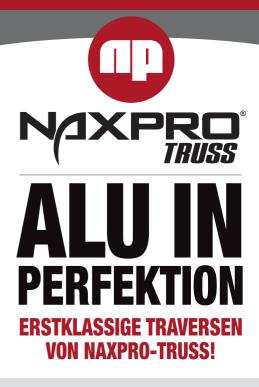
With these and other offerings, we aim to create unique added value for all Leatcon visitors. The trade fair aims to enable everyone - from newcomers to experienced professionals - to expand their knowledge, discover new technologies, and exchange ideas with like-minded people. With over 120 program items, from lectures and workshops to hands-on demos, there should be something for everyone.

Take the opportunity and secure your ticket for Leatcon 2024 now. I'm very much looking forward to meeting you in person in Hamburg.

Best regards,

Duc Nguyen









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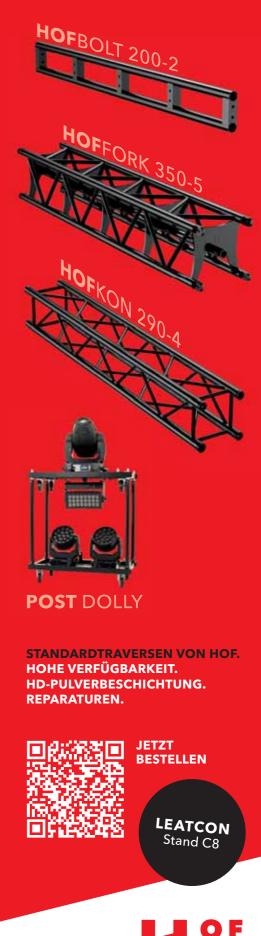
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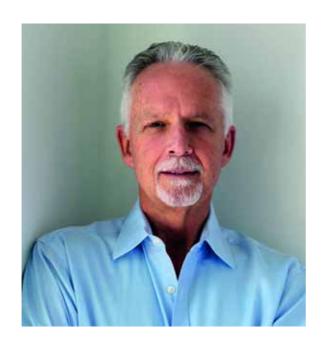
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who is who



Jeff Rosica

Jeff Rosica officially stepped down from Avid in June after the company was acquired by STG for \$1.4 billion. He joined Avid in 2013 as Senior Vice President of Worldwide Sales and was appointed President in December 2016. In February 2018, he became CEO.

Rosica announced his departure from Avid in November. At the time, he said he would stay for a while to assist with the transition to the new leadership. Avid announced his successor, Wilfred Dilard, earlier this year. In a notable speech at the HPA Tech Retreat in February, he warned of "catastrophic times" for the media and entertainment industry, driven by "uncertain business models" fueled by technological advancements, especially AI.

In a post on the business network LinkedIn, Rosica described his time at Avid as "an incredible journey": "(…) It was an incredible journey, and I'm grateful to have had the opportunity to spend more than a decade of my career as part of Avid - especially as CEO, which was an honor, a pleasure, and undoubtedly the highlight of my career! I leave Avid with great pride and high expectations for the company's future. I'll be cheering loudly for the company and the team from the sidelines!"

Rosica also hinted that he is just taking a break.

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Digital X is coming to Cologne on September 18-19, 2024. With stages, marketplaces, brand houses, and top-tier speakers, Cologne's city center will once again become a world exhibition of digitalization in 2024. Future megatrends and digital solutions will be brought to life - in areas such as the future of work, connected business, security, and sustainability. Digital X is Europe's largest cross-industry digitalization initiative. Organized by Deutsche Telekom, it involves over 300 national and international partners. This year, Telekom is bringing the Fantastischen Vier as the top act to the Digital X stage. The most famous German hip-hop band will play one of their first concerts of 2024 at Cologne's Mediapark. The concert can be followed live at home or on the go through a free livestream on Magenta Music and corresponding social media channels. Further details can be found at www.telekom.com/digitalx.

The European Association of Event Centers (EVVC) invites you for the 25th time to the Management Symposium (MFT), setting sail on September 23-24, 2024, heading "Course North-East" towards Rostock. This year, the focus is on sustainability and future perspectives, but extensive and qualified input will also be provided on topics such as law, personnel, and technology. In sixteen different sessions, all aspects of work in the event industry will be covered: From sustainability or personnel management to technology and legal frameworks, the program is broad in scope. In the sessions, experts from renowned agencies, lawyers from partner law firms, international guests, and industry voices will share best practices. Networking will not fall short either, as the EVVC invites attendees to a community evening with delicious food, cool drinks, and music.

Minister of State for Culture Claudia Roth will present the Applause Award for the first time in Rostock on November 20, 2024. The award recognizes outstanding live music venues and concert series in six categories and is endowed with around 1.6 million euros. This will be the 11th time that Claudia Roth presents the Applause Award. Since 2013, she has honored venue operators and organizers. The prize is realized by the Initiative Musik.

Dry hire specialist Niclen and event technology distributor Publitec are hosting a three-day open house on their premises in Dortmund this fall. From October 9-11, 2024, interested customers can attend the "Niclen Family Open House Days". Simultaneously, a special sale of used event technology will take place on-site through the Niclen Family brand "Rudi Deluxe". The adjacent Lichtburg event location will be used for the Open House Days, where visitors can meet multiple manufacturers showcasing their products. "Since our restructuring earlier this year, we've formed some new distribution partnerships, including with Adam Hall Group, Hof, and Pixera", explained Publitec Sales Manager Ulf Krynojewski.

The kick-off for the "Sustainable Event Industry Initiative" by 2b Different and Baum eV at the Darmstadtium on September 27, 2024,



marks the beginning of a long-term initiative. Many of the 820 Baum members use trade shows and events as an effective marketing communication tool. Transformation in line with the Green Deal and the Corporate Sustainable Responsibility Directive (CSRD) mandates considering sustainability aspects in event planning and execution. The initiative provides a platform for cooperation between service providers and clients in the event industry. It is also scientifically networked, aiming for close collaboration with educational institutions to raise awareness from the start of training. Independent research projects will provide important findings and results to all initiative participants.

This year, manufacturer and distributor Kindermann is hosting the "Xperience Tour" in three German cities. After last year's success, the event is being expanded to three locations: Porsche Museum in Stuttgart (September 24, 2024), Volkswagen AG Forum in Wolfsburg (September 26, 2024), and Volkswagen's Transparent Factory in Dresden (October 10, 2024). Dealers, planners, and system integrators interested in innovations in conferencing, collaboration, and connectivity are invited. Visitors can expect not only innovations from Kindermann but also from distribution partners like Bose Professional, Legrand, LG, Maxhub, Newline, Optoma, Panasonic, Philips, Sony, Vogel's, Yamaha, and Zee Vee.

■ The next Showlight will take place from May 19-22, 2025, in Dijon, France, at Le Parc des Expositions et Congrès. About 400 attendees are expected, leaving ample time for discussions and networking over the three days. In 2025, Showlight offers exhibitors a choice between two options: the traditional 3 x 3 m stand with a table and six chairs, or a table with six chairs in the center of the exhibition space for discussions during breaks. The latter is introduced as a cost-effective alternative for smaller exhibitors.





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dates et.





In the labyrinth

Since the end of July 2024, the international exhibition "Tim Burton's Labyrinth" has been on display at the Radsetzerei in Berlin. The exhibition delights not only fans of the American cult director Tim Burton but also anyone who loves fairy-tale art and darkly macabre humor.

After stops in Madrid, Paris, Brussels, and Barcelona, with over 650,000 visitors, the exhibition featuring around 200 previously unpublished original artworks has now arrived in Berlin. Tickets for the exhibition, organized by Concert Concept and DEAG Classics, are available until November 3, 2024. The exhibition is open Wednesdays and Thursdays from 2 PM to 8:30 PM, Fridays and Saturdays from 10 AM to 9:30 PM, and Sundays from 10 AM to 8:30 PM. It is closed on Mondays and Tuesdays.

In the exhibition, the audience dives into Tim Burton's fascinating universe. Visitors embark on a captivating and immersive journey into the heart of Burton's artistic vision. The exhibition offers a unique opportunity to glimpse into Burton's mind and explore the depths of his creative spirit. In octagonal rooms designed with a sense of mystery, hundreds of his original drawings, sketches, and paintings are on display, along with life-sized installations of Burton's creations.

"Tim Burton's Labyrinth" is a tribute to his cinematic genius. The combination of cutting-edge exhibition elements such as video mappings, animated scenographies, and light installations with analog exhibits makes this exhibition a must-see experience. Visitors wander through the eerie forest of Corpse Bride, encounter the quirky characters from Edward Scissorhands, Charlie and the Chocolate Factory, and Beetlejuice, and get lost in the magical worlds of Alice in Wonderland and

The Nightmare Before Christmas. The music for this exhibition, personally authorized by Tim Burton, is composed by his regular collaborator, Danny Elfman.

Tim Burton

Born in 1958, the artist and director Tim Burton is one of the most fascinating filmmakers in contemporary cinema. His distinctive style has defined films such as Beetlejuice (1988), Batman (1989), Edward Scissorhands (1990), Batman Returns (1992), The Nightmare Before Christmas (1993), Ed Wood (1994), Mars Attacks! (1996), Sleepy Hollow (1999), Planet of the Apes (2001), Charlie and the Chocolate Factory (2005), Corpse Bride (2005), Sweeney Todd (2007), Alice in Wonderland (2010), Miss Peregrine's Home for Peculiar Children (2016), Dumbo (2019), and Beetlejuice 2 (2024), his latest production and sequel to the original. Long before his directorial career, Tim Burton expressed his genius through drawing, painting, and photography, which remain a central part of his creative process today. As the creator of a unique, eccentric, and darkly humorous aesthetic, Tim Burton has produced numerous films and works that have become classics of film history. This year, he received a star on the Hollywood Walk of Fame.

www.timburtonexhibition.com, www.timburton.com



"The government must step up"

After the cancellation of Taylor Swift's concerts, René Tumler, Managing Director of the EVVC, comments on safety at large events.



Following the Austrian authorities' prevention of a suspected terror attack, which led to the cancellation of three Vienna concerts by superstar Taylor Swift, safety at large-scale events is once again a major topic. René Tumler, Managing Director of the European Association of Event Centers (EVVC), is calling on the government to take action to ensure safety in event venues.

For the arenas, halls, and stadiums organized within the EVVC, it is clear: ensuring the safety of all visitors and staff is the top priority in hosting (large-scale) events. Many venues in Central Europe have long been investing in efficient security technology and concepts. However, as the case of the canceled Taylor Swift concerts in Vienna shows, even these measures are not always a reliable guarantee of safety. The incident highlights, once again, that cooperation with regional and national authorities is crucial, especially for large events in the cultural, sports, or business sectors.

From René Tumler's perspective, the government must also pave the way for new security technologies: "We now have the ability to use cameras combined with artificial intelligence in event venues. To utilize modern technologies like these in the future, we need legal frameworks and support from the responsible policymakers."

The EVVC also addresses current legislation regarding the training and deployment of security personnel. As an alternative to the current § 34 a of the Trade Regulation Act (security industry), the association calls for targeted, low-barrier training for event security. The German federal government's planned Security Industry Act is headed in the wrong direction, according to René Tumler: "Security tasks at an event must be clearly defined and distinct from other service roles, such as ticket control. The current draft of the law remains too vague. We believe it would be more effective to develop security concepts based on the type of event rather than the number of participants."

Expanded board

At the WTF24 (We Transform Future) event held in the Grand Hall Zollverein in Essen, the FWD event organizers' association held its 2024 annual general meeting and expanded its board.



The new expanded board of FWD (left to right): Markus Illing, Vera Viehöfer, Christian Eichenberger, Matthias Thoben, Tom Koperek, Anja Osswald, Jörg Pries, Christian Seidenstücker, Alexander Ostermaier, Jörg Zeißig and Silke Schulte.

The general meeting was led by Markus Illing, Chairperson, and Vera Viehöfer, Deputy Chairperson, who discussed the re-election, the expansion of the board, and the association's key focus areas.

During the meeting, the board, previously composed of eleven members, was expanded by two new experts: Jörg Pries (Schenker Germany), who brings extensive logistics expertise, and Marc Mundstock (AXICA Eventlocation/Berlin Catering), who has a strong network in Berlin. Both were elected to the board by the members.

Additionally, Matthias Thoben (Engelmann Messe & Design) and Jörg Zeißig (Holtmann) were re-elected to their positions, continuing their

work for the association alongside Illing, Viehöfer, Andreas Weber (CFO), and board members Christian Eichenberger, Tom Koperek, Anja Osswald, Sascha Poddey, Burkhard Schmitz, and Christian Seidenstükker.

Following the meeting, a talk was held with staff members from the office, including Julia Jost, Sophie Messerschmidt, Marko Roscher, Managing Director Alexander Ostermaier, and Christian Eichenberger, offering direct insights into their work and updates on their areas since the 2023 meeting. Key topics of focus were business, people, sustainability, and politics.



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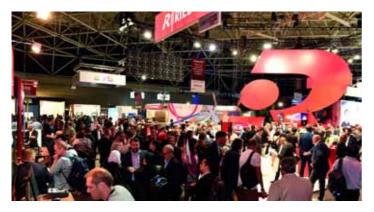




et companies & markets

"Content Everywhere"

The IBC 2024 is set to take place from September 13 to 16 at the RAI in Amsterdam, featuring a range of new exhibition elements, including networking, learning opportunities, the AI Tech Zone, and the IBC Talent Program.



Michael Crimp, CEO of IBC, states: "IBC continues to find new ways to address the trends, issues, challenges, and opportunities driving innovation in media and entertainment. Additions like the AI Tech Zone, the Talent Program, and the AV User Group event, combined with this year's strong lineup of visionary speakers for the conference, ensure that we remain positioned as the world's leading M&E event. In a year where major global sporting events and election broadcasts are putting media performance more in focus than ever before, we are bringing together an industry eager to explore new methods and technologies."

The new AI Tech Zone serves as a central hub for AI providers, creatives using the technology, and solution providers addressing specific industry needs. The AI Tech Zone stage will feature industry leaders and visionaries offering insights into how AI is transforming media and entertainment and shaping the sector's future. A networking zone will allow the IBC community to directly engage with some of the innovative players driving AI for M&E.

To accommodate the new AI Tech Zone, IBC has expanded its exhibition space to Hall 14, which also includes a second "Content Everywhere" area. Steve Connolly, Director at IBC, explains: "We aim to accommodate the exponential growth of Content Everywhere with Hall 14, which serves as the central area for Over-the-Top (OTT) and multi-platform services."

The exhibition will also feature a unique IBC Talent Program in the Showcase Theatre in Hall 8. The free sessions will explore how the M&E community can collaborate to foster new talent, make training accessible, and establish shared standards for diversity and inclusion. In collaboration with key stakeholders and partners, the IBC program will highlight



the benefits of partnerships and mentoring, introduce the next generation of media professionals to the industry, and enhance engagement with M&E companies.

Also new this year is a special Audio-Visual (AV) buyer event on the eve of the exhibition. In partnership with the AV User Group, IBC has organized an IBC Speed Pitch Event on September 12 for 40 of its members. This event offers media technology companies the opportunity to pitch their products, services, and brands directly to major AV buyers.

Other exhibition highlights include:

- Esports Showcase in Hall 8, showcasing the latest innovations in gaming production and broadcasting
- World Skills Café, focusing on skills, diversity, and education
- IBC Innovation Awards, taking place on Sunday, September 15, at the RAI
- Technical Papers Program, running throughout the IBC conference
- IBC Accelerator Media Innovation Program, bringing together media companies and technology partners to demonstrate how they address real-world challenges and drive progress in the industry
- IBC Conference

By the time of publishing, the exhibition space booked for IBC 2024 had already exceeded last year's total. The overall number of exhibitors, as well as new exhibitors, has also increased. Steve Connolly remarks: "We are seeing overwhelming demand from exhibitors, with many returning brands increasing their space and new companies joining. There is already very positive buzz around this year's exhibition. We're expecting a few exciting days ahead!"

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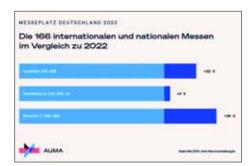
Trade fair review: Significant growth

Germany's trade fair industry saw more than just significant growth throughout 2023 compared to 2022. The vast majority of industry trade fairs made a successful post-COVID comeback. In total, nearly 320 trade fairs were held in 2023.



This is according to a recent study by the Association of the German Trade Fair Industry (AUMA). Around 183,000 companies exhibited at roughly 70 trade fair venues across Germany in 2023, marking a 30% increase over 2022. The fairs attracted approximately 11.4 million visitors, 3.8 million (+50%) more than in the previous year. Exhibition space grew from 5.7 to 6.34 million square meters (+11%). Nearly two dozen fairs premiered in 2023, with themes focusing on the construction and energy sectors, particularly sustainability and digitalization, as well as the hospitality industry. No trade fairs were held exclusively online anymore.

At 166 major trade fairs with international or national significance in Germany, 147,000 exhibitors and 7.5 million visitors participated. Of the total 6.34 million square meters of exhibition space, 5.2 million were dedicated to international or national flagship fairs in Germany.



International participants returned to Germany's trade fair scene with impressive numbers. In 2023, 96,000 exhibitors came from abroad, compared to a third fewer in 2022. China regained its top spot among exhibitor nations, accounting for over 15% of international exhibitors, surpassing its pre-pandemic figure of 14% in 2019. Italy ranked second with 12%, followed by Turkey with 5.2%, marking its first appearance among the top exhibitors.

More than 200 trade fairs were held in the first half of the year, including flagship events such as the world-leading trade fair for water, sewage, waste, and raw materials management IFAT in Munich (May), the ILA aerospace exhibition in Berlin (June), and the leading trade fair for printing technology Drupa (May/June). Overall, more than 330 fairs are planned for 2024.

A first glance at the upcoming AUMA organizer outlook reveals that nearly 50% of trade fair organizers intend to further strengthen their international flagship fairs in Germany. Over 35% aim to expand their business abroad. Three-quarters of organizers expect that German trade fairs will perform equally well or better in international competition over the next 12 months. Most of this competition occurs within Germany and the European Union, with additional key markets in North America, South, East, and Central Asia, as well as the Middle East. The full study is set to be released in the summer.



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Milestone anniversary

30 years dedicated to event and entertainment technology: Prolight + Sound is celebrating its anniversary, offering exhibitors special "Anniversary Packages".

2025 will be a particularly special year for Prolight + Sound: the leading trade fair for event and entertainment technology will celebrate its 30th anniversary, making it one of the most enduring trade fairs in the industry. From April 8 to 11, 2025, visitors, exhibitors, and partners will be treated to a celebratory edition full of highlights in Frankfurt am Main.

Through the ups and downs of three decades, Prolight + Sound has become a key fixture in the international event sector. Despite the experience and stability that come with such a long history, the trade fair represents more than tradition and expertise. It also embodies innovation, creativity, and a continuous passion for the industry, while remaining attentive to its evolving needs. As part of its anniversary, Prolight + Sound will return with a new April date, moving from its usual March slot.

Over the summer, the trade fair team visited numerous exhibitors to plan the upcoming show together. "Fueled by the inspiring atmosphere of these conversations and the overwhelmingly positive feedback, preparations are already in full swing", says PLS Director Mira Wölfel.

In addition to innovative product launches from renowned brands and an attractive supporting program, the event will feature several birthday surprises. Exclusively for the anniversary, exhibitors can take advantage of attractive all-inclusive booth packages, such as the "Anniversary



Package". Attendees can also look forward to one of the largest job and talent areas in the sector, a unique outdoor stage, and community nights at popular Frankfurt venues. More information and regular updates about Prolight + Sound 2025 can be found at www.prolight-sound.com.





BOE integrates "Structures International"

Messe Dortmund is expanding the exhibition portfolio of BOE International: starting in 2025, the trade fair "Structures International" (for temporary buildings, industrial, storage, and event tents, as well as equipment) will be integrated.

This strategic decision reflects Messe Dortmund's commitment to actively shaping the dynamic demands of the industry and providing a comprehensive, cross-sector forum for innovation, exchange, and business development. Structures International will enrich the scope of the BOE by serving as an international hub for the tent industry. Its focus on forward-looking temporary logistics and event infrastructure complements the thematic breadth of the international trade fair for experience marketing and opens new synergies for exhibitors and industry visitors. According to the organizers, this step is also based on strong demand from industry and commerce for these specific trade formats.

"The integration is a strategically significant step that further strengthens the BOE as a meeting point for the event industry. Structures International has established itself as an international platform for the tent industry, offering decision-makers from the event sector, trade, production, logistics, and architecture, as well as industrial clients with high needs for temporary storage logistics, a comprehensive range of tents and accessories. With its focus on temporary constructions and tents, it ideally complements the profile of the BOE", says Sabine Loos, Managing Director of the Westfalenhallen Unternehmensgruppe. "From 2025 onwards, visitors can expect an expanded spectrum of products, services, and technological innovations...

The expanded trade fair offerings will be accompanied by a comprehensive supporting program. Expert lectures, workshops, and di-



scussion panels with industry experts will address current topics and challenges while promoting vibrant exchange. All important information, updates, and developments regarding the trade fair will be available on Facebook, Instagram, LinkedIn, the fair's website, and via newsletter.

The BOE (Best Of Events) annually marks the kickoff for the national and international event industry. At the Dortmund exhibition site, exhibitors from the event planning and equipment sectors, as well as exhibition construction, showcase their offerings and engage with industry visitors, agencies, and companies. BOE visitors benefit from conceptual success recipes, a varied supporting program with lectures, and new contacts. The BOE offers an opportunity to discuss projects and budgets right at the beginning of the new year. Additionally, the trade fair connects young professionals with future employers. The upcoming trade fair will take place on January 15-16, 2025.





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Arri: New location in Vienna

A new branch of approximately 750 square meters at the site of the new HQ7 Studios complements Arri Rental Wien's office, which specializes in camera equipment.

Arri Rental is expanding its service offerings in Vienna by opening a new branch that rents out lighting and grip equipment for productions of all kinds and sizes, and also provides logistics services. Camera equip-



ment can still be rented through the established Arri Rental Wien office as usual.

The new branch is located at the site of the modern HQ7 studio complex, which opened this summer as a leading European production center. Large international film and television productions can be realized there. The branch encompasses more than 750 square meters and offers lighting and grip equipment, including current Arri lights such as the Sky Panel X and the Orbiter, as well as exclusive products from Arri Rental (Brikloks, Hexatron, Hover Dolly with Delta Tracks).

Andreas Buchschachner, head of Arri Rental Wien, will also lead the new location. He is supported by lighting expert Ingo Gärtner. "With the expansion of our presence in Vienna, we are demonstrating our belief in the city as an important European production location. We have been renting equipment in Vienna for many years and have established strong relationships here. We are very pleased to support the local industry in its further growth", explains Andreas Buchschachner.

N&M: New location in Augsburg

With a new logistics location in Augsburg, Neumann & Müller is further expanding its logistics network, enabling efficient and fast handling of event technology in the southern region of the country.



Neumann & Müller Veranstaltungstechnik (N&M) will establish a new logistics location at the Augsburg freight transport center and will handle equipment for trade fair sites in the south and southwest of the country, as well as for recurring event productions in the region. The service provider aims to enhance the performance of the company-wide logistics and better meet the continuously growing demands of individual N&M business areas.

With the new location in Augsburg, the number of logistics sites will increase to three: Previously, Bochum and Leipzig were the main hand-

ling points for a large portion of the equipment. With this additional site, which has a logistics area of around 10,000 square meters, matching the capacity of the other two, transportation distances will be reduced while increasing equipment availability.

"This means a gain in efficiency and handling speed for us", says Nils Stüvecke, head of logistics at N&M. "By renting this nearly new existing property in the Prologis Park Augsburg, we have established an optimal starting position for the development of N&M logistics in the coming years."

Dolby: New location in Nuremberg

Dolby Laboratories has opened a new location in Nuremberg. Alongside Munich and Berlin, this underscores Dolby's success in Germany.



Andreas Ehret, Managing Director of Dolby Germany, emphasized the importance of the team in this success: "We started with 40 employees back then, and today around 100 colleagues from 14 nations work here in Nuremberg, one of our largest and most significant locations outside the USA." A demo tour took around 150 invited guests through many laboratories and development areas that have been built to meet the latest technological and sustainable requirements. The Nuremberg team works with Dolby technologies such as Dolby Atmos and Dolby Vision, which are used in billions of devices worldwide. Visitors to the opening event received insights into the automotive lab, the mixing room, and the critical listening room.



Notable Visitors (left to right): Mayor Marcus König, Jens Hinkelmann (Tucher Foundation), Andreas Ehret, and Dr. Tobias von Tucher.

Additionally, a Mercedes-Benz E-Class was available to illustrate to guests at the opening party how Dolby Atmos for cars has developed. As of now, 13 automakers worldwide have already integrated Dolby Atmos or announced plans for integration.

Iconic eye-catcher

Following the model of the Robe Showtruck, Avolites is bringing the Avostream to the streets.

"Our Avolites roadshow comes stylishly in a 1960s Airstream. With ideal workstations right on board, the Avostream is tailored to the needs of lighting and visual designers", explains Dieter Gross, CEO of Robe Deutschland. The Avostream is touring the country, showcasing the latest console highlights from Avolites, or serving as a preconfigured training area, providing a cool atmosphere at festivals to program the show on the integrated or own console while also getting a glimpse of Avolites' solutions and those of other brands in the Robe Group.



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Who played what?

The latest issue of the workshop statistics ,Who Played What?" from the German Stage Association shows a significant recovery from the COVID-19 crisis. However, there are also new challenges.

After three seasons with theater closures during the pandemic, the 2022/23 season marked the first "normal" season again. Accordingly, the number of performances and audience figures rose. The total number of productions in Germany increased to 6,773 (7,716 in the DACH region). These figures are clearly approaching pre-pandemic levels. In the 2018/19 season, a total of 7,125 productions (8,188 in the DACH region) were staged. A similar trend was observed in the overall number of performances, which reached 74,412 in Germany and 85,004 in the German-speaking region in the 2022/23 season (2018/19: 82,052 and 94,300, respectively). The audience numbers increased in the 2022/23 season to 18,586,302 in Germany and 22,704,188 overall (2018/19: 22,942,112 and 27,553,055, respectively). In the 2021/22 season, audience figures were still 31 percent lower than in the 2022/23 season. While they have approached pre-COVID numbers, they are still almost 20 percent below the audience figures of the 2018/19 season.

However, the development across different genres is not uniform: while music theater has lost a quarter of its audience from 2018/19 to 2022/23, drama and children's and youth theater have each lost around ten percent. In dance, the numbers are nearly on par with four years ago. All these figures come from the workshop statistics, for which 437 theaters from Germany, Austria, and Switzerland provided their data for the 2022/23 season.

Overall, the 76th issue of the workshop statistics indicates a recovery from the COVID crisis, during which audience numbers in Germany had dropped to 2.5 million in the 2020/21 season. However, other political and economic crises are now partially deterring audiences from attending theater performances.

The German classic, Goethe's "Faust", is increasingly rarely performed (at least in its original text). In the 2022/23 season, only eight productions were recorded, down from eleven the previous season and twenty in the pre-COVID season of 2018/19. Among the 25 most-performed plays of the season, there are still 14 classics. Shakespeare continues to lead the list of most-played dramatists with 95 productions. Across genres, the three works with the most audience members are different: the Bochum musical "Starlight Express" (with 440,497 attendees), the openair spectacle "Winnetou I" in Bad Segeberg (with 430,321 attendees), and the "Arise Grand Show" at the Berlin Friedrichstadt Palast (with 422,419 attendees).

TSL expands portfolio

Frank Schmitz is expanding his company TSL Production in Pulheim near Cologne with the acquisition of VPS Event Technology from Krefeld, adding a video division.



After over 30 years in the industry, including around 20 years of good and friendly collaboration with Frank Schmitz, Udo Straß, now 68, is looking toward retirement and is handing over his company VPS Event Technology, based in Krefeld, to TSL. Straß has specialized particularly in the fields of video transmission, large-screen technology, LED walls, cameras, and video production.

With this acquisition, TSL Production is evolving into a true full-service provider, offering customers from both companies a more comprehensive range of services starting immediately. Although the Krefeld location is not planned to continue due to cost reasons and to optimize logistical processes, this will not disadvantage the existing VPS clientele due to the short distance and more efficient workflows.

In addition to the entire inventory, which includes 150 outdoor LED modules (3.9 mm), 2 LED trailers with screens up to 6 x 3.3 m, various laser projectors with up to 30,000 ANSI lumens, and the latest HD camera technology, the staff from VPS will also be retained, ensuring the preservation of long-established expertise. Udo Straß will continue to be available as a consultant if needed. In a second step, Frank Schmitz plans to expand the portfolio in the areas of LED screens and video direction and editing technology.



\$422 billion

According to the Industry Outlook and Trends Analysis 2024 (IOTA) from AVIXA, the Pro-AV revenue will rise from \$306.4 billion in 2023 to \$325 billion in 2024, reflecting a healthy growth rate of 6.1%, although this is lower than the previous year's rate of 6.9%.



The market is expected to grow by \$98 billion over the next five years, with a compound annual growth rate (CAGR) of 5.35%. While the modernization and advancement of offices continues, the experience economy dominates growth in the Pro-AV sector.

AVIXA's 2024 Industry Outlook and Trends Analysis presents data and analyses regarding the size of the Pro-AV industry from a global perspective, including regional and vertical breakdowns. The study covers product trends, solution categories, and vertical markets.

"When we look more closely at the data, we find that growth across the entire Pro-AV industry varies significantly. Technologies that support conferencing and collaboration in businesses are not developing as well as those for entertainment and events", says Sean Wargo, Vice President of Market Insight at AVIXA. "Companies that focus exclusively on collaboration may not be as successful as those that concentrate on entertainment. IOTA helps to better identify where growth is strongest and highlights opportunities for the AV channel."

Before the pandemic, the experience economy was one of the most influential trends and has now regained its strong position. From 2024 to 2029, global revenue for venues and events is projected to grow at a CAGR of 6.3% to \$57.2 billion, making it the fastest-growing vertical market. Everything related to on-site entertainment is growing rapidly. This includes content production and streaming, also known as broadcast AV.

The future of the corporate office remains secure. As the largest vertical market for Pro AV, office spaces were a cause for concern during the pandemic. However, with the trend towards hybrid working, these worries have dissipated, creating new market opportunities and restoring confidence in this sector.

Revenue from corporate spaces is expected to reach \$91.4 billion by 2029, driven by new construction, increased opportunities for conferencing and collaboration, expanded content capture and production, as well as security, monitoring, and protection. However, growth in this sector is expected to decline to just under 5% over the next five years.

Globally, challenges in the Pro-AV market are shifting from supply issues to workforce shortages - similar to conditions before the pandemic. Salary increases indicate that the job market remains tight. The impacts of AI are noteworthy. AI will reshape the professional AV industry by bringing intelligent automation to security, monitoring, and life safety, introducing adaptive interfaces for control and monitoring systems, and enhancing the user experience in conferencing and collaboration.

For more information about the Industry Outlook and Trends Analysis 2024 (IOTA), visit www.avixa.org/IOTA.



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Howden acquires Schwandt

The global insurance broker Howden has acquired Schwandt Versicherungsmakler KG, a specialist in event insurance in Germany.

The partnership with Schwandt is part of Howden's strategy to invest in specialized areas. Howden is also strengthening its leading position in the entertainment sector and its market presence in eastern Germany. Schwandt was founded in 2004 and has been continuously growing under its owner, Hans-Peter Schwandt, who is well-known in the event industry since the 1990s. The company specializes in tailored concepts for events as well as insurance solutions for companies, freelancers, and individuals, offering these services in Germany and abroad.

The acquisition of Schwandt further underscores Howden's ambitions to enhance its presence in specific market segments and geographic key regions with culturally compatible firms. It follows the successful acquisitions of the Franz Gossler insurance group in March 2023 and Northern Lloyd in June 2023. After completion, Howden Germany will have more than 400 employees at 12 locations.

Owner Hans-Peter Schwandt states: "As an owner-managed company, we have built an excellent reputation over more than two decades with our specialized concepts for event insurance. Our clients appreciate the high quality of our work and trust our well-founded, risk-oriented advice. We are proven to provide reliable and comprehensive coverage. I look forward to continuing this as the head of the Howden Schwandt Berlin office with my team."

Groh-P.A.: Economic benefits

Groh-P.A. Veranstaltungstechnik has expanded its L-Acoustics inventory. Buchholz near Hamburg is now an L2 location.

The L2 and L2D systems from L-Acoustics impressed owner Jan Grohmann-Falke with their advanced technology and outstanding performance. They provide precise and detailed sound reproduction for both



small and large events. The compact and modular components of the L2 system also allow for flexible adaptation to different venues and sizes.

Grohmann-Falke emphasizes the economic benefits of the new system: "The weight-to-performance ratio of the L2 system is excellent. It allows us to create even more detailed and clearer sound experiences while saving time on setup." The L2 can be directly hung from the dolly, eliminating the need for complicated angle adjustments and precise alignments with the system. "In the end, this saves valuable time during production."

He adds: "We work very closely with many colleagues in the industry. Dry hire is more than just a rental process for us. It's about equipping fantastic events together as an industry." To control the speakers, Groh-P.A. has also invested in the new LA-RAK III, each equipped with three LA7.16 amplifiers that support the L2 and L2D with 16 channels of high-performance amplification and processing. The LA7.16 comes in a new LA-RAK III Touring rack, providing 48 amplifier channels in a Milan AVB-compatible housing with a power output of over 60,000 watts in 9 HE. With the amplification of the LA7.16 and the AutoSolver tools, the output of the L series can be modulated for optimal results.

Riedel invests in Apex

By investing in the Austrian manufacturer of high-quality camera stabilization solutions, known as gimbals, Riedel is expanding its range of services.

As part of the partnership, Apex will become part of the Riedel Group but will continue to operate as an independent company. Together, the partners aim to leverage their respective strengths to remain successful at the forefront of technology and innovation.

The systems from the company, founded in 2019 in Vienna, are primarily used for recordings from helicopters, cars, boats, or cranes for the production of live TV, commercials, and films. As a global player in the international market, Riedel offers the Viennese company the opportunity to utilize its global sales and service network, while the Wuppertalers gain an experienced team and excellent know-how, as well as access to new and promising markets. The partnership also enables synergies at the development site in Vienna, benefiting both partners and customers alike.

"I firmly believe in the innovative technologies of the Viennese pioneers at Apex. Investments in such specialized technology are investments in the future and open up new niches in our core markets", says Thomas Riedel, founder and CEO of the Riedel Group.

"Whether for live events, film productions, or TV broadcasts - the solutions from our two companies are indispensable in the modern media landscape and have often been used together, including recently at the major events in Paris", says Apex Managing Director Thomas Schindler.

The more women, the louder

The Federal Association of Concert and Event Industries (BDKV) has officially launched its women's network "BDKV Female Voice". The initiative aims to increase the visibility of women in the event industry, promote equal opportunities, and create a space for exchange, support, and further education.

Coordinated by BDKV board member Verena Krämer, participants from various member companies recently came together for a workshop in Frankfurt. During this kickoff event, they discussed the issues that concern them as women in their work and in the industry, leading to the establishment of goals and tasks for the network. It is already clear for "BDKV Female Voice": the more women engage here, the louder and more effective the network can become.

In the workshop, the women were supported by coach and consultant Astrid Ekkstein, who helped them recognize potentials and define strategic steps with her deep understanding of the challenges and dynamics in the event industry. Verena Krämer summarizes: "Together, we set cleThe members of "BDKV Female Voice" and workshop leader Astrid Eckstein in Frankfurt (left to right): Tina Krug, Berit Baumhoff, Sabrina Theisen, Michaela Schneider, Madeline Falkenhahn, Johanna Holthöwer, Sarah Zimmermann, Melanie Becker, Annika Verheyen, Ulrike Schirrmacher, Nadine Rüffert, Verena Krämer, Francesca Herget, Natascha Vebre, Astrid Eckstein

ar goals and thus gave ourselves the chance to achieve more diversity in our industry, establish positive role models, and promote new careers. The industry will benefit from taking a stronger perspective from women."

Johannes Everke, managing director of BDKV, adds: "BDKV Female Voice is an asset to the industry and fits very well with our mission as an association to support companies in social change and to make ourselves more attractive as a workplace." Further meetings are planned at the Reeperbahn Festival in Hamburg and during the BDKV members' assembly on November 13, 2024, as regular in-person meetings promote networking within the network and provide space for project work.

Model 2400 NEU







N&M: Intensive sustainability efforts

Neumann & Müller has received two new ISO certifications in the areas of environmental and occupational health and safety management. For the company, these fulfilled criteria mark the next milestone in the implementation of a comprehensive sustainability concept.

Recently, Neumann & Müller Event Technology (N&M) has met the high standards associated with the ISO 14001 and 45001 certifications. This demonstrates the company's effective integrated management system for the environment as well as for safety and health at work. Martin Hartmann-Schüler, sustainability manager at N&M, stated: "The certifications are a significant step for us. They emphasize our commitment to sustainable practices and the protection of our employees."

Sustainable and resource-efficient procurement, optimized transport logistics, regional crews and suppliers, as well as the reduction of negative environmental impacts are just a few of the points N&M highlights to improve environmental performance and achieve its environmental goals. The company places great importance on raising awareness among employees and suppliers and consistently working to improve its environmental protection efforts.

The integrated management system evaluates the effectiveness of the measures taken and monitors the impact of actions. The system also serves to control work-related risks, ensure employee protection, and prevent work accidents, injuries, and illnesses. The preventive measures range from the mandatory use of personal protective equipment on projects to workplace ergonomics and are embedded in internal processes.



Martin Hartmann-Schüler, sustainability manager at N&M (right), and Florian Nürnberger, head of development at the company

From Iris Berben to Michael Schulte

The Lava Studios in Paderborn are recognized as specialists in music production, providing artists and musicians with an inspiring environment for their creative projects.

With modern technology, professional equipment, and a dedicated team of experts, the Lava Studios are the ideal place for high-quality music recordings, mixing, and mastering. The team offers a wide range of services tailored to the needs of musicians and producers, allowing artists to record their music in a professional environment, thanks to highquality recording technology and acoustically optimized spaces for perfect sound quality.

The experienced team at the Lava Studios ensures that each piece of music is optimally mixed. By using current software and high-quality hardware, the produced soundscapes meet all standards. The final polish comes from mastering, ensuring that the music sounds excellent on all platforms and playback devices.



A particular focus of the Lava Studios is the Lava Voices project. The extensive voice actor database offers a diverse selection of talented speakers from around the world. Whether a warm, familiar voice is needed for an audiobook, a dynamic presentation for a company, or lively character voices are sought, a professional solution can always be found.

The Lava Studios have already collaborated with well-known artists such as Peter Heppner, Iris Berben, Michael Schulte, Turbo B, and Ralf Richter, demonstrating their expertise in numerous successful productions. An outstanding project was the musical drama "Die Kinder der toten Stadt", currently performed in many schools as part of a culture of remembrance and against anti-Semitism.

In addition to core services, the Lava Studios also offer radio advertising, sound editing for shows and fashion events, and additional services for events. This allows event organizers to enrich their events with professional audio productions.

"Our work has already received multiple awards", says Lava managing director Lars Hesse. "We are proud to be part of the creative scene in Paderborn and actively contribute to the promotion of musicians and artists in the region. With our comprehensive offerings and commitment to quality, we aim to be the ideal partner for all those looking to realize their musical visions."

The recording studio is affiliated with Lava Jam, an internationally active music publisher and label for marketing artists. Lava Jam is part of Sony Music Publishing/EMI.

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Signposts and impulses

The Fraunhofer IDMT celebrates its 20th anniversary with high-profile guests, a technology showcase, and an anniversary sound installation for the impulse generator in 3D sound.

The Fraunhofer Institute for Digital Media Technology IDMT recently celebrated its 20th anniversary with a festive and entertaining event at the Park Café in the Festhalle Ilmenau. Over 100 invited guests from politics, science, and industry accepted the invitation from Institute Director Professor Joachim Bös. The anniversary celebration took place at the same location where the official launch of the Fraunhofer Institute for Digital Media Technology IDMT was celebrated 20 years ago.

At the beginning of the ceremony, guests were welcomed with a ceremonial anniversary sound installation in 3D sound. The topic of 3D sound has been one of the major research areas of the Ilmenau Institute for almost 20 years, and the technology is now successfully used worldwide in events, planetariums, opera houses, cruise ships, and art installations. A 3D sound system has also been installed at the Ilmenau Park Café since its reopening in late 2020, following extensive renovations.

Moderator Diana Smikalla welcomed both the Thuringian Prime Minister Bodo Ramelow and Thuringian Minister of Economics Wolfgang Tiefensee after the entertaining sound spectacle. They conveyed their congratulations to both the current Institute Director, Joachim Bös, and the former Institute Director, Professor Karlheinz Brandenburg.

Prime Minister Bodo Ramelow stated: "20 years of Fraunhofer in Ilmenau - rarely have the past and future been so closely connected as in this anniversary. As a signpost and impulse generator for innovative developments and scientific excellence, the Fraunhofer community continues to play a crucial role in shaping the future of our economy and, thus, the future of our prosperity and well-being." Thuringian Minister of Economics Wolfgang Tiefensee recognized the 20-year expertise of the research institute in the fields of acoustic research and audio technologies in his speech. The Thuringian Ministry of Economic Affairs, Science, and Digital Society has supported the Fraunhofer IDMT with nearly 20 million euros in state and EU funds since 2016, in addition to the federal and state contributions to its base funding.



Ceremony (left to right): Institute Director Professor Joachim Bös, Thuringia's Prime Minister Bodo Ramelow, Thuringia's Minister of Economics Wolfgang Tiefensee, Professor Anna Kruspe, Fraunhofer Executive Board Representative Dr. Patrick Hoyer, Mayor of the City of Ilmenau Dr. Daniel Schultheiß, Vice President of TU Ilmenau Professor Jens Müller, and former Institute Director of Fraunhofer IDMT Professor Karlheinz Brandenburg.



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Garage days revisited

Like many technology companies, Beckhoff initially tinkered, assembled, and programmed in a garage. Today, the automation specialist is a global player with a revenue of 1.75 billion and around 5,500 employees worldwide (2023). Beckhoff is also wellknown in the entertainment sector, but what exactly does the company do - and how did it come to be? Dipl.-Ing. Michel Matuschke, industry manager for the entertainment industry, provides answers to this complex topic.

Where did Beckhoff's beginnings lie? Was there an initial vision that was acted upon?

The impetus came from an unsatisfactory situation in the field of industrial controls: on one hand, these were based on dedicated and therefore specialized processors. On the other hand, a simple data storage and representation system comparable to the IT world was not possible. Hans Beckhoff recognized the advantages and immense potential in the convergence of automation and IT. The business idea was to transform a standard PC - which initially was not suitable for plant control due to a lack of real-time capability - into a highly reliable and real-time capable controller. Over the years, this idea led to an extremely broad portfolio of compact, industry-appropriate PCs and operator panels, which only became true machine and plant control systems through the control software TwinCAT.

Keyword: Beckhoff Automation

Beckhoff Automation, founded in 1980 in Verl, East Westphalia, realizes open automation systems based on PC-based control technology. The product range includes the main areas of industrial PCs, I/O and fieldbus components, drive technology, automation software, cabinet-free automation, and hardware for industrial image processing.

This New Automation Technology stands for universal and industry-independent control and automation solutions that are used worldwide in various applications – from CNC-controlled machine tools to intelligent building control and entertainment applications. In 2023, the company generated a global revenue of \$ 1.75 billion, employing around 5,500 people and operating 40 subsidiaries or representations, with a total presence in over 75 countries.

What exactly is behind TwinCAT?

TwinCAT is a complete software package for engineering and executing a wide variety of automation tasks. Its modular design includes conventional PLC functions, motion control for precise axis control, safety functionality, visualization, and data collection, as well as communication interfaces to the IT world, industrial image processing, and artificial intelligence.

The automation engineer benefits from working in the familiar lookand-feel of traditional PLCs (Programmable Logic Controllers) while still utilizing the advantages of a modern software environment. This allows even highly complex applications to be implemented comfortably.

A prime example is the kinetic sculpture "Kinetic Rain" at Changi Airport in Singapore: during a 15-minute show, 1,216 aluminum droplets form into sixteen different displays related to the theme of flying.

What is the central requirement for applications like Kinetic Rain?

For such installations, a consistent and rapid processing of the processes is extremely important. A correspondingly powerful communication technology is crucial to transmit the diverse data quickly and, above all, deterministically – i.e., after a clearly defined period – between the controller and the sensors or actuators.

Today, this is optimally achieved with EtherCAT, the communication protocol developed by Beckhoff, which serves as an Industrial Ethernetbased fieldbus between all components of the control system.

This EtherCAT protocol was disclosed by Beckhoff and has long been an international standard. How did this come about?

In 2003, shortly after the protocol was introduced, the user organization EtherCAT Technology Group (ETG) was founded, in which we made



EtherCAT openly accessible. This has enabled other device manufacturers, such as TTS Theater Technical Systems from Syke in the theater sector, to develop products. This has greatly contributed to the global acceptance of EtherCAT, especially since the maintenance of the technology within the ETG ensures compatibility between devices from different manufacturers, thus enabling an even broader range of devices.

Does the entertainment industry also benefit from this?

Absolutely. We do not sell a closed system that only works with components from Beckhoff at all levels. Therefore, many specialized providers are available to the user, which ensures a very high level of investment security. Accordingly, EtherCAT is now well established, and almost all of our entertainment customers rely on this high-performance communication protocol.



Why is that?

In the entertainment sector, it's important that, for example, an artistic director has a vision of a creative idea and expects the technicians to implement it. To stick with the example of Kinetic Rain: the balls should initially look like an airplane and then, 300 milliseconds later, like a balloon. This must be easily executed by the technicians, who want to utilize all available possibilities. This includes the fast data communication of EtherCAT, the wide range of available EtherCAT devices, and, last but not least, the open system architecture of Beckhoff control technology, which has always supported other fieldbus protocols like Profibus, Profinet, CAN, and EtherNet/IP.

Does the entertainment industry also benefit from this system openness?



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Definitely, because without the appropriate interfaces established in this creative area, our PC-based control technology would never have achieved today's high acceptance. System integrators have recognized from the beginning that the Beckhoff system is excellently suited for automation processes in a theater or theme park. However, there was quickly a desire to transmit data directly into the Beckhoff system during a production via DMX from a console, from a video server via Artnet, or even through SMPTE time code synchronization. After all, an animated character must move in complete sync with the corresponding video and audio production. We have always listened attentively to our customers and, therefore, now offer a very broad portfolio of technical solutions, with over 15 communication interfaces in the fields of light, audio, and video. With this integration capability in the entertainment world, Bekkhoff clearly distinguishes itself from other automation providers.

Keyword: EtherCAT

EtherCAT (Ethernet for Control Automation Technology) is a real-time Ethernet system disclosed under the EtherCAT Technology Group (ETG) for high-performance data communication and is an international standard according to IEC 61158. The focus of the development was on short cycle times ($\leq 100 \ \mu s$), low jitter for precise synchronization ($\leq 1 \ \mu s$), and low hardware costs.

EtherCAT is particularly characterized by the processing of data telegrams in real time, which allows for highly efficient information transfer. The devices connected to the EtherCAT network extract their designated data or insert their data as the telegram passes through each device. This results in the fastest possible information processing throughout the entire EtherCAT network.

Who is Beckhoff's target audience and who are its customers?

The target audience for our products ultimately consists of the so-called end customers - i.e., theater operators, concert organizers, etc. - i.e., companies that, for example, host concerts for an artist or operate a theme park or build something special for an expo or trade fair. There are countless examples of this. These end customers are typically supplied by a system integrator who needs such a complete control system - thus becoming our direct customer.

Why does an integrator need the complete system?

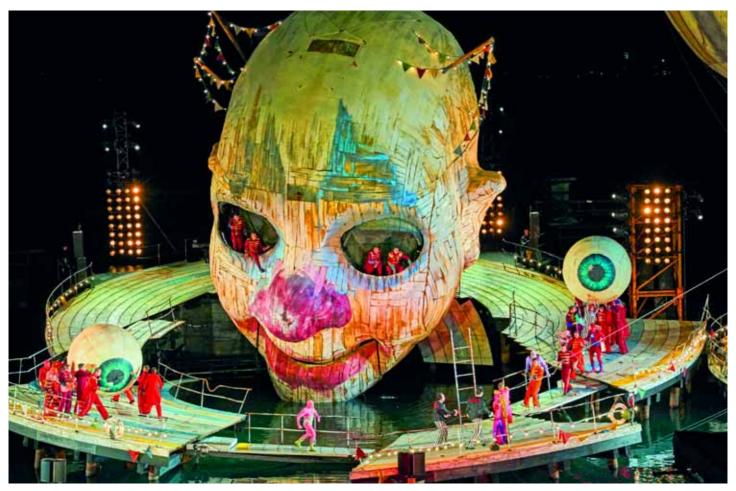
A good system integrator wants to integrate all technical trades according to customer requirements. Sometimes, objects such as a robotic arm for a character in a theme park need to be moved, or 300 DMX lights or several projectors need to be controlled. In the field of building automation, cooling should function depending on room occupancy for energy efficiency reasons, rather than starting at 11 AM when the show doesn't begin until 6 PM.

Additionally, the live aspect is becoming increasingly important: sensors can now be programmed to recognize a specific person and then turn on the lighting, an associated projection, or a fog machine accordingly. Beckhoff provides the relevant integrated interfaces for all these applications.

How does the interplay between Beckhoff, the system integrators, and the end customers work?

Beckhoff is a supplier of components and systems for automation, not a system integrator. Of course, we do have direct contact with some large end customers, but the classic medium-sized theater should contact a system integrator who then collaborates with us to realize the suitable solu-





tion. The integrators, in turn, must have additional contacts with providers from the audio or lighting sectors.

Accordingly, they typically bear overall responsibility for both the project and the subsequent service. In the latter case, integrators can collaborate with our global service and support network if needed. This global presence of Beckhoff is especially important to large international customers.

Are there differences among system integrators that Bekkhoff needs to prepare for? Of course, there are country-specific differences. Some think quite locally, while others are very globally oriented. The culture and size of individual countries also play a significant role. At the beginning of my work, I wasn't even aware of how many very large integrators there are, for example, in China, of which I had never heard before.

These companies are hardly visible at European trade fairs. When I eventually found out about the scale of some of them, I was immensely impressed. I've come to understand that in China, one thinks and acts in dimensions. For the Chinese, it's normal to build a highway or an entire theme park within a short period.





Beckhoff develops and manufactures exclusively in Germany. Why?

This concerns key features such as long-term availability. Looking at the current PC market, the offerings range from stationary desktop computers to notebooks. At the latest every two years, these devices contain different hardware. Thus, the software programmer in the entertainment industry could only hope that their software continues to run on the (yet again) new hardware in long-term operation. However, it often happens that the software needs to be adjusted to the new hardware with more or less effort. In contrast, Beckhoff offers specialized industrial PCs available in a broad range of performance and design that are typically available for at least ten years. The customer can thus freely choose whether and in which cycles they want to update hardware and software.

Fundamentally: how can automation of processes using Bekkhoff products save time and costs in the entertainment sector?

In the past, solving certain process workflows technically typically re-



Dipl.-Ing. Michel Matuschke

quired a large control cabinet filled with numerous individual components. Additionally, complicated wiring and cross connections had to be secured. All of this not only cost money but also, above all, space - which is often very limited, for example, in a theater or on a cruise ship. Here, Beckhoff control technology allows for much more compact solutions. Furthermore, many older mechanical components can now be represented through software and often new functions such as continuous performance data acquisition can be utilized. Another positive aspect is predictive maintenance. Beckhoff components are almost never subject to regular maintenance. This is different for many other trades. In a theater with 80 motors, an external company is usually contracted to maintain all the motors equally. After all, it's often not known how much each motor has actually run. With Beckhoff control technology, an analysis can be performed at the push of a button to determine exactly which motor has run how many times in recent years. By automatically reading hour counters or checking the travel paths of a roll, maintenance can therefore be carried out as needed.

www.beckhoff.com/entertainment-industry www.ethercat.org

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"Tour Talks" continue

After another teaser for the "Tour Talks" by podcaster Markus Vieweg, here's a brief preview featuring Felix Brückner and Lars Brand.

All conversations take place on tour - hence the name. "This could be in the backstage, in a café, or wherever it fits", explains Markus Vieweg. As a touring musician himself, he encourages the interviewees to share insights into their lives, their jobs, and everything else that's interesting. This is Part 3 of our little series of Tour Talks.

Felix Brückner

Consultant and Awareness Activist for Accessible Venues



Regarding the costs of accessibility in venues: "There's always the question of what costs how much. There are things that don't cost anything, and then there are things that cost a lot - and often that becomes the excuse. I always counter by saying that it doesn't always have to cost a lot of money. One of our biggest problems is poor communication. For example, event pages for clubs may have attractive travel plans, but only for people without disabilities. If I want to find out where

the nearest accessible stop is as a person in a wheelchair, there's no information. So, a homepage can be approached much more sensitively. The same goes for social media postings. For example, one can use image descriptions - a simple-to-use additional feature that is offered everywhere. A prime example is a festival lineup: As a visually impaired person, I go to the homepage, and my screen reader, which reads out all the available text, only says: 'There's a picture.' That's it - and I have no idea who's playing. These are all little things that require just a bit more effort but cost nothing and help a lot."



Lars Brand

Drummer/Manager Max Giesinger

On the dual role of drummer and manager: "I kind of stumbled into this dual role completely. I founded my first band at 13, and after a year or two, we wanted to hit the stage. Since no one was there to say 'You can play here!', I informed myself about how to actually get concert gigs. My absolute goal was to become a rockstar and get on stage. For this reason, I took it into my own hands and gradually grew into this role. If I had just leaned back and remained 'only' a drummer - nothing would have happened. I realized that back then.

When I'm on tour today, I try to separate both jobs as much as possible: When I'm sitting at the drums in the evening, I'm completely present. That's my great strength because I can really separate both jobs well: When I'm a drummer, I'm a drummer. When I'm a manager, I'm a manager."

The complete podcast episodes of the Tour Talks can be found at www.tourgespraeche.de. If you would like to get in touch directly with Markus Vieweg, you can do so at info@tourgespraeche.de.

www.tourgespraeche.de



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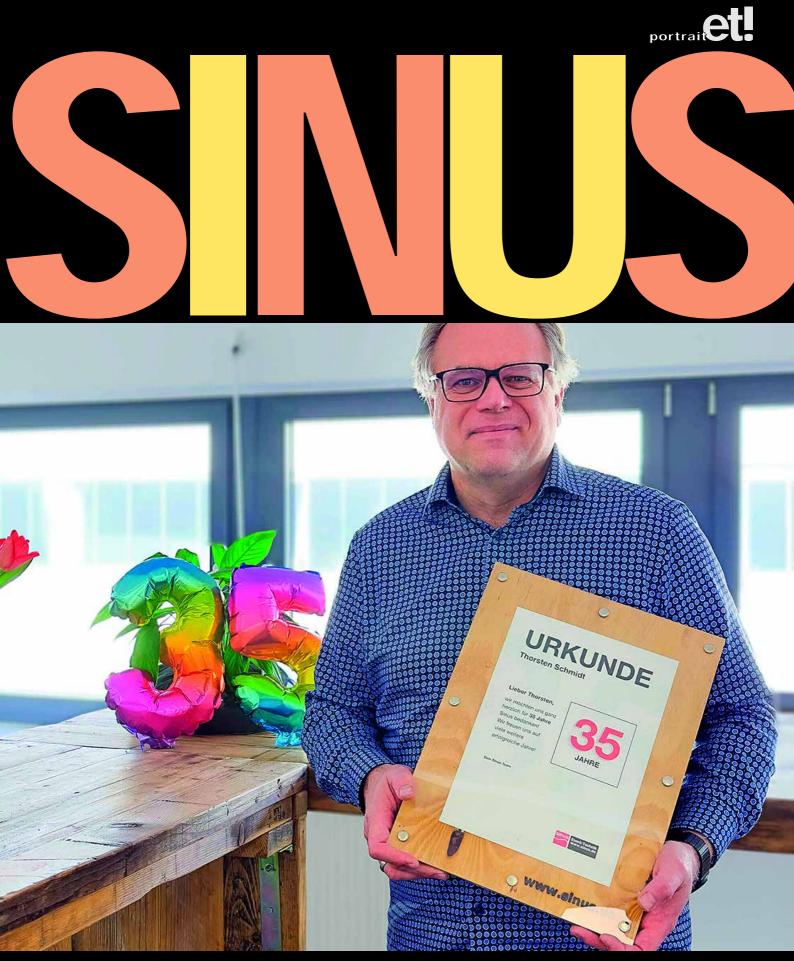
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For the 35th anniversary of Sinus Event-Technik, founder and managing director Thorsten Schmidt has a lot in store. In addition to expanding the PV system and making significant investments in the rental fleet, sustainability is the top priority. Here's a look back.





The (pre-)history of Sinus begins in 1980 when Thorsten Schmidt's older brother was playing in a band and was looking for a lighting technician for the first Kranichstein Rock Festival. Eleven-year-old Thorsten didn't hesitate. With a great affinity for technology and a bit of youthful bravado, he built a "light control panel" from a few light switches in his father's workshop, igniting a lifelong passion.

In 1984, Schmidt started working as a DJ at a young age. Not only did he build his first small sound systems, but he also rented them out to friends and family. The family workshop soon became too small, so Thorsten converted his parents' garage into a larger technical storage and office space. This youthful entrepreneurial spirit laid the foundation for Sinus Event-Technik. Today, that's called a "startup".

In 1986, he completed training as a radio and television technician, expanding his technical know-how and solidifying his job as a specialist in a rapidly developing industry. In 1989, Sinus Light, Sound, and Stage Technology officially came into existence.

From 1992 onwards, Thorsten Schmidt discovered the world of musicals with the Youth and Theater Project Darmstadt, where he brought the musical "Räuber Hotzenplotz" to life. His collaboration with founder Matthias Edeling marked the beginning of a series of successful musical performances. In 1993, "Linie 1" was created, followed by "Dschungelbuch" in 1995 and "Hasan Schmidt" in 1996. In addition, Schmidt accompanied the band Tobsucht with his light show at numerous live performances at various festivals and concerts throughout Germany in 1995. When the second technical garage in Darmstadt-Arheilgen burst at the seams in 1996, a decisive decision was made: Thorsten Schmidt turned his passionate hobby into a real business. This led to the construction of his own technical storage facility on Frankfurt Landstraße. The ability to take on more and larger projects required support from freelance and soon also permanent employees. Recognition from agencies and establishment as a creative and professional technical consultant in lighting, sound, and stage technology allowed Sinus to build a comprehensive customer base. With a focus on corporate events, they realized creative and technically demanding projects.

In 1997, Sinus invested in moving-head spotlights. This technology allowed the company to be one of the first to elevate events to a new level, working with breathtaking visual effects and previously unmatched flexibility in designing light shows.

Due to the enormous growth of the rental fleet and the demand for more workspace, a move to a 700 square meter vacant warehouse on Wittichstraße 7 in Darmstadt was on the agenda in 1999. With the introduction of the first proper inventory management system, Sinus Event-Technik also made significant strides in the organizational area to optimally handle the Rental/Dry Hire sector.

After the transformation of the company into a GmbH (2001) and with the introduction of video and imaging technology in 2002, Sinus expanded its range of services in response to changing market and customer needs, becoming a full-service provider for event technology. Continuous mainte-







nance of the growing rental fleet and the quick handling of repairs for customers were ensured in 2009 by the permanent staffing of the Sinus workshop. This strategic decision not only strengthened the internal infrastructure but also made a clear statement about quality and reliability to customers.

After significant investments of around 600,000 euros in sound, lighting, stage, and video technology in 2012, the year 2014 was all about the 25th anniversary of Sinus. Along with the quarter-century celebration came the introduction of the position of operations manager to further structure the growth.

In 2015, Sinus Event-Technik embarked on an ambitious growth path. "We invested heavily in new technologies, including high-resolution LED screens, which strengthened our ability to create visually stunning experiences. In addition, we explored new business areas, thus expanding our range of services to meet our customers' changing needs", recalls Thorsten Schmidt.

In 2017, they opened their own carpentry workshop, enabling them to provide tailored and creative solutions for customer projects from a single source. In 2018, due to continued growth, the third move took place. After an intensive search, Thorsten Schmidt chose a suitable property in Mörfelden-Walldorf with the necessary spatial capacity and optimal logistical connections. "The purchase of the property with an office building and warehouse, along with the construction of an additional 700 square meter two-story commissioning hall including three loading docks, was designed to prepare us optimally for the future", Schmidt explained. Long before the general sustainability wave, the complete conversion of the company building to LED lighting and the installation of building automation to control all heating systems took place in 2019. The installation of a 100 kW photovoltaic system on the company roof and the establishment of six electric charging stations up to 22 kW in the same year were further steps in this direction.

In the pandemic year 2020, streaming became the new core of the service offering. "We immediately invested in professional studio technology and made our Sinus Studio the center for digital events." From general meetings to award ceremonies to online awards with live connections to the winners, Sinus still offers a variety of streaming services today. With the gradual return to a new normal, a hybrid format evolved from the purely digital format. "This flexibility and technical expertise enabled us to successfully conduct a wide range of events in the new format and gradually return to live events." Additionally, the infrastructure for electric mobility at the company's location was expanded: the number of charging stations grew from six to eleven, which continue to be free for employees and customers. Thus, despite ongoing challenges due to the pandemic, Sinus recorded its most profitable year in history in 2022.

In February 2024, Sinus celebrated its 35th anniversary. "This anniversary is not only a reason for us to be proud but also the starting signal for a determined future with an increased focus on expanding the sales structure to further solidify and actively shape our market position", says Thorsten Schmidt.



et

8500 times "The Lion King"

A record-breaking show anniversary for Disney's "The Lion King" in Hamburg: Joachim Benoit celebrates his 8,500 performances as the hornbill Zazu. Since the German premiere in December 2001, he has entertained and amazed audiences as the royal majordomo. In Germany, no musical performer has played the same role as often as he has.

When the curtain rises eight times a week at the Stage Theater im Hafen, Rafiki's voice rings out, and the unique opening of Disney's "The Lion King" begins, the native of Rhineland-Palatinate stands on stage as the royal majordomo. With his long-standing commitment, Joachim Benoit has shaped the role of Zazu in the German production, breathing <u>new life into it every evening: always upbeat, funny, and lovable.</u>

"A comedic role like Zazu is characterized by pace, good timing, dignity, and joy in performance. The latter is my motivation for my profession, so it is an honor for me to be part of this for so long. It feels wonderful to receive so much appreciation and trust from Disney", says Joachim Benoit.

For over two decades, Benoit has embodied the demanding role of Zazu, which is challenging both physically and technically. Among other things, the performer must fall onto his back multiple times during the show and get back up without using his hands - all while wearing a heavy costume that makes him sweat even more. Particularly, Zazu's puppet requires utmost concentration, as it is equipped with one of the most complex mechanisms in the show.

For more than 22 years, the musical in Hamburg has touched millions of hearts and continues to sell out every evening. And not without reason. Few musicals connect dance, song, and acting in such a perfect way. Unmatched is the magic with which director Julie Taymor makes people and puppets become one. Additionally, there is the creativity that transforms a cartoon into independent and overwhelming theatrical images. Of course, one of the success factors is also the music by Elton John, Lebo M., and Hans Zimmer. To date, over 15 million people have seen the performance, making the musical one of Hamburg's biggest cultural tourism highlights.

Even after 8,500 shows - a record number of performances for a musical performer in Germany - Joachim Benoit remains motivated in his role. His secret? "I learned from director Julie Taymor that the show should always be in flux and that the interpretation can change. So, I constantly alter my playing style. This keeps the job varied even after so many years."

Finally, here are a few numbers about the Disney Theatrical Group (DTG): Founded in 1994, it is part of the Walt Disney Studios. It is currently led by Andrew Flatt, Thomas Schumacher, and Anne Quart. The company's ten Broadway titles have been seen by more than 200 million theatergoers worldwide, received 62 Tony Award nominations, and won the highest honor on Broadway 20 times. The company's first production, "Beauty and the Beast", premiered in 1994, had a remarkable 13-year run on Broadway, and has been licensed worldwide for over four decades.

In November 1997, Disney made theatrical history with the premiere of "The Lion King". The show won six Tony Awards in 1998, including Best Musical and Best Direction for Julie Taymor, who became the first woman in Broadway history to receive this award. Running on Broadway for 25 years, the show has welcomed 112 million visitors worldwide and is currently performed in nine productions around the globe. "The Lion King" has played in over 100 cities in 24 countries on all continents except Antarctica. Its worldwide box office exceeds that of any film, Broadway show, or other entertainment title.

Next, "Aida" by Elton John and Tim Rice premiered on Broadway and won four Tony Awards in 2000. This was followed by "Mary Poppins", a co-production with Cameron Mackintosh, which premiered in London in 2004 and ran on Broadway for six years, also winning a Tony Award. In 2006, the award-winning production "Tarzan", featuring music by Phil Collins, ran for ten years in Germany.

In January 2008, "The Little Mermaid" opened on Broadway and became the best-selling new musical of the year. In 2012, DTP brought two critically acclaimed productions to Broadway that together received seven Tony Awards: "Peter and the Starcatcher" and "Newsies", each having a two-year run and touring North America, with "Newsies" being showcased in a record-breaking Fathom Events film version.

"Aladdin", which premiered in 2014, remains a Broadway favorite. It has launched nine productions on four continents and has been seen by more than 17 million guests. Also still running is "Frozen (Die Eiskönigin)" from 2014, which is currently performed in four productions worldwide. Other successful stage projects include the world premiere of "Hercules" this year in Hamburg, "Shakespeare in Love", "High School Musical", "The Hunchback of Notre Dame" in Berlin, and "King David in Concert" on Broadway.

The Disney Theatrical Group has collaborated with the most significant theaters in the U.S. to develop new stage musicals, including "The Hunchback of Notre Dame" and "Freaky Friday". As part of the recent acquisition of 21st Century Fox, DTP also manages the Buena Vista Theatrical banner, which licenses Fox titles for stage adaptations, including "Anastasia", "Moulin Rouge! The Musical" and "Mrs. Doubtfire". Next on the Disney Theatrical agenda: the premiere of "Hercules" in London's West End, the North American tour of a newly reimagined production of "Beauty and the Beast", and the development of the successful film "The Greatest Showman" as a stage musical. It can be said that at practically every hour of the day, a Disney musical is being professionally performed somewhere in the world.















Sebastian Beutel

Since August 2024, Sebastian Beutel has been the Avolites Senior Technical Support Manager, responsible for national and international service for Avolites lighting consoles and media servers, which are part of the Robe Group. Beutel is well-known for his years of support for Avolites users at Trendco, where he gained extensive experience in sales and service as Sales Manager.

Martin Braun

Martin Braun is the new Head of Sales DACH at Lawo. He brings over 25 years of experience in the broadcast industry and will be responsible for developing sales strategies, expanding market presence, and maintaining strong customer relationships. Before joining Lawo, Braun held important positions at Linde, Pinnacle, and Avid. He holds a degree in Physical Engineering.

Jamie Dunn

Lawo has entrusted Jamie Dunn with additional responsibilities as a board member and deputy CEO. Dunn, who has been with Lawo since 2011 and has served as Chief Commercial Officer corporate strategy and strengthening (CCO) since 2019, will now take on legal responsibilities for the company alongside CEO Philipp Lawo and Claus Gärtner, who joined as CFO and board member in November last year. He is a classically trained sound engineer.

Falko Paul Eidner

Falko Paul Eidner will now lead operations at the SAE Institute in Leipzig. As Campus Manager, he will continue to drive the modernization and expansion of the media school. In his new role, he will also be responsible for around 200 students. Eidner graduated from the SAE Institute in 2013 with a degree in Audio Engineering and has worked for companies such as Audi, Deutsche Bahn, and Hugo Boss.

Alexander Freund

Alexander Freund is the new Campus Manager at the SAE Institute in Bochum and will take over responsibility for approximately 200 students. Freund studied Audio Engineering starting in 2013 and graduated with a Bachelor of Arts. He then worked as an independent project manager, making a name for himself as an event and sound technician, as well as a web designer and developer.

Jan-Dirk Hachmann Since June 2024, Jan-Dirk Hach-

mann has been working at LTT Group in the Business Development sector, specifically supporting the further development of the stage technology division with a focus on rigging. With over 25 years of industry experience, Hachmann is an experienced contact in his field. The LTT Group in Bocholt has one of the largest warehouses for aluminum trusses in Europe.

Mathilda Kruschel

Stops & Mops GmbH has expanded its collaboration with Mathilda Kruschel and appointed her as the official sales partner for Germany. "Thilda" Kruschel, who has operated her own event service for years, is now the contact person for the Desk **Dough** product range. This product is a 100% digital beam fixture for more beams and is easy to integrate into lighting programming.

Mark Mayfield

Meyer Sound has hired Mark Mayfield as Director of Cinema Marketing: He will lead growth initiatives for this market. Mayfield brings experience in sales, marketing, editorial, education, and product development in the cinema, professional audio, and AV fields. He has previously worked for Bose, Eastern Acoustic Works, and JBL. Additionally, he has been an instructor at the Infocomm Academy.

Jonas Michaelis

Ovest has appointed Jonas

Michaelis as the new Chief Strategy Officer (CSO). His main responsibilities will include implementing the global collaboration among Qvest locations worldwide in Europe, the USA, Australia, and the MENA region. As an expert in developing new business areas, he has led global development as CEO since early 2021.

Marcel Mothes

Vision Two and Claypaky are pleased to welcome Marcel Mothes as a new sales representative focusing on the entertainment and rental sector. Mothes will manage the western part of Germany from his base in Detmold. He brings extensive experience in the MI (Musical Instruments) industry and has training as a certified business economist. He has worked many years in MI retail.

Manfred Porschnitzer

After nearly 40 years in the live entertainment industry, Manfred Porschnitzer retired on May 31, 2024. As a co-founder of the stage construction company now known as Stageco Deutschland, he has significantly contributed to the company's development and success. Manfred Porschnitzer began his career as a stagehand with Werner Herbst, the owner of the concert agency Chapeau Claque.

Andreas Zang

Andreas Zang is new to the BT Innotec team and primarily takes on external sales in the southwest region. The trained event manager brings about 15 years of experience in the event industry. The family-friendly working environment and flat hierarchies were decisive factors for his move to BT Innotec. He now shares responsibility for the southern part of the country with Tobi Winter.













AVIXA TV wins awards



AVIXA TV has won two awards at the 45th annual Telly Awards, the most prestigious U.S. award for excellence in video and television across all screens.

The series "How'd They Do That?" takes viewers behind the scenes with some of the most innovative minds in the AV industry and received a Silver Award in the Science & Technology Series category. Additionally, "Behind the Scenes With V_ Technologies" was awarded a Bronze Award for a single science and technology video.

This year, 13,000 entries from five continents were submitted for the Telly Awards.

Rent.Group wins award



The Rent Group, together with the design and branding agency The Studios, won the German Brand Award in the Brand Identity category. The award recognizes the strategic and timelessly contemporary brand orientation of the new umbrella brand Rent Group.

Since the beginning of 2024, the Party Rent Group has been operating under the new company name Rent Group, encompassing three divisions: Party Rent, Fair Rent, and Office Rent. On this occasion, the brand identity was further developed in collaboration with The Studios. The new design clearly unites the four brands. The German Brand Award honors the conceptual achievements of both companies.

EISA Awards 24/25 for Philips TVs



Three Philips TV models were recently awarded the EISA Awards 2024/25 as the best in their category. The jury selected the 55OLED809 as the EISA Best Buy OLED TV for 2024-2025, stating it is "a TV from the middle of the range that far exceeds its price in quality". The jury crowned the "The Xtra" 65PML9009 as the Best Family TV 2024/25, commenting, "The 65PML9009, also known as 'The Xtra', features state-of-the-art technology". In awarding the Philips 65OLED+959 as the EISA Best Home Theatre OLED TV, the jury remarked, "The 65OLED+959 demonstrates the capabilities of its P5-AI Dual Engine processor, combined with a new OLED META panel and a 5.1.2 channel sound system".

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Coda Audio Hops 7-Pro

With the compact dimensions of just 518 mm x 190 mm x 273 mm and a weight of 9.2 kg, Coda Audio presents the latest model in the Hops speaker series, the Hops 7-Pro. Equipped with a newly developed 1.75-inch neodymium ring diaphragm driver and two 6.5-inch neodymium cone speakers, this versatile 2-way full-range speaker delivers an impressive power handling capacity of 1000 W (AES) with extremely low distortion.

The new Hops 7-Pro features numerous key technologies from Coda Audio, including the patented Dynamic Airflow Cooling (DAC), which minimizes power compression by dissipating heat from the enclosure and cooling the transducers. This results in consistent tonality over long periods with higher power handling capabilities.

With its variable nominal radiation characteristics, the Hops 7-Pro offers high flexibility for numerous applications, particularly thanks to the rotatable and interchangeable Instafit Waveguides, which can be rotated in 90-degree increments. They are available in two variants: 80° x 50° and 120° x 60°.



Yamaha

DHR/CHR12 and DHR/CHR15M

The new loudspeaker models DHR/CHR12 and DHR/CHR15M offer a selection of two-way models with bi-amping (DHR) or passive operation (CHR), bringing additional flexibility to a series that can achieve a new level of professional quality, precision, and performance for a wide range of live and installation applications at a very cost-effective price.

The new DHR12 and CHR12 installation/utility speakers fit between the DHR/CHR10 and DHR/CHR15 models and are suitable for permanent installations requiring high sound quality and high sound pressure. Both models are equipped with a specially designed 12-inch woofer with a 2.5-inch voice coil and a precise 1.4-inch compression driver. The DHR/CHR10 and DHR/CHR12 models use rotatable compression drivers, allowing them to be used in horizontal or vertical configurations, ensuring optimal utilization of the 90° x 60° radiation pattern. The Class-D amplifier of the DHR12 delivers 1000 W of power and features 24-bit/48 kHz A/D conversion.







Model 2400

With the Model 2400, Tascam presents what it claims is the flagship of its model series. Like the other consoles, the Model 2400 combines an analog console with a multitrack recorder and an audio interface with DAW control. Due to its significantly more extensive features, Tascam explicitly identifies professional recording studios and larger live sound applications as its target areas.

The Model 2400 has twelve mono and five stereo inputs (one of which can also be fed via Bluetooth), four stereo subgroups, five output channels, and an effect processor with 16 adjustable presets. MIDI in and out with MIDI timecode, song position pointer, and a click output are ideal for artists and producers using electronic instruments and sound generators. Each of the twelve mono channels has a simple compressor, a 3-band EQ with tunable mids, and an insert path.

Phantom power can be switched in groups of four. In the stereo sum, a compressor (with five knobs on the top) and a parametric 4-band EQ can be activated.





The Ultra-X80 is the new powerful flagship of the successful Ultra-X series. It combines the technology of the previous Ultra-X family with that of the large-format Panther line array speaker. According to Meyer Sound, this achieves a new level of precision, performance, and clarity in a compact and user-friendly speaker.

The Ultra-X80 integrates seamlessly with all other Meyer Sound sound reinforcement solutions and comes standard with both an analog and a digital Milan-AVB input module.

The speakers in the Meyer Sound Ultra-X family, along with the Panther, the 2100-LFC low-frequency control element, and the USW subwoofers, now form the largest range of speakers on the market that can be connected via a Milan-AVB network, supported by the Meyer Sound Nebra software platform.

The design has been slightly adjusted: it now features two 12-inch drivers with neodymium magnets combined with a 4-inch high-frequency compression driver with a rotatable horn and a radiation pattern of 95° x 40°.

L-Acoustics and d&b collaborate

The two industry leaders in audio technology, d&b Audiotechnik and L-Acoustics, present the innovative brand-neutral Milan Manager software, developed to simplify the configuration, management, and monitoring of Milan-AVB networks.



The brand-neutral software is now available for free download and will be showcased at upcoming industry trade shows by both companies. As a brand-independent solution, Milan Manager simplifies the setup of networks of any complexity. This promotes the universal acceptance of Milan-AVB, the most stable and open network technology platform. The clearly structured, tab-based user interface of the Milan Manager provides quick and efficient access to all essential functions. Additionally, Milan Manager delivers clear network status messages in real time.

Milan Manager automatically detects devices and allows users to name them, set sample rates, and manage the media clock. In-

dividual channels can be combined into output streams and then bundled for connection to receiving devices. Stability and security are crucial for network management. Milan Manager provides continuous access to the current network status, enabling users to proactively address issues and ensure optimal performance.

With this collaboration, d&b audiotechnik and L-Acoustics emphasize their commitment to broader acceptance of Milan-AVB. The introduction of the Milan Manager represents a significant first step towards seamless Milan-AVB integration. Both companies are actively working on the development of additional features.

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Cordial



Presentation during the IBC 2024 in Amsterdam (v.l.): Christophe van den Berghe, Theresa Vondran, Dr. Andreas Sennheiser



Spectera - the bidirectional wireless broadband ecosystem

At IBC, Sennheiser has ushered in a new era of digital wireless audio transmission by presenting Spectera, the world's first bidirectional broadband solution. With its groundbreaking WMAS technology (Wireless Multichannel Audio Systems), Spectera significantly reduces the complexity of wireless systems.

At the same time, the system provides audio professionals with entirely new possibilities, enabling time-saving workflows and complete remote control and monitoring, including continuous spectrum monitoring. The bidirectional bodypacks can handle both in-ear monitor and microphone/line signals simultaneously. The solution is remarkably resistant to RF fading and allows for flexible use of the broadband RF channel, for example, for digital IEMs with latency down to an impressive 0.7 milliseconds.

"We are very pleased that years of technical development and political spectrum work have culminated in a digital wireless ecosystem that will solve many of the problems faced by users of wireless multichannel systems today", said CEO Dr. Andreas Sennheiser during the official presentation in Amsterdam. "Our broadband solution is ideal for large productions, whether in touring, broadcast, or theater. Spectera meets the key wishes and needs of our customers regarding user-friendliness, reliability, and flexibility. The system requires significantly less hardware, simplifies frequency coordination, is designed for redundancy, and offers the flexibility of an ecosystem that grows with their needs."

WMAS - the broadband principle

Bidirectional digital broadband transmission addresses many of the typical challenges faced by users, technicians, and owners of wireless audio systems today. These include overly complex frequency coordination for large multichannel setups and the complicated wiring in racks, as well as the resources that such a multichannel wireless system still consumes - in terms of both space and setup time, whether in storage, on tour, or backstage.

Sebastian Georgi and Jan Watermann are the inventors of the specific Sennheiser WMAS approach. The technology they developed is a proprietary variant of OFDM-TDMA, specifically tailored for reliable bidirectional multichannel communication with low latency. They compare the broadband principle to standard narrowband technology: "Instead of many individual narrowband RF carriers of 200 kHz width, we use a single broadband RF channel for audio transmission – more specifically, the bidirectional transmission of audio and control data. In Sennheiser's approach, the broadband RF channel is a TV channel 6 or 8 MHz wide, depending on local regulations.

The WMAS system organizes its audio links within this channel. Each audio link, whether a microphone or an IEM, is assigned specific time slots for transmitting its audio information making it possible for the first time to operate IEMs and microphones in the same TV channel, rather than placing them in two channels separated by a guard band. Because all audio links utilize the full bandwidth of the RF channel when it's their turn, RF fading is greatly reduced. This equates to a 40-fold diversity for an 8 MHz RF channel and a 30-fold diversity for a 6 MHz TV channel. Additionally, the spectral power density is low, allowing frequencies to be reused more easily, for instance, across a larger festival site, between neighboring theaters, or within a broadcast complex."

Significantly reduced system complexity

One of the most impressive innovations in the Spectera ecosystem is certainly the Base Station, which replaces an entire rack full of wireless microphone receivers and IEM transmitters with 32 inputs and 32 outputs in a single rack unit. A whole production could fit within just one broadband RF channel (6 or 8 MHz). The bodypacks also save space as they handle IEM/IFB and microphone/line signals simultaneously.

"Having just one bodypack is not only a significant advantage for the performers", says Bernd Neubauer, Product Management Spectera, "it also simplifies the work for sound engineers, who only need to work with one type of bodypack and can quickly add an IEM to a microphone if needed. The required storage space also decreases since there's only one variant of the Base Station and only two frequency variants - UHF and 1G4 - for bodypacks and antennas."

Spectera not only provides a return channel but also a continuous bidirectional communication that enables a completely new way of full remote control and monitoring. Through the continuous control data stream, audio settings can be adjusted, IEM and microphone levels can be modified, RF channel quality and battery status can be monitored, and much more. AES 256 encryption (AES 256 CTR Mode with >10k Years expiry) for both audio and control data ensures the necessary data protection. Furthermore, all devices assist in continuously monitoring the spectrum, scanning for potential interference from other RF sources. With Spectera, it's now possible to look behind the utilized RF channel and identify disturbances.

Excellent audio quality

Spectera delivers the familiar digital audio quality from Sennheiser for microphones, instruments, and IEMs, utilizing various audio codecs optimized for their respective applications, all processed internally with 32-bit float precision. With Spectera's eleven audio link modes, latency, audio quality, channel count, and range can be flexibly controlled throughout the production for each link. Audio engineers can always maximize the use of the RF channel, either by assigning a higher quality to a smaller number of audio links or allowing for more links while reducing quality accordingly. Regardless of which audio link mode is selected, Spectera offers clear sound that ,,will be a revelation, especially for IEM users", says Neubauer. "With Spectera, you can expect a clear, detailed IEM sound with extremely low latency down to 0.7 milliseconds. The 'Dual Mono' IEM cleanly separates the right and left in-ear channels, enhancing the soundstage for optimal performance."











Benedikt Euen, Spectera Product Management: "Spectera treats spectrum resources with great respect by allowing IEMs and microphones to operate in the same TV channel. At a festival, the system simplifies frequency coordination among sound engineers and streamlines the entire workflow.

For example, when a large band is waiting for their gig at a festival, it's sufficient to lift the RF mute to go live with the entire band. While narrowband systems are tied to fixed carrier frequencies and specific features, Spectera allows for completely flexible management of the show or production. Need an additional IEM? No problem! Need to accommodate another artist within the 64 audio links? We can handle that!"

The Spectera components

The Base Station, in a space-saving 19"/1 U format, is the heart of the Spectera ecosystem: it handles up to 64 audio links (up to 32 inputs and 32 outputs). One Base Station can utilize up to two RF broadband channels for wireless transmission of all audio and control data. The Base Station is frequency-agnostic; activating it via the corresponding local license automatically loads the approved frequency range.

Redundancy is a key principle in the design of the Base Station. It features two power supplies, primary and secondary Dante audio connections, and two optional slots for redundant MADI connections (Optical Multimode or BNC). Up to four antennas can be connected to provide redundancy, increase coverage, or expand system capacity by utilizing additional frequency ranges. The cascading port will be activated through a future firmware release. Notably, there are no RF components in the Base Station, so other wireless equipment in the rack will not be disturbed.

The SEK bodypacks are also space-saving as they can simultaneously handle in-ear monitor and microphone/line signals, allowing for completely flexible choices that can be changed as needed during a show. The bodypack has a 3-pin input for a lavalier or headset microphone or an instrument cable. The 3.5 mm headphone jack features a high-performance headphone amplifier with impedance matching.

The SEK continuously displays device information, even when the device is turned off. The bodypack is available in a UHF variant (470 - 608 MHz and 630 - 698 MHz) and a 1G4 variant (1350 - 1400 MHz and 1435 - 1525 MHz). It is powered by a BA 70 lithium-ion battery (the same model used for Evolution Wireless Digital) and offers up to seven hours of operating time, depending on the selected configuration.

The IP 54-protected Spectera DAD antenna (Digital Antenna Directional) serves as both a transmitting and receiving antenna for IEM signals, mic/line signals, and control data. The integrated RF components eliminate the need for additional RF equipment such as combiners, splitters, or boosters.

Since the RF signal is digitized at the antenna, the DAD does not use a BNC connector and coaxial cable for connection to the Base Station but instead utilizes a robust RJ45 connector and CAT 5e cable, which are easier to handle, more cost-effective, and less prone to cable losses than coaxial cables. The antenna is powered by the Base Station (standard PoE). In addition to CAT 5e antenna cables, it is also possible to use Layer 1 Media Conversion to Fiber to cover larger venues.

If the Base Station is the heart of the Spectera ecosystem, the brand new Link Desk software is the backbone. The desktop application runs on Mac or PC, turning a laptop into a remote con-



trol and monitoring center. Here, engineers can flexibly choose between audio link modes and their respective audio quality, latency, possible audio links, and range, as well as fully remotely control and monitor the entire system, including all audio settings and RF channel quality.

Euen explains: "Setting up a multichannel wireless system can also be a real challenge from a software perspective. Therefore, we have developed assistants for quick and easy system management.

Link Desk stores productions, allowing technicians to quickly retrieve their system configurations and save valuable time during the event." An intelligent notification system provides additional support.

The Base Station is also activated via the Link Desk software using a device-specific single-node license. By entering the specific local license code, the software ensures that the system operates within local regulatory requirements for frequencies, RF channel bandwidth, and transmission power, so technicians are on the safe side here.

The delivery start for Spectera will be announced in the first half of 2025. The system will continue to evolve over time - with additional hardware and software. On the hardware side, the next addition will be the SKM handheld transmitters. Moreover, the implementation of the SMPTE ST 2110 standard family for the transmission of professional media signals is planned, which can currently be achieved with Merging Technologies' Hapi.

Christie 1DLP Laser Projectors Jazz Series

The new Jazz series from the 1DLP laser projectors line starts with two models: the DWU2400-JS and the DWU1800-JS. Both models impress with WUXGA resolution in a lightweight, compact form factor, offering 23,750 and 17,800 lumens, respectively. The Jazz series from Christie features advanced electronics, including 0.8-inch HEP (High Efficiency Pixel) DMDs from Texas Instruments for improved color and contrast reproduction, as well as a more efficient cooling system design.

The projectors in the Jazz series provide high brightness in a handy, compact housing weighing just 29.4 kg, making them 41% lighter than WUXGA projectors in the same brightness class that use 0.96-inch DMDs. The DWU1800-JS and DWU2400-JS support active 3D and come with integrated warping and blending features with Christie Twist. The free software Christie Mystique Lite, in combination with an affordable camera, offers oneclick warping and blending of up to three Christie projectors in a horizontal arrangement.



Viewsonic

Viewboard IFP110

Viewsonic presents the Viewboard IFP110, a large-format interactive display for classrooms, lecture halls, and meeting rooms. The display impresses with a comprehensive software package and numerous connectivity options, making it attractive and efficient for teachers, students, and meeting participants. The 110-inch display offers ample space for digital lessons or presentations in the meeting room. With a refresh rate of 60 Hz, it ensures crystal-clear representation of dynamic content.

The UHD panel delivers 3840 x 2160 pixels, 400 nits brightness, and a contrast ratio of 5000:1. It accurately displays 1.07 billion colors. For convenient connectivity, three easily accessible USB-C ports allow fast multimedia playback, smooth data transfer, and charging devices with up to 100 W. Additional connections include USB-A, USB-B, HDMI, VGA, DisplayPort, Audio-In, HDMI, SPDIF, Audio-Out, RJ45, RS232, OPS slot, and WiFi module slot. Viewsonic supplies the IFPs with the software solution "Display", enabling wireless presentations.





The Wall IWC Series

Samsung expands the applications of The Wall technology with the IWC series: the new Micro LED displays offer brightness levels of up to 1800 nits, ensuring high-quality image quality even in bright environments. Additionally, the Black-Seal technology+1 provides impressive contrast values. Thanks to Ultra-Chroma technology and Al-supported image optimization, content is displayed in realistic colors and up to 8K resolution.

In showrooms, as well as in representative entry areas of hotels, boutiques, and businesses, there is often diffuse lighting: sunlight streams through windows, spotlights highlight individual areas of the room, and ceiling lamps broadly illuminate the floor. In large-format displays, this changing light situation can become problematic. In the worst case, the displayed image appears patchy, as brighter illuminated areas of the screen look darker and have lower color intensity. It is therefore important that the quality of the display remains consistently high regardless of ambient lighting conditions. The new IWC series from Samsung ensures this.



Broadcast Solutions

HI Human Interface

HI Human Interface is claimed to be the first truly intuitive control solution for extensive broadcast and live event infrastructures. HI was developed by Broadcast Solutions, a leading system integrator. In today's broadcast production or at live events, the media environment is necessarily complex, involving processing from multiple vendors, a large number of sources and destinations, various formats and resolutions, as well as high-quality requirements.

To achieve a perfect result every time, complete and secure control is essential. This is where HI comes into play.

It combines all elements - video, audio, data, baseband, SMPTE ST2110, Dante Audio, NDI, and more - into a simple, unified control system. More than just a routing system, HI can control all functions of the connected systems: cueing, switching, and adjusting. It is ideal for fixed or mobile installations, at one location or across multiple studios, broadcast trucks, theaters, and links.



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Ola Melzig



Lights, action... camera!

Blackmagic Design unveiled the Ursa Cine 17K 65 digital large-format film camera at IBC 2024 in Amsterdam, along with new advanced technologies fully integrated into the post-production workflow.

The new model features a new RGBW 65 mm large-format sensor with 17,520 x 8,040 pixels and larger pixels for a dynamic range of 16 stops, interchangeable PL, LPL, and Hasselblad lens mounts, as well as industry-standard Lemo and Fischer connectors.

The camera comes with a built-in high-performance storage of 8 TB and offers ultra-fast network access for uploading media and syncing with Blackmagic Cloud. The Ursa Cine 17K 65 is now available for order through Blackmagic Design resellers worldwide.

The Ursa Cine is equipped with a new sensor designed for exceptional image quality in all resolutions from 4K to gigantic 17K. The larger sensor is based on the technology of the Ursa Mini Pro 12K with larger pixels, achieving a full 16 stops of dynamic range. The RGBW architecture ensures an equal number of red, green, and blue pixels. It is optimized to deliver rich colors, optimal image quality, and maximum flexibility across all resolutions.

The camera is specifically designed to meet the requirements of any high-end production. Its balanced and robust magnesium alloy housing is coated with a lightweight carbon fiber-polycarbonate composite, allowing users to move quickly on set. Industry-standard Lemo and Fischer connectors mean that users can remotely control the camera and power lens motors and other accessories simultaneously. There are 12G-SDI outputs, 10G Ethernet, USB-C, XLR audio, and other outputs.

For different projects, appropriate lenses are required, which is why the Ursa Cine comes with a interchangeable mount. This allows for quick changes between PL, LPL, EF, and Hasselblad mounts. Additionally, each lens mount has contact pins for reading lens metadata for monitoring and use in post-production.

The camera allows crews to work faster on set with multiple monitoring options. It features a fold-out monitor with a 5-inch HDR touchscreen on one side and an external colored status LCD on the other.

On the right side, the camera has a "station" in the form of a second 5-inch HDR touchscreen specifically for assistants. This allows the crew to work without external monitors connected to the camera. Additionally, there is a special focus-puller mode that helps users find the perfect focus.

With its numerous industry-standard connections, the camera is designed for high-end cinema productions. The 7-pin Lemo and 3-pin Fischer connectors on the front offer start/stop recording and a 24 V power supply for onboard accessories like focus motors. The camera is powered via a standard 8-pin 24 V Lemo connector. There is also an additional 2-pin 12 V Lemo connector on the back for lower-voltage accessories.

Blackmagic RAW files store metadata, lens data, white balance, digital slate info, and custom LUTs, ensuring a consistent look on set and in post-production. The Ursa Cine records data on the included Blackmagic Media Module (8 TB) and provides users with over four hours of recording time in Blackmagic RAW 17K at full 65 mm aperture or a whopping 20 hours in 4K. Moreover, it features a powerful optical low-pass filter (OLPF) specifically tuned to the sensor, including updated IR filtering that improves color reaction in the red spectrum. Combined with Blackmagic RAW processing, the camera captures colors and important image details.

The Ursa Cine is the first digital film camera with integrated cloud storage technology. The Blackmagic Media Module is fast, robust, and has an 8 TB storage capacity. Hours of recordings in the highest resolutions and frame rates can be stored on the high-speed memory. Additionally, file access is available via 10G high-speed Ethernet. Users can also use existing drives since the optional Blackmagic Media Module CF has two CFexpress slots.

The Blackmagic Media Dock accelerates post-production workflows with faster and more straightforward editing and color correction. Users can deploy up to three Blackmagic Media Modules and have lightning-fast simultaneous access to the image media from multiple Ursa Cine cameras.

Up to four separate editing workstations can be directly connected to the four 10G Ethernet ports. Even with simultaneous access from many users, data is transmitted very quickly.

While recording, the Ursa Cine supports creating a small H.264 proxy file in addition to the original camera media. The small proxy file is uploaded to Blackmagic Cloud in seconds, providing real-time access to the footage in the studio.

"This capability for direct media delivery into a Davinci Resolve media bin while editors are working is revolutionary like never before", says Grant Petty, CEO of Blackmagic Design. "Additionally, the camera includes an integrated hardware streaming engine that supports RTMP and SRT streaming to popular platforms or directly to clients. For this, you simply connect the camera to the Internet via Ethernet, high-speed Wi-Fi, or even a smartphone with 4G/5G. This way, you can now stream live from film sets."

The Ursa Cine supports the optionally available Blackmagic Ursa Cine EVF, which allows for precise outdoor and handheld filming. The viewfinder features a high-quality 1920 x 1080 OLED color display with an integrated proximity sensor and a four-element diopter for precise focusing.

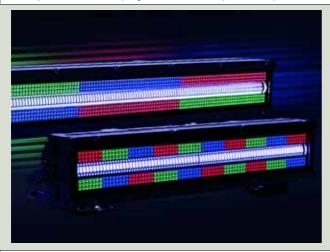
The camera has an 8-pin Lemo power connector on the back, compatible with 24 V and 12 V power supplies, allowing for easy use of the camera with existing power supplies and batteries. Additionally, there is a 250 W power adapter and a B-Mount battery plate, enabling users to utilize different high-voltage batteries from manufacturers like IDX, Blueshape, Core SWX, Bebob, and others.

Each camera is delivered in a sturdy Pelican case with custom foam interior partitioning, ensuring that the camera and accessories are securely and stably housed. The PL lens mount is pre-installed on the camera body. For working with medium format photo lenses, users also receive an active Hasselblad HC lens mount.

Stops & Mops Desk Dough

Desk Dough is not entirely new anymore, but it has now appointed Mathilda Kruschel as its official distribution partner for Germany. The Desk Dough is designed as a 100% digital beam fixture that can be easily and comfortably integrated into lighting programming for more beams. Its concept generates a moving light from any commercially available projector, opening up new creative lighting possibilities. Desk Dough is a device in a small box (16 x 13 x 4 cm) and weighs just under 1 kg, making it a real lightweight.

The box contains a small standard fanless computer, a kind of show-light adapter. Control is provided by four buttons on the top. A network port, two USB ports, an HDMI connection, and a 3.5 mm audio jack complete the setup. Desk Dough serves as a connection between a lighting console and a digital light source in the form of a projector. The device is programmed like a moving light, and the output is generated externally by a powerful digital projector. Control is done via Art-Net or sACN. Behind the Desk Dough are developers Matt Finke (Loop Light) and Tobias Stumpfl (AV Stumpfl).



Pulse Bar L/S

Together with the Pulse Panel and Pulse Panel FX from Elation's new Pulse series, the Pulse Bar is an extremely effective strobe and eye-candy bar that adds dynamism and energy to any design. The Pulse Bar is available in lengths of one and one-half meters (Pulse Bar L and Pulse Bar S) and features controllable 1.5 W RGB LEDs at the top and bottom, 5 W cold white strobe LEDs in the center, and 1.5 W RGB LEDs in the core. The flexible control of RGB and CW LED zones opens up a multitude of design possibilities. The Pulse Bar allows for intense, attention-grabbing performances with combinations of white and colored light to enhance the energy of specific scenarios. A library of flexible RGB and CW strobe effects, as well as variable dimming modes and curves, are already integrated into the DMX control for quick programming. The Pulse Bar is equipped with the same RGB and CW LEDs as the Pulse Panel and Pulse Panel FX, featuring the same effect engine and control options. An integrated, lockable slot allows for the integration of optional diffusion filters, ND filters, and other optics for flexible applications.

Litecraft BX.12

With the BX.12, Litecraft introduces a more powerful version based on the BX.7 model. This multifunctional and outdoor-capable spotlight has been developed for a variety of weather- and power-independent applications and, in addition to its performance upgrade to twelve powerful RGBW LEDs, also includes many new features in hardware and software resulting from customer feedback, ensuring maximum practicality. With the integrated lithium-ion battery and fully integrated charging electronics, the device can be charged directly via a power IP connection cable or permanently supplied with voltage.

For flexible adjustment of runtime, various battery modes are available, allowing for adjustment of operating time (with corresponding brightness adjustment) at any time. When the device is powered by mains voltage, brightness is automatically boosted, allowing the BX.12 and the also new BeamX.12 IP to be used in parallel with the same power and optical appearance. Another important feature for wireless use is the integrated Lumenradio CRMX chip, which enables wireless control via DMX 512 with both CRMX Classic and the latest Lumenradio protocol CRMX2. In CRMX2 mode, the device can be quickly and securely integrated into existing wireless networks using a "Linking Key" and also displays the name of the "Universe Name" configured in the sender. The device has a significantly higher light output compared to its smaller sibling, with a narrow beam angle of ten degrees, extending its classic applications as a truss-toner for beamwork effects.





Highlite

Expanded Infinity Raccoon Series

Highlite announces the expansion of the Infinity Raccoon series with four new members of the product family: Raccoon P7/7, Raccoon Junior P4/7, Raccoon Junior P7/4, Raccoon S420/4, and Raccoon W40/4. The Infinity Raccoon series has been developed for the demanding requirements of high-end lighting applications and offers advanced control options and a robust, IP65-compliant construction.

The series is characterized by careful color calibration, extensive control functions, and robust build quality. The series features a naming scheme that makes understanding easier. The Raccoon pars are available in both large and small housings and use either 4 or 7 color LEDs. The difference is clear: the "P" stands for "Par", while the numbers indicate the number of LEDs and colors in each fixture. Additionally, the Raccoon S420/4 combines 420 RGBW LEDs to provide strobe and wash effects, offering a dynamic lighting solution for various applications, while the Raccoon W40/4, with its 40 RGBM LEDs, offers ample wash effects.

equipment.light

Luna Bulb - the LED-based light bulb

Astera introduces the Luna Bulb, an innovative new product that externally mimics the appearance of a traditional light bulb but is powered internally by Astera's Titan LED technology.

As the only LED-based light bulb with integrated CRMX, the new Luna Bulb, alongside Astera's NYX Bulb, is available in E26, E27, and B22 bases and can be directly screwed into a mains-powered lamp socket like a conventional light bulb.

A spring-loaded clip allows the fixture to transform from a sleek form into the shape of a traditional bulb, giving it both aesthetic and practical value for indoor and outdoor sets (as the bulbs maintain the same weather resistance as an IP44 socket).

With fully adjustable white values (1750-20,000 K) and extensive color mixing (RGB, Mint, and Amber, with options to select RGB, HIS, XY, and filter gel colors), the Luna Bulb delivers flikker-free light in a variety of environments.

Thanks to the underlying Titan LED engine, it can seamlessly coordinate with the broader Astera ecosystem via Astera's intuitive app, its range of white and FX remote controls, BTB connection, or wireless CRMX.

Configuration is done either through the battery-powered Prep-Case or PrepInlay for Luna Bulb, which can hold up to eight bulbs, allowing for quick and efficient setup, activation of the blue mode, and DMX address assignment on the go.



The Luna Bulb has received much praise from numerous cinematographers, gaffers, and rental companies for its practical design and outstanding skin tones, complementing Astera's extensive range of innovative lighting solutions.

2 -

ROBe

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iSeries



Crewbrain App 2.0

About a year and a half after the launch of the native app for Android and IOS smartphones, Crewbrain now presents a completely revised and improved version 2.0 of the app. It can now be downloaded and installed from the app stores of the respective platforms and offers many interesting optimizations and new features.

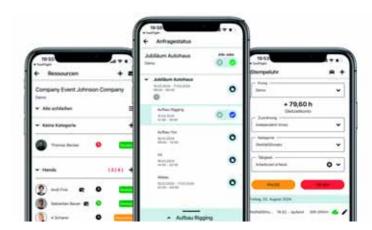
From a technical perspective, the new version of the smartphone app brings many advantages: "With the revision, we were able to lay the foundation for the future development of our app", explains Sven Schlotthauer, Managing Director of Crewbrain. "The clear structure not only applies to the user interface but also to the code, helping not only users with operation but also our developers with further development. This way, interesting options will emerge in the future to expand the app with personalized settings, allowing it to be tailored to the individual wishes of the users." The functionality of the app has remained almost identical. The new app can now be downloaded and installed from the app stores of the respective platforms.



Sommer Cable Syscat 4

The Syscat 4 family enables the simultaneous and reliable transmission of up to four analog or eight digital AES/EBU or DMX signals over distances of up to 100 meters via stage-ready CAT cables. The core element of the Syscat 4 family is a splice adapter, consisting of a compact and robust metal housing (HI-Housing) with an integrated Ethercon RJ45 full-metal socket and stable cable gland, terminated with a 50 cm long 4-way splice from the flexible and resilient digital patch cable SC-Semicolon 2 in combination with Neutrik or Hicon XLR connectors (3- or 5-pin, male or female).

The channel numbers are clearly labeled on the connectors, as is customary with Sommer Cable: (Channel 1 = Pins 4+5, Channel 2 = Pins 3+6, Channel 3 = Pins 1+2, Channel 4 = Pins 7+8). The Syscat 4 family also includes matching floor stage boxes (Ethercon NE8FDV <> 4 x 3-pin XLR female + male parallel) and 19-inch patch units in Syspanel housing with a high packing density and space-saving arrangement of 18 devices in just 1 U (2 x Ethercon NE8FDV <> 2 x 4 x 3-pin XLR female + male parallel).



DA-3000SD

Tascam has introduced the DA-3000SD, a two-channel DSD/PCM master recorder and analog/digital converter, building on the success of the original DA-3000 and intended to be an excellent choice for a wide range of professional audio applications. The DA-3000SD was designed for recording, mastering, archiving, and monitoring, capable of recording audio in PCM at 192 kHz as well as DSD at 2.8 MHz and 5.6 MHz, the highest quality recording formats available on the market.

Multiple devices can be synchronized for both recording and playback, creating a DSD multitrack environment. By cascading eight DA-3000SD units, users can record up to 16 tracks simultaneously. The DA-3000SD also enables precise monitoring with its own volume control. When used as an A/D and D/A converter, users benefit from two high-quality galvanically isolated BurrBrown converters in the input stage and a dual mono configuration with two high-quality circuits at the outputs, ensuring minimal interference between channels.





Instagrid Portable Power Supply

Instagrid has been around for six years. The first products hit the market in 2021. In the construction industry, Instagrid's portable power supply has already become an integral part, powering devices with high energy needs on construction sites without emissions.

By eliminating generators, the ecological footprint is reduced, creating a healthier work environment. As the demand for efficient and sustainable energy supply in event technology rises, a power supply from Instagrid is more relevant than ever. The efforts towards a clean energy transition are becoming increasingly apparent, and making events more sustainable is an easily implementable and cost-effective solution with Instagrid.

With Instagrid, diesel and gasoline generators and long cable runs can be avoided. The portable power supplies provide powerful, reliable, and sustainable energy for all types of events, especially for outdoor events where electrical outlets are not available.

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BTT 44 ⁴⁰ Labor Tempelhof 46 High End 48 Blue Days 5 30 Jahre GLP 52 Raimund Theater 56 Flyover Chicago 5 Gasometer Berlin 60 Ludwig XIII. 62 Lafayette College 6 Peter Maffay 66 AC/DC 68 Roland Kaiser 70 Coldplay 7 Justin Timberlake 75 Mono Inc. 74 Judas Priest 76 ettatrade shows & events



Thomas Dürrbeck, Tobias Hesse (W+W Consulting+Sakes)



Michael Nothelfer, Jörg Reimund Sieper (JB-Lighting)



Milan Ostendorf, Oliver Winkler, Marc Petzold (LMP)



Chris van Goethem (Tead), Jörn Nettingsmeier (VDT)



Christian Jung, Detlef Eckert, Kevin Berlauwt (Meyer Sound)















Award winners of the Weltenbauer Awards





Thilda Kruschel (Dough Desk)





Marina Kunkel (Kunkel Consulting)



Michael Paschenda (Pan Acoustics), Henry Dahmen (EAEC)



Vincent Kaufmann (DTHG), Sven Kubin, Jörg Braeutigam (VBG) Christoph Grauting (Multisenses)



Stephan Brinkert (ASM), Jan Pawlak (JP Ingenieure), Katrina Gagelmann, Andreas Knode (ASM)



On days like these...

In June, the 62nd Stage Technology Conference (BTT) took place at the Jahrhunderthalle in Bochum. Over 1,900 professionals from the theater and event industry experienced two exciting days and a successful EM public viewing evening.

Two days full of thrilling discussions, innovative technologies, and new products presented by 82 exhibitors. More than 50 inspiring lectures, keynotes, and discussion panels across five stages made the BTT a unique event. With a clear positioning as a networking event, the focus of both days was on encounters and collaboration. The patron of the BTT was Ina Brandes, Minister for Culture and Science of North Rhine-Westphalia. DTHG Chairman Wesko Rohde stated: "We are particularly pleased that Ina Brandes has gladly accepted this patronage. This shows how much significance she attributes to the innovative work of theaters and research companies. As a region with the most theaters and cultural venues in the country, the state of NRW has thus taken on its responsibility."

The Stage Technology Conference has been organized by the DTHG for 117 years. Through two world wars and the division of Germany, the BTT has become a stable platform for professional exchange and further education in the theater industry. Since the founding of the DTHG, the conference has taken place every two years at different locations in Germany - this time at the Jahrhunderthalle in Bochum, an impressive industrial hall with a rich history.

During the BTT, it provided space for more than 80 exhibition stands. The Anatomical Theater, the Sound Lab, the round tables, and the catering area were also integrated here, so all important places were close together and could be reached with just a few steps. Consequently, there were numerous voices afterward calling for the BTT to be held here permanently. "It used to be like that", noted Wesko Rohde, chairman of the German Theatre Technology Society (DTHG), which organized the fair.

The well-attended annual general meeting of the DTHG also took place during the BTT. Along with many stimulating discussions, a new board was elected. It consists of: Wesko Rohde (Chairman), Sanela Kolb (Deputy Chair), Vincent Kaufmann (Deputy Chair), and board members Martin Högg, Hajo Rau, and Jörg Schildbach. The auditors were Katrin Oelgarten and Christel Herkenrath.

To counteract the general shortage of skilled workers, various offerings specifically for young people were available at the BTT, such as tours of the fair and presentations of the key companies in the industry. The program also included various round tables on this and other exciting topics, including "Next Generation: Initiatives Against Youth and Skilled Labor Shortages", "ETTE - European Safety Training for Technicians" and "Braked by Reality: What's the Status of Digitization in Theater?".

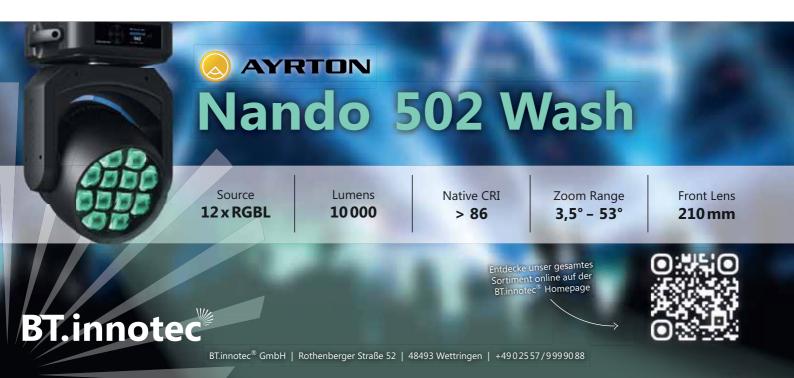
Weltenbauer Award

As part of the BTT, the awarding of the renowned Weltenbauer Award also took place. The award honors the innovative and creative implementation of an artistic vision through stage technology. An entire team is recognized, as a stage production is always a team effort: from the set designer to the technician to the workshop and stage staff. The central requirement for the award is to enchant the audience through originality and creativity. The evaluation by a professional jury focuses on the degree of innovation and the reinterpretation of known and proven technologies.

A special award was given for the "Luftschloss Tempelhofer Feld" (ATZE Music Theater): the construction of a wooden amphitheater as a training project that promotes creativity and teamwork. Due to its innovative approach and significance for the community and (cultural) location, it deserves the highest recognition and demonstrates possible uses of the former airfield.

The honorary award was posthumously awarded to Hermann Patz, founder of Bühnenbau Wertheim, who passed away in February. Patz was an unconventional and tireless pioneer in the development of stage floors. His stage floors are found worldwide on stages that are "the boards that mean the world".

The award ceremony impressively showcased the diversity and creativity of the German theater landscape and highlighted significant technical innovations that contribute to extraordinary theater experiences behind the scenes. This year's DTHG Night was particularly praised, as it turned into a cheerful, boisterous public viewing party during the Germany EM game, complete with plenty of food and drinks. On days like these, one wishes for eternity...



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Lighthouse project, round two

With around 150 participants at the C2C Summit: Labor Tempelhof and 180,000 visitors from three concerts by the band Die Ärzte, the lighthouse project for large concerts oriented around the circular principle of Cradle to Cradle has entered its second round.

With Labor Tempelhof, the initiators Cradle to Cradle NGO, Loft Concerts, Kikis Kleiner Tourneeservice (KKT), and Side by Side Eventsupport demonstrate how and why large concerts can contribute to making the world a livable place - without mountains of waste, without toxic chemicals in products, and without climate catastrophe. The project started in 2022 and was continued from August 23 to 25, 2024, with three major concerts by Die Ärzte, each attended by around 60,000 spectators at Tempelhof Airport. In planning, implementation, and production, as many climate- and resource-positive products, processes, and innovations were used and tested as possible. The concerts were framed by an information concept about Cradle to Cradle, circularity, and sustainability.

A total of 35 measures were implemented, including several that continued unchanged from 2022, such as the use of 100% green electricity at the concert site, as well as measures that could be significantly scaled. The food offerings at the concert venue this year were 100% vegan-vegetarian (up from 60% previously), and the number of separating toilets, from which nutrients such as phosphorus and nitrogen can be recovered and processed into liquid fertilizer and humus, increased from 150 to 255. Innovations for 2024 include a mobility survey to improve the data base for the further development of the mobility concept, as well as the implementation of a holistic reusable system that includes not only cups but also dishes and cutlery for the first time. A detailed description of all measures and the respective implementation partners can be found on the project website.

Social aspects were also taken into account again in 2024, including social tickets at reduced prices. "The development of ticket prices at large concerts is absurd. I certainly do not want to organize concerts only for the wealthy. Even the 83 euros we charge for these three concerts is not affordable for everyone. I had open doors with the band when I proposed the idea of offering a cheaper social ticket. Anyone with a qualification certificate from the state of Berlin received tickets for 19.90 euros. Two percent of the tickets for the three concert days were sold as social tickets", explained KKT Managing Director Kiki Ressler, providing bakkground on the social tickets.

The Labor project is once again taking place at one of the most central and largest event locations in Berlin, Tempelhof Airport. In the future, the project results are to serve as the basis for circular and sustainable event guidelines there. "Environmental protection and sustainability are also top priorities at Tempelhof Projekt GmbH", says Managing Director Fabian Schmitz-Grethlein. "This is not only taken into account in our construction projects and our goal of renovating the entire building to be climate-neutral, but also when it comes to hosting large events at our airport. Designing these to be as circular and resource-positive as possible

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is both our concern and our mission. We are working to provide the necessary infrastructure, especially regarding mobility and energy. For example, our festival power for events already provides 100% green electricity. Supporting Labor Tempelhof is a matter of course for us, as we can also derive valuable insights about products, processes, and measures here. This helps us with all other activities on site as well."

After the presentation of the expanded and new cases, followed by a discussion led by Tabea Kaplan, Michael Kellner, Kiki Ressler, and Fabian Schmitz-Grethlein, moderated by Isabel Gomez from the management of Cradle to Cradle NGO, the following panel addressed other festivals and organizers who are also on the path to circularity. Moderated by Jule Kauert, project manager for Labor Tempelhof at Loft Concerts, Michael Fuchs (Sustainability Manager at the Berlin Marathon organizer SCC Events), Katharina Weber (Project Manager at Yourope - The European Festival Association), and Katja Mailahn (Managing Director of Mainzplus Citymarketing) reported on challenges and opportunities in their projects. Michael Fuchs noted that the issue of the circular economy plays a significant role in a marathon, as large quantities of materials are in circulation. Katharina Weber referred to her own survey, which found that over 80% of the surveyed organizers aimed to hold a climate-neutral event, with about half wanting to achieve this by 2030 at the latest. Katja Mailahn stated that Mainzplus Citymarketing's event offerings are also developing in this direction, specifically using Labor Tempelhof as a model for their summer concert series implemented by the Mainz municipal company.

After a tour of the concert grounds with stops at some of the implemented measures, Marcel Tietze, Managing Director of Loft Concerts, and Pascal C. Thirion, Head of Rental Tempelhof Project, discussed the airport as an event location and the balancing act between monument protection and infrastructure adjustments. Due to the heritage status, direct supply of solar energy or the collection and use of rainwater from the roof is currently not possible.

In the following panel, Josephine Kreische (Managing Director, Vytal Global), Caroline Kraas (Manager Packaging and Litter Reduction, WWF Germany), Sandra Tomaevi (Project Lead Circular Futures, Project Together), Karen Matthiesen (Project Development and Sustainability, Gastro Team Bremen), and Amrei Karsch (Project Manager for Beneficial Events at Loft Concerts) addressed the implemented reusable concept on site.

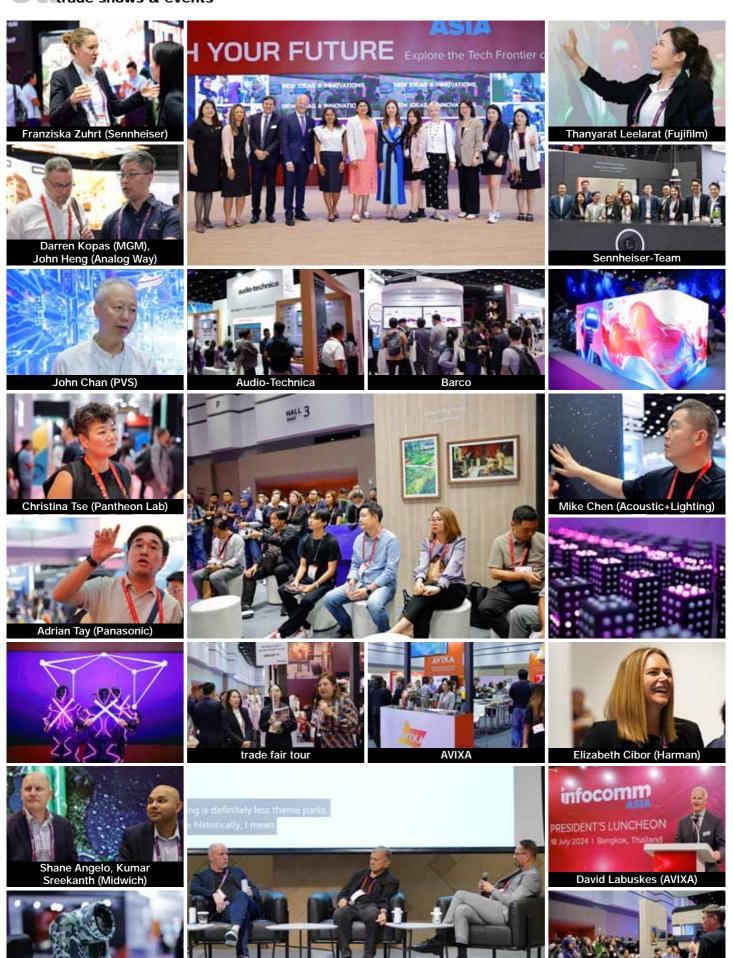
It became clear how much such a system relies on good cooperation at complex large events. The Labor Tempelhof was also utilized by the initiators in cooperation with the alliance mehrweg.einfach.machen (initiated by WWF, Project Together, and the Reusable Association) to jointly collect data on usage behavior and acceptance of the reusable system at the concert venue. The data will be evaluated and published after the concerts. The study, like the implementation at Labor Tempelhof, aims to help make reusable systems at large events the new norm.

To conclude the day, Daniel Anthes (Founder & Managing Director, Knärzje Bier) and Florian Augustin (Managing Director, Finizio Future Sanitation) presented how food waste and nutrients contained in feces and urine, such as phosphorus and nitrogen, can be used as raw materials in the context of a C2C circular economy.

As in 2022, the environmental impacts of the implemented measures will also be recorded and evaluated in 2024. They will then be incorporated into the digital guidebook for Labor Tempelhof for the event industry.

The entire C2C Summit: Labor Tempelhof is available as a recording online.

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Stephen Thomas Cavit (Tru Sound), Liakat Dhanji (Columbia Pictures), Stephen Shah (Forrec)

Maxhub





Infocomm Asia: 21 percent more visitors

Infocomm Asia 2024 concludes with a record increase and is evolving into the central platform for the Pro AV industry in Asia.

Infocomm Asia 2024 is becoming the leading event for professional audiovisual technology (Pro AV) in Asia. The fourth edition at the Queen Sirikit National Convention Center (QSNCC) in Bangkok (Thailand) recorded 8,817 visitors from over 50 countries - a 21 percent increase compared to the previous edition.

Chris Kee, Executive Director of Product Management at Christie, is excited: .. Infocomm Asia has truly become an international stage. We met visitors from Southeast Asia, Taiwan, China, and India. The fair has become an international event over the years." Another exhibitor at Infocomm Asia, David McKinney, Managing Director of Generation AV, agrees and emphasizes the regional reach of the fair: "From the beginning, we have seen customers from all over Asia, including major system integrators and consultants." This makes the fair more pan-Asian than other events that focus only on individual countries. According to Niko Walraven, Area Vice President APAC at Neat, significantly more industry visitors came to Neat's larger booth compared to the previous year; the exchange of experiences and discussions were correspondingly high quality. David Lau, Industry Development Director at Absen, also expresses satisfaction: "We are meeting more people from Asia here than elsewhere and can expand our customer base. Furthermore, especially in the Pro AV sector, most of the major brands are here."

With 180 exhibitors showcasing 280 brands, 99 were participating for the first time. The largest Infocomm Asia to date provided a comprehensive overview of the latest and most innovative Pro AV offerings for the thriving Asian market.

From technological innovations in advertising displays to extended reality (AR/VR/MR), smart classrooms, and location-based audio immersion, the fair presented over 350 new products and solutions that were introduced for the first time in Asia. Visitors experienced firsthand the pos-



sibilities of Pro AV in areas such as education, entertainment, live events, hospitality, retail, healthcare, security and defense, and transportation.

With a variety of innovative solutions, Infocomm attracted an international audience and welcomed delegations from across the Asia-Pacific region, including AV and technology partners and system integrators who visited the fair in large groups, such as Global Vision Multimedia (Malaysia, Philippines, Singapore, Indonesia, Japan), Dacon Networks (Singapore), Esco Asia (Vietnam, Singapore, Philippines, South Korea), Goldenduck (Thailand), KM Technologies (India), Lightsource (Thailand), and Mahajak Development (Thailand).

Many visitors expressed a high investment interest and actively sought the latest Pro AV technologies and solutions for their projects, not only through personal conversations but also through guided tours and networking events like the Infocomm Asia Summit. This was a key component of the event and featured a comprehensive conference program with over 50 presentations, attracting around 2,400 delegates - almost 2.3 times as many as the last edition.

Infocomm Asia also offered special events such as guided tours for first-time visitors, a technical tour to the interactive AV installations of the EGAT Learning Center, and the Immersive Sound Experience. "I believe that the growth we have experienced at Infocomm Asia in terms of products, exhibitions, and interested distribution partners is a reflection of the market", notes June Ko, Executive Director of Infocomm Asia. "All industries need enhanced technologies to drive the success of their organizations and to stay one step ahead in our constantly evolving world of communication and interaction." The next Infocomm Asia will take place again in Bangkok from July 23 to 25, 2025.

Mike Blackman (ISE), David Labuskes, Martin Saul (AVIXA)



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Audiophiles and technology enthusiasts

The international audio fair High End 2024, held at the MOC Event Center Messe München, has closed its doors after four successful days. With a wealth of highlights, world premieres, trends, and innovations, the leading trade fair has once again asserted its position and provided the industry with numerous new impulses.

In the halls and atriums of the MOC, there was consistently an excellent atmosphere, especially during both trade visitor days, characterized by intense dialogue, information exchange, and outstanding business deals. The exhibitors spoke positively about the organization and attendance at their booths and spaces. "The industry is more vibrant than ever", summarizes Stefan Dreischärf, Managing Director of the fair organizer High End Society Service GmbH. "Audiophiles, music lovers, and technology enthusiasts appreciate the fair because they are offered the entire spectrum of the audio world", adds the fair director.

With a wide variety of high-quality audio technology products, the fair attracted a total of 22,198 visitors over two trade visitor days and two public days, under summer-like temperatures. This number is slightly above that of the previous year, with the proportion of trade visitors at 11,237 being higher than the public attendance of 10,373 for the first time. High End 2024 was the most international yet, with attendees from 108 nations; neighboring countries such as the United Kingdom, Italy, and the Netherlands were among the most represented alongside Germany. Additionally, 588 media representatives traveled to Munich to learn about the industry's innovations and share not only these but also the atmosphere of the fair with the world.

The fair experienced an overwhelming influx of visitors on the first public day, where the surge was so high at times that areas in the atriums had to be temporarily cordoned off to avoid overcrowding in the aisles and spaces. Although the total area in the MOC spans over 30,000 square meters across four halls and three atriums, visitors were particularly drawn to the atrium spaces, where demonstrations with exclusive products took place. Every inch of space was utilized by the 513 exhibiting companies, making the fair fully booked again this year. Alongside High End, the two specialty fairs International Parts + Supply (IPS) and the World Of Headphones also took place in Hall 1. The latter showcased an enormous selection of high-quality headphones, portable audio players, and related accessories for an auditory delight.

The IPS supplier fair offered a chance for those looking for solutions to manufacture their products, including high-quality electronic components, customized speaker systems, high-end contact solutions, and modern enclosure productions.

While the testimonials at the fair had caused a stir in previous years, this time several esteemed artists honored the event with their presence. Steven Wilson, brand ambassador for High End 2019, invited visitors to immersive sound experiences in collaboration with the speaker manufacturer PMC and the organizer on all four days.

Undoubtedly, this was an unforgettable highlight for many attendees. With played tracks from various musicians, genres, and decades, Wilson demonstrated the sound of Spatial Audio in fully booked presentations and explained the differences between stereo, Dolby Surround, and



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immersive playback. The Brit captivated his audience not only with fantastic sound and goosebump moments but also with his relaxed, open manner of interacting with the crowd.

Adding to the glamour on stage was musician and producer Leslie Mandoki, who released the new album "A Memory Of Our Future" by the Mandoki Soulmates. Along with his Soulmates band members Tony Carey from Rainbow and John Helliwell from Supertramp, he provided an exciting insight into the creation of the new album, which was recorded and produced entirely analog, during a special press conference.

Further star guests were encountered at various exhibitors' booths. Nick Getz, son of jazz legend Stan Getz, presented the "60th Anniversary Edition 1STEP of Getz/Gilberto" at Audio Reference. He also shared personal experiences and insider knowledge from his father's remarkable life with visitors. Additionally, Boris Blank, founding member of the



Swiss electropop band Yello, made an appearance at the Horch House booth, where Yello's music was presented on tape for the first time. The exclusive tape machine used to play it is a limited masterpiece, with only ten copies produced.

Those seeking a break from the fair's hustle and bustle found a quieter spot in the rows in front of the X-pert Stage, the new talk and lecture program at High End.

The positive feedback from all participants and the stable visitor numbers have made it clear: the enthusiasm for excellent music reproduction remains strong, and high-quality audio technology continues to reach many people. The fair sends a promising positive signal and continues to provide important impulses for the entire audio industry. The next High End will take place from May 15 to 18, 2025, once again at the MOC Event Center Messe München.



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Automotive audio momentum

The most attended and sponsored Automotive Audio Conference of the Audio Engineering Society (AES) in Sweden featured the latest innovations and research in this rapidly evolving market.

The 5th International Conference of the Audio Engineering Society (AES) on Automotive Audio 2024 was not only sold out but also achieved record numbers of participants and sponsors. The three-day conference took place in June at the Uni3 Geely Center in Gothenburg, Sweden, attracting over 300 professionals from the automotive audio field, who informed themselves about the future of automotive sound through demonstrations of the latest technologies, interactive workshops, and presentations.

The event focused on how some of the most advanced sound technologies are currently being developed and applied to automotive audio. Topics addressed included many new scientific approaches in this stillyoung field, such as applications of artificial intelligence in automotive audio, sound reproduction in vehicles, virtual acoustics, and voice and speech recognition technologies.

Keynotes were delivered by Jonatan Ewald from Volvo, who spoke about trends in automotive audio from an OEM perspective; Dr. Xiajun Qiu from Huawei, who presented on active noise control in vehicle interiors; and Jan Skoglund from Google, who focused on ,the mass-market suitability of immersive audio" through open formats for all types of audio developers and algorithms.

The conference also featured, for the first time, an immersive audio room provided by Genelec, showcasing entertaining and educational presentations by Stefan Bock from MSM Studios and Morten Lindberg from 2L.

"The first branded audio system was installed in an OEM-built vehicle 40 years ago. The growth in quality and technology was obvious back then, and the vision for the next 15 to 20 years began to take shape", said Roger Shively, Vice Chair and Treasurer of the conference. "This year's conference showcased the tremendous advancements in automotive audio and will be an essential part of the future of both the automotive and audio industries."

"I was very pleased to see so many representatives from automakers and to learn of their appreciation for the AES conference", said conference chair Rafael Kassier. "We are proud that this year's conference attracted a record number of professionals. There was even a longer waiting list. We also appreciate the overwhelmingly positive feedback on our technical program, which offered insights into the future of automotive audio and included 15 presentations as well as 12 workshops and tutorials."

The conference sponsors confirmed this positive feedback: "We were happy to be part of the conference and to give the audience insight into what we see as the future of automotive audio: vehicles that are not only a place of entertainment but also a communications hub for natural conferencing", said Sophia Emmert, Senior Product Manager Automotive Audio at Fraunhofer IIS.

The AES Convention series will return in the fall with the AES Show 2024 in New York. More at aes.org/events.

About AES:

The Audio Engineering Society (AES) is the world's leading professional organization for audio professionals and enthusiasts. For over 75 years, AES has been at the forefront of audio technology and innovation, providing a platform for knowledge exchange, networking, and industry collaboration.



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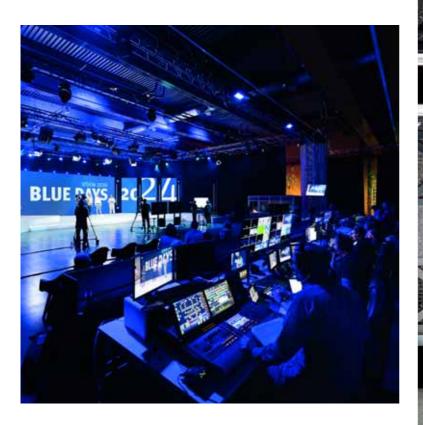
AI co-moderation

This year's Blue Days event by Drees & Sommer focused on the theme of innovation. The digital Al co-moderation elevated the event to a new level and captivated the audience.

Gate 22 provided the perfect stage for this. With moderator Yasmine Blair, the company executives took a glimpse into the year 2030 and presented the future corporate strategy. The autonomously positionable LED wall by Aumovis, a highlight of the show, was used to impressively showcase the company's vision for the future. Aumovis took on the role of an AI co-moderator and also participated in one of the three live connections to enhance the speaker's stage presence with dynamic movements.

Around 5,000 viewers followed the digital event through small public viewings at their locations. Following the bilingual livestream, evening events were held worldwide to wind down the day together.

Thanks to the creative planning of the Drees & Sommer team and effective coordination with the 20-member crew from B&B Eventtechnik, an impressive event was realized that demonstrated how innovative technology and creative concepts can seamlessly work together to create unforgettable experiences.



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30 years and not a bit dull

GLP celebrated its 30th birthday at its home base in Karlsbad – and what a celebration it was. Live music from Alice Merton and Michael Schulte, along with the presentation of a new super spotlight, kept the mood high well into the early hours of the morning – for both managing director Udo Künzler and the 720 guests.

"We prepared for the celebration for eight months, and it was more than worth it", reported a visibly exhausted Uli Steinle later that evening. The marketing director of GLP was responsible for the entire planning process.

Everything had to be ready by early afternoon when the first guests arrived (walking the red carpet, complete with a sponsor wall!). There

was a food court featuring authentic Spanish ham, currywurst, grilled meat, a barbecue station, steamed dumplings, flammkuchen, salmon, roast pig, Thai/Sushi, vegetarian stations, Baumstriezel, and ice cream. Guests were offered beer, various cocktails and long drinks, Udo's homemade "Blutwurz", and Slovakian "Tatra Tea" at the drink stations. Additionally, there was a wine bar, a regional schnapps tasting, and a barista station.





When asked about fun facts, Steinle shared: "There were quite a few! The cakes were baked by Udo Künzler's family, the semi-finals of the European Championship were streamed on the main stage screen the next day, there was a special GLP kart at the E-kart track, and the first call for medics that evening was for a guest from the USA who scraped his arm on the kiddie car track. We also raised 8,000 euros for children's charities." A central element of the celebration was the large stage, where alongside musical acts, several speeches were held, moderated by Markus Wilmsmann (Mothergrid) and Udo Künzler. From a lighting perspective, the stage featured 8 Impression X5 IP Maxx, 20 S350, 86 Impression X5 Compact, 12 Fusion Creos, 24 JDC2 IP, and 24 Impression X5 IP Bar.

The stage program began at noon with engaging conversations, structured in 10-year intervals. This was followed by employee awards and an





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interactive quiz game. The first musical act was the Curbside Prophets, followed by an acoustic set from Alice Merton ("Roots"). After a raffle draw, Michael Schulte took the stage as the musical highlight of the evening. He performed with a full band, playing a complete set, from his ESC title "You Let Me Walk Alone" to his current single "Beautiful Reason". To close the evening, the Curbside Prophets returned for their second set.

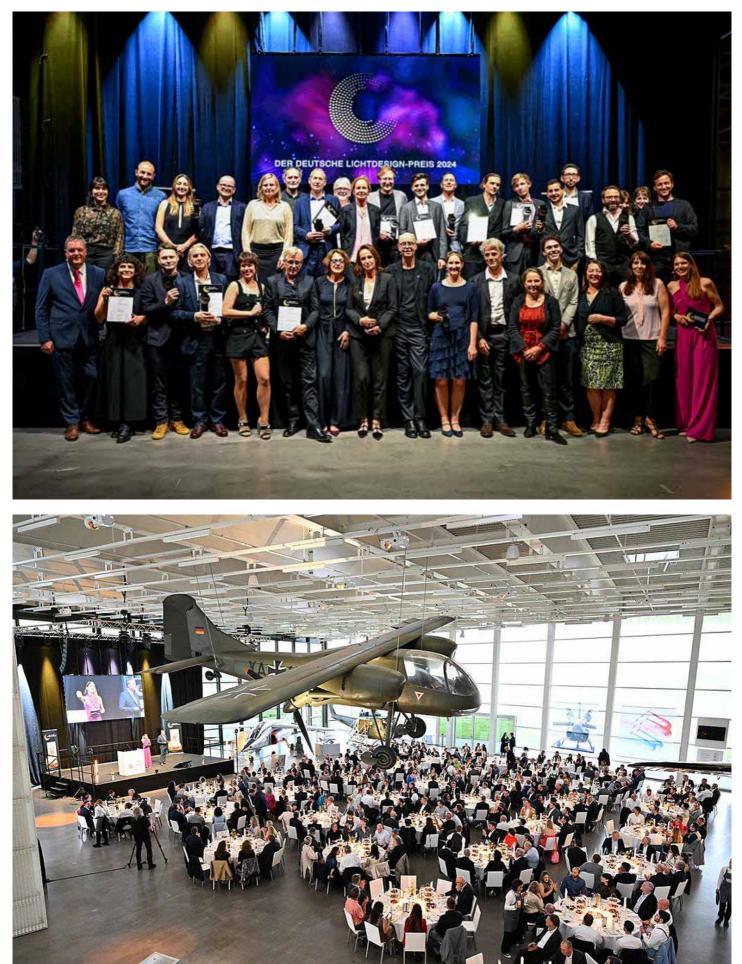
GLP – German Light Products has stood for innovative lighting technology for the professional market since 1994. The pioneering spirit of GLP founder Udo Künzler was fully expressed in the very first product idea. The Patend Light, for whose development GLP was founded, was a groundbreaking fusion of the already widespread disco scanners and the yet-to-be-market-ready moving lights. Reflecting on this, managing director Udo Künzler reminisced: "Light has always been my passion. Since my uncle Hartmut Braun was building his own scanners in the early '90s, founding GLP was a very easy decision for me."



Throughout its more than 30-year history, GLP has experienced both groundbreaking successes and significant setbacks; however, one thing has remained constant through all the ups and downs: the unyielding will to develop intelligent and innovative lighting solutions that enable lighting designers to explore entirely new artistic expressions. In this tradition, global industry standards such as the Impression X4 series were created, as well as the newer, high-performance KNV LED modules, the hybrid strobe JDC1, and the Highlander Wash with discharge lamp. GLP continues to develop new products at its headquarters in Karlsbad, Baden-Württemberg. The success of its high-quality, creatively playable lighting solutions has quickly enabled the company to grow internationally.

Today, the company has around 260 employees worldwide, about 60 in Germany, 20 in the USA, and 10 in England; the rest are involved in production (Scandinavia and China) and at support locations (Asia, Nordics, Spain).







Order, clarity, brightness, contrast - and sustainability

Among numerous outstanding projects in Germany, Austria, and Switzerland, the jury had to decide on the winners in eleven categories for the German Lighting Design Award 2024. For the first time, a public award was also presented, allowing industry professionals to vote during this year's Light + Building event. The Lighting Designer of the Year was the Berlin-based office Blieske Architects Lighting Designers.

Blieske Architects made a significant impact in their first participation in the annual "German Lighting Design Award". The firm received nominations for the lighting solutions at the Federal Archive in Berlin-Lichterfelde (Category: Public Areas/Interior) and at the Documentation Center for Flight, Displacement, and Reconciliation (Category: Museum) in Berlin. Two additional projects won in their respective categories.

The subtle lighting concept for the tower ascent of the St. Mary's Church in Wittstock won in the category of Cultural Buildings. In the space, which is only partially and sparsely illuminated by daylight, Blieske Architects consciously uses darkness as a means of design and experience. The paths on the stairs and platforms are lit only at specific points to continually challenge the visitors' attention and direct it to specific spots. Thanks to the lighting guidance, navigating the nested staircases, despite the changes in direction, is intuitive and safe. The lack of complete illumination gives the space its characteristic effect.

The second winning project by Blieske is the National Historical Museum of the Kyrgyz Republic in the International Project category. An extremely short planning time and a fast, uncomplicated implementation on-site by local craftsmen, some of whom had limited technical qualifications, were the main challenges for the lighting design. The solutions found often do not meet the standards commonly found in Central Europe, but they prove that high design quality can be achieved with technically simple means.

Two projects from Switzerland and one from Austria also impressed the five independent jurors and last year's Lighting Designer of the Year (Kardorff Ingenieure, Gabriele von Kardorff). With the exception of the International Project category, the jury personally examined each of the nominated lighting solutions before making their final decision. The new façade lighting (Category: Outdoor Lighting/Presentation) of the Vienna City Hall, completed in 1883, provides a vivid example of the compatibility of outstanding design and sustainability. Despite the significantly more appealing nighttime appearance of the town hall today, Podpod Design managed to reduce the number of light fixtures from 4,800 to 1,100, cutting electricity consumption (including control energy costs) by more than 50% and maintenance costs by 80%.



Landtag, Rheinland-Pfalz

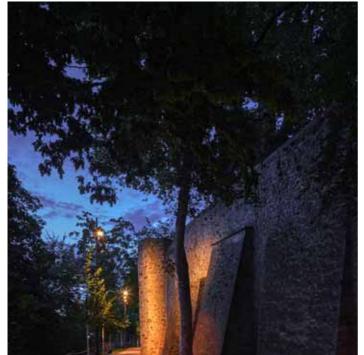
Winning projects in Switzerland were found in the Museum and Hotel/Gastronomy categories. For the multimedia exhibition "Wonders of Medicine" at the Novartis Pavilion in Basel, Iart AG created a futuristic,



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-Stadtbibliothek, Mönchengladbach

Zwingerpark, Offenburg



Novartis Pavillon (Wonders of Medicine), Basel





Turmaufstieg St.-Marien-Kirche, Wittstock

clean, and laboratory-like atmosphere, where the light fixtures are completely integrated into the architecture. Both the scenography and the architecture are equally highlighted by a coordinated lighting design. The integration of an innovative visitor tracking system with the lighting solution makes the exhibition areas interactive.

The Wellness Hostel 3000 in Laax, built in the early 1980s, was expanded to include a wellness area. Object lighting gives it a specific character with colored light. The company Hübschergestaltet complemented the striking design lights with functional fixtures that recede in appearance while modulating and illuminating the architecture energy-efficiently. The rooms and lobby of the modern, light-flooded concrete extension, which was added to the existing ensemble as a youth hostel with 170 beds, are equipped with decorative, energy-efficient design fixtures. They gently illuminate the building and contribute to an inviting atmosphere.

With support from the Light + Building team in Frankfurt, a public award was introduced for the first time this year. Trade visitors to the fair could vote among four projects selected by the jury that excelled in sustainability aspects. Ultimately, Peter Brdenk (Planwerk architecture firm) won the award with the Gildehoftunnel Essen project.

As the tunnel is expected to see more pedestrian use in the future, ensuring adequate brightness and the emotional impact of light, as well as appropriate design with lighting fixtures, are of great importance. The planners achieved this with closely spaced, simply designed geometric forms, which reflect the design idea of order, clarity, and brightness while contrasting with disorder.

With two nominations and two winning projects, the Berlin office Blieske Architects Lighting Designers achieved the highest score among all participants and is thus honored as Lighting Designer of the Year. The firm was founded in June 2016 after the split of the internationally successful lighting planning office Dinnebier+Blieske. Jan Blieske had begun his career as a lighting designer there in 2004 after more than ten



Gildehoftunnel, Essen



years as an architect working on heritage projects and became a partner and managing director in 2008.

The working method of his own office is characterized by close teamwork with architects, exhibition planners, and the involved planning disciplines. A focus of the work, and equally an area of expertise for the firm, lies in the conception and planning of lighting in museums and heritage buildings, as well as in developing sustainable lighting solutions while considering the entire lifecycle of a lighting system.

The winners

Category Office/Administration: Arens Faulhaber Lichtplaner (Innodom, Cologne)

Category Public Areas/Interior: Dinnebier Licht (Landtag, Rhineland-Palatinate)

Category Outdoor Lighting/Public Areas: Studioteilchenwelle (Zwingerpark, Offenburg)

Category Outdoor Lighting/Presentation: Podpod Design (Das Rathaus (Wiener Lichtspiele), Vienna)

Category Transportation Buildings: Envue Homburg Licht (Jahnplatz, Bielefeld)

Category Museum: Iart (Novartis Pavilion (Wonders of Medicine), Basel) Category Shop Lighting: Licht Kunst Licht (Oberpollinger, Munich) Category Hotel/Gastronomy: Hübschergestaltet Lichtgestalter (Wellness Hostel 3000, Laax)

Category Education: Bartenbach (City Library, Mönchengladbach) Category Cultural Buildings: Blieske Architects Lighting Designers (Tower Ascent St. Mary's Church, Wittstock)

Category International Project: Blieske Architects Lighting Designers (National Historical Museum of the Kyrgyz Republic)

Public Award: Architekturbüro Planwerk (Gildehoftunnel, Essen) Lighting Designer of the Year 2024: Blieske Architects Lighting Designers.

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Blieseke Architects Lighting Designers

etinstallations





Successful renovation

Since the completion of the renovation work at the Raimund Theater at the beginning of the COVID-19 pandemic, the historic theater of the Vereinigte Bühnen Wien in the sixth district has been shining in new splendor.

In just over two years, the house was modernized and thoroughly renovated. "The Vereinigte Bühnen Wien are one of the flagships in the cultural sector of Wien Holding. With the completion of the fundamental renovation and modernization of the Raimund Theater, we have made the house fit for the future. We improved the building's substance from the façade to the roof, renovated the audience area, brought the technical facilities up to the latest standards, and redesigned the forecourt with the support of the district. We stayed well within the budget of 12.76 million euros", said Dr. Kurt Gollowitzer, managing director of Wien Holding, at the reopening at the end of 2021.

As part of the improvement of the building's structure, water damage restoration measures and urgently needed façade and roof renovations were carried out. In the auditorium, the floors, walls, and ceiling areas were completely redone. The seating was entirely renewed, allowing for flexible auditorium arrangements in the future. The walkways in the stalls and the first and second tiers were completely renovated, and the existing outdoor balcony on Wallgasse was reactivated. The sanitary facilities throughout the building (front and back house) were modernized and generously expanded. The modernization of the auditorium also included measures for accessibility, such as the installation of an elevator for the audience. The technical installations were upgraded to the latest standards, including the fire alarm system, emergency lighting, all electrical installations, and the cooling system. Lastly, appropriate measures in the building technology also improved energy efficiency, and the ventilation system was optimized due to the pandemic.

In designing the stage house, the VBW technical departments contributed their know-how and experience. A central visitor cloakroom was established in the basement of the theater. The foyers, shops, buffets, as well as the office and cafeteria areas were also adapted. Founded in 1893, the Raimund Theater opened with Ferdinand Raimund's "Die gefesselte Phantasie". As a stage for the middle class, the house understood itself as a counterbalance to the large stages of the time and was used as a speaking theater featuring German classical folk plays and contemporary dramas. Hence, the house was also referred to as the "Mariahilfer Burgtheater".

In 1908, operetta made its entrance with Johann Strauss's "Der Zigeunerbaron". The theater experienced its heyday as an operetta stage in the





late 1940s. The first musicals were performed in 1976. Since its takeover by VBW, the house has been dedicated year-round to musicals. In addition to the renovation, the lighting and sound technology were adapted to modern requirements. These extensive measures greatly enhanced the attractiveness of the venue. Recently, the house was chosen for Cameron Makkintosh's spectacular new production of Andrew Lloyd Webber's "The Phantom of the Opera", one of the most successful musicals of all time.

The new production has never been seen in the German-speaking world but has already been performed in the UK, the USA, and at the prestigious Sydney Opera House in Australia, completely sold out. The Austrian premiere took place on March 15, 2024. The original production of the musical has welcomed more than 160 million visitors in productions across 46 countries, 195 cities, in 21 languages, and has won over 70 of the most important theater awards (including 4 Olivier Awards, 7 Tony Awards, 7 Drama Desk Awards, and 5 Outer Critic Circle Awards), making it one of the most successful musicals of all time. The original Broadway production broke all box office records last year at the end of its 35-year run, while the London production is currently in its 38th year. The new production at the Raimund Theater impresses with many spectacular special effects, including the legendary chandelier.

Team Original Production

Sounddesign - Mick Potter Projektions - Zakk Hein Lighting Design - Paule Constable



Team Phantom Of The Opera Vienna

Associate Lighting Design - Rob Casey Associate Sound Design - Nic Gray Production Management - Johannes Fiala Technical Management - Martin Kindermann

Team Raimund Theater

Technical Direction - Andreas Wallek Stage Manager - Felix Kröger Head of Stage Technology - Yvonne Schrittesser Head of Lighting & Video - Gustav Vychron, Lukas Berger Head of Sound Technology - Patrick Polly Associate Lighting Design - Stephanie Erb Video Programming - Werner Hlavka Lighting - Martin Hartner, Simon Jantsch Sound - Marc Schmid

Companies involved

Sound Technology - Autograph Sound, Signal Sound & Light Distribution, Studiokonzept Medientechnik, Kainaudio, Studer Austria, Audio-Technica Deutschland, Salzbrenner Wien Lighting and Video Technology - Supporting Role Lichttechnik, AV Professional, Bruckschwaiger, Lightpower, Howard Eaton Lighting Stage Technology (selection) - Waagner Biro Stage Systems (auch Hauptsponsor), Silicon Theatre Scenery, ATC Pro, Taronic Bühnentechnik, Eventservice Parkas, Gerriets, Snow Business



Antriebstechnik und Steuerungskomponenten für Bühnen-, Theater-, Studiobau sowie den Event- und Präsentationsbereich

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Flexible audio rendering

Kraftwerk Living Technologies equips Flyover in Chicago with the innovative losono Spatial Audio System from Encircled.



Since its opening in March 2024, the latest attraction from Pursuit, Flyover Chicago at Navy Pier, has captivated thousands of visitors with its breathtaking experience. This spectacular flight over the Windy City features unique aerial footage of the city's iconic landmarks. Flyover constructed the theater with 61 seats, installed a Brogent Motion System, and brought in additional specialists for the audiovisual elements.

Kraftwerk Living Technologies (KLT), known for its expertise in technologies for flying theater attractions, designed and delivered a state-ofthe-art audiovisual (AV) installation, including projection, control, and audio. The advanced immersive audio technology Iosono was provided and set up by Encircled. Flying theaters are attractions where flight experiences are realistically simulated through the combination of movement, film projection, spatial sound, and special effects.

"We are proud to offer one of the most flexible immersive audio rendering solutions with excellent integration capabilities. The company's expertise was crucial in various phases of the project, starting from the collaboration with KLT's Audio System Designer, Philipp Hartl, the Immersive Sound Designer Tim Archer from Masters Digital, and the Flyover team in planning the speaker setup, to supporting KLT in the final tuning of sound calibration and the development of the object-based content production workflow to be ready for the latest immersive audio creation tools or the various channel-based formats", said Jan Langhammer, Co-Managing Director of Encircled.

Eric Sambell, Global Director of Construction and Entertainment Technology at Flyover, added: "We wanted a simple system that can be used in all our attractions, provides our guests with a stunning audio experience, and allows for a consistent workflow for our content and technical teams."

The Flyover team secured the support of leading experts for the launch of its attraction in Chicago. This includes Dave Revel from Tech MD as project advisor, Kraftwerk Living Technologies as the AV system integrator, and Tim Archer from Masters Digital as sound designer and mixer.

So how does immersive audio work in a flying theater attraction? At Flyover in Chicago, KLT's custom multichannel speaker setup ensures that all guests experience an impressive soundscape and optimal experience. The system consists of 34 JBL AM7215 speakers positioned behind and on the sides of the 435 square meter perforated screen from Endurescreens, as well as four 2x18" JBL ASB7128 subwoofers placed on the floor.

All speakers are powered by Dante-capable amplifiers from the Crown DCiDA series. Additionally, there are built-in speakers in the seats, po-

wered by Innosonix multichannel high-density amplifiers. Encircled's advanced Spatial Audio Processor, driven by the Iosono Inside software, manages the calibration of speaker pathways, the playback of 3D audio content, and the spatial rendering of live inputs into the system.

"Encircled played a central role in planning the speaker layout, selecting suitable speaker types, configuring the software on the spatial audio processor, and performing acoustic calibration following KLT's basic speaker tuning", said Kevin Murphy, Senior VP Sales and Business Development at Kraftwerk Living Technologies. "They optimized the alignment of the speakers, assisted in fine-tuning the system to meet the requirements of the Encircled processor and the workflow tuning, and supported the content production process for future-proof adaptations of existing content or new films to the object-based format of Iosono."

The design of the immersive audio system allows for precise sound localization both horizontally and vertically, ensuring optimal accompaniment to the visual content on the huge screen. "Unlike conventional immersive audio formats that often offer limited possibilities for the vertical distribution of audio objects, the unique multilayer approach of the Iosono rendering system utilizes a variety of speaker groups to achieve sound positioning across the entire screen", Murphy explained.

The high-resolution arrangement of speakers in the mid-level allows for precise sound localization through wave field synthesis. This generates stable point source objects and ensures consistent sound perception from all seats. Another challenge was the playback of already existing content, which Encircled successfully mastered with the help of Iosono's Spatial Audio Workstation.

The tool treats multichannel formats as a virtual speaker setup behind the newly installed dome. This enables precise adjustment of the position of each channel to the existing speakers used in other flying theater attractions. For newly produced content, an object-based workflow allows for the storage of individual sounds with 3D position metadata. This ensures that the same content can be rendered across different speaker layouts, providing excellent quality and easy transfer of the content.

"With more than ten previous installations of flying theater attractions around the globe, we were able to bring valuable experience to contribute to the excellent acoustic design of this state-of-the-art flying theater system", added Max Röhrbein (pictured), Co-Managing Director of Encircled. The company offers all Iosono-related products as licensed software solutions and has been an official licensee of the Iosono technology from Barco since October 2019.





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etinstallations

Light revolution in Berlin

Since June 2024, the Gasometer at the EUREF-Campus in Berlin has literally been shining in a new light, demonstrating the perfect interplay of innovative technology and sustainable, aesthetic lighting design.



The successful revitalization of the historic and listed gas storage facility from 1910 is the result of years of successful teamwork. The approximately 1,100 square meters of event space can accommodate up to 2,200 guests and features a sky lounge with a rooftop terrace at a height of 66 meters, as well as several conference, exhibition, and catering areas, with the central forum serving as a multifunctional auditorium. Thanks to its outstanding lighting quality, the Gasometer can also meet the high demands of professional TV studios and production facilities.

All lighting installations in the hall, foyer, and conference areas have been coordinated to optimally highlight the architectural character of the building. In addition to their aesthetic qualities, the installations primarily impress through their contribution to the sustainable operation of the entire building. Thanks to the use of energy-saving LED driver systems, the energy consumption of the complete hall lighting in the forum in standby mode is only 210 W; at full load, power consumption of up to 10 kW is anticipated. The over 850 lights installed, along with their corresponding drivers and control systems, were manufactured by the British company GDS Pioneering Light.

During the initial planning discussions, Jens Breetz, Head of Event Technology at EUREF-Campus Berlin, was already convinced of the quality of the products. "With Vision Two and the project management by Anke Schierenbeck, it quickly became clear to me that we would be using a high-quality product that is not only suitable for television but also flicker-free", describes Breetz the initial conversations with Vision Two, the German distribution partner of GDS.

Another planning challenge was to develop a lighting concept that meets the demands of an exclusive event venue while harmoniously blending into the historical-industrial character of the building. "Consistency in lighting design is particularly important to highlight the architectural features of the Gasometer", explains Breetz. The so-called Sirius series from GDS was the right choice for this task. With a variable color temperature ranging from 2700 K to 5000 K, it allows for complete RGB color mixing. "The accentuated lighting of the columns with color gives the listed building a special character and emphasizes its historical significance", praises Breetz the final lighting design. The diverse design concepts were supported by the precise lighting calculations from Alexander Asche, Technical Project Manager at Vision Two.

Anke Schierenbeck, Team Leader of Project Business at Vision Two, recalls being fascinated by the Gasometer's revitalization plans from the



The Gasometer team (from left): Jens Breetz (Head of Event Technology EUREF-Campus), Anke Langhardt (Head of Event Marketing EUREF-Campus), Anke Schierenbeck (Team Leader Project Business Vision Two) and Christoph Wegner (Executive Board member Pik)

very first moment. "The involvement of our manufacturer GDS through the planning office Theapro and the assignment for integration to our long-term system partner Pik was a win-win situation for all parties involved. This way, we could jointly overcome all challenges and meet all requirements."

In hindsight, Christoph Wegner from Pik particularly praises the professional and extremely pleasant collaboration on a personal level. He did not expect that the project would result in such a "cool" lighting installation when he first contacted Thomas Lüdicke from Theapro through Anke Schierenbeck two years ago.

Regarding innovation and sustainability, the lighting concept in the Gasometer was also intended to set new standards. As the European Energy Forum, the EUREF-Campus Berlin carries the energy transition in its name and serves as a blueprint for a CO2-neutral world of tomorrow. The campus has already met the CO2 climate goals of the federal government for 2045 since 2014 and considers sustainability as the foundation for all actions.

To ensure this, the unique Drive Hub system, in conjunction with GDS's bidirectional control protocol IPM, was implemented. In addition to power supply, control and data signals are transmitted over the existing wiring. Compared to conventional LED drivers, this allows for an efficiency increase of over 30%. A key advantage of the Drive Hub is its power factor of 0.99, while conventional LEDs and drivers typically have a power factor of 0.6. Overall, this leads to an additional CO2 savings of 17.3 tons, a reduction of 26% compared to standard LEDs. Moreover, the remote controlling of the Drive Hub minimizes maintenance and personnel costs.

During the installation of this complex lighting system, all participating companies had access to the quick and competent advice from GDS at any time. This fact is also emphasized by Björn Ley, the responsible project manager from Theapro: "During the construction phase, having direct contact with the manufacturer GDS through and with Vision Two was particularly advantageous, significantly facilitating collaboration onsite and contributing to the project's success."

The famous and distinctive triangular, fan-shaped concrete ceiling of the CNIT building (National Center for Industry and Technology) in the Paris city center of La Défense has been illuminated with Anolis Calumma XL SC LED lamps. This new lighting is part of a moderni-





achieve the best results with the new lighting concept,

the vault is indirectly illuminated from all the roofs of the tallest offices inside. "We needed

a lot of light output for this, and we chose the largest Anolis Calumma lights, the Calumma XL SC, as they provide the necessary impact with

11,000 lumens and excellent light quality", explained Nedir Benkhelifa from BOA Light Studio.

After a five-year hiatus, the Amberger Festspielverein has found a new venue for the performances of

the play The Autumn of the Winter King of the Amberger World Theater at the former LGS site. A mobile stage and a mobile grandstand for more than 800 people were specifically built for the play on the site of the former State Garden Show. The acoustic challenges were perfectly solved by Christian Weiss and his company Bully Veranstaltungstechnik. An important aspect was

speech intelligibility - with over 100

performers, including 25 with wireless headsets or lavalier microphones, this posed a challenge. The following equipment from dB Technolo-

gies was used: 6 Vio X206 60 x 90 degrees in the truss of the grandstand, 4 Vio S118R subwoofers, 3 Vio X206 100 degrees, 4 IS5T as front fill for the grandstand, and 2 times 3 Vio L210

as monitoring for the actors in front. Additionally, 2 Ingenia IG3 were used for monitoring the actors at

and once famous for its exotic cabaret and burlesque shows, has been completely renovated and reopened as Lido 2, a premier musical theater. Global Technique Concept, led by project manager Eddy Couloigner, oversaw the renovation. The new Elation rig of the

Lido consists of 30 Fuze Max Profiles, 30 Fuze Profiles, 16 Fuze Wash FR and 12 Cho-

rus Line 16 spotlights. The entire lighting was provided by the French Elation partner Best Audio & Lighting. The Lido 2 team included Technical Director Florian Fassenet, his deputy François Muquet-Notter, Assistant Déborah Lopez, and General Director Simon Stehlé. The show's lighting designer was Giuseppe Di Orio, with lighting techni-

The Lido, a staple of Parisian

nightlife since the Roaring Twenties

cians Alexis Tsagris, Léo Lequesne, and Juliette Luangpraseuth on duty, and Eddy Couloigner in charge of lighting project management.

The Congress Hall built in 1967 in Saarbrücken accommodates spaces for a variety of very different events such as conferences, trade fairs, and meetings, as well as shows and concerts of all kinds, some of which are also broadcast on radio and television. After its renovation and reopening in September 2023, the installed sound control system of the Saarländischer Rundfunk (SR) was

equipped with a modern audio infrastructure. With the installation of a Lawo mc236 MkII all-in-one production mixer and two Lawo AoIP stage boxes, SR is replacing the

analog predecessor system with a console that meets the quality demands of the SR in terms of performance, flexibility, and efficiency. The heart of the audio equipment is an mc236 MkII production console with integrated processing. "With the new audio system in our control room at the Congress Hall, we have taken a first step into the IP

world, which opens up significant freedoms in production", explains Ralf Schnellbach, Head of Production Technology for Radio at SR.



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The set-and-forget solution

Immersive Design Studios unifies live event broadcasts with the help of Aja Colorbox. A recent example is the Worre Studios in Las Vegas.

Virtual production may be the talk of Hollywood, but as the demand for blockbuster-quality visual effects rises in the professional AV sector, this approach is gaining popularity for hybrid live streams of concerts, product launches, and other events. Unlike film or series productions, live events do not allow for a second chance, which makes the Canvas platform of Immersive Design Studios attractive for companies using this technology. Canvas combines real-time gaming engine and cloud technology with video recording, playback tools, and artificial intelligence (AI) to ensure memorable and immersive live event experiences. The company works closely with its clients to support and broadcast or stream each production live. To ensure a consistent appearance for broadcasts that consist of footage from various cameras, the team uses Aja Colorbox along with Assimilate Live Looks for live grading - most recently for the Worre Studios.

Thomas Soetens, co-founder and CEO of Immersive Design Studios, explains: "We are constantly developing new ideas and testing them on client projects. When we thought about Worre Studios and began working on the look-up tables (LUTs), we realized that we could use our cinema cameras with Colorbox and Assimilate Live Looks. So, we ordered several Colorboxes and were able to implement them with Live Looks within a week." According to Soetens, the workflow was relatively easy to implement. Worre Studios, a Canvas-based facility used virtually by companies for hybrid live events, features a round LED stage. The venue consists of four LED walls measuring 18 x 4.5 meters, with a total resolution of 38K. It accommodates up to 350 people and can reach up to 500,000 virtual participants. Canvas projects the events onto the LED walls, but most of what happens in the studio is also streamed live.

To ensure a Hollywood-worthy visual experience for such a production, a consistent appearance had to be maintained wherever interaction between the LED wall, the presenter, and the virtual production bakkground occurred. Soetens and his team used LUTs as a solution since these support camera calibrations that go beyond adjusting the white point and balancing colors. They routed signals from ten different cameras through a video mixer and into Aja Colorbox units, which helped them match the appearance and color scheme to the specified LUT intended for the broadcast. The resulting effect gave external viewers the feeling of being in the midst of a film.

"Our Colorboxes were simply placed between each camera and the mixer. This eliminated any latency, which was really very practical", said



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Soetens. "We just had to configure the devices and address them over the network to achieve really good results. Since they are small and portable, we could place them anywhere and access them remotely via the browser-based web UI. This gave us much greater control over the outcome."

Achieving a consistent appearance when working with a variety of cameras can be challenging since each camera has unique characteristics. Instead of inefficiently learning multiple camera models and brands along with their different LUTs and calibration approaches, Soetens and his team saw Colorbox and Assimilate Live Looks as the central solution to unify and color-match footage from various camera types with low latency.

"We could switch 'look & feel' between shots and ultimately make every camera source look the same", he explains. "This made it possible to use multiple LUTs across multiple Colorboxes, test them, and seamlessly create a cohesive program output."

Aja Colorbox and Bridge NDI 3G

In addition to using Aja Colorbox, Immersive Design Studios employs many other Aja solutions in projects, from Kona I/O cards to FS Frame synchronizers, mini converters, and more recently, Bridge NDI 3G, "Bridge NDI 3G fits many of our clients", says Soetens. "Especially considering that Canvas can process hundreds of NDI streams; most of our clients use it as a set-and-forget solution for SDI to NDI encoding/decoding needs." Aja Colorbox is a powerful video processing device that performs LUT-based color transformations and offers advanced color science with the Aja Color Pipeline, as well as multiple look management approaches, including Colorfront, Orion-Convert, BBC, and NBCU LUTs. With 12G-SDI inputs/outputs and HDMI 2.0 output, the Colorbox supports up to 4K/UltraHD 60p 10-bit YCbCr 4:2:2 and 30p 12-bit RGB 4:4:4 output - ideal for live production, on-set production, and post-production. The browser-based user interface allows for easy adjustment of color settings, whether directly via Ethernet or through a third-party WiFi adapter.

Bridge NDI 3G is a 1RU gateway that provides high-density conversion from 3G-SDI to NDI and NDI to 3G-SDI for multi-channel HD and 4K/UltraHD. Designed to be seamlessly integrated into any existing NDI or SDI workflow as a plug-and-play device, Bridge NDI 3G offers immense conversion power and flexibility that can be fully controlled remotely, suitable for AV use, security and surveillance applications, broadcasting, eSports, entertainment venues, and a variety of other facilities that require high-quality, efficient NDI encoding and decoding.

Since 1993, Aja Video Systems has been a leading manufacturer of video interface technologies, converters, digital video recording solutions, and professional cameras, providing high-quality products for the professional broadcast, video, and post-production markets. The company develops and manufactures its products at its headquarters in Grass Valley, California, and distributes them through an extensive network of resellers and system integrators worldwide.

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Lights on Louis XIII

The French projection mapping expert CS Prod tells the story of King Louis XIII in the former royal residence of Saint-Germain-en-Laye using M-Vision projectors from Digital Projection.

The town of Saint-Germain-en-Laye, located in the western suburbs of Paris, has housed many monarchs throughout its history who used it as a royal residence. However, none had as strong a connection to the town as Louis XIII. This often-overlooked king, who lived in the shadow of his father, Henry IV, and his son, Louis XIV (the Sun King), spent most of his time there and chose the town as his permanent residence in 1620. To-day, Saint-Germain-en-Laye is a student town, with almost half of its population (23,000) made up of students. The city is committed to providing young people with access to culture.

Lumières sur Louis XIII ("Lights on Louis XIII") was developed in collaboration with the city's cultural department and CS Prod, the French partner of Digital Projection, led by Christian Salès, which focuses on creating content related to history and heritage with technical expertise. Between March and April of this year, visitors were able to embark on an immersive journey into the memories of Louis XIII thanks to Digital Projection's M-Vision laser projectors during the event. "Organizing such a show was a first for us", says Benoit Battistelli, deputy mayor of Saint-Germain-en-Laye and responsible for culture. "We opted for a large-scale performance designed to engage young people through sound and image and encourage them to learn in a more interesting way."

CS Prod prevailed over 20 competitors in selecting the provider responsible for executing the project, impressing with its thorough appro-



ach. "Christian Salès from CS Prod crafted the production as precisely as possible", explains Battistelli. "CS Prod delved deeply into the historical details, such as decor, colors, and shapes, to consider the story and specific details of Louis XIII."

The Manège royal, built in the 19th century and featuring a magnificent roof shaped like an inverted hull, was chosen as the venue for the immersive show because of its association with the king. "The first thing that catches the eye when you enter the building is the architectural structures and the balcony where the king used to sit", says Christian Salès, artistic director of CS Prod, who aimed to cover all interior spaces with video content.

To achieve this goal, the team installed three E-Vision 15000 projectors with ultra-wide-angle lenses at the back of the balcony, six M-Vision 23000 laser projectors on each side of the building projecting onto the opposite wall and the ceiling, and two M-Vision 27000 projectors at the back of the room with a projection range of 50 meters. "We knew that the front wall had to be the most impressive for the public, showcasing true colors and sharp images. The M-Vision 27000s met our requirements in every respect", he explains.

On the balcony, which is central to the show, CS Prod installed a transparent metal mesh for hologram effects, with permission from Showtex. "By placing the video projectors very low at the back of the balcony, the audience could see none of the technology and focus entirely on the content", adds Salès. CS Prod supplied the entire AVL system; the Digital Projection laser projectors included eight speakers, four subwoofers, and 30 Par-Can LED lights.

"We also used the colors of the time, which we found in existing paintings and books about the king's life", explains Salès. The company took a full month for research. During this time, CS Prod met with specialists from that era, visited châteaux in Burgundy for inspiration on specific decoration, and conducted research in various libraries and museums. Creating the content then took three months, with the script co-authored by Christian Salès and Michel Piquemal.

The immersive show also included a six-minute projection mapping display on the building's exterior facade, taking place every night. This was achieved by installing M-Vision 23000 laser projectors in two side towers, 30 meters away from the facade. Lumières sur Louis XIII was a remarkable success, attracting 15,000 visitors within a month, including 3,500 schoolchildren.

A new level of flexibility

Lafayette College, a college in eastern Pennsylvania and one of ten members of the Patriot League, utilizes Riedel's Simply Live Production Suite (SLPS) to deliver simultaneous high-quality live broadcasts of sports events.

"With Riedel, we have found a true partner. The team has exceeded all our expectations and has played a significant role in our success", said Scott Morse, Assistant Vice President of Communications and Marketing at Lafayette College. "I never thought we would have a control room for live streaming that could connect with any location on campus through our campus network. The satisfaction with the Riedel equipment was evident from the beginning throughout the team."

Founded in 1997, the Lafayette Sports Network (LSN-TV) has been recognized by Broadcast & Cable Magazine as one of the best college or university networks in the country, reaching over 90 million viewers nationwide through its partner networks. As the host of 23 Division I sports, LSN-TV produces over 35 live television broadcasts and 80 additional live streams annually. With the growing prevalence of live streaming, LSN-TV recognized the need to expand its capabilities and meet the increasing demands of its viewers. Riede-I's solutions for live video production have significantly helped meet the high-quality standards associated with the transition to major streaming services, allowing the broadcaster to showcase its institution like never before.

Thanks to the intuitive touchscreen interface, the Simply Live Production Suite has simplified production workflows to the extent that even students with little or no experience can quickly learn to operate the system. With a core team of at least six staff members, including camera operators, replay operators, and graphics operators, the college has been able to produce exceptional broadcasts with minimal training.



Through an additional SLPS all-in-one system running on a V-Mini server, LSN-TV has further expanded its capabilities in a space-saving manner. Due to the compact server size, the college can set up its streaming equipment at various locations, covering a wide range of sports. While LSN-TV previously could only produce and distribute one game at a time through the central control room, the combined solutions now enable the simultaneous broadcasting of events and coverage for all its sports teams.

"The success story of Lafayette is a testament to the user-friendliness and exceptional performance of our technology", said Greg Macchia, VP Business Development Live Production at Riedel Communications. "We look forward to continuing our partnership and further supporting Lafayette College in its outstanding live productions."





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The immersive wave

Since March 2024, the permanent exhibition "Planet Ocean" has been running successfully at the Gasometer in Oberhausen. In just over six months since its opening, more than half a million visitors have been drawn in by the fascinating images of the world's oceans and their inhabitants. From a technical standpoint, a movable 1,000 square meter screen meets extreme conditions. Here's a behind-the-scenes look.

The exhibition ranks among the major crowd pullers; for comparison, Berlin's Museum Island attracts about 2.2 million visitors annually. "Planet Ocean is not just an exhibition, but an experience that evokes emotions and leaves a lasting impression", says Jeanette Schmitz, Managing Director of the Gasometer.

At the heart of the exhibition is, as the name suggests, the ocean, which is the largest and least explored habitat on our planet. With largeformat photography and impressive 3D elements, such as the skeleton and life-size figure of a whale, visitors dive deep into the mysterious world of the seas. "The aim of the exhibition is to convey the fascination of the ocean in a way that not only expands knowledge but also emotionally resonates. This is best achieved when visitors become part of the bigger picture and can experience the overwhelming beauty and complexity of the ocean up close", Schmitz explains. The centerpiece of Planet Ocean is the immersive installation "The Wave". On one of the highest screens in the world, holographic projections and interactive visual material of the ocean create an impressive experience. "What makes this project particularly challenging is the extraordinary location and the nature of the surface to be played, in this case, a movable fabric rather than a rigid screen", says Michael Rabbe, Managing Director of Epson Germany.

Unlike the conventional projection of images on a solid wall, this setup uses two flexible fabric surfaces: This unusual construction consists of a vertical fabric screen from AV Stumpfl and a horizontally stretched mesh, extending in an L-shape over an area of more than 1,000 square meters. The mesh alone measures an impressive 18.6 x 21 meters, while the vertical screen reaches a height of about 40 meters. This construction creates the impression of diving directly into the underwater world. By

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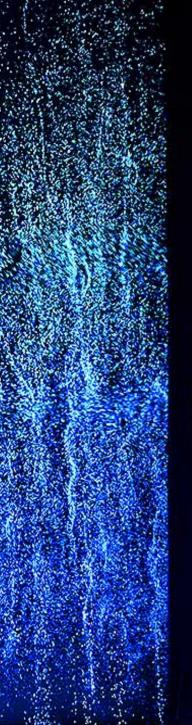












tracking the visitors, the content displayed on the screen can be partially controlled, making the experience even more immersive.

The technical implementation was handled by Sigma System Audio-Visual, acting as the interface between the artists from ARS Electronica and the hardware. They faced particular challenges. The seven projectors used from Epson not only had to be extremely powerful but also capable of operating under extreme environmental conditions. The Gasometer, a former gas storage facility, has only a thin outer shell, causing the indoor temperature to fluctuate depending on the weather. Since the exhibition is open year-round, the projectors must be able to cope with significant temperature variations during operation. "Both the influence of the temperature difference and the height of the building, as well as the size of the pressure difference between the top and bottom (thermal currents), complicate the integration of the technology", explains Karsten Lange from Sigma.

In close collaboration with ARS Electronica, the Sigma team developed a customized solution. The powerful Epson projectors were installed in specially designed towers that can withstand the extreme conditions of the Gasometer. These towers are not only ventilated but also equipped with their own heating system to compensate for temperature fluctuations, ensuring smooth operation of the technology.

Each of the seven projectors features advanced 3LCD technology, allowing for excellent color reproduction and a high contrast ratio. With a brightness of 30,000 lumens, the projectors can uniformly illuminate the enormous projection surface of over 1,000 square meters and present the underwater world in astonishing sharpness and vibrancy. These technical specifications were crucial in making the animations, with a resolution of 60 million pixels, appear as naturalistic as possible.



The AV installation "The Wave" is a prime example of how artistic vision and technical know-how can seamlessly intertwine. It illustrates how creative approaches can be realized through the collaboration and commitment of all parties involved, overcoming even complex challenges. The Japanese company Epson, the world market leader in projection for over twenty years, invests approximately 1.3 million euros daily in research and development, enabling the implementation of technically innovative projects like that of the Gasometer in Oberhausen.

Team Epson Germany: Werner Reifberger, Christian Seyfried

Team Sigma-AV: Christian Backes, Marc Brinar Team Ars Electronica: Ina Badics, Chris Bruckmayr, Florian Cossee, Stefan Dorn, Patrick Müller, Dominik Trichlin, Markus Wipplinger

Team Garamantis: Marcus Dittebrand, Rupert Huber, Ekaterina Losik

et av-media technology

Innovative all-in-one solution

Large-format display, flip chart, touchscreen, and whiteboard in one: With the Cannyboard, the conference hotel Schloss Hohenkammer is relying on future-proof technology made in Bavaria.



Located north of Munich, Schloss Hohenkammer is a hotel specialized in conference operations. With 168 rooms, three restaurants, 30 meeting rooms, a wide portfolio of event technology, and appropriately trained staff, the hotel provides everything necessary for the success of workshops and seminars.

A central element of the hotel's high-quality conference equipment is the Cannyboard. This 86-inch display solution serves as a flip chart 4.0, large-format touchscreen, digital whiteboard, and video conference system, combining all the tools needed for interactive team meetings, seminars, lectures, workshops, and training sessions - regardless of whether participants are in the same room or connecting remotely.

Martin Kirsch, Managing Director of Schloss Hohenkammer, sees it as his primary task to ensure that every event in his venue is a success. "Our goal is to meet the seminar objectives through our technology, our spaces, and our service. We do everything for this, and that sets us apart", Kirsch states. Even before the pandemic, the qualified conference center had been focusing on forward-looking seminar technology. However, despite the world becoming more digital, little had changed in meeting rooms, Kirsch recalls: "We were very shocked to see that the projector had remained unchanged in meeting rooms for 30 years."

At the same time, his team felt how many participants and speakers wanted to enhance and digitize their collaboration. "Our approach was to provide this possibility and to understand contemporary technology as an essential component of conferences", explains Kirsch.

When the hotel came across the Cannyboard, the team was immediately excited "because it surpasses the projector in all aspects, from image quality in 4K to the many different working options", says Kirsch. "The fact that the Cannyboard perfectly supports digital collaboration among participants meeting in person - while also allowing for remote connections - really appealed to us."

Another advantage of the solution is that it can also be used with other applications. "For example, I can easily access my Teams or Google Meet from the office and move around in my familiar working environment", Kirsch explains. The manager emphasizes that digital and analog should not exclude each other. "We are not fans of everything having to happen



only with a smartphone", Kirsch says. Often, it is the combination of different tools that makes the difference or complements each other ideally.

The hotel hosts events for up to 180 people, but its focus is on meetings for eight to 25 participants. And this is precisely where the Cannyboard is ideally suited for effective collaboration, as it allows for active participation.

The Cannyboard is ready for use immediately via Wi-Fi or network cable. The plug-and-play technology of the smart board requires no installation and can be easily used by all users without complicated hurdles. Participants can connect directly to the touchscreen via QR code or link using their own smartphones or tablets, collaborate, and easily upload files such as photos or texts to the smart board via AirDrop, without any tedious software downloads or cumbersome registration processes.

When asked about the most popular features of the solution, Kirsch mentions screen sharing, which works not only via cable but also wirelessly without any stumbling blocks. Another benefit is that users can easily take their entire workshop with them. "I start something here, take it to another conference hotel or office, and can continue right where I left off."

Regarding the future, Martin Kirsch is confident that the conference landscape will continue to change as more conference organizers and speakers understand the potential of technologies like the Cannyboard. "Just the possibility of quickly bringing someone in for a brief period via video conference is sensational. For instance, during an ongoing conference, I can quickly bring in the company's lawyer for a legal question via video call for a few minutes, without them needing to dedicate their entire time to the event. Or during an important strategy workshop, the board member can give a short greeting live, which demonstrates a tremendous appreciation for the employees."

Despite everything, digital media, which undoubtedly represent a perfect complement and support in the event sector, will never completely replace the gathering of people, Kirsch is sure of that. The most crucial factor for the success of a conference is the trust between participants. "You can only achieve that if you have at least met in person at the same place once", Kirsch concludes.



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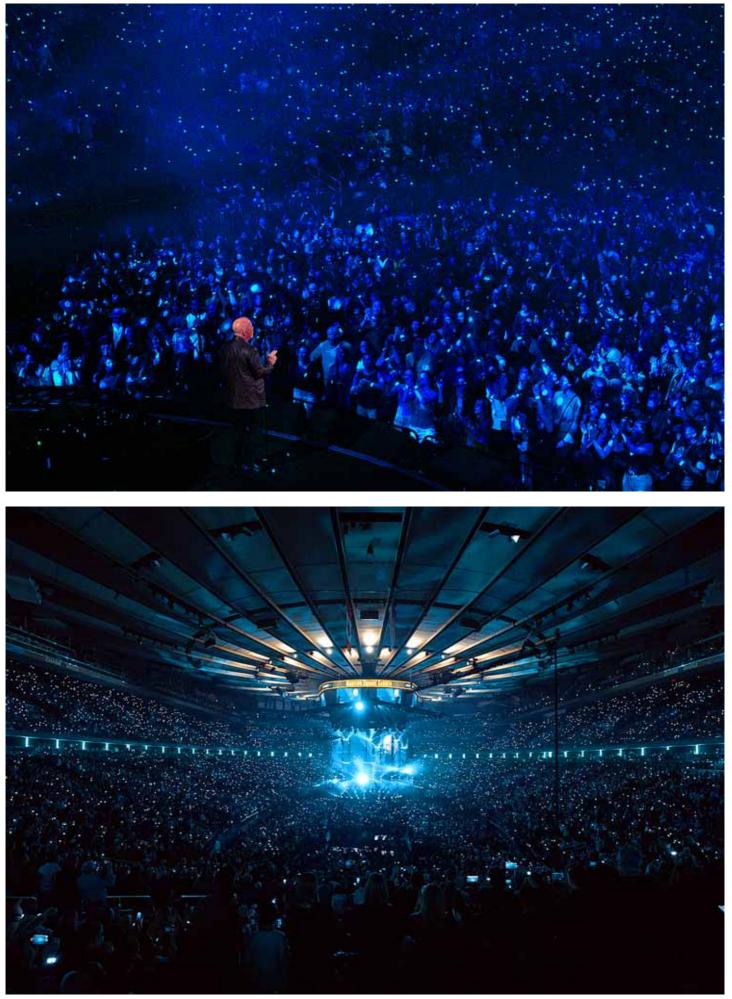


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100!

Billy Joel's historic 100th and final concert of his residency at Madison Square Garden in New York was captured for posterity by Arri cameras. There were also a few Emmys awarded.

Let's start with the accolades: Of four Emmy nominations, Arri won three awards: Outstanding Variety Special (Pre-Recorded), Outstanding Technical Direction and Camerawork, and Outstanding Lighting Design/Direction for a Variety Special. Special praise went to Josh Weibel, who has been the monitor mixer for 15 years, and Brian Ruggles, who has been the front-of-house mixer for Billy Joel for 52 years.

To capture Billy Joel's historic 100th concert at Madison Square Garden, the producers used Arri's Alexa 35 and Mini LF cameras for the primetime broadcast on CBS. The truly unique event demanded the highest image quality and set new standards for live concert broadcasts, which also personally impressed the artist: "I usually don't like live recordings of myself and feel uncomfortable, but this time the result is truly convincing", said Billy Joel.

The concert took place on March 28, 2024, at Madison Square Garden (MSG) in New York and marked the grand finale of Joel's unprecedented MSG residency. "We knew this wasn't just another show", said Barry Ehrmann, Executive Producer at Enliven Entertainment. "Billy's 100th concert at the Garden was a historic milestone. So we needed correspondingly powerful cameras to capture the unparalleled visual experience for posterity."

The decision to use Arri's Alexa 35 and Mini LF cameras proved crucial for the vibrant look of the production. The cameras are robust and reliable and have a wide dynamic range. Due to their color management and performance in low light, they are often the preferred choice for cameramen. Ehrmann commented: "Arri cameras are always my first choice when it comes to multi-camera productions for concerts. I believe the Alexa 35 and

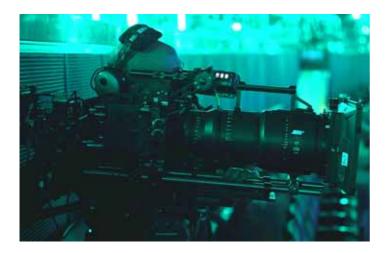
Mini LF models surpass all other offerings on the market." Show director Paul Dugdale is also satisfied: "I love the look of the cameras and how they handle shooting against the light - something that happens so often in concert films. In 2011, we first integrated Arri cameras into a large multi-camera recording, and I've stuck with them ever since."

The performance of the cameras in different lighting conditions allowed the production team to capture both intimate close-ups of Billy Joel and epic shots of Madison Square Garden. Steve Cohen, Billy Joel's lighting designer, creative director, and executive producer, was also impressed by the cameras' ability to capture his vision: "My lighting design looks effective and realistic and appeared on film just as it does to the naked eye - that's rare."

The resulting CBS special, which aired on April 14, 2024, attracted an impressive audience of over 23 million viewers. Funicular Goats provided equipment, workflow, and technical management for the production. Through skilled technical management and the use of multi-camera solutions, Funicular Goats enabled the creative team to focus on Billy Joel and his final MSG show.

The success of such a legendary production is crucial, as it sets new standards for live entertainment, and the right choice of camera technology plays a significant role. Thus, Peter Crithary, Vice President of Live Entertainment at Arri, is right when he says: "Arri cameras have the ability to convey not just images but also emotions and atmosphere. At Billy Joel's 100th concert, failure is not an option."

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Oikeiosis for BEP

Alain Corthout's lighting design for the Black Eyed Peas draws on ancient myths and symbols - and the Chamsys Stadium Magic Q MQ500M.

The ancient Greek philosopher Hierocles liked to use concentric circles to represent what he called "oikeiosis" (the essence of our identity as humans), where the inner circle symbolized the individual and each subsequent curve represented an ever-expanding universe. This same theme has been revisited by philosophers throughout the centuries - most recently this year in Alain Corthout's production design for the Black Eyed Peas concert at the La Défense Arena in Paris.

Corthout created a transcendent visual panorama that connected light and video in concentric patterns that seemed to reach further out into the audience. "The light and video concept aimed to create a seamless fusion of the elements by using expansive curves and circles to present a unified visual experience", says Corthout. "By integrating light circles emanating from the video screens, I wanted to convey a sense of grandeur, where stage and audience form a unity."

Starting from the dominating LED screen, Corthout developed his visual narrative over the entire two-hour show: "I focused on capturing the joyful, ecstatic party atmosphere that the music of the Black Eyed Peas is known for", he explains. "The design and programming were aimed at reflecting the band's energy and sound." To achieve this, a Chamsys MQ500M Stadium console was used, complemented by a stadium extension and an additional MQ500M as a backup. The lighting design, featuring a total of 55 universes, was exclusively controlled by the console, while the videos were managed under the direction of Austin Stengle using Resolume. The show programming was done with Capture 2024 Symphony.

Phlippo Showlights from Belgium supplied the Chamsys consoles as well as the lighting and video equipment for this show. "The Philippo team not only set up an 800-light system in a single day", reports Corthout. "Philippo also provided all the rigging and sound equipment and the stage risers."

Corthout utilized many features of the console: "The three critical functions of the console were Group FX, Grid FX, and Speed Masters", he says. "These functions simplify the programming process and can quickly adapt to dynamic tempo changes and last-minute song alterations. They are efficient for programming and ensure seamless transitions and synchronization."

Among the additional advantages of the console, Corthout mentions the Copy Heads Programming of the MQ500M, the Replace Palettes, the Multi Console + Visualiser settings, and the MVR Import + Plot. "This allows me to quickly import from Vectorworks CAD programs or visualizers, so I can start building the show without wasting time on patching."





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Never does one go completely...

In the summer, German rock musician Peter Maffay said farewell to the big stage after a career spanning over 50 years with the sold-out "We Love Rock'n'Roll" stadium tour. Alongside various guest stars, Metrail from Follow-Me, GLP, and Epicto also joined the tour.

At the age of 75, after 55 successful years in the music business, rock musician Peter Maffay bid farewell to the big stage as part of his soldout "We Love Rock'n'Roll - Farewell" tour, leaving with an exclamation mark: twelve stadium shows were on the tour schedule. Günter Jäckle, Maffay's long-time lighting designer, developed the design for this farewell tour together with production manager Bernie Haefner and set designer Fritze Krauch. He reports: "Fritze and I had the idea early on to integrate an 'M' into the stage design. We implemented this idea in two ways: on the one hand, the musicians' risers formed a stylized 'M,' and on the









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other hand, we integrated a video-equipped set construction element in the shape of the letter as a proscenium into the stage."

The M as a stage proscenium was the only defining stylistic element in an otherwise very video-dominated show. From a lighting perspective, Jäckle relied on a total of 80 GLP Impression X5 Wash lights and 20 of the new weatherproof LED bars, Impression X5 IP Bar. The X5 Wash lights were used on four trusses in the stage roof as well as on the two front truss frames on the left and right. The X5 IP Bars were placed on the ground, specifically for the spectators seated particularly low in the stadiums, to recreate the M shape.

Once again, the experienced lighting designer remained true to his fundamental rule of limiting himself to as few types of lights as possible.

He opted for the X5 series due to its greater brightness: "The X5s are simply significantly brighter than the X4. That was certainly the main criterion. But an LED washlight also has its own characteristics as a physical object in the space that I wanted to utilize. So the devices also became a stylistic element in the stage roof. In fact, I used them less to illuminate the stage and more as audience-facing blinders, allowing me to effortlessly bathe at least the first 50 meters of the audience area in color. And for that purpose, the X5s, with their high output and rich colors, were excellent."

The same was true for the X5 IP Bars, which the designer used for the first time on this tour: "Here, too, the greater brightness of the devices was crucial for me. For health reasons, we generally work without fog at Peter Maffay's shows. Even without fog, I can still get a clearly visible



















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beam from the X5 IP Bars. However, the bars served less as effect lights and rather created an atmosphere."

For the first time on a tour, Günter Jäckle used the Follow-Me trackin system 3D Six. "LMP Lichttechnik demonstrated the system to me about five years ago. Of course, I found it exciting, but initially, there wasn't a specific application case. Peter Maffay, who strongly seeks contact with the audience, does not want to be blinded by harsh spotlights. Therefore, it made sense to rely on a remote system operating with moving lights in the rig. Additionally, about 600 square meters of video surface were part of the design. Live camera images played a correspondingly significant role. In such cases, one must also create 'TV light' - another point in favor of Follow-Me. Not least, the old follow spots are hardly seen anymore, so they are no longer easily obtained in good condition."

With a Follow-Me 3D Six license plus a backup server (including a backup license), the team tracked multiple targets (Peter Maffay, guest artists, and solos) and could draw on ten moving lights, with six follows coming from the front and four from the back. One operator was solely responsible for Peter Maffay, while the other handled guest artists and solos.

During the tour, it was not primarily about the light show; after all, performances took place outdoors in the summer and thus largely in daylight and residual daylight, Jäckle further reports. Therefore, the primary goal of the lighting design was to achieve the best possible light quality for the cameras. The tracking system communicated via sACN with the lighting console. Network integration was carried out using priority routing over ELC nodes. Main dimmer, zoom, focus, and colors were controlled via the lighting console. The Follow-Me operators could also influence dimmers, CBS size (via the iris), and z-offset through the fader wing of the tracking system.





Günter Jäckle usually uses a Cyber Cam for lighting, capturing the stage from above. This function was also taken over by the Follow-Me camera on the tour. "The biggest challenge with this production was calibrating in daylight." However, working with the system was easy to learn, he reports: "After half a day of training in our show lab, I had a good understanding."

Oliver Horn, head of the lighting crew, adds: "Once you understand the logic, it's not rocket science. However, you need someone with experience for the calibration - and good Follow-Me operators."

As advantages of the system, Horn cites space savings, both in the hall and in the truck, as well as the option for manual tracking, while other providers rely entirely on auto-tracking. However, the Follow-Me team plans to try out the Follow-Me auto-tracking system "Track-It" soon, in a combination of auto-tracking and manual tracking.

Peter Maffay's "Farewell" tour ended on July 20 in Leipzig with a particularly large show that was recorded for a documentary and a live DVD. For this, the lighting rig was expanded with an additional 100 GLP Impression X5 Wash lights. During the tour, Maffay welcomed various old and new musical companions, such as Johannes Oerding (throughout the tour) and special guest Anastacia, who performed her own segment. Depending on the city, numerous other "surprise guests" joined, including Bülent Ceylan or Rea Garvey, as well as from the musical beginnings, Frank Diez (guitar), Steffi Stephan (bass), and Jean-Jaques Kravetz (keyboards). An emotional gesture: during "Wenn wir uns wiedersehen", Maffay remembered his long-time companions who had already passed away, including the promoters Fritz Rau and Roland "Balou" Temme they probably would have loved it.

Epicto was responsible for the directing and camera technology and was on-site with a total of 12 cameras (man-operated cameras, PTZ with









Pana Pod, finger cameras, and 2 wireless systems), all recorded. The LED technology and playback were provided by Pandoras Box. PRG was the technical general service provider for the tour and also delivered the lighting design. Satis + Fy provided the sound.

With a capacity of about 320,000 visitors spread over 14 concerts, the open-air tour will be Peter Maffay's last big (!) rock'n'roll tour. Nevertheless: "It's not a farewell to music. It's a farewell to the big touring stage", says Maffay, only to reappear days later as a guest at Bülent Ceylan's show in Wacken. As Trude Herr beautifully sang: "Never does one go completely..."

Rigging: 4 container trusses 19 meters, 10 frame ladders 14 meters, 2 lighting towers - FOH

Lights: 12 Ayrton Domino LT, 50 Martin Mac Ultra Performance, 80 GLP Impression X5 Wash, 20 GLP Impression X5 IP Bar, 48 Robe Mega Pointe, 18 8-light DWE Blinder, 12 GLP Fusion MPL 20 Floodlights

Follow spots: 1 Follow-Me 3D System, 2 Mouse Cantroll, 6 Tack-iT Targets

Mixing consoles: 2 Grand MA 2 full size, 1 Grand MA 2 light

Photos: Ralph Larmann





Band

Bertram Engel - drums Pascal Kravetz - keyboards Ken Taylor - bass Peter Keller - guitar JB Meijers (Common Linnets) - guitar Frank Mead - saxophon Yaris Makkay (son of Peter) - vocals Linda Teodosiu - vocals Leon Taylor (son of Ken) - vocals Charly Klauser - percussion + more

Setlist

Schatten in die Haut tätowiert/Carambolage/Du/Samstag abend in unserer Straße/Weil es Dich gibt/Und es war Sommer/Eiszeit (+ Johannes Oerding)/Liebe wird verboten (+ Johannes Oerding)/Blinde Passagiere (+ Johannes Oerding)/Wenn wir uns wieder sehen (+ Johannes Oerding)/Glaub an mich/Abenteuer (Yaris)/Spuren einer Nacht (Acoustic)/Zwei in einem Boot (Acoustic)/Josie (Acoustic)/Gelobtes Land/Der Mensch auf den Du wartest (+ Anastacia) – **Anastacia:** Just You/Left Outside Alone/I'm Outta Love/You Shook Me All Night Long (AC/DC, + Linda Teodosiu) – **Peter Maffay:** Nessaja/Über sieben Brücken mußt Du gehn (Karat) – Sonne in der Nacht/Ab heute für die Ewigkeit









The perfect sound

Solotech masters the acoustic challenges of Keane's current UK arena shows with the powerful K Series concert sound system from L-Acoustics.

"I requested L-Acoustics specifically for this tour because it is the system I feel most comfortable with after years of working and mixing for other artists", says Philip Harvey, Front of House Engineer for Keane. To celebrate the 20th anniversary of their album "Hopes and Fears" the band embarked on a triumphant UK arena tour, which brought a series of acoustic challenges. The tour, spanning six arenas and seven shows, required a sound system capable of delivering both whisper-quiet moments and powerful, energetic highlights with equal clarity and performance.

"While Keane is known for their melodic ballads, their live performances demand a very dynamic sound", explains Harvey. "Our goal was to deliver a powerful rock show that ranges from intimate moments to loud rock, ensuring that every seat in the room receives a uniform audio impression."

The challenge lay in the varying sizes and acoustics of the arenas, as well as the set design, along with a T-shaped stage that extended into the audience, complicating the placement and coverage of the speakers. Additionally, maintaining consistent sound quality throughout the venue without relying on delay hangs was crucial.

Thus, the Keane team turned to L-Acoustics partner Solotech. Their project manager, Tim Mitchell, explains their approach: "Even coverage was our primary goal; since a large portion of the audience was in assigned seats, we had to ensure that the sound reached each individual with comparable quality and performance."

The solution came in the form of a comprehensive L-Acoustics K Series system, consisting of 16 K1 and 6 K2 per side for the main L/R

hangs, 16 K2 for the side hangs, and eight K3 for the 180° hangs per side of the line array speakers. This was complemented by eight hanging KS28 subwoofers in a cardioid configuration per side, oriented at 30 degrees, as well as 18 ground-stacked KS28 subwoofers in a cardioid sub-arc array configuration. The out-fills consisted of four A15 Wide per side, with 12 Kara II used for the front and stage area fills. All enclosures were powered by LA12X amplifier controllers, with system control managed through three P1 processors in a Milan-AVB network.

The L-Acoustics Soundvision software played a crucial role in the system design process. The initial designs were created by US system engineer Michael Gazdziak, with whom Philip Harvey had worked on several tours and whom he brought on board. These designs were then refined on-site by Solotech's touring system engineer Rich Kemp for each venue. Mitchell adds: "Soundvision was extensively used throughout the design process of this system, allowing us to adapt to the nuances of each venue."

For the T-shaped stage, the team employed innovative techniques: "Panflex was used on the K2 down-fills to minimize spill onto the stage", says Mitchell. "A strategically placed second row of Kara II along the stage edge covered areas not addressed by the K2 down-fills."

The result was a great success, reflected in the reactions from the band and industry professionals. "I later heard from the band that well-known musicians, music producers, and production managers were present at these shows, and all were overwhelmed by the production and performance", concludes Harvey.



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Before the reunion...

Skan PA Hire provided a K1 concert sound system from L-Acoustics that powered Liam Gallagher's anniversary tour for the 30th birthday of the album "Definitely Maybe", just before the announcement of the Oasis reunion.

Thirty years after Oasis's groundbreaking debut album "Definitely Maybe", Liam Gallagher completed a tour celebrating this anniversary shortly before the news of the Oasis reunion was made public. The challenge? To deliver an audio experience that does justice to the iconic album during a series of sold-out UK arena shows.

To meet this challenge, Skan PA Hire, now part of Clair Global, was commissioned to assemble a professional sound system that best conveyed the energy known from Gallagher's performances. The mission was clear: to provide a consistent, powerful sound that would electrify the audience from the front row to the back seats. "We needed a setup that could deliver both serious pressure and intricate sounds", explains Sam Parker, Front of House Engineer for the tour. "L-Acoustics was the obvious choice for me to meet these requirements."

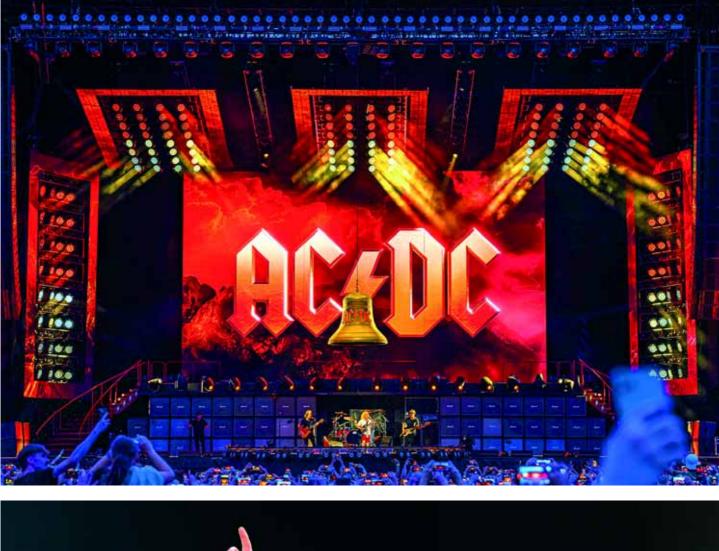
Systems Engineer Mark Pantlin designed a comprehensive concert tour system built around L-Acoustics' renowned K Series line array speakers. The setup included 16 K1 over four K2 per side, complemented by ten K1 over six K2 per side. Bass reinforcement was provided by 12 hanging K1-SB subwoofers per side, while coverage of the outer seats in the 270-degree audience area was ensured by two sets of 12 K3 per side.

On the ground, 24 KS28 subwoofers were arranged in eight pods of three each in a cardioid configuration for optimized rearward rejection. The system was enhanced by eight A10 Focus as front-fills, six A15 Wide as out-fills, and four delay arrays with eight K2 each to ensure a balanced and crystal-clear sound throughout the venue.

Pantlin emphasizes the versatility of the system: "By positioning the K1-SB subwoofers in conjunction with the cardioid ground sub-array outside the main arrays, we achieved a controlled stage environment with good bass reproduction."

The L-Acoustics Soundvision software played a crucial role in the system design process. "Soundvision was very important for planning up to the start of the tour", explains Pantlin. "The program shows us what the final result will look like before it goes live." This way, the system was able to impress from the first chords of "Rock'n'Roll Star" to the last song, "Married With Children".







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"Let there be light!"

Since 2016, AC/DC had not been on tour – until the start of their Power Up Tour on May 17, 2024, in Gelsenkirchen. As usual, the band presented a lot of new lighting, including products from GLP and Chauvet. The design teams report.

At the beginning of the show, nine massive, tilted video screens displayed an intense, captivating intro video, just like on previous tours, once again focused on Angus Young, the guitar icon and the band's only remaining founding member. Following this, a 24-song rock'n'roll journey began with ,If You Want Blood". Thanks to skillful planning of the tour dates (with several off days between performances), singer Brian Johnson was in the best shape he had been in a long time. The 76-yearold unexpectedly passed every performance vocally with flying colors. This atmosphere is exactly what Patrick Woodroffe and Terry Cook from Woodroffe Bassett Design (WBD) aimed to create when developing the production design for this long-awaited tour. "We wanted stage lighting and video to work together and appear as a unit", says Cook, the tour's lighting designer, while Woodroffe serves as the creative director. "From the very beginning, we knew we would have screens to constantly change the look of the show. Throughout the performance, the video screens were meant to split, open, and realign to create a large image."





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Grombacher Straße 70 75045 Walzbachtal Tel. +49 7203 50 20 60 Fax +49 7203 50 20 69

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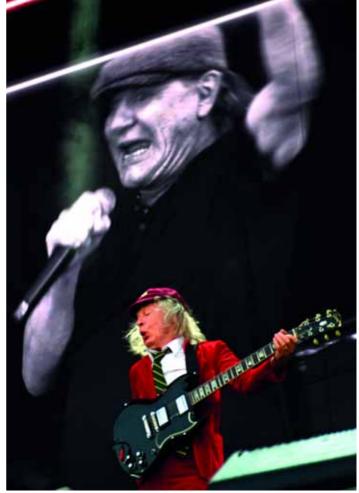






Each of the production screens measures 9 m x 4.8 m. The backgroun screen divides into three parts, while the front IMAG screens split into two. Between the screen segments, lights fill the 2.7 m gap. The bakkground gap aligns with two overhead trusses, making two lines of light visible when the background screen splits. This corresponds with the three overhead light pods, which have the same overall dimensions and thus create symmetry. Now the team just needed an all-encompassing key light.

Neg Earth chief Dave Ridgway had a recommendation for Terry Cook when he was searching for that one next-generation wash light. "It needed to be bright, versatile, eye-catching, and powerful", says the designer. So, Ridgway recommended the Impression X5 IP Maxx from GLP and promptly arranged for a test. Terry Cook's conclusion: "The fixture brought the desired bite and true character. And it was just aggressive - definitely an AC/DC lamp! We like to use new technologies on AC/DC tours, and this also applied to the current Power Up Tour."



But the high-performance moving light brought another advantage: its IP classification. Its weather resistance would prove important during the tour, even though all fixtures were used under the stage roof. Neg Earth had been contracted as the tour supplier by Dale "Opie" Skjerseth, the band's production manager. Once the designer gave the green light for GLP's powerful wash light, Neg Earth promptly ordered 172 fixtures. This made Neg Earth the first rental company worldwide to incorporate the Impression X5 IP Maxx into their inventory.

Lighting designer Patrick Woodroffe has been associated with both AC/DC and Neg Earth for decades. "The band had not been on tour for a while for various reasons", Terry Cook notes. "We were contacted to support them for a one-off show at the Power Trip Festival in California (last year, ET.Now reported) before they planned 'something in Europe.""

Thus, WBD had already had the opportunity to experience the performance capabilities of the X5 IP Maxx. When the European tour was fi-























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nally confirmed, WBD was once again in demand: "There should be no frills in the design. It was more about effectively connecting the band, the music, and the fans", says Cook.

The lighting designer worked closely with Stufish, who were responsible for the stage design and video screens. "I realized I could replicate the shapes of the video with five large light pods - filled with just one type of fixture. Stufish suggested framing the pods with video so we could pull the video away from the screens and integrate it into the roof and sides of the stage. Suddenly, the idea was born, and we knew it was a successful combination."

Three identical overhead pods were visually balanced vertically by two additional pods on the left and right sides of the stage. Each contained a matrix of Impression X5 IP Maxx fixtures, making up the majority of the 168 fixtures that were on tour. The remainder was mounted on the front truss to illuminate the band's characteristic 2.5-meter-high wall of Marshall amplifiers.

The challenges in implementation were numerous. It was initially unclear whether such a large number of X5 IP Maxx could be delivered on





time. "We also had to figure out how to arrange these fixtures in the trusses at equal distances in a matrix while simultaneously achieving the right beam angles. The rig was somewhat of a throwback to the old PAR can rig when we were still using Molefays." Additionally, custom mounts had to be created for each unit, and special load distribution was integrated into each suspension.

The next decision concerned the DMX programming mode for the X5 IP Maxx. Terry recalls: "When I first turned on a single cell with just 3%, everything became clear. We wanted to use pixel control to change the shape of the light sources. Therefore, choosing the right mode was crucial." He further explains: "There is a moment in 'Thunderstruck' where we wanted to see 168 linear light strips instead of circles, to create a kind of lightning effect, generating a powerful sparkle and flicker in this strong intro."

After careful consideration, they decided on Mode 4 (Multipix Advanced Mode) of the fixture. "This gave us an incredible 141 DMX channels, with only two fixtures per universe. It caused a heart attack for Neg Earth, but we wanted the flexibility to create such pixel effects." Terry





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Cook also knew from the beginning that he wanted to integrate GLP's new high-performance wash light into the Follow-Me Followspot system, ,,to aim all 168 beams at guitarist Angus Young during a really big guitar moment". The X5 IP Maxx, with its extensive range from extremely narrow 3.3 degrees to a wide, homogeneous 66-degree wash, provided the necessary flexibility for the show.

Terry Cook thanks several people, particularly Simon Barrett, the head of GLP UK, for his support in preparing the show, but also set designer Ray Winkler (Stufish) and technical designer Jeremy Lloyd from Wonderworks, who provided the technical considerations for the light pods. Finally, he mentions Sam Patterson's team at Treatment, who created the video content.

The show itself was, of course, directed by Charlie "Cosmo" Wilson, the band's experienced lighting director, while Joe Bay and Michael Hankowsky from Early Bird were engaged for the light and video programming. The last and newest member of the FOH team is Fraser Walker from WBD, who, like Cosmo, controlled the video screens live and without timecode at every show. "It's great to see how harmoniously Cosmo and Fraser run this show together", notes Cook.

Another essential component of the lighting rig is a collection of 210 Chauvet Professional fixtures. The color palette created with the lights was selected to coordinate with the video. "The color choices that Cosmo and I made were meant to bring video and lighting together", says Cook. "We often see video in this show acting like light, so we treat it with the same color look. We have video frames around the stage pods, which are often controlled by the lighting system, so it reacts as a unit and we can adjust the color, look, and mood. Cosmo does a great job with the colors. My favorite moment of the show is probably 'Whole Lotta Rosie'. It's a magenta/cyan song, and it's so much fun to see Cosmo act live."

78 of Chauvet Professional's motorized Color Strike M wash-strobes, 108 Strike 1 blinders, and 24 Strike 4 units help weave this multifaceted



visual panorama and establish the connection between the band and the audience. "We use the Color Strike M on the front and IMAG trusses", says Cook. "They are wonderful for color hits and big strobe moments. We also have them on the ladders at FOH and between the screens. The tilt function in a vertical position like this is very useful. The 108 Strike 1s are in a continuous row, mounted at the top of the front truss", Cook explains. Lastly, Cook mentioned the Strike 4 units on the audience tower: "They reach the far corners of every venue to ensure we can truly illuminate the entire audience", he says.

"This is a live show for light and video, so both video director Fraser and Cosmo must work in sync for it to work", explains Cook. "The video screens themselves display various elements, including logos from the band's album covers. This part was overseen by creative director Patrick Woodroffe. We have a series of custom videos that connect the content of the respective song with the live show. Of course, we also use them for IMAG and treat the video with Notch, and the show is captured on camera by Johnny Hays. It's fascinating to see how harmoniously Cosmo and Fraser run this show together live and without timecode."

Like all major productions, this tour is the result of countless contributors, Cook notes, mentioning production manager Dale Skjerseth, technical designer Wonder Works, stage builder Tait Towers, and lighting design drafter Aiden Bromley as his collaborators. The video was provided by Screen Works, pyro by Innovative Pyrotechnics, and the stage structure by Stage Co.

After Opie and WBD were so impressed by the young crew that Upstaging had hired for a recent American show, they decided to request a similarly composed crew from Neg Earth. The rental company then assembled a young, highly professional team with an average age of just 28 years. Other crew members included Jim Mills, Lewis Willding, Niccolò Grigolato, Ben Tinniswood, Zac Saleh, Euan Odd, Charlie Strangeways, and Holly Brightman, who worked under the leadership of crew chief Alan Fotheringham. The Neg Earth team, which assisted with all prepa-







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rations, consisted of Joao Magalhaes, Jack Prior, Fiore Fillarini, and Greg Gadomsk. Finally, Terry Cook notes that there is a cue in the show called "Let there be light". "That's the moment when the rig lighting is turned up fully – 100 percent, a moment that Angus also loves and enjoys".

Setlist

If You Want Blood (You've Got It)/Back In Black/Demon Fire/Shot Down In Flames/Thunderstruck/Have A Drink On Me/Hells Bells/Shot In The Dark/Stiff Upper Lip/Shoot To Thrill/Sin City/Rock'n'Roll Train/ Dirty Deeds Done Dirt Cheap/High Voltage/Riff Raff/You Shook Me All Night Long/Highway To Hell/Whole Lotta Rosie/Let There Be Rock – TNT/For Those About To Rock (We Salute You)

PWR/UP Tour Credits – Team

Lead Guitar: Angus Young Vocals: Brian Johnson Rhythm Guitar: Stevie Young Drums: Matt Laug Bass Guitar: Chris Chaney

Management/ Accounting UK/Europe: Prager Metis Llp - Austin Jacobs, Mark Carter, Alix Bishop Booking Agent: Rob Light, Chris Dalston, Allison McGregor Tour Director: Tim Brockham Assistant Tour Manager: Noel Rush, Steve "Pud" Jones Band Security: Mark Haughey Production Director: Dale Skjerseth Production Manager: William Keating Stage Manager: Chris "Super" Deters Production Cooridinator: Kenneth "TJ" Gordon Production Assistant: Nicole "Nikki" Benus Production Accountant: Jonathan Francis Site Co Red Team: Toby Fleming Site Co Blue Team: Guy Habosha Head Carpenter: Jan Lehouck Teleprompter/Carpenter: Harvey Fitzpatrick Carpenters: Imy James, Scott "Boyo" Seaton, Nick Pishhadamian, Ros Magmahon, Harvey Fitzpatrick, Dillon Leslie, Mike "Otis" Kinard Barricades: Justin Johnson Pyro Crew Chief: Fred Price Jr. Pyros: Seth Thomas, Theo Ruby, Fabienne Roloff Sound Engineer: Paul "Pab" Boothroyd Monitor Engineer: John "Grubby" Callis System Engineer: Matt Van Hook Crew Chief: Paul "Swanny" Swan Monitor Tech: Sean Baga, Kyle Busch PA: Adam Collins, Jonas Segginger, Marcin Matysiak, Marcin Mlodawski



Delay: Marcelo Telefanko, Emanuel Sequeria Stage Tech: Toby Boothroyd Floater: Falko Knueppel Audio Adviser: Harry Witz Head Rigger: Mike Ryder **Riggers:** Max Pearson, David Brierly Venue Security Director: Giovanni Gasparetti Venue Security: Stefan Wolter Head Of Power: Jose Romo Power: Sabino Hernandez Jr., Jack Murray, Tristan Lynch Lighting Director: Charlie "Cosmo" Wilson Lighting Head Of Department: Alan Fotheringhame Lighting Tech: Zac Saleh Lighting Network System: Ben Tinniswood Lighting Techs: Euan Odd, Lewis Wilding, Holly Brightman, James Mills, Charlie Strangeways, Niccolo Grigolato Video Director: John Hayes Video Engineer: Brandon Gallegos Video Server Tech: Kenneth Delvo Video Crew: Jason Lebel, Gabriel Lopez, Brittany Groth, Jason Datin, Charles Manning, Pearl Macmahon, William Marion Video Screen Operator: Fraser Walker Video Delay: Jonathan Noble

PWR/UP Tour Credits - Companies

Band Travel Agent (Worldwide): Amy Keeling (First In Service) Crew Travel Agent (Europe): Lyndsey Thomson (Tour Company) Lighting Design: Terry Cook, Patrick Woodroffe Project Manager: Jeremy Lloyd (Wonder Works Limited) Audio: Greg Smith, Harry J. Witz (Clair Global) Lighting: Dave Rideway, Sam Rideway (Negearth) Video: Danny O'Bryan, Jonathan Eaton, Amy Segawa (Screenworks) Scenic: Kiyanna Brown (Tait Towers) Staging: Tom Frederickx (Stageco) Pyro: Uli Frick, Joachim Berner (Innovative Pyrotechnik) Engineering: McLaren Technical Services Power: Mitch Margolin (Ces) Radios: Jeremy Schilling (Road Radios) Barricade: Okan Tombulca, Sebastian Tobie (Eps) Buses: Jörg Philipp (Beat The Street) Trucking: Natasha Highcroft (Transam Trucking) Freight: Duane Wood, Duncan Peek (Rockit Global) Ground Transport Europe: Peter Schäfer (Global Touring) Credentials: Kiersten Holland, Kyle Powning (Cube Services) Itineraries: Stephanie Vogel, David Evans, Steve Richards (Cube Services) Hub International Insurance Services: Peter Tempkins

Fotos: Ralph Larmann









In the thick of it

Numerous fans of the European Championship followed the opening match in one of the ten official host city fan zones. This was made possible, among others, by the experts from Temporärbau Nüssli.

The fan zones were constructed by the experienced professionals from Roth. The efficient construction of these temporary structures ensures comfort and safety for the fans, contributing to the unique atmosphere of the tournament. "We are proud to contribute to this year's European Championship", says Jan Poneß, Head of Event Structures at Nüssli. "Our fan zones not only allow fans to experience the games up close, but also provide a safe communal experience."

The official fan zones were placed in the ten venues hosting the European Championship in Germany and offered a framework for a fan festival with giant LED screens, goal arches, towers, grandstands, and stages. The zones enabled supporters to share the excitement and emotions of the games together, even if they could not be in the stadium. The materials used were later repurposed for various open-air events and sports activities in different forms throughout Europe.

"The establishment of the fan zones within the tight deadlines posed significant logistical challenges for all team members. Despite partly adverse weather and wind conditions, all critical deadlines were met", adds Uli Born, speaking on behalf of the entire team. Overall, the fan zones were a win for all visitors during the 2024 Football European Championship in Germany.



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Noah's season

The American singer-songwriter Noah Kahan is the musical shooting star of this summer. At the Red Hill Auditorium in Perth, Australia, he performed a sold-out concert in front of 5,000 fans. Robe was part of the event.

Lighting designer, programmer, and operator Alexandra Lutz-Higgins used a lighting system predominantly from Robe, provided by the lighting and visuals rental company Showscreens based in Perth.

The company had recently invested in Robe Fortes. The setup consisted of a total of 22 Fortes, 21 BMFL Wash Beams (four of which were on a Robo Spot system), and 32 Spiider LED washes. The visual concept for the tour, which has been running since May 2023 in support of the successful album "Stick Season", was created by Chase Hall from the U.S. design studio Cour Design.

Reprogrammed from scratch

Originally, Alexandra Lutz-Higgins programmed the show together with Will Flavin. Over the months, the design has slightly evolved and transitioned into a current tour version, with additional songs added to the setlist and reprogrammed from scratch. The upper lighting was distributed across three trusses, all equipped with BMFL Wash Beams, providing general stage illumination.

The Fortes were installed on two rigs, with six fixtures on each side left and right of the stage, while the remaining 10 Fortes were positioned behind the stage directly in front of the video wall for backlighting and effects. A row of strobes was placed on the floor in front.



On stage, three 4.8-meter tall towers were positioned on each side, equipped with five Spiiders and some blinders. The show featured both strobes and vibrant, lively colors, as well as CTO and CTB tones as impressive characteristics. Therefore, the Spiiders were primarily used as washes and to create strong white beams of light (rather than for pixel effects).

Beneath the stage platforms, various blinders, LED PARs, and strobes were also present. Several gobo looks and textures were added to further enhance the songs. The show was a mix of time-coded and manually executed lighting cues and was controlled via a grandMA3 console.

Alexandra Lutz-Higgins, like Noah Kahan, hails from Vermont and is excited about this shared musical journey. During her time at an art school a few years ago, she considered becoming an illustrator, but then switched genres and has since been equally passionate about ,,lighting design for music". The lighting designer and programmer enjoys the creative freedom that the profession offers and appreciates learning about new places and different cultures every month.

Showscreens is one of the largest rental companies for entertainment technology in Western Australia and handles a variety of shows and events, from theater, opera, and ballet to concerts, festivals, corporate, and business events. On site, production manager Kale Tatam oversees the show, which marked the conclusion of the Australian leg of the tour.







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Kaiser came, saw, and conquered

Roland Kaiser's grand open-air tour "RK50" celebrating his 50th anniversary on stage is breaking all records. Wherever possible, the stage was shared with Peter Maffay, who is also on a farewell tour. Lighting designer Andreas Kisters primarily relied on Robe for his design.

It's hard to believe: Today, at 71 years old, Roland Kaiser is one of Germany's most esteemed artists and the most successful interpreter in the schlager genre. Those who are counted out live longer: After retiring from the stage due to COPD, undergoing a lung transplant in 2010, and with strict discipline, it was his promoter Dieter Semmelmann (Semmel Concerts) who encouraged him to perform in arenas across the country a few years ago. Energized by the long-running "Kaisermania" at the Elbe River in Dresden, all arenas were filled, leaving a disbelieving, shakinghis-head Roland Kaiser behind.

In 2024, Kaiser and Semmelmann are adding the crown to it all. "I had to incorporate a few medleys into the current program; otherwise,

the announced 50 hits wouldn't have been possible in terms of timing", Kaiser explains, justifying his promise for the 50th anniversary and performing 50 (!) hits at selected open-air stages and, for the first time, in large stadiums in Rostock, Cologne, Frankfurt, Leipzig, and Hannover. With more than 90 million records sold, he captivates audiences of all ages with his excellent band (including guitarist Jörg Weisselberg, singer/guitarist Billy King, and pianist, keyboardist, and musical director Joachim Radloff).

"My production team is simply fantastic and has come up with some special ideas to surprise and delight everyone during the 2.5 hours live show in the large arenas", says Kaiser. This team includes Andreas Ki-







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sters (Soundhouse), Gunther Hecker (Cue Design), and Thomas Schmitt (Semmel Concerts), who are responsible for stage and lighting design.

"The contract for the design and technical implementation was awarded by the tour organizer Semmel Concerts", explains Kisters, who has worked with Roland Kaiser multiple times. "For over 30 years in Europe, my work has included lighting, stage, and show design for concerts, events, and architectural projects, but the RK50 tour is impressive due to its sheer scale", says Andreas Kisters, who has worked as the lead lighting and stage designer at Soundhouse since 2015.

"It was important for Roland Kaiser that the stage received a 'face' through the interplay of LED walls, lighting design, and stage decoration. Additionally, the lighting and content on the LED walls should form



Light Assistant Julian Lampe, Video Operator FOH Niki Kuhn



a harmonious unity with the individual songs", Kisters explains.

For the stage design, a decoration was built consisting of individual golden slats, which were placed on the inner sides of the stage. The front edges of the set were also dressed with them. "To complete the stage design, we designed an oval 'header' made of an LED wall and again the golden slats. This hung in the front area of the stage and could also be moved during the show using a C1 system." A design book with corresponding renderings was created for visualization.

Since the tour also included so-called "back-to-back shows", meaning performances taking place on several consecutive days in different cities, it was necessary to ensure that the time-consuming stage decor could be set up overnight from one city to the next.



Sound Crew: Christoph Schwendinger



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The central elements of the lighting design consisted of a total of 60 Robe fixtures: "We had 48 Megapointe fixtures from Robe. Additionally, we had 12 iForte LTX that were hung on the delay towers and used as foltow spots (for seven musicians) with a Zactrack system", explains Andy Kisters. "One really doesn't need to say much about the Mega Pointe: the fixture is the perfect combination of spot and beam. The Forte LTX, on fixture is the perfect combination of spot and beam. The Forte LTX, on a distance of 60 meters from the stage. We used them as follow spots in combination with the automatic follow system Zactrack, and it worked excellently."

Alongside Robe, the following additional fixtures were used: 68 Marin Mac Ultra Performance, 48 GLP Impression X5 LED Wash, 36 Major Blinder DWE 4-lite, and 4 MDG Hazer/Fan AF1. As with Peter Maffay,

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Epicto was involved in the tour: the concept and idea (video) came from Haegar Deutsch and Thomas Schmitt. Eight cameras (manned cameras, PTZ with Pana Pod, finger cameras) were used for direction and camera technology, all rigged with recording. LED technology and playback were managed via Pandora's Box.

Andreas Kisters also controlled the lighting at FOH. Video was managed by Niki Kuhn, and sound was handled by Hannes Meiser. The lighting technology was provided by Group 20 Event Technology, while Soundhouse supplied the sound technology.

Setlist: Gut, dass ihr da seid/Ich glaub es geht schon wieder los/Alles was du willst/Medley 1: Frei das heißt allein + Die Gefühle sind frei + Ich hab' deine Tränen nicht verdient + Haut an Haut + Midnight Lady + Friedensangebot (Lisa-Marie) + Wind auf der Haut und Lisa + Hier fing alles an + Amore amore + Wir sind Sehnsucht/Santa Maria/Gegen die Liebe kommt man nicht an/Zuversicht/Mein Geheimnis/Lieb mich ein letztes Mal/Dich zu lieben/In the Ghetto (Mac Davis)/Liebe kann uns retten/Medley 2: Hab' ich zuviel riskiert + Ich hab dich 1000 mal geliebt + Es kann der Frömmste nicht in Frieden leben + Viva l'amor + Das Fenster zum Hof + Amore mio + Südlich von mir/She's a Lady/Das Beste am Leben/Im 5. Element/Sieben Fässer Wein/Manchmal möchte ich schon mit dir/Schach matt/Medley 3: + Halt mich noch einmal fest + Flieg mit mir zu den Sternen + Wohin gehst Du + Stark + Sag bloß nicht Hello + Freunde bleiben + Kein Problem + Unerreichbar nah + Es ist alles ok/Kurios/Extreme/Sag ihm, dass ich dich liebe - Du, deine Freundin und ich/Joana/Warum hast du nicht nein gesagt/Bis zum nächsten Mal.





A technical challenge

The award-winning London production of the musical "Sunset Boulevard", featuring Nicole Scherzinger from the Pussycat Dolls in the leading role of Norma Desmond, utilizes Sennheiser systems for its creative revival.

The 16-week run of Sunset Boulevard at the Savoy Theatre in London posed more of a technical challenge than a standard theater production, a challenge embraced by sound designer Adam Fisher and production engineer James Melling. With the help of Sennheiser's equipment and expertise, including Fisher's preferred Digital 6000 system, they developed a solution that worked reliably every night.

With Nicole Scherzinger in the lead role of Norma Desmond, the soldout performance of Andrew Lloyd Webber's iconic musical became one



of the city's talking points. To date, the production has received multiple awards, most recently winning seven Olivier Awards, including Best Sound Design and Outstanding Musical Contribution. With a total of seven awards, it ties with classic shows like "Hamilton", "Matilda", and "Cabaret" for the most Olivier trophies awarded in a single evening.

The first technical hurdle arose with the request to film the performers outside the theater as part of the performance and to live stream it. It was completely new to accompany the performers from the dres-



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sing room out onto the street and then onto the stage. In particular, the compatibility of Sennheiser's products made the integration of live video and audio streaming into the existing system a complete success.

"The camera and video work meant we had to deal with RF interference from the large screen", explains Fisher. "When we started rehearsals, show director Jamie Lloyd had the idea of incorporating remote-action scenes. This meant a lot of work - not just regarding the wireless microphones but also the in-ear monitors (IEM)." Melling adds: "In the show, we use D6000 receivers with SK 6212 mini bodypack transmitters. Since we wanted to leave the building, we needed not only a long battery life but also a strong antenna signal and small, portable packs. A really cool feature was the EK 6042 camera receiver. It works with all Sennheiser products and uses the same batteries, allowing us to easily integrate it into our existing systems."

Filming the performers each night as they left the building and navigated through narrow corridors back to the stage without losing the signal was a technically exciting challenge that Matt Bird, Radio Lead at Autograph Sound, managed with ease. "We had to use multi-zone antennas, a mix of Sennheiser AD 3700 directional antennas and A 1031-U omnidirectional antennas, which is something we don't do often in theater", explains Bird. "The system provided us with solid RF reception quality inside the building. And when we exited the building, we could easily connect with the camera receivers, giving us additional range and flexibility."

Together, the team opted for the aforementioned two-channel EK 6042 camera receivers. These are compatible with a wide range of analog and digital Sennheiser microphone systems, including Digital 6000, and have a very wide switching bandwidth of 184 MHz to cover multiple frequency windows of the transmitters. The EK 6042 has an exceptionally low latency, allowing the performers to stay in sync with the music even as they move in a remote environment.

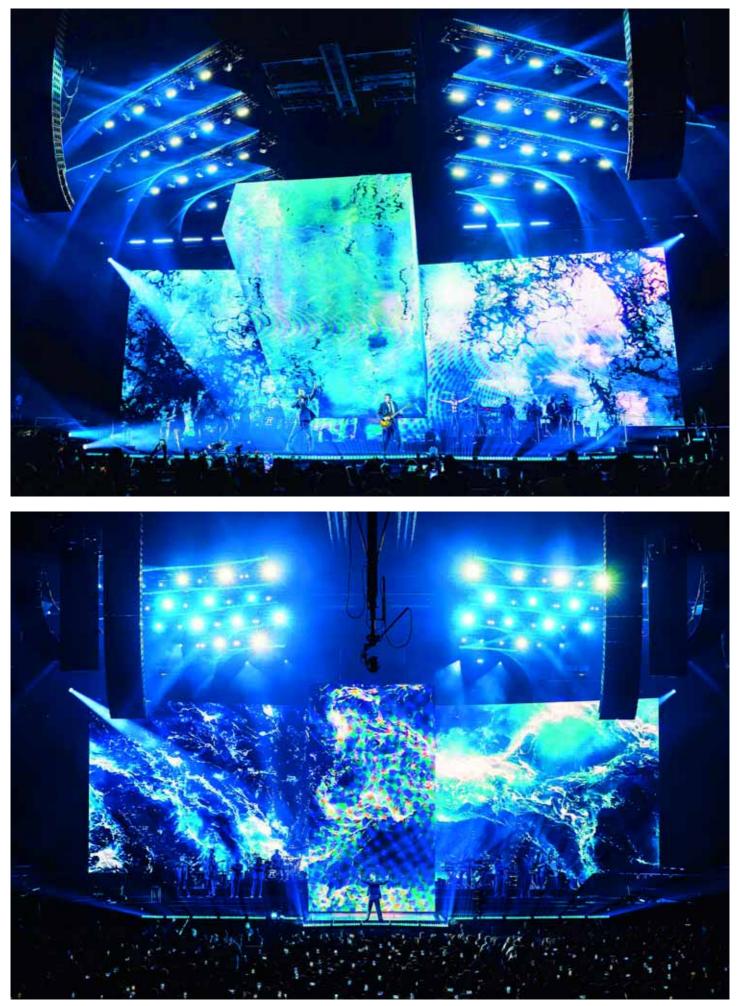
Kevin Gwyther-Brown, Business Development Manager at Sennheiser, ensured that the team at the theater and at Autograph Sound received all the information they needed throughout the planning process. "Using the SK 6212 transmitters for Sunset Boulevard was a good choice", says Fisher. "Their small size and battery life set them apart from all other competitors, but the new WMAS technology is crucial. It makes situations like leaving the theater easier to implement and will open up many more possibilities."

In 2023 alone, Adam Fisher designed the following productions: "The Wizard of Oz" (UK Tour), "Evita" (Leicester Curve), "Sunset Boulevard" (Savoy), "The Phantom of the Opera" (Middle East Tour), "Lizzie" (UK Tour), "The Lord of the Rings" (The Watermill Theatre), "Evita in Concert" (Drury Lane), "Love Never Dies in Concert" (Drury Lane), and "The Wizard of Oz" (London Palladium).

Kevin Gwyther-Brown (left), Adam Fishe







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"A very specific niche"

Footlights from Robert Juliat are accompanying Justin Timberlake's "The Forget Tomorrow World Tour". They are used at the edge of the stage.



Cory Fitzgerald, the lighting designer for Justin Timberlake's ongoing "The Forget Tomorrow World Tour" and a senior partner at the Burbankbased creative studio Silent House, is using 30 Robert Juliat 864 LED asymmetrical footlights with a four-color mixing system to illuminate the stage during the singer-songwriter's shows. ACT Entertainment, as the exclusive North American distributor, was responsible for the delivery.

The tour began in April and will continue until spring of next year. It is Timberlake's seventh major concert tour and his first in five years. He is supporting his sixth studio album, "Everything I Thought It Was".

Fitzgerald had previously used RJ Dali footlights in other productions, including shows for Kendrick Lamar. "I had already used the Dali 862 pure white footlights at Justin's shows earlier this year before the tour started", he says. "When the Dali 864 color version became available, I decided to use them for the tour. They effectively line the edge of the sta-

ge and provide footlight and key light fill for Justin, the dancers, and the band."

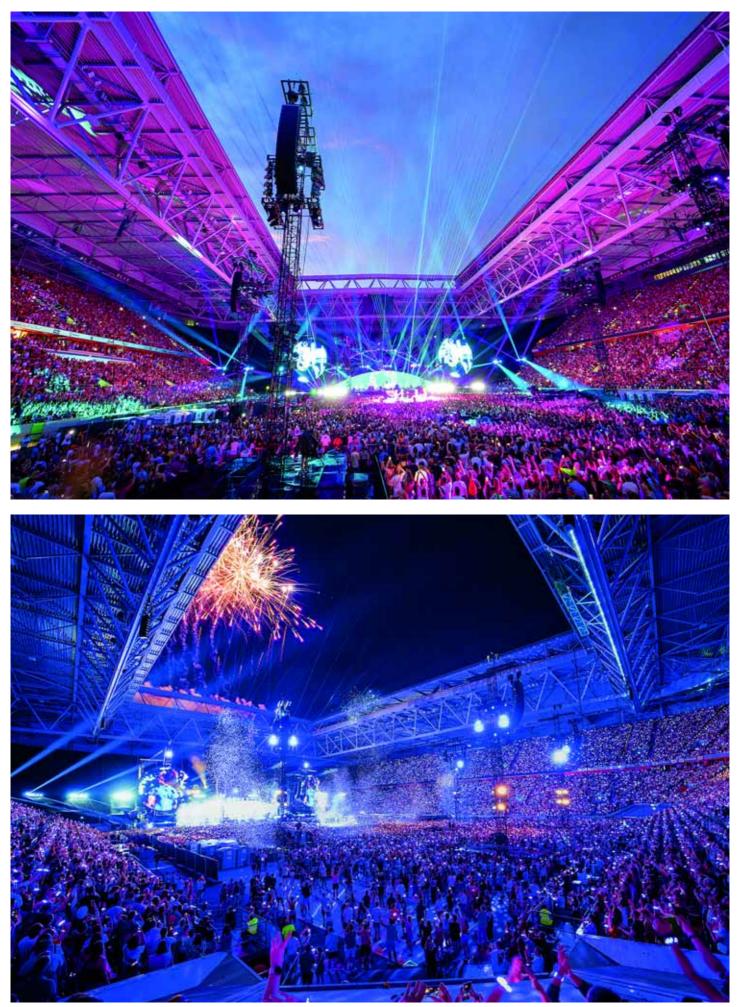
Solotech, Montreal, supplies the Dali 864 footlights and has also invested in a large inventory of the fixtures to meet the tour's demands. "The Dali 864s are very versatile and fill a gap in the market with their size and low profile, allowing them to be easily placed in locations where lighting is needed", Fitzgerald explains.

"The footlights are also bright, offer good colors, and have a control mode option for one or four groups. I particularly like the near and far focus feature, which allows for quick and flexible adjustments as the artist moves on stage: you don't have to commit to a focus and stay with it."

Looking ahead, Fitzgerald sees the Dali series as his preferred footlights. "This is a very specific niche, but the Dali footlights are now part of my toolkit whenever footlights are needed."









feelsliketheyhavereachedtheirgoal

Award-winning lighting designer Sooner Routhier chose to design Coldplay's "Music Of The Spheres" tour with more environmentally friendly, sustainable fixtures. Upstaging, a long-standing partner, is the lighting supplier for the tour.

Routhier's original tour design was introduced in 2022 to support the album "Music of the Spheres", and the band is continuing the current stadium tour with the same design. For this year's European leg, which started on June 8 at the Olympic Stadium in Athens, she sought the most effective way to add a spotlight effect to the show without using a heavy, power-hungry fixture. "We wanted to illuminate the seats to expand the overall impression of the lighting", she says.

Subsequently, Elation's John Dunn and Chuck Dillingham (Freed Sales) brought the new "Proteus Atlas" to Clear All Visuals in Nashville so that Routhier could test it extensively. The designer found what she was looking for, and thus the powerful, IP66-certified Proteus Atlas Beam FX Moving Head made its debut on the tour. "We placed the fixtures in the seats behind the stage to give the lighting additional impact", she explains. "Music of the Spheres is a show without fog, but even without fog, the fixtures can create amazing beam effects."

Tour lighting director and programmer Shaheem Litchmore has been working with Coldplay for three and a half years and oversees the daily handling of the equipment on tour. "They make the show feel massive at certain moments", he says, "and since they are placed around the stage, they create an intimate, immersive experience. It's like embracing the entire space".

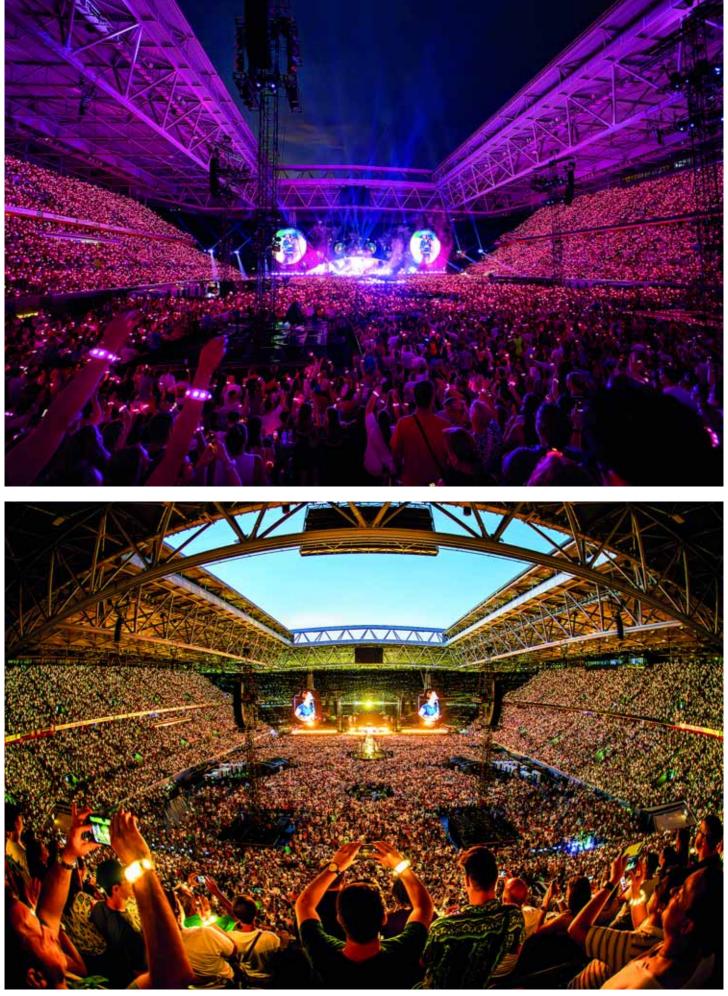
The Atlas produces dynamic beams at certain times and Gobo/prism effects at others to enhance the mood of specific songs. "We love the sight of the intense beams sweeping through the stadium and touching the clouds, although it's also cool to create a softer look with such a powerful fixture", noted Shaheem. A Coldplay show, of course, includes many wow moments, including one right at the beginning of the show when the lights go out. "One of the first lighting sequences features the Atlas beams directed vertically into the sky and then falling to the ground of the stadium", describes Shaheem. "No one expects that, which makes it even more impressive."

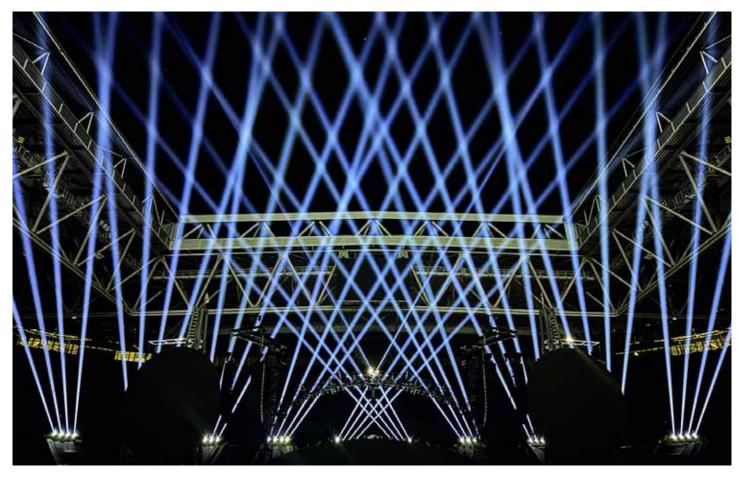
Sooner used the fixtures in various ways, such as during the rainbow run for "Adventure Of A Lifetime" and for "A Sky Full Of Stars", where massive white beams visually explode behind the stage, creating a true "light fireworks" effect. For "Paradise", the softer side of the fixture is shown with strong Gobo/prism images. In "Clocks", there is no front light, and the band is only seen as a silhouette. The Atlas adds a lot of beams to the lasers used here.

Given that this is one of the most attended and highest-grossing tours of all time, Coldplay's environmental efforts during "Music of the Spheres" are highly commendable. The stages were designed with a team of sustainability experts and built from reusable materials; displays, lasers, lighting, and PA are all energy-efficient, and many other ecological aspects were considered. The Proteus Atlas aligns with the tour's green ethic, as it operates with a fraction of the power consumption of 7000 W Xenon fixtures, leaving a much smaller ecological footprint.

Team

Lighting Design: Sooner Routhier Production Design and Creative Director: Misty Buckley Creative Director: Phil Harvey Lighting Director: Shaheem Litchmore





Lighting System Crew Chief: Daric Bassan

Front of House Technicians: Emilio Aguilar, Kevin Royan, Rob Corman Savage, Charlie Collins, Luke Dobson, Zach Boebel, Emma Hart, Michelle Radogna, Chris Dries, Paige McLaughlin, Micah Dade, Conall Haldeman

Coldplay speaks

All our data and environmental impact assessments for both the "A Head Full Of Dreams Tour" (2016/2017) and the first two years of the "Music Of The Spheres Tour" have been independently collected and conducted by our long-term sustainability partners Hope Solutions. The assessments and reports are shared annually with the MIT Environmental Solutions Initiative team for review and validation. They have independently validated and assured the data as well as the calculation methods, assumptions, and justifications for the tour-to-tour comparison. Our figures are based on actual emission reductions and do not take carbon offsets or emission certificates into account.

So far, there is no industry standard for sustainable tours or a centrally prescribed methodology for emissions reporting in this sector. We will continue to work towards promoting and establishing this. We have made every effort to align ourselves with the principles of recognized standards like the Greenhouse Gas (GHG) Protocol and to follow best practices and guidelines. We are also working closely with Hope Solutions, MIT, Live Nation, and Warner Music Group to examine the impact of live music and establish some CO2 footprint benchmarks for different types of tours.

For five years, Coldplay has pursued its mission to reduce carbon emissions and environmental impacts from its tours. The team has now achieved its first goal: to reduce CO2e emissions by more than 50% compared to the previous tour. Here are the highlights:

- Overall 59% reduction in direct CO2e emissions compared to the previous tour (2016-17), based on individual shows in 2022 and 2023.

- 7 million trees planted, supported until maturity by One Tree Planted one for every concertgoer. Approximately 10,000 hectares of land have been restored across 24 countries and 48 planting projects.
- 2 solar-powered The Ocean Cleanup River Interceptors deployed.
- 86% average return and reuse rate of LED wristbands.
- 18 shows in 2023 fully powered by a portable battery system made from recycled BMW i3 batteries.
- 23 partnerships with eco-friendly travel providers to help fans travel to shows using low-emission transport.
- 17 kWh average power generated per show from on-site solar installations, kinetic dance floors, and bicycles - enough to power the band's Cstage performance every night.
- 100% of shows provide free water refill stations for fans.
- Over 3,000 tCO2e saved by purchasing sustainable aviation fuel (SAF) for flights.
- 72% of all tour waste diverted from landfills and sent for reuse, recycling, and composting.
- 9,625 meals + 90 kg of toiletries donated from tour catering to help the homeless and needy.
- Financial support for environmental organizations like ClientEarth, The Ocean Cleanup, Climeworks, Project Seagrass, Sustainable Food Trust, Cleaner Seas Group, Food Forest Project, Knowledge Pele, Conservation Collective, and others.
- 33% reduction in freight burdens.

Setlist

Act 1 Planets: Music Of The Spheres/Higher Power/Adventure Of A Lifetime/Paradise/The Scientist/Act 2 Moons: Viva La Vida (B-Stage)/Hymn For The Weekend (B-Stage)/Everglow (B-Stage)/Charlie Brown/Yellow/Act 3 Stars: Human Heart/People Of The Pride/Clocks/Infinity Sign (B-Stage)/Something Just Like This (Chainsmokers)/My Universe/A Sky Full of Stars/Act 4 Home: Sunrise/Sparks (C-Stage)/The Jumbotron Song (C-Stage)Fix You/Good Feelings/Feels Like I'm Falling In Love/





"That's what the fans expect"

Skan PA Hire is accompanying Take That on their "This Life" world tour through arenas and stadiums. The company, part of Clair Global, provided crew, audio design, and equipment.

Under the leadership of tour director Chris Vaughan and production manager Wez Wearing, Take That continues to delight tens of thousands of fans of all generations every night. Although the venues in Germany were smaller for Britain's biggest pop band since the 1990s, the shows were just as perfect.

FOH engineer Gary Bradshaw has pursued the same goal since the band, now a trio consisting of Gary Barlow, Mark Owen, and Howard Donald, began in 1993: "I need to reproduce the sound of the records in the shows as closely as possible - that's what the fans expect. With the live band, the arrangements are different, but the overall sound must be similar. Our musical director Mike Stevens is very good at arranging the music, and the musicians in the live band are brilliant."

Bradshaw has been using Digico consoles since their launch and had an SD7 Quantum with him on this tour. "There are some Waves plugins, and the band uses some of their own FX and EQ effects for the guitars. They use Neural DSP Quad Cortex pedals and have been modifying the sounds of the guitars for a long time, so everything comes to me in FOH over the same input signal. The band is therefore making their own changes - it's basically their sound modeling tool."



Swansea

He continues: "I do use a Waves dbx 160x compressor over the drum audio group, but primarily the effects that are already included in the Digico console - compression and EQ - and keep everything as simple as possible. The console responds quickly and works seamlessly with my Waves."

During the two-hour show, the audience experiences a musical journey divided into four sections. "Getting the right cues took some time", says Gary Bradshaw. "But we had enough rehearsals. The songs haven't really changed, but the sound is different. I have to concentrate for the full two hours", he adds, noting that Skan's service was crucial for the smooth running of the tour. "Skan is very precise in tour preparation and always makes the right choices for the equipment, especially with the PA system: I think d&b is the best you can get here. And their crews are always very good!"

Matt Vickers from Skan designed the d&b Audiotechnik rig, which aligns with the show's creative concept. "The Take That team are experienced professionals who understand that we need to deliver the music. They've been collaborating with us from the start to integrate the PA elements into the show design."

"All ground subs and infill speakers are hidden under the front stage edge; we worked with the stage designers to fit them into the setup accor-



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renta



dingly. At the beginning of the big shows, there's a rain effect where liters of water flow over the front stage edge, which means the ground subs sit in the water catch basins. For this reason, we simply added larger wheels to the sub carts and mounted their outdoor rain covers. For the flown arrays, we just had to ensure enough space for follow-spot trusses and han-

ging bridges to the B-stage", he explains.

Once the positions are established, Vickers hands over the design to the tour team and to Matt "MBF" Besford-Foster, who is responsible for daily optimization and tuning with the respective location. "MBF ensures that we cover every seat with the same audio quality, that the show is perfectly mixed, and that all fans are given the same experience." The system consists of speakers from the GSL (main), KSL (side), and V series (rear). On the floor, J Subs and Y-series boxes are used for front fills.

"My main goal is to make all these different types of speakers sound like one big, natural sound source", says MBF, particularly referring to the B-stage: "I use a special EQ for the part of the PA that covers the Bstage and activate it as soon as the B-stage is used. This prevents possible feedback and provides Gary with a solid system, regardless of which microphones are in front. I also pay attention to the positioning of the 120degree boxes within the arrays to avoid problematic sound interferences. The d&b SL system has excellent directional characteristics that help keep the SPL low. It's teamwork from the entire audio department, and I rely completely on the PA technicians Eddie O'Brien and Patrick Boyd."

Monitor engineer Becky Pell, who has used Digico for 20 years, adds: "On this tour, I'm using a Quantum 7. I have old outboard gear in the form of Neve 5045, which is useful for dampening PA spill into the vocal





microphones when the guys are on the B-stage, but I don't use any plugins. In my opinion, the onboard features of the Quantum provide everything I need. I especially like the Chilli and Naga processing in the Spice Rack to dynamically smooth frequencies on the vocals."

Skan also provided the immersive IEM mixing technology from Klang that Becky Pell requested: "I've used Klang on every tour I've supported since 2018: I have a Klang DMI card in every Digico and a pair of Mac Minis with a touchscreen controller and a switcher, so I only need one screen. The best thing about this tour, however, is that Take That themselves are extremely pleasant and professional to work with - true British pop royals with great songs."

With Clair Global's worldwide support, the "This Life" world tour will conclude this winter in Japan.

Crew

Tour Director: Chris Vaughan Production Manager: Wez Wearing Crew Chief/Monitor Technician: Liam Tucker FOH Engineer: Gary Bradshaw System Engineer/FOH Technician: Matt Besford-Foster ("MBF") PA Technicians: Eddie O'Brien, Patrick Boyd Monitor Engineer: Becky Pell Stage Technician: Sammi Goundry Skan PA Crew: Chris Fitch, Matt Vickers Take That Technician: Glen Fuller











The second symphonic journey

Following the great success of the first "Symphonic Live" tour in 2019, Mono Inc. was back on the road this year with "Symphonic Live - The Second Chapter", once again garnering maximum enthusiasm. Lighting designer Chris Schulz and sound chief Sören Lentz report.

In April/May 2024, five years after the first Symphonic tour, Mono Inc. embarked on another largely acoustic tour, enhanced symphonically, with a total of 18 shows, all of which sold out long in advance. The production, including the orchestra ensemble, was captured in both audio and video and has now been released.

Sören Lentz was responsible for the audio aspect of the tour, having accompanied the band for more than ten years in live productions. "The



concept and instrumentation of the show were created by Mono Inc. and No Cut Entertainment, while I handled the audio planning - of course, always in coordination with the band. After two days of preparation and rehearsals with our rental partner GrohPA, the tour kicked off", reports Lentz. The band desired a powerful yet warm, balanced sound. "Both the symphonic aspects (strings, piano) and the classic 'Mono Inc.' sound should come to the fore." Care had to be taken to ensure that the set pre-







dominantly featured quiet, contemplative songs that leaned more towards classical music than loud rock music. Additionally, a quiet singer was juxtaposed with a loud drum set and cellos, violins, and violas.

At FOH, Sören Lentz used an Allen & Heath dLive S5000 with Universal Audio Apollo for plugins, as well as two Genelec monitors. The microphone setup consisted of Audix microphones for drums (+ Sennheiser e901 boundary mic for kick in), and Sennheiser microphones for vocals: e935 for backing vocals and MD445 on a 2000-series wireless system for lead vocals. The band's monitoring was done using Sennheiser SR2050 in-ears. "I use Sennheiser's MD445 for lead vocals due to its narrow pickup pattern, meaning little bleed and background noise from drums, etc. They provide a strong, consistent sound with good speech intelligibility."

Chris Schulz explains his lighting design, which featured a somewhat more subtle illumination this time: "I had eight Ayrton Rivale profiles. The Groh PA company had just added them to their inventory and offered them to me - I agreed and am very satisfied: The LED lamp is really good." Schulz continues: "For me, it was important to have a varied gobos setup (e.g., for projection surfaces in churches). Additionally, the lamp should also be able to deliver a good beam when needed. Everything worked well."

Moreover, Chris Schulz used eight Astera AX9 via Lumenradio, with four for banner lighting and four as floor lights for singer Martin Engler and drummer Katha Mia. "The setup is quick to assemble, and there are no cables lying around in the front stage area."

The lighting was further enhanced by a mix of beam spots, LED washes, and blinders in the roof (back/mid/front), as well as four SGM P-5s for backdrop lighting and four LED washes for aisle lighting. "I ran the show through my Chamsys MQ500. The show ran completely on timecode except for front light/blinders/solos; I've been working this way with the band since 2015", says the lighting designer.

The biggest technical challenge of the tour especially for the sound - was the very different venues, classical houses, and churches with reverberation times of several seconds, which repeatedly led to varying PA situations. Sebastian Lippelt managed the backline. In 2025, the next journey for Mono Inc. is planned, but this time it will be louder and with more equipment. S C H N I C K S C H N A C K S Y S T E M S

Dot

Für besondere Aufgaben zum **Beispiel die Beleuchtung von** Acrylstäben oder das Kreieren harter Schatten und noch einige andere, benötigt man ganz besonders helle LEDs. Der winzige aber lichtstarke LED P-Dot kann unkompliziert installiert und sehr einfach angesteuert werden. Seine 4 LEDs, rot, grün, blau und weiß, wurden sorgfältigst ausgesucht, um die bestmögliche Lichtgualität zu erreichen.

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Brilliant sound on National Day

In its 12th edition, the "Concert de Paris" once again met the requirements of French broadcasting and the Eurovision network for sound quality in live sound reinforcement and transmission, thanks to Lawo's IP audio infrastructure, including mc2 96 and mc2 56 consoles.

This year, due to the Olympic and Paralympic Games also being held in Paris, the traditional Concert de Paris took place for the first time on the forecourt of the historic Paris City Hall (Hôtel de Ville). The National Day received special brilliance with the arrival of the Olympic flame and the lighting of a cauldron in the city.

The audio infrastructure from Lawo was managed by a team of experts from Radio France. At FOH, Nadège Antonini created the orchestra and FOH mix using a 48-fader mc_96 console, while Stéphane Thouvenin mixed the soloists and choirs on a 32-fader mc_56. Alice Legros served as the producer responsible for the overall FOH production. Stage monitoring was handled by Stéphane Desmons and Charles Bouticourt, who utilized a 32-fader mc_56 console with a 16-fader extender in a configuration with two separate control surfaces to ensure precise monitoring during the performance.

The setup included a redundant pair of A_UHD Core Audio engines, whose processing power was shared among the three consoles, as well as a redundant Ravenna network between FOH and the stage. A central home management cluster was employed to connect, secure, and manage the entire live production environment.

A Radio France OB van, equipped with a mc_66 MkII console, produced the clean-feed

audio signal for transmission on French radio and television, as well as for the Eurovision feed. Laurent Fracchia was responsible for the broadcast mix in the OB van (Control Room 5), while Arnaud Moral acted as the producer to ensure a smooth operation.

The evening was broadcast live on France 2 and france.tv and simultaneously aired by the EBU Eurovision in over ten countries. A large crowd gathered in front of the city hall to witness performances by the Orchestre National de France, the Chœur and Maîtrise de Radio France (conducted by Cristian M_celaru), as well as internationally renowned opera singers and soloists such as Lang Lang (piano), Nadine Sierra (soprano), Pene Pati (tenor), Gaëlle Arquez (mezzo-soprano), Khatia Buniatishvili (piano), Fatma Said (soprano), Gautier Capuçon (cello), and Renaud Capuçon (violin), along with special guests duo Thibault Cauvin & -M-(guitars).

The concert concluded with the arrival of the Olympic flame at the Parvis de l'Hôtel de Ville and the ceremonial lighting of a cauldron just before the start of the traditional fireworks from the Eiffel Tower and the Trocadéro Gardens.

As in previous years, the event reached around three million viewers on France 2 and many more listeners on France Inter radio. It was broadcast live in many countries worldwide via the Euroradio and Eurovision networks.

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From Robin Schulz to Toto

During the celebrations for National Day, the Luxembourgers were offered a diverse cultural program. As in previous years, the general service provider DLP Motive managed the City Sounds stage.

In the capital, the National Day celebrations began with the largest folk festival in the country, which included events such as the "Fakelzuch" (Torch Parade) and the traditional fireworks display. After that, visitors had the opportunity to celebrate until the early morning hours at concerts and festivals of all kinds, held on the terraces of cafés or on specially erected stages in all neighborhoods.

On the City Sounds stage at the Glacis, where artists like Robin Schulz, Morcheeba, and Toto performed, DLP Motive ensured for the third time that the concerts could be presented in the best possible audiovisual manner. Since its founding in 2007, the company has completed around 400 projects each year. "As a full-service technical service provider with many years of experience, we not only offer a complete package of design, logistics, and production for events of all sizes but also a rich rental offering in the areas of lighting, sound, video technology, and rigging", says Managing Director Torsten Hagedorn.



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"Without cables, it doesn't work"

Showtime Sound recently produced the US tour of the Nordic folk band Heilung. They were joined by partners like L-Acoustics, Absen, Tyler Truss Systems, and Sommer Cable.

Heilung is known for their impressive and audiov visually stunning shows, transforming their performances into a mystical journey through ancient Nordic mythology. The trio, consisting of Kai Uwe Faust, Christopher Juul, and Maria Franz, combines music and poetry live with their band. Their work is based on Nordic sagas set in a mysterious forest and Viking environment. Showtime handled the entire organization of the US tour, which included stops at the legendary Red Rocks Amphitheater in Colorado and the Riverside Theater in Milwaukee.

For this elaborate tour, Showtime once again relied on trusted partners, including L-Acoustics, Absen, Tyler Truss Systems, and Sommer Cable, to meet the high demands of the production. Marc Chauvin, technical director at Showtime, explains the choice of cabling: "When selecting our transmission systems for audio, lighting, and video, we place great emphasis on reliability and top quality. Every show presents us with new challenges, which is why we rely on proven partnerships - like the one with Sommer Cable."

In their impressive theater shows, Heilung uses various amplified traditional Scandinavian instruments. The songs are sung in historical languages such as Old Norse, Old English, and Old Saxon. Since their founding in 2014, Heilung has also made a name for themselves internationally, performing in concert halls and open-air arenas for more than 10,000 spectators.



Sommer Cable is an indispensable partner for Showtime at large events like this. Kyle Shearer (pictured), Production and Design Technician, explains: "For the setup and integration of our systems, we use the Mercator CAT7 series from Sommer for multi-channel Ethernet-based snake solutions. Typically, we use single-channel, dual-channel, and in this case, four-channel versions, which allow us to seamlessly cover distances of up to 125 meters. These solutions are not only important for our daily production needs and our touring clients but also form the bakkbone for complex events like Heilung's concerts. Without excellent cables, it doesn't work; they are crucial for all aspects of production."





Dream, love, rock

Judas Priest, alongside Black Sabbath, are the "inventors" of heavy metal, and they toured Europe with Uriah Heep and Saxon on the "Invincible Shield Tour". Here's a conversation with Charlie "Cosmo" Wilson about his lighting of sign and working with the band.



















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The well-known designer and programmer Cosmo Wilson, who has been responsible for the lighting for AC/DC for decades (!), has been a fan of Judas Priest since his teenage years. Later, as he embarked on his professional career, he dreamed of one day lighting up his heroes. However, as a sought-after lighting designer, his schedule was always so full that it never came to fruition.

Around the year 2000, he heard that Judas Priest was looking for a designer and threw his hat in the ring. His good friend Tom Horton got the job. Although he was disappointed, Wilson was happy for him and went on to light up several other bands, including the Scorpions, who toured with Judas Priest.

Nineteen years later, Wilson received a call from Horton, who said he was leaving the band and asked if Wilson would be interested in taking over the job. The two friends met in Florida and programmed for two nights. Then came the first show at Hard Rock in Hollywood, and Cosmo Wilson was in his element, living his dream. Since then, Judas Priest has been able to enjoy his explosive light shows, which he creates for the iconic band.

You had a great time with Judas Priest. If you had to sum up your experience with the band in three words, what would they be?

Dream, love, rock.

What surprised you the most when you got to know the band better?



How absolutely nice, friendly, and down-to-earth they are. It's crazy when you meet your idols and realize they are just normal people. Extremely talented, but normal. We greet each other warmly every day on tour, which I could never have imagined.

You have been lighting artists for some time now. Looking back on your experiences, what has prepared you the most to light Judas Priest? Which artist is most similar to them in terms of lighting?

I'm lucky to light bands like Judas Priest because they come from the PAR can days. There's a certain feel that comes from incandescent bulbs that needs to be successfully transferred to modern intelligent lights. You have to operate them the old-fashioned way. So, I still control my lights like a PAR can rig, and bands like Judas Priest notice that. For me, it's about timing, but even more about the dynamics of cue operation. Even though I have programmed the looks, I still control the lights by feel because I find that more authentic.

How do the fans at Judas Priest concerts differ from fans of other bands you have lit?

They are all similar, but as Rob Halford (the band's frontman) calls them, they are the "metal maniacs". The band and the fans see themselves as part of the "heavy metal community". Judas Priest loves the fans, and the fans love Judas Priest.

Does the band participate in the planning of the lighting? Do





they make suggestions to you?



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interview



It works like this: Martin Walker, our production manager and FOH sound engineer, discusses new design ideas and logistics with me. Then he presents these ideas to Rob Halford, after which we try to incorporate his feedback and refine the design. The result needs to look good and be easy to transport and set up daily - mainly for financial reasons. When I started controlling the lights in 2019, I went to the dressing room after a few evenings post-show, and Rob looked at me and said, "Cosmo, I feel it! I feel the difference! Where have you been all my life?!"

What is the biggest challenge in lighting Judas Priest?

The show needs to look just as good as their music and performance; I need to hit the cues perfectly. For me, there's really no significant challenge; however, sometimes I wish I had more time to program more looks for the show. Since I've been a fan for so many years and know every song inside out, I can practically "see" the cues I want to set. I spend as much time as possible on every setup beautifying the show and making it better than the last one. I'm afraid that will never stop...

What is the best thing about lighting this band?

When I first heard "Breaking the Law" in a club in New York in 1980, I was blown away but didn't know who it was. When the DJ told me it was Judas Priest, I didn't believe him. Until then, I only knew Judas



Priest from "Hell Bent for Leather" and "Unleashed in the East", and I wasn't prepared for this change. I then bought every single album - everything before I became a lighting designer! Although I dreamed of lighting Judas Priest, I never thought it would actually happen - until one day it did. Every night during the show, sometimes even multiple times during the show, I get the biggest grin on my face and say to myself, "I was born to work as a lighting designer for Judas Priest".

During the current tour, Wilson started programming for the European tour in March but had to go to AC/DC in April to program their tour. In the meantime, Martin Brennan took over his job at Judas Priest. As always, Judas Priest delivered an energy-filled show, with guitarist Glenn Tipton, who suffers from Parkinson's disease, participating via video playback. Tipton last performed live in March during an encore in London.

Setlist: Panic Attack/You've Got Another Thing Comin'/Rapid Fire/ Breaking The Law/Riding On The Wind/Devil's Child/Sinner/Turbo Lover/Invincible Shield/Victim Of Changes/The Green Manalishi (With The Two Pronged Crown) (Fleetwood Mac)/Painkiller – The Hellion/ Electric Eye/Hell Bent For Leather/Living After Midnight















Every year again

Meyer Sound was the exclusive sound partner for the Roskilde Festival in Denmark for the seventh consecutive year a few weeks ago. This year, 200 shows took place on seven stages - all fully equipped with Meyer Sound systems. Headliners included Foo Fighters, Doja Cat, 21 Savage, SZA, Skrillex, and Jungle.

Every year, Roskilde transforms into a hub of music, art, and culture for one week, welcoming more than 130,000 concertgoers. However, socially significant topics such as climate change and human rights are also gaining more prominence. To date, the nonprofit Roskilde Festival Charity Society has donated more than 59 million dollars to social causes around the world.

Meyer Sound and the Roskilde Festival team share many common goals in their partnership. "It's always something special to be a part of this festival and to provide visitors with a fantastic experience; we always give our best for that", says Helen Meyer, Senior Vice President at Meyer Sound. "At the Roskilde Festival, we work directly with Meyer Sound", explains Production Manager Lars Liliengren. "We talk openly about the system design and collaboratively design the ideal system for each stage."

Katharine "Katie" Murphy Khulusi, Director of Loudspeaker Development at Meyer Sound, confirms: "It's a really good collaboration: We come here with our team of engineers and scientists, can experiment, try out different settings, and continuously improve ourselves."

This year, more than 750 Meyer Sound speakers were in use, provided by the Danish company Victory Event, Stage & Tour. On the enormous Orange Stage alone, 276 speakers were installed, including 78 Panther line-array speakers. "The stereo image of the Panther was wide and sounded excellent", says Migui Maloles, who was responsible for mixing Doja Cat on the Orange Stage. "The system matched perfectly with Doja Cat's music mix of hip-hop, rock, and pop: This music requires a lot of pressure in the lower range - no problem for Panther. I had a great time working on it." The Arena, Apollo, and Avalon stages were also equipped with the system. Meyer Sound systems made up of Leopard, Lina, and Lyon speakers were installed on the Gaia, Gloria, and EOS stages. This year also featured a special highlight: For the first time, the new 2100-LFC lowfrequency control element was present at the festival, working alongside Panther to sound the Arena, Apollo, and Avalon stages.

With a total area of more than 2.5 square kilometers, the Roskilde Festival faces an acoustic challenge every year, which primarily involves controlling the mutual sound coverage of the seven stages and suppressing overlaps as much as possible. In particular, the sound for the Arena Stage - a massive tent stage measuring 84 meters in length and 80 meters in width - presents a challenge, especially with the FOH located at the back of the tent.

"The tent's waveform and the hard plastic surface make the acoustics complex. They create a reverberation that needs to be managed. Therefore, we have developed various options for 2024", explains Liliengren. "The solution lies in directing the sound downward", adds Bob McCarthy, Director of System Optimization at Meyer Sound, who is responsible for system design and tuning in collaboration with the festival crew.

For 2025, the Roskilde Festival plans some innovations. A new, larger version of the Orange Stage with improved load-bearing capacity is already confirmed to accommodate more complex stage productions and larger sound systems. More will follow. John Meyer, President and CEO of Meyer Sound, states: "The Roskilde Festival wants all visitors to feel warmly welcomed. And the team manages to achieve this every year anew."









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Fly, dragon, fly

An area the size of 500 football fields, 100 stages of all types and sizes, and more than 200,000 visitors - the Glastonbury Festival in England is a gigantic open-air event. At the end of June 2024, not only top acts like Coldplay performed, but also various companies participated, including Adam Hall, Avolites, Chamsys, Chauvet, Martin Audio, Robe, Video Illusions, and XTA. The technical highlight this year was the oversized "Dragonfly".

As expected, the lighting and sound at Glastonbury could be seen and heard this year. However, the technical highlight was something else: Instead of the flame-throwing and laser-laden spider that has been an established Glastonbury gimmick for fifteen years, Arcadia revealed a dragonfly at this year's festival - the Dragonfly. This sculpture, built from a retired military helicopter and scrapped excavators, served as a stage for (DJ) artists such as Fatboy Slim and Eric Prydz. The head of the Dragonfly featured a pair of glittering faceted eyes shaped from a Tangram matrix of video screens. The company Video Illusions, a long-time partner of the Arcadia team, was commissioned to design and manufacture a custom LED panel with an almost invisible structural frame and control.

The specifications also required the screens to be flat, IP-certified, and semi-transparent in hexagonal and pentagonal shapes, allowing them to connect with one another. The goal was to replicate the solid form of the dragonfly's faceted eyes while enabling a transition from an opaque to a transparent surface to make the DJ inside the head of the Dragonfly visible.

Dave Whiteoak, Managing Director of Video Illusions, and Ben Rushton-Vaughan from Cucumber Productions designed a waterproof LED panel that was only 4 millimeters thick. The 4-mm pixel spacing allowed for the semi-transparent effect that Arcadia's co-founder Bertie Cole and Pip Rush were seeking. The irregular curvature of the structure and the modular nature of the screens created the organic shape of the Dragonfly-'s faceted eyes. Katie Davies was the technical production manager for Arcadia at the Glastonbury Festival. CPL provided four Barco-UDX31k projectors that handled the projections on the belly of the Dragonfly. Rushton-Vaughan led the video system and was responsible for all technical aspects. "I created the UV maps in Maxon's Cinema 4D before importing them into the Avolites Ai servers", he explains.

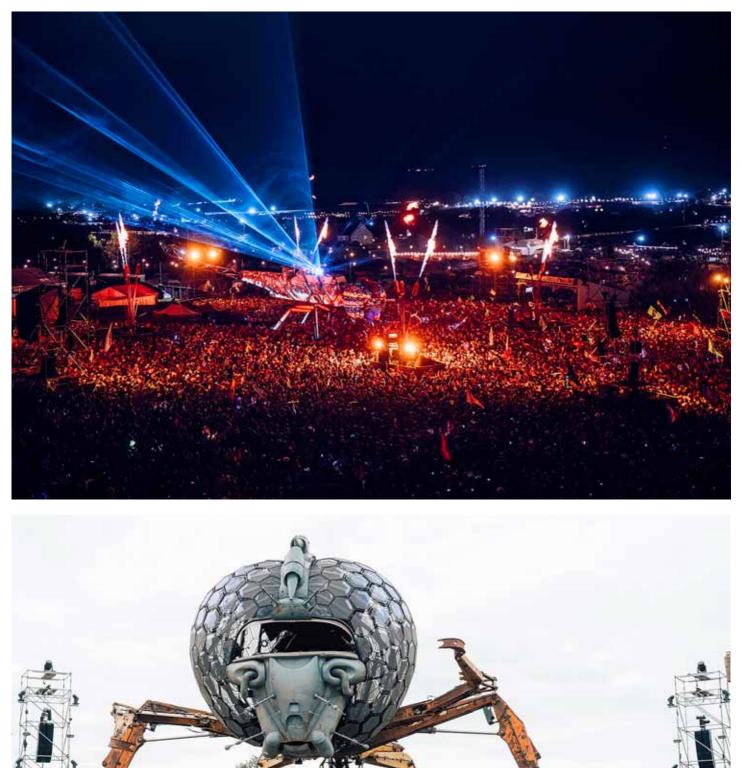
Visual Art Director Joe Crossley and his team from Astral Projekt designed and created the video content using Touch Designer and Unity. Dave Cohen, lighting designer from Mirrad, provided the Avolites Synergy system with Ai-QGen servers operated by Arran Rothwell-Eyre from Avolites. The legs of the Dragonfly were pixel-mapped in an Avolites D9-330, which took video signals from the Ai server via Synergy, thus extending the video screen.

The video content was fed into the Ai servers via NDI, which livecombined the two sources from Astral Projekt. These were then remapped according to Rushton-Vaughan's UV map and output to the 178 hexagonal and twelve pentagonal screens, as well as the projectors. A timed show program ran once a night, with pre-rendered content played directly from the Ai servers. To ensure clear communication across the entire site,











Video Illusions installed a 360-degree CCTV system. This provided all technical programmers and operators positioned at various locations around the stage with the desired images.

Multi-view monitors were positioned in the body of the Dragonfly, in the dimmer world, and at FOH, all running via HDMI over fiber optics and HDMI DAs back to the control.

Lighting

The lighting for the Dragonfly included six iBolts and twelve iPointe65 from Robe. More than 200 fixtures illuminated the Arcadia Arena. Lasers formed the wings of the giant dragonfly. The show also featured a selection of fire effects. The sculpture "awoke" each night at 11:30 PM for a 9-minute show called "Warraloo", developed by Arcadia in collaboration with the Wadjuk Noongar Nation from Western Australia, based on the dragonfly's metamorphosis cycle.

This was followed by a lineup of DJs and artists performing during the three main days of Glastonbury. Their booths were located in the cockpit of the helicopter or in the head of the Dragonfly.

The six iBolts were mounted on eleven-meter-high truss towers around the arena, directing their beams into the night sky, making Arcadia visible from all corners of the festival. The iPointe65 were on four inner pods surrounding the Dragonfly. Each pod featured burning reed sculptures made from recycled metal parts and crane booms. The iPointe65 were mounted beneath the pods and served as architectural lighting for the reeds while the pods were used by performers during the show.

The lighting design was controlled by Sam Werrett (also from Mirrad) using an Avolites D9 console. The lighting team included James Bunning, Jake "Sharkie" Cawkwell, Stu Barr, Nat Archer, Charlie Knight, Rupert de Renzy-Martin, and Jack Coffin. The three technical assi-



stants, Sinead Brooker, Becky Winrow, and Tyler Haines, supported the team.

A special area for many years has been Shangri-La - a festival within a festival dedicated to creativity, art, and underground culture. There lies the Nowhere Stage, where fans of electronic music feel like they're in a club. James R. Dickson was responsible for the lighting design, operation, and provision of lighting technology on the medium-sized stage with his company Elixir Lighting Ltd. He opted to use Cameo Otos H5 and Zenit W600 SMD.

"Our task was to create a nightclub in the middle of a green field", says Dickson. "We placed the fixtures not only on the stage but also at the sides of the audience area to enhance the dynamics of the dancing people." For Dickson, the Cameo Otos H5, an IP65 beam-spot-wash hybrid moving head, played a central role: "We use it for beams, washes, and gobos - whenever dynamics and movement were required."

Dickson arranged the Otos H5 in pairs at the sides, each interrupted by a Zenit W600 SMD outdoor LED wash light used for strobes and wash effects. From here, the two Cameo models shone both into the audience and onto the square matrix of 225 tube lights (15 x 15) above the heads of the audience.

However, extensive material from other lighting manufacturers was also in use: Chauvet's Color Strike M played a key role in Coldplay's show. The IP65-certified fixtures provided by Upstaging were placed throughout the rig by LD Shaheem Litchmore. Among the guests at Coldplay was actor Michael J. Fox, who accompanied the band in a wheelchair and performed a moving version of "Fix You" on the guitar. The performances by Coldplay and Fox can be found on YouTube.



During Dua Lipa's show on the Pyramid Stage, Chauvet's Colorado PXL Curve 12, supplied by LCR, were positioned along the contours of the stage and the thrust deck. The LD here was Matt Pitman. 174 Strike







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Array 1 blinders, this time supplied by GLS, supported Michael Kiwanuka's performance.

Control

Chamsys consoles and PC wings were found almost everywhere at Glastonbury: Patrick Sollitt, who accompanied Paul Heaton's show, used a Magic Q MQ500M stadium console, as did Anthony Hazelden, who controlled the lighting for Burna Boy's gig on the Pyramid Stage.

In the Big Top Circus Tent, lighting designer James Loudon used a Magic Q MQ500M together with a Magic Q MQ70 and a Genetix GN5 node. Chamsys supplier was Fineline Lighting. At the Flying Bus Stage, another MQ500M and a 500M wing from GLX Productions supported the show.

Ed Warren worked on the Pyramid Stage with operator Amy Barnett to control the ground set provided by GLS using a MQ500M stadium console during Michael Kiwanuka's show. Warren used Chamsys products at a total of six different locations, including the art installation Car Henge, where he collaborated with Will Thomas, and for the Sugababes on the West Holts Stage, where Kristina Jazykova operated a MQ500M.

On the Levels Stage, SR Production Services provided a MQ500M+ stadium console and four Genetix GN10 nodes for lighting designer James Newmarch. The MQ250M was also present on the new Wishing Well Stage, where David Howard was responsible for the lighting design.

On the Lonely Hearts Stage, SR Production Services provided a MQ250M for Kai Mcilquham. Luke Adams controlled the lighting for the gigs on the Hive Stage with a MQ250M. On the Peace Stage, LD Harry Merrison used a console provided by PF Events. At Glasto Latino, Mass Affect Lighting created the looks.

South West Group Events used a Chamsys MQ70 console and an extra wing on the Left Field Stage. For Annie Mac's set in the Stonebridge Bar, LD James Dickinson also used an MQ70. On the Avalon Stage, a Chamsys PC wing was used for Kate Nash, and a MQ500M for The Cat Empire. The Chamsys Quick Q 20 was also in use, supplied by BSM on the Glebe Stage.

Sound

In terms of sound, SWG Events has continued its long-standing partnership with the Glastonbury Festival and once again used Martin Audio systems in several areas this year. The six-part WPS system and eight SX218 speakers were deployed on the BBC Introducing Stage, where they functioned as L/R stacks powered in a 2-box configuration by Ikon amplifiers. Four Blackline X8 units served as front fills, while a pair of Torus T1230 acted as out fills. LE1500s were used for artist monitoring, supported by SX118 subwoofers.



The headliners on the Woodsies stage were Gossip, Jamie xx, and James Blake, with a surprise appearance by the "secret act" Kasabian being another highlight. Simon Purse deployed a full WPL system (twelve per side) in a 2-box configuration, featuring a split L/R ground-stack subsystem made up of twelve SXH218 units. The system was supplemented with eight WPC units as front fills. Four Torus T1215 side fills (two per side) were used for stage monitoring, along with two cardioid SXC118s and a set of XE500 monitor wedges.

On the Park Stage, W8LC speakers (twelve per side) and W8LCD down fills (two per side) were utilized, accompanied by sixteen WSX218 in L/R stacks. The stage package included twelve XE500 monitors with SX118 subs. At Leftfield, a stage combining pop and politics, the focus was more on amplifying spoken word performances. Here, Martin Audio's W8LM (eight per side) was deployed, flown from a goalpost truss system. Twelve LE12J wedges were available for artist monitoring.

Overall, a large team from Martin Audio was present at Glastonbury: on the Woodsies stage, Sam Jones (FOH), Xav Booth (FOH Tech), James Marsh and Dylan Jones (patch), as well as Oliver Haward (monitors) and Tom Malin (monitor tech) were working. The team on the Park Stage included Joe Bailey (project manager), Adam Andrews (FOH), Ian Williams (systems), Fraser Wilks, Tom Baxter, Laura Evans, and Ieuen Fishburn (patch), along with Will Fisher (monitors) and Kieran Jordan (monitor tech). On the BBC Introducing Stage, Dan Jenkins (team leader/patch), Jack Kenyon (FOH), Harrison Burdon (monitors), and Callum Jones (patch) were involved.

XTA and MC_ amplifier systems were also strongly represented at the Glastonbury Festival 2024. On the Glade Stage, Stefan Imhof from Audio Plus used DPA100 to operate a Function-One FOH system and monitors. In total, seventeen DPA100 units powered the Function One Vero, Vero VX, F124 subs, front fills, and side fills, while another twelve units operated the monitors, all controlled via the Globcon XTA-MC_ Edition control software.

RG Jones, in collaboration with 22live, provided all the sound equipment for the West Holt Stage, with Paul Hatt from CS Audio supplying 48 channels of splits via XTA DS8000 (2U, eight inputs to 32 outputs microphone/line distribution system) between monitors, FOH, and broadcast. An MX36 console switching system was used throughout the site, including the Glade and Acoustic stages. EM Acoustics supplied all the equipment for the Acoustic Stage, which was operated by Tom de Brabant.

The next Glastonbury Festival will take place from June 25 to June 29, 2025, in Pilton, Worthy Farm (England). Editorial suggestion: The theme of sustainability could be highlighted by reactivating the Iron Maiden plane, the Motörhead bomber, and the scorpion from Hanover, technically upgrading them analogously to the dragonfly. However, this would make Glasto more of a Monsters Of Rock...

www.glaston bury festivals.co.uk

et

EM FAN ZONE

Location: Brandenburger Tor, Berlin Company: Stageco

Specification: The fan zone at the Brandenburg Gate was created with an installation featuring a gate 63 meters wide and 21 meters high, along with 24,000 square meters of artificial turf on the Straße des 17. Juni, serving as a striking photo bakkdrop. For this, employees of Stageco Germany constructed various structures in front of the Brandenburg Gate, including the substructure for the enormous video wall (24 x 12 meters). The stage was supplemented by ten delay towers serving as support structures for sound and lighting technology, as well as two large grandstands for VIP guests and media representatives.

EURO OPENING

Location: Flößerbrücke, Frankfurt Company: Bright Studios, Elation Specification: Shortly before the start of Euro 2024, a show transformed the Flößerbrücke over the Main River, which was draped in the colors of the 24 participating nations for the duration of the tournament, into a giant musical instrument for around 25 minutes. Lighting designer Thomas Giegerich used 96 Proteus Excalibur, 48 Proteus Maximus, and 48 of Elation's new linear lighting solutions Pulse Bar L to bring the concept visually to life. The concept's starting point consisted of colored fields attached to the bridge that moved to the rhythm of the music.



BONIFATIUS

Location: Domplatz, Fulda **Company:** Satis + Fy Specification: In August 2024, the musical production "Bonifatius" returned to Fulda for eight shows. General partner Satis + Fy relied on proven solutions in the fields of technology and scenic design. Four projectors with a power of 40k ANSI lumens were used once again. The tower stage from Megaforce impressed with a width of 60 meters and a performance area of 300 square meters, along with 600 square meters for the choir and orchestra. The PA system was provided by L-Acoustics. The production utilized 105 speakers and approximately 300 spotlights.





MYTHOSRAUM

Location: MB-Museum. Stuttgart Company: TLD, Mad Music Specification: Just before the turn of the year 23/24, the Mythosraum "Silberpfeile - Rennen und Rekorde" at the Mercedes-Benz Museum received a comprehensive lighting update. TLD planned this renovation, which was implemented by Mad Music lighting technology. The project included the installation of new LED lighting, including signal and network technology. For this, TLD selected lighting designer Alexander Orkisch and the KL Par FC from Elation. Mad Music installed 129 of the compact full-color LED spotlights while the museum remained operational.



EURO-ROADSHOW

Location: nationwide Company: Meevi-Rent Specification: Meevi-Rent provided complete power supply for the football tour to Euro 2024. Almost every game saw three teams traveling to ensure the setup of power supply, onsite support, and dismantling during the nationwide roadshow in 21 cities. The Stuttgart team relied on three generators of 150 kVA each. Additionally, each location required a Powerlock distributor, 100 meters of CEE 125 A cable, and various distributions. Power generation was carried out with Atlas Copco 150 QAS generators.



WOA TV

Location: Wacken Open Air Company: TVN Specification: For the 33rd Wacken Open Air, the TVN teams also brought the broadcast trucks TVN-Ü5 and TVN-Ü6. On 240 hectares, 85,000 people celebrated. To make the event accessible to fans who could not secure a tikket, the program highlights were not only broadcast on the video walls of the stages but also streamed online. In 2024, TVN produced a festival live stream featuring performances from the "Faster & Harder Stage" and the "Louder Stage", which could be viewed for free on Magenta Musik.de or Magenta TV.





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etlast but not least

Why pre-sales are so important

Recently, the media reported that revenue in the music industry has risen significantly again. That is true, but the large pie is spread thickly across very few. For smaller to mid-sized acts, the struggle for survival in music remains tough. This is what Christina Lux believes. Reflections from the perspective of a musician with heart and soul.

It takes incredible nerve and confidence to go through with planned gigs, especially since pre-sales often only happen at the last minute. I hear this particularly from the musicians around me. Without a strong, established fanbase, it's no longer feasible nowadays. And here, every ticket counts – preferably sold in advance.

What does not work is leaving the promotion of performances solely to the organizer and hoping something will happen. I spend a lot of time repeatedly promoting my concerts on my channels. My newsletter is my treasure. Promotion is extremely important - also from the artist's side. However, one struggles with the ever-shrinking opportunities in the daily press.

It's clearly noticeable that the cultural sector is becoming narrower, unless you are a superstar. And sometimes, you read a concert review and think that someone clearly doesn't know what they're doing. However, it's becoming increasingly rare for anyone to attend and write something after a concert. As everywhere, there are certainly exceptions and great highlights here, no question about it. Thanks for that!

The share of streaming revenue worldwide is 80%, while physical media account for 18%. Of 11 million artists, about 200,000 who upload music to Spotify receive 95% of all revenues. Additionally, there is the pro-rata system, which rewards those with high market shares more. Streaming generates only 0.003 per stream, meaning 1,000 streams correspond to 3 that ends up with us. It's easy to calculate how incredibly many streams one would need to earn a little money with this form of music distribution.

So concerts are the elephant in the room on which everything stands

Thanks to the monopolies of companies like Eventim, Live Nation, and Ticketmaster, and their strange practices like dynamic pricing, ticket prices for superstars have skyrocketed. As a result, there is often not much room left for smaller concerts. Often, I think: Why are people paying so much? Apparently, being there is everything. We live in a time when these mega-events are becoming increasingly gigantic, so much so that even the "grandma" sometimes shakes her head.

I would now clearly say: Every ticket counts at small and mid-sized concerts. And every ticket purchased in advance greatly reassures the soul. So what can I do as an artist? Not much, except appeal to the art of artist protection, as this supports us and continues to enable us to tour. I often discuss ticket prices with the organizers. Because I can't get by with tickets under 20 either. This is also not easy for people with low incomes but is unavoidable. Rising costs for clubs and crews have further tightened the situation.

In the end, most of the great places where I and others in my musical circle perform are run by volunteers. I repeatedly experience so much wonderful passion there. My heartfelt thanks for this wonderful work! Here we come to the next problem: Most of the cultural associations where I perform have been around for 40 years or longer. It is foreseeable that one after the other will stop because there is no new generation. Many of today's operators and organizers of these smaller venues are now themselves between 60 and 70 years old. Without volunteers, there would probably be only a very limited number of diverse cultural offerings.





What musicians can do

I gladly share concerts of my esteemed colleagues because spreading the word simply helps. Additionally, there are loyal listeners who consistently share concert dates. At the concerts themselves, I always make a clear statement about how important pre-sales are and also set the record straight regarding streaming. This can be packaged very charmingly, as many ,users" have no idea what streaming ultimately means for those who created the music.

What visitors can do

If possible, please don't wait until the last minute to buy a ticket. It genuinely costs nerves and often leads to cancellations because you simply can't predict whether the evening will be profitable. Before Corona, we knew approximately a month in advance what was going on, but now we know it a week in advance or not at all. Depending on the level of costs, you have to decide whether to take the risk - or not.

Here are some helpful links:

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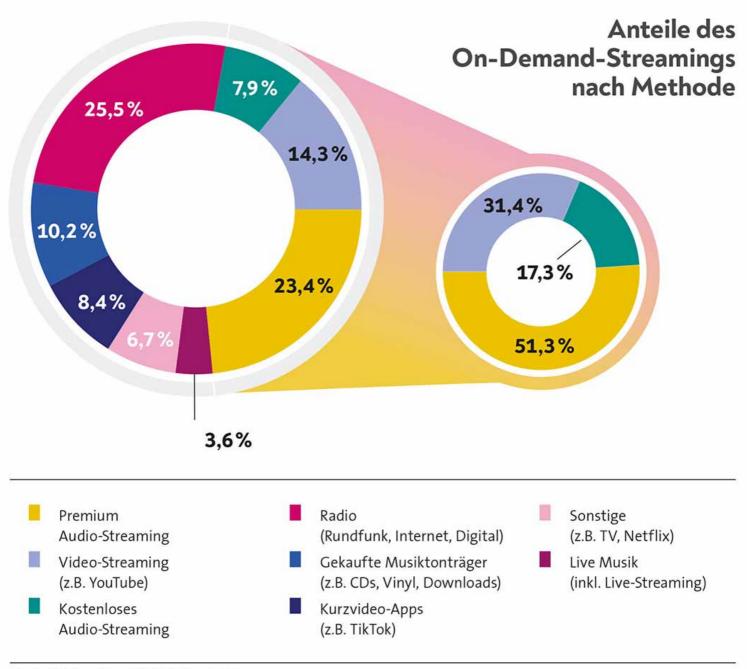
In summary, I truly hope that things will continue. With you, together, with one another. Feel free to contact me directly.

Christina Lux, born in 1965, is a German musician, singer, guitarist, and composer from Cologne. She has been active as a musician since 1983, initially in local rock bands, later in various jazz formations, and has been creating her own music since 1988. In 1989, she toured and recorded as a backing vocalist with Purple Schulz, David Torn, Edo Zanki, Laith al Deen, among others. Her latest album, "Live de Luxe", released in October 2023, is her 11th album, which she recorded with Oliver George. More information can be found at www.christinalux.de, personal contact: info@christinalux.de.

Hörgewohnheiten in Deutschland

in einer typischen Woche

Prozentuale Anteile an der Gesamtzeit des Musikhörens



Quelle: IFPI, Engaging with Music Report 2023

From idea to final song

Yamaha presents Seqtrak, a standalone tool for music production featuring a step sequencer, drum machine, two AWM2 synthesizers, an FM synthesizer, a sampler with recording capability, an effects section, microphone, speakers, and a built-in battery.



+++Giveaway+++

An extensive and continuously growing sound library and a cleverly designed, very intuitive workflow make Seqtrak the perfect travel companion and an indispensable creative tool for studio, stage, and on the go. The sound can be extensively adjusted directly on the device. Even more possibilities are offered by the free Seqtrak app, which allows detailed adjustments of all parameters.

Due to its extensive features, Seqtrak is ideal as a travel companion for musicians and producers who want to capture ideas wherever they are. The foundation of music production is the sequencer with its dynamic and intuitive control options. For each track, there are six pattern slots that can be switched between to add more variety to the music.

The first section consists of the drum section with seven tracks: kick, snare, clap, two hi-hats, and two percussion sounds. Each of these tracks can be filled with high-quality sounds from the extensive library. The sound library currently includes over 2000 sounds and will be further expanded with additional sound packs in the future. It is also possible to load samples from other users via the Seqtrak app. These sounds can then be arranged on the step sequencer with up to 128 steps, with 16 being displayed on the corresponding keys.

In addition, there is an impressively sounding synthesizer section. Three synthesizers and a sampler can be used simultaneously. The first two synths utilize Yamaha's versatile AWM2 engine with 128-note polyphony. The third synthesizer, named DX, brings back the characterful sounds of the classic Yamaha synth with a four-operator FM engine. All synthesizers can be switched between mono, poly, and chord modes to meet the application requirements.

Seven keys are available for playing melodies or chords and can be adjusted in terms of scale and root note. In keyboard mode, the keys of the step sequencer become a chromatic keyboard. There's even an arpeggiator included. The sampler assigns a sound from the library to each of the seven keys. Alternatively, Seqtrak can record and sample its own sounds, either from an external source, via USB, resampling, or with the built-in microphone.

The range of possibilities is impressive given the compact form factor. All preset sounds from Yamaha can be further edited in the sound design area. Parameters such as pitch, volume, pan position, attack, decay, or filter can be adjusted depending on the selected sound. Additional options are opened up by the effects section, which also allows for reverb, delay, modulation effects, and more. Distortion for a kick or compression for the entire mix - everything is ready. No additional devices are needed: complete songs can be produced on Seqtrak from the idea to the final sound design.

The Seqtrak app offers even more extensive adjustment options and provides access to all parameters of the effects, drums, and synthesizers. The app even includes a visualizer for the user-friendly creation of interesting videos where animated objects respond to the music.

ET.Now is giving away one of these little allrounders. To participate, simply send an email with the subject "Seqtrak" to sk@etnow.de don't forget to include your sender information! The deadline for submissions is November 30, 2024.

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Editor-in-chief Stephan Kwiecinski (v.i.S.d.P.) sk@etnow.de

> Editors Julia F. Kwiecinski Laura M. Kwiecinski

Photos Ralph Larmann Stephan Kwiecinski Louise Stickland

Pierre Bendayan (AES Audio Conference), Jan Blieseke (St.-Marien-Kirche Wittstock, Nat. Hist. Museum Kyrgyz Rep.), Dirk Böttger(Gasometer), Bremgaertner-Karlson (Mercedes), Marc Brenner (Sunset Boulevard), Nikolai Brenner (Jahnplatz Bielefeld), Markus Bukhardt (Blue Days), Howie Choo (Beckhoff-Kinetic Rain), Paul Clarke (Noah Kahan), Chris Cooper (Robe-Team Glastonbury), Martin Cundy (Glastonbury), Anne de Wolff (Christina Lux), Donna+DerBlitz (BTT), Marco Döppke (Gasometer Berlin), Matt Eachus (Glastonbury), Daniel Foltin (Jamie Dunn), Jordi Galderic/Casademont (Tim Burton), Paul Gärtner (Labor Tempelhof), Sarah Ginn (Glastonbury), Great Wolf Resorts (Beckhoff-LA Pro Point), Ed Gregory (Flyover), Marvin Ibo Güngör (Nüssli EM-Tribünen), Jochen Günther (Prolight + Sound), Olivier Hannauer (CNIT), Michael Heck (Sennheiser Spectera), Fabian Heigel (Jonas Michaelis), Wolfgang Helm (BOE), Steven Hendrix (Tim Burton Exhibition), Samir Hussein (Coldplay + Dua Lipa Glastonbury), Werner Huthmacher (Landtag Rheinland-Pfalz), Jansenberger (Rathaus Wiener Lichtspiele), Steve Jennings (Justin Timberlake), Péter Just (Beckhoff-Muepa Budapest), Jörg-Mark Kasassoglou (Sommer Cable), Felix Kästle (Lichtdesign-Preis I D des Jahres) Jens Kirchner (Innodom Köln) Anja Köhler (Beckhoff-Seebühne Bregenz), Sandra Kosel (Raimund Theater), Christian Kruppa (Gasometer Berlin), Kai Kuczera (Coldplay), Frank Lambrechts (Black Eyed Peas), Moritz Leick (Gildehoftunnel Essen), Philipp Lipiarski (Arri Wien), Eileen Maes (Verena Krämer), Joan Marcus (Beckhoff-Hudson Scenic Studio), Roman Marmor (Raimund Theater Renderings), Céline Matous (Tim Burton), Christof Mattes (René Tumler), Morris Mac Matzen (Joachim Benoit), Myrzik+Jarisch (Cannyboard), Ogando (SR), Pete Redel (Heilung), Michael Reiner (Novartis Pavillon Basel), RHM Productions (Take That), Maximilian Roeder (Arri Wien), Maggie Schaefer (Coda), Julia Schambeck (Stadtbibliothek Mönchengladbach), Sebastian Schels (Zwingerpark Offenburg), Katharina Schiffl (Phantom der Oper), Sophie Schwarzen-berger (Felix Brückner), Jay Stone (Take That), Studio Blikkfang (Lava Studio), Isabel Talenberg-Plümacher (Oberpollinger München), Aimee Todd (Liam Gallagher), Deen van Meer (Phantom der Oper), Ruedi Walti (Wellness Hostel 3000 Laax), Alex Waltke (Marcel Mothes), Jörg Werschnitzky (Labor Tempelhof), Thomas Wolf (Gasometer)

Design & Layout Stephan Kwiecinski · sk@etnow.de

Advertising & Coordination Claudia Kwiecinski · ck@etnow.de Elke Petrick · ep@etnow.de

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