

the **EDGE**

Issue Eight | September 2003

Leeds United's New PA System

In this Issue:

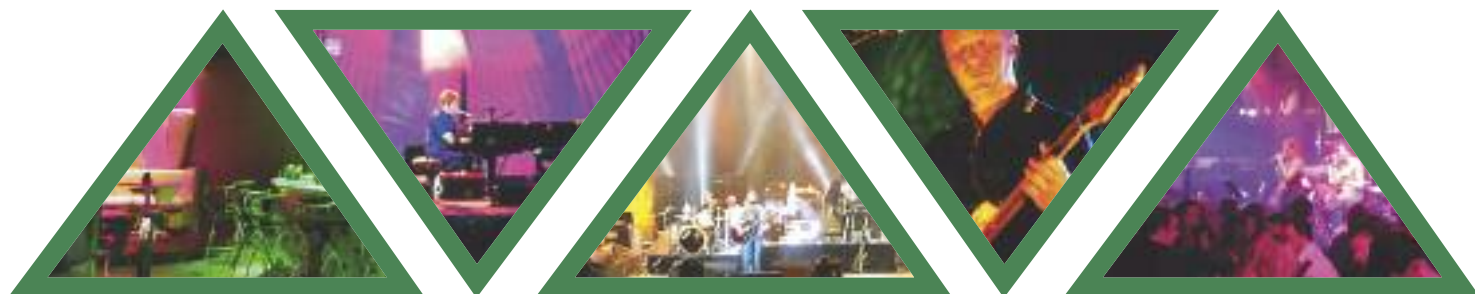
**New Mini Line Array
Elton's Historic Show
W8L's Festival Blitz
Audio Goes Offshore**



The Martin Experience

CONTENTS

Cover Story: New PA system for Leeds' Elland Road stadium	3
Product News: Mini Line Array (W8LM) and Sub (WLX) arrive at PLASA	4-5
Elton John: His historic Maltese concert, with Capital Sound Hire	6
Corporate News: Martin Audio's Management Buy-out	7
Preparing for the Proms: How Line Array blew them away at Blenheim	8-9
Audio Offshore: The inspiration behind Fusion, on the Orkney Islands	12
Café Iguana sets new standards in Florida	13
W8LC's dinner date at Duke's in Durham	14
Sierra Nevada World Music Festival	15
Euro Festival Focus: On PinkPop (Holland) and Rock Im Park (Germany)	16-17
Chicobum — and launching our Line Arrays in Italy	18
Aurateq/Mission hook up big style in South America	19
Audia make their mark — in Bordeaux and Morocco	20
Perspex Wedges the real hit of Eurovision	21
Phlipppo, PFL and Roma give Belgian sales a boost	22-23
Global opens in Ljubljana	23
Skansen scores for DM Audio	24
Telesine's successes in Istanbul	25
Rea Sound busy in bars and churches	26-27
TAG provide chamber music in Fremantle's Metropolis	28
Delhi's Mojo working; Wellington tastes Sandwich	29
Peace Festival in Barcelona; Pattaya Festival in Thailand	30
Far East: Lafite (Shenyang) and Beach Club (Kota Kinabalu) open for business	31
Wavefront users around the world	32



Right At The Cutting Edge

This month marks a double celebration. The company, started by the charismatic Dave Martin, returns to a state of independence, having engineered a successful, and amicable management buyout from parent company, TC Group. The full story appears on page 7.

The company's late founder was very much a free spirit and he would undoubtedly have approved of the latest episode in Martin Audio's history. We will be sure to drink a toast to his memory on the stand at PLASA, where we will be launching our Mini Line Array (W8LM).

And this is the second cause for celebration, as our family of Line Array systems — to suit all budgetry and application requirements — is now complete.

There is also a third reason to raise a glass. At 32-pages, this edition of *The Edge* is the largest we have produced, and is precisely double that of the launch edition three and a half years ago.

However, *The Edge* is NOT a 'willy waving' exercise — it is an organic entity, and its size reflects the growing success our loyal network of distributors is experiencing around the world. The stories in this edition — which cover a complete global span — say as much about you as they do about Martin Audio.

As usual it would not have been possible without help from our media friends in the industry. Thanks are due to Mike and Sarah at Gasoline Media, for keeping us in touch with the Synco network axis, and to Mark Cunningham, who joined them at the *PinkPop Festival* in Holland, where the W8L was rigged loud and proud (the words and photographs were adapted from a story originally featured in the Summer 2003 issue of *Total Production*). Special thanks go to Martin Audio's Martin Kelly, for taking his pen and camera into parts of the world yet to be breached by even the doughtiest of war photographers ... and to our posse of co-opted correspondents within our distribution companies, who have taken time out to source the stories and photography that appear in this edition. We are grateful to you all.

Where to see us

- Sept 7-10: **PLASA 2003**, London, UK
- Oct 1-3: **PALA**, Singapore
- Oct 10-13: **AES**, New York, N. America
- Nov 18-20: **Cine Asia**, Bangkok, Thailand
- Nov 21-23: **LDI**, Orlando, N. America
- Feb 17-19: **PALME**, Dubai, UAE
- Mar 19-21: **NSCA**, Las Vegas, N. America

Cover: Leeds United's Elland Road Stadium.

Jerry Gilbert

Leeds United's Elland Road Stadium Gets New Public Address System



Crowds at Leeds United Football Club's Elland Road stadium will be able to hear broadcast messages and emergency evacuation procedures with a lot more clarity — thanks to a new Martin Audio-based public address installation carried out by leading system integrator, Advance Integrated Systems.

The company were one of four firms asked to tender to their own design and their submissions were checked for statutory compliance on behalf of the Football Trust by consultants, AMS Acoustics.

AIS's Managing Director Alan Inkster says that the requirement was for an emergency sound system that would comply with BS7827 and the Guide to Safety at Sports Grounds ("The Green Guide").

His company was supported by a large product

catalogue from Martin Audio, and the expertise of EASE specialist, Peter Child, who produced data and system verification for all four stands alongside AIS Director Stephen McCay.

In total AIS have distributed 25 Blackline F12 (12" + 1") enclosures in the North, South and West stands, with some of the pre-existing enclosures being redeployed for infill duties.

To provide the coverage and quality required for the impressive East stand, they also needed some long throw enclosures — and Martin Audio again had the purpose solution, supplying five AM906 large-format lightweight composite material stadium horns,

giving 90° x 60° coverage, and five AM404 stadium horns, with a spread of 40° x 40° — mounted at the front of the stands, with five WTUB (twin 6.5" + three 1" soft dome) cabinets as under balcony fills. Four Blackline H2's (10" + 1", horn-loaded mid/hi pack) for covering the pitch, complete the system design.



All Blackline cabinets and WTUB's were weather-proofed for external use and fitted with high quality 100V line transformers.

The system is fed from a networked Bosch Praesidio, digital software controlled PA/VA system running on a redundant ring based, fire rated fibre optic backbone, backed up by a UPS system — and an auto start generator — provided by the club. Inputs include a number of feeds from the DJ station, a fully monitored control room mic used by the police and a remote back-up mic located outside the stadium.

The new sound system was installed in time for the Premiership season kick off on August 16.

Left to right: Alan Inkster (AIS managing director), with Martin Wood, senior project engineer responsible for Elland Road.

The stand in the background is the East Stand which is over 35 metres high and features the AM stadium horns.

W8LM Mini Boosts Line Array Family



The three-way, active/passive W8LM Mini Line Array has been designed for multiple applications in areas where the Line Array principle is demanded but space is at a premium.

Although incredibly compact, the W8LM is a full-bandwidth, 2 x 8" and 2 x 1" system and can be used in many situations without additional sub-bass.

Using proven array principles from its larger siblings, and an evolution of the Hybrid™ loading technique, a low/mid output with a sensitivity greater than 100dB is easily achieved, rising to 106dB for the HF.

By using innovative mid-horn geometry and a toroidal wave guide, a constant directivity, horizontal pattern control of over 120° (700Hz-18kHz) is maintained, ensuring no tonal imbalances off axis.

The captive, quick deployment rigging system allows inter-cabinet angles of 0-7.5° to be set as a flown or ground-stacked system as determined by the Viewpoint array optimisation software. As all cabinets are hinged at the front, the spacing between adjacent elements remains the same irrespective of splay angles, ensuring smooth vertical dispersion and the continuation of all the Line Array principles.

To make system design even more cost-effective, the W8LM is a 12-ohm cabinet, and up to eight cabinets can be powered from one Martin Audio MA2.8s amplifier.

The W8LM is also compatible with the new WLX Hybrid™ sub.

Technical Specifications (single enclosure)

TYPE	Three-way, compact line array element
FREQUENCY RESPONSE	60Hz-18kHz \pm 3dB
HORIZONTAL COVERAGE ANGLE (-6dB)	100° (down to 800Hz)
HORIZONTAL COVERAGE ANGLE (-10dB)	120° (down to 700Hz)
VERTICAL COVERAGE ANGLE (-6dB)	7.5°
LF+MF SECTION	1 x 8" (200mm)/2" (50mm) voice coil, reflex-loaded direct radiator, 1 x 8" (200mm)/2" (50mm) voice coil neodymium driver, front horn-loaded, rear reflex loaded
HF SECTION	2 x 1" (25mm) exit compression drivers, horn-loaded
RATED POWER	LF+MF: 400W AES, 1600W peak HF: 75W AES, 300W peak Passive: 400W AES, 1600W peak
SENSITIVITY (1W@1M)	LF+MF: 100dB HF: 106dB Passive: 99dB rising to 105dB at HF
MAXIMUM SPL (CALCULATED @1M)	LF+MF: 125dB continuous, 131dB peak HF: 125dB continuous, 131dB peak Passive: 124dB continuous, 130dB peak
NOMINAL IMPEDANCE	LF+MF: 12 ohms HF: 12 ohms Passive: 12 ohms
CROSSOVER	300Hz passive, 2.2kHz active or passive, selected by rear mounted switch
CONNECTORS	2 x Neutrik NL4 input/ link sockets
ENCLOSURE	Vertical trapezoid with 3.75° wall angle Multi-laminate birch ply construction
FINISH/GRILLE	Textured paint/perforated steel grille
ENCLOSURE DIMENSIONS	(W) 620mm x (H) 241mm x (D) 400mm (W) 24.4ins x (H) 9.5ins x (D) 15.75ins
WEIGHT (including rigging hardware)	24kgs (53lbs)

For full description and specifications, please see product data sheet.

WLX: Line Array's Low-End Partner



The Martin Audio WLX Hybrid™ is the latest in a long line of high-performance sub-woofers, combining the very high efficiency of horn loading with the bass extension of a reflex enclosure.

The WLX is smaller, lighter and can be flown or ground-stacked, possessing high output capability with extended low frequency response.

A single ultra-long excursion 18" (460mm) driver with a 4" (100mm) voice coil is front-loaded by a hyperbolic horn. The rear of the driver is reflex-loaded to extend the LF output below the natural cut-off point of the horn

When flown, one WLX provides low frequency augmentation for one W8L and up to two W8LC.

The captive, quick deployment rigging system allows inter-cabinet angles of 0-7.5° to be set as a flown system, closely matching the curvature of the adjacent full range Line Array such as the W8L or W8LC systems.

The WLX couples with existing W8LC flying frames. The rectangular shape makes ground stacking straightforward while interlocking skids are fitted to firmly anchor cabs during use.

Due to its 8-ohm impedance, one Martin Audio MA4.2s will drive four WLX cabinets.

Technical Specifications (single enclosure)

TYPE	Hybrid™ horn and reflex loaded sub-woofer
FREQUENCY RESPONSE	35Hz-150Hz ± 3dB
DRIVER	1 x 18" (460mm)/4" (100mm) voice coil, ultra-long excursion, water resistant cone
RATED POWER	1000W AES, 4000W peak
SENSITIVITY (1W@1M)	106dB (half space)
MAXIMUM SPL (CALCULATED @1M)	135dB continuous, 141dB peak (half space) 129dB continuous, 135dB peak (open space)
NOMINAL IMPEDANCE	8 ohms
CROSSOVER	70-150Hz active low pass filter
CONNECTORS	2 x Neutrik NL8 input/link sockets
ENCLOSURE	Rectangular, multi-laminate birch ply construction
FINISH/GRILLE	Textured paint/perforated steel grille
ENCLOSURE FITTINGS	Interlocking skids on sides and top & bottom 2 generously sized bar handles and an additional large pocket handle on each side for lifting during transportation and rigging
ENCLOSURE DIMENSIONS	(W) 1000mm x (H) 490mm x (D) 800mm (W) 39.4ins x (H) 19.3ins x (D) 31.5ins
ENCLOSURE DIMENSIONS INCLUDING WHEELBOARD	(W) 1000mm x (H) 490mm x (D) 950mm (W) 39.4ins x (H) 19.3ins x (D) 37.4ins
WEIGHT (including rigging hardware)	85kgs (187lbs)

For full description and specifications, please see product data sheet.

Capital Sound Hire With Elton John In Malta



Around 15,000 Maltese fans crammed into Floriana's *Fosos* (Granaries) outside Valletta recently for a rare appearance by Sir Elton John.

Malta's concert formed part of the *Elton John Solo* European tour, and London-based Capital Sound Hire won the contract to provide a Martin Audio W8L Line Array PA system, as Elton's regular touring company Clair Bros leapfrogged onto the next venue.

Elton John's tour manager and keyboard technician, Dale Sticha, had visited Malta last March to confirm the location and all other details, such as sound and lighting.

As it happened, Dale's own PA company, Sticha Brothers, runs a Martin Audio W8C system in its

inventory back in the US — and soon Capital Sound had received a speculative inquiry from Anton Attard, on behalf of the promoters, who had picked up their name on the internet.

The PA company's Martin Connolly takes up the story. "Dale was asked what he thought of the Martin Audio system, and once he had given the green light, Anton was in touch with us." The Line Array system was duly freighted over to the Mediterranean island by Fly By Nite.

This was the first rock concert in the Floriana Granaries for ten years (Tina Turner being the last artiste to appear there), and Martin described the scene. "The site was rectangular — 160 metres wide but only 70



Independence Day



The Directors of Martin Audio and TC Group have confirmed that the management team of Martin Audio has succeeded in purchasing the company from the TC Group. The announcement was made on August 13, and the management buyout was supported by ISIS Equity Partners plc and The Royal Bank of Scotland.

David Bissett-Powell, MD of Martin Audio, stated: "The management of Martin Audio have long aspired to independence and are pleased that under the TC Group we have had the opportunity to attain this goal. Having established strong links within the Group we will continue to work closely with Lab Gruppen and other group companies and expect new co-operation with TC Applied Technologies regarding digital power, processing and networking."

The CEO of TC Group, Anders Fauerskov, says: "Since the acquisition of TGI plc by TC, Martin Audio has been a well-managed and strong performer and we wish the management all the best in the future. We expect the TC Group and Martin Audio to continue working closely together on products and technologies."



The five Martin Audio directors (left to right): Tony Allen, Rob Lingfield, David Bissett-Powell, Anthony Taylor and Bill Webb — following the buyout announcement

metres deep — with the stage on one of the long sides.

"There was bleacher seating towards the back, behind which was a 4-metre high, 10-metres deep flat-decked platform, flanked either side by some grandstand seating."

Capital Sound had several conversations with the promoters, regarding sight lines, local housing and sound coverage (due to the stage being positioned off centre). And since there were no crash barriers, seating coverage had to start within two metres of the stage. Elton's PM, Henry Crallan, suggested using the eight Clair i4 cabinets as left/right outfills and these were deployed on the end of the PA wings to complement the main system. This



Left to right: Martin Connolly, Ian Colville and Finbar Neenan

comprised of 12 x W8L enclosures per side with four W8LC Compact Line Arrays to maximise coverage right up to the stage.

With just Elton and his piano onstage, Capital Sound were only required to handle a left and right mix from Clive Franks' PM4000, which was zoned for L/R main hangs,

L/R underhangs, L/R outfills and centrefills. "The system wasn't driven very hard but it was an incredibly full sound that was really impressive," said Martin Connolly.

Much of this was due to the processing — using XTA DP-226 digital devices, with an Audiodcore software

package programmed by Capital Sound's Line Array tech, Ian Colville, who was on duty in Floriana with system tech, Finbar Neenan.

Organised by Jonastin Zammit's NnG Promotions, the event was supported by the government and by some of Malta's top companies. Local artists Karen Polidano, Corkskrew, Winter Moods and Ira Losco all supported Elton John.

The promoters were so impressed with the Martin Audio Line Array that they wanted to extend the lease on the system — but Capital Sound already had it detailed elsewhere.

Blenheim Palace Classic Proms



System Sound and Light used Wavefront W8L and W8LC line array systems recently in the magnificent grounds of Blenheim Palace, home to the 11th Duke of Marlborough and the birthplace of Sir Winston Churchill. The event was a Classic Proms concert, with the Performing Arts Symphony Orchestra conducted by Roderick Dunk.

The audience were treated to popular classics including *Puccini's O Mio Babbino Caro*, *Hungarian Rhapsody No 2*, *The Blue Danube Waltz* and *Summertime*, with British crowd pleasers *Rule Britannia*, *Jerusalem* and *Pomp And Circumstance*. The concert featured soprano Annette Wardell, who sung to an estimated 280 million audience during the 2002 FA Cup Final.

A spectacular firework display accompanied Tchaikovsky's *1812 Overture* and the evening was rounded off with an old favourite, *633 Squadron*.

The concert was just one of a three-month season of *Classic Proms*, *Music from the Movies* and *70s Tribute Band* concerts playing to appreciative audiences in parks and stately homes across England this summer.

The Blenheim Palace sound system comprised stereo columns of ten Martin Audio 3-way W8L line array cabinets per side, augmented with Martin Audio WSX subwoofers.

The W8L columns were powered by Martin Audio MA4.2s power amplifiers and controlled using multi channel band zoning* for smooth acoustic-to-amplified transition and extended coverage.

Band Zoning

*When line arrays are used for long throw applications air absorption can cause significant high frequency attenuation at low humidity. Progressive mid and high frequency shelving is applied to the upper zones of W8L columns to partially compensate for this air absorption. This progressive shelving is called band-zoning because one extra mid frequency band and two extra high frequency bands drive the upper zones of the line array.

Standard W8L presets configure the controller to produce these extra bands for a wide range of column lengths and humidity conditions. This simple Martin Audio technique delivers remarkably consistent sound quality over the whole venue.

All column curves were calculated using Martin Audio's ViewPoint™ software. ViewPoint™ calculates the optimum inter-cabinet splay angles for the smoothest coverage given basic information about the venue, available loudspeakers, grid height etc. ViewPoint™ also gives useful rigging information including motor loads and safety factors for a given configuration.

Delay towers were installed to cover the extended audience expected after a favourable weather forecast. Each tower had six W8LC Compact line array cabinets powered by Martin

Audio MA2.8s power amplifiers and, again, controlled using multi-channel band zoning.

Band zoning the delay system provided an incredibly smooth transition from the main system and provided extended coverage. Simon Biddulph, MD of System Sound and technical director of Performing Arts Management, was enthusiastic. "The W8L/W8LC system was exceptionally good and exceeded our expectations. The W8LC's threw a very long way".

The Blenheim *Classic Proms* was mixed by industry veteran Richard Sharratt, who is well known for his unflappable engineering of large-scale events including *BBC's Proms in the Park*, Hyde Park *VE Day Celebrations* and performances by Placido Domingo, Jose Carreras and Montserrat Caballe. Richard has also worked on countless operas such as Puccini's *Madame Butterfly* and Verdi's *Aida* at the Royal Albert Hall. He was also responsible for the excellent sound design on the West End and Stuttgart productions of Disney's *Beauty and the Beast*.

Richard praised the Martin Audio W8L system. "Having recently worked with a variety of other manufacturers'



systems it was a relief to get back to the Martin Audio line array. I really enjoyed being able to use plenty of low end – the system is very controlled off axis so there was no risk of feedback".

System Sound and Light and Richard Sharratt will be out stirring up the crowds with the Martin Audio W8L/W8LC System again soon providing sound for this year's *BBC Proms in the Park*.

Blackline Solution For PSD



PSD Electronics have carried out a full sound and lighting installation in a one-time cinema in Brierley Hill, in the UK's West Midlands.

When Derek Bater purchased the former 1000-capacity Eclipse nightclub with partner Edwin Amor he immediately contacted his old friend Phil Soltys at installation company, PSD.

The previous owner had taken the venue out of its reincarnation as a bingo hall, and when Messrs Bater and Amor inherited the venue, they recarpeted and refitted the place, which now has a full sound and lighting spec and four bars.

Phil Soltys decided that a combination of four Martin Audio Blackline H3's, groundstacked with four S218 subs, powered by Ecler amplifiers, would provide the best value for money solution — and was



delighted to discover that it easily outperformed the much larger system that it replaced. "It proved that the direct radiating, standard ported bass cabinet philosophy functions far more efficiently than the horn-loaded system," he says.

Delay points are set for a pair of Blackline F15's midway back in the auditorium. F15's also provide coverage for the upstairs balcony area while a pair of F12's provide underbalcony fills and a further pair of F12's provide the DJ's with excellent monitor referencing.

System management is entrusted to a BSS FDS-366 Omnidrive Compact Plus and playback devices include Technics SL1210 turntables, Denon CD player and Allen & Heath XONE 62 mixer. All the lighting is from the Robe catalogue.

Meanwhile, the two partners' future plans are to get the top floor fully operational as a VIP room and extend the present trading pattern to four-nights-per-week.

New Wine For Wavefront



Described as a 21st century pentecostal church, New Wine Church in Woolwich has carried out a major upgrade to its sound and vision infrastructure. Leicestershire-based Hawthorn Theatrical Ltd were awarded the contract after having impressed with the PA support they provided for the Church's New Year's Eve celebrations.

Divided into three spaces, the three-year-old church includes a small downstairs chapel and community area, including creche and catering. However, it was the 1500-seat main room — set within the shell of the Odeonsque art deco church — that Martin Hawthorn's company was asked to upgrade, in order to provide additional functionality.

For sound reinforcement, they selected exclusively Martin Audio components — and provided a cabling infrastructure for future expansion as well as over 100 ways of audio patching, a 72-channel Allen & Heath (ML5000) desk, fully-specified outboard rack and 18 radio mics to accommodate the large scale band and choir.

The emphasis was on discretion to maintain the look of the listed building, and thus a conventional, eight-box Martin Audio W8C left/right stack is concealed behind perforated video screens as the main PA system.

“Originally we had planned to use flown delays, but when we provided a Martin Audio system for their special New Year event we found it worked a treat without — the W8C projected effortlessly to the back of the church,” said Martin.

For the low frequencies, Hawthorn also specified six Martin Audio WS2A subs — concealed under the stage in two batches of three — while a further two LE400C floor monitors are hidden under grilles in the fore stage.

Additional stage sound is provided in the form of a further four Blackline F12's (for the choir) and four flown F15's for the band, with five WM0.5 wedges to infill on the moving band stage truck.

The system is powered by a combination of QSC 2402's and 3402's while processing includes a quantity of Sabine Feedback Eliminators and Drawmer 4-channel gates. Mics include Sennheiser drum kit mics, Sony radios, Shure handhelds and the system processing is via XTA. Induction loop amplification is also provided for the hard of hearing.

In addition to its live presentations, the New Wine Church operates with a variety of audio and video playback sources, including minidisc and CD, as well as VHS.

Hawthorn also provided the lighting and some of the multimedia, including four projectors — two 7700-lumens Sanyo XF41's, projecting onto the 4x3m perforated screens and two XP41's (3,300 lumens) onto rear projection screens.

On the engineering front Hawthorn Theatrical have designed and commissioned a motorised truss, which is flown at front of house with art deco trim to complement the building. Due to a shortage of space two motorised trucks are used to deliver the band and choir on and off the stage, while a curved motorised festoon curtain provides mid drapes, a rear gold foil decorative drape positioned in front of a Starcloth.

Martin Hawthorn believes his company have delivered the ideal solution. “I think we have created an impactful environment for conferences and motivational speaking while allowing the church to host major concerts.”



Reaching Out To The Rock



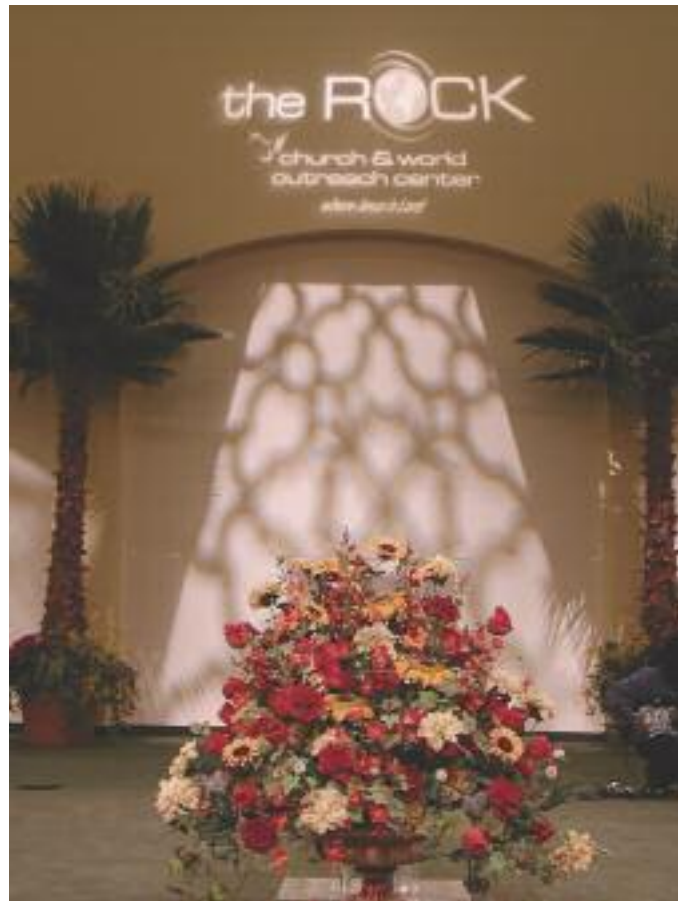
Established as a Christian Church in 1988 and located in the city of San Bernardino, California, The Rock Church and World Outreach Center is built into a new, 188,000 sq. ft, state-of-the-art facility, with a sanctuary covering 42,000 sq. ft with 2,600 seats.

Senior pastors Jim and Deborah Cobrae wanted a sound system that would deliver the spoken word clearly, yet still have the ability to keep up with a powerful and diverse music ministry. Due to its location in the inner city of San Bernardino, the Church mixes different cultures, and the worship music reflects from each one — from black gospel to rock and roll and everything in between.

With Richard Ralke of LA Sound's guidance, The Rock chose Martin Audio to supply the essential audio for the 10,000 members. For those church members who play in the band or sing in the audience, every word, note and sound can be clearly heard because of the quality of the Martin Audio system.

Commenting on the Wavefront W8C's, Paul Roberts — a member of the congregation and the sound engineer who installed the system — says, "They take very little equalising or processing to get better performance quality sound from the rig than any other system. And it's really quick and easy to set-up, which makes things a lot easier for us. I appreciated the hands-on technical support that Rob Hofkamp and Peter Child at Martin Audio gave to this project."

In terms of specifics, The Rock's FOH system includes



a 48-channel Soundcraft MH4, along with stereo 4-way active Martin Audio Wavefront W8C and W8CS loudspeakers. Power is provided by Crest Audio 7001 and 8001 amplifiers. System processing includes a dbx DriveRack controller; an Ashly stereo 31-band EQ, with Martin Audio EM186 as delays. Shure, Sennheiser and Audio-Technica wired and wireless mics, and an FOH outboard processing setup includes two Klark-Teknik DN 410 Parametrics, four BSS DPR-404 Quad Comp De-Essers, two TC Electronic M-ONE XL and Yamaha SPX 990 reverbs, two Denon DN-T625 CD/cassette players and a Sony MiniDisc player.

Visually speaking, the pastors were concerned with the appearance of large unsightly speaker clusters protruding from the ceiling. Roberts had all the speakers painted white, with the rigging cables coated with white plastic to keep them out of sight as they blend into the white ceiling. The delays, front fill, and stage fill are all Martin EM186s.

The Rock's first concert featured New Zealand's Parachute Band. The band's manager Lance Cathro and front of house engineer Brent Greenwood were stunned at the power and clarity characteristics of the Martin Audio Wavefronts.

From day one, the system has satisfied the entire pastoral staff, musicians, audio staff, technical staff — and most importantly the entire congregation, whose financial pledges made the whole project possible.

Fusion – First Orkney Superclub



The Orkney Islands, off the coast of Scotland, might be considered as one of the least likely locations for a high-profile dance club and live music venue — but that is precisely what Neil Stevenson, who runs Groove Records and promotes bands on the island, has established in the capital of Kirkwall.

‘Fusion’, as he has called it, is literally that. To serve bands’ and DJs’ interests alike he was determined to enlist top-quality project management and leading pro audio brands to obviate the need for acts to carry production other than backline.

He turned to LMC Audio (Birmingham) where the experienced Mark Bromfield set about putting together a

cutting-edge sound and vision spec, based around Martin Audio Blackline loudspeakers and BSS Audio’s proprietary Soundweb DSP platform.

Neil Stevenson has established a two-room venue in a converted fish smoking factory — with respective capacities of 600 and 200 on the ground and first floor. Each space has the capability of staging DJ’s and bands and via Soundweb the sound signal from each zone is routable to either space.

While Fusion has been equipped with a separate mixing desk and outboard rack, for use when bands appear, the Blackline system will be in use full time.

In the three-sectioned main room a pair of Blackline H3/S218’s are groundstacked on either side of the stage, while flown Blackline H2’s fire back from the rear of the room and there is an intermediate delay position, with further left/right H2’s.

To the right of the entrance is a ‘chillout’ area, which is served by a pair of Martin Audio EM15’s, with an EM120 articulating the low frequencies, while elsewhere other EM15’s are used as infills.

In the upstairs room a single, a portable stack of Blackline H3/S218’s is positioned either side of the stage.

Martin Audio have also provided all the monitoring — with six F12’s deployed as

conventional floor wedges, and an additional pair of F12’s providing the downstairs DJ monitoring and a pair of F10’s upstairs. While the main system EQ is provided by Soundweb, the floor monitors are processed by BSS Opal EQ’s.

The entire sound reinforcement is time-aligned in the three Soundweb 9088LL units and powered by Crown Pulse amplifiers. Soundweb will automatically switch the input source selection and signal routing, as well as contain the processing parameters for the EM15’s.

In addition, a BSS 9010 ‘Jellyfish’, used for master control, resides in the manager’s office and is mounted in a specially-configured desktop box, linked by CAT5 cable and RS232 serial connection straight into the box. DJ’s will also have local control via a BSS 9011 ‘Shrimp’ — with one positioned in the ground and first floor booths and one at the main bar.

Outside Soundweb’s control scope are the H3/S218 stacks, to which are assigned Martin Audio’s dedicated M3 system controller.

Thus bands visiting the Orkneys will now be able to rely on a recognisable stage rig and audio infrastructure to plug into — and Neil Stevenson will no longer have to deal with the hire logistics he had to in the past.



Café Iguana Sets New Standards



Café Iguana is a new nightlife 'concept' club in the fast-developing area of Pembroke Pines, west of Hollywood, Florida (between Fort Lauderdale and Miami). To achieve the sophisticated audio and lighting design of the top Miami clubs, venue owners, Joe Delaney and the Bar Management Group, chose designer Paul Van Puffelen of Southern Technical Support, Inc. working in collaboration with Michael Harris of Harris Audio in Miami.

The owners wanted the club to provide its patrons with even, high quality audio coverage throughout, along with exceptional intelligibility in the seating and bar areas. The lighting was designed to project subtle moods and feelings in the different parts of the club.

As Van Puffelen explains it, "The idea was to have a sports bar with a lot of video in the front, evolving into more of a Cantina style as you move further into the club. Then there's a dancefloor with luxurious VIP areas furnished with quality woods, finishes, and colours that also doubles as a stage.



When asked why he chose Martin Audio for the sound, Van Puffelen responded, "We had just finished another club, and the client was impressed with our Martin Audio-BSS-BGW-Bryston system. We decided in the last stages to switch the dancefloor system over to Martin Audio."

The equipment array includes four WT-3 speakers, painted custom white with silver grilles; four W8S Subs, also painted custom white with silver grilles, and a Bryston 4B and BGW GTAs.

"Overall, the club has 40 perimeter speakers and 100 Sony monitors with seven large screen projection systems. It's pretty amazing for this type of club," Paul concludes.

Asked about Martin Audio, Café Iguana owner Joe Delaney said, "The high quality of the Martin Audio sound system allows my customers to enjoy incredibly faithful sound reproduction at quite high levels without the ear fatigue normally associated with club systems. This allows us to sustain a higher energy level without tiring our customers."



W8C Stars At World Music Festival



A three-day epic of world music and reggae, coupled with a supersonic camping experience, the Sierra Nevada World Music Festival celebrated its 10th anniversary (around Summer Solstice as usual), with a roster of colourful and dynamic artists performing on two outdoor stages to create a profusion of multicultural sights and sounds.

Sierra Nevada West takes place in the Calaveras County Fairgrounds, nestled in the Sierra Nevada foothills, just outside the small town of Angels Camp. Also known as Frogtown, the spot got its fame from the Mark Twain story, *The Jumping Frog of Calaveras County*.

The distinguished roster of artists included The Wailers, Reggae Firebrand, Capleton, Gary Pine, Barrington Levy, influential early ska vocalist, Prince Buster, legendary Daddy U-Roy, Brigadier Jerry Eek-A-Mouse, Pato Banton, the Twinkle Brothers, Della Grant, Johnny Clarke and Leroy Sibbles. Dance hall sounds into the wee hours were provided by Yami Boli, Stone Love and Mighty Crown, along with the Latin-influenced Big Mountain, the high energy B-Side Players, and Bayanga.

Loudsound, one of Northern California's finest production and rental firms, provided high quality audio for the high altitude Sierra

Nevada West Music Festival for close on nine years now. Starting with a proprietary front-loaded speaker which company head Steve Palmer describes as, "big, heavy and not very efficient," Loudsound eventually bought their first Martin Audio system (32 x W8C's and 16 x WSX's) — "small, lightweight, and way more efficient."

This year's Sierra Nevada Festival was the first time outdoors with the W8L line array. Asked about the W8L's performance, the colourful Palmer claims in no uncertain terms that the system "gets up and down fast, like two rabbits in the springtime, has smooth, consistent coverage and the best low end I've heard to date."

The side fill system had loads of headroom, adds Palmer. "We now have put together a monitor and side fill system where one of the reggae artists actually ask us to turn *down* the low end. I love it,"

FOH system equipment included two Soundcraft MH4 mixing consoles with four racks of power including two QSC PL6.0 and four QSC PL236 power amps.

The monitor system consisted of LE12J floor monitors, four Blackline S218 subs with four W8C mid high cabinets for side fills. Monitor power was provided by AB International and QSC, processing by dbx, Drawmer and Klark Teknik with Shure, AKG, Audio-Technical, and Sennheiser microphones.

The crew included Scott Prentice, house engineer; Steve Palmer, assistant engineer; Loren Miller, band engineer; Ryan Cornelius, system tech/monitor engineer, and Robert Hardiman, assistant monitor engineer.

This year's Sierra Nevada Music Fest was another towering success, with 6000 to 8000 attendees each day. As Palmer concludes, "The promoters were extremely happy with the Line Array system as was the audience. All day long, we had people coming to the front of house mix and saying how clear and consistent the sound was from front of venue to the back."



W8LC Enhances Duke Uni Dinner



Anyone who knows college basketball in the United States understands the dominance Duke University in Durham, North Carolina has achieved over the years. Under the expert tutelage of coach Mike Krzyzewski, Duke has won 14 NCAA 'final four' appearances and three national championships in 1991, 1992, and 2001. All of which explains why the Duke Basketball Dinner is a major event in the state and the southeast region.

Audio for the Dinner, held at Duke's Cameron Indoor Stadium, was provided by the veteran crew from RMB Audio, specifically including technicians Robert Weddings, Roger Dennis, and

powered cabinets backstage for monitoring. Microphones included Twin Crown LM301 lectern condensers and two UHF Shure U4 series diversity channels armed with six handheld Beta 87 capsules.

A Midas Heritage 2000 44 mono + 4 stereo input with 4-band sweepable EQ as the matrix was complemented by two BSS 960 stereo 1/3 octave EQs; Drawmer DL241B stereo compressor limiter; two BSS FDS-388 Omnidrives; two Drawmer DS404 4-channel noise gates; three Drawmer DS441 quad compressor limiters, an Eventide H3000, a tc electronic D-2 Delay, two Yamaha SPX-990 multi-effect units, a Denon compact



Graham Wiggs. Martin Audio Director of North American Operations, Rob Hofkamp, was also in attendance to provide some typical hands-on guidance. The new W8LC Compact Line Array was chosen for its sound quality and RMB's ability to rig the system extremely quickly, avoiding unnecessary stress and strain on the crew.

In terms of the equipment specifics, FOH speakers included 12 Martin Audio W8LC cabinets flown, along with six Martin Audio W8S subs. Six Martin Audio LE700 wedges were used for front fill.

FOH amplifiers included Chevin Research A6000s for the subs, A3000, A2500, Quad 9 for the mid/highs and six JBL EON10

disc/cassette player and a ClearCom communications system.

Frequency coverage for the loudspeakers was absolutely consistent with the manufacturer's stated specifications, and while walking the venue it was obvious that inaudible comb filtering peaked everyone's attention.

RMB has three previous generations of Martin Audio products and stock over 100 cabinets in their inventory. Company President, Cooper Cannady, states that he has, "always been pleased with the designs from Martin Audio's engineering team — from founder David Martin and now through the leadership of Bill Webb."

Synco W8L System Peaks At PinkPop



Established by its founder Jan Smeets in the summer of 1970, *PinkPop* claims to be the longest continuously-run festival on the European continent. Located in a perfect setting in Landgraaf, 30 minutes from Maastricht Airport in Holland, the festival has been produced for the last six years by The Production Factory, the Dutch company formed by

North and South Stages, and the 3FM Tent, this year's *PinkPop* bill featured the likes of Massive Attack, Solomon Burke, Skin, Counting Crows, The Cardigans, Moloko, Deftones, Queens Of The Stone Age and Audioslave, along with continental best-selling stars including the impressive Ilse De Lange and Anouk.

Audioslave on stage



Mick Froeling and Gerrit Kuster, to offer a full range of technical and creative services.

The company, which has offices in both Holland and Germany, produces everything from corporate events to festivals, as well as the celebrated *De La Guarda* 'audience experience' show, and has been working on events with *PinkPop* promoter Mojo Concerts for around 12 years.

With the three-day programme spread across the

In line with normal Production Factory practices, "the best equipment and service providers" were sourced for the festival, which meant that PA firm Ampco Pro Rent and its sister lighting company Flashlight continued their long-running involvement — hanging their wares from the StageCo structures.

This included the new Synco W8L Line Array by Martin Audio in both the North and South stages.

Ampco Pro Rent's production manager, Jannes de Vries, is usually office-based but travels to work on the firm's larger events such as *PinkPop* and Lowlands. Sheltering from Saturday's relentless storms inside the catering tent, he outlined the PA systems used on each stage.

The North and South stages each featured 16 flown Synco Martin Audio W8L line array cabinets per side with ground stacks of Renkus-Heinz Synco Touring System lows, mid-highs and 'combis', plus 24 Crest-powered R-H STS 18in subs per side. The line arrays were powered by Synco MA 4.2 amplifiers (again from Martin Audio) and processed by XTA DP226 controllers.

This was the first *PinkPop* to use the new Synco Martin Audio W8L line array, and although Ampco would have been happy to use the Synco Touring System of previous years, the words 'line array' on several bands' riders encouraged the switch. Its sound was as clear as a bell, and its extremely long throw was very impressive — an

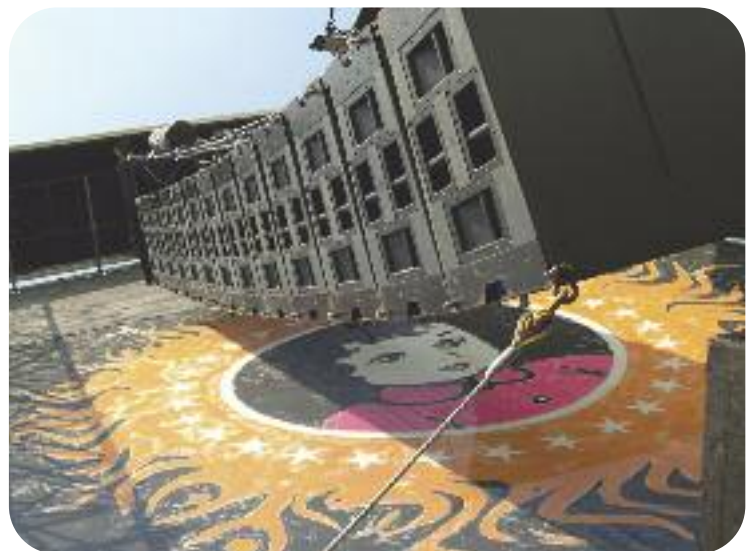


Jannes de Vries, Ampco's production manager for the event

ideal festival system, one might say!

De Vries made mention of one major change at FOH. "On the main stages, we're driving the systems using BSS Soundweb, instead of Midas XL88s and Varicurves. It makes it very easy to ensure that the system curves of the North and South stages are identical, and the change has been well appreciated."

PinkPop, with some exceptions, was relayed on the Internet at www.3voor12.nl, as well as having highlights broadcast on Dutch TV's Channel 3. More than 30 years after its first summer 'fling' it's as relevant as ever, and it's a tradition that will run and run.



German Festival Season Gets Sirius



Martin Audio's W8L Line Array was on duty at the famous *Rock im Park*, which was held in the German city of Nürnberg recently.

The Alternastage in Nürnberg was fully equipped with 24 of the W8L enclosures, supplied by Pave Veranstaltungstechnik of Nürnberg, in co-operation with Sirius AG. They also provided a complete array of Martin Audio floor monitors (LE 12JB's and LE700's).

Rock im Park is one of Germany's biggest and best-known Festivals, and Pave have been working on the event continuously since 1998.

Over the three days this year no fewer than 27 international bands appeared on the Alternastage, including Moby, Badly Drawn Boy, Turin Brakes, The Hives, and the Dandy Warhols.

Wolfgang Geisler (of Pave) and Dirk Pingert (of Sirius) reported that every FOH technician had been impressed by the enormous output of the system.

"This was the first time we had tried the Martin Audio Line Array," said Wolfgang. "In recent months we have demoed various line array systems, but so far the Martin line array is best in our opinion."

"The features we particularly liked about the system is first of all the handling and rigging, which is very easy and quick."

"We also liked the quality of the sound, and the fact that the system sounds very neutral, independent of the volume level. The efficiency of the W8L is very impressive — we had 12 cabs per side plus bass bins and this was really sufficient to cover a capacity of 20,000 people in the auditorium."

Sirius have also been busy with the W8L Line Array system at a number of other German festivals. They serviced two simultaneous events — *Hurricane*, in the north of Germany in co-operation with Capital Sound Hire (using both the W8L and W8LC systems, and 24 x WSX subs) and Southside in Tuttlingen, which they undertook independently. Each was attended by 40,000 visitors.

Sirius also provided a further four festivals over each August weekend all utilising 24 x W8L's with the exception of *Terramoto* — a huge festival in Weeze, formerly known as *Bizarre*, which deployed 32 x W8L's.

The events were M'era Luna in Hildesheim (on the first weekend); *Highfield*, Erfurt (second weekend), *Chiemsee Reggae*, Chiemsee (third weekend) and finally *Terramoto* — which featured headline bands of the calibre of Placebo, Foo Fighters, Linkin Park and Limp Bizkit.

All Martin Audio equipment was supplied by Atlantic Audio, the company's exclusive German distributor.

W8LC Fleets Combine For Chicobum



The annual *Chicobum Festival* in Italy has been a regular fixture on the calendar for Piedmont-based PA company Big Talu for a number of years.

Owned by Guido Costamagna Big Talu have been long devotees of Martin Audio's Wavefront series — and some time ago took delivery of the 400th W8C off the production line.

Held in the Park Chico Mendez di Borgaro, to the north of Turin, *Chicobum's* principle attractions are the main stage (for mainstream acts) and the Barrumba stage (which leans more towards techno).

Artists appearing this year included Alanis Morissette; Flaminio Maphia; Siblings Di Soledad; Gem Boy; Giorgia; Coil Gap; Line 77; Ozric Tentacles; Jones Persian; Piero Pelù; Roots; Sepultura; Ska-P; Skin; Subsonic and South Sound System.

This was Big Talu's first outing with the W8LC Compact Line Array which they purchased from Audiosales, Martin Audio's Italian distributor.

"Given the size of shows they do, the medium-sized line array was the perfect solution for Big Talu," said Audiosales' product manager Mauro Codeluppi. But to fulfil the requirement in Turin they needed to sub-hire in some further enclosures from another PA company, Electra Service — who had been the first company in Italy to purchase the W8LC.

The two companies combined their inventories to dress the main stage with 12 Compact enclosures per side, while the sub frequencies were handled by ten WSX per side. Eight of Martin Audio's industry-standard LE400 wedge monitors were provided for artist foldback.

The whole rig was powered by Lab Gruppen 3400 amplifiers and processed with XTA DP226 digital devices.

"We took some of our customers along to the festival — and fortunately the sound was really impressive," says Mauro. "This system has been well received since we first demonstrated it — to 80 customers at the football stadium in Viadana village. We already have 40 boxes out in the marketplace."

There is a good co-operation between the PA companies in Italy. One of the major players, Fumasoli, purchased a 24-box W8L Line Array system in Spring last year.

In early August he took that system to Zofingen — for a large festival between Zurich and Berne in Switzerland to support one of Martin Audio's Swiss customers.

The festival, which takes place in September, will accommodate international artists such as Counting Crows and Joe Cocker, alongside Italian artists and DJ's.



From left: Daniele Fonneso (stage manager), Cipo Calliari (FOH sound engineer), Sem Cigna (monitor engineer), Raffaele Manera (backline tech), Guido Costamagna (Big Talu owner) and Roberto Buttarelli (Electra Service owner).

Aurateq/Mission Large It In South America



Austen Derek and Rachel Stires provide the impetus behind Aurateq Systems, a multi-faceted design, installation and production company based in New York City, with a number of high-profile projects in the US, London and South America.

Formed by Derek and another partner in the mid-late '80s, the company specialised in sound systems for concerts and dance clubs like the Sound Factory, the Roxy in New York and Ministry of Sound in London. In demand because of his many talents, Austen had also been handling audio and general production for rock concerts, church events, parades and industrials in both countries as well.

When Derek reformed the company in the early '90s, an opportunity arose in South America to produce large-scale outdoor dance events featuring European DJs. A Colombian/American company, Mission Productions, which owned a club in Cali, needed Aurateq's help to create these outdoor events because they were outgrowing the club. Hugely popular, these festival-style events quickly drew massive crowds.

From this point, Mission Productions started booking bands for concerts, and utilised Aurateq to design and build their PA's. Currently, these shows feature Grammy-winning Latin American bands like Mana from Mexico and Los Prisoneros (The Prisoners) from Chile.

These, and other Latin bands, have drawn extraordinary crowds. In fact, Derek says, "The last show we did was a festival-style event for 60,000 people."

Martin Audio has been a staple for Aurateq Systems for a long time. When the Wavefront W8 Series first came out, they purchased a number of enclosures that they used for years.

"Right after that purchase, I was called to update Ministry of Sound's sound system in London which had a similar bottom end to the Martin Audio design," recalls Derek. The only thing that was missing was the 6.5/1" combination, so Bill Webb built a module for me that worked really great, and we've been with Martin Audio ever since!"

Mission Productions inventory now comprises of well



over 400 Martin Audio speaker cabinets, with two line array systems out all the time throughout South America. "We use W8L's for front of house," Derek adds, "with W8C's and W8S for side fill and front fill; and depending on the size of the show we'll either use W8CT's, W8CM's or W8T's for the delay positions." The entire FOH and delay speaker systems are powered exclusively by Martin Audio MA4.2S and MA2.8S power amplifiers.

Asked why he is so loyal to Martin Audio, Austen is very straightforward. "I love the sound of the boxes. A lot of engineers and production people down in South America say, 'Oh, they have that typical *Brit* sound...' and sometimes it takes a while to

get them comfortable; but now these guys are flipping out about how great they sound."

Mission's production manager, Rolli Garbalosa, has worked with Martin Audio products before. He recently used 40 x W8L line array cabinets per side with three delay towers of eight W8L line array speakers for Vincente and Alejandro Fernandez, and he was completely blown away. There were over 75,000 people in attendance at this stadium.

"The W8L is also the fastest flying Line Array sound system, without a whole bunch of gadgets you need to keep track of. Everything is self-contained," he added.

Mission Productions, in conjunction with Aurateq Systems, are currently working on a large Christian rock tour with US and Latin acts and plan to add another complete FOH system in the coming months to cover the anticipated increased demand for their large-scale stadium productions.



The Mana concert at Bogota Stadium

Kilmi Debut Line Array On Rabat Festival



Audia, Martin Audio's French distributors, have enjoyed a successful summer — at diametrically opposed ends of the sales spectrum.

On the one hand they were busy selling a small Blackline system to Music Shop — based on the outskirts of Bordeaux — for installation into the City's brand new nightclub, Fatcat, while major Moroccan PA company Kilmi Musique were breaking in their new W8L Line Array system on the highly-prestigious ninth annual *Rabat Festival* (under the patronage of His Majesty the King Mohamed VI).

Based in Mohammedia (between Casablanca and Rabat), Ahmed Kilmi's sound and lighting hire company managed the sound and lighting on all seven stages for this major festival of Arabic culture — but it was the main stage that was earmarked for the Line Array.

Audia's PA division technical director, Jean-Noël Elouali, says that the North African production giants have been using Martin Audio systems since they first started dealing with the Nantes-based distributors — around six years ago.

"They started by buying the big W8 Wavefront system, then the W8C — and now they have the W8L Line Array. The company specialises in festivals, and with the arrival of the Martin Audio Line Array into their inventory, they have brought production values up to a high level."

While Kilmi's initial purchase was for a 16-box system — supplementing their existing WSX subs with some additional pieces — they have already undertaken to increase this to a 12-enclosure-per-side array in the near future. "It is Mr. Kilmi's intention to

double his system by the end of the year," forecasts Jean-Noël.

The Festival itself covered a broad programme — from cinema, music, poetry, theatre and art, with leading Moroccan singers and lyricists.

Meanwhile, down in Bordeaux clubbers can party to sounds on the new Fatcat dancefloor, delivered by four Blackline H3's and two F12's, with six S218's delivering sub frequencies, processed (as is the rest of the system) by Martin Audio's dedicated DX1 digital controller.



Custom Perspex Wedges A Hit At Eurovision



The five visually-stunning perspex floor monitors, doubling as a prism on the glass-floored LED stage at this year's *Eurovision Song Contest* in Riga, were a clever adaptation of Martin Audio's classic LE12JB floor monitor.

When DM Audio's Lars Wern — who also acted as audio consultant on the recent Eurovision events in Stockholm and Tallinn — realised that the lack of underfloor space in Riga's Skonto Hall would make it impossible to recess all the wedges under stage (as they had in Sweden and Estonia) he debated whether it would be possible to have the floor monitors constructed in perspex. He thus approached Martin Audio at this year's *Pro Light + Sound* exhibition in Frankfurt — and the UK manufacturers were equal to the task.

This year DM Audio cooperated with local company Universal Baltic Sound (UBS) under Edmunds Verners. While UBS supplied the FOH speaker

system (and necessary amplifier power), processors and cabling, DM Audio provided the Martin Audio monitor speakers, effects, mixers, matrix distribution — and the five-strong engineering team.

While DM Audio could conceal a mixture of 11 conventional Martin Audio LE700 and LE12JB wedges in a pit at front of stage (beefed up with some WSX subs), the perspex five-monitor vocal system on stage was an essential addition. This was to assist the artistes not using IEM, but who were still positioned too far away back from the front row LE700's.

Aesthetics clearly became a priority. "The LED screen shining through the perspex made the wedges look fantastic," said Lars. "And the sound differential with the perspex cabinet was easily compensated for by applying additional EQ."

Since the internal chassis would also be easily visible through the transparent perspex, it was decided to further improve the aesthetics of the LE12JB by removing the crossover network, placing it in a remote box to leave only the silver-painted drivers and horns visible to the television audience.

Aside from the chassis construction and adjustment of the input connector/filter network, Martin Audio say that extreme care was needed on final build, since in addition to the silver-painted driver rears, all internal cables had to be meticulously 'dressed' for neatness — even the speaker cables were specially fabricated in silver!

A dedicated crew of five were able to place the wedges in the exact position for each entry, since the precise location of microphones, monitors, grand piano and drums were able to be marked out on the LED floor.

DM Audio's 'Mr Barney' liaised directly with each artist

before and after every rehearsal to ascertain the required monitor mix, and communicated this information back to the foldback engineers, Mats Wennerholm and Philip Jansson. From Mr. Barney, DM sensed how popular these wedges were proving to be as the week-long rehearsals wore on.

"Everybody loved the monitor system — in fact we did not receive a single negative comment

from any of the artistes when the show was over," confirmed Lars.

Lars Wern believes that the construction of the Martin Audio wedges, with their asymmetrical horn design, make them highly suitable for this type of show. And now that DM Audio have added the customised speakers to their own rental fleet, he envisages that there will be plenty of further opportunities to use them for televised shows (in any case, DM can easily resite all components into standard wooden cabs when needed).

And Martin Audio have vowed that if *Eurovision* proves a need for this type of stage monitor they will make them into a production item.



Pic: Maltese contestant, Lynn Chircop, performs through the new Martin Audio perspex wedges

Roma Reopens After 20 Years



After being closed for 20 years, one of the most famous and beautiful movie theatres in Antwerp reopened its doors last spring.

The renowned theatre company Rataplan Foundation have totally restored this 1200-seat monument to its original state. However, this time around they left out the seats and instead turned it into a multi-functional concert hall, with a capacity of 2000. In a short space of time, Rataplan have done a spectacular job, although it will be a further three years before Roma has its 500-seat balcony back in its original state.

The entire renovation was financed by Rataplan, supported by donations, with more than 100 people volunteering to assist with the rebuilding programme.

Pieter Nys, of Antwerp sound hire company D-

Rent, undertook the technical element of the project, designing and supplying the sound and light system. Depending on the type of production, D-Rent will deploy the Martin Audio W8L Line Array or Wavefront W8C, with WT2 infill and WSX subs.

Together with Steve Kemland of Ampco Belgium and Geert de Wit (FOH engineer), an acoustic concept was designed using the new 'Shark bass creator' and a TiMax imagemaker.

On the grand re-opening night, the W8LC Compact

Line Array was showcased to the audience and various sound hire companies. It was a dream come true for many of Antwerp's citizens, the magic of the venue and the brilliant sound of the W8LC system making this an unforgettable night.



PFL Prefers W8C



Philippe Bauwens, FOH engineer (left), with PFL director, Dominic De Gruyter

Dominic de Gruyter and Lucien Smolders, both with 20 years' experience and success in the Belgian audio rental industry, formed their own hire company, PFL, a couple of years ago.

The main market segments serviced by PFL are corporate events and tele/video conferencing, and in a short space of time they have become one of the major providers of international meetings and conferences throughout Europe.

But in 2003 PFL decided to expand its concert sound department as well. Quality and multifunctionality were the two criteria for their choice of audio equipment, and from the vast choice available to them they opted for eight stacks of Martin Audio W8C and twelve LE12JB floor monitors (to expand their existing LE400 fleet).

To show off the potential of the new system, PFL took on no fewer than 30 open air festivals this summer.

Two months after their first job with Praga Kahn, Dominic said he was convinced the company had made the correct decision in choosing Martin Audio.

He is now predicting a further expansion of the company's Martin Audio inventory in the near future.

Phlippo Audio Chooses W8LC



Phlippo Audio, Belgium's biggest Martin Audio user for many years (with W8C, WT2, W15T, LE12 JB and LE400 in their inventory), have invested in a 16-enclosure W8LC Compact Line Array system.

The rig hasn't languished in the warehouse a single day this summer. Besides the Radio Donna tours for which Tom Phlippo uses the W8LC's, the system has been out on major events such as the annual *Amnesty International* open air festival, the recent *City Parade* in Ghent, *Navigation Antwerp*, the TV1 day, *Gentse Feesten* ... and many other festivals .

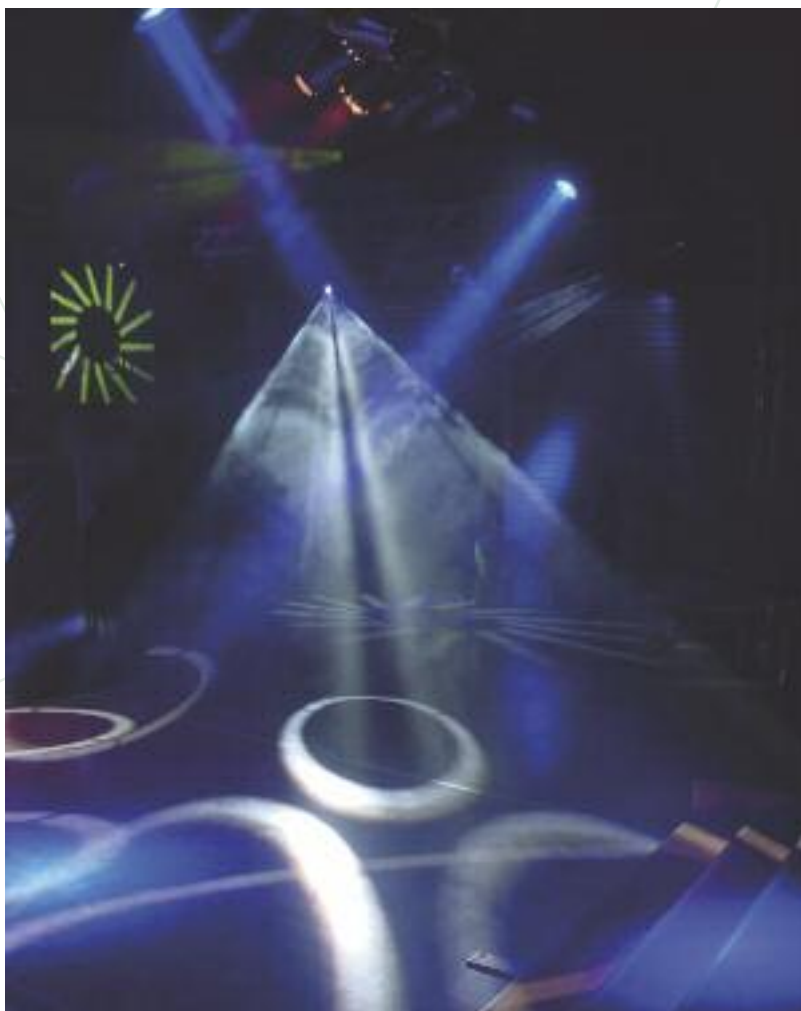
Phlippo has secured several large productions for this coming autumn, such as the *TMF Awards* (Belgian MTV) at the Sportpaleis Antwerp.

Director of Phlippo Audio and Phlippo Showlights, Tom Phlippo, says, "I'm a happy man — and the purchase of the W8LC system is the main reason!"



Tom Phlippo (left) and Jim Mattheus at the Amnesty International benefit

Tugo Goes Global With Blackline



Global, the new nightclub in the Slovenian capital of Ljubljana, is owned by Tugo Stari. Like his other venue, Klub Oz, it is also fitted out with Martin Audio loudspeakers, and the same contractor (Andrej Cvar) was used for both venues.

Global occupies a penthouse position in the city centre, with superb panoramic views over the old town from the three-sided glass-walled club and the outdoor drinks balcony. Access to the club is via a purpose-built lift and the venue, with its luxuriously draped dancefloor, generally projects an elitist image.

Distributed throughout the club are 26 Blackline enclosures, processed with a Martin Audio M3 and DX1 speaker control.

The equipment was supplied by Bostjan Konic of KSL, Martin Audio's Slovenian distributor. In the past seven years Bostjan has transformed the nightclub scene and touring rental markets with over 20 major Martin Audio installs, while four rental companies now include Wavefront W8C and Blackline in their inventories.

DM Audio Field W8L At Skansen



Swedish PA company DM Audio AB has enjoyed a busy outdoor season using their Martin Audio W8L Line Array rig.

Their major project was to undertake a summer installation at the amusement park and open-air museum, Skansen, where the W8LC was powered by QSC amplification.

Aside from being the first open-air museum in the world, Skansen is also a zoological park specialising mainly in Nordic fauna. Founded in 1891, it is located on the island of Djurgården, a royal park near the centre of Stockholm.

Although Skansen owns its own Apogee system they decided to rent the Martin Audio system (eight speakers per side), which has been matched with six QSC PowerLight amps. The sound was controlled using two Rane RPM 26z processors.

Working with Skansen's Per Ekstrand, DM Audio's system, which is used for almost all the entertainment taking place in the park, has proven highly successful, according to DM's Lars Wern.

The highlight, however, has been the live broadcast TV show *Allsång på Skansen* — a singalong/audience participation show which transmits every Tuesday night.

Attracting crowds of around 30,000 the show will have run seven times by the end of the summer and is hosting many top Swedish artistes, including Per Gessle of Roxette and the ARK.

The Martin Audio/QSC combination was again in action — this time at the *Quark Festival* in Norway — when DM Audio, for the second year running, provided equipment to local PA company PA Compagniet (PAC) in the shape of a 16-box W8L line array (with 16 WSX subs) powered by a pair of QSC PowerLight PL9.0's.

Earlier in the summer, DM Audio had collaborated with Universal Baltic Sound (UBS) to produce this year's *Eurovision Song Contest* in Riga, Latvia — featuring Martin Audio's newly-created perspex wedge monitors (*see page 21 for full report*).



Telesine Equip Massive Doors Park Complex



The massive Doors Park leisure complex has opened on a 10,000 sq metre site in the Turkish city of Eskisehir, with a total capacity of 6,000.

Owned by Gurdal Abaci, the sound system was specified by Halim Ozkan and Laurent Ferron of the Telesine Group, who started working on the project at the end of 2001.

Doors Park incorporates two restaurants, an al fresco night club and an indoor live venue, a wine cave and a conference room. Martin Audio loudspeakers are the preferred playback brand in each of the zones.

The first restaurant — Doors Kebab — offers a wide range of traditional Turkish food, while background music, provided from a CD source, is played out through four EM26's (the complementary Doors Balik fish restaurant offers a similar sound system set-up).

On-season clubbing is conducted outside in the Doors Club, before the action moves inside to Doors Live, where up to 2,500 people can enjoy exclusively live entertainment during the winter months.

The sound systems are identical in each location. The PA includes a highly-specified Blackline system comprising six H3's and a pair of S218 subs (processed through the dedicated DX1 controller), with a further six EM186's (and EMX2A system controller).

In the live club, onstage monitoring is provided by a pair of legendary LE400C's, with six Blackline F15's operating as stage fills. There are also a pair of F15's as return monitors, while a pair of EM26's serve as the DJ's reference sound.

The system is powered by Crest Audio amplification, with LA Audio equalisation. Lighting is from the Martin Professional roster of moving heads, controlled by an Avolite Azure 2000.

The Wine Cave offers a choice of fine wines from around the world as well as local wines, and visiting guests are entertained by CD-derived background music played back through a pair of EM26's.

Finally, the 45-capacity conference room offers full AV facilities, with a pair of EM26's reinforcing the audio and Seleo providing the projection.

All the technology was supplied by Martin Audio's



Doors Park's live stage

Turkish distributors, Istanbul Telesine Sound & Lighting Systems AS.

The company specialises in distribution and turnkey installation of professional sound, light and visual systems, from their base in Turkey's second city.

Over the years they have built up a strong customer base of prestige clients, including five star hotel complexes, first class holiday villages, theatres, TV stations, conference halls,

cinemas, theme parks, discotheques, pubs, cafes, theatres and TV stations.

Although the company was founded in 1989, it had been working in the same field for five years previous to that. Due to their vast experience, they have managed to win many of the significant contracts offered in the Turkish entertainment industry.

In the year 2002, Telesine AS became known as the Telesine Group, and now has regional bases in Ankara, Antalya and Bodrum — with Azmir, Side and Adana to follow over the next couple of years.

Telesine will continue to follow their core markets for professional sound, lighting and visual systems, offering a range of services including Design & Consultancy, Import & Export, Sales & Installation and Technical Service & Support.



The Istanbul Telesine team

EM Series Goes To Church



*Abbey Presbyterian
Church minister,
Rev Gordon Best*

Rea Sound have just completed a very busy six-month period in the church market, during which they carried out a number of high profile installations using Martin Audio equipment.

Just over a year ago Newmills Presbyterian Church was razed to the ground by fire. The church committee quickly established plans for a new church and they were soon in touch with Rea Sound to install a suitable, cost effective and reliable sound and audiovisual system.

The company responded with a sound package incorporating the Martin Audio EM76 speaker cabinet at the heart of it. A series of four EM76's were hung in a central cluster to cover the majority of the church, with four WT15 cabinets placed to the under-side of the balcony for infills — all powered with Martin Audio

MA1400 power amplifiers and EQ'd with Martin Audio's dedicated EMX1A system controller. For the foyer, Minister room and crèche areas a Martin Audio C115T architectural system was fitted, allowing the sound to be heard from the main church to the surrounding rooms.

Elsewhere, Abbey Presbyterian Church offer a different type of venue, with a movable back wall (a first for Rea Sound). As the church requested a central cluster, the company opted for three Martin Audio EM56 cabinets, in combination with a Martin Audio MA1400 power amplifier and EMX1A system controller. These speakers were selected due to the fact that they could meet the requirement to fill the entire room, should the wall be placed at its fullest extent. And with the cabinets being flown

reliability was a key factor in order to minimise any disruption due to faulty equipment.

A more traditional church — built in the early 1900's — is Derraghmore Presbyterian Church in Limavady. This stone building required a small sound system that would blend into the church décor. White coloured Martin Audio EM26 cabinets were requested and fitted to the alcoves of the windows within the church (allowing the speakers to be virtually hidden from sight lines). Powered by the new Allen & Heath PA12 powered mixer desk this system was ideal for the church.

The final church was the Armagh Baptists, who due to expansion have built a new purpose built complex on the outskirts of the city. Sporting a highly advanced audio-visual system the

sound system needed to live up to the requirements of this ultra modern church.

The Church committee knew from the start that they wanted Martin Audio equipment. Utilising the Blackline F15 cabinet and S18 sub bass enclosure combination Rea Sound provided a premium class sound to the strict budget. Powered by Martin Audio MA2.8 power amps through the DX1 controller, the sound quality is second to none.

A separate monitor system was also provided for by way of Martin Audio WM05's, powered by Martin MA1400 power amp through a W3 controller. The main entrance and surrounding prayer, crèche and Sunday school rooms have all been wired for the Martin Audio C115 architectural speaker units.

Back To The Bars For Rea Sound



Towards the end of 2002 a small local company approached Rea Sound to provide a high quality audio system for their newly furnished Villager public bar on the outskirts of Belfast.

The pub had two distinct areas — the front bar for local drinkers looking for quiet background music and horse racing results and a younger, more upbeat area for the late Friday and Saturday evenings at the rear.

Rea Sound fitted the front bar with eight Martin Audio EM15's, chosen for the quality audio from this small enclosure. Two EM150 (2x10") sub bass units were also fitted beneath seating areas in the bar, allowing for the sound system to blend into its surroundings. Controlled by a Martin Audio EMX1A system controller and powered by a Martin Audio MA1400, this surpassed the client's expectations.

The back bar was fitted out with eight Martin Audio Blackline F8 cabinets and two Martin Audio S15 subs, providing more than enough coverage for this area. A Martin Audio M3 controller was also installed, powered by Martin Audio MA2.8 power amplifiers.

Over on the other side of Ulster Rea Sound upgraded Dicey Reilly's to a Martin Audio EM series system using eight EM26 compact full range 8" enclosures with four EM120 sub bass enclosures and a further two EM150 (2x10") subs. Four MA1400's provide the amplification with a Martin Audio EMX1A system controller. The venue has a live DJ every weekend and the pub is always busy.

Back in Belfast, The Errigle Inn, which dates back to the 1840's, asked Rea Sound to help bring them into the modern age. The front 'Pinewood Bar' operates as a sports bar and a number of key positions have been used to site 42" plasma screens with a two-zone audio system to allow two events to be shown simultaneously. A total of eight Martin Audio C115's are located throughout this small bar, supported by two Martin Audio CS265 subs, adding real 'effect' to any



sporting event. Selection and volume controls have been located behind the bar, allowing full local control.

The main bar attracts the larger, younger crowd and here Rea Sound opted for a Martin Audio Blackline system comprising of eight F8 ultra-compact, two way passive cabinets with two Blackline S15 compact vented sub bass units, controlled by an M3 controller and powered by three MA1400's. The upstairs 'Arbele Lounge' private function area is primarily used for live band performances, hence a larger Blackline system was installed, consisting of four Martin Audio F12 two way passive multi-angled enclosures and two S18 subs. An M3 controller and two MA1400 power amplifiers have also been installed, while a further two MA1400 power amps were added for the monitor system, comprising of four Blackline F10 cabs.

The Whitefort Inn, Belfast is due to open its doors in September, a year after being completed. This fire-damaged venue was rebuilt to become one of Belfast's premier super pubs. In the face of tough competition, Rea Sound was awarded the sound equipment contract,

The venue has a number of distinct zones. The main ground floor system comprises a Blackline F8 system with 12 colour costumed Blackline F8 compact enclosures, fitted to blend into the walls they are hung on, while four S15 subs have been disguised as part of the interior décor. The rig is powered by five Martin Audio MA1400's and controlled with a Martin Audio M3.

A total of 12 C115 Architectural enclosures were installed as the background music system in the first floor restaurant/private function area. A number of ceiling mounted Martin Audio speakers were also fitted in the public restroom areas to provide for in-house announcements and background music.

Once opened this will undoubtedly be one of the busiest venues in the city.



TAG's Chamber Music



The Metropolis building is a classic turn-of-the-century Australian watering hole with a huge first floor balcony. It's an integral piece of Fremantle history, just a stone's throw from state capital Perth, in one of Western Australia's main tourist attractions. It's a thriving deep water port and was home for Alan Bond's defence of the Americas Cup.

But venture inside Metropolis and you quickly realise that this is no sleepy pub that time forgot. Instead, managing director, Mario Madaffari, is slowly metamorphosing Metropolis into one of the great Australian clubs — both technically and architecturally.

The club features five chambers each representing elements of life: Fire, Earth, Metal, Water and Air. The chambers revolve around the concept of providing alternative spaces with their own unique style and atmosphere. Patrons have the luxury of choosing the room that best suits their mood and personal taste.

The most recent space to benefit from the refit is 'Chamber 5' — or *Air*. C5 features the club's main dancefloor system as well as the spectacular Art Bar, the equally spectacular Blue Bar and the fully restored traditional first floor balcony. C5 is a dual-use space,



providing high level dance music most nights and doubling as a live band venue when required. Consistent with the venue's 'no compromise' philosophy Mario wanted an extremely high quality audio system and TAG's technical director, Anthony Russo, was on hand with a number of Martin Audio system options.

To get the best from the system a series of specially designed acoustic 'clouds' and wall panels were installed to control reverberation. The audio arsenal that Mario and

Anthony settled on included two Martin Audio W3 (15" 3-way) and six EM56 (12" 2-way) speakers along with two Blackline S15 single 15" subwoofers. The W3's were located at left and right front of house with the EM56's around the dancefloor and the subs fitted under the stage. A DX1 digital controller gives the system the flexibility to blend to either FOH or dancefloor surround role — or full-tilt mode, with both synchronised and running together. The whole system is cleanly driven by QSC, with four PLX and one four channel CX Series

amplifiers. The DJ booth is also luxuriously equipped.

Having comprehensively analysed the room during the design stage, after final system sign-off — including precise speaker angling, tuning and equalisation — there was full agreement that that system in that space was absolute magic.

Meanwhile, activity in the other chambers includes a cocktail chill out space in C2 (*Earth*) with an independent DJ, booth seating and an unobtrusive low level compact audio system comprising of six C115 speakers and two EM150 subwoofers. The C2 refit is also new and serves as a welcome oasis for reinvigorating the hard charging clubber, for those engaging in the gentle art of conversation or for those just seeking some privacy and solace.

C3 (*Metal*) remains a mystery! Its theme has yet to be revealed but it promises to be altogether different.

Mario is building Metropolis into something of a Fremantle institution where patrons can come over many years and still find the music and the atmosphere that suits them. They may need to move from room to room as they mature but they will always be able to call Metropolis home.



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The Martin Experience

Mojo Lifts Off DLF City Centre



Delhi-based DLF Group is presently engaged in developing the DLF City Centre in Gurgaon. As the retail revolution takes hold, 40% of the projected 146 shops in their new mall (which also features a multiplex cinema) will be for food and beverage operations — with Mojo already opened.

This new entertainment venture by Vikram and Priyanka Rana features architecture and interior design by Studio Praxis and concept design and project consultancy by DJ Philp. He in turn supervised the sound and lighting installation, which was masterminded by Arun Kalra's RK International.

As the Indian distributors for Martin Audio, RK have installed a full rig consisting of two Blackline H2's and two S218 subs, with a pair each of F10's and S15's, and four F8's serving the different



areas. Fed by Technics turntable and Pioneer CD sources, the system is powered by Martin Audio MA series amplifiers, mixed

through an Allen & Heath XONE:62 and processed via Martin Audio's dedicated DX1 system controller.

DLF's expansive plans are certain to mark Gurgaon out as an entertainment hub of the future.

fabric flavoured sandwiches



sandwiches in Wellington — New Zealand's newest flavoured club — is one of the entertainment jewels of the South Pacific, skilfully crafted from the best design ingredients.

Co-owner Bryce Mason's experience at **fabric** (London) left him in no doubt as to the choice of the best sound system — Martin Audio. The collaborative design expertise of Wavefront Audio and TAG New Zealand achieved the best audio experience in Wellington on opening night.

The main dancefloor pulses with two W8C's and four WSX subs, with EM186 in-fills. The more diffuse intimate sound of the lounge is attained with two Blackline F15's, two S18 subs and four F10 in-fills. The whole venue is seamlessly controlled with the new Allen & Heath iDR8 control system — enabling all source selection and speaker management to be controlled by a single device, monitored and adjusted in real time.

Andrew Clelland, Wavefront Audio MD and custom installer of **sandwiches**, is delighted with the result. "The effortless



sound of the W8C/WSX is the best permanent install I have heard anywhere in New Zealand", he said. Co-owner Mason is equally impressed. "From our experience in London, we knew the sound system had to be Martin Audio and we have not been disappointed. The sound still far exceeds anything we had hoped for."

20,000 Attend Peace Festival



A massive Peace Rally, which saw 20,000 people demonstrating against the war in Iraq recently, included a concert in Barcelona's Maria Cristina Avenue.

Some 30 singers, bands and theatre groups participated, including Maria del Mar Bonet, Marina Rosell, Toti Soler, Paco Ibañez, Jose Antonio Labordeta, Jaume Sisa, Pep Sala (SAU) Gerard Quintana (Sopa de Cabra), Javier

Gurruchaga (from Orquesta Mondragon) — as well as theatrical and television personalities.

PA for the event was provided by Barcelona-based Musica Viva. Their director,

Ramon Mañas, not only has expertise in lighting, but a good deal of experience with the Martin Audio W8L Line Array.

He rigged 12 W8L's each side of the stage, with 16 WSX subwoofers — all powered by Martin Audio's MA4.2 power amplifiers. Eight W8C's were provided for front-fill and a further four for side-fill.

Technical direction was in the hands of Musica Viva's Pepe Cervera in collaboration with Jaume Armengol, Cesar Mira, Xavi Lonca, Jordi Fatxo — as well as Nacho Alberdi and Alex Juarez from Alberdi Pro, Martin Audio's Spanish distributors. In charge of monitors (a selection of Martin Audio LE400 and LE12J floor wedges) was Manuel Cervera.

LE400C's Provide Monitoring At 'Thailand's Woodstock'



Billed as 'Thailand's Woodstock', the second Pattaya Festival saw 130 artistes entertaining an audience of more than 500,000 people. Organised by the Tourism Authority of Thailand the event was supported by sound companies, Mahajak Development and Ten Years After Co — the latter one of the country's best-known rental firms.

For stage monitoring the company fielded multiples of Martin Audio's classic LE400C floor monitors — among a set of 14 of the classic floor wedge which Chavalit Mahaviriyakul's company purchased from the manufacturer's Thai distributors, Vichai Trading. They also used the LE400C's on the recent Asanee & Wasan concert tour (pictured).

According to Vichai Trading's Suthichai Sopchokchai, Ten Years After are now in the process of evaluating some of Martin Audio's other systems.



Going French In Shenyang



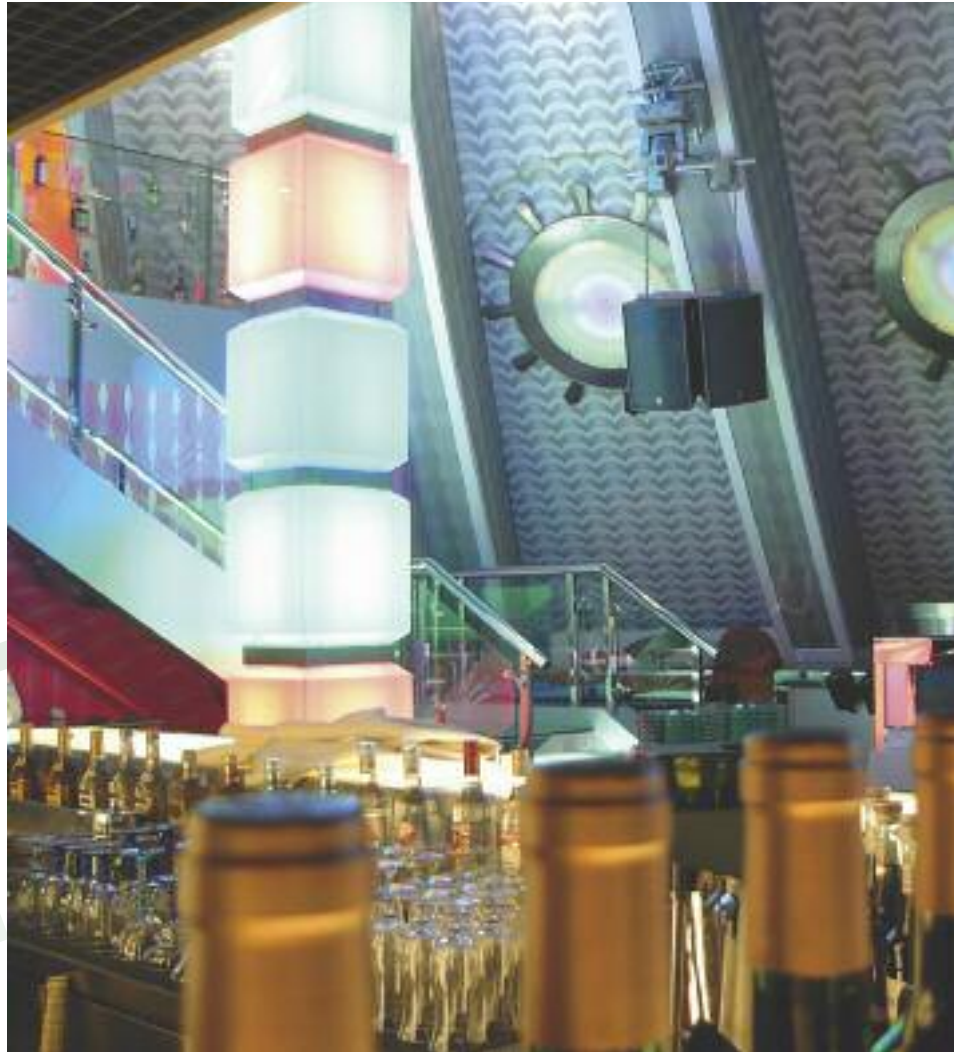
Shenyang's Lafite French restaurant is a new three-storey restaurant incorporating a separate bar and disco.

Located at the Triumphant Arch, in China's Wulihe Stadium, Lafite is extensively equipped with a Martin Audio sound system.

In the restaurant itself are four WF15 speakers driven by Crest Audio 7001 amplification, with a Klark Teknik DN 360 equaliser and Klark Teknik DN 504 compressor-limiter. In the M disco are eight W3 speakers, eight WS2A subwoofers, and eight WF15 sidefills. The DJ monitoring is via a pair of WF12s, with Crest Audio 8001 and 7001 amplification, Klark Teknik DN 360, DN 504 and DN7453 processing.

Also installed are a TC Electronic M-One multieffects unit, a Martin Audio DX1 speaker processor, and Pioneer DJ 600 DJ mixer and CD player.

Deployed in the M Bar are a further eight EM76 speakers, four EM251 subwoofers, a Crest 7001 amplifier, Klark Teknik DN360, DN 504 and Martin Audio EMX1A processor, and Pioneer DJ 600 and CD player.



Wavefront Takes To The Beach



The large Beach Club entertainment venue in Kota Kinabalu, East Malaysia, recently completed a Wavefront installation via Swee Lee Music Company – Singapore.

The owner, who has more than 15 years of experience in the club scene, was seeking a high quality sound system, and Martin Audio was chosen as the preferred brand for its quality and durability. Four Wavefront 3s were specified as the FOH system, together with four Blackline S218 sub-woofers to provide an earth-shattering bass.

Another four ICT300's act as side-fills on the ground floor, while a further two ICT300's and ICS300 sub-woofer were installed in the VIP area located on the second floor. A total of three Martin Audio controllers (M1, M3 and WX3A) were used to provide active crossover output for the speakers and the whole system was powered by QSC amplification.



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RALEIGH MUSIC BROKERAGE	+1 919 965 4300
SATIN SOUND	+1 724 983 1938