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LAS VEGAS OMNIA

THE EDM SCENE IN THE US CONTINUES TO THRIVE AND ITS ENTERTAINMENT CAPITAL, LAS VEGAS, IS AT THE EYE OF THE STORM. CLUBS ARE GETTING BIGGER AND REPORTED DJ FEES ARE MORE SWOLLEN THAN EVER. OMNIA RECENTLY JOINED THE PARTY - ALL 75,000 SQ FT OF IT AT CAESERS PALACE.



LAS VEGAS, USA
THE AMERICAS

In a very short space of time, Hakkasan Group has established a name for itself in nighttime entertainment. Having expanded on top of a collection of high-end restaurants following its strategic partnership and subsequent acquisition of Angel Management Group, the Abu Dhabi-based business has made its mark with an uncompromising approach to creating supersonic nightclubs.

Luxury service, opulent design and ground-breaking technology are at the core of these venues - Hakkasan in Las Vegas, HQ in Atlanta City, Bootsy Bellows in Aspen and West Hollywood, and Hooray Henry's, also in West Hollywood. As well as throughout its collection of day-clubs.

The group's latest nightclub concept is Omnia, which promises 'the next generation of luxury nightlife'. It has kicked off here in Las Vegas and will grow with the opening of Omnia San Diego in May. People and companies often channel their excitement about their latest thing as being the best, the most interesting or totally different than anything else. It rarely is. In this case, Hakkasan Group's statement of intent appears to stand up. Omnia isn't just a feast of design and technology; it is led by some serious creative vision.

Omnia Las Vegas takes up a mammoth 75,000 sq ft, which is split across three spaces. The main club is by far the biggest room and is home to some incredible technical feats. Then there is the ultra-lounge, known as Heart of Omnia, which is impressive in its own right - much more intimate and chic in its design. Finally, there is the terrace, with its views of the Las Vegas Strip.

The building work was carried out by Penta Building Group, Rockwell Group were designers and Audiotek ran the technical design team, project managing the technical aspects of the job, including audio, video and lighting. Along the way, there were some unique contributions from various manufacturers too.

The technical design team featured Audiotek's Frank Murray plus his colleagues - Lighting Specialist Andy Taylor, Sound Engineer Chris Kmiec, Technical Director Len Bolger and Project Logistics Director Mags Morton - as well as Hakkasan Group's VP of Music, James Algate. It also included Willie Williams - who has been U2's production designer for more than 30 years.

Frank picks up the story: "Willie has been a good friend of ours since the '80s. We never thought we'd get a chance to do something together but then this one came along. We wanted to do something different. I suggested it to the team at Hakkasan Group and they said go for it. He ended up with more time than he anticipated between two projects - Robbie Williams' tour and U2's.

"He has extraordinary vision. There's always been a drama to what he's done. What we like to do and what we try to do in a nightclub interested him - he'd never done it before. He'd never really had the time to look at it, although it fascinated him when we mentioned it. Then the current U2 tour got delayed because of Bono's accident and that gave him the time to do everything we wanted."

Willie brought a new perspective, explained Frank: "Inviting Willie to join the Omnia project was the best thing we ever did. It allowed us to think outside the box and without the restrictions that normally go with nightclub design. In many ways, you get your design cues from the interior designer or your project architects. Not having any interest in the nightclub business whatsoever and coming from a ►



Image by Francois & Francois

spectacular rock 'n' roll show point of view, Willie came along and took a completely different view of what could be done."

The most obvious outcome of this almost unhindered approach is the huge 'chandelier' that hangs from the centre of the main room. It is a triumph of creativity and engineering, which unifies visitors on the mezzanine level with those on the floor. It features eight rings that sit inside each other - the largest is 32ft in diameter and the smallest is 3ft across. It weighs approximately five-tonnes and moves at up to 4ft-per-second. It is controlled by 21 Tait winches and the company's proprietary Navigator Automation System software.

Frank continued: "Tait came in to do movement that has never really been done in a nightclub before and it has taken on a life of its own. It is gobsmackingly impressive. The Tait contribution was magnificent - no question.

"It drops over 80ft. Every one of the rings is individual. It does spirals, it does rotations, and it does what you call penny rolls inside each other. Willie spent two weeks working the movements out - some of the things he wanted to do have expanded the realms of possibility. He thinks in the third dimension. We look at the lighting to give the spectacle, whereas he looks at the movement to give the spectacle and the lighting to give the shape to that movement."

With this in mind, the chandelier has been adorned with 20,152 individual tri-colour LED pixels. Audiotek also installed Robe Pointes and Robe Robin MMX Spots on two of the rings to add even more movement to the chandelier. Elsewhere in the room, Robe 300E

Spots and Robe Faze machines continue the dynamic theme. Frank said: "We've never had any problems with Robe. When we've worked in the US, we've enjoyed a very good relationship with their design team in Florida. Every time they've supplied magnificent back up, on time delivery and good prices."

Martin Professional VC-Strips are embedded in the bottom layer of each of the rings and are mapped as a video element. TMB Solaris Flares, Ayrton Magic Panel, Ayrton Blade and Laserworld PM8200 lasers have also been specified for the main room. The venue's lighting desks include an Avolites Quartz, an Avolites Sapphire and two MA Lighting grandMA2s.

Other visual highlights in the main room include a complex video infrastructure, with extensive mapping, a cascading video wall and a 193ft LED ribbon, which wraps around the balcony. Absen, which has been associated with Audiotek's largest video installs, and is regarded as Audiotek's technology partners on many projects (including Hakkasan, which was completed in 2013) provided the HD video panels at Omnia Las Vegas. The set-up currently runs three Avolites Media Ai EX8 media servers for controlling content. Avolites' Ai Developer Ciaran Abrams, who provided support during installation and programming said: "Mapping was a big task. Different elements required different mapping solutions - the chandelier was a particular creative challenge, fully utilising the feature set of Ai. The cascades and mezzanine areas of the room were also very complex. Using Ai, we were able to create a 3D representation of the pixels ►



TECHNICAL INFORMATION

SOUND

12 x L-Acoustics Arcs II loudspeaker; 33 x L-Acoustics 12XTi loudspeaker; 10 x L-Acoustics Arcs Wide loudspeaker; 4 x L-Acoustics Arcs Focus loudspeaker; 6 x L-Acoustics KARAI WST line source; 4 x L-Acoustics 115XT HiQ loudspeaker; 15 x L-Acoustics SB18i subwoofer; 12 x L-Acoustics SB28 subwoofer; 6 x L-Acoustics 15m subwoofer; 13 x L-Acoustics LA8 amplified controller; 13 x L-Acoustics LA4 amplified controller; 8 x Renkus-Heinz ICL-FR loudspeaker; 6 x Renkus-Heinz TRX-61 loudspeaker; 7 x Renkus-Heinz IC118S-R loudspeaker; 18 x QSC CX1102 amplifier; 2 x QSC Q-SYS Core 500i processor; 68 x Tannoy CMS 501 ceiling loudspeaker; 12 x Pioneer CDJ-2000 Nexus multiplayer; 4 x Pioneer DJM-900 Nexus mixer; 1 x Pioneer DJM-2000 Nexus mixer; 4 x Technics SL1210 turntable; 3 x Rane SL4 interface; 3 x Shure SM58 microphone; 3 x Shure SLX wireless system; 1 x Shure ULX1 body transmitter; 1 x Shure WL185 microphone

LIGHTING & EFFECTS

40 x Robe Robin 300E Spot moving head; 6 x Robe miniPointe moving head; 34 x Robe Robin MMX Spot moving head; 41 x Robe Pointe moving head; 28 x Ayrton Magic Panel R moving head; 32 x Ayrton Magic Blade batten; 17 x TMB Solaris Flare blinder; 3 x Robe Faze 1050 FT fog/haze machine; 4 x Martin Professional AF-2 DMX fan; 4 x Laserworld PM8200 laser; 1 x Avolites Quartz lighting console; 1 x Avolites Sapphire lighting console; 2 x MA Lighting grandMA lighting console

VISUAL

4 x Avolites Media EX Series media server; 1 x Avolites Sapphire Touch console; 4 x Christie WU14K-M projector; 1 x Sony RM-IP10 camera; 6 x Sony SRG-300H camera; 1 x Sony AWS-750 video mixer; LED walls of various shapes and sizes

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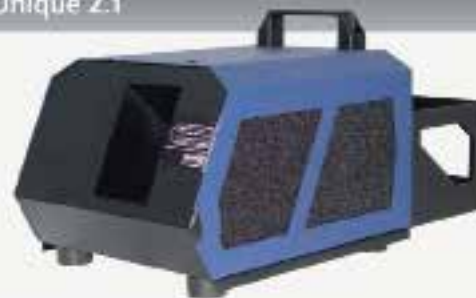
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and import that information." Avolites and Kramer products handle the video mapping and control.

Four Christie WU14K-M projectors have also been installed. VS Squared Labs - the LA-based video production house, known for its work at Coachella, Ultra Music Festival and Electric Daisy Carnival festivals - provided the dramatic custom-designed content.

The main room audio is delivered by an L-Acoustics sound system - L-Acoustics Arcs II loudspeakers and SB28 subwoofers for the main system and 12XTi loudspeakers for the fills. The rear bar has been installed with L-Acoustics Arcs Wide loudspeakers and SB18i subwoofers. The main system is driven by L-Acoustics LA8 and LA4 amplifiers. An L-Acoustics KARAI and SB18i combination provides the DJ monitoring.

Frank commented: "We brought the idea of using L-Acoustics to the table. Due to some changes that were out of our control, we were faced with looking at the latest developments in loudspeaker technology. It was our conclusion that, of all the boxes we had heard recently, L-Acoustics offered some of the most interesting solutions - particularly in a non-array based system. And the main room, particularly, offered itself to the solution that we wanted and L-Acoustics offered us the best package.

"We know people within L-Acoustics. It's a design and engineering-led company - nothing is presumed, everything is analysed to the finest detail. The engineering. The build quality. The loudspeakers they offer and the loudspeakers that can be used in combination gave us everything we wanted.

"Stuart Down, Dan Orton and Tim McCall had all worked with us in

previous years and we had a very high level of comfort and confidence during the design phase. Chris (Kmiec) was very insistent about our vision and drove the team very hard to achieve what we think is the best sound system in the club industry today."

As you would expect, the venue is home to wealth of DJ equipment. Its stock includes 12 Pioneer CDJ-2000 Nexus digital DJ decks, a Pioneer DJM-2000 Nexus DJ mixer, four Pioneer DJM-900 Nexus DJ mixers, four Technics SL1210 turntables and three Rane SL4 Serato interfaces. A selection of Shure microphones has also been included.

Heart of Ominia - the ultra-lounge within the venue - is a very different prospect compared to the main room. It is comparatively very intimate, with a focus on exclusivity and a music policy that is more hip-hop focused. Though the room's feel is very different, its technology is just as important to its identity.

Audiotek once again opted for an L-Acoustics sound system. It features Arcs Focus and Arcs Wide loudspeakers, together with SB18i subwoofers. In-fill comes from XTi loudspeakers and SB15m subwoofers. Power and control is again handled by LA8 and LA4 amplifiers. The DJ booth monitor system comprises L-Acoustics 115XT HiQ coaxial loudspeakers and an SB18i subwoofer.

Lighting in Heart of Omnia includes Robe 300E Spots, Ayrton Magic Blade, Ayrton Magic Panel, Philips Showline Nitro 510 LED strobes, Robe Pointes and a Robe Faze. Here, too, LED video content features extensively. Absen and Audiotek worked together to provide an integrated video environment throughout the 360° Heart of Omnia experience. Frank explained: "The walls are all part of this constant-▶

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ly changing visual show. Every wall panel contains a video element - this is a truly kinetic art installation. The entire room has become a video canvas - changing the colour, the mood and the energy of the space, on demand. It's like a dynamic wallpaper effect, which VS Squared has again been instrumental in creating."

The outdoor terrace presented the design team with a very different challenge. On one hand, they had stunning views of the Las Vegas Strip at their disposal, but on the other there were noise pollution concerns relating to nearby residents. To overcome this, Audiotek recommended and supplied a directional speaker system from Renkus-Heinz. The IC Live loudspeakers are digitally steerable columns that are capable of high output and good beam control. Frank said: "This solution has been a revelation. To date, there have been no issues or complaints relating to this outdoor area, which, with its astounding neon-lit iconic backdrop, is probably the most atmospheric social space on the Las Vegas Strip."

Throughout the venue, in corridors and other peripheral areas, Tannoy ceiling loudspeakers and QSC amplification and control has been used. Zoning and processing is handled by QSC's latest control products - another technological feat for the project.

Omnia Las Vegas held its grand opening over the last weekend of April, welcoming the likes of Calvin Harris and P Diddy, following a soft opening that included a celebration for Justin Bieber's 21st birthday. For the design team, these events concluded a year of dedicated work, which wound up with an audiovisual spend in the region of US\$15 million.

Frank said: "We've been based over there, nearly constantly, for the last year. We'd barely come off the back of Hakkasan when we were told they were planning this one. It was a very fast track job. Penta the builders were superb. Jeff Walker and his team deserve special mention because it the best run site I've ever worked on. Nothing was a problem."

Reflecting on the project, he continues: "We love what we do and you can't do this in a better place than the epicentre of the clubbing universe. We work with the best people and value their trust in us to deliver world-class venues every time.

"This one is special. Hakkasan Group's Neil Moffitt and his team have had a vision and an ambition to create the benchmark venues in the EDM and dance music industry worldwide. We see Omnia as the ultimate expression of this passion and drive. We are proud that we have been part of the team and have helped with this achievement. I am grateful to them for their trust and faith in our team, in what we came up with and what we have built." 📍

FRANÇAIS

Le Omnia Las Vegas occupe un gigantesque espace de 75 000 pieds carrés, divisé en trois sections. Le club principal est de loin la plus grande salle et celle-ci abrite d'incroyables prouesses techniques. Les travaux de construction ont été réalisés par le groupe Penta Building, tandis que Rockwell Group a joué le rôle de concepteur et Audiotek s'occupa de l'équipe de conception technique, gérant les aspects techniques du projet, y compris l'audio, la vidéo et l'éclairage. Dans le cadre du projet furent introduites quelques contributions uniques provenant de divers fabricants. L'accroche-regard de l'Omnia est l'énorme « lustre » orné de 20 152 pixels LED de trois différentes couleurs, qui pend au centre de la salle principale. L'entreprise Audiotek a également installé des spots Robin Pointes et des MMX de chez Robe sur deux des anneaux, rajoutant ainsi encore plus de mouvement au lustre. Des barrettes d'éclairage VC-strips de Martin Professional sont incorporées à la couche inférieure de chacun des anneaux et servent aussi d'élément vidéo. Des lasers Solaris Flare de TMB, une matrice à LED RGB Magic Panel et un projecteur Blade de chez Ayrton, ainsi qu'un laser PM 8200 RGB Pure Diode ont été demandés dans la pièce principale. Les pupitres d'éclairage du site comprennent un Quartz et un Sapphire de chez Avolites et deux grandMA2s de chez MA Lighting. Quatre projecteurs WU14K-M Christie ont également été installés. La pièce principale est équipée d'un système de son L-Acoustics : des enceintes L-Acoustics ARCS II et des enceintes subgraves SB28 pour le système principal et des enceintes coaxiales 12XTi pour le remplissage. Le système principal est géré par des amplificateurs LA8 et LA4 de chez L-Acoustics.

DEUTSCH

Omnia Las Vegas startet ein 75.000 Quadratfuß großes Mammutprojekt, das in drei Bereiche aufgeteilt ist. Der Hauptclub ist bei weitem der größte Raum und verfügt über einige unglaubliche technische Merkmale. Die Bauarbeiten wurden durch Penta Building Group übernommen, Rockwell Group waren die Designer und Audiotek verschaffte das technische Designteam, das die technischen Projektaspekte der Arbeit verwaltete, einschließlich Audio, Video und Beleuchtung. Auf dem Weg gab es einige einzigartige Beiträge von verschiedenen Herstellern. Ein besonderer Schwerpunkt des Omnia ist der riesige 'Kronleuchter', der in der Mitte des Hauptraums hängt und mit 20.152 individuellen dreifarbigem LED-Pixeln verziert ist. Audiotek installierte ebenfalls Robe Robin Pointes und Robe MMX Spots auf zwei der Ringe, um dem Kronleuchter noch mehr Bewegung zu verleihen. Martin Professional VC-Strips wurden in die untere Schicht von jedem Ring eingebaut und sind als Videoelement abgebildet. TMB Solaris Flares, Ayrton Magic Panel, Ayrton Blade und Laserworld PM8200 Laser wurden ebenfalls für den Hauptraum festgelegt. Die Lichtpulte des Treffs umfassen einen Avolites Quartz, einen Avolites Sapphire und zwei MA Lighting grandMA2s. Vier Christie WU14K-M Projektoren wurden ebenfalls installiert. Die Audio des Hauptraums wird durch ein L-Acoustics Soundsystem bereitgestellt. - L-Acoustics ARCS II Lautsprecher und SB28 Subs für das Hauptsystem und 12XTi Lautsprecher für die Füllungen. Das Hauptsystem wird durch L-Acoustics LA8- und LA4-Verstärker gesteuert.

ITALIANO

Omnia Las Vegas é un colosso di quasi 7.000 metri quadri, diviso in tre aree. Il club principale é sicuramente la sala piú grande che ospita alcune delle incredibili imprese tecniche. I lavori per l'edificio sono stati portati avanti da Penta Building Group, dai progettisti Rockwell Group e da Audiotek che ha diretto il team di progettazione tecnica, gestendo gli aspetti tecnici del lavoro incluso audio, video e luci. Nel frattempo ci sono state anche delle singole collaborazioni con diversi produttori. L'attrattiva dell' Omnia, unica nel suo genere, é l' immenso lampadario che si cala dal centro della sala principale, adornata da 20.152 singoli Led a pixel tricolore. Audiotek ha inoltre installato dei puntatori Rob Robin e dei faretti Robe MMX su due degli anelli per dare ancora piú movimento al lampadario. Delle Martin Professional VC-Strips so state inserite nella parte inferiore di ciascun anello e sono controllate come un elemento video. Inoltre, sempre per la sala principale, sono stati utilizzati altri elementi quali: riflettori TMB Solaris, MagicPanel Ayrton, MagicBlade Ayrton e laser Laserworld PM8200. Per ciò che concerne i tavoli luminosi del locale, essi includono un Avolite quarzo, un Avolite sapphire, due MA Lighting grandMA2s ed anche quattro proiettori Christie WU14K-M. L'audio della sala principale é stato affidato ad un sistema audio L-Acoustics (altoparlanti L-Acoustics ARCS II e subwoofer SB28 per il sistema principale e altoparlanti 12XTi per quelli secondari). Il sistema principale é diretto da amplificatori LA8 e LA4 L-Acoustics.

ESPAÑOL

Omnia Las Vegas ocupa un enorme lugar de 7.000 metros cuadrados divididos a lo largo de tres espacios. La discoteca principal es por lejos el salón más grande y alberga algunas proezas técnicas increíbles. El trabajo del edificio fue llevado a cabo por Penta Building group, Rockwell Group fueron los diseñadores y Audiotek manejó al equipo de diseño técnico, la administración de los aspectos técnicos del trabajo, incluyendo el audio, video y la iluminación. Sobre la marcha, hubo algunas contribuciones únicas de parte de varios fabricantes. Un punto de referencia único de Omnia es la lámpara de araña enorme que cuelga del centro del salón principal, la cual fue adornada con 20.152 pixeles individuales tri-color de LED. Audiotek además instaló Robe Robin Pointes y Spots Robe MMX en dos de los aros para darle aún más movimiento a la lámpara de araña. Las tiras VC de Martin Professional están incrustadas en la parte inferior de cada uno de los aros y mapeadas como un elemento de video. Para el salón principal también se especificaron láseres de TMB Solaris Flares, Ayrton Magic Panel, Ayrton Blade y Laserworld PM8200. Los mostradores de iluminación del lugar incluyen un Avolites Quartz, un Avolites Sapphire y dos MA Lighting grandMA2s. También se instalaron cuatro proyectores Christie WU14K-M. El audio del salón principal es entregado por un sistema de sonido de L-Acoustics - parlantes ARCS II de L-Acoustics; subs SB28 para el sistema principal y parlantes 12XTi para los rellenos. El sistema principal es conducido por amplificadores LA8 y LA4 de L-Acoustics.