

EDGE

Issue Three | March 2001

Texas Touring with the Longthrow



In this Issue:
MoS Dome Farewell
Magna Development
Stadium Series Announced
Cinema System at Molinare
City of Culture
Twin Lakes Church



The Martin Experience

CONTENTS

Inside Rotterdam's Culture Club	3
Martin Dominates Dome's MoS Farewell	4
New Recruits	5
Making a Major Contribution to Magna	6
Dah Chong Hong fit Blackline into China City	7
Molinare Convert to Digital Post via Cinema Hybrid System	8
Ad Lib Tour with Armatrading / Contractor Aesthetics Strike Right note with Reiss	9
New Products	10-11
Texas Touring with the Longthrow	12-14
Embassy Gives Malta First Multiplex / MMS Fit Wavefronts into latest Tiger Tigers	15
Leaders of the Pack / The Ride to Long Island	16
A&T: Trading Hard in Russia	17
Perfect Bliss	18
Casino Turns to Contractor Enclosures	19
Twin Lakes Church Given Audio Overhaul	20
The Hard Rocking Sound of Baby's	21
International News	22-23
Wavefront Users	24



Right at the Cutting Edge

The publication of this third edition of *The Edge* comes at a special time for the company. As this journal illustrates, sales achievements during the last quarter have crossed a wide range of territories and applications — from the unique configuration of the Wavefront LongThrow system by Adlib Audio on the Texas tour, to the final night of the Millennium Dome, and the HQ building for the City of Culture in Rotterdam. We are also proud of the continuing repayment of our investment in Cinema technology, with leading London post-production facility Molinare being the latest converts.

During the past quarter we have welcomed onto our expanding staff both Jim Cousins and Bradley Watson, adding both gravitas and dimension to our support teams.

Meanwhile, our product portfolio also continues to increase. At the Frankfurt *Musikmesse* we will be announcing our new Stadium Series — and a further major disclosure confirming a highly-prestigious system installation contract newly won by the company. To bring yourself right up to date on all our developments make sure you visit stand D40 in Hall 4:1.

Over the next 24 pages you are invited to take the tour through the world's theme parks, retail boutiques, places of worship, bar/diners, discotheques — and even bookshops to see where our products are being specified.

As usual debts of gratitude are due to those who have made this publication possible: notably to Martin Kelly for his Texas photography; Jim Cousins, now a full-time member of the Martin Audio team, for his excellent article on the design of Adlib Audio's Texas LongThrow array; to *Mondo* magazine for the loan of the visuals for Baby's; and to Red Square Interactive, Dartford, to whose capable hands the design and production of this edition were entrusted. The next edition of *The Edge* will publish at the 2001 *PLASA Show* — hopefully containing your news.

Jerry Gilbert.

Where to see us

March 7-11: **Musikmesse**
Frankfurt, Germany

March 8-10: **NSCA**
Florida, N. America

May 12-15: **AES Europe**
Amsterdam, Holland

May 16-19: **CALM**
Beijing, China

June 25-28: **Cinema Expo**
Amsterdam, Holland

Sept 9-12: **PLASA**
London, UK

Sept 21-24: **AES Convention**
New York, N. America

Inside Rotterdam's Culture Club



Rotterdam's stupendous Hotel New York stands on a peninsular at the top of the River Maas, offering spectacular views out to the North Sea. The former office of the Holland America Line, this was the embarkation point for refugees and emigrés seeking to escape poverty for a new life in the New World from the turn of the last century.

The HNY is one of the most individually-stylised hotels you'll discover, echoing the doomed aspirations of bygone generations seeking a brave future. Today, Rotterdam is seeking to regenerate its own future, and this year has the honour of sharing (with Oporto) the accolade of being nominated European City of Culture.

To continue the romantic idyll of the HNY, a motor taxi whisks residents from the hotel's jetty towards downtown, under the shadow of the architecturally-superb Erasmus Bridge, masquerading like some giant, tightly-strung harp. Soon we're standing at the entrance of Calypso 2001.

Originally constructed as a school, the building was reconfigured into a cinema in the 1960's, and after a period of dereliction during which it was earmarked for demolition, the Council-owned building earned a reprieve when it was selected by the Cultural Capital of Europe Foundation for redevelopment as the City's multi-leisure HQ. Not only was it centrally-based but it could simultaneously accommodate press conferences, AV presentations, arts cinema, dance nights and live music — all built around a foyer café bar/restaurant/refectory.

But the Foundation had to make the programming work. They brought in the charismatic Pim Bottema, part owner of popular local club Night Town, who sensed it was time to renew his relationship with pro audio giants, Ampco.

The enormous requirement for sound reinforcement could only be fulfilled in a joint arrangement, and thus Ampco Pro Rent MD, Fred Heuves, sat down with Marc Kocks from sister company Ampco Audio Products to weigh up their options. Both men knew that Martin Audio, with whom the company has a long trading relationship, could fulfil a single-source inventory, including three-way cinema systems, and with an amalgamation of rental and new stock, the conception was realised in record time.

Ampco's solution has been to specify two alternate systems in the main entertainment room — rigging a full-blown surround sound system comprising of a Blackline H3/S218 combination in each corner of the room for dance nights. As soon as a band takes to the stage a conventional ground-stacked concert system comes into play, consisting of a further H3/S218 stack either side of the stage, with four flown

Blackline F12 delays sited further down the room. For foldback, Ampco have provided ten of Martin Audio's classic LE700 wedge monitors, which are controlled by a dedicated Martin Audio MX-4 controller (a pair of M3 controllers run the dance system and a DX-1 the stage PA).

In the cinema/presentation theatre, three Screen 4's provide the LCR system, with a pair of Screen Sub 1's handling the low frequencies. Eight Effect 5's form the surround sound and are wall-mounted evenly down each side of the theatre.

This room can also double as the press room, when three portable Martin Audio ICT-300's, designed for speech intelligibility, can be introduced on stands.



Out in the refectory, 16 Martin Audio EM-15's are G-clamped onto the makeshift trussing among the par cans supplied by Dutch company Metam, taking source material provided by a Denon DN-T620 CD/cassette player, powered by Crest amplification and mixed through an Allen & Heath 14/4/2 Wizard — a combination of brands common to all spaces.

Said a delighted Marc Kocks: "This has been so successful that there's now a chance that Calypso 2001 will remain open after the Cultural year is over. And that will give us the opportunity to show Martin's cinema system, in particular, to the world."

He added: "We are proud that, thanks to Martin Audio's assistance, we were able to build and deliver this system in just three weeks."

Martin Dominates Dome's MoS Farewell



The final notes struck in anger to signal the closedown of the Millennium Dome, were heard through Martin Audio reinforcement systems on New Year's Eve.

Wavefront 8 Compact systems — supplied by Capital Sound Hire — dominated the Dome's farewell performance, when the Ministry of Sound took over the venue for a grand *New Year's Eve 2000-2001* party, featuring 40 of their DJs.

Cap Sound ensured that the temporary Wavefront system was well capable of pumping 12 hours of solid dance styles into three prime locations.

The event took place, not in the main arena as many had suspected, but in the adjacent *Skyscape* — where the resident (non-Martin) house system was augmented — as well as another of the Dome outbuildings and in two specially-rigged marquees.

Martin Connolly, who project managed the event for the hire company, revealed that all the spaces were given a planetary theme and respectively dedicated their environments to house, garage, drum 'n' bass and trance.

His company was awarded the contract to provide the full playback, DJ mixing and SR system by production manager Nick Fisher, with whom Cap Sound have worked many times in the past. Martin emphasised that they had not only been Fisher's first choice but were also given the stamp of approval by Ian Bushell, MoS international event manager.

Interfacing with the Ministry's technical man on site, Nod McDonagh, Cap Sound had conducted an initial site survey but were concerned about the acoustics and dB levels in *Schoolscape* — a 60-metre-long rectangle, dubbed *Mars: Scary Movie*. Hence, Jim Griffiths of acoustics consultants, Symonds, was brought in by Nick Fisher and the MoS.

"Jim shared our belief that rather than deploy a number of delayed stacks down the length of the room — which was one option, the best solution was to have four ground stacks (one in each corner) firing through the rectangle — each 19m equidistant from the centre — and to drape the building with heavy wool serge," continued Martin Connolly.

Each stack consisted of six W8C's and six WSX's, with the BSS Omnidrive deployed as the loudspeaker management system and Crown 2400s and 3600s as the power. By ground-stacking the system rather than using risers, they were able to gain an extra 2dB out of the system.

Martin Audio enclosures were also in action in *Saturn: World Dance Big Top*, as well as in the VIP Bar.

In the World Dance (Drum 'n' Bass) marquee, Cap Sound had a further four Wavefront stacks, the front comprising eight WSX's and six W8C's, and the rear with a six-and-six configuration.

In the VIP Room a less potent system was installed, comprising two stacks a side of W8S/W8C.



Capital Sound Hire also provided the sound engineers in the three locations, with Ian Colville and Mark Jowett mixing the audio in *Schoolscape*, Harm Schopman and Paddy Kemp in World Dance, and Finbar Neenan and Dennis Williams in the VIP Room.

Capital Sound Hire's on-site team also took the opportunity to field test a new sound baffle, recommended by Jim Griffiths and supplied by industrial scaffolding company, SGB Group.

"As an experiment, this temporary modular sound barrier was erected at the rear of the Drum 'n' Bass marquee," explained Martin Connolly. "This was the sensitive end, with the heavy residential areas of Greenwich and Tower Hamlets being just over the river, there was obvious concern about potential noise complaints."

Paul Oakenfold closed proceedings in the Ministry tent and the 16,000 or so revellers went home happy at 9am.

And an exhilarated Martin Connolly was left to reflect on a job well done.



New Recruits

Jim Cousins is New Senior Project Engineer



Jim Cousins, the eminent audio consultant, has left the freelance world for a permanent post as Martin Audio's senior project engineer. His mission will be to straddle the disciplines of engineering and marketing, combining application training for dealers and major users.

Cousins spent his early working life doing vibrational analysis as an engineering apprentice in the aircraft industry before working in medical ultrasound and then hearing and speech research.

He joined the old Midas Audio Systems Ltd set-up in Stanhope Street, next door to Dave Martin's company in the late 1970's, and has remained in pro audio ever since.

Freelancing in system design, training and consultancy since 1982, he ran Meyer Sound Europe in the mid 1990s during the launch of their large-scale powered series.

Drawing on his background in large-scale events (such as the recent 'Popstock' mass gathering in Italy), Cousins' short-term goal will be to exploit the properties of the arrayable Wavefront Longthrow system.

He commented: "It's great to be rejoining the British manufacturing sector after a long absence and I am particularly pleased that I shall be working with Bill Webb whom I have known since the Stanhope Street days. Although the modern Martin Audio has progressed on many fronts, it is still run and manned by a team with a strong pedigree in the live sound industry. It feels like a natural home."

Brad's Boost to UK Sales Force

To help service the increased domestic trade, we welcome Brad Watson, who has joined the company to work alongside UK sales manager Simon Bull.

Brad brings a worthy pedigree, having served three years with the prominent Kent-based entertainment technology specialists, Set Lighting & Sound.

"I'd reached the point where I could progress no further with Set, and the Martin sales executive position represented an obvious career move," said the 28-year-old, who lives close to Brand's Hatch at West Kingsdown in Kent.

Brad's feel for audio has been honed via 13 years as a semi-pro DJ, during which time he became exposed to Martin Audio systems.

But it won't only be sales targets and figures that he'll be comparing with Simon Bull, since both men are also keen mountain bikers.

"We've threatened to take the bikes out but it hasn't happened yet," he says. A case of off-road, but firmly on the right track for Brad Watson then.



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The Martin Experience

Making a Major Contribution to Magna



Plans for the £37m Magna development — the UK's first Science Adventure Centre — were unveiled at the end of November.

The project, spectacularly set within the cavernous former Templeborough Steelworks, situated between Sheffield and Rotherham in South Yorkshire and closed since 1993, is supported by a lottery grant from the Millennium Commission.

Set to attract more than 300,000 visitors a year Magna features four adventure zones and two shows, which offer the visitors an exploration of steel and the four elements — Earth, Air, Fire and Water — via a series of interactive challenges.

The attraction is owned and operated by the educational charity, Magna Trust, who turned to experienced design company, Event Communications, for the realisation of the technological wizardry.

Event Communications have brought together the same AV technical team responsible for This Dynamic Earth in Edinburgh — last year's Scottish Millennium project. This includes Peter Key Sound Design and Production, who specified the audio system, which included multiples of Martin Audio's architectural EM Series loudspeakers, and Electrosonic, who supplied this, and all the video playback equipment.

Electrosonic started work on the audio-visual consultancy for this project in late Autumn 1999, liaising closely with all the project team to develop the complete AV content. During this

consultancy stage, the company produced detailed information and carried out a number of large-scale projection tests to prove some of the ideas as they were being developed.

Having successfully tendered for the audio-visual package, Electrosonic continued with the detailed AV systems design, at the same time undertaking the engineering and installation for the entire attraction.

Martin enclosures will be installed into three of the main pavilions: Air (Floating Airship); Earth and Fire, where a combination of EM15, EM26, EM56, EM76 and EM251 sub woofers will be deployed.

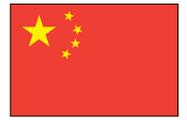
Peter Key explained: "As with the Dynamic Earth project you turn to the formula that you know works. We went for the EM Series — partly because we knew it would blend in with the architecture, and also because of its sonic characteristics."

When Magna opens this Spring, the EM Series will be expected to reproduce a number of different soundtracks and FX. "Some of it follows the video projection and will be derived either from video servers, solid state sound stores or Fostex hard drive machines," explained Peter, who will personally be producing the majority of the soundtracks.

Summarising the anticipated impact of Magna on the community, Stephen Feber, chief executive, remarked: "Magna is the first of its kind in the UK and a unique and exciting project. We are looking forward to opening our doors to the public in 2001."



Dah Chong Hong Fit Blackline into China City



The China City nightclub project in Zhuhai was first conceived back in May this year, and once the go-ahead had been given, Dah Chong Hong were appointed the main audio equipment suppliers.

Martin Audio loudspeakers are fairly ubiquitous on the city's nightlife scene and it was little surprise that they were specified again — this time in tandem with amplification from fellow TGI company Lab Gruppen.



Dah Chong Hong's dealer, D & E International Ltd, sold the entire package of sound and lighting, which included 12 Martin Audio WSX subs; 20 Martin Audio Blackline H3's; eight Martin Audio Blackline S218's; a pair of Martin F12s and four Martin M3 and a DX1 dedicated system processor.

This was powered by 13 Lab Gruppen 1600's, four Lab Gruppen 2002's and ten Lab Gruppen 4000's, with Klark Teknik processing.

Two ground stacks of five WSX subs were placed either side of the stage, with a pair of S218's forming two stacks in the centre. Six H3's were mounted on top of the WSX at the front stage and a further three were flown around the dancefloor to

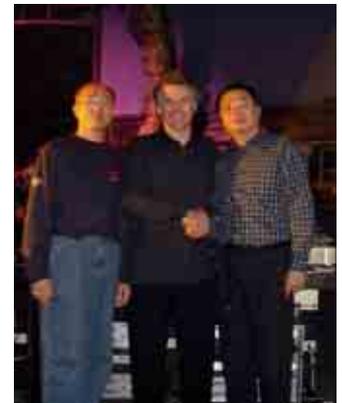
ensure better coverage, since the venue measures in excess of 15m high. Away from the dancefloor, the other six H3's are placed on top of the S218's for coverage of the seating area in the semi-circular building. The F12's are used for DJ monitoring.

Dah Chong Hong's Eddie Lee and Patrick Lau visited the site before the project commenced and acted as consultants for Philip Wong of D&E International, assisting with the system alignment.

Head of Martin Audio, David Bissett-Powell, also provided valuable assistance and expertise.

The club can accommodate more than 1,500 people, and during the soundcheck, prior to the opening, an SPL of up to 130dB was recorded on the dancefloor.

The owner of China City, Mr. Xu Zhi Xiu, is said to be delighted with the results, as he reports that the club is almost permanently full. He attributes this to the commitment and support shown by Dah Chong Hong, D & E International — and David Bissett-Powell, adding that when he is ready to open another disco, the system will certainly be Martin Audio.



Molinare Convert to Digital Post Via Cinema Hybrid System

Top London West End post-production facility, Molinare, have made a radical departure from traditional nearfield monitoring by kitting out two newly-upgraded 5.1 digital rooms with hybrid Martin Audio cinema systems.

Dubbing A and Dubbing B at the facility in Fouberts Place now have modified Screen 4's, customised to the studio's requirements, with eight Effect 5's providing the surround sound in each studio.

The sales agent was specialist cinema supplier Peter Hall of Future Projections Ltd, whose company also installed Martin cinema systems in the prestigious Warner Bros preview theatres in Holborn last year. He explained that Molinare had favoured the Martin system over conventional nearfield monitors costing many times the price.

Studio technical director, Darren Woolfson, explained the background to the upgrade. "Molinare started out 27 years ago as a facility provider for the radio industry and now provide facilities for all areas of the TV industry.

"Until a few months ago we had four audio dubbing studios — two digital suites and two older analogue rooms. We decided to upgrade the latter because the equipment was coming to the end of its useful life.

"We knew we would be putting 96 and 48 fader Soundtracs DPC-2's in — but monitors were an important decision; since we wanted the Dolby license we had to decide carefully." As both are large rooms they also had to be sure that whatever they installed was capable of delivering the required SPL.

Billy Mahoney, head of audio at Molinare, was accustomed to the traditional cinema horn-driven sound — and two horn-loaded systems were therefore reviewed. But audio consultant Matt Dobson's argument that a two-way system was a compromise, was one that was shared by everyone.

"He recommended a visit to listen to Martin Audio's three-way system at High Wycombe; they set up a demo at their local UCI multiplex where we were able to compare show reels.

"I was very impressed; they were so pleasant to listen to, particularly on the dialogue, that you instinctively felt that you wanted to turn them up, to increase the volume," appraised Darren.

Molinare gave the green light, but customised the system, combining the 6in and 1in mid-high of the Screen 4 with the single 15in bass driver of the Screen 2. Both systems are rear-screen mounted.

Darren explained the rationale: "These systems are designed for cinemas up to 200 capacity and although our rooms are a fair size we needed nothing like that output. Also I wanted to match the two rooms as near as possible.

"The directionality of the horn provides a really good tool for mixing — so why bring in expensive mahogany cabinets when no-one will see them."

The whole system is powered by compact Chevin amplification, via BSS Audio FDS-360 digital crossovers, supplied by Sterling Audio

The final word came from Peter Hall: "The Martin cinema components are now our system of choice for all top-end venues."



Adlib Tour with Armatrading



Adlib Audio have completed a successful UK theatre tour with acoustic singer songwriter Joan Armatrading.

The venues covered a vast range of sizes — from audience capacities of around 330 up to the 1800-seat Liverpool Philharmonic Hall — which provided a stern test for Adlib's Martin Audio Wavefront system, and the rigging capabilities of their crew.

With Alan 'Nobby' Hopkinson mixing at front-of-house on a Soundcraft Series 4 and The Astoria's Erik Sanderson-Evans on monitors (doubling as production manager), Armatrading played acoustic guitar exclusively across a wide range of styles, with one back up musician doubling on bass and keyboard and the other on percussion and sax.

Said Adlib Audio MD Andy Dockerty: "Nobby put this tour out to tender, but knew that our equipment was quite new, and given the type of show it was, that the Wavefronts would be smooth enough to handle the wide range of styles."

Adlib Audio had 16 x W8C's and eight WSX's at their disposal. "But we only ever put three subs each side of the stage. We had the option to do a single or a two-bar drop, but tended to use six top boxes downstairs, stacked each side of the stage, reinforced with three subs. We generally didn't need to provide additional balcony coverage.



"With 55° dispersion the box is great for room coverage and it's quite a smooth, sweet sounding system," commented Steve Cole, who engineered support act, Martyn Joseph.

The system management was via the classic BSS FDS-388 Omnidrive, with FCS-960 graphic equalisers, with FDS-366 Omnidrive Compact Plus processors and further FCS-960's on monitors, where the sound was mixed from a Soundcraft SM24.

Contractor Aesthetics Strike Right Note with Reiss

Martin Audio's stylish Contractor series has been specified into a leading-edge mens' and womenswear fashion store in London's West End.



Aesthetics played an important role when Reiss fitted out their large flagship store behind Oxford Circus.

Having worked on several previous installations for Reiss, Wave Audio Visual won the contract and presented several design options to the client, whose preferred choice was 12 of the wall-mounted white C115 5in ICT mid-high enclosures, split into four zones, and buffered by four, partly-concealed, ultra-compact black CS265 subs, housing two 6.5in drivers.

The sound is CD-sourced (although there is a DJ input which is used occasionally), driven by QSC amplification, and routing is via a Cloud CX-133.

Said installation account manager, Neil Manwaring: "We have a long history with Martin Audio and have used EM15s on previous occasions with Reiss. This time we offered them several products, and both aesthetically and performance wise the C115s offered an excellent solution."

Architects on the project were Lever Hopley Architecture.

New Products

LE12JB Offers Performers Differential Dispersion

Martin Audio have extended their LE wedge monitor series with the LE12JB — a two-way active/passive multi-angled enclosure that offers differential dispersion.

Fitted with a high-sensitivity 12in (305mm)/3in (75mm) coil driver — handling low frequencies up to the 1.3kHz crossover point — high frequencies are reproduced by a 1.4in

(35mm) exit titanium diaphragm compression driver loaded by a proprietary differential dispersion (50°-100° horizontal, 70° vertical) horn.

The horizontal dispersion varies from wide to narrow as the performer moves back from the floor monitor. This narrowing dispersion effectively changes the forward gain of the horn, which enables it to throw further, increasing the monitor's operating range and reducing excess spill. As the performer moves closer to the monitor so the dispersion widens, allowing the performer to hear clearly even when positioned directly above, or the left or right of the monitor.

Constructed in multi-laminate birch ply, the multi-angled enclosure is available in left- and right-handed versions. Incorporating a tough, punched steel grille and recessed side handles, the cabinet is finished in black textured paint.

Used actively, the LE12JB is best operated with the DX1 or MX5 controllers to provide crossover, limiting and EQ functions. In either mode sound quality is consistent, enabling use of both active and passive configurations onstage, without the need to compensate for differing tonal balance.



Popular Blackline Range Extended

Martin Audio have extended the enormously-popular Blackline series of portable and installation enclosures with the announcement of the F215. This is a two-way passive, vented trapezoidal enclosure offering a very high SPL and extended low-frequency performance from twin 15in (380mm) drivers.

In addition to the reflex-loaded, low-frequency drivers, the single box system contains a 1.4in (35mm) exit compression titanium diaphragm compression driver, loaded by a proprietary, rotatable 80° x 50° constant directivity

horn. The twin LF drivers operate together up to 250Hz. above 250Hz only the upper driver — a specially designed, low distortion bass-mid device — is used up to the 1.3kHz crossover point.

The enclosure is constructed in multi-laminate birch ply, with four rear-mounted 4in (100mm) castors and handles fitted top and bottom. Twelve M10 flying inserts are provided for cabinet rigging.

Essential specifications. Frequency Response: 45Hz-17kHz \pm 3dB (measured 1m on axis); Dispersion: 80° H x 50° V (at -6dB points);

Power Handling: 800W AES (3200W Peak); Impedance: 4 ohms; Maximum SPL, measured at 1m on axis: 128dB continuous (134dB peak).

The F215 can be used with or without the Martin M3 controller although the low-frequency performance will be enhanced when used in conjunction with the M3 controller, which will also provide high-quality limiters to protect the F215.

Applications include live sound reinforcement, nightclub installs, and onstage as sidefill and drum monitors.



Stadium Series Given Sneak Preview

At this year's Frankfurt *Musikmesse* Martin Audio will be providing a sneak preview of their new range of Stadium Series products.

Bill Webb and his engineering team have been working on the design of a family of large-format, horn loaded systems dedicated to the needs of sports stadia, arenas and large exhibition halls — a significantly increasing sector of the market as green and brown-field sites come up for development into multi-purpose sports and entertainment venues and modern soccer stadia.

The result is a range of three lightweight, high SPL mid/high horn systems — the AM404, AM604 and AM906 - with coverage patterns of 40°x 40°, 60°x 40° and 90°x 60° respectively.

Each system features a port-assisted 10in (250mm) mid horn and 1.4in (35mm) exit HF compression driver and all have large-format, square-mouth horns which provide constant directivity characteristics in both the horizontal and vertical planes.

The AM404 can be used in either a bi-amplified or optional 2-way passive configuration. As a stand-alone system it provides exceptional intelligibility over its uniform 40°x 40°

coverage pattern. For full-range music reproduction, it can also be used in conjunction with the AS118 low-frequency loudspeaker.

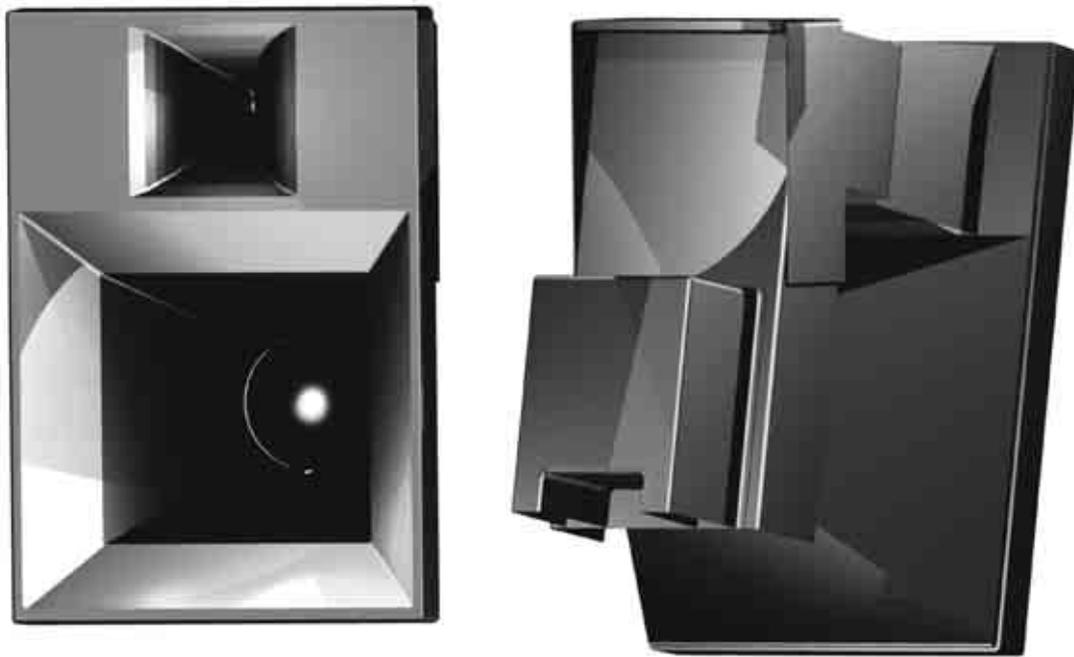
The mid horn section utilises a 10in (250mm) cone driver loaded by a unique 'phase-ball' device which ensures consistent off-axis performance across the midband and avoids 'beaming' at the upper end of the frequency range.

Extended performance down to 120Hz @ -10dB is achieved by reflex porting the rear chamber of the driver. A low-distortion motor system ensures clarity of output and consistency of tonal balance even at extreme power levels.

High frequencies are reproduced by a 1.4in (35mm) exit compression driver loaded by a 40°x 40° horn with a dispersion pattern which exactly matches the mid.

The AM404 is constructed from a weather resistant, lightweight composite material and is equipped with comprehensive mounting points to allow for flexible install and arraying requirements.

The AM604 and AM906 are similarly designed, but offer 60°x 40° and 90°x 60° dispersion patterns.



Texas Touring with the LongThrow

Liverpool-based sound rental company Adlib Audio are using a Martin Audio Wavefront LongThrow line array as part of their regular Wavefront Compact rig on an extended UK and European tour with the hit band Texas, supported by Semisonic.

Singer/songwriter Sharleen Spiteri, who lists Holland, Dozier, Holland and Carole King as big influences, regularly takes Texas to the top of the charts with songs like *Summer Son*, *When We Are Together*, *Put Your Arms Around Me*, *Black Eyed Boy* and *Say What You Want*, with the album *The Hush* becoming a huge success throughout Europe.

Adlib 'head honcho' and Texas engineer Andy Dockerty wanted to exploit the incredible performance of the Wavefront LongThrow W8CT/CM system to project the soulful voice of Sharleen and the tight musicianship of Texas to their ever-appreciative audiences without the shortcomings often encountered with other touring systems in large venues. With system design help from Adlib's Dave Kay and Martin Audio's Rich Rowley, Andy Dockerty has put together a touring system that would satisfy that criteria and then some.

Martin Audio engineering director, Bill Webb, explains that the Wavefront LongThrow system follows a long history of Martin Audio vertically-arrayable systems that started with the legendary 115 bin and 'Philishave' systems. "The frequency band was split into three separate horn-loaded elements — low, mid and high — that could be stacked vertically in-line to narrow the vertical coverage of the stack and increase the throw of the system. A column of bass bins would be stacked beside a column of mids and highs."

A more recent Martin Audio all-horn, vertically-in-line system was the modular F2 system. The F2 followed the same Martin Audio tradition as earlier systems but could be flown. "It is a compliment to the F2, and to its predecessors, that other loudspeaker manufacturers are beginning to discover the principles of line arrays," continues Bill. "But they still seem unable to grasp the importance of horn loading *all* of the elements — a long-standing Martin tradition. To achieve true long throw we must return to the original Martin philosophy combining the high efficiency benefits of horn loading with the principles of the vertical-in-line array in compact, easy-to-use Wavefront compatible modules — the W8CT, W8CM and W8CS".

In the Texas system, W8CT/CM LongThrow line arrays are built into the left and right Wavefront W8C clusters for main/mix coverage and into the side down-stage clusters for the long diagonal throw to the far side seats. Wavefront W8C systems cover nearfield, front fill and VIP/side-stage



bleachers with bass projection provided by a combination of flown W8CS run as mid-bass and floor-stacked WSX folded horn subwoofers.

The benefits of being able to horizontally array LongThrow sections and tailor the horizontal coverage to the venue shape using the same truck pack and rigging system that is used for the regular Wavefront sections, should be obvious to any touring rental company. All systems are flown with the ubiquitous Martin/MAN flying systems maintaining a 12:1 load safety factor.

The Texas FOH system comprises of Soundcraft Series 5 and 4 consoles driving a control rack of BSS FDS-366 processors set up with Martin Audio loudspeaker management programmes for Wavefront W8C 3-way loudspeakers, W8CS Compact subwoofers, W8CT and W8CM LongThrow elements and WSX folded horn subwoofers. Crown power amplifiers are patched and level set to provide farfield/mix/nearfield and inner/outer balance.



LongThrow Basics

Unlike other manufacturers' products that have been rushed into production to exploit the recently recognised benefit of line array systems — often forgetting the fidelity and efficiency benefits of horn-loading and forgetting the horizontal lobing effects of spaced drivers — Martin Audio LongThrow systems have been developed using established components and horn-loading techniques for controllable horizontal performance compatible with the rest of the Wavefront family.

Wavefront LongThrow systems have incredible forward efficiency when compared with traditional arrayable systems. This efficiency keeps headroom up and distortion down, making the LongThrow system ideal for the heaviest rock and dance gigs without stress. A long throw system will retain its fidelity after an all-night thrash because its efficiency reduces driver ageing.

W8CTs in column	High-mid gain
1 (single row)	9.5dB
2 (double row)	16dB
4	22dB
6	25dB
8	28dB
10	30dB

W8CT and W8CMs are designed to be flown in vertical line arrays to provide a combination of W8C-compatible 55° horizontal coverage with tight vertical control.

The vertical coverage of a single W8CT is

approximately 7.5° in the upper midrange but ... when dead-hung, ie flown vertically parallel one below the other, the vertical coverage narrows with increasing cluster height.

For practical sound reinforcement uses, a long straight column's mid and HF coverage must be regarded as being cylindrical in nature. Low/low mid vertical coverage will widen in the farfield depending on the height of the column but users should be guided by the following coverage shape to ensure consistent mid/HF coverage.



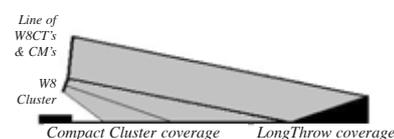
Straight W8CT column mid/HF coverage = 55° (horizontal) x the column height

A long, straight Wavefront LongThrow column will cover vast floor areas if you aim the column axis towards the rear of the audience. Remarkable results can be obtained indoors using continuous columns running from stage level to the maximum seating height.



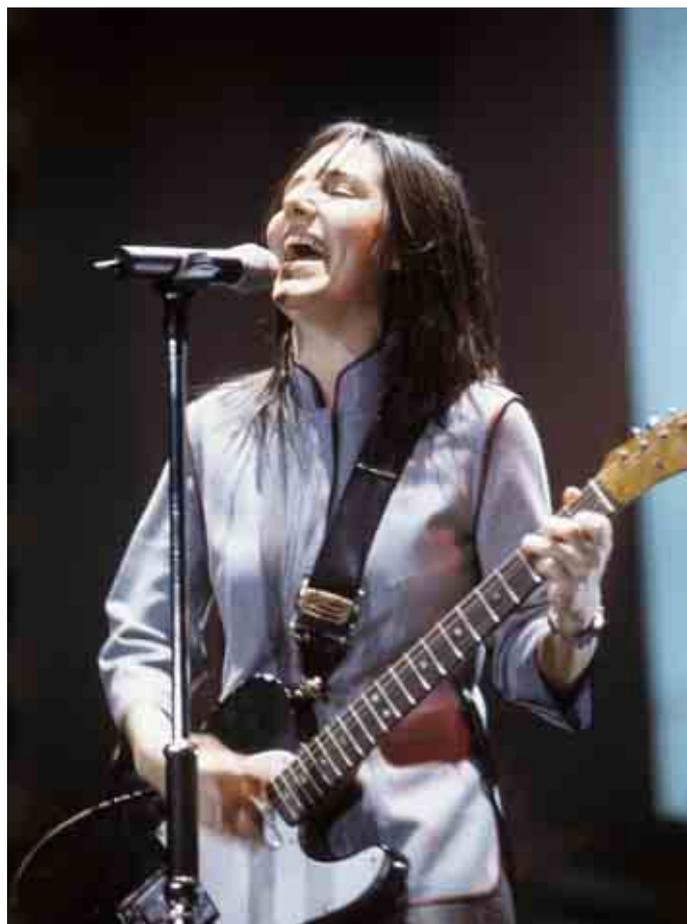
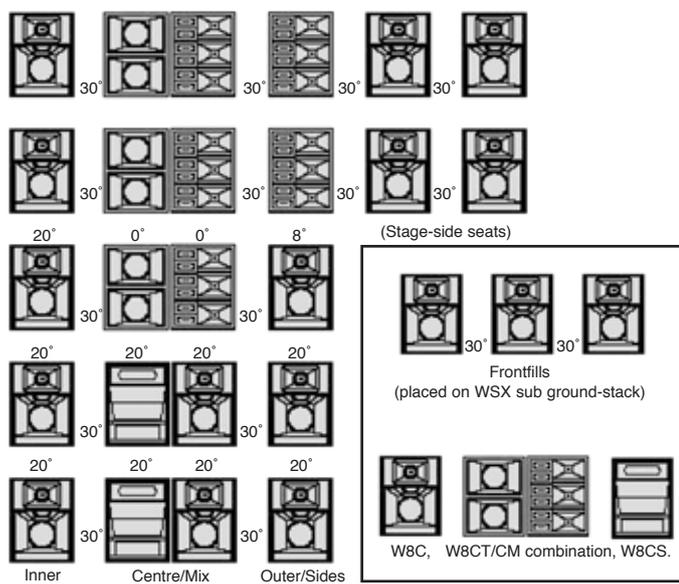
Unfortunately, continuous vertical columns are rarely acceptable — particularly where the audience wraps around a thrust stage and sight lines are critical for both audience and camera crew.

On the Texas tour, shorter LongThrow columns are flown in combination with Wavefront W8C midfields and downfills. >>



Texas Touring with the LongThrow

<< Typical left and right Texas clusters
(Audience Right shown. Angles are inter-axis):



“We’re on to a winning formula here,” said a beaming Andy Dockerty at the end of another Wembley Arena gig packed with devoted and excited fans. Andy explained that he had wanted the versatility and horizontal control of a regular Wavefront Compact system combined with the well-established, all-horn benefits of the traditional Martin vertical array, and the Wavefront LongThrow had given him just that — the best of both worlds.

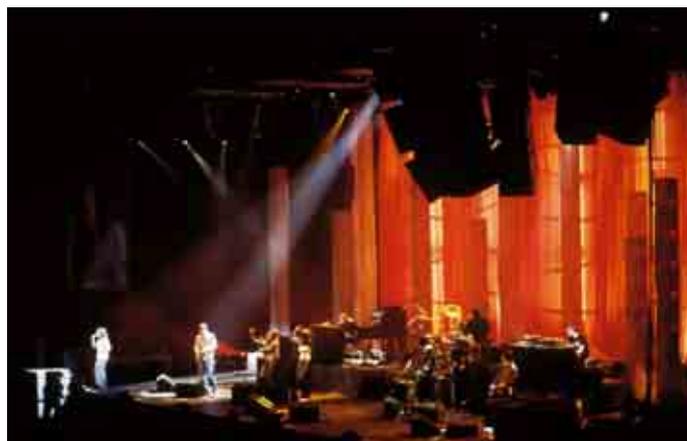
The sell-out Texas Greatest Hits tour is crewed by Adlib’s Dave Kay, Hass, Ben Booker and Phil Stoker (FOH) plus Marc Peers and Roger Kirby (monitors and stage).



The tour got off to a faltering start. After playing Newcastle Arena, Texas were due to appear in a snowy Aberdeen but the blizzard conditions were against them and the Aberdeen date had to be postponed until March.

Snow and floods allowing, the tour continues throughout the UK and Ireland and then crosses the channel for France, Germany and Denmark before returning to play extra dates in London, Birmingham, Cardiff, Manchester and Newcastle by popular demand. Extra dates are selling out faster than they can be added.

Stop press: Semisonic have been supporting Texas to great acclaim on the current tour and will be touring the States shortly — with a Martin system!



Embassy Gives Malta First Multiplex



Malta's first multiplex cinema has opened in Valletta, featuring exclusively Martin Audio's purpose-designed sound reinforcement throughout the six theatres.

The Martin Audio components were recommended to owner Mark Zammit by cinema

consultant Mike Beeny.

The Embassy was originally built as a single-screen cinema in 1952, but the new complex now forms part of a complete shopping centre and fast food court — set in a prime location in the island's capital.

Designed by Fitch & Co

Mark Zammit confirmed that the combined film, food and fashion development will have cost Embassy Ltd around £9 million.

Mike Beeny explained: "The Embassy were very keen to have state-of-the-art sound and stadium seating, and they came to the UK, where I took them to the 20-screen UCI Cinema in Trafford. The biamped Martin system represented almost exactly what they have decided to opt for."

The result is a combination of biamped Screen 4's, with a dedicated crossover, and Sub 1's — in either one- or two-box configurations depending on the room size. These are set at 265-capacity, 195, three at 117 and a small 99-seat cinema.

The cinemas are located on two levels and the sound quality in all six studios is identical. Every screen is Sony SDDS formatted and the main room also has a Dolby back-up.



MMS fit Wavefronts into Latest Tiger Tigers

Martin Audio loudspeakers provide the sound reinforcement in the two recent Tiger Tiger late night club, bar and restaurant concepts opened by Chorion plc in Birmingham and Manchester. Both were fitted by London-based Music Marketing Services.

Situated in Manchester's regenerated Printworks leisure complex, the latest Tiger Tiger features eight different and stylish bar environments set over three floors, as well as its own 90 seater restaurant and a dedicated club, following an investment of £3million.

Music Marketing Services have specified multiples of Martin Audio EM series architectural loudspeakers in the Main Bar, Kaz Bar, Printworks Bar, Raffles Bar, Lounge Bar and Canadian Lodge, with 100V line versions of white Contractor Series C115's flush-mounted around the restaurant.

In the nightclub MMS have favoured the four Martin WT3's — the company's dedicated arrayable theatre version of the

Wavefront 3, used in conjunction with eight W8CS compact sub bass enclosures.

The entire system is powered by Martin's matched lightweight amplifiers, with a combination of MA series devices specified for each bar.

Tiger Tiger boasts a Manchester first — it's not only the city's only 'one-stop' venue but also its only 25-plus establishment. Research carried out by the Tiger Tiger team highlighted a gap in the market for cash-rich but time-poor young professionals who enjoy a good night out but demand a level of service not offered by any of Manchester's bars and clubs.

There are 36 bars and 16 diners in the Printworks which has been described as "the first American-style urban family entertainment complex in Europe", following a £150m transformation of the former Hulton newspaper offices.

Leaders of the Pack

Leader Of The Pack, a new rock 'n' roll musical, set in the 1960's and based around the successful songwriting partnership of Ellie Greenwich, Jeff Barry and Phil Spector, has begun a UK provincial theatre tour.

With a cast of 16, the audio set-up for the show was conceived and detailed by experienced freelance sound designer Bobby Aitken and contracted out to Orbital, who supplied all the equipment to order.

As this is a touring production — commencing at the Churchill Theatre, Bromley before embarking on its 26-week national tour — careful consideration had to be given to equipment that was both versatile and easy to rig/de-rig.

Aitken has long been a devotee of the theatre-

specific version of the Martin Wavefront 3 system, and again specified ten WT3's as his preferred sound reinforcement enclosure. These, and four matching WS2A Martin subs, were purchased by Orbital specifically for the production.

Chris Headlam, managing director of Orbital, explained: "It's part of our policy to support freelance sound designers. We are always happy to buy in new equipment where requested — and Martin Wavefronts are no exception.

"There is no doubt that Bobby has achieved a first class sound for this show — the WT3's have certainly worked out really well on this production."

It was left to Orbital to develop the rack equipment

into a touring package compatible with short load-in times. All amplifiers, processors, radio mic receivers, mains and audio patching fit into two double bay wheeled road cases, Headlam confirmed.

The WT3's are normally mounted in horizontal pairs, using the Martin Audio/Thomas Engineering low profile flying bracket. The four WS2A subs are also

stacked in pairs.

The system is powered by amplification from Lab Gruppen, who recently joined Martin Audio in the TGI group company portfolio.

Sound engineers on the tour are Adam Mcready (at front-of-house) and Marcus Wadland, and the show producers are Centreline Productions.



The Ride to Long Island

Martin Audio loudspeakers continue to feature prominently in the Scottish & Newcastle-owned Long Island Iced Tea chain of late night venues.

The brand was originally trialed in Covent Garden many years ago, but Chris Preston from AEI Music, the company entrusted with supplying the environmental audio visual, says that a stronger focus has now been adopted in the Midlands.

In setting out the specification, Chris reviewed all the major speaker brands, but conceded: "I really wanted to provide a family of enclosures that were visually uniform, within a budget, and could offer quality, reliability, supplier support and flexibility. These all played a major part in my decision, and with this in mind I chose products from the Martin Audio EM and Wavefront ranges."

Sited in the new Star City complex in Birmingham, with the adjoining building leased by Warner Village, serious noise abatement issues had to be confronted.

In Nottingham, Long Island Iced Tea was to feature a daytime ground floor main bar area and a dedicated night club on the first floor, where Martin Audio's dedicated EMX1A and WX3 processors were deployed to cover the zoning correctly.

Both venues used a combination of Martin architectural EM 15's, 26's, 56's, 76's and EM150 subs for the infill and bar areas, with the Wavefront 3's and WS2A subs utilised on the dancefloor areas.

Chris summarises: "The Martin Audio systems gave a great result. With Birmingham having noise pollution issues we were kept within boundaries but the system provides a more than impressive sound, while in Nottingham the EM56/EM150 combination sounds particularly impressive."



A&T: Trading Hard in Russia



A&T Trade, Inc was set up as an American corporation back in 1990 by three famous Russian rock and jazz musicians, among them Sasha Sit (pictured right), now the Executive Vice President. Today it is one of the most powerful pro entertainment and MI suppliers across the whole of the former USSR.

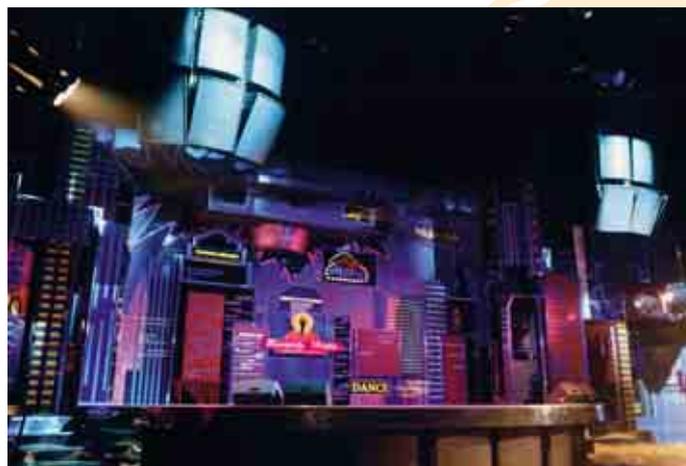


Beverly Hills, playground for Hollywood's movie stars, is where the story began for A&T Trade. As guitarist with Autograph between 1980 and 1990 Russia's leading rock band enjoyed celebrity status in their native country, and in Herb Cohen, the band shared the same manager as Frank Zappa, and worked alongside the eccentric performer.

L.A. had already become a second home by the time A&T Trade was set up, and from this base the management team were able to set up sales offices in Moscow (Russia), Riga (Latvia), Kiev (Ukraine), Tblisi (Georgia), with distribution centres throughout Russia.

Today, there is a network of 200 dealers, nine owned distribution centres and 12 owned retail stores, employing 200 in Moscow, 30 in Kiev and 20 in Riga. Siberia has been earmarked as the next part of the country for development.

He explained: "When we decided to enter the touring sound and installation market, JBL and Turbosound already had a presence. But having toured the world alongside bands like Chicago I had fixed ideas about what constituted good sound. I went to the *PLASA Show* in 1995 and after carefully listening to a number of systems I visited the Martin Audio stand ... which is how it all began. I was sold on the sound.



The Edge caught up with Sasha during the recent NAMM Show in Anaheim, and he explained that the business had been set up initially to sell MI products such as Ensoniq and Fender back to Russia. "But as business grew we acquired more distribution rights, such as Lexicon and Genelec, allowing us to develop a pro audio division, MI division and later sound and light, including tour sound."

Highly ranked in A&T Trade Inc's portfolio of touring and high-end contracting brands is Martin Audio, selected with a musician's ear for accuracy by Sasha.

"In my opinion Martin is the most musical system on the market ... almost hi-fi. The musicality of the system makes it perfectly suited for jazz, classical or rock."

Today it is featured in numerous installations, including Chuck Norris Beverly Hills Club in Moscow, voted by many to be the best-sounding club in Moscow, as well as many other prestigious clubs and casinos.

The new Chamber Hall, the first classical music venue to be built in Moscow for 60 years, will also be based around a W3 system, while A&T Trade Inc have also just put together the first three-way cinema system using Martin Audio's dedicated products.

Today Sasha Sit has seen fortunes revive since the economic collapse and chronic devaluation of the rouble back in 1998. This was the year that brought the country to the verge of bankruptcy, as Russia defaulted on its foreign debts, leading to a devaluation of the rouble by more than 400%.

But A&T Trade survived the crash despite seeing the company's turnover drop from \$45 million to \$25 million during the crisis.

For the past four months Sasha has been based near the English stockbroker town of Guildford, believing that it is the most strategic place to have a European office. "From a timezone perspective the UK is the best possible location."

Perfect Bliss



Bliss a sophisticated new bar/restaurant in Bournemouth, has been opened by Future 3000 plc — the team behind the internationally-famous Slinky touring dance nation, which is resident at the leisure company's Opera House in Boscombe.

Future 3000 boss, Richard Carr, had owned the stupendous art deco building for several years before contracting interior specialists, Design Mode, to convert the bottom two floors of the former Maples department at a cost of £1.25 million .

To give the multi-functional Bliss a sense of theatre and comfort, designer Stuart Jones devised a succession of individual stage sets and distinct spaces to promote a timeless, cosmopolitan, European feel, favouring natural materials and neo-classic design values.

On the ground floor an upbeat espresso bar area is combined with a focal drinks bar and raised lounge. Downstairs is a more private atmosphere — an intimate dining salon with an illuminated marble table — linked by an impressive marbelled spiral staircase.

In short, Bliss represents a blend of graceful curves, rich fabrics and soft lighting, with exotic illuminated marble bars, a glass entrance floor, and of course the staircase providing the design highlights.

Such an ambience required a sympathetic audio soundscape, and this was designed by Future 3000's head of technical services, Lee Price, the man behind the full-on dance sound of Slinky.

He voted for the trusty Martin Audio loudspeaker system which dominates the company's other venues, the Opera House and Urban — and is used on tour with Slinky — although one of Lee's prime considerations was to provide acoustic isolation from the five storeys above the ground floor and basement, which the landlord has converted for student accommodation.

Most of the music (funk and soft jazz) is computer-driven, while in the evening a DJ takes over. "We opted for Martin Audio EM26's since it doesn't matter what level you run them at, you get a full, clear sound that enables conversation to take place. Every time I have heard them in Martin's demo room they have stood out as being special. At weekends, with a DJ playing to a house rammed with 1000

people, we needed something with the versatility to cut through the ambient noise."

He has selected 26 of the EM26's divided into six zones. There are no bass bins and the whole sound is fed through a pair of BSS Soundwebs — the multi-input digital matrix device, which will store different EQ settings and route any sound source — in this case from either CD, DJ or band — to any "sound zone" in the building.

A separate system carries 1970's kitsch film themes to a pair of Martin C516 recessed ceiling speakers in each of the Gents and Ladies rest rooms.

Lee Price appraises: "The wide dynamic range of the new version Soundweb is incredible and the 'leveller' function on the latest software means that where the level is low — such as the signal from an MP3 download — it balances everything out."

The sound system is powered by QSC amplification and DJs will mix from a RED mixer.

Future 3000 are a big name in town and the Bliss sophistication is sure to appeal to Bournemouth's leisure aspirants. If it works, expect the entrepreneurial Richard Carr to look further afield.



Casino Turns to Contractor Enclosures



Frontline of Tasmania have carried out a high-powered sound system installation at the Country Club Casino in Launceston, geared around our Contractor enclosures.

The company had been called in to discuss the requirements for a background music system. But at the meeting it was disclosed that a refurbishment programme of the main gaming room had already started, and that during the room demolition the builders had pulled out the loudspeakers which had formed part of the old 18-year old system.

The requirement for the replacement system revolved around background music with paging facilities, plus additional 'plug and go' microphone inlets at various points and an evacuation facility linked to the fire alarm panel.



In the main gaming room the sound system had to be able to overcome the ambient noise from the machines, as well as the associated traffic.

The original plans showed that eight areas were to be themed, each requiring a different music source. The system was also to be flexible so that its functions could be easily extended to other areas. This included a further gaming area downstairs, a hotel area with a bar and two restaurants — along with a members' club — plus a swimming pool. Finally, there was a five-room conferencing area ... also with special requirements.

The main system was given eight zones via a Cloud Z8, with six line levels and three mic inputs. The signals were bussed to the individual zones, each having its own remote source select and level.

Frontline specified 36 Martin Contractor Series C115's around the room for the main machine areas, with audio and

paging strategically positioned facing away from the sports area and tables, minimising spillage and hot spots. Frontline placed eight Martin Contractor Series C516's in the sport areas, enabling the sport signal to reach the audience direct without spillage to the other zones.

The music is sourced from three 25-disc Pioneer CD players and all powered by eight QSC amplifiers.

Frontline say that the entire system was designed, quoted, proposed to the casino and accepted within 48 hours.

Parting the Red (and Green) Sea

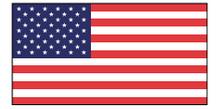
80,000 disenfranchised football fans marched on Sydney Town Hall in support of the South Sydney Rabbitohs, one of Australian rugby league's founding members recently. The march flowed through the city, led by a modern day Pied Piper in the shape of a flat bed truck, with ten Martin Audio Wavefront LongThrow cabinets belting out one rousing victory anthem tune after another.

The configuration of four W8CT LongThrow tops (6 x 1in horns and 3 x 6.5in high mids), four W8CM LongThrow mids (2 x 12in low mids) and two WSX 18in monster subs were driven by four QSC PowerLight 2 amplifiers, with system crossover, EQ and limiting undertaken by a Martin Audio DX1 digital processor.

Once at the Town Hall a series of high profile orators addressed the crowd with stirring messages about the People's Game. And there was not a dry eye in the house as the Wavefronts belted out South's theme song *Glory Glory to South Sydney*.



Twin Lakes Church given Audio Overhaul



Martin Audio have provided the essential sound reinforcement in the refurbished Twin Lakes Baptist Church in Aptos, California.

Curtis Kelly acted as the system designer/engineer, installer and contract negotiator, with Lori Burke of Delicate Electronic Sales supplying the equipment and installation support.

The church was built in 1973 in a hybrid theatre fashion. The sanctuary seats around 1700 people, while the stage dimensions are 60 feet wide at the downstage end and 40 feet deep. Proscenium height is 32 feet at the downstage end, with a downsloping ceiling to a height of about 18 feet at the upstage end, while the distance downstage to back of sanctuary is 80 feet.

The surfaces are plaster with minimal acoustical treatment, and as Curtis Kelly explained, the existing audio system was far from adequate for either the church's present or future needs. "A complete demolition of existing sound system, stage, interior walls and pews was contracted, after which stood only a shell."

The church's musical director, Dan Baker, was appointed to seek information on a new sound system, while another TLC member, video producer Kelly Welty, was also drafted into the project to consult on staging and lighting design issues.

Twin Lakes Church was reviewing three other contractors when Curtis was given the opportunity to draft a proposal to meet the audio design base budget of \$200,000. "After meeting with the TLC board members we arranged a demonstration of the Martin Wavefront 8C at Delicate Productions, and within 24 hours we were presented with the contract."

TLC's Dan Baker takes up the story. "We listened to many different proprietary loudspeakers, and to be honest, we had never heard of Martin. But after the demonstration we were amazed at just how true, smooth and musical the Wavefront 8C system sounded."

"In order to emphasise the natural sound of the the Wavefront system we had set up one W8C on top of a W8CS, ground supported, and fed a CD player and SM 58 mic into a Yamaha 01R, a BSS FDS-366 Omnidrive Compact Plus and Crest amplifiers," explained Curtis. "There was no EQ, ... just signal in, signal out, and they loved it!"

Another attribute that won the vote for Martin Audio was the simplicity of the product design. "The other proposals were utilising a myriad of specific loudspeaker components to achieve coverage — some featuring up to nine different types," continued Curtis. "We achieved full and smooth coverage using eight of the W8Cs' great dispersion capabilities in a typical LCR configuration and six W8CS subs."

The (non-Martin) stage fills are delayed at 15.478ms — taking into effect the distance from the LCR clusters to the first few rows of seating — the underbalcony speakers at 49.562ms. These times, as well as system alignment and equalisation, were achieved using SIA Smart Live.

Martin colour-matched the W8 clusters at TLC's request for aesthetics, with Lori Burke at Delicate a major influence in getting this done.



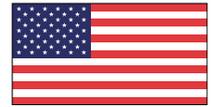
So much for the performance and aesthetic — but what were the specific requirements of the clergy and how did the audio system fulfil these requirements?

Curtis Kelly: “The system needed to be able to handle large musical productions, as well as be able to accommodate touring productions with minimal interfacing and sub-rentals. It also needed to be able to reinforce church plays and theatre productions, guest speakers and Sunday sermons.”

Furthermore, the system also had to be capable of functioning unfacilitated by inexperienced operators. “We achieved this by using two BSS 9088 Soundwebs and the BSS 9010 ‘Jellyfish’ remote. Presets were designed for full FOH console outputs to the Soundweb’s inputs and other presets — removing the need for a console and operator — while still having the use of music playback, wireless microphones and lectern operation with a push of a button.”

In addition to storing the delay times in Soundweb, Curtis Kelly also has the W8C/W8CS component delay times, phase,

EQ, Q, level, crossover HPF, LPF, slope, gain and limit plugged into the 9088’s crossover design.



Floor pockets were also installed throughout the stage, with mic input, monitor speaker outputs, headphone outputs and isolated AC outlets — all this to a custom 56-channel input panel with transformer ISO record split to their recording room, and full 56-channel monitor split.

The sound booth is located balcony centre and the sound mix is generated by resident engineer Karl Heebner and his assistant from a Crest X8 VCA front-of-house console, with 48 (plus four stereo) inputs, eight groups, eight VCA’s, eight Aux’s and four matrix outputs. The FOH rack consists of all industry standard processing.

The result? A future-proofed, high-fidelity system that any house of worship would be proud of.

The Hard-Rocking Sound of Baby’s

Continuing the trend for incorporating nightclubs into the large hotel/casino complexes that dominate Las Vegas, Baby’s is the venue that visitors to the Hard Rock Hotel work out in when they’re in town — aided by a punchy Martin Audio sound system.

The underground club is split into two levels and has a capacity of just under 900 people. With three separate rooms, the intimate feel of the venue is the result of AIA Derek Saunders’ imaginative lounge-inspired design.

The most sumptuous room contains comfortable settees, a tropical fish aquarium, its own DJ booth and a Martin Audio Wavefront system comprising a pair of W2’s, four W0.5’s, an EM150 sub, eight EM15’s and two EM251’s, for further bass end extension.

The largest room, which contains the main dancefloor, is split into two levels, and once again the audio is based around Martin Audio components, the system installed by local company, Soundelux Showworks.

Here, we discover eight W3’s and eight W0.5’s hung out of sight in the ceiling. There is also a pair of FSX subs above the dancefloor and two WSX subs built into the wall. An empty storage room has been cleverly converted into a huge bass chamber, with further WSX’s.

Shannon Jeleneck, who originally worked with Soundelux, and who is now lead sound engineer at the Hard Rock Hotel, commissioned the system. “Since the original installation I’ve redesigned the small room, so that it can now compete with the main room,” he reveals.

The main system at Baby’s is controlled by a BSS FDS-355 Omnidrive Compact, and is shortly to become Crown-powered. The smaller room uses a Martin controller on the



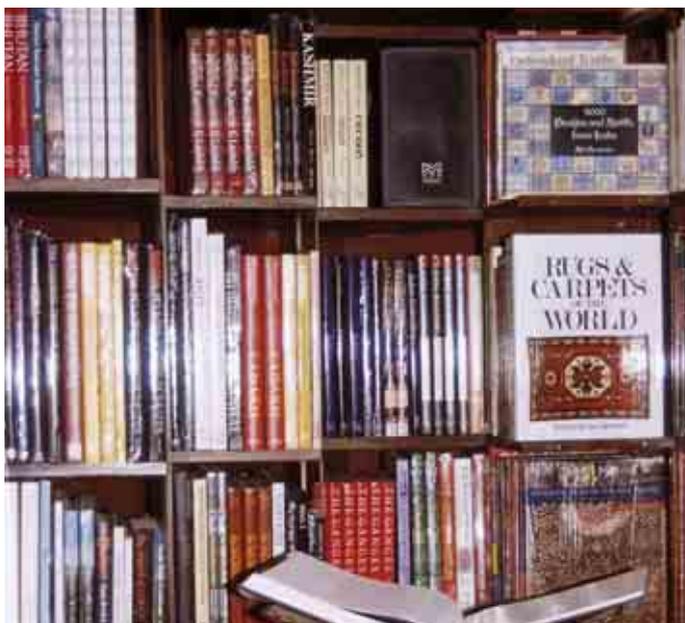
smaller enclosures and a BSS FDS-355 on the dancefloor system.

Shannon first learned about the qualities of Martin Audio while he was a student at Columbia. “I did some freelance work for Martin, prepping speakers for demo, as well as building racks, truck loading and some box repair.”

Today, he is involved with specifying Martin gear not only at the Hard Rock, but on his own projects.

He has a very defined view of Martin’s audio characteristics. “I’d call it a very British sounding box,” he says. “It is on the horny, throat-sounding side, with a clean, tight low sound. The high frequencies can get out of control, but with a good system processor and very little work, the box can be made to work in any situation.

“There is no EQ at Baby’s other than what is being used on the Omnidrive — and that is mainly to defeat small room problems and roll off the highs at 18K.” He adds: “There is a +5dB spike at 50Hz and that’s there to mess with the neighbours.”



Art, Fitness and Cuisine in India



Martin Audio products have been enjoying unprecedented sales in the Indian sub continent, where our distributors are RK International of New Delhi.

The Turquoise Cottage is one of the most happening bars in New Delhi, with an area of 6,000 sq ft. The restaurant, noted for its Thai food and the high quality sound, was installed and maintained by RK International. The equipment includes four Martin Audio EM26's and two ICS-300's.

Also in New Delhi, Timeless The Art Book Studio (*pictured left*) provides 3,000 sq ft of centrally-located and superbly-decorated space on two floors — entirely filled with art books. It is exclusively designed for the connoisseur and discerning buyer of art books, and opened two years ago specifically to meet the demand.

It is also known for its pleasant ambience, with RK International again equipping the Studio with audio, this time using six EM15's and an EM251 reproducing the lower frequencies.

Club X Cell is an aerobics studio run in collaboration with Reebok Fitness Centre, situated in the heart of Greater Kailash, New Delhi. The studio is equipped with all the latest aerobic and gym equipment, as well as an excellent sound system, imported and installed by RK International. Here, the company have fitted four of Martin Audio's EM26s.

Urban Edge offers what no other pub in Bangalore can — hi-tech electronic gadgetry, in the form of lasers, AV jukebox, fibre optic and intelligent lighting and a night active video camera — as well as the best infrastructure that money can buy.

It is well positioned to capitalise on all trends, and with its choice of food, music and decor can offer everything from fashion shows to art exhibitions to hardcore music. The disco and general section of the pub boasts a 12K Martin Audio Blackline sound system — again imported and installed by RK International.

The system comprises of nine F12's and four S218 subs, driven by a pair each of Martin MA2.6 and MA4.2 amplifiers.

Finally, Thukral Productions, a rental company for the last four decades and situated in North India, has an association with more than 20 Indian pop stars. All their show equipment is sourced from the UK and USA and their rental stock now includes a large-scale Wavefront system, comprising 24 Wavefront 8CS and 16 WSX cabinets, as well as four Blackline H3's, four Martin MA4.2 amplifiers and four MX5 Martin dedicated controllers.

Multipurpose Unity



The Unity Hall Hotel is a classic Australian pub in the middle of the inner Sydney suburb, Balmain. Rather than limiting The Unity to pies and pilsner, proprietor Will Hardman saw the opportunity to convert an unused first level space into a multi-function facility with a 220 person capacity.

Not knowing who or what functions the new space would cater for Will proceeded to make it as flexible as possible. "If we build it, they will come", was the theory. For the audio system the simple specification was: excellent audio quality and complete reconfigurability.

Technology Sound and Vision were selected to design the system. "The multipurpose issue was the reason we chose Martin Audio, commented TSV's Daniel Scarpellino. "The speakers needed to be visually presentable, have excellent speech intelligibility and also have the thump for the club nights." Eight Martin EM56's were installed, two on each side of the room in a square configuration, along with two S15 Martin Blackline sub-woofers powered by four QSC RMX2450's.

An Allen & Heath DR66 digital audio mixer was chosen for its reconfigurability, programmed to cover the four likely audio scenarios.

Hotel manager Tony DeBono, expressing total satisfaction with the set-up, commented: "At last the headaches with audio are over."

Having built it, Will is finding the bookings are coming out of his highly polished woodwork, "We've got regular Wednesday to Sunday night club bookings, we've have fashion parades, private receptions and parties, band nights and we've even had a small trade show. Nothing has tricked the system and everything has been covered by one of the pre-set modes. All I hear about it is from people saying how great it sounds. Isn't that how it should be?"

Wavefront 8 Rental Companies Around the World

COMPANY NAME	COUNTRY	TELEPHONE
3200 LIGHTUNG	AUSTRALIA	+ 61 2 9693 1777
AVSOUND PRODUCTIONS	AUSTRALIA	+ 61 2 9949 9000
ANDY J SOUNDS	AUSTRALIA	+ 61 8 8376 2771
MARTIN PARKS PRODUCTIONS	AUSTRALIA	+ 61 2 6360 4411
ENTERTAINMENT INSTALLATIONS	AUSTRALIA	+ 61 2 4323 3873
JAZZRIGHT PRODUCTIONS	AUSTRALIA	+ 61 2 9311 1197
TOP END SOUNDS	AUSTRALIA	+ 61 8 8981 7744
AVL	AUSTRALIA	+ 61 3 9387 1055
CENTRESTATE	AUSTRALIA	+ 61 2 6362 0587
SOUND SOLUTION	AUSTRALIA	+ 61 3 9686 4755
PHASE ONE AUDIO	AUSTRALIA	+ 61 89 22 77979
DERRINGERS MUSIC	AUSTRALIA	+ 61 88 37 11884
STEPHEN SOUND	AUSTRALIA	+ 61 3 9436 8981
DAVIDSON AUDIO	AUSTRALIA	+ 61 29 36 81159
ORACLE MELBOURNE	AUSTRALIA	+ 61 418 139200
MASTER SOUND PRODUCTIONS	AUSTRALIA	+ 61 2 9683 4971
AVLA	AUSTRALIA	+ 61 8 9221 1888
KRAXBERGER HERBERT	AUSTRIA	+ 43 7242 45193
PA SOUND & LIGHT TEC	AUSTRIA	+ 43 7667 6090
TOPLAK STAGE POWER	AUSTRIA	+ 43 222 4898877
VIDEO & SHOW	AUSTRIA	+ 43 7242 66588
FOR MUSIC VERLEIH	AUSTRIA	+ 43 2236 71684
BRUNNER & BRUNNER	AUSTRIA	+ 43 663 037578
ATI	BELGIUM	+ 32 9 362 07 48
RIKES	BELGIUM	+ 32 3 309 1742
STUDIO 2000 BVBA	BELGIUM	+ 32 89 30 89 54
ART SYSTEM	BELGIUM	+ 32 10 24 68 68
STAGE PROJECTS BVBA	BELGIUM	+ 32 75 721710
PHILIPPO AUDIO BVBA	BELGIUM	+ 32 3 491 91 76
GROUP SON PRIVE	BELGIUM	+ 32 2 767 24 10
D-RENT	BELGIUM	+ 32 3 324 02 97
SOUND & LIGHT SYSTEMS	BELGIUM	+ 32 59 276646
NORTHWEST PRODUCTIONS	CANADA	+1 250 765 8451
THE LION SHARE INC	CANADA	+1 905 830 0525
D & E (INTERNATIONAL) LTD	CHINA	+ 852 2898 8666
HUIFENG LIGHT & SOUND ENGINEERING LTD	CHINA	+ 86 20 9178 8278
AV CENTRUM	CZECH REPUBLIC	+ 420 602 227357
SOUND SERVIS	CZECH REPUBLIC	+ 420 2 3536 4098
AUDIOTEL	ESTONIA	+ 37 2 7 38 5485
RADIANT SOUND COMMUNICATION	FINLAND	+ 358 3 22 33311
UNITED SHOW ENTERPRISES HELSINKI LTD	FINLAND	+ 358 9 759 4180
BGM	FRANCE	+ 33 4 66 84 39 34
TECHNISCENE	FRANCE	+ 33 2 35 88 86 86
PRODUCTION 44	FRANCE	+ 33 2 40 52 07 07
ART SON ET LUMIERE	FRANCE	+ 33 4 94 03 03 52
ATC	FRANCE	+ 33 5 56 69 60 60
AUDIO CONCEPT	FRANCE	+ 33 563 39 67 86
AUDIOLYRE	FRANCE	+ 33 5 59 98 31 10
GPS	FRANCE	+ 33 251 686 900
EURO LIVE	FRANCE	+ 33 296 743 326
MEGAWATTS	FRANCE	+ 33 478 431 026
LWS	GERMANY	+ 49 228 94676-0
KLEMENT ELEKTROTECHNIK	GERMANY	+ 49 5626 8475
SCHALLDRUCK VERANSTALTUNGSTECHNIK	GERMANY	+ 49 3531 65300
NEW NOISE	GERMANY	+ 49 201 8686010
BIG BEAT PA – SERVICE	GERMANY	+ 49 4403 6358
SLP PRO SARL	GUADELOUPE	+ 590 80 15 80
D & E (INTERNATIONAL) LTD	HONG KONG	+ 852 2898 8666
THUKRAL SOUND TRAX	INDIA	+ 9111 432 3633
REA SOUND	IRELAND	+ 44 1648 764059
MAFFEI SERVICE	ITALY	+ 39 0461 707852
FUMASOLI SERVICE	ITALY	+ 39 0165 35806
PHOENIX AUDIO SNC	ITALY	+ 39 041 5342349
RADIO SATA SERVICE	ITALY	+ 39 051 6332440/6332398
MUSIC SERVICE	ITALY	+ 39 0577 306032
PIANO & FORTE	ITALY	+ 39 0522 661506
ELECTRA SERVICE	ITALY	+ 39 0375 82919
CLAPS	ITALY	+ 39 0434 26882
MEZZA NOTA	ITALY	+ 39 0444 695507
BIG TALU SERVICE	ITALY	+ 39 0174 45314
BLU STUDIO	ITALY	+ 39 079 293179
COOPERATIVA 56	ITALY	+ 39 051 6153339
FAST SERVICE	ITALY	+ 39 081 8237009
T.S.S.	ITALY	+ 39 0521 776810
VOX SERVICE	ITALY	+ 39 049 5380151
ZOHO MUSIC SERVICE	ITALY	+ 39 011 6645754
W M AUDIO SERVICE	ITALY	+ 39 0962 865013
CORIPPO ALBERTO	ITALY	+ 39 030 2511722
MUSIC LIGHT INSTRUMENTS	ITALY	+ 39 0566 56356
MASTER SERVICE	ITALY	+ 39 371 460304
PROCO PIO NICOLA	ITALY	+ 39 967 86718
JE-IL SOUND	KOREA	+ 822 835 1608
LIVE	KOREA	+ 822 747 2162

COMPANY NAME	COUNTRY	TELEPHONE
SOUND BOX CO	KOREA	+ 822 419 5141
MARTIN KOREA SOUND CO., LTD	KOREA	+ 822 419 5141
SHINHAN SOUND CORPORATION	KOREA	+ 822 376 8383-4
ELTEK	LEBANON	+ 961 1 265048
CHIFU	MACAU	+ 853 567847/8
KILMI MUSIQUE	MOROCCO	+ 212 332 44 23
SIMPLON	NETHERLANDS	+ 31 50 3184150
EAST SOUND	NETHERLANDS	+ 31 575 519365
MANIFESTO	NETHERLANDS	+ 31 229 279839
PURPLE HAZE	NETHERLANDS	+ 31 348 424477
VAN ZANDBEEK PA	NETHERLANDS	+ 31 653 902690
ACME AUDIO LTD	NEW ZEALAND	+ 64 9 302 0352
NORSTAGE A/S	NORWAY	+ 47 52 71 43 10
AMAS LYD PRODUKSSON A/S	NORWAY	+ 47 55 32 90 50
COMPANIE WEST P A A/S	NORWAY	+ 47 51 52 43 83
RHYTHMIC SOUND SERVICES	SINGAPORE	+ 65 841 0911
PLOHL MIRAN	SLOVENIA	+ 386 62 661 761
MEGA AUDIO D.O.O.	SLOVENIA	+ 386 62 314063
CONZERT	SPAIN	+ 34 96 120 31 11
SONOSET (MILWAUKEE AUDIO S.L.)	SPAIN	+ 34 93 372 40 53
SONARTE	SPAIN	+ 34 926 31 28 28
SONOBEXI	SPAIN	+ 34 953 76 33 37
LUC SON	SPAIN	+ 34 96 530 30 23
TOUR SERV. PROF. SO I I L.LUM, S.L.	SPAIN	+ 34 93 477 04 95
RED TSO	SPAIN	+ 34 977 64 34 95
PROSEC AUDIO S.L.	SPAIN	+ 34 985 98 07 01
ELECTRIC-SO	SPAIN	+ 34 93 726 54 44
MILWAUKEE AUDIO S.L.	SPAIN	+ 34 93 372 40 53
MUSIBELIOS S.L.	SPAIN	+ 34 95 234 12 54
SEGUNDO LASER	SPAIN	+ 34 967 40 10 96
SONORIZACIONES Z, S.L.	SPAIN	+ 34 961 20 31 11
FATSINI S.L.	SPAIN	+ 34 97 770 1412
MUG HYR AB	SWEDEN	+ 46 31 130990
DM AUDIO	SWEDEN	+ 46 89 70785
RIGHIRE	SWEDEN	+ 46 16 145300
SKELLEFTEA Ljuduthyrning	SWEDEN	+ 46 910 173 74
SOUNDHOUSE	SWITZERLAND	+ 41 41 240 44 24
AUDIO-PHASE	SWITZERLAND	+ 41 32 384 26 72
REYANG PROFESSIONAL SOUND CO LTD	TAIWAN	+ 886 2 2254 2926
YASHIN PRO-AUDIO INC.	TAIWAN	+ 886 7 322 2555
DINGLEY PROSOUND SERVICES	TAIWAN	+ 886 7 384 3845
TEMPO MUZIK LTD	TURKEY	+ 90 212 230 38 18
HAWTHORN THEATRICAL	UK	+ 44 1664 821111
STARSOUND SYSTEMS	UK	+ 44 1924 278875
CAV	UK	+ 44 1453 751865
ADLIB AUDIO	UK	+ 44 151 486 2214
CAPITAL SOUND HIRE	UK	+ 44 171 978 5825
ROSSCO LTD	UK	+ 44 1462 431413
AUTOGRAPH SOUND RECORDING	UK	+ 44 20 7485 4515
PA PA	UK	+ 44 1248 670980
CABLE MUSIC PA HIRE	UK	+ 44 1926 339780
ZU 2	UK	+ 44 7974 418867
INTASOUND PA	UK	+ 44 1905 841591
BLIZZARD SOUND	USA	+ 1 920 451 1343
GSA NEW YORK	USA	+ 1 914 632 0192
NORTHWEST PRODUCTIONS	USA	+ 1 250 765 8451
PROLINE AUDIO	USA	+ 1 918 260 0503
SOUND CONSTRUCTIONS	USA	+ 1 718 893 7352
THE LION SHARE	USA	+ 1 905 830 0525
SAI	USA	+ 1 612 724 5395
DYNAMIC PRODUCTIONS	USA	+ 1 770 794 1133
RALEIGH MUSIC	USA	+ 1 919 965 4300
SUNBELT SCENIC STUDIOS INC	USA	+ 1 480 598 0181
CLEARWING AUDIO	USA	+ 1 414 258 6333
ORDWAY MUSIC	USA	+ 1 651 282 3045
WORLD AUDIO	USA	+ 1 210 472 3932
OPRYLAND PRODUCTIONS	USA	+ 1 615 228 0491
GO AUDIO	USA	+ 1 414 764 8290
A.C.E.S	USA	+ 1 800 204 5415
PALAMINO SOUND & LIGHTING	USA	+ 1 800 876 4501
CELEBRATION SERVICES	USA	+ 1 937 836 5662
DELICATE PRODUCTIONS	USA	+ 1 805 388 1800
LA SOUND	USA	+ 1 818 765 6900
LOUDSOUND	USA	+ 1 916 481 3679
MHA AUDIO	USA	+ 1 301 733 9337
PROMIX	USA	+ 1 914 662 3543
ROLLING THUNDER	USA	+ 1 401 954 6068
SOUNDWAVE	USA	+ 1 520 327 5590
STICHA BROTHERS	USA	+ 1 608 276 5570
TECHNOTRIX	USA	+ 1 815 935 0233
TECHNICAL PRODUCTIONS	USA	+ 1 314 644 4000
VERTICAL SOUND	USA	+ 1 216 521 9994
WAVE TRIBE PRODUCTIONS	USA	+ 1 541 618 9499