

#### EHE EDGE

#### BIGHT OF THE CAFFIUS 6DG6

An earlier than usual edition of **LHP PD92** this spring sees us publishing our biggest-ever issue in time for the *NSCA Exhibition* in Las Vegas. It's a win-win situation as this then enables us to reach visitors at the hugely influential *Pro Light+Sound* Frankfurt at the end of the month, with arguably the most important edition of **LHP PD92** we have yet published.

Rich in coverage from North America, we are also proud to bring you some groundbreaking stories from around the world. In the hierarchy of pro audio installs little causes as much excitement as projects undertaken by Steve Dash (Integral Sound) and Austen Derek (Aurateq) — particularly to any of us old enough and fortunate enough to have experienced the original Richard Long sound system at Paradise Garage nearly 30 years ago. Therefore your first port of call should be to page 6 where the new 3,360-capacity Ministry of Sound in Singapore is awash with Martin Audio components specified by these master technicians.

On the domestic front we have been kept busy covering The Strokes (with Capital Sound), Chris Rea (with RG Jones) and the new 'Virtual' Frank Sinatra season (with Autograph Sound) who have used our equipment as their main PA arrays at the London Palladium. Working from reclaimed archives, the show has presented a major restoration and time-coding challenge as the Sinatra voice is 'synced' to a live 24-piece orchestra and 35mm footage appears on nine different moving projection displays.

We also have some important stadium install news and at last the promise of a new range of floor monitors which will be launched at trade shows this spring.

As ever, compilation of **LHR ED9R** has required a team effort, and we are again indebted to our friends from the press — notably *Live Sound* 

International with their assistance on the Kanye West story, and also *Pro Audio Middle East* and *Mondo\*dr*. You will get your rewards at Frankfurt.

Finally, a big thank you to all our correspondents — mostly our distributors themselves — who this time around have brought us news from as far afield as Croatia to the Cayman Islands.

Terry Filbert

Cover: The Strokes – UK Tour (Photo: Simon Camper)



#### WHERE LO SEE US

16-18 March: NSCA, Las Vagas, N. America
29 Mar – 1 April: Musikmesse, Frankfurt, Germany

23-25 April: Palme, Dubai, UAE
31 May – 3 Jun: CALM, Shanghai, China

7-9 June: INFOCOMM USA, Florida, N. America 26-29 June: Cinema Expo, Amsterdam, Holland

20-22 July: PALA, Bangkok, Thailand 10-13 Sept: Plasa, London, UK

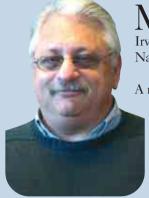
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www.martin-audio.com

#### Weisman Appointed National Sales Manager



artin Audio is pleased to announce the appointment of Irv Weisman as North American National Sales Manager.

A respected industry veteran who has pioneered a variety of audio brands, including BGW and Crest Audio, Weisman most recently served with Tannoy Loudspeakers as Regional and National Sales Manager.

A long-time enthusiast of Martin Audio loudspeakers, having previously worked with Director of North American

Operations Rob Hofkamp, Weisman is enthusiastic about his new challenge: "Martin Audio makes great speakers and I'm looking forward to helping the brand get traction in the North American market — familiarising people with the product and supporting the market growth through the expansion of the dealer network."

Hofkamp added, "Irv brings a wealth of hands-on experience to the position along with a visionary approach to brandbuilding."

In his new position, Weisman will be working from California. He is located at 43 Melrose Dr., Mission Viejo, CA 92692 and can be contacted at 888.844.4287 or iweisman@martin-audio.com

#### €1.4m Amsterdam ArenA **Project Gets Underway**

s we went to press Holland's flagship stadium, the Amsterdam ArenA, home of soccer club Ajax Amsterdam, was commencing its €1.4 million investment programme to dramatically improve its acoustics and sound quality for live events.

The programme includes acoustic treatment and a new, digitally-distributed sound system, designed both as a standalone public address/safety system and to augment PA systems brought in by visiting concert and event productions.

The measures followed months of preparation and research by leading Dutch music promoter MOJO Concerts, TM Audio of Holland and acoustic engineers Peutz, and will result in a substantial improvement for speech and music intelligibility and quality.

To improve the quality of the acoustics, reverberation time in the stadium will be reduced by using thousands of square metres of special sound absorbent materials on the roof and on the walls.

The other half of the project sees the installation (by TM Audio) of a new digitally-based, high-power audio system, comprising more than 200 Martin Audio W8LM line array enclosures and a Peavey MediaMatrix Nion signal distribution system.

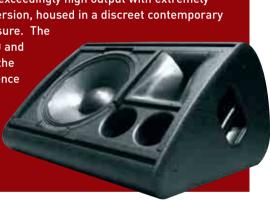
The sound system is customised and engineered for the particular shape of the ArenA, and different sections will be on different sends, each controlling a cluster of loudspeakers.

The full installation will be reported in the next edition.

#### **NEW MONITORS COMING...**

Sometimes it takes a long time to improve on a winning formula and after 15 years and over 10,000 LE monitors sold that is just what has happened. Martin Audio will be launching a range of stage monitors at the forthcoming round of spring fairs. The new series features a unique combination of exceedingly high output with extremely controlled dispersion, housed in a discreet contemporary designed enclosure. The

LE1200, LE1500 and LE2120 will be the definitive reference – to which all others will aspire. 🛢







utograph Sound designer Nick Lidster describes the show as the most challenging he has faced. Under David Leveaux' direction, the 'virtual' live season of *Sinatra at the London Palladium*, which opened in February, has been made possible by the discovery of vintage 35mm archive footage; this, and the consequent tape restoration and timecoding issues necessary to bring Frank Sinatra—larger than life—to nine moving video screens ... synced to a 24-piece orchestra.

"That has been the big advantage on this show — the fact that because the Martin system is horn-loaded you have a much greater control of the low-end while the HF projects and shines like a torch, and has been very impressive. At the back

W8LC is fully horn-loaded we have been able to 'steer' the

audio accurately into the different areas; this is not the case

with some systems where you get a huge low-end build-up

which you cannot get rid of.

Autograph Sound are no strangers at providing even sound coverage around the London Palladium, with its 2,400-seat stalls and 'fanned' lower balcony and gallery circle areas, and reckon they have undertaken all the major shows in the theatre over the past ten years.

With a L,C,R line array hang (and 54 distributed Martin Audio Effect 3R cinema speakers) the audio is run in 5.1 surround sound, with two suspended five-box Martin W8LC's taking care of the two near flanks and the vocals coming as a mono signal through the centre cluster. Autograph have used the custom frame they designed for *Miss Saigon* to fly the Martin WSX subs above the W8LCs. "They screw into the dolly boards and ensure we can rig them on trusses," explains Lidster. "We have one WSX each side in the air and another each side on the ground."

He explains that with a show such as this

— a live swing band (including seven-piece string section) and 16 dancers reinforcing
Ol' Blue Eyes' voice "you don't need gutchurning power. It's a balance of all the disciplines," states the designer.

A further six W8LC's are ground-stacked each side of the stage (along with the WSX) and there are strategically-placed delays and front fills. Spread throughout the different levels are the Effect 3R's, which are increasingly finding favour for reproducing surround effects on West End musicals.

Nick Lidster is now on his third outing with a Martin Audio line array system, after first auditioning it at Brixton Academy and then demoing a system on *Les Miserables* in Berlin. Says colleague Scott Arnold, "Nick always wanted to use the Martin system here, knowing he would need power as well as quality. You don't have a 24-piece orchestra and expect the show to run quietly — it's not going to happen."

"This is a good sounding room but there are difficult areas," acknowledges the sound designer. "As the Martin Audio



of the circle the sound is bright, clean and crisp, with no delays upstairs whatever. It means I can turn up the HF without killing people downstairs near the stage. And unlike other line arrays, when you walk off axis the W8LC is fairly smooth and everything rolls off evenly without sounding muddy."

Nick Lidster (inset pic) has used ViewPoint<sup>™</sup> as the foundation of his design – fine adjusting angles to fit the

venue. He has also used Martin Audio's crossover presets, feeding these into the new XTA 428, via the latest AudioCore software. "However, because we were trying to go for a more naturalistic sound we didn't need the LF lift that might be used if we were running a rock 'n' roll show."

Outboard processing used includes a TC Electronic S6000 reverb, Drawmer compression and gates and some valve compression on Sinatra's voice.

"We are using two Pro Tools HD systems for Sinatra's voice and the sound effects and Pro Tools runs the timecode that drives the projection," the designer continues. "Rob Tory, our Pro Tools engineer, has done all the click tracks which go to the MD on headphones, the audio is ethernetted back to the company office where the other Pro Tools HD system resides."

But the show itself is a triuimph for putting Frank Sinatra's voice in front of a live orchestra.

An audio pioneer in his own right, Sinatra had done a lot of archiving, pre-recording some of his early (1957-58) TV series in stereo and using 35mm film. This was digitised and rotoscoped, with the images removed. Because the recordings featured discrete audio tracks and relatively sparse instrumentation, the immediate bonus was that the vocals could be extracted and the new live orchestrations mixed in.

The recordings were processed at Autograph using the CEDAR Cambridge v2.6 restoration system to remove all the extraneous noise and hiss.

Using CEDAR NR-4 Advanced Noise Reduction, Auto Dehiss, and Debuzz -Buzz and Hum Removal,

> CEDAR's inhouse restoration engineer, Paul Alexander removed general background noise as well as unwanted hiss and buzz. He explained,"The original recordings and transfers were of extremely high quality and most

of the background noise that I removed was due to problems with the initial recording in the 1950s."

Virtually Frank Box Office: 0870 890 1108 website: www.sinatra.com

With most of their inventory out on *Mamma Mia* in Madrid, Autograph Sound purchased 18 addition W8LC's for a show they believe they were awarded in view of its sheer complexity. "It has been a case of making the sound and video work in conjunction with each other," declares Nick. To do this they used Pro Tools HD; the original material is triggered by MIDI from a Cadac G-Type, operated by Paul Stannering, and will end up on Tascam playback.

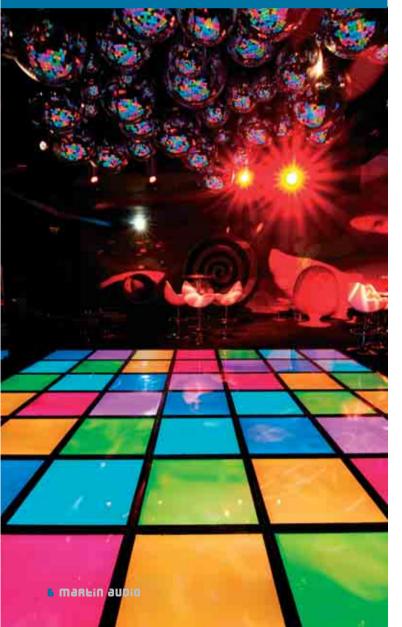
Ultimately it has been the reconciliation of the old and new, perfectly synchronised, with which Autograph have been tasked.

Photo: Tristram Kenton

Small wonder then that Nick Lidster has had sleepless nights worrying about this show. "Because of the level of technology used you do feel very responsible," he says. ■

## MoS DeLuxe

"The Ministry of Sound in Singapore will be the new standard by which systems will be weighed"



artin Audio has extended its relationship with the Ministry of Sound — on the grandest scale yet. The new operation at Clarke Quay, Singapore, is the organisation's largest venue worldwide, with a capacity for 3,360 clubbers. Located across two floors, it is divided into seven zones, with a 20ft water curtain screen projecting live images from around the club.

The design and installation of the system was a collaboration between Aurateq Systems and Integral Sound. Aurateq's Austen Derek says that he suggested the idea of the collaboration when first approached by Justin Berkmann to design and build the system.

"The Ministry of Sound in Singapore will be the new standard by which systems will be weighed," believes Austen. "We had an extremely talented and efficient team, including Rachel Stires from Aurateq and Peter Diles, Michael Bartolo, George Stavropoulos and Steve Dash of Integral Sound — all of whom have numerous world class systems under their belts."

The design was a straightforward 'back to basics' concept with some new and some time-proven equipment. The speaker stacks were a similar design to the original system in London — a completely horn-loaded solution using custom Martin Audio W8C, AS118 and the Bertha Subs.

"Although the Singapore room would not accommodate six speaker stack placements, we were able to fit four stacks in opposing corners. The system has the ability to reach well over 140dB. It just sings along," says Austen.

The Martin Audio W8C elements were chosen — two per location — because of their 55° dispersion and their percussive impact. With the 55° dispersion of these boxes the designers were able to create a 85° dispersion from each stack (by adding the 30° from the splay). "We were able to really focus the sound where we wanted it. We also built some custom wedges that focused the boxes downward onto the dance area. I have had great success with these units throughout the years — I use them for concert production and DJ events that I do outside of my design and installation work. They have never let me down and are one of the most predictable of speakers."

The Martin Audio Hybrid™ folded horn/reflex loaded bass system was chosen for the main bass section of the system. These units have the ability to produce an extremely fat, tight and punchy sound expected of a world class sound system.

These are coupled with the famous Bertha subs, adapted by the late Richard Long, whose provenance dates back to the 1950's, and the Aurateq tweeter arrays, created by Rachel Stires.

The entire system is optimised using SDX electronicx from Integral Sound — built by Steve Dash himself.





#### "The system has the ability to reach well over 140dB. It just sings along"

"The DJ booth monitoring system *had* to be ridiculous," continues Austen — and so he used the Martin Audio Blackline H3H — the horizontal version of the H3 — and the Blackline S218. "The DJ monitors needed to be able to overpower the main system because the booth is situated so that it protrudes into the dancefloor and is completely open. This presented a

problem as there were certain speaker locations that had some time delay added to correct their placement. This scenario would throw the DJ off if he did not have a 'ridiculous' monitoring system ... not to mention that most of those guys love it loud anyway."

The other areas in the club were designed by Weiming Song and Arthur Soh of Architectural Audio in coordination with Peter Owen of Martin Audio. Weiming Song commented, "It has taken over eight months and six million Singapore dollars to convert this space into the number one club in Singapore, if not the world. There was only one choice

for loudspeakers; Martin Audio — from the ceiling speakers to the main dancefloor — is involved in every part of the club". Weiming added, "We are delighted to have worked with Clement again; The Balcony, which is a new 24-hour chill out lounge bar above Orchard Road, was our first project together and we plan to continue this relationship in the future."

The individual zones at the Mos are divided as follows: **The Main Dance floor** is where the big name floor filling acts will perform, with their every movement projected onto the 20ft water curtain. The custom sound

system was designed to set a new standard in Singapore and delivers on this promise to excess.

The Tunnel is a member's only area allowing the privileged few to chill out before finding their dancing feet again and getting back in the groove. Studio 54, with the dancefloor ceiling covered in mirrors balls, has psychedelic colours and patterns adorning the walls in a throw-back to the groovy '70s. Pure is the chill-out lounge for everyone, with sofas fashioned as beds; Taittinger Lounge is for society's high flyers with a bird's eye view of the main dancefloor and a one way mirror looking into Studio 54 (where only the privileged get the full red carpet treatment). Smoove is a caged dancefloor which sets the scene for the funky bass rhythms. Finally, VIP Rooms show off the very best the club has to offer.

Austen Derek concluded, "I would like to thank Clement Lee, owner of Ministry of Sound Singapore for seeing our vision for his stellar night club. This was a great project to work on, with many talented individuals who were eager and accommodating."

### Then an artist commits himself masterpiece, it's no surprise him to be equipped with the best step of creating a collection of music that takes a global look at the blues and where they came from. Blue music that cover Rea's take on the music that formed the basis of his now considerable career. In all there are 137 songs, as well as a DVD and a collection of paintings influenced by the individual aspect of the blues addressed by each disc. Inevitably, the time has come to take the epic out on the road, and RG Jones were called upon to provide the sound system, steered by Simon Honywill (pictured), with Joe Campbell on monitors and Mark Edwards and Steve Carr doing all the real work.

RGG on The Road to Hell

to producing his life's musical that he wants those involved in helping possible tools with which to do the job.

Chris Rea has made the unprecedented Guitars contains no less than 11 CD's of Choosing the set for this tour must have been a challenge, and Rea has selected to play an eclectic mix of some of the vast array of material from Blue Guitars, accompanied by a selection from Dancing Down The Stony Road and a good helping of classic Chris Rea (Driving Home For Christmas not included.) It's a set full of dynamics, lasting more than two hours, and Rea and the band go from howling blues to acoustic southern blues with banjo, mandolin and dobro and back to the chugging rock of Road To Hell.

The loudspeaker system chosen by Honywill to faithfully reproduce all of

this consists of 32 Martin/Synco W8LC, 12 Martin/Synco W8LM plus four of the brand new W8LMD wideangle downfill and 12 WLX subs.

The system needs to be highly flexible, as venues on the tour range from intimate theatres to cavernous arenas, with audience sizes from 1,500 to 11,000 all needing to be covered. The W8LC provides the main grunt, with the W8LM's acting as ground stacks or flown outfills as required, and as downfill for the main system in some of the loftier gigs.

The overall result is a very compact, tidy and fantastic sounding touring package which continues to uphold the Chris Rea tradition of squeezing a big sounding show into one very small truck.

# **Evans Above**

ne of the biggest challenges facing a PA company is the ability to evenly distribute the signal from a lone microphone around an arena containing 10,500 people.

When the source is merely spoken word – spanning a vast dynamic range, with additional play-in FX — the task can border on the near impossible.

Thus Capital Sound Hire set high standards and three separate production levels (for theatres, small arenas and large arenas) for comedian Lee Evans' recent tour — based around Martin Audio line array (and non-line array) components.

Evans' gags are embroidered by numerous 'pops' (the mic is used as a stage prop), VT play-ins and a closing song which he delivers on mandolin.

At Hallam FM Arena in Sheffield, the artist listened carefully during rehearsal to the playback at the three different delay points (each containing three clusters of four Martin W8C's). He was equally concerned about his monitor sound — and although production carries Martin Audio LE12J floor wedges, these are generally forsaken in favour of boosted side fills (provided by six Martin Audio W8LM Mini Line Arrays).

Cap's solution for the large-scale shows was to rig two hangs of 16 x W8LC Compacts, supported by six W8C's, forming the outfills on either side of the main PA, with a total of eight Wavefront W2's deployed as frontfills.

Commented production manager, Mark Harris, "We wanted a set-up that would deliver a good sound but could also be toured and rigged easily. The mid-sized enclosures are great as we can hang 16 a side — plus the outfaces — and they can still be trimmed sufficiently high to keep the sightlines intact." This was important, since three landscape LED screens provide a stunning opening sting to the show.

"It's always difficult to get one man and a mic to sound clear through a venue of this size," said system tech, Matt Harman-Trick. "Our solution has been to use lots of speakers. The delays possibly aren't needed but they really boost that intelligibility." He has used "a mixture of ViewPoint predictive software and commonsense" to optimise the system, "guesswork and experience" for the delays. Delay points are set at 28m from the stage, 42m and the third at 56m.

"I'm a big fan of the W8LC because it really works in a large venue — in fact there's not many situations I wouldn't use this in."

The man in the FOH driving seat, Phil Tame, said that Lee Evans liked the sound fairly loud but was having to contend with a swoop between the dynamic music stings (ie the play-in of *Bohemian Rhapsody*, which peaked at 120dbA) and a barely audible whisper.

"But I'm really impressed with the W8LC," he continues. "The coverage is great and it delivers a nice sound; it's also good having the delays as a safety device."

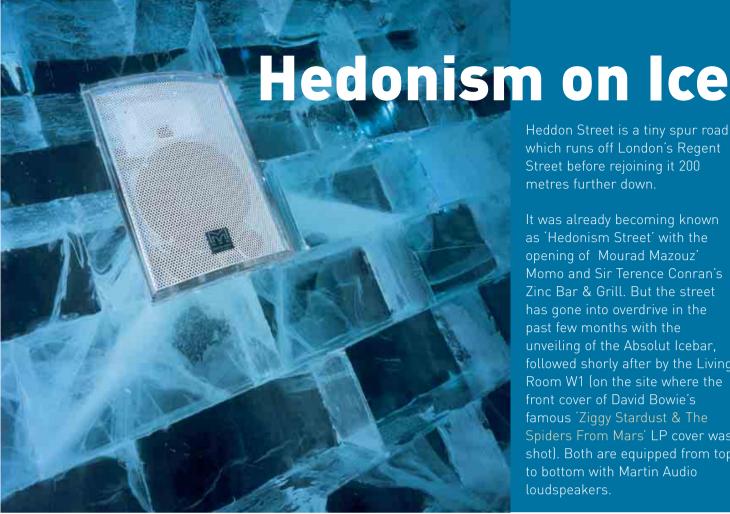
Left to right: Matt Harman-Trick, Phil Tame and Mark Harris





"really impressed with the W8LC"





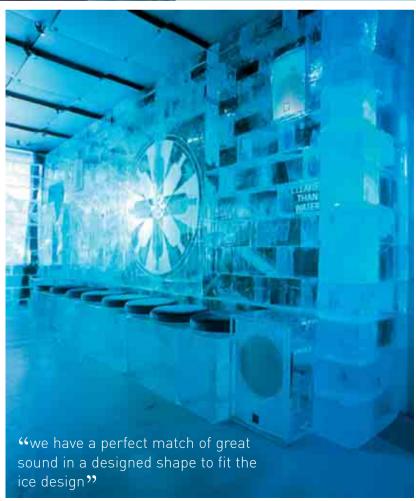
Heddon Street is a tiny spur road which runs off London's Regent Street before rejoining it 200 metres further down.

It was already becoming known as 'Hedonism Street' with the opening of Mourad Mazouz' Momo and Sir Terence Conran's Zinc Bar & Grill. But the street has gone into overdrive in the past few months with the unveiling of the Absolut Icebar, followed shorly after by the Living Room W1 (on the site where the front cover of David Bowie's famous 'Ziggy Stardust & The Spiders From Mars' LP cover was shot). Both are equipped from top to bottom with Martin Audio loudspeakers.

bsolut Icebar — a joint venture between Absolut, Icehotel and Below Zero London - presents a unique environment of -5° centigrade, where everything, from the walls, bar, and bar stools, to the artwork and the 'glass' that holds the Absolut cocktail is made from crystal clear Nordic ice.

Finding a loudspeaker system that would blend seamlessly into the glacial interior of the Swedish concept provided a challenge that was met by Martin Audio. The UK manufacturer had already produced 'invisible' customised perspex floor monitors for the Eurovision Song Contest in Latvia several years ago, and now they focused on the classic EM26 — which formed the centrepiece of a complete audio fit-out of the four-zone, £1.5m development.

Icehotel partners, Below Zero London, had originally been looking at two loudspeaker options for the overall sound reinforcement via their contracting company, Willowmead. But everything dovetailed together following a meeting between Martin Audio MD, David Bissett-Powell and Lab Gruppen's Tomas Lilja — coincidentally held at the original Icehotel. "Having produced the perspex monitors for Eurovision, we knew we could replicate the EM26," said Martin Audio sales manager, Simon Bull. "These have been a proven industry standard over 12 years, with an



ability to operate at both high and low level."

As a result five glacial EM26's are now set back into the ice fabric of the bar in Heddon Street, with special adaptations of their Blackline S12 providing the subwoofers.

"When Icehotel's artistic director Arne Bergh first saw them as they were delivered to site he couldn't believe it," Simon remarked.

Producing the perspex loudspeakers is an elaborate process. The material takes three times as long to cut and is more complicated to work with than conventional timber because of the variance in thickness. Production then culminates in a week and a half of polishing and finishing. The special EM26's are supplied to Icebar with an open mesh grille to allow the internal components to be fully visible.

Elsewhere in the downstairs Moose and Reindeer Rooms — which is available for corporate functions — as well as the main upstairs bar/restaurant, a combination of Martin Audio's new AQ5 and AQ8 architectural speakers reproduce the sound, reinforced by AQ212 and AQ112 subs.

Said Icebar International director, Agnetha Lund, "The speakers fit like an ice block into our ice walls and provide a great final touch."

Loudspeaker design support and installation were provided by Martin Audio's Simon Bull, and UK contractors, Marquee Installations. A hundred metres away, Living Ventures Ltd take their music really seriously. They expect much from their long-serving audio system contractors Green-I, who espouse the same high brand values — from their choice of loudspeaker to the 'logic' programming in the DSP. Zoning is likewise a critical element and the music in the 300-cover restaurant

Upstairs, in the formal dining area, they have deployed further multiples of yokemounted AQ6's, angled down to the floor, the use of Phoenix connectors allowing these to be mounted flush to the walls.

It all adds up to a high level of audio housekeeping in keeping with the overall 'living room' theme.



needs to remain at BGM level, while on the same floor — but in a different area live bands are creating an entirely different vibe onstage where a resplendent white Yamaha GT7 digital grand piano provides a focal point. The philosophy is to use a high number of speakers run at low volume, providing unsurpassed, even coverage.

Over the years Green-I have associated themselves with the top end of leisure hospitality and their audio system of preference has always reflected their quality installations — in this case Martin Audio.

Thus the new flagship 'Living Room W1' sees multiples of Martin Audio's new horn-loaded AQ6 and AQ8 architectural enclosures — liveried in white and brown custom colours to match interior designer's Shideh Shaygun's imaginative concept.

Green-I have mounted the AQ's in either rotatable horizontal format — like bookshelf speakers around the open fires in the middle of the venue — or vertically. A mixture of AQ6's and AQ8's are used around the bar and dining area on the ground floor (with AQ8's exclusively serving the piano stage area).



Green-I's reason for favouring Martin's new architectural series is straightforward according to the company's Ian 'Woody' Woodall. "It just does what it says on the box — no fancy words or marketing, they are simply really impressive. Furthermore, the company also met our requirement to place Declon cloth behind the grilles, so that the drivers could not be seen,"

Living Ventures' head of music, Steve Walter was equally positive, remarking on the fact that the AQ series could be customised in terms of both the colours and fixing points. This is their 13th Living Room and he believes that any unit manager should now be able to relocate and recognise familiar audio architecture.



situated on a picturesque 55-acre campus a few miles away from The Palace in Auburn Hills, Michigan, The Apostolic Church designed its new sanctuary with the intention of making it a worship space for a variety of functions. A study in minimalist architecture, the sanctuary is a fan-shaped, 45,000 sq. ft. design, featuring a raked floor with a 30ft rise and close to 180° seating.

The wide range of events featured at the new sanctuary includes everything from live bands for the youth ministry, theatre performances, orchestras and an Easter play with professional lighting and pyrotechnics.

Unfortunately, the sanctuary was plagued with audio problems stemming from the wide 180° seating, coupled with unwanted reflections and reverberation, which had a negative impact on speech intelligibility and clarity.

Under the direction of congregation members Norman Carter and Calvin Ringl, the church approached project manager Al Hildreth for the upgrade and redesign, and he, in turn, chose to work with Ann Arbor Audio. As their president, John Malek, explains, "the room had no acoustical treatment. We modelled the room using CATT acoustics software, and based on the results, added 2in-thick, fabric-wrapped absorption panels to the back wall to reduce the slapback echo reflecting to the platform."

Ann Arbor Audio also recommended the addition of a vertical fibreglass barrier to close off a gap in the ceiling deck leading to the metal roof, to eliminate acoustic sound smearing and reflected path issues. They then specified Martin Audio W8LM mini line array enclosures for the install, each cabinet measuring less than 10 inches in height. Says Malek, "The W8LM line arrays didn't block the sightlines. The church

needed a sound system that could provide highly intelligible, even coverage. With these arrays, you can walk the room left to right without a significant drop in SPL."

The system consists of left, centre and right hangs of six W8LM line arrays. "We were considering installing two horizontal speaker rings — one for nearfield and one for delays," Carter says. "Knowing what I know now, I'm glad we didn't go that route."

Eight Martin Audio LE12JB loudspeakers and a single LE400C loudspeaker serve as floor monitors on the 35ft x 100ft stage. Subwoofers are in built-in enclosures under the stage.

Carter agrees. "From front to back, we have coverage to  $\pm 3$  dB," he says. "We've found that the system performs well for the type of music we play and how the room is used. John Malek did a great job of predictive modelling using CATT and EASE."

Additionally, the sound system is quickly convertible — every component can be removed from the stage within an hour. A flexible microphone design for 19 floor boxes, using a series of ADC patch bays, allows for 110 microphone points and 16 wireless mic channels along the stage to be independently routed down to 76 channels at the FOH and monitor mix positions.

Summing up, Malek says, "The ministry had become accustomed to poor coverage and found the Martin Audio line arrays to be unbelievable. It's a high volume system with clear speech intelligibility and a smooth response. I was impressed with how the W8LM's sounded, even before the acoustic treatment was finished."

or lovers of comedy and the grand style of Hollywood in the golden age, The Friars of Beverly Hills is a local institution.

A prominent private show business club since its formation in 1961 by Milton Berle, the venue has become world-renowned for its Roasts and testimonial dinners (now known as Lifetime Achievement Awards). The FOBH is also famous for the entertainers who have been members over the years, including such notables as Frank Sinatra, Dean Martin, Sammy Davis Jr., Jack Benny, Groucho Marx, Johnny Carson and Billy Crystal, to name a few.

Since its inception, The FOBH has raised funds for charitable causes through Roasts and other events. The first Los Angeles cabaret show was held at the Biltmore Hotel downtown in 1948. After moving to its current location 9900 Santa Monica Boulevard, in 1961, The Friars of Beverly Hills continued to serve its member community as a retreat, a place of meals and social gathering.

The group gained in notoriety through the years, achieving legendary status when the term 'Roast' entered the American lexicon, transitioning in meaning from "an in-house private event" to "any event where a guest is honoured by being 'Roasted." The Friars of Beverly Hills continued the tradition over the decades, honoring such notables as Ed McMahon, Arnold Schwarzenegger and Hugh Hefner. Gloria Allred became the first woman accepted as member in 1981, leading the way for many other women to join, including Phyllis Diller, Roseanne Arnold, Jillian Barberie and Dionne Warwick.

Today, the walls of the club are lined with memorabilia of these historic philanthropic events and ceremonial dinners. And the tradition continues with younger generation of

## Friars Roasted!



FOBH members includes such comedians as Jay Mohr, Jeffrey Ross and Hank Azaria.

When the club undertook a major audio and video upgrade recently, they approached Delicate Productions of Camarillo. In order to bring up the

audio quality and capability in all of the elegant performance and lounge spaces without intruding on the venue, designers Bill Sage, Graham Thornton and Curtis Kelly used Martin Audio loudspeakers throughout, including Martin WT3 Compact three-way trapezoids, switchable biamped 400-800W into 4 ohms; four WS2A 2 x 15 cone-loaded vented subwoofers, two LE12JB active/passive low profile differential dispersion floor monitors and four WTUB 2-way passive reflex enclosure for additional bass.

The luxurious upstage lounge features an extensive equipment line-up including Martin Audio C115 polypropylene enclosures along with subwoofers, plasma displays and amplification.

The Martin Audio loudspeakers were part of a top audio processing and control specification detailed by Delicate Productions.

As Bill Sage points out, "Friars of Beverly Hills is one of our best and steadiest customers. They totally trust us and, now, Martin Audio as well to deliver what they need to stay ahead of the curve with sound. We sold them a turnkey system right down to the backline and they love it. We're still working with them."



#### Kanye Touches the Sky with W8L

anye West, the world's leading-edge rapper and producer, recently wrapped a hugely successful 46-city US *Touch the Sky tour* which showcased the artist's gifts as a producer of sophisticated new music.

A multiple Grammy Award winner, Kanye was supporting his second album release, *Late Registration* with his first headlining tour in scaled arenas and theatres, featuring a grand-scale production concept extending far beyond traditional rap shows.

The expanded presentation included DJ Atrak, a keyboardist, percussionist, two background singers and a string section with four violins, two cellos and a harp. Openers include *American Idol* winner Fantasia and Keyshia Cole, featured with West on his previous tour opening for Usher.

Obviously this lineup produced a sophisticated blend of sounds far beyond the standard voice, bass and drum arrangement, so Genesis Audio Systems of Phoenix, Arizona was called in to extrapolate West's innovative production sound into a live sound context.

To deliver the highest quality and coverage across the different venues, Genesis opted for a 36-box Martin W8L line array with 28 Martin WSX subs.

Veteran FOH engineer Phil Strong (inset) ran the show from Digidesign's VENUE console (drawing on the vast library of TDM software plug-ins), with a Yamaha M5D-RH handling monitor mixes under the supervision of Genesis' John Clark III. Outfront, the Martin W8L system was generally flown in 12-box main arrays, with larger arenas supplemented with six-box side

arrays. New W8LD Martin Audio downfill boxes were also provided for the bottom of the main array to ensure the required 20° by 120° pattern and the coverage needed in the first four or five rows.

System power was provided by Martin MA 4.2s amps, augmented with XTA DP226 DSP. To ensure

optimum coverage, Genesis system tech Mike Arnold worked with Martin Audio's Rob Hofkamp to optimise cabinet angles as well as low-end response via differing subwoofer configurations.

For monitoring, John Clark provided a dozen mixes for a combination of wedges and in-ears supplemented by two additional WSX subs and sidefills.

According to Strong, the key to the tour's success was to know the music and the desires of the artist. "To accomplish that, you need to really understand the musical vocabulary and know how to identify what is important about the record," he explained. "If you choose incorrectly you can alter the perception and feel of the song drastically, and for a detail-oriented producer like West, that is unacceptable.

"People think of hip-hop artists as being more bare bones, like early rap artists, but this was a full blown production from one

of the hottest producers in the studio and on the road."

# **Stunning Stingaree**

In the late 1880s it was simply called the 'Stingaree' district.

South of Market Street, in the bustling port town of San Diego, it was the raw, lusty, no-holds-barred part of town where no respectable woman would ever venture.

Like San Francisco's Barbary Coast, the Stingaree was concentrated in a relatively small waterfront area with saloons, gambling halls (three of which were owned by legendary lawman Wyatt Earp) and houses of prostitution.

Well, times have changed. Stingaree is now known as the Gaslamp, and it has become the hip and upscale historic district of downtown San Diego, located near the city's top-line sports complex, Petco Park, and the San Diego Convention Center.

The new Stingaree — a luxurious, three-level, 22,000 sq. ft facility for dining and entertainment — is located in an old warehouse at the corner of 6th and Island and has quickly become one of the city's hottest dining and entertainment destinations.

Stingaree's ground floor houses the facility's impressive restaurant flanked by towering wine racks and a floor-to-ceiling waterfall. The spacious bar separates the dining room and the nightclub on two levels.

The mezzanine lounge has a waiting area, along with a

deluxe Skybox/Penthouse Suite and the DJ Booth, which hangs over the dancefloor, along with an overhead walkway.

Stingaree's rooftop garden provides a place to cool off with a reflecting pool (the source of the waterfall below), tables, another bar, and greenery around the perimeter of the roof area.

The owners, wanting to provide the highest level of audio throughout to maintain consistency of quality in sound and video, chose Brad Donaldson and Pro Systems AV, who service many event producers, as well as prominent nightclub and restaurant installations in San Diego.

Given complete flexibility to specify the gear Donaldson says his experience with Martin Audio made it the obvious choice.

Five W8LM mini line arrays are flown on each side of the main dancefloor, powered by Martin 4.2s/2.8s amplifiers and processed by a DX1, with four S218 subs on the floor. The restaurant/late night lounge features Blackline F212s and AQ212 subwoofers, along with other fills.

"We wanted to create a high end sound system that would keep up with the beauty of the venue," Donaldson adds. "The curves of the venue and the vision of the interior designers proved to be a challenge. For example, we had to be creative with the



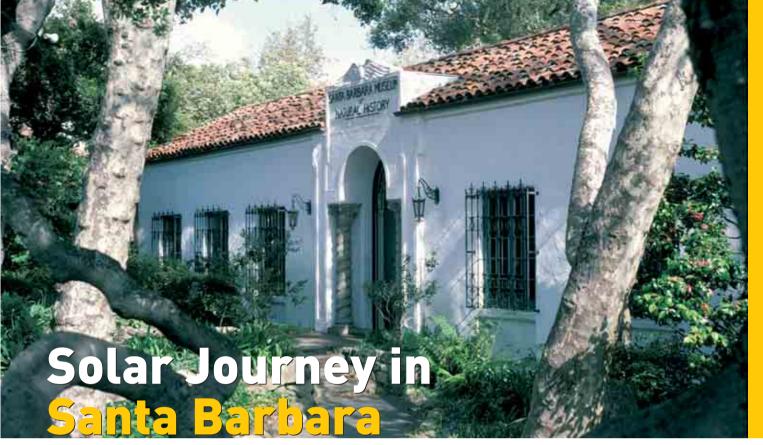




main speaker hangs because of the curved mezzanine overlooking the dancefloor, and a bridge going directly over the top. The smooth coverage of the W8LM's allowed us to cover the area with two hangs."

But the original plans had no room for subwoofers. Donaldson explains, "We actually modified some seating areas and created enclosures for the subs on the dancefloor. This actually gave the client more defined booth space to increase their bottle service."

And the client's reaction to the system? "Everyone is very pleased with the fidelity and impact of the system." •



Pounded in 1916, the Santa
Barbara Museum of Natural
History is one of the oldest
museums in California. A popular
attraction for families and foreign
visitors, the museum is located in
scenic Mission Canyon, immediately
behind the Santa Barbara Mission.

The museum is renowned for fine dioramas of birds, mammals, and southern California habitats, halls of marine life, geology, and Chumash Indian life, and an exquisite art gallery dedicated to antique natural history prints.

The museum's Gladwin Planetarium was totally renovated in early 2005 and equipped with state of the art technology that virtually transports visitors to distant planets, stars and galaxies.

The new Ty Warner Sea Center is a major off-site facility owned and operated by the Museum of Natural History.

During the recent upgrades, the Museum also decided to upgrade and improve its antiquated audio system, calling on Delicate Productions in Camarillo, California.

The venue for this new system was a beautiful function room called the Fleischmann Auditorium from the 1930s with a wooden stage and 348 theatre-style seats. It is used for presentations and is also the venue for the Santa Barbara International Film Festival and other community events such as lectures.

Because of the auditorium's wide range of functions, Delicate had to come up with a multipurpose sound system that was easy to operate and able to reproduce speech and music with exceptional quality and coverage.

Using Martin Audio's new AQ Series, as the centrepiece, Delicate opted for a comprehensive design upgrade featuring Martin AQ12s in tandem with four 320 dbx DriveRack PR speaker processors as part of a hi-spec package.

The Gladwin Planetarium presented another challenge altogether. The original speakers were mounted straight in the middle with the old projector, and consequently was a mono system. They needed a 5.1 system to go along with the new Digistar 3 SP planetarium projection system.

To get the increased surround coverage to match the visual presentation, the projection and sound system were gutted and the seating plan changed so the patrons were facing all one way in a reclined position.

In terms of speaker positioning, because the dome edge came down to about 8ft high, the install team was able to mount the Martin Audio EM Series loudspeakers against the wall just under the lip of the dome. As project manager, Bill Sage, points out, "The speakers are black and so is the wall below the dome, so they blend in really well. We pointed them at the patrons in their seats, and that way we kept the reflections to a minimum. Martin always voices the speakers really well and we only had to use a little EQ to deal with the dome."

He added, "Krissie Cooke, the Astronomy Programs Coordinator, has this program on the computer that lets you travel through the solar system," concludes Sage. "She controls it with a computer Joystick. The first time we fired up the sound system and she took us on a little 'tour.' It was like an amusement park ride. I had to grab on to the seat because the sound and the video really could make you dizzy. This has been one of my favourite projects."

wo days on a beautiful beach in the Cayman Islands listening to leading jazz acts such as keyboardist George Duke, vocalist Al Jarreau, guitarist Earl Klugh, saxophonist Ravi Coltrane and gospel vocalist Yolanda Adams. Sounds like a good idea to us.

And it did to the thousands who attended the two-day festival held. The result of collaboration between the Cayman Islands Department of Tourism and BET (Black Entertainment Network) Jazz, the Jazz Fest will soon be a staple of the Caymans and other Caribbean islands based on its growing popularity.

Located 480 miles south of Miami in the quiet western Caribbean, the Caymans are a trio of tiny islands renowned for their beaches and diving spots — a premier destination for discriminating travellers, honeymooners and families.

Paul van Puffelen's Southern Technical Support of Miami and Charles Gregory of Hopscotch Sound in the Caymans provided audio for the festival. Gregory has been running a successful recording studio in the Caymans for quite some time and had asked van Puffelen to augment his live rig, which originally consisted of two W8's per side over two WSX subs.

In order to achieve the long throw required, van Puffelen and Gregory consulted with Rob Hofkamp of Martin Audio North America to come up with a powerful line array system for the event, featuring four W8LC compact cabinets per side over five WSX subs per side, with four W8S cabinets in the centre. This was more than sufficient to project 250 feet deep (plus side and downfill).

Crowds for the event, held on a restored abandoned beach property, with sunsets and passing cruise ships in the background, averaged approximately 3,000 and the audio quality was top-notch throughout.

"Everyone was amazed at how good it sounded, considering it was outdoors and we weren't using any delays," summarised van Puffelen.

And Charles Gregory, the local impresario whose recording studio, Hopscotch Sound, has been a popular choice for musicians, added, "Changing over to Martin Audio speakers is the best decision I've made in my whole career. And it's not just about the equipment, it's about the people. Having Rob here with us during the festival setting up the PA really topped things off.

"As for the speakers, I just did a two-night show with Roy

Cayman Jazz Fest



Ayers and the clear coverage was extraordinary. With the line arrays flown fairly low people were remarking not only on the quality of the sound but the fact that they were still able to have a conversation!

"The Martin Audio speakers have taken my company to a whole other level!"

#### **Antwerp AMT**

ntil ten years ago the municipal-owned AMT (Antwerp Musical Theatre) was the predominant theatre in the Belgian city. When, in 1993, Antwerp was bestowed with the title European City of Culture, the theatre — which had now moved to another location — fell into the private ownership of Music Hall (under the direction of Geert Allaert), who built it into a venue for touring musical productions from the UK (such as Les Miserables, Cats and Phantom of the Opera).

Now the 2,200-capacity venue has extended its scope and become a multi-purpose performance space for Music Hall's own musical productions as well as one-off performances, with the aid of a new Martin Audio line array system, supplied and installed by Ampco Belgium.

Their sales manager Steven Kemland explained that the unusual dimensions of the venue, which includes a huge 42 metres drop from the balcony tier to front of stage, makes it difficult to achieve even coverage, while the theatre is located in a difficult loading area. As a result the stage needs to rotate through  $360^{\circ} - 10$ m below the stage to load into — and this makes staging a one-off production both costly and awkward, he says.

When they were about to stage their own inaugural musical production *Dracula*, Music Hall were urged by Ampco to audition a Martin W8LM for their new house system instead of choosing other brands which they had specified in the past .

"We knew that *Dracula* was set to run between October and January," said Kemland.

"Having worked with the company before at the Capitol in Ghent we were able to arrange a demo and Geert immediately loved the sound of the system."

Where the theatre had once needed a separate music and voice system, with specific under-balcony and delay points, the W8LM demonstrated that it could cover all tiers evenly with a straight L/R linear curve.

The system has been designed in two 12-enclosure hangs, optimised using ViewPoint™ and DISPLAY™ virtual 3D environment software.

The top six enclosures on each side project into the balcony, while the second tier of the system covers the ground floor stalls.

"It works like a double line array system," says Kemland. Flown at a height of three and a half metres the line array hangs can cover from the third row of the front stalls. Nearfield coverage for the first two rows is then provided by six portable Martin Audio W15T's (these are removed when the orchestra takes up the front row positions). Finally, a pair of W8LX subs are groundstacked each side of the proscenium arch.

The production for *Dracula* was carried out by rental company Flashlight/APR (the sound designed and operated by Walter Rothe).

After careful listening tests during pre-production and first runs of the *Dracula* shows Geert Allaert and his team where convinced that they they had made the right decision in choosing Martin Audio W8LM for the AMT Theatre. "We were so impressed with the sound, which was the best we ever experienced in the hall, " he said.

Steven Kemland, who project managed the installation agrees. "Wherever you go in the theatre the sound is identical — from the front row stalls to the top of the balcony."

In order to get maximum utilisation from the venue Music Hall have also renovated the Foyer and Food Bars, providing a number of satellite party spaces (starting at 1500-capacity) that can be rented for separate functions. These have also been equipped with large quantities of Martin AQ architectural and C516 ceiling speakers.



Summarised Steven Kemland, "This was a challenging installation given the inherent design and age of the building — along with the number of satellite rooms — but thanks to Martin Audio we have achieved a result which Geert Allaert is delighted with."





mpco Belgium have carried out a major Martin Audio sound installation at the new Plopsaland Indoor theme park in Hasselt.

Eight years ago Ampco Belgium fitted out the original Plopsaland — based at the seaside resort of Adinkerke-De Panne — but this latest theme park is entirely enclosed.

Plopsaland is the brainchild of children's television production company Studio 100, which bases its entertainment around popular characters from the TV shows (including Samson & Gert and Kabouter Plop). Run in conjunction with the Belgian Government, the Hasselt facility is based on a 110m x 90m footprint, holding a maximum 2,700 people and featuring 28 different attractions.

Ampco thus arranged their sound design into 28 different zones, each with its own dedicated sound effects, local control and background music specific to the theme.

Because Studio 100 is not only a TV production company but also one of the most important music production companies in Belgium supporting successful acts like Spring, K3 and others, the music infrastructure needed

to be of high quality, emphasised Ampco Belgium sales manager, Steven Kemland.

"We decided to place the Martin Audio loudspeakers right in the centre of each attraction," he reports. "Next to the paging and background music this reproduces all sound effects — from the croaking of frogs and cave sounds to the music from the two-tier carousels.

This was the only way to get results

To achieve this, Ampco have deployed more than 200 architectural loudspeakers. This includes around 80 x C115's, 30 x AQ5's (and other AQ series speakers) — all this combined with Armstrong I-Ceiling sound panels.

that stand out of the ordinary."

And the adventure is far from over — for now Studio 100 are planning to open another themed site in the French speaking part of Belgium — scheduled to open in April 2007.

## Different Strokes

**V** 

he Strokes brought their angular downtown Manhattan guitar sound to the UK in February — teaming up with their long-serving British sound engineer, James Gebhard for a theatre/arena tour.

Though their latest album, *First Impressions of Earth*, is more experimental and lavishly produced than the lo-fi approach of the first two, the band likes to capture the rawness of those early recordings in a live context. However, their FOH man strives to transmit a much greater energy than was present in the studio mixes. "Raw, loud and in your face," is how James puts it.

The crew line-up on this tour saw him paired with Capital Sound's experienced systems tech Al Woods for the first time — perhaps surprisingly, since Gebhard has himself long been a massive fan of Cap's equipment inventory, and the support he knows he can depend on. Most of Cap's Martin Audio line array fleet has been called on at some stage during this tour, depending on the venue size and configuration.

"The W8L/LC is my preferred system of choice," exclaims Gebhard. "Martin is always the first name on my spec — which is why I use Capital, apart from the great working relationship I have with them."

The sound engineer has been with The Strokes since the very beginning and five years later James Gebhard (below) still masterminds The Strokes' live sound with a largely transparent approach, restricting any processing to a minimum. "I use a bit of reverb and delay — largely because the new album has it — and I use the Avalon preamps on Julian (Casablancas') vocals for distortion on the older songs; but that's it."

The latest tour has seen the band play a variety of theatres and arenas, but because of the extra lighting that production has

been carrying — with a mother grid and separate triangular truss — it has restricted their ability to fly the system. "In certain venues it's been difficult to get the weights I have needed to fly the necessary amount of PA, due to roof loadings," says Al Woods. "It's a relatively heavy lighting rig for some of the venues, which can eat into the weight available to hang PA. However, the W8LC is a very light, powerful box and is a great choice for a flown system in these situations."







Having overcome the physical obstacles, he has then needed to optimise the two main PA hangs for the house and tune them to the sound engineer's requirements.

Though he carries Martin's predictive ViewPoint™ software on his laptop, along with XTA AudioCore V6 (DSP) and SIA Smaart (for time alignment and phase checking), so familiar is Al Woods (*right*) with system and house characteristics that he draws largely on personal experience.



Although he says ViewPoint provides a great guideline, like all system engineers, where tiered balconies are involved, his concerns turn to the thermal effect a house full of standing punters will have on the predictive curves and the tendency for the high and midrange energy to shoot over their heads. "So with the flown W8LC's it's a case of redistributing and attenuating the energy, taking more from the balcony by tightening up the splay angles, generally from the FOH position to the rear of the floor." Touring with both Starsailor and the Stereophonics helped him to evolve this solution.

Meanwhile, both he and James Gebhard have nothing but praise for the response of the W8L. "When they first introduced these boxes I was really blown away, it just has such great attitude," said the FOH engineer.

"Other line array systems may sparkle but sometimes they are just too 'polite'", cut in Al. "The Martin system has always had a really raw energy to it, especially at the low end. I don't think there's another system that comes near it in the transition between the midrange and the low end. On the L, especially, the low end is stunning — it's pure rock 'n' roll; but having said that I have mixed orchestras with it and achieved great results."

Throughout the tour, production has been reconfiguring the systems, using both the W8L and W8LC as the main hangs, adding outfills and sidehangs, and where necessary they have used Martin's dedicated W8LD downfill box. At Hammersmith they introduced the W8LM mini line array for infill purposes.

At the stage, monitor engineer Jamie Landy provides eight monitor mixes via the 12 Martin LE700C's — having been converted to Martin's classic wedge after using them while working with the Futureheads on the NME 2005 tour. A W8C/S218 sidefill stack keeps the sound focused on stage. "Nicolai (Fraiture) has a lot of kick to his bass," says James, "and so the S218's were recommended — and he's not kicked his wedges off the stage yet." A further stage mix is sent to the W2/W2SA drum fill combo for the benefit of Fab Moretti.

The Strokes change their show and running order on a nightly basis. "There was a time when they didn't do set lists at all — and they rarely soundcheck," informs James Gebhard. But on this sell-out tour they continuously built their show to a crescendo, ending with the three classic tracks from their first album, *New York City Cops*, *Barely Legal* and finally *Take It Or Leave It*.

### Gay Reds turn to Black

remlin is now well into its seventh year, which will come as something of a surprise to many in the gay community in Belfast since it seems like it's always been there. As Northern Ireland's first ever gay-owned and run club Kremlin has established itself well and truly as the core of the gay social scene in the north, if not the whole of Ireland.

The club's layout and decor reflects an image of Soviet Russia. Don't let it fool you though, as you will find a warm welcome and the hottest atmosphere inside! Its three areas, Tsar (public bar), Long Bar (disco bar) and Red Square (two-level club arena) play host to the best resident DJs, live acts and PAs.

With the current award winning formula (Best Irish Gay Venue three years running — Big Buzz Entertainment Awards) & Best Irish Gay Night (BBM Music Awards), the ongoing expansions, and the best gay up-for-it clubbers in the province, this year has seen Kremlin firmly cement its reputation as the best gay venue in Ireland.

The Kremlin team are aware of the ever-changing needs of its customers and to this end are constantly striving to provide an exciting and fun calendar of events throughout the year.

The entire club is transformed on a weekly basis to provide a backdrop for a huge variety of theme nights ranging from The Wizard of Oz to the Wild West and from Latino Night to the fairground attraction that is The Kremlin State Fair ... not forgetting the ever popular and often controversial Kink! fetish nights and Ibiza style foam parties.



The club has played host to some of the best PA's on the club circuit with chart acts and top cabaret artists.

October 2005 saw the largest single investment in the gay community in Ireland, with the combined redevelopment of Kremlin's Long Bar and Tsar areas in a £1million project, bringing a stylish new second mezzanine floor and cocktail bar as well as a new modern feel to the entire bar.

As part of this refurbishment all areas underwent a major Martin Audio overhaul. The Kremlin has always loved Martin Audio products and knows the quality available.

The venue left it to Rea Sound to provide the best design for each of the areas in question, including a new clubroom, The Shoe Factory. Due to the wide variety of uses the product Rea Sound opted for was a Blackline system in each of the dance venues, each consisting of four F15's, four F8's and two S218's, along with processing and amps. In order to make use of the existing Martin Audio product in the venue Rea Sound had it serviced, cleaned, repainted and branded — and then re-installed the eight EM56's, four ICT 500's and four EM201 subs into the new long bar.



The 14th and largest *Humor* Festival took place recently over ten days in the Swiss Alps location of Arosa — with over 10,000 visitors attending.

Swiss company Stagelight AG were once again selected as exclusive supplier for the sound, lighting and video equipment. Stagelight is one of

the longestserving hire companies in the industry, and since the very beginning has focused its efforts exclusively on Martin Audio loudspeakers.

At Humor Stagelight used a W8LM line array with WS2A subs, W2s and



WT15s as fills and LE12JB stage monitors - all powered by MA4.2s and MA1.6s amplifiers and DX1 dedicated system controller.

Artists and organisers alike were extremely happy with the quality of the technology and are already asking for the same combination of Stagelight and Martin Audio again for next year.



TK sound rental company, Rossco Ltd has extended its relationship with

The company, run by former musicians Ross Sharples and Mark Donovan, recently purchased ten W8LM Mini Line Array enclosures from dealers, LMC Audio, along with two of the new W8LMD Downfill boxes. Ross Sharples confidently predicts that a further six WLX matched subs will provide the final piece in the jigsaw.

Says Ross, who set up the company in 1997, "We have been with Martin Audio and LMC Audio from day one."

The new Line Array joins an inventory that already includes Martin Audio W8C/W8S, W2, EM15, W0.5, WM0.5 and the legendary LE400 stage monitors.

This is designed to service a broad, and at times quirky work roster, which aside to the local annual Rhythms of the World Festival, recently included the Public Enquiry for relatives of the victims of the Tsunami (when the Olympia Auditorium was transformed into the West London Coroner's Court); an appearance by United States former Secretary of State, Colin Powell at the Hilton Metropole, and an appearance by Cape Verde diva Cesaria Evora (of Buena Vista Social Club fame) at Blenheim Palace — the first time the new W8LM hangs were fired up in anger. More conventionally perhaps, a Martin Audio system also supported recent performances by Charlotte Church.





Southside Faithful

outhside Christian Church is a congregation on a mission — literally! It prides itself on being contemporary and relevant to the people of Adelaide. "Our vision is to serve the community with a message of hope, truth and love," states senior minister Danny Guglielmucci — and this powerful message is delivered by an equally powerful extensive music ministry, teaching programme and very connected community care arm.

Central to any church is its Sunday services and here Southside excels with live music, powerful preaching and video interactivity.

The growth of Southside has been spectacular. From humble beginnings in 1994 with a congregation of just 40 meeting in a small church building at O'Halloran Hill, the church now attracts over 3,000 on any given Sunday. The current location, at the expansive Old Reynella markets, has been a work in progress with, most recently, a completely new fit out for audio, lighting and video in the new upstairs auditorium.

"Line array was the only sensible option," said Nick Burns, MD of house of worship installation specialists, Forefront Productions, who managed the project. The Southside auditorium is approximately 50m long and 40m wide and when the raked seating is in place potential capacity will reach around 1,700. The church started the planning process well in advance auditioning seven of the leading lights in line array.

"The Martin/QSC package simply gave us the best overall

combination of dynamics, punch, smooth frequency response and mid range detail," admitted Nick — adding that the latter attribute is an area in which Martin Audio has had a strong focus for many years.

"Whilst we auditioned various 'mini' line array systems," continued Nick, "it was a unanimous decision that the power and performance provided by a mid sized 'compact' system was too crucial to trade. There's a lot of information coming off stage and we wanted to deliver it all."

The W8LC's are configured six a side with four WLX-GS ground stacked delivering low frequencies. Four Blackline F8's and two EM76's cover the front few rows and sides respectively. On stage a combination of nine Blackline F12's and five LE12JB's provide foldback and the entire system is powered by a total complement of 23 QSC amplifiers (or around 20,000 watts) — assisted by a comprehensive digital processing, transport and control system.

A typical Southside service includes a nine piece live band, ten vocalists, two speakers, a video presentation and a 16 piece choir — all on individual mic feeds. All in all there are up to 80 mic channels at the Yamaha PM5D (monitor), M7CL (FOH) and DM1000 (FOH/Choir) digital consoles.

This technical fit out puts Southside on a par with any of Australia's 'super-churches' and provides the growing congregation with a meeting place and auditorium to extend its ministry through music and drama ... and of course provide the focus for Southside's community care programmes.

#### \*\*

#### Cinderella Man

Based on an extraordinary true story, Russell Crowe's latest blockbuster movie, *The Cinderella Man*, is about a down-and-out boxer who triumphs over the most unlikely odds. Whilst resurrecting his fighting career and rescuing his family from the poverty of the Great Depression he becomes a folk hero for all those struggling against adversity.

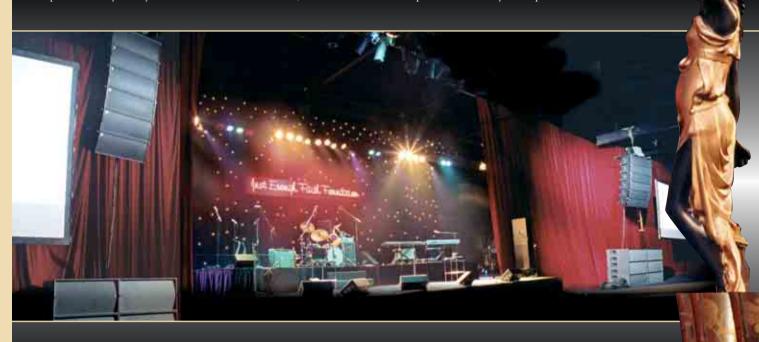
The movie's Australian launch at Sydney's Hordern Pavilion was a night to remember with a veritable 'who's who' of Australia's brightest and best enjoying a \$2,000 a plate five star dinner, and entertainment including Melanie C and Leo Sayer.

Essentially a charity night, the event was generously sponsored by Kerry Packer's PBL and L'Oréal, and raised

Speaking from the boxing ring was celebrity DJ and Master of Ceremonies Alan Jones, whose interview with The Cinderella Man himself, Russell Crowe, was broadcast through an eight cabinet Martin Audio W8C system. This was flown above the

boxing ring, and carried the spoken word plus the backing band which subsequently performed in the ring.

On the main performance stage two lines of six Martin Audio W8LC compact line array cabinets were ably supported by 12 WSX subwoofers, all powered by QSC PL-2 amplifiers. The system provided



around one million dollars for the *Just Enough Faith*Foundation, an organisation devoted to feeding and giving a second start to the homeless — a fitting analogy to the Cinderella Man's own story.

With a boxing ring at one end, a performance stage at the other and a team of extras dressed in 1920's street clothes conversing and moving around the aisles, the Hordern was transformed.

32 Hundred Lighting provided total production, audio and lighting for the event with a selection of Audio-Technica Artist Elite microphones covering the critical interview and speech applications and a Martin Audio line array system delivering the result.

Melanie C, Leo Sayer and their bands more than sufficient sound reinforcement for the night. Two Allen & Heath GL5000's handled mixing duties, a 48-channel at FOH and a 32-channel at foldback.

32 Hundred's MD Iain Reed commented, "This was a great night to be involved in – not least because a million dollars was raised for a very worthwhile cause. Technically for us it was smooth sailing with no issues. Everything sounded great."

All in all this unquestionably opulent event, while providing an opportunity for the rich and famous to experience great entertainment and premium production, contributed mightily to a very worthwhile cause — something the Cinderella Man would surely applaud!



he Hong Kong
Special Administrative Region
recently hosted the six-day
Hong Kong Ministerial
Conference World Trade
Organisation — the first
time an event of this
size has been staged in
Hong Kong.

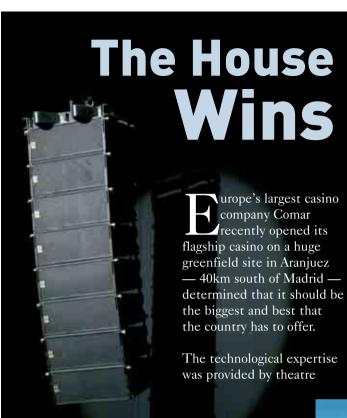
The Electrical & Mechanical Services
Department was assigned to organise this convention, and Max Production Ltd were contracted to supply the sound system for the Wanchai Convention Centre.

As Sammy Mok had just brought 16 x Martin W8L line array enclosures for his company, he knew he had the armoury to provide even coverage throughout the large auditorium.

Patrick Lau from Dah Chong Hong Ltd helped the production company to undertake the acoustic modeling using Martin Audio's proprietary DISPLAY™ software as well as ensuring that clean feeds were provided for the radio and television trucks.

Max Production reinforced the W8L hangs with 16 x WSX subs — all powered with Martin Audio MA 4.2s amplifiers — while 20 LE400C floor monitors were used on stage.

The ease of set up and the performance of the W8L was very impressive. As a result Sammy Mok is already planning to increase his inventory of Martin Audio cabinets.



specialists Stonex — who specified a Martin Audio W8LM line array system and French lighting designer Daniel Fayolle (who opted largely for Clay Paky effects).

The interior is divided into two main sections — the casino rooms and the show area. The latter is in the form of a 400-seat auditorium, and four multipurpose rooms with dividing walls. These can be combined to create one large hall, with seating for an audience of 2,000 people.

Stonex have enjoyed a long relationship with Adagio Pro,

Martin Audio's Spanish distributors, and the two companies teamed up to design an audio system under the control of a Yamaha DM2000 console.

The stage system comprises of 16 W8LM line arrays, with six WLX subs. WTUB's act as frontfills, a pair of Martin H3T's as sidefills and six LE400C monitors as performers' reference sound.

All in all the installation proves the old casino adage that the house always wins.



# Scorpions on the Beach



hen German band The Scorpions played their Middle Eastern concerts recently, it was the first time an international rock band had toured the Gulf.

In Qatar the concert came to the beach area of the Inter-Continental Hotel in Doha.

Promoter, MediaTech MD, Karnig Sarkissian, brought in Lebanese-based rental company Eltek and Lumatron Qatar's Salim Abil Mona to jointly provide the equipment.

Despite the difficulties of transporting the rig across the beach, a Martin Audio line array was erected on scaffolding, with eight W8LC cabinets suspended from either side of a stage specifically built for the show. Four subwoofers were positioned on either side of the stage and four smaller W8LM line array cabinets were hung from the lighting rig, stage centre, for front fills. The PA was powered by Martin Audio MA4.2s amplifiers — and Eltek also provided Martin Audio LE400C floor monitors.

The show was a success and the logistics are now firmly in place to put Doha on the map as a developing concert entertainment centre.

#### **AQ-Demia!**

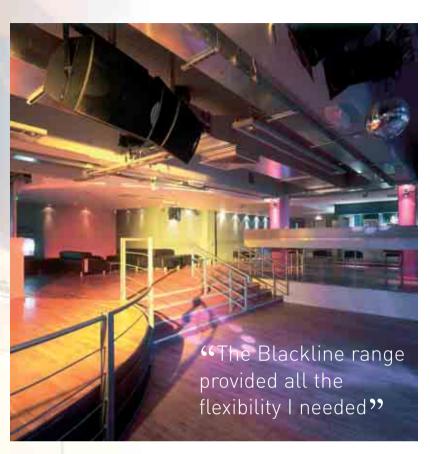
awthorn Theatrical have specified AQ speakers exclusively in their design model for many of the UK's new City Academies.

The company has been providing a full technical infrastructure, consisting of sound, light, projection and control. The most recently-commissioned system (pictured below) was at Northampton Academy, which has been designed around four spaces — the main assembly hall, two drama studios and a dance studio.

In the main 350-capacity assembly hall the system — comprising a pair of AQ15's, four AQ12's (as delays) and a pair of AQ212 subs — is under AMX wireless touch control from the lectern. Aside from requiring speech intelligibility, the main hall also features music presentation and the screening of films (via the Hawthorn-supplied big screen) — all of which are within the scope of the AQ series.

The performance spaces can be reconfigured and the drama studios integrated into one huge area. Each drama studio is equipped with four bar mounted AQ10's while the dance area sees

flexible solution, but the AQ boxes are relatively compact, quick to install and are aesthetically pleasing." He also said that working alongside architects the colour was critical—and AQ's factory finish provided the perfect match.





another pair of AQ12's, supported by a pair of Martin's costeffective two-way workhorses, the Blackline F12's, forming a complete portable rig.

"We have got to know the Martin Audio catalogue well and understand what the product can do," states the company's installation manager Simon Ling. The AQ enclosures complement Hawthorn's large hire inventory of Martin Audio loudspeakers. "Not only does it provide a highly

#### **PVAV at Brunel**

In a separate contract Peter Varey's PVAV opted for a Martin Audio solution in the £1.7m refurbishment of the 600-capacity Academy — part of the Student Union building at Brunel University in Uxbridge (pictured above).

"Given the wide variety of the entertainment programme Martin's Blackline range provided all the flexibility I needed," said Varey, "with plenty of punch in the bottom end for the hard dance nights."

Part of the refit included a new raised stage area. Here Varey ingeniously reorientated four of Martin Audio's new AQ215 (2 x 15) subs in the horizontal access and recessed them under the

stage apron to create the additional rumble.

The PA system has been designed around multiples of Blackline F15's and F12's providing the dancefloor sound. Six of the former and two of the latter are ceiling mounted while coverage for the bar, chillout and peripheral areas is accounted for with the provision of four F8's. Completing the Blackline family, a pair of F10's provides the reference sound up in the booth. •



he former Atlantic Bar & Grill, one of London's most enduring and treasured landmarks, has reopened as the Astor Bar & Grill.

When Oliver Peyton's famous restaurant, which burst onto the scene in 1994, went into administration last September, a new operational team led by Channel 4 chairman, Luke Johnson, restaurant consultant Simon Wright and Gary Ashworth (collectively Adriatic Restaurants Ltd) took over the magnificent Grade-II listed art deco building within weeks and renamed it. The Astor name is designed to merge the great 1920's art deco Gatsby era with the edginess of the 1960's and the Profumo scandal.

With three impressive spaces — the grand dining room, celebrity Dick's Bar and Chez Cup — the owners knew they needed high-octane sound reinforcement.

"We wanted a lot of loudspeakers that could be run at low volume during the early evening — but then be turned up depending on the style of entertainment," said Simon Wright, formerly Food & Beverage director with Ian Schrager Hotels.

During his time with Schrager Simon had routinely contracted Sound Division to provide their outside production for special events at the Sanderson and St. Martin's Lane Hotels — and after carrying out their survey,

the installers recommended a Martin Audio solution, predominantly drawing from the highpowered, cost-effective Blackline series.

"We quoted Martin Audio because their vast range of enclosures matched all operational and design requirements," said Sound Division MD,

## **Astor** La Vista



"a highly flexible solution"

David Graham. "We now know the product capabilities of the Martin Audio catalogue inside out and the one thing we know is that it will provide a highly flexible solution."

In the 200-cover restaurant and 4,000 sq ft island bar area are 12 Blackline F8's and a pair of S15 subs; the club sound is reinforced by a further S218 dual 18in sub.

In the exclusive Dick's Bar are four further Martin F8's and S15 compact sub while in the circular Chez Cup, four aesthetic AQ6 Contractor loudspeakers are wall mounted around the perimeter of a space that is ideal for private dining.

Knowing that these rooms originally embodied the 1919 elegance of the

Regent Palace Hotel — once the largest in Europe — Sound Division were also anxious that this installation paid homage to the magnificent art deco interior with its stupendous pillars and balustrading.

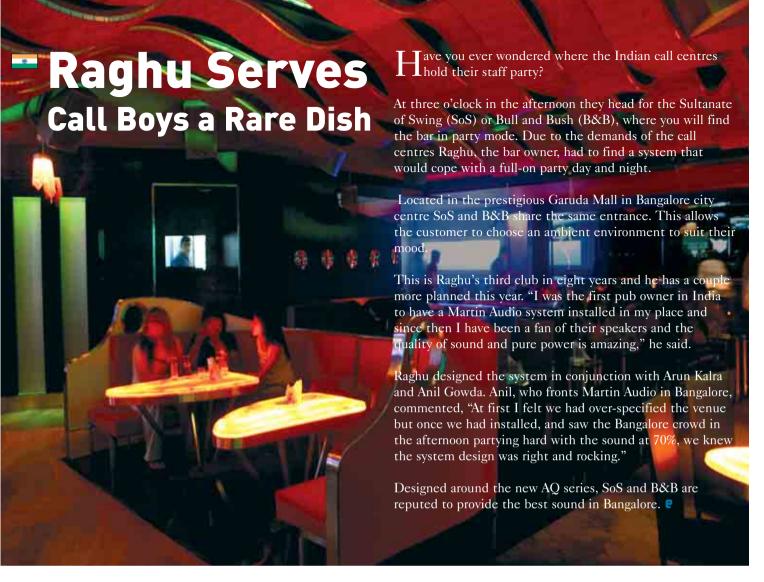
"It has been a privilege to become involved with one London's most elegant and historic late night dining and drinking venues — and indicates how far Sound Division has progressed over the last two years," remarked David Graham.

Simon Wright, in turn, was full of praise for the installers' work. "Their turnaround time here was amazing. In just two days they had stripped out the old gear and had three separate

systems up and running
— not to mention the
additional equipment
they brought in for our
launch party. They have
a fantastic work ethic,
and a great team."

Astor Bar & Grill will be open six nights a week, Monday to Saturday from 5pm to 3am and private parties can be catered for seven days a week.





#### **Delhi Reaches Climax**

Peter Punj and DJ Rummy opened Climax in New Delhi to rave reviews recently and they have already picked up their first award: India's prestigious *Times* Night Life Award for Best Bar with Dancing.

The pair wanted to set a new standard in clubbing in New Delhi, and this is their first venture together. Both realised that to get the right sound, look and location was vital to the success of the club. The club is located near India's famous Qutab Minar — a 239ft sandstone tower — and its main deck has stunning views overlooking the Qutab Golf

Course. Inside the club is divided across two levels — with a VIP Champange lounge on the first floor and the upper level functioning as a chill-out area. The dancefloor can be seen from both floors, allowing the 1,000 clubbers to show off their latest moves.

DJ Rummy commented, "Martin Audio was my immediate choice, I was the first W8C user in India and wanted that tradition to continue.

"The system was designed



by Arun Karla and myself using a combination of Blackline and the new AQ series. Suprisingly the complete sound installation came in under budget and to my amazement was even cleaner and more powerful than I had imagined possible. The WS218X has totally awesome low-end power."

n impressive new shopping mall in West Tehran has had its children's entertainment floor equipped with Martin Audio EM loudspeakers.

The company's Iranian distributor, Zir O Bam Ava. Co. won the contract to provide audio throughout the amusement playground on the third tier of the Tirajeh Shopping Mall developed by the Kish Paradise Co) after successfully demonstrating the EM series.

According to Zir O Bam founder and managing director, Faramarz Rafiei, the bowling alley is the first of its kind in the city. His company specified four EM26's to achieve maximum coverage, while cancelling any unwanted delays resulting from the hard, reflective surfaces.

Although the tender was approved instantly, Zir O Bam only had 24 hours to get the system installed — necessitating the entire day being spent on designing custom ceiling brackets; this enabled the cabinets to be be suspended at a 7° downward angle in the 20m x 6m alley, and aimed directly towards the bowlers' seating area.

Following this success Faramarz Rafiei's company were also asked to commission a system for the bumper car area, where the existing sound was not only distorting badly but leaking out into the adjacent areas (including the restaurant). Following measurements, they calculated that 70dB of SPL was spilling from the third floor down to the ground.

By installing six Martin Audio C115 speakers in a 360° pattern within the outer circle of the false ceiling, 95dB of clean sound was delivered to the main bumper car area. This reduced to 75dB at a distance of 8m — but most importantly there is now no spill into the remainder of the mall.

Finally, a BGM and paging system were installed by Zir O Bam across the entire mall, requiring a total of 450 ceiling speakers to be deployed across all three floors, operated by the mall management. In addition, 24 Martin C115T 100V line speakers have been integrated into the main lobby area of the ground floor, covering a total of 20 separate zones, with four channels of redundancy.

#### **Mall Practice**







### Striking Oil

football stadium in Tbilisi, Georgia provided the unlikely location for a huge rock concert — in honour of the BP operated Baku-Tbilisi-Ceyhan (BTC) oil pipeline running some 1100 miles between Baku in Azerbaijan on the Caspian Sea, to a newly constructed terminal at Ceyhan on the Mediterranean.

RG Jones were contracted to provide the audio — based around their Martin Synco 3-way W8LC/WLX line array system — for an event which was headlined by Simply Red and staged at the Mikheil Meshki Stadium, home of Lokomotiv FC.

The company were working for Steve Nolan's Chromatic Productions, who in turn had been contracted by Neos Creative, BP's main contractor for the event.

RG Jones' engineer, Simon Honywill explained, "BP as operators of the BTC pipeline are staging events to celebrate the completion of this pipeline which runs through Azerbaijan, Georgia and Turkey. Our first show took place in Baku, Azerbaijan in May and we have now completed the Georgia event where as well as 155 miles of pipeline being laid, two massive pump stations have also been constructed."

Part of the cargo flown out in a massive Antonov aircraft were 44 x W8LC enclosures and 20 x WLX subs, which formed the main PA system.

Simon reports that the original venue earmarked for the event had been a nearby park. "But it was not suitable for a

free concert, as the authorities had no idea how many people would turnup — so it was



agreed to use the football stadium next door instead."

There the Star Group set about creating a rigging and staging infrastructure at one end of the stadium.

The main hangs of 16 x W8LC, suspended from Star's 'V' tower PA structures, were forced out fairly wide as a result of XL Video's big screen displays, combined with the footprint of the 'V' towers. To fill in the centre close to the stage, six W8LC's were hung each side adjacent to the stage, maintaining the audio focus on the stage and ensuring those who arrived early also received the same quality audio as the rest of the stadium. Ten WLX subs were set in a concert array either side beneath the main hangs.

Simon Honywill optimised the system using Martin Audio's bespoke DISPLAY™ 3D predictive software. "The system sounded fabulous and our clients were very happy with the result," he said.

The concert which also featured local heroes the Sukhishvili Georgian National State Dance Company (described by Honywill as "awesome"), was the culmination of a day of celebration.



# Serving a good Pastor Dish

yung-won University Road, a landmark on Kyonggi province's social scene, is a street frequented by church-goers.

Along the crowded entertainment strip, one extraordinary church shines like a beacon among the high density 'Bok Jung Dong' of South Korea. This church has consistently stood out, thanks to a steady pool of patrons supporting it throughout its many years in operation.

Good Pastor church, a name associated with good preaching and a fun service, has a capacity of over 1500 people and is mainly frequented by the early 20s and young executives.

As the number of people heading for the church increased, it became evident that the current PA system couldn't cope with the demands of the sound engineers.

The venue's main operator, Mr Noh, had also voiced his opinion that the current set-up was unable to cope, and hence began the search for an upgraded system.

Fortunately, the church has long been supported by Mr Choi, founder of Young Jin Electronics, the Martin Audio distributor.

When the Martin Audio Wavefront Line Array system was suggested, Mr Noh was invited to a

The result? the whole operating team was impressed beyond all expectations. Mr Noh placed the order there and then for immediate delivery.

demonstration.

The large main auditorium now has 12 x W8LCs (as left/right hangs) with a three-enclosure W8LM as the centre cluster. The WLXs are ground-stacked while a further ten Blackline F12s have been commissioned for stage monitor and sidefill duties. All driven by Martin Audio amplifiers and dedicated DX1 system controllers.

In a smaller auditorium, a W8LM mini line array has been commissioned, reinforced by a pair of WMX flown subwoofers, with four further Blackline F12s providing the fills.

Finally, the Creche/Childcare room has also been properly equipped for audio. Here Young Gin Electronics have supplied 12 x AQ8 ultra-compact full range loudspeakers from Martin Audio's new architectural range.



Large auditorium

"The entire operating team was so impressed with W8LC's performance"



Mr Choi of Young lin Flectronics in the smaller auditorium



Based in the Besançon Exhibition Centre, Micropolis is a 7,000-capacity multipurpose venue, able to accommodate everything from the Amnesty International congress to a Simple Minds concert.

"Given the exceptional acoustic qualities of the venue, we had to equip it with the most appropriate sound system in terms of versatility," said Olivier Curie, Technical Manager of Micropolis. "Other criteria we looked at were musicality and ease of use."

As a result, 16 x W8LMs and four WSX subs were purchased, essentially for congress events and single-performer show. For large-scale concerts the venue plans to rent in supplementary equipment.

To accomplish this, Micropolis have set up a partnership with L&S Production: This renowned 16 year-old rental company is based in Dole, and from the very beginning has developed a real passion and loyalty towards Martin Audio products.

"Micropolis was looking for a strong partnership with a local rental company," explained Jean Michel Lechenet, L&S Production's Manager. "We demoed and installed the W8LM systems — but at the same time we are able to supply an additional 16 x W8LC /12 x WSX rig when required."

He continued, "Martin Audio systems are already highly regarded by international productions, while French artists or productions are always convinced after hearing a demo."

### **Prodigy**

The Prodigy played a recent show at the Dom Sportova Arena in Zagreb, where Niking provided all the light, sound and trussing. This included a Martin Audio line array rig comprising 12 x

W8L's, 12 x W8LM's (for sidefill) and 24 x WSX subs — driven by Powersoft amplification.

With a 7,400 capacity, Dom Sportova is the largest sport hall in Croatia that is used for concerts, and spectators were thrilled to welcome The Prodigy to the country for the first time.

#### Temma-X Muzikfest

ome 4,000 visitors recently flocked to one of the biggest concert spectaculars ever in Slovenia.

The *Temma-X Festival* witnessed performances by top Slovenian bands (including Katalena, Siddhartha, Elvis Jackson and Lojze Slak) to celebrate 15 years of the band Big

Thirteen Slovenian performers appeared on stage with two songs — an interpretation of one BFM's song and one of their own — pumping out through the Martin Audio PA. Comperes Slon and Sadež entertained visitors throughout the performances, and also delivered all the songs of Big Foot Mama in a three-minute-long collage.

An hour of high-octane rock and nostalgia followed, and after two encores, the fans' persistence was rewarded with the legendary song *Nisem Večs Tabo*.

All performing bands received generous applause, but most fascinating and surprising was Lojze Slak, who used special scenesetting, stage pyros, theatre with acrobats, collage projections of Big Foot Mama's video clips and artistic and abstract movies.

All the equipment was supplied by Bostjan Konic of KSL, Martin Audio's Slovenian distributor. For the FOH they used W8LC line arrays and WSX subs. To cover the first row KSL used four WSX and four W8LC in



a ground stack, while stage monitoring consisted of the entire LE series (LE700, LE400c and LE12JB). Some F12 speakers were used for for sidefills onstage, to help the comperes, while a drum fill was also provided in the

shape of an S218 sub and two F15's.

Powering the speakers was a combination of Martin Audio and Crest amplifiers, with XTA DP226 and DP224 system management crossovers.

This festival was just the beginning of major celebrations for one of the most successful Slovenian rock bands, which went on right through to the new year.



## Heroes

t is currently trendy to use special German names for the country's new up-and-coming bands. Wir sind Helden (which translates as 'We are Heroes') were the shooting stars of 2004, and undertook their last major hall and arena tour of Germany, Austria and Switzerland.

At the Hamburg Color Line Arena they performed before an audience of 10.000 people. TDA Rental GmbH from Essen, with the sound crew of Roland Franke, Sabrina Sudhoff, Sven Teichmann and Steve Todeskino, were responsible for providing production on this 'new generation' pop band tour.

Wir sind Helden performed perfectly with Martin Audio's line array system, comprising 24 x W8L, 24 x W8LC, four W3 and 24 x WSX subs.

## We are Söhne Mannheims



They mix HipHop, Rap, Soul, Pop, Dancehall, R'n'B, Rock and Reggae with emotional ballads. The 'Söhne Mannheims' reinterpret the spirit of the bible in a very contemporary fashion. When the band performed in Schwerin, in the east of Germany, they relied on Martin Audio equipment to guarantee that their



message was understood in the most distant parts of the openair location. The audio package was serviced by Complete Audio Berlin and included 16 x W8LC, eight W8LM, 16 x WSX and LE700 and LE12JB floor monitors all powered by Crest Audio amplification.

#### The Island of Museums

omplete Audio Berlin built up the stage at the Museumsinsel (Island of Museums) in Berlin and used an exciting Martin Audio array to reinforce different styles — from the German electropop duo Zweiraumwohnung and the American singer MIA to the virtuoso, Heather Nova. For this gig they used 24 x W8LM and eight WSX, with ten LE700 and four LE12JB wedge monitors, powered by Martin amplification.

The special atmosphere on this night, with the crowd

clapping their hands in front of the famous dome, inspired the German distribution partner of Martin Audio (Atlantic Audio) to put out the message: We touch you with sound such was the emotion coming from the Martin Audio line array and sub bass enclosures.

With similar Martin Audio rigs, Complete Audio Berlin have undertaken some interesting international productions recently including Keith Urban, Goldfrapp, the Bloodhound Gang, Boss Hoss, Starsailor, Soweto Gospel Musical and Diana Ross.

### Red Bull's Flying Day

B Team, the audio production company from Slovenia, were called in to set up the Romania Bucharest Red Bull Flugtag — using large quantities of their preferred Martin Audio equipment for the sound reinforcement.

This worldwide event is actually a crazy 'flying day' and the highlight was the series of selfmade flying machines launching onto the river from a 30ft ramp above.

DB Team used a total of 44 x W8LC's, reinforced with 40 x WSX subwoofers powered by a combination of Martin Audio, Lab Gruppen and Crest Audio amplifiers. In addition Martin Audio LE700 and Blackline F15 were used as reference monitors on the stage-truss

The DB Team worked together with VPK Production from Slovenia (system manager Uroš Piskač) and Produkcija Zvuka from Croatia, who collectively ensured a first-class sound.



## Vai at the Culture Factory

Sardinas and Steve
Vai (and the Breed)
appeared for the first in
Croatia recently with an
incredible performance at
Tvornica Kulture in Zagreb
— southern slide blues
followed by metal.

The crowd literally held Vai in their hands as he played through a Martin Audio W8LM line array with WSX subs.

Tvornica Kulture (Culture Factory) is a small venue, a one-time TV studio in downtown Zagreb which is very popular for the broad number of events it stages.



## **Wavefront Rental Comp**

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ANDY J SOUND	+ 61 8 8376 2771		FRANCK SONO	+ 33 164 29 26 79
AVL ELECTRONICS	+ 61 3 9387 1055		GPS	+ 33 251 686 900
AVECUIND PRODUCTIONS	+ 61 8 9221 1888	•	L & S PRUDUCTION	+ 33 384 /9 00 96
CENTRESTATE PRODUCTIONS	+ 61 2 7747 7000	- 7	LE SCENOPOLE	+ 33 457 40 21 00
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DERRINGERS	+ 61 8 8371 1884		RICHARD LAURIAUT ECLAIRAGE	+ 33 385 391 535
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JAZZRIGHT PRODUCTIONS	+ 61 2 9311 1197	•	STARS	+ 33 810 56 66 66
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SOUND & LIGHT TEAM	+ 43 0676 405 64 27	•	NEW NOISE TECHNIK FUR SHOW & EVENT	+ 49 201 8686010
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STAGE PROJECTS BVBA     STUDIO 2000 BVBA	+ 32 56 32 37 73	•	MABA CULUR BI.	+ 36   29 05   03
CANADA	+ 32 7 3// / 1 4/		PUCKEUI UAU BI	+ 36   340   361
NORTHWEST PRODUCTIONS	+ 1 250 765 8451	•	SZATJI LIGHT & SOUND	+ 36 66 415 606
• SPL SOUND	+ 1 250 763 3855	IN IN	DIA	
CHINA		•	AV TECH	+ 91 80 22863691
NORTHWEST PRODUCTIONS     SPL SOUND     GHINA     GUANGZHOU TV STATION     GUANGZHOU TV STATION	+ 86 20 8667 1161		MABA COLOR BT.  RMS AUDIO ROCKGOLOYO BT. SZATJI LIGHT & SOUND  IDIA AV TECH DECIBELS THUKRAL PRODUCTIONS VERSATILE SOUND AND LIGHT  IDIONESIA	+ 91 20 26138305
GUANGDUNG HUIFENG FERFURMANCE EQUIFMENT CU., LI	D+ 00 ZU 04011300		THUKRAL PRODUCTIONS	+ 91 11 4311011
KUNMING YIFENG INDUSTRY AND TRADE CO.			VERSATILE SOUND AND LIGHT	+ 91 80 23342662
NANJING HUIFENG PERFORMANCE EQUIPMENT LTD COLUMBIA	+ 80 23 843231/3	- 🕌	PRO 4	+ 62 8188 33471
MISSION PRODUCTIONS	+ 57 654 1153		RAM AGUNG	+ 62 21 6265329
CROATIA		IR	AN	
<ul> <li>NIKING D.O.O.</li> </ul>	+ 38 548 270103	•	ZIR O BAM AVA CO.	+ 98 21 88786625
<ul> <li>PRODUKCIJA ZVUKA</li> </ul>	+ 38 540 861909		ELAND	
CYPRUS	. 257 22212000		REA SOUND	+ 44 (0)28 8676 4059
V&M AUDIO     CZECH REPUBLIC	+ 357 22313088		ALIY ALIBI MUSIC SERVICE	+ 39 011 9084998
AV CENTRUM	+ 420 602 227357		ALIVE MUSIC SERVICE	+ 39 011 9084998
JAROLIM	+ 420 302 227337		ALL MUSIC SERVICE	+ 39 0584 770097
SOUND SERVIS	+ 420 235364098	•	ALL SERVICE	+ 39 0521 694348
DENMARK			AMADLA PRODUCTIONS	+ 39 0583 464494
DANSK LYD PRODUKTION	+ 45 32 95 00 77	•	B.S.B.	+ 39 051 720625
EUROPEAN TOUR PRODUKTION	+ 45 363 07080		BIG TALU SERVICE	+ 39 0174 45314
RINGSIDE TOURPRODUCTION	+ 45 3645 0701	· •	BLU STUDIO	+ 39 079 293179
• ACOUSTICA	+ 20 1221 03504	- <del>:</del>	CINQUANTASEI CLAPS	+ 39 051 6153339 + 39 0434 26882
• ARRAY TECH	+ 20 1010 81876	•	CORSINOTTI RINALDO	+ 39 011 6193784
ESTONIA		•	DIESIS	+ 39 0187 738354
• AUDIOTEL	+ 37 250 45189	• •	ELECTRA SERVICE	+ 39 0375 82919
FINLAND			ELETTRA SERVICE	+ 39 0141 855405
RMC TAPAHTUMATEKNIIKKA 0Y	+ 358 3 3123 7900	· •	EMPORIO ON STAGE	+ 39 055 720794
FRANCE	. 22 / 0/ 02 02 52		FAST SERVICE FULL SERVICE	+ 39 081 8237009 + 39 347 412 37 87
ART SON ET LUMIERE     ATC	+ 33 4 94 03 03 52 + 33 5 56 69 60 60		FULL SERVICE FUMASOLI SERVICE	+ 39 0165 35806
AUDIO CONCEPT	+ 33 563 39 67 86		IMPERO MUSIC SERVICE	+ 39 0984 74138
AVANT SCENE	+ 33 534 63 02 60	•	JAM'S AUDIO	+ 39 0833 782363
BALLOON FARM STUDIO	+ 33 2 99 32 11 11	•	LA BOTTEGA DELLA MUSICA	+ 39 081 992509
•• BGM	+ 33 466 84 39 34		LA.TO. SERVICE	+ 39 095 7442448
BL EVENEMENT	+ 33 565 345477	- 🚬	MAFFEI SERVICE	+ 39 0461 707852

## anies Around the World -- Wavefront W8 -- Wavefront Line Array

1	es Al vulli	
•	MEZZANOTA MICROFASE MICROSISTEMI ALLESTIMENTI MISTER X	+ 39 0444 695507 + 39 0172 389277 + 39 039 6093910 + 39 347 960 2838
•	MUSIC LIGHT INSTRUMENTS MUSIC SERVICE	+ 37 347 760 2636 + 39 0566 860046 + 39 0577 306032 + 39 0984 76800 + 39 041 5342349
	PIANO & FORTE PIU' SOUND PLANET SOUND PRO SOUND SERVICE	+ 39 0522 661506 + 39 030 2511722 + 39 010 6515952 + 39 0422 460241
	PROCOPIO NICOLA RADIO SATA SERVICE SPRAY RECORDS T.S.S. W M AUDIO SERVICE	+ 39 0967 86718 + 39 051 6332440 + 39 085 975031 + 39 0521 776810 + 39 0962 865013
•	ZOHO MUSIC SERVICE  IPAN  SEPT 1  ISY MUSIC HOUSE	+ 37 0762 863013 + 39 011 6645754 + 81 3 5313 8512 + 81 3 3836 3552
K	USAGIYA OREA AIR AUDIO OCEAN SOUND	+ 81 88 652 2715 + 82 53 422 6526 + 82 2 6001 1155/6
LE	OCEAN SOUND TM SOUND UTO SOUND BANON ELTER	+ 82 31 977 8157 + 82 31 977 8532 + 961 1 902 555
MI	ALAYSIA WAN LEE MUSIC EXICO D.F.	+ 60 87 412 896
•	KORAGRO SA DE CV	+ 52 0166462-19170 + 52 0166 8818 8981 + 52 0133 3344 1334 + 52 01722-2131983 + 52 5255 5555 9751 + 52 5604 7335 + 52 5530 9163 + 52 5762 5941
MI	OROCCO KILMI MUSIQUE	
•	AMPCO PRO RENT BV EAST SOUND MANIFESTO PURPLE HAZE SERVICE-CENTRUM APTRONICS SIMPLON VAN SAMBEEK PA	+ 31 30 2413444 + 31 575 519365 + 31 229 279839 + 31 348 433787 + 31 315 631521 + 31 50 3184150 + 31 653 902690
	PK SOUND VISIBLE PRODUCTIONS WAVEFRONT ENTERTAINMENT LTD. DRWAY	
•	ARTISTGRUPPEN AS NORSTAGE A/S PA PRODUKSJONER BERGEN AS RUBICON AS 4AN	+ 47 55 243000 + 47 52 71 43 10 + 47 55 59 85 98 + 47 6384 6610
	HITEC HILIPPINES SOUNDTRIP	+ 968 2469 8380 + 632 451 0947
PC	SUPERIOR MOTORS SUPPLY CORPORATION  DLAND  MUSNICKI SOUND	+ 632 374 1737 + 48 22 773 24 73
PC •	PRTUGAL PURO AUDIO	+ 35 121 434 3122
	DMANIA PARADIGMA PRODUCTION SC FIVE'S INTERNATIONAL SRL SRBIA & MONTENEGRO	+ 40 21 212 4800 + 40 21 312 39 43
• •	AUDIO KONSTRUKTOR NGAPORE AUDIO RESOURCES PTE LTD.	+ 381 21 452 842
	INSYNC MUSIC PRODUCTIONS/MASTERTOUCH AV PTE LTD RAZES AUDIO VISUAL LIGHTING OVAKIA	+ 65 6732 1900 + 65 6766 7458 + 65 6741 6668
	ROCK CENTRUM ELECTRONICS PLUS OVENIA DB TEAM D.O.O	+ 421 434 36336 + 386 41 336 869
•	MEGA AUDIO D.O.O. PLOHL MIRAN	+ 386 62 314063 + 386 62 661 761
•	ELECTRIC-SO ESPECTACULOS LITO	+ 34 93 726 54 44 + 34 9865 30855

$\vee$	VOI GOI	erront Line Array
•	FATSINI S.L.	+ 34 97 770 12 57
•	INGUNZA	
	MUSIBELIOS S.L.	+ 34 95 234 12 51
	MUSICA VIVA PROSEC AUDIO	+ 34 93 303 32 47 + 34 98 598 07 01
	RED ISO	+ 34 977 64 34 95
	SEGUNDU LASEK	+ 34 96/ 40 10 96
• •	SOMER SOMIDO E ILLIMINACION ST	1 1/ 4XK 57 HX 55
	SONOBEXI S.L.	+ 34 953 76 33 37 + 34 98 168 52 30
•	SONOGAL	+ 34 98 168 52 30
•	SONORIZACIONES Z, S.L. SONOSET (MILWAUKEE AUDIO S.L.)	+ 34 961 20 31 11
51	WEDEN	+ 34 73 372 40 33
•	DM AUDIO AB	+ 46 8 97 07 85
•	LJUD & LJUS CONTROL AB	+ 46 60 514 100
•	MUG HYR AB RIG HIRE AB	// // 4505/0
	SKELLEFTEA LJUDUTHYRNING TECHNOSOUND LJUD & MUSIKSERVICE AB	+ 46 8 6282727
	WIIZERLAND	
•	AUDIO-PHASE	+ 41 32 384 26 72
•	STAGELIGHT AG	+ 41 62 745 25 00
	V-TECH-GMBH X-LIGHT & SOUND GMBH	+ 41 79 695 13 84 + 41 62 923 95 75
T	A IAW A N	
	DINGLEY PROSOUND SERVICES REYANG PROFESSIONAL SOUND CO LTD YASHIN PRO-AUDIO INC.	+ 886 7 384 3845
/ <u>•</u>	REYANG PROFESSIONAL SOUND CO LTD	+ 886 2 8797 8687
N.	YASHIN PRO-AUDIO INC. JRKEY	+ 886 7 322 2555
	TEMPO MUZIK LTD	+ 90 212 230 38 18
U	AE EN	
	TECHNOPRO	+ 971 4 267 5336
Ų	ATOMIC SOUND SYSTEMS	± /./. (n)7778 784791
•	BASSET AUDIO	+ 44 (0)1642 652902
• •	CAPITAL SOUND HIRE	+ 44 11112118 944 6777
•	CAV	+ 44 1011453 751865
•	CENTER STAGE	+ 44 IIII7II X7IIX 11133
•	FX MUSIC HAWTHORN THEATRICAL	+ 44 (0)20 8208 1771
	INTASOUND P.A.	+ 44 (0)1905 841591
	LIGHT WORK	+ 44 (0)1159 203366
•	LIMIT AUDIO	+ 44 (0)1527 892368
•	MAC SOUND	+ 44 (0)161 969 8311
•	PYRAMID AUDIO RG JONES SOUND ENGINEERING	+ 44 (0)7976 946692 + 44 (0)208 9713100
	ROSSCO	+ 44 (0)1462 431413
•	STAGE AUDIO SERVICES	+ 44 (0)1384 263629
•	STAGE AUDIO SERVICES STARSOUND SYSTEMS	+ 44 (0)1924 278875
•	TERRY TEW S&I	+ 44 10120 8502 2943
•	TOTAL SOUND SOLUTIONS USS (UNIQUE SOUND SYSTEMS)	+ 44 (0)1792 428181 + 44 (0)1242 261438
÷	WAVELENGTH STAGE & EVENT UK	+ 44 (0)1527 595 444
		+ 44 (0)1706 363800
	5 <b>A</b> /	
•	A.C.E.S. INC. A.V. PRESENTATIONS	+ 1 518 270 4747 + 1 985 542 9196
•	ASR PRO EVENTS	+ 1 407 767 5776
	AURATEQ SYSTEMS INTERNATIONAL INC.	+ 1 305 466 1985
•	BLIZZARD SOUND	+ 1 920 451 1343
•	DELICATE PRODUCTIONS DYNAMIC PRODUCTIONS	+ 1 805 388 1800 + 1 770 529 8100
•	EMS INC.	+ 1 401 331 5247
	GENESIS AUDIO	+ 1 602 426 0930
•		
•	LA SOUND COMPANY MAX AUDIO	+ 1 818 772 9200 + 1 401 228 4287
		+ 1 301 733 9337
•	OIL CAN HARRY	+ 1 301 733 9337 + 1 414 355 4465
•	PHIL REIGH SOUND	+ 1 814 742 8291
	PRO SYSTEMS PRODUCTION SOLUTIONS INC.	+ 1 858 430 0330 + 1 610 374 6998
•		+ 1 919 965 4300
•	ROLLING THUNDER	+ 1 401 331 5427
•	SACRAMENTO PRODUCTION SERVICES	+ 1 401 331 5427 + 1 916 481 3679
	SACRAMENTO PRODUCTION SERVICES SATIN SOUND SYSTEMS	+ 1 401 331 5427 + 1 916 481 3679
•	SACRAMENTO PRODUCTION SERVICES SATIN SOUND SYSTEMS SLAMHAMMER SOUND SOUND CONSTRUCTIONS	+ 1 401 331 5427 + 1 916 481 3679 + 1 724 983 1270 + 1 612 724 5395
•	SACRAMENTO PRODUCTION SERVICES SATIN SOUND SYSTEMS SLAMHAMMER SOUND SOUND CONSTRUCTIONS SOUNDWAYE PRODUCTIONS	+ 1 401 331 5427 + 1 916 481 3679 + 1 724 983 1270 + 1 612 724 5395 + 1 718 893 7352 + 1 520 327 5590
•	SACRAMENTO PRODUCTION SERVICES SATIN SOUND SYSTEMS SLAMHAMMER SOUND SOUND CONSTRUCTIONS SOUNDWAYE PRODUCTIONS SPECTRUM AUDIO INC.	+ 1 401 331 5427 + 1 916 481 3679 + 1 724 983 1270 + 1 612 724 5395 + 1 718 893 7352 + 1 520 327 5590 + 1 619 528 8470
•	SACRAMENTO PRODUCTION SERVICES SATIN SOUND SYSTEMS SLAMHAMMER SOUND SOUND CONSTRUCTIONS SOUNDWAYE PRODUCTIONS SPECTRUM AUDIO INC. STANCO AUDIO	+ 1 401 331 5427 + 1 916 481 3679 + 1 724 983 1270 + 1 612 724 5395 + 1 718 893 7352 + 1 520 327 5590 + 1 619 528 8470
	SACRAMENTO PRODUCTION SERVICES SATIN SOUND SYSTEMS SLAMHAMMER SOUND SOUND CONSTRUCTIONS SOUNDWAVE PRODUCTIONS SPECTRUM AUDIO INC. STANCO AUDIO STEED AUDIO	+ 1 401 331 5427 + 1 916 481 3679 + 1 724 983 1270 + 1 612 724 5395 + 1 718 893 7352 + 1 520 327 5590 + 1 619 528 8470 + 1 314 644 5557 + 1 724 779 6500
	SACRAMENTO PRODUCTION SERVICES SATIN SOUND SYSTEMS SLAMHAMMER SOUND SOUND CONSTRUCTIONS SOUNDWAVE PRODUCTIONS SPECTRUM AUDIO INC. STANCO AUDIO STEED AUDIO STICHA BROTHERS TECHNICAL PRODUCTIONS	+ 1 401 331 5427 + 1 916 481 3679 + 1 724 983 1270 + 1 612 724 5395 + 1 718 893 7352 + 1 520 327 5590 + 1 619 528 8470 + 1 314 644 5557 + 1 724 779 6500 + 1 618 276 5570 + 1 314 644 4000
	SACRAMENTO PRODUCTION SERVICES SATIN SOUND SYSTEMS SLAMHAMMER SOUND SOUND CONSTRUCTIONS SOUNDWAYE PRODUCTIONS SPECTRUM AUDIO INC. STANCO AUDIO STEED AUDIO STICHA BROTHERS TECHNICAL PRODUCTIONS TECHNICAL PRODUCTIONS	+ 1 401 331 5427 + 1 916 481 3679 + 1 724 983 1270 + 1 612 724 5395 + 1 718 893 7352 + 1 520 327 5590 + 1 619 528 8470 + 1 314 644 5557 + 1 724 779 6500 + 1 608 276 5570 + 1 314 644 4000 + 1 815 935 0233
	SACRAMENTO PRODUCTION SERVICES SATIN SOUND SYSTEMS SLAMHAMMER SOUND SOUND CONSTRUCTIONS SOUNDWAVE PRODUCTIONS SPECTRUM AUDIO INC. STANCO AUDIO STEED AUDIO STICHA BROTHERS TECHNICAL PRODUCTIONS	+ 1 401 331 5427 + 1 916 481 3679 + 1 724 983 1270 + 1 612 724 5395 + 1 718 893 7352 + 1 520 327 5590 + 1 619 528 8470 + 1 314 644 5557 + 1 724 779 6500 + 1 618 276 5570 + 1 314 644 4000



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