

LIGHTING+SOUND *International*



THE PRINCE'S TRUST CONCERT IN LONDON'S HYDE PARK

- Hyde Park: Masters of Music in Concert
- Diamonds are Forever: Neil Diamond at Wembley Arena
- Nuclear Chemistry at GUSH Nightclub
- Company Profile: PA hire giants Britannia Row
- Twenty, Not Out: Dial Sound and Light
- On Tour with The Smashing Pumpkins and Judith Durham

PLASA

JULY 1996



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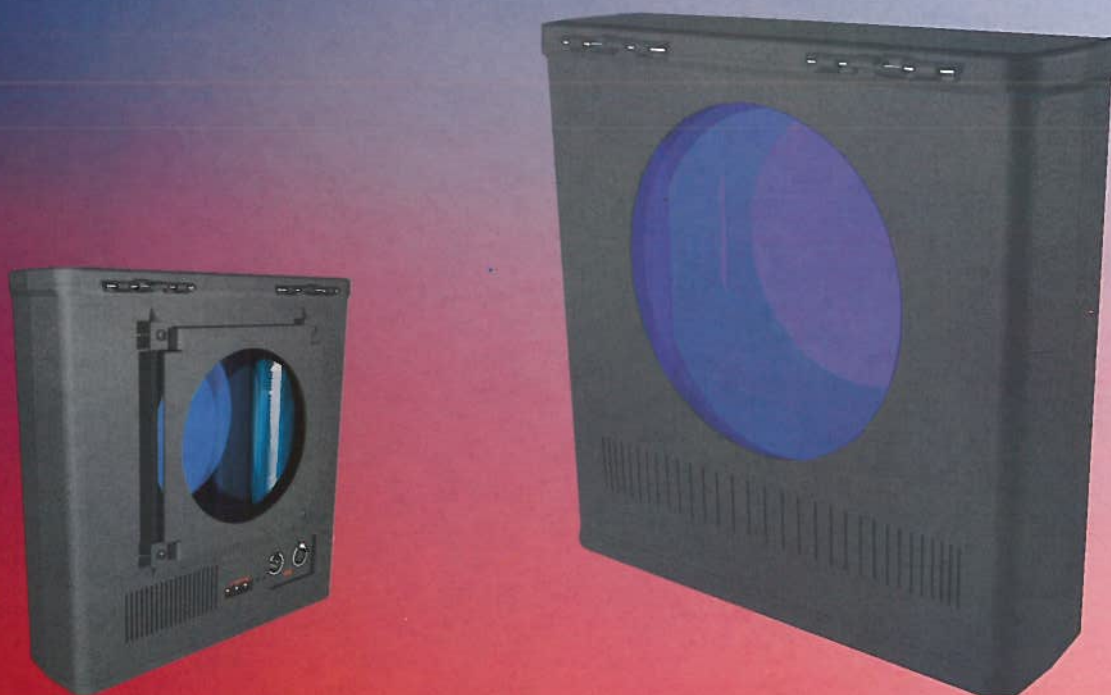
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LIGHTING+*SOUND* International

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All other worldwide patents granted or pending.

PLASA Goes Live at Earls Court in September

The PLASA Show Rollercoaster is gaining momentum all the time. In what promises to be the event of the decade so far, the PLASA Show, which runs at Earls Court from the 8-11 September 1996, will almost certainly break all previous records. Stand sales are at an all-time high and remaining stand space is rapidly being snapped up by companies across the world.

With both Presentation Technology (8-11 Sept) and the British Music Fair (7-10 Sept) exhibitions running alongside the PLASA Show, the estimated number of visitors for the three-in-one event will be a staggering 22,000 with 4,500 from overseas.

Alongside a myriad of new products and technical innovations, the PLASA Show will also introduce a host of new events and special features which will appeal to all sectors of the industry, making PLASA a truly interactive exhibition. The **Motorola Internet Bar** will feature the latest in Internet technology, in addition to offering exhibitors the chance to display their own web sites to visitors.

The **PLASA/Lite Structures Pavilion** is designed with the needs of small or first-time exhibitors in mind, whilst **ESTA** (Entertainment Services Technology Association), the US trade association, will be hosting a dedicated area for US and Canadian companies. Exhibitors signed up to date include Tomcat, Altman, MDG Fog/Smoke Generators, Strong, TMB, GAM, Rose Brand, Gray Interfaces and Future Light.

The **Stage** area has been designed by Theatre Projects and will play host to a number of activities - all of which will be free to visitors. Events already confirmed include the Gemini/DJ Magazine mixing competition on the Sunday and a workshop entitled 'Tales from the Production Desk' hosted by Richard Pilbrow and featuring David Hersey and Rob Halliday on Tuesday. At the heart of the Presentation Technology

exhibition, the Retro Box/Videowall area will give visitors the chance to compare exhibit's videowall products in a specially designed feature area.

The PLASA Show will also be presenting a 'Specialist Sound Sector' dedicated to the requirements of the professional audio, broadcasting, recording and installation sound industries. Companies already signed up for this area include HHB Communications, Raper & Wayman, TOA, Signet AC, Clock Audio Projects, Sound Design and Whiteley Electronics.

This specialist sector will be on the second floor of Earls Court 1, alongside Presentation Technology and The British Music Fair, and will prove a major enhancement to the Show.

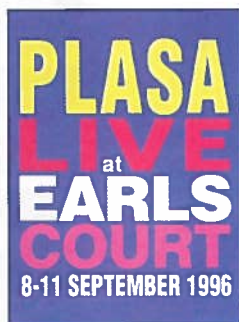
Supported by L+SI sister publication S+CSI, Pro-Sound News and Audio Media, the Specialist Sound Sector will be complemented by a number of seminars. These are designed to address key industry topics and up-to-the-minute technical issues and will offer insights from major industry figures.

Details of the seminar programme are currently being finalised.

Presentation Technology, gives visitors an opportunity to see a wide range of video conferencing, multi-media, videowall and entertainment technology. With international visitors such as British Airways and Disneyland Paris attending, Presentation Technology is set to be the major European show of its kind.

This unique entertainment technology triumvirate is set to provide visitors with all their buying requirements and will offer a first-time opportunity of viewing the full range of presentation, audio and lighting products under one roof. Do not miss out by being elsewhere!

For further details contact Bridget Beaurepaire at P&O Events, telephone 0171-370 8229.

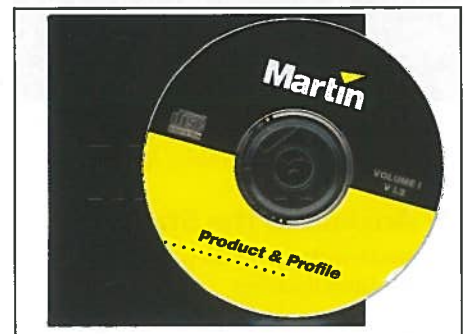


Martin and Strand Cancel Agreement

Due to conflicts in their respective distribution networks, Martin Professional A/S and Strand Lighting Ltd have terminated their arrangement, whereby Martin were manufacturing automated luminaires under the Hyperbeam label for Strand.

With effect from July 1st, the two companies jointly announced cessation of their agreement and concurrently Martin Professional have terminated all production of Strand Lighting-labelled products. Both companies wish it to be known that the decision was made with full understanding of the other's position and that the two parties continue to enjoy friendly relations.

L+SI First: CD Rom



The interactive age is truly with us. For the first time in its ten-year history, L+SI is carrying a CD Rom on its cover. The disc, produced by Martin Professional, carries a wealth of information on the Danish manufacturers' product range, including its award-winning PAL 1200, together with a company profile and contact details for Martin distributors worldwide.

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Photon Impact

Stagetec are finding things busy in the run-up to the PLASA Show. As Compulite's UK distributor, the company received orders in the same week for the new Photon LX control desk from both Malvern College Theatre and from BBC Bristol's news studio.

Stagetec have also won the contract to install a new sound system at Wakefield Theatre and Opera House. The main speaker system will feature Renkus-Heinz equipment, with on-stage monitoring provided by Ohm and all driven by Crown amplifiers. The package also includes a Soundcraft K3 mixing console.

Pulsar's Seminars

During the last two weeks of May, Pulsar conducted a successful series of intensive training seminars in Shanghai and Beijing which were planned to coincide with major exhibitions in the region and which played host to 150 students.

Studies for Pulsar focused on the Masterpiece control system and other Pulsar products, whilst Clay Paky products were demonstrated separately. The whole range of seminars were presented by Advanced Communications Equipment Co Ltd, and attended by Pulsar's Derrick Saunders and Andy Graves. The seminars in Beijing are now a monthly feature.

Turbosound Link to DPA



Sean Martin, Turbosound's international sales manager (left) with Sten Jensen of DPA SoundCo in Denmark.

Turbosound and DPA SoundCo of Denmark signed a deal worth nearly £800,000 at the recent AES exhibition in Copenhagen.

The order, for 48 stacks of Flashlight and 12 stacks of Floodlight, automatically promotes DPA SoundCo to the premier division of European PA companies, as well as substantially reinforcing Turbosound's presence in Scandinavia. The region can now field 42 stacks of Floodlight in Norway through CAC, and a 32-stack Flashlight system in Sweden through Starlight.

DPA will provide Flashlight and Floodlight PA for the four main stages of the Roskilde festival this summer. For the first time in years, Britannia Row will be engaged elsewhere, with its huge Flashlight inventory committed to numerous international tours. DPA SoundCo is currently working closely with Turbosound's R & D department on a new design for a wedge monitor.

Casino Lighting

Further to winning the control and dimming for the two new Royal Caribbean ships, Strand will also be supplying the ship's casinos with additional rack-mounted controllers to integrate with the existing Premiere control system.

The room will gradually change its appearance over the course of the day, creating a continuous backdrop of interesting looks. Peter Ed, Strand's cruise and theme manager expands: "The biggest effect will be the famous 'jackpot' effect when someone gets really lucky. The whole room is turned into one huge lighting effect with flashing, chasing and strobing lights."

The lighting designer can programme the effects on the Strand 430 theatrical console running GeniusPlus operational software. The use of a theatre-style console makes it easy to create and edit effects, colour scrollers and even moving lights.

Crest up the Junction

Crest reports a number of recent installations. Century Series Vx FOH and LM monitor consoles were recently installed at The Junction in Cambridge by Electrotec Audio Lease, and Crest have also sold a large quantity of amps to LMC for installation in nightclubs and live venues. LMC has also recently bought and installed 14 Crest CA 12, 9 and 6 amps at the University of East Anglia for the Union of UEA Students (a feature on this installation will appear in L+SI's sister magazine, S+CSI). In addition, Crest has also been receiving regular orders from PA Installations in Llanelli.



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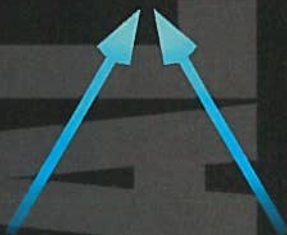
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JVH Showhouse 1996

As one of Holland's leading distribution and installation companies, Jac Van Ham's Showhouse is always a major event, attracting visitors not only from Holland, but Belgium, France, Germany and the UK.

Sound companies represented by JVH include Citronic, Canon, Cloud, Celestion, Outline, AKG and Philips, and lighting products are just as strong with Abstract, Celco, Clay Paky, Optikinetics, Pulsar and Space Cannon, as well as Lite Structures, Le Maitre and Doughty. The object of the event is to introduce clients to some of the latest products at their showroom.

JVH is headed by genial MD Ben Weijters, who said of this year's show: "It has been very successful, with a high turnout of our entertainment, retail and electronic installation clients. We have also had visits from some of the UK companies we represent."

This was backed up by Celco's Colin Whittaker, who told L+S: "During my visit I've been able to talk to all the sales staff and demonstrate some of our latest products." On show from Celco was the full range of lighting consoles including Explorer EPX, Pathfinder EPX and Navigator EPX together with the Fusion digital dimmer and M9 video processor.

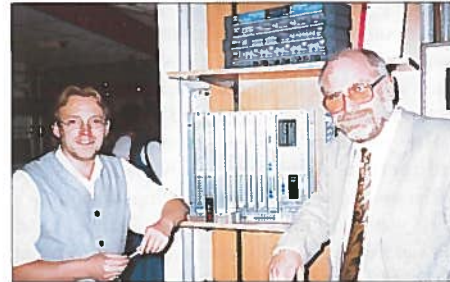
Roy Millington from Cloud was another UK visitor who was able to go through the Cloud product range with the JVH staff. Le Maitre's Rick Wilson chose the event for the European launch of the Le Maitre Low Smoke Generator (LSG). He also announced that hire company Flashlight had ordered three units. Other UK involvement included Pulsar represented by Ken Sewell and Adrian Brooks from Lite Structures.



Left to right: Adrian Brooks (Lite Structures), Rick Wilson (Le Maitre) and Ben Weijters of JVH.



Ben Weijters flanked by Gerard Jongerius (left) and Fons de Vreede of Flashlight.



Ben Weijters with Roy Millington of Cloud.

PCM Up the Pace

With the announcement of another Motor School in the first week of September, followed by their biggest PLASA stand to date, PCM are as busy as ever.

Recent orders include 16 new Lodestar motors to Outback Rigging. The company already have a substantial stock of Lodestars which PCM have undertaken to refurbish. Swiss rental company Audio Rent placed an urgent order for motors with PCM and took delivery of them just two days later for the annual Rock am Ring Festival.

Theatre contracts completed this month include the supply of motors to The Wolsey Theatre in Ipswich with the first production to benefit from these being Lettice and Lovage. Other sales include that of four fast-speed half ton hoists for moving truss 16 metres a minute to German rockers Pur for their latest arena tour and 10 to Ozzy Marsh at Global Rigging. Lite Alternative invested in half-ton standard speed Lodestars for the Tears For Fears tour. Meteorlites ordered no less than 30 motors to help cope with their impending Summer rush, and PCM also supplied motors to ScreenCo and Britannia Row Productions for the recent Oasis mega-shows at Maine Road Football Stadium, Manchester (see L+S, June 96).

US Cyber' Round-Up

High End Systems have equipment out on tour with US band The Butthole Surfers, including 12 Cyberlights, eight Intellabeams, several F-100 fog generators, 12 Emulator laser simulators and 60 Dataflash strobes, 10 of which are situated on six 'Towers of Terror'. LD for the tour is Lawrence Upton and Texas-based LD Systems are providing the full lighting package. LD Systems is also providing 22 Cyberlights for ZZ Top's 'Continental Safari' world tour, with LD Larry Sizemore.

High End also report that country singers George Strait, Tim McGraw and Faith Hill performed under more than 100 Cyberlights at the recent Country Music Festival in Dallas.

All Video Gallery

The Rock Video gallery in Denman Street recently took delivery of 50 HDI 450 Sennheiser headsets and 20 infra-red transmitters. Described as the first ever all-video gallery, the exhibition features multi-media art in rock videos, song writing, production techniques and special effects.

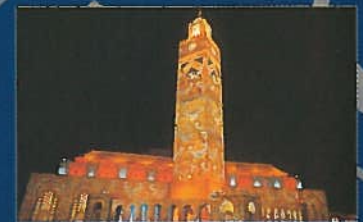
The Sennheiser headsets are handed to visitors on entering and used throughout the display. The first exhibition covers rock videos from 1975 and plots the development from Queen's Bohemian Rhapsody to the present day. Using infra-red technology, The Rock Video Gallery exhibits computer-generated images and virtual reality techniques from specially recorded laser-discs.

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New Master Dealer

M & M, ETC's sole UK distributor, has appointed Futurist Light and Sound of Dewsbury as a master dealer for ETC products. Michael Lister, Futurist's managing director, told L+S that the company has already added both the ETC Source Four and Source Four Par to its stock and is currently organising local demonstrations of the new Express desk. Futurist, which covers the North of England, will be showing all ETC products at ABTT North in October.

In view of the huge amount of product being sold by M&M and its dealers, the company has created a dedicated, 24 hour service pager/number for their customers. Answered personally by a member of the technical team, customers can secure help any time day or night. The help desk number is 0941 103383.

WL Long-Term Deals

White Light is to offer a range of special deals for long-term rental of certain equipment. White Light's general manager, Bryan Raven told L+S: "We got the idea from one of our customers, a youth theatre, who have a long term rental agreement with us for a number of CCT Rockette Par 64s. We have also been talking to a number of venues and theatres who don't have the capital resources to provide a reasonable size lighting rig for visiting companies. Our long term rental deals are proving popular with these venues."

SOCS: A New Pairing

For over a decade, Stage One and Hangar Services Ltd have worked together successfully on many events, most recently the new Renault Megane launch at Telford Exhibition Centre. To maximise shared resources and expertise, the two companies have joined forces to become Stage One Creative Services Ltd.

Registered to BS EN ISO9002, the new company has established a reputation in a number of areas: mechanical engineering, electrical installation, steel fabrication, cabinet making, props and scenery construction, all supported by in-house pre-production planning and CAD facilities.

The new company will continue to produce Hangar Staging modular staging, and is also launching Q-Motion onto the hire market. As the name suggests, Q-Motion is a motion control system which ensures accurate positioning of any form of stage scenery from simple trucking and revolves to multi-axis requirements.

Industry Enjoys Summer Holiday



Pictured left to right are Effective Productions' Pete Cox and Rick Price, with Marquee's Spencer Brooks and the Yamaha desk.

A stage version of Summer Holiday, based on the 1960's movie featuring Cliff Richard and The Shadows, opened at the Blackpool Opera House in early June.

This pre-West End run involved several companies within the industry to provide the necessary technical expertise. Triple E were called in to devise a special track system. David Edelstein designed a system of runners and hand winch for continuous track, on which a blackcloth moves to create a constantly moving diorama effect. Part of the cast, on a travelator, move in the same direction and at the same speed as the backdrop.

The sound production company, Effective Productions (formerly Alpha Audio), and designers, Peter Cox, Graham Simpson and Rick Price, have included a number of Trantec radio mics in their spec. They are using 16 of the latest \$5000 true diversity systems, alongside five of the VHF bodypacks and five S2 MTX VHF handhells.

Meanwhile, Marquee Audio have sold Effective Productions a Yamaha PM3500 mixing console for use on the show. They also supplied eight Nexo PS15s and eight PS10s plus controllers.

Transtechnik's Hop

Transtechnik GmbH have moved into new premises, less than 20 metres away from their old base. The site gives the company three times as much space, with facilities including conference and training centres and an extensive demonstration room.

The company can be contacted at Ohmstrasse 1-3, D83607 Holzkirchen, Germany.

Lighting Technology Scores a Double

Lighting Technology Projects has unveiled its second major floodlighting scheme at the Earls Court Exhibition Centre. Continuing the colour scheme of metallic blue and white already used at Olympia and Earls Court 1, the Brompton Road facade of Earls Court 2 has been transformed with the grey metallic cladding absorbing the rich blue colour of the installation. As with previous schemes, architectural and structural details are enhanced by strong white light contrasting with the blue washes.

Designed by projects director Bruce Kirk, this is the third project completed for Earls Court Olympia. The luminaires used on the EC2 project include floodlights by Abacus, Siemens and Powerlite and high intensity beamlights from Francis Searchlights. All three installations use Powerstar 400W blue lamps for the washes and area lighting with 150W HQI-T powerstar lamps for the feature effects.

Habitat II - Istanbul

Theatre Projects supplied lighting equipment for the closing ceremony of the United Nations Habitat II conference in Istanbul.

Celebrations, in the form of satellite cultural events, were staged throughout the city, which is based where the Straits of Bosphorous is crossed by the Bosphorous Bridge. The bridge, which measures one kilometre across and 360 foot high, formed the focus of the lighting and fireworks spectacular which concluded the ceremonies.

TP, in conjunction with local lighting company Staras, designed a showcase which involved the linking of two continents, Asia Minor and Europe, by an arc of light, formed by the British designed and built 18 Sky-Arts, mounted on the Bosphorous bridge. Five trawlers, each equipped with a four headed Sky-Tracker, powered by a single generator supplied by Bristol-based Templine (who also provided the power for the closing ceremony), made their way up the Straits from the Mediterranean, to within half a kilometre of the bridge where the light show began with a searchlight show similar to that made famous by 20th Century Fox. Having drawn attention to the bridge, the Sky-Arts took over revealing a flotilla of boats sailing under the bridge and continuing to provide sweeps and fans of light which formed an arc between the two continents as a fireworks display concluded the show.

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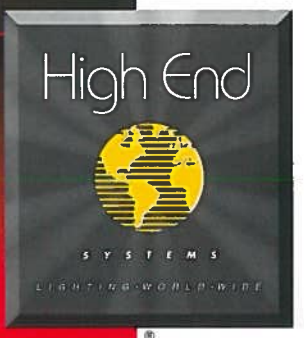
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Festival of the Sea

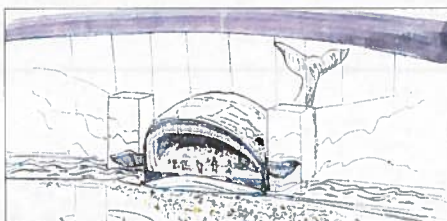
The Bristol International Festival of the Sea, held in late May, attracted around 300,000 visitors and pulled in a television audience of millions across the UK.

Millennium Special Projects, a division of Millennium Pyrotechnics, who specialise in son et lumiere shows and outdoor audio-visual spectaculars won the contract to supply stages, set design, sound systems, specialist lighting, searchlights, multi-coloured lasers, massive moving projected images and water screens.

Millennium dressed the main stage in the shape of a huge whale, the gaping mouth being the stage front. On each side of the stage, water fountains were positioned which projected out of two 30 metre pools, each containing 35,000 litres of water projecting water over eight metres high. The fountains were coloured from an array of intelligent lights and featured multi-coloured lasers firing through them to form graphics in the water. These were the largest ever dancing fountain systems to be seen in Bristol. In addition, Millennium also specified a new computerised twin projection system which beamed 20 metre moving images onto the walls of Lloyds Bank.

In use for the first time ever in the UK was a new water screen which was used for the finale show (the device enables ordinary video film to be projected onto a wall of water).

Pictured top is the full stage, with Millennium's visual showing the whale below.



VA Acquire Blitz

The Board of Visual Action Holding plc has acquired the whole of the share capital of Blitz Communications Limited for an initial cash consideration of £5.25 million from the three management shareholders and 3i plc.

The principal operations of Blitz include the hire of audio-visual, video, sound, lighting and staging equipment for use in corporate presentations, along with sales and multi-media presentation installations. The company was formed in 1991 as a result of the management buy-out of Blitz Vision Ltd in a deal backed by 3i. All three management shareholders will enter service agreements with Visual Action and they have also agreed non-competition clauses for periods of five years.

The acquisition of Blitz provides Visual Action with an opportunity to strengthen its presence in the UK audio-visual hire market which it has through Samuelson Communications Ltd and TP Sound Services Limited.

No Fit State

Thistle Techniques recently sold lighting and sound equipment to Cardiff's No Fit State Community Circus as part of a £70,000 National Lottery Grant to be used on their production of Alice In Wonderland which is currently touring the country to packed houses.

The equipment specified included an Avolites Pearl touring desk with graphic tablet, Avolites 36 way 10 Amp module dimmer racks, six Strand Prelude 16/30s, six Strand Prelude Fresnels and a High End Systems F100 smoke machine. On the sound front, there was a Soundcraft 400B in control, with four RCF Event 3000 speakers, two Matrix Audio Developments (MAD) 500W amps, a Sony MDS 303 mini disc player, eight Shure mics and three EMO Passive DI boxes.



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Electric Museum

C Audio power amps have been installed at the Kawagoe Electric Museum at Kawagoe City in Japan. The museum features a multi-media system, with three video theatres, in which visitors can draw their own picture and project the image onto the screen in a TV simulation.

Design and specification for both the audio and video were carried out by Victor Arcs, who specified Turbosound Impact loudspeakers, with Electro-Voice, JBL and Bose - all powered by C Audio amps.

Trantec at Euro 96

MBI Sound & Light have purchased the first four Trantec S5000 Series UHF hand-held radio systems off the production line, and pressed them straight into service at Wembley for the FA Cup Final and Euro 96.

For Euro 96, the UHF hand-helds were used for miking up the marching band at the opening ceremonies and subsequent National Anthems. The BBC originally intended to run out with lead mics for the band, but MBI set the receivers up in the venue's sound control room. The outputs were fed down BBC multicore to an OB truck, where the stereo mix was created.

MBI are contracted to maintain and engineer Wembley's in-house system, and top of MBI's shopping list are Trantec lapel transmitter packs in preparation for the pantomime season.

Subvision Flux



Subvision and VLC have just completed filming a new series called 'Flux' for Chameleon TV. The show is based around a club setting with Subvision and VLC providing a live mix onto a Seleco video projector and nine 28" Panasonic monitors installed around the venue. Live camera feeds, animation and VLC's VLM computer system, which produces images live to a sound input, were all mixed through a Panasonic AV-5.

Laser Active

After providing laser effects of animated sea creatures for The Festival of the Sea in Bristol, Laser Grafix were also providing effects at the annual Bedford River Festival. As a result, the company are now investing in pulsed copper vapour laser technology and have been awarded the exclusive lightshow distributorship of copper vapour lasers by Oxford Lasers, whose lasers featured in Pink Floyd's Division Bell world tour.

1996 Tony Awards

After the confusion surrounding the nominations for Broadway's Tony Awards last year, when 'Sunset Boulevard' swept the board virtually by default, the event's organisers must have been hoping for an easier ride this time around. Sadly, that was not to be the case; by failing to nominate the musical 'Victor/Victoria' or any of its creative team, they incurred the wrath of its star, Julie Andrews. Nominated in, and strongly tipped to win, the best leading actress in a musical category, Andrews stood before the audience at the end of a matinee and announced that she would be declining the nomination.

By some strange chance, two members of the creative team did feature amongst the eventual winners, though for their work on another show: Jules Fisher and Peggy Eisenhauer jointly collected the best lighting award for 'Bring in Da Noise, Bring in Da Funk'. The pair beat Blake Burba (nominated for 'Rent'), Nigel Levings ('The King and I') and Christopher Akerlind ('Seven Guitars'), with the award extending Fisher's record number of Tony wins to seven.

'The King and I' took the other design categories, with Brian Thomson winning best scenic design and Roger Kirk best costume design for their work on the show. The rest of the creative categories for musicals were dominated by New York's surprise fringe hit, 'Rent'. The show has now graduated to Broadway and is attracting strong interest from producers on this side of the Atlantic.

Roll on next year's controversy . . .

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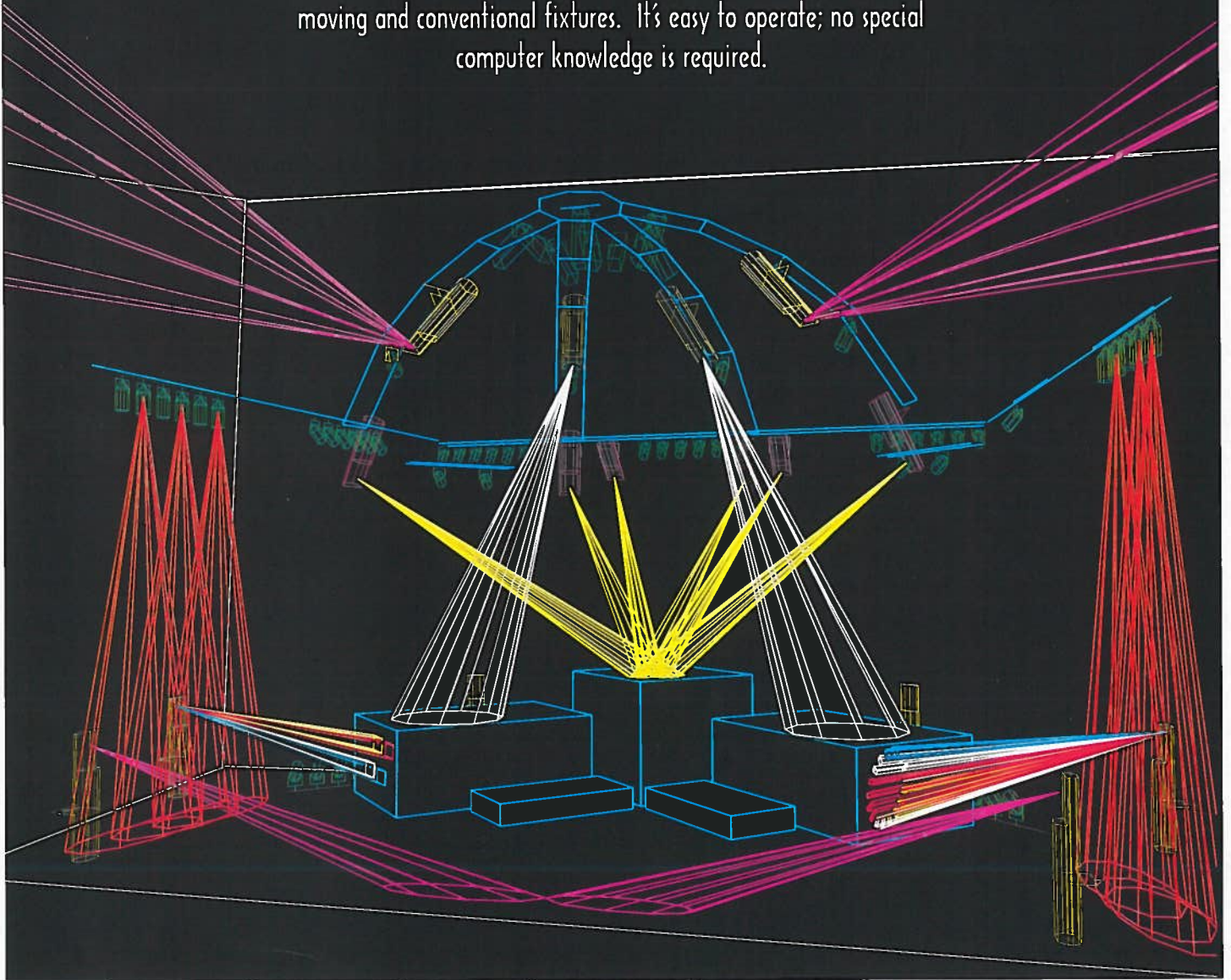
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WYSIWYG & Citröen



Lighting designer Durham Marengi lit the recent unveiling of the new Citroën Saxo at Birmingham's NEC, after programming the light show on a WYSIWYG system. The brief, from production company Moore Events, asked for a moving light system to cope with four diverse reveal sequences in the main auditorium, to give both dynamic gobo projection and provide bold colour washes on dancers and cars suitable for the five-camera relay to a main screen.

Icons were used, as Light & Sound Design have created a Mock Icon conversion to allow the WYSIWYG system to 'see' the output of the mini-Icon desk as DMX protocol. The reveal arena used 28 Icon luminaires with rotating custom glass gobos, with 56 Washlights, Molefay and Par conventionals run from Marengi's own Celco console.

The set, designed by Paul Bonomini and built by Scena, was an industrial landscape of pylons and ramps with a huge main screen, under which sat the band. The first job for LSD's Mark Hunt, who programmed the show, was to draw the ground plans into the 3D world of the WYSIWYG programme, and then to 'rig' the lights on accurate truss positions orientating them correctly from Marengi's ground plan. John Sinden programmed the moving lights, working with Marengi over a six-day period.

The big question of course, was would what they had seen be what they got? However, when it came to running the show rehearsals, Marengi told L+SI: "We had recorded the rehearsals onto video during the day (thanks to Creative Technology and Paul Keating of Delta Sound), and as we ran our cues in time to the tape, it was really quite surreal to see everything replay exactly as we had envisaged."

One Stop Rigging

Unusual Manufacturing, a new part of the Unusual Industries Group, has been set-up to provide a retail-style service for the rigging industry. In a one-stop shop operation, clients can purchase a range of slings, blocks, ropes and shackles, all by respected manufacturers such as Habegger and Elephant. The company also specialises in designing and building control systems for electric chain hoists and provides a full maintenance and test certification service.

Spanish Fly

Stage Technologies have been appointed to provide a power flying control system for the Teatre Nacional de Catalunya in Barcelona. The state-of-the-art computerised rigging control system, consisting of two control desks, motion control racks and networked computers, has been ordered by joint venture UTE Chemtrol/Cymi Nacional which is based in Madrid.

The 95 axis system, which is due to be commissioned in September, provides motion control for 92 variable speed hoists designed and manufactured by J.R. Clancy and three fixed speed hydraulic stage lifts. The Stage Technologies Acrobat! and Juggler! control desks will be connected to the control racks via a high performance industrial network.

The Teatre Nacional is a brand new theatre which is due to be opened in December 1997. It has an impressive neo-classical style exterior which is partially covered with glass and will primarily stage drama performances, most of which will be produced in-house.

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MA Workshop



German company MA Lighting Technology GmbH recently acted as host to an international forum offering a product workshop on control and dimming. The five day meeting gave distributors an opportunity to catch up on the latest information via talks and hands-on demonstrations. Scancommander and Light-commander training was carried out at the premises of Lightpower, the exclusive German distributor of MA products. Delegates are pictured above with MA's Ralph Jorg Wezorke (third left).

Blackout Busy

Blackout, the drapes and rigging specialist, supplied and installed sound-proofing drapes for the recent Oasis concert, as well as drapes and rigging for The Cure Unplugged film shoot for MTV. The company is also in the process of producing gauze panels with hand-painted fruits, which will form part of M People's set for the forthcoming tour.

Blackout also provided extensive rigging, trussing, ceiling structures, perimeter walls and drapage for the recent British Gas ACM.

Euro Steeldeck

Steeldeck scored another hit with NRK Television's production of this year's Eurovision Song Contest in Oslo.

Steeldeck first made contact with NRK director Pal Veiglum at London's PLASA show last year and as a result were chosen to supply the staging. Steeldeck provided the entire main stage for Eurosong '96 which was specially designed by production director Michael Passmore, as the units had to complement existing staging and achieve specific loading requirements.

NRK now propose to rent out the stock as a commercial service operation. In addition AVAB Norge have become agents for Steeldeck and have recently made some successful follow-on sales. "This was the sale of the year for me," Philip Parsons, managing director of Steeldeck told L+S.I. Steeldeck can again be seen at PLASA '96 in September, sharing a stand with Glantre Engineering.

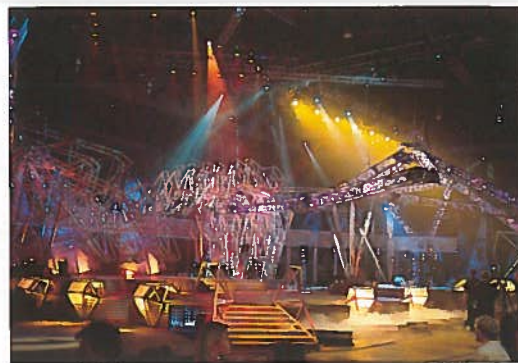


photo courtesy of Martin Professional

More Headroom for Nite Klub

London's Autograph Sales Ltd has supplied a large complement of Lab Gruppen amps and signal processors, for a maximum-headroom sound system in Sunderland's new night spot - the Nite Klub. The £300,000 installation involved the complete interior renovation of an old Locarno Ballroom and was completed by late April.

The sound system was designed by Autograph Sales' John Adeleke, in conjunction with Birmingham-based contractor 2007 Sound & Light. During the commissioning, Autograph used a Meyer Sound SIM System II acoustic analyser and supplied a total of 18 Lab Gruppen amps for the installation. These ranged from Lab 500s to Lab 2000Cs, with Autograph also providing a quantity of Klark Teknik DN3600 Series eqs, DN514 4-way gates and DN728 delay lines.

In addition to handling the system installation, 2007 Sound & Light supplied the Nexo loudspeakers and also designed and installed the Nite Klub's sophisticated lighting rig.



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Rainbow effect, two-colour beams	*	*	*
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Max. No. of colours	Infinite	113	24
Rotating gobos in dichroic glass	Optional	2	Optional
Rotating M-size metal gobos	4	2	4
Fixed M-size metal gobos	4	4	—
Variable speed indexed two-directional rotation of gobos	*	*	*
10 additional gobos in metal	*	*	*
Fixed prisms	—	1 (5 facets)	1 (4 facets)
Rotating prisms	2 (4 facets, 3D)	4 (4 facets, 3D, wake, image doubling)	—
Frost filters	2	2	1
Iris	increased speed	increased speed	*
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NEWS IN LIGHTING + SOUND INTERNATIONAL

Archaos at Brixton



Archaos: circus for the technological age.

French circus group Archaos took the concept of circus to the limits in the late 1980s and early 1990s, but in 1992 it all went horribly wrong as gales in Dublin destroyed their Metal Clown production - the largest touring structure ever to hit the road.

Archaos retreated to France and in late 1995, carefully relaunched a new concept designed to move the art form swiftly towards the next century. With Game Over, Archaos came back and this Spring played seasons in Paris and in London at Brixton Academy. This was to be circus for a technological age, where traditional acts and skills collide with new disciplines (motorbike and BMX rides, stuntmen and half of France's Olympic trampoline team).

The production is a massive indoor arena spectacle in which circus, dance and theatre interweave with techno-dance music. A huge transparent polycarbonate sphere dominates the stage. Films play on its curved surface and, as a show-stopping finale, two motorbikes spin inside the orb at nail-biting speed. This is the first time since Arno Wickbold died during a performance at Olympia in 1951 that a 'globe of death' has been seen on a stage in the UK.

The show features the talents of Fabien Martineau as projections and images designer with Jean Marie Prouveze as lighting director and Georges Ulivieri, set designer. The 35mm film is directed by Isabelle Jolly with Guillaume Debroise as technical consultant.

For Archaos, the technical demands were extensive as production manager Philippe Maucourt explained to L+S: "With Game Over, the set-up has to vary for each venue, but we had to ensure that 7.5m distance is kept between the action arena and the screen. We use 6kW HMI projectors from Cameleon and they are set in a rehearsal space approximately 47m from the screens, right in the axe of the stage."

A solid square truss grid for flying lights, screens, aerial artistes and sound was required. For the extensive rig, one down stage truss was positioned above the forestage trampoline, 17m long with 11m clearance above stage level. There is a further truss above the audience and two side trusses above the stage area, plus a truss upstage in front of the screen position. The aerial artistes would also need to move above the stage area and their trapeze, ropes, bungy and flying equipment is fixed to a grid comprising a square truss and two cross section trusses.

The trusses needed to be bridled to avoid the slightest movement when the artistes are in motion with direct access to the grid for technicians and artistes. Plans tentatively include further dates in Paris and a possible return to the Academy in a revised format.

Marine Theme Park

UK-based Wynne Willson Gottelier have recently created the world's first sea-going theme park.

It is remarkably compact, taking up no more than 30sq.m in space, and whilst it is aimed at 'little people', it includes no less than 11 'rides', each unique and all set in a magical, themed environment. The concept, taken up by Stena Line for their new HSS class of ferries, is operated with minimal supervision using a state-of-the-art smart card system sponsored by Pepsi.

Named 'The Incredible Voyage', passengers enter the park through the mouth of a friendly ginger cat. Immediately, the spell is cast when, flying with Time Capsule or viewing in Up Periscope, the player ends up in another fantasy world, where one after the other the characters of a fantastic journey reveal themselves.

Now WWG are considering the potential of the concept on dry land under the InGenius banner and are actively looking for sponsorship for the project. The company have a growing reputation for creating entertainment environments using cutting-edge technological solutions. They have also built up considerable expertise in the marine sector over numerous projects for some of the biggest names in the cruise industry.

Wholehog's 'Big' Hit

Big, a musical stage version of the movie made famous by Tom Hanks, has just opened at the Shubert Theatre in New York. Lighting designer Paul Gallo wanted to use both Vari*Lites and Cyberlights for the show, but was concerned about which system to use to control these two very different lamps. He and associate designer, Vivian Leone, contacted Richard Knight in the UK, an expert in the use of moving light technology for stage productions who recommended the new Wholehog II - its first use on a Broadway production.

Paul Gallo added Paul Sonleitner to his team as console programmer so he and Vivian could concentrate on lighting the show. As all three were new to the Wholehog, Flying Pig Systems devised a programming format that was in keeping with the theatre style of running a show, and Paul Gallo and his team were able to download the changes in software from the company's Web site.

JEM Overseas

Following the 1996 Entech show at which Jon Petts, JEM's new general manager collected the Entech award for Technical Brilliance for the ZR31E smoke machine, JEM have appointed Stagecraft Pty Ltd as the new JEM Pyrotechnics distributor for Australia.

Stagecraft Pty Ltd have been working closely with JEM and JEM's exclusive smoke machine distributor, Show Technology Pty Ltd. The appointment will also allow Show Technology Pty to concentrate their marketing energies on promoting JEM smoke machines and consolidating their position as one of JEM's top three overseas distributors.

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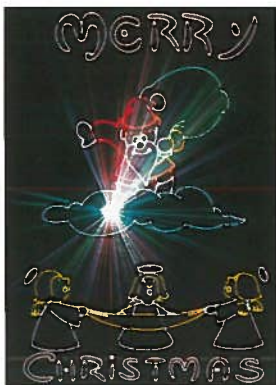
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Magical Pangolin

Laser Magic held an open day at their Seaford headquarters recently, using award-winning laser shows to demonstrate the capabilities of Pangolin design software, which they distribute in the UK. Laser Magic claim the package, which runs under



Pangolin produces a colourful Christmas greeting.

Windows 95, enables the design of laser images and the creation of complete shows, providing enhanced levels of image definition and colour reproduction.

The company have been involved with Pangolin throughout the development of the system, providing feedback along with other laser display specialists, and have built the user-friendly control desk. Since its introduction, the images produced by the system have found favour among many of the world's foremost laser companies.

Laser Magic have been busy recently in India, South Africa, the Middle East and Brazil, where Steve Harvey has been providing a laser display at a motor show for BMW.

Tour News

PanCommand Systems Inc of San Jose, California, manufacturers of the PanCommand system have filed for Chapter 7, whilst **Morpheus Lights**, the associated rental operation, have filed for Chapter 11 protection from bankruptcy.

The festival season this year is soaking up Capital Sound gear with systems out in Holland for Pink Pop, Chatham & Rochester and Mid Fin. **Concert Sound** are just rounding off the Shirley Bassey tour and FOH man Geoff Hooper will move straight on to Chris de Burgh. The low profile Mark Knopfler tour moves into a higher gear as it crosses over to the continent, playing venues from 2,500 to 16,000 around Europe until early August. **WigWam** are confirmed as main contractors for this year's Castle Donington Monsters of Rock (assuming it happens).

The Shaolin Kungfu Monks were loading in to the Nynex Arena when the IRA's latest contribution to the peace process went off in Manchester on the 15th June. LD Paul Dexter reported the whole building rattling. Luckily, the bomb narrowly avoided claiming the life of a house rigger who had literally just secured his harness to a girder when the shock wave hit, making the roof jump enough to have thrown him off. Sad to say, they then loaded out, the show having been forced to cancel. Finally, **SSE Hire** has just made a major purchase of 70 stacks of Nexo PA to cope with the expanding demands (particularly in Summer) of the concert industry.

Steve Moles

Shure Announces New Distributors

Shure Brothers Inc, one of the world's largest manufacturers of microphones and electronic components, has appointed Jands Electronics (NZ) Limited as its exclusive distributor for New Zealand. Jands Electronics is the sister company of Jands Australia and will distribute the full range of Shure products.

Shure has also appointed Audio Export Geog Neumann and Co GmbH of Geilbronn as its exclusive distributor for Germany.

RCF Shipments

RCF Electronics have recently shipped the first pairs of their Event 6000 speakers, which feature a three-way bass reflex system and can produce SPLs of up to 134dB. The first installation of the system was undertaken by London-based Envotech at Raffles nightclub in Jersey, while Guildford Sound & Light, who have been supplying the Event range for some time, have just taken delivery of their first pair of 6000s.

Leisure Services

Edenbridge-based Leisure Services (UK), the South East Clay Paky and Pulsar resellers and exclusive dealers for the Missen Acoustic system, have gone into receivership. Sales director Mike Lavelle has joined The Effects Co and company chairman Ian de le Vingne has joined Cerebrum.

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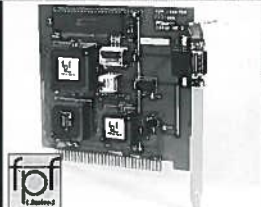
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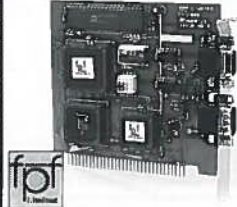
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PCDMXT1



PCDMXR2



15 Years of 5 Star Cases

When the staff of 5 Star Cases (pictured right) take to their stand at the PLASA Light & Sound Show this year, they will be celebrating the company's 15th year in the business. For this, their ninth consecutive appearance at the Show, the occasion will be marked by a more relaxed



approach from the Cambridgeshire-based case manufacturer. This year's 5 Star stand will be a laid-back, soft-sell environment, where birthday celebrations come before the business of cases. For managing director Jim Willis, head of 5 Star since 1989, the 'rest' will be a just reward, for the last seven years has been a period of steady growth and development, culminating in the recent expansion of their Wisbech premises.

John Sparrow was the original owner of 5 Star Cases when the company first appeared in 1981. Through the 1980s, the business concentrated almost solely on the supply of cases to the music industry, along with a host of imported accessories. Jim Willis, formerly owner of the company supplying foam conversion services to 5 Star, bought the company in 1989 along with partner Lesley Jones, solely for the manufacturing capability and expertise that it offered, and dispensed with the cluttered range of imported accessories. In the year that followed, turnover was doubled, rising by 30% per annum ever since.

While 5 Star were keeping the cases coming for the music industry, an Ipswich-based company, Pro-Tect, were doing the same thing for the disco lighting industry. The logical step was taken, and Pro-Tect was acquired in 1991, its owner, Keith Sykes, who has remained with 5 Star to this day as production manager. Since that time, the number of staff at the company has risen to 29, and the Wisbech premises cover a total of 12,000sq.ft.

The intervening years have also broadened the horizons of the company, with increasing amounts of demand from outside our sector. Today the entertainment industry accounts for 60% of the company's total sales, with their considerable expertise being utilised for packaging engine components by Rolls Royce, British Aerospace and Formula 1 racing teams. On top of this increasingly lucrative market, the company also now apply their resources to producing casings for power distribution units and loudspeaker cabinets. Further illustrating the company's development in recent years is the fact that in 1989, none of its production was exported, while today, that market represents 28% of the turnover.

Currently doing well in the product line are cases designed specifically for the High End Systems Cyberlight and the Clay Paky Golden Scan 3, which take the unorthodox approach of carrying the units upside down. This innovation allows for full testing of the unit to take place while it remains in its case, cutting out a good deal of time and energy on the part of the technicians. As Jim points out: "People find this unusual at first, but they don't switch back to conventional cases!"

The majority of the production undertaken is bespoke work, and the Golden Scan 3 case, still a relatively new development, has already been produced in 27 different versions, with areas for spare lenses or bulbs for example, to suit the specifications of individual clients. Aside from all of this, 5 Star also manufactures a range of studio furniture, demonstrating the breadth of their manufacturing capability, which includes full CAD design facilities and a cutting shop that will be completely automated within two years. So, don't be fooled by the laid-back approach if you see them at PLASA in September - 5 Star Cases are well geared for the next 15 years.

Lee Baldock

Masterpiece Goes Underground

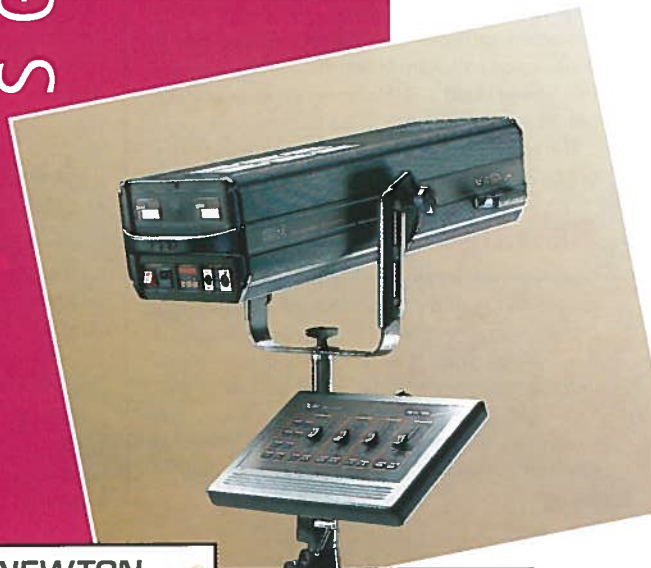
The current tour of Transglobal Underground is using four Golden Scan HPes and a Masterpiece 108, sponsored by Pulsar. The band have a unique style, with many of their dance numbers being sung in Arabic, and a mixture of dynamics, dress and action adding a rich texture to the show.

The lighting designer for the tour, Nigel Monk, who has worked with the band for two years, is using the scans to replace all other lighting in certain venues, and is careful not to overplay the movement of the units, believing that a light does not have to move just because it can! Monk is well-versed with the Masterpiece, having previously toured with one for the Lighthouse Family.

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Peak Development

Within the newly opened Victoria Peak Development, Hong Kong's first major themed attraction, is also the country's first ever dark ride. On the Rise of the Dragon ride, the dragon takes visitors through six scenes which depict the history of Hong Kong and Fragrant Harbour. The queuing area takes as its theme the dark, winding alleys of Hong Kong, where dogs bark and Chinese lanterns throw eerie long shadows . . . !

Glanre Engineering was one of only two British companies working on the project and installed the stage and architectural lighting, optical effects projection, dimming and control interfaces for the ride and surrounding area. The contract called for a considerable amount of animatronics and special effects, including 19 GAM Scene projectors and an LN2 fog system. AC Lighting, in conjunction with Altman and Strand Asia, supplied four Strand LD90 2.5kW dimmers and also carried out the on-site installation for Glanre.

The redevelopment of Victoria Peak was carried out by Richard Crane Productions of Orlando.

Revenge is Sweet

Club Revenge, located in Brighton, has just been refurbished with a combination of Turbosound's skeleton Floodlights and TSW-718 bass cabinets. It is a relatively small club, but in the low-ceilinged intimate space, the four Floodlights and four TSW-718s represent a 'substantial' system. The installation is the first appearance of Floodlights south of London and was carried out by BAV of Brighton.

Wavefront on Grease

Ten Martin Audio Wavefront 3 speakers are providing the auditorium sound on the new touring production of Grease (pictured). Used with Meyer USW sub bass and Meyer UPMs, they make a formidable combination, according to the show's sound designer, Bobby Aitken of Autograph, the UK distributors of Meyer. The Martin boxes were specially modified to feature flying points top and bottom, while Autograph designed a pivot system for the speakers. Martin also modified the connectors, removing the Neutrik NL4s and replacing them with EP5s to enable Autograph to use their existing multiway.



In Northern Ireland, Rea Sound have carried out several installations using Martin EM and Wavefront 12 speakers, for which they are distributors. The main system at Squires Nightclub in Derry comprises 12 EM185s and EM250 sub-bass, with Wavefront 2s and EM15As as in-fills, plus two system controllers, whilst McSwiggans in Ballymena has 24 EM15s underpinned by four EM150 sub-bass, run with an EMX1 controller. Other Martin installations by Rea have been undertaken at Murphy Bros in Ballena and at Jackie Mullan's in Derry.

Sarner Install at Saltstraumen Attraction

Sarner International has just commissioned its fourth major attraction in Norway. Found at one of the most northerly points in the country and dominated by the sea, it brings to life the history of Saltstraumen, an area steeped in heritage and legend. The all-weather visitor attraction features a multi-sensory show which includes a number of powerful special effects all designed, created and installed by Sarner.

The attraction is divided into two parts comprising an exhibition area, as well as the main attraction which is staged in an apparently circular space which, at first glance, appears to be a simple auditorium. A screen is formed by shrouds of sails which are motorised so that, at the appointed time, they are raised amidst billowing smoke to reveal a secret chamber in which numerous scenes are played out using high tech Sarner wizardry.



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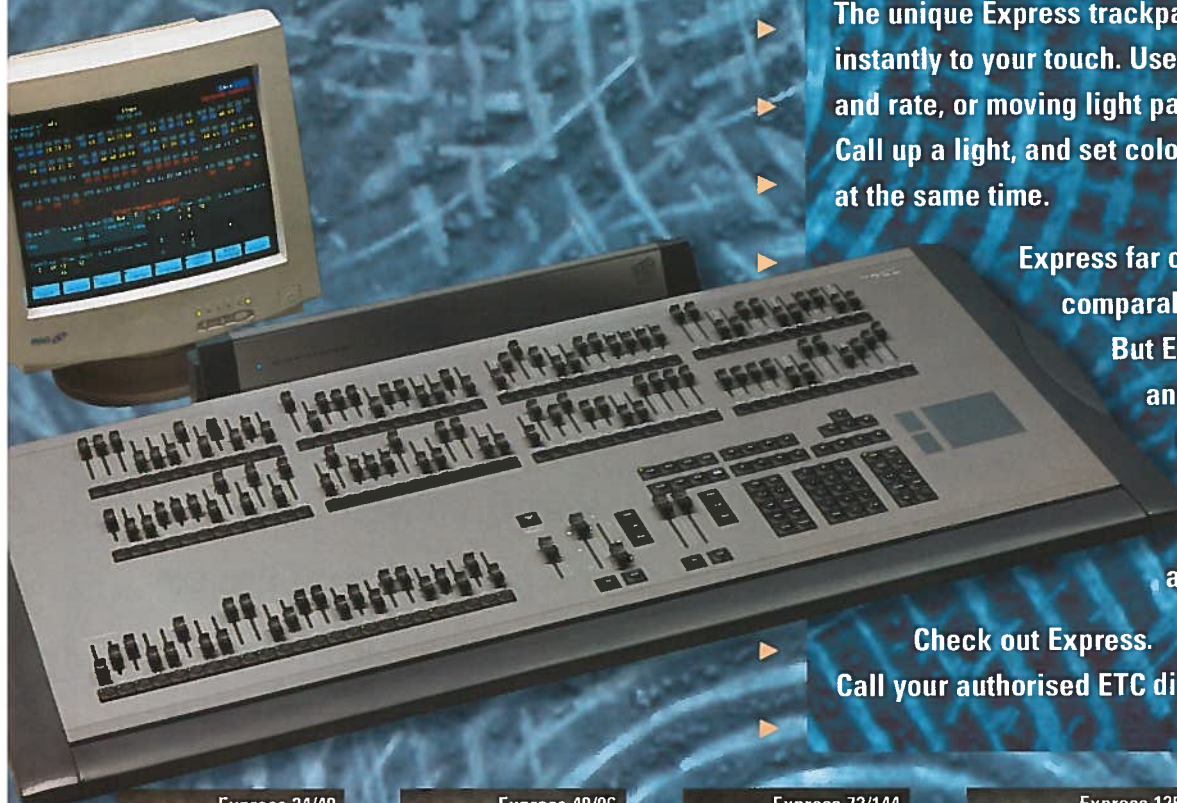
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Brilliant Summer

Brilliant Stages has announced that their Stacking Truss - invented by Mark Fisher and Charlie Kail for Simply Red's 1996 dates and now out with The Cure - is playing a large part in a touring season that MD Charlie Kail tells L+S is the "busiest ever".

The Stacking Truss system allows truss sections to be nested together for travel. The truss is tapered in its end elevation and uses snap braces for lateral strength. CPL have bought a quantity for their hire stock and it has also been specified by Robbie Williams Productions for The Cure - for which Brilliant Stages also built and finished the entire stage set and scenery, and provided motion control of the 'cones' which contain lighting fixtures.

Le Maitre Fireworks

Le Maitre Fireworks have a busy schedule during the summer. Various projects include the starting of the City of London Road Race by firing from the guns of HMS Belfast, touring with Meatloaf in Spain and Denmark, the Herbal Life conference at Earls Court and the Adidas-sponsored 'Prince Naseem at Brixton Academy'.

The company were also involved in a fireworks display organised by Coca-Cola to mark the end of Euro 96 and worked with Walt Disney and Umbro for a show at the London Hilton. At the Royal Gala Concert celebrating 20 years of Birmingham's NEC, the Princess Royal was in attendance for a Le Maitre fireworks display and the company have also been invited to take part in the Tokyo International Fireworks Festival.

HELL Goes Architectural



Howard Eaton Lighting Limited has completed a dramatic architectural lighting effect for the e-fact advertising agency's office in Clerkenwell.

e-fact wanted to highlight its core computer server which enables all of the team, including the client, to simultaneously work on the same project. Architect consultants Architeam were brought in to provide the creative solution and found that the creation of a glass cylinder encasing the computer server and pulsing like a hi-tech heart-beat required expert guidance.

HELL designed and installed the system using a combination of stock HELL products, including 12 fluorescent tubes, four three-way dimming fluorescents, a few custom-made items and a healthy amount of innovation. Subsequently, they were also asked to install, at great speed, a lighting effect in the hub of the meeting table in the boardroom. For this the company produced custom Birdie (MR16) fittings which they sited under the table's central glass feature.

People on the Move

Stage Technologies have appointed **David Black** as a senior designer to join their expanding team of automation control engineers. He most recently spent four years as senior electronics/software engineer with Arrow Rigging.

Tim McCall has rejoined Marquee Audio to head up a new department concentrating on sales of sound reinforcement to rental companies. He will be working in the north, using Marquee Audio's Sheffield operation as a base.

Sony Broadcast has appointed a new managing director. **Nick Twyman**, formerly of Tektronix, succeeds Miles Flint who was promoted to the post of deputy managing director at the company's European headquarters in April.

Creative Technologies have appointed **Scott Burges** and **Gary Holford** to the board of directors. Burges becomes project director, whilst Holford becomes graphic director.

Tomcat have appointed **Barry Farley** and **Keith Bohn** to their Texas-based sales team. Farley joins Tomcat after gaining extensive experience with touring shows, whilst at 27, Bohn fits into the youthful tradition of the company.

RCF Electronics have appointed **Lesly Honeywood** as sales office co-ordinator. She will be responsible for the day-to-day running of the sales office and customer service.

George Martin, legendary producer of **The Beatles**, was awarded a knighthood in the **Queen's recent Birthday Honours List**.

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Association AGM Highlights PLASA Growth

The Professional Lighting and Sound Association's Annual Report for 1995, published on the 3rd June, highlights a year of major achievements with objectives fulfilled, strong growth and future advancement assured.

Over 50 members of PLASA attended the AGM, held on the 14th June at the Victoria & Albert Hotel in Manchester and many were impressed with the professional level of presentation and the manner in which issues raised were dealt with. Those in attendance were presented with a summary of the year's activities by Association chairman, Paul Adams. At the close of proceedings, a cheque for £1100.00, together with a certificate, was presented to Ken Walker on his retirement to mark the many years of tireless energy devoted to SCIF and more latterly PLASA. Once the formalities of the AGM were concluded, members were joined by representatives from local non-member companies keen to learn more about the work of the Association. A presentation covering PLASA's presence on the Internet and its role in the future development of the industry then followed, underlining the Association's commitment to act as a catalyst to growth and effectively represent the interests of its members.

Following lunch, a group of 50 made their way to the nearby Granada Studios Tours for a backstage tour of the facilities and a quick pint in the Studio's most famous television landmark - the Rovers Return on Coronation Street.

The AGM was the culmination of a year of advancement, which began in proactive mode when PLASA merged with the Sound and Communication Industries Federation (SCIF) on 1st January 1995. The benefits were felt almost immediately: over the year the membership of PLASA increased to 400 companies across a broader industry range and the development of new services was made possible.

A SCIF initiated publication, Sound+ Communication Systems International, was purchased and relaunched as a bi-monthly PLASA publication in April 1995. S+CSI is aimed at the audio and presentation market and together with Lighting+Sound International, represents a formidable team in the dissemination of industry



PLASA Chairman Paul Adams welcomes members to the new-style AGM in Manchester.



Paul Adams presents a Distinguished Service Award to Ken Walker.



Formalities over, a group of 50 visited the nearby Granada Studios Tour and inevitably posed for pictures outside the Rovers Return. (Not surprisingly the majority were PLASA staff!)

news and information, with both magazines enjoying a high profile in the industry.

continued on page 65

FURTHER ASSOCIATION NEWS AND LOTS MORE PHOTOGRAPHS ON PAGE 65

LETTERS

Dear Editor,

Re: ABTT Review, L+SI May 1996

I was pleased to read Robert Halliday's review of this year's ABTT show and to note the positive comments on our products on display. Regarding the comment of the Cirrus lowsmoke being 'indistinguishable from dry ice' - hopefully I can clarify this.

At the Effects Company we have always considered that the 'low lying fog effect' (as it is so often described) could be utilised much more if the logistics of producing it could be made simpler. The traditional dry ice machine is still very effective (as sales of our Cumulus will testify) but there was a desperate need for a system that was more customer friendly/easy to use. If you couple this with electronic control of the complete system, one can understand why we sell so many units.

It is a system of producing the low lying fog effect that is on one hand so totally different to that of the dry ice machine, but on the other hand really is virtually indistinguishable from dry ice in its visual appearance. The Cirrus really does produce an effect that is thick/white and stays cold and close to the ground. Unfortunately, this can be hazardous to the private parts of small animals (daschunds, poodles etc) but that is another matter altogether!

I hope that this gives a better understanding of the Cirrus lowsmoke's operations.

Martin Blake
The Effects Company

Multiform Multiply



Former PLASA chairman Tony Kingsley has resigned from the position of managing director of Avitec and recently joined Multiform Lighting, the Uckfield-based lighting manufacturer. Tony Kingsley (right) is pictured above at the PLASA AGM with Multiform's managing director Iain Price-Smith.

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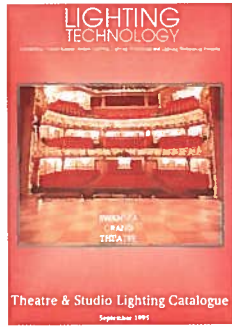
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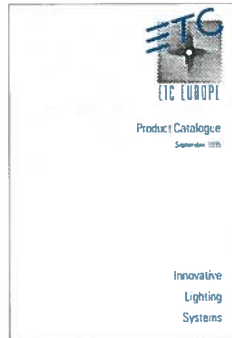
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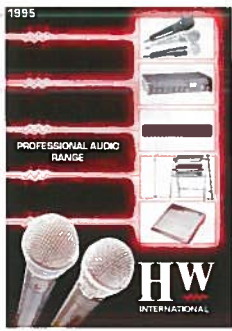


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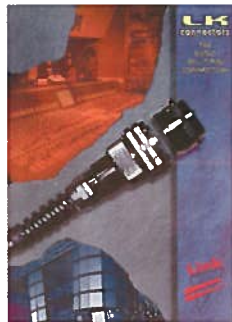
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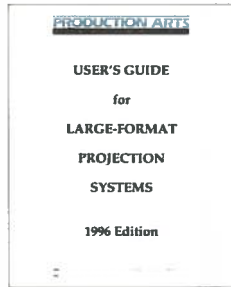
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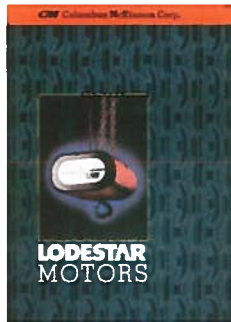
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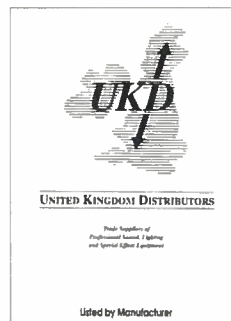
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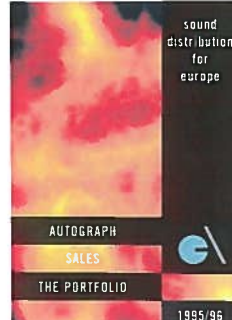
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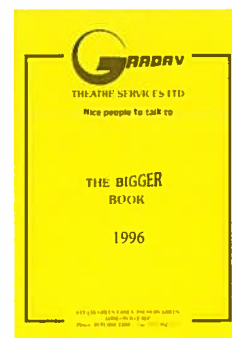
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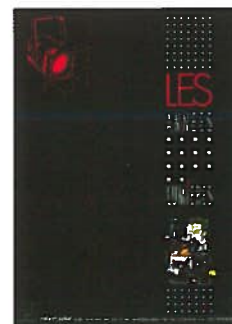
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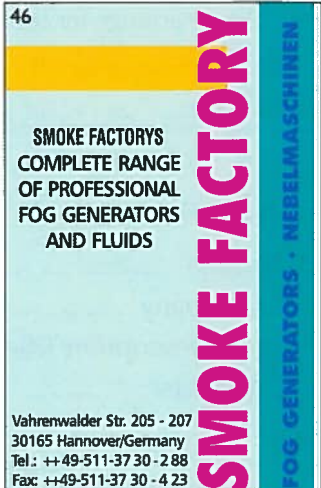
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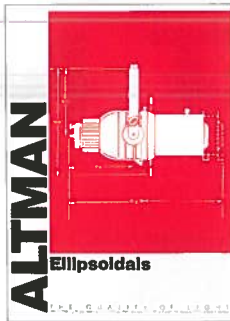
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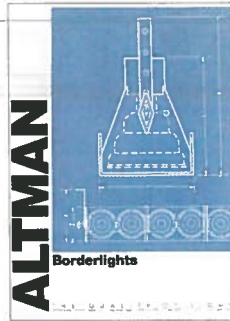
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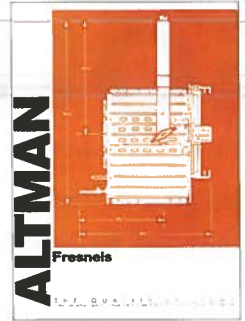
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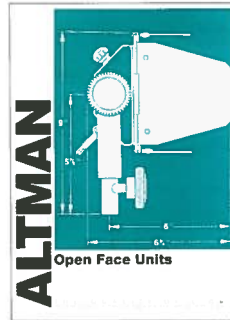
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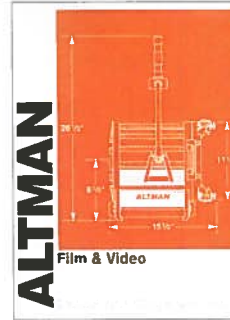
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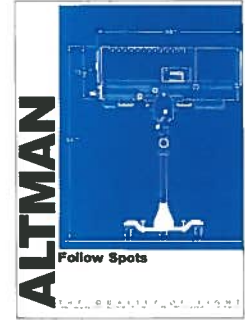
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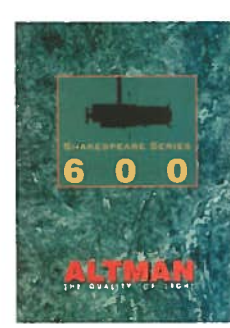
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ALTMAN STAGE LIGHTING CO. INC. now offer a new Mini Catalog along with seven tri-fold brochures as supplements to our main catalog. AS FEATURED ON THIS PAGE

The tri-folds contain description and pertinent data on our Ellipsoidals, Shakespeare Ellipsoidals, Follow Spots, Borderlights, Fresnels, Film and Video Fresnels & Open Face Units.

The Mini Catalog has information on our complete line of products including accessories, hangers and attachments, distribution and a large informative glossary.

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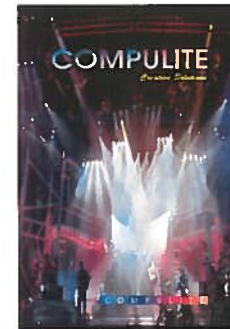
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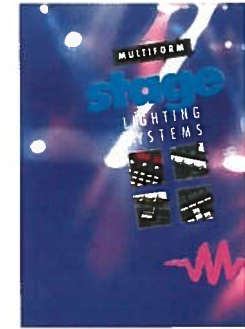
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EQUIPMENT NEWS

Apogee Lines Up Host of New Products

Apogee Sound has enhanced its entire line of professional power amplifiers. The SA series has been reintroduced as the SA series II, and is being manufactured in-house.

The new amps now offer the same sonic standards as the established DA series, and both series can now be networked with the company's new amplifier control software. Utilising the Lonworks network protocol, the Windows software is configured in the same way as a mixing desk, with faders for amplifier channels, assignment buttons to arrange amps in logical subgroups, and graphs showing each amp's temperature, line voltage, and other parameters.

Also new from Apogee is the C-3 concert loudspeaker - a compact, three-way, tri-amped system aimed at multi-application touring. The C-3 utilises a horn-loaded 15 inch bass driver, a constant directivity horn-loaded two-inch compression driver and a one-inch high frequency horn/driver combination.

Finally, the company have also launched the D-1 digital loudspeaker controller. It features 1800ms of digital delay, driver offset correction, 48dB per octave crossover slopes, user programmable correction algorithms and a 26-band parametric filter set.

For further information, contact Apogee in California, telephone +1 (707) 778 6923.

Phantom Power



The Phantom Plus from ARX.

ARX Systems have released the Phantom Plus, a new stand-alone four-channel 48VDC power supply unit. It has been designed specifically for microphones and DI Boxes that require an external ultra low impedance regulated power supply. Housed in an all-steel chassis for maximum EMR rejection, the Phantom Plus also features a passively buffered grounding system to protect against grounding interaction or loops.

For further details contact ARX International in London, telephone 0181-742 0350.

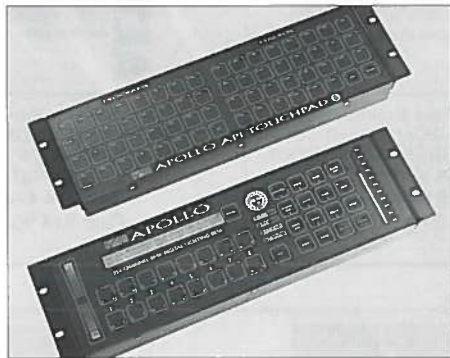
DX Series from Fane

Fane Acoustics have announced the launch of the new DX Series of co-axial bass drivers, offered in 10, 12 and 15 inch models.

Features include a true single point source of sound, smooth dispersion control, and more compact enclosures due to the elimination of a separate horn. All models are available with or without a series of dedicated crossovers to match them to the company's own HD horn drivers. Both the Fane DX10 and the DX12 are rated at 175W RMS, while the DX12HE and DX15HE are rated at 200W, all with an 8 ohm nominal impedance.

For further information, contact Adam Hall in Southend-on-Sea, telephone (01702) 613922.

KAM's Apollo



The KAM Apollo and AP1 Touchpad.

First shown this year at SIB in Rimini and later at Frankfurt, the KAM Apollo 256 digital light controller was officially launched in England on the 17th May. L+SI was there to learn more about its features.

The Apollo is a DMX512 control system giving access to 256 channels of lighting with expansion possible by the addition of a second desk (automatically slaved) to give full 512 channels.

Designed very much with the bar/disco environment in mind, but with the features to attract other users, all the controls - touch pads, back-lit scrolling LCD display, and a touch digital slider - are protected by a fully water-proof plastic coating. The RS232 port used to slave in a second controller doubles as a mouse port for use in programming moving mirror cues where its X and Y functions can be assigned to any two channels.

The desk scores on its cue memory and the software behind it, which makes it more powerful than might be expected for a controller of this type. Programme capacity allows for up to 200 scenes with 30 Macro sequences (chases) of 16 steps each. All stored by Flash chip technology, the controller requires no battery back-up and is thus program secure.

The Apollo Control Interface (ACI) Windows driven software enhances control and programming access by allowing off-line editing, a database library of most of the existing popular moving mirror lights, and an on-screen 16 channel assignable display. The Windows displays are well laid out with obvious tool buttons across the top bar and familiar drop down menu commands. Programs can be generated or modified live in real time or off-line and can be stored on the PC and loaded into the Apollo directly via the RS232 link, or remotely via modem.

The operation of light shows can be further simplified by the addition of the AP1 access pad. This is a 60 button touch pad panel that gives access to 30 assigned scenes and all 30 macros.

For further information, contact Lamba in St Albans, telephone (01727) 840527.

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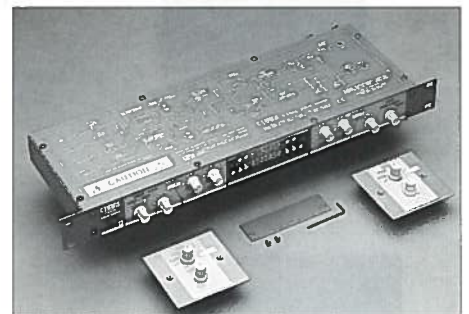
JHS Scanner 2

John Hornby Skewes have announced the launch of a new diversity wireless microphone system, the Scanner 2. Following the success of its predecessor, the Scanner, the new system consists of a VHF hi-band quartz-locked fixed frequency dual-diversity receiver with tone squelch muting circuitry. The hand-held microphone transmitter incorporates an Audio-Technica capsule.

Both the Scanner and Scanner 2, along with the L1 lavalier model, are now fully compliant with EMC regulations for radiocommunication transmission equipment.

For further information, contact JHS in Leeds, telephone 0113-286 5381.

Mixing with Cloud



The CX-242 from Cloud Electronics.

The new Cloud CX-242 mixer, launched this month, has been specifically designed to meet the need for a mixer suitable for use among the increasing range of music, entertainment and information sources available to venues, retail outlets and public buildings.

The mixer provides four stereo line level inputs, plus two balanced mic inputs, which can be presented in any combination, separately or jointly, to two stereo zone outputs.

Other features include local and remote control of music level and source, switchable priority for either microphones or messaging systems, separately adjustable EQ for music and microphone, multicore linkage to additional unit for four zone operation, mono mode option for distributed sound systems and remote music mute adjustable from -20dB to -70dB.

For further information, contact Cloud in Sheffield, telephone 0114-244 7051.

The New Champs

A new range of compact touring loudspeakers has been introduced by Stage Accompany of The Netherlands. The Champ series comes in 12 inch, 15 inch or double 15 inch models, and features include the SA 8535 compact driver on all models, active/passive mode switching, heavy duty flying system and a compact, resonance-free housing.

For further information, contact Stage Accompany in Hoorn, The Netherlands, telephone +31 229 2125 42.

Sarner's Digital Video

Sarner International has launched the world's first solid-state Digital Video Machines (DVM) designed for visitor attractions and theme parks. These have been specially designed for applications requiring repetitive performance of video. Similar to audio message repeaters, the compact units can be configured to provide up to eight hours and 16 separate groups of video and stereo sound simultaneously.

For further information contact Sarner in London, telephone 0181-743 1288.

Safety Statement

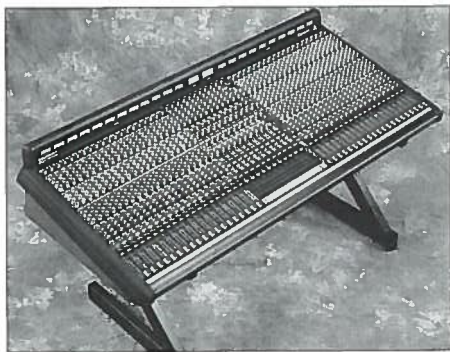
James Thomas Engineering have issued a safety statement regarding the use of their Par 64 lanterns. The company, in conjunction with their major distributor AC Lighting, have carried out extensive tests which show that Silver lanterns used in conjunction with either the lamp adjuster or cap blanking plate and 1000W Par lamp may have a problem with the crimp connectors or plastic cable gland.

The company and their distributors have indicated that, in future, Par 64 Silver lanterns will be supplied with metal cable glands, and, where ordered, any connection inside the Par lantern will be made using high temperature crimps and suitable sleeving.

They also recommend that all Par lanterns fitted with crimp connectors are checked in line with the recommendations of the safety statement, which includes the replacement of crimp connectors with high temperature (rated minimum 140 degrees C) versions with suitable sleeving to cover the crimped joint and the fitting of a metal cable gland.

For further details contact the company in Pershore, telephone (01386) 553002.

Century Addition



The Crest LMx monitor console.

Crest Audio have launched the Century LMx monitor console, which can configure any or all of its 22 output buses for either mono or stereo pair operation without patching or module swapping, with the touch of Global Level/Pan buttons on the corresponding output modules.

The LMx's output section comprises 10 dual group output modules and one stereo L/R output module. Each of the group output modules incorporates a dedicated stereo EQ section with three overlapping swept bands, sweepable high pass filter, individual balanced insert switches and summing inputs.

The unit also features a built-in microphone splitter, eight scene mute groups, a globally selectable AFL/PFL solo system, comprehensive sub-grouping capabilities and separate pre/post switching for every pair of output sends.

For further details, contact Crest Consoles in Brighton, telephone (01273) 693513.

Turbo's Impact Amp

Turbosound has launched the IA-1400, a dual-channel professional power amplifier for use with the Impact range of sound reinforcement products. With 600W per channel into a 4 ohm load, the IA-1400 provides reserves of power to drive, with ample headroom, any of the loudspeaker enclosures in the Impact range.

The use of on-board output limiters increases reliability by optimising the available power output to the loudspeaker load and eliminating the possibility of amplifier clipping. Inputs to the amplifier are via 3-pin XLRs, and are electronically balanced which, together with a high common mode rejection ratio, gives effective immunity from hum loops.

Muting circuits automatically disconnect the loudspeaker loads via relays during power-up and power-down cycles, thereby further protecting the loudspeakers from accidental damage due to transient spikes. Output levels are monitored by two front panel LEDs, giving the user a visual indication prior to the onset of signal limiting.

For further information, contact Turbosound in West Sussex, telephone (01403) 711447.

Selecon Brochure

Selecon have just published a new brochure on their range of architectural and display lighting. For further information and a copy of the new Selecon architectural lighting brochure, contact Selecon UK in Ringwood, telephone (01425) 470425.

EV Mic Update

Microphones for touring, studio and broadcast applications are included in new developments from Electro-Voice.

The RE1000A, a true condenser studio microphone, follows the same design as the current RE2000 model, and includes a self-noise floor of <14dB plus a low frequency roll-off switch which engages a 12dB per octave filter at 130Hz. Overall frequency response is 70Hz-18kHz with a supercardioid polar pattern.

Other models include the RE200 cardioid condenser, the CO2 omni-directional mini-lavalier for small profile/high-sensitivity broadcast use and the CT30 full-range half-cardioid boundary-mount condenser floor/table-top microphone. The new ND157 which features a neodymium magnet and a directional polar pattern for feedback rejection.

For further information, contact Shuttlesound in Mitcham, telephone 0181-640 9600.

Transtech Hoists

Transtech GmbH are producing a range of customised pole light hoists. The hoists are available in straight or curved form, with any required load profile or configuration of connections.

The motor comes with a newly developed, self-locking worm gear. When the actuator is locked out, the supporting pole will move a maximum of 5cm from its position, without the need for a brake, meaning the hoists can easily and accurately be homed to previously programmed positions.

For further information, contact Transtechnik in Germany, telephone +49 80 2499 0108.

Versatile Fren-L



The Fren-L.

Lowel have launched the Fren-L, intended to bring greater versatility and ease of use to the traditional Fresnel-lensed light.

The light, which can be used with 650W, 500W or 300W lamps, produces what the company claim is an exceptionally wide flood and tight spot, with an overall 8:1 focusing ratio. A rack and pinion ball-bearing lamp carriage movement and double wall convection cooling is intended to give smooth operation and long lamp life. An over-sized swing-down handle and single arm yoke enable a wide tilting range, whilst multiple-leaf barndoors offer tight control over the spill of light.

For further information, contact Holmes Marketing & Distribution in Newbury, telephone (01653) 32321.

USA Enhanced

QSC Audio have launched the newly enhanced version of their USA Series professional power amplifiers.

Neutrik Combo connectors are standard in the three new models, providing active balanced XLR and 1/4 inch TRS inputs. Selectable limiters provide optional input limiting to reduce prolonged amplifier clipping. Variable low-frequency filters (30Hz, 50Hz, or flat) reduce potential speaker damage below box tuning frequencies, and increase power available for low frequencies within the speaker's operating range.

For further information, contact QSC in California, telephone +1 (714) 754 6175.

Soundcraft Surround

Soundcraft has added a surround-sound module to the B800 console.

The outside broadcast, live TV and radio production console has already been installed into a number of broadcast institutions, including the BBC, Danmarks Radio, Radio France and Star TV.

The module for the B800 was designed by Mallory Nicholls of Interact Systems, who manufacture Magtrax surround-sound monitoring systems. The new B800 features a straightforward connection to four, five and six channel surround sound systems with integrated monitoring, routing and dual LCRS panners. The processor controlled switching, calibrated monitor level adjustment and assignable speaker cut groups add to the flexibility of the console.

For further information, contact Soundcraft in Potters Bar, telephone (01707) 665000.

MASTERS OF MUSIC

Hyde Park Special: Mark Cunningham went along to this summer's landmark Prince's Trust concert in London

Harvey Goldsmith's legendary cast for the biggest rock event ever staged in London will live long in the memories of the 150,000-strong audience. In the weeks leading up to the MasterCard-sponsored show at Hyde Park, Mark Cunningham spent time with the key crew players to give L+SI the most comprehensive report on this major production.

I woke up on the morning of Monday 1st July having dreamed a wonderful dream. The previous two days had been the hottest for years, England was celebrating victory in the Euro '96 final and the surviving Beatles fulfilled aching speculation by 'getting back' for the finale of the MasterCard Masters Of Music Concert at London's Hyde Park on Saturday 28th June in front of 150,000 thrilled fans. Then the coffee kicked in and I was back down to earth.

Despite the cloud and wind (which did the sound no favours whatsoever), England's semi-final defeat and the non-appearance of the Fabs, everything else about Harvey Goldsmith's benefit concert for The Prince's Trust, the flagship event of this year's National Music Festival, was as big, grand and entertaining as rock shows get.

With a stellar line-up featuring Eric Clapton, Bob Dylan, Alanis Morissette and the all-star live premiere of *Quadrophenia*, it was the largest rock concert ever staged in London - the first to be held in Hyde Park since Queen graced the boards at the last of 16 free concerts in September 1976. This time around, however, the joy of watching some of the most significant rock history-makers cost just £8 (£95 for a seat). A low price indeed, but one sure-fire method of filling the venue for the benefit of the television cameras which were filming the event for broadcast to an estimated 120 million viewers in 40 countries, and effectively earning a right royal packet for The Prince's Trust. It was, therefore, fitting that The Prince's Trust's Rock School Band earned their keep, so to speak, by opening the proceedings, while other young hopefuls, Leighton Jones and Imogen Heap, and compères Frank Bruno and Billy Connolly, kept the entertainment going at the front of the stage while the headliners changed sets behind the curtain.

The first of which was Jools Holland and his Rhythm & Blues Orchestra who launched into a typical boogie-woogie routine in between characteristic quips. Alanis Morissette offered proof that she has become one of this decade's finest. Her numbers 'You Oughta Know' and 'Hand In My Pocket' have almost taken on an anthem-like status, and were greeted with some of the most enthusiastic applause of the afternoon. And then cometh The Man . . . Bob Dylan, who together with guest guitarist Ronnie Wood, ripped through a no-holds-barred set of classics - including the evergreen 'Don't Think Twice - it's Alright' and 'All Along The Watchtower' - which spanned more than three decades.

The highlight for many was the first live performance of Pete Townshend's Mod-opera,



Above and below, Masters of Music certainly fulfilled its promise to be the largest and most ambitiously staged rock concert ever held in London.



Quadrophenia. Originally released as an album by The Who in 1973 and recreated as the 1979 Franc Roddam movie, *Quadrophenia* traces the mental anguish and subsequent spiritual epiphany in Brighton of school-leaver Jimmy, during the Mods and Rockers clashes of 1964. But the transfer to the stage of the intellectual aspects of Townshend's work was always going to be the greatest challenge, especially in front of such a large crowd.

But it worked, and in no small part due to Jonathan Park's complementary stage design and the integration of Jumbotron-screened video inserts, directed by Aubrey 'Po' Powell and produced by Steve Swartz. From a musical viewpoint, however, the reunion of Pete Townshend with former Who colleagues, Roger Daltrey and John Entwistle, was perhaps

the greatest crowd-pleaser of all.

This story of an adolescent with four personalities, together with the charitable nature of the event, presented a perfect opportunity to assemble an all-star cast, consisting of Phil Daniels in a narrator's role, Gary Glitter, Pink Floyd's David Gilmour, Stephen Fry, Adrian Edmonson and Trevor MacDonald as a news correspondent from the riot-torn Brighton beach.

At approximately 5pm the previous rain-drenched afternoon, I had seen Glitter accidentally swipe Daltrey's head with his microphone stand during a soundcheck, and watched in horror as the former Who singer struggled for more than 10 minutes to find his feet. The soundcheck was brought to an abrupt halt as many wondered whether he would be fit for the show. But a hastily contrived eye patch, aptly painted with a Mod target design, enabled Daltrey to face the crowd as if nothing had happened. *Quadrophenia* begins six sold-out shows at Madison Square Garden on July 16 and a tour will follow. Hyde Park was possibly an ill-matched venue for its premiere, but it has fuelled my enthusiasm for seeing an indoor arena presentation where the relationship between the human performances and the video material will make for an intoxicating blend.

The show closed with a classic hits 'n' blues package from Eric Clapton and a 10-piece line-up. Though 'wonderful tonight' Clapton may have been as the skies darkened, one was left a little cold by the expectation of an historic finale that never came. We were, however, treated to a moving rendition of 'Holy Mother', complete with the 32-piece choir Clapton performed with at Pavarotti's Modena show a week earlier. For most of the audience it was the end of a memorable show, and the

beginning of a long struggle to leave the park. But for those of us graced with a wrist band, a great night was to be enjoyed in the hospitality marquee, courtesy of the Mike Flowers Pops and MasterCard.

AN UNUSUAL VENUE

Creating a venue for the concert within Hyde Park was no mean feat in itself and Unusual Services was chosen by Harvey Goldsmith Entertainments to site manage and co-ordinate the 500 metre deep ground infrastructure. Before anything could happen, a licence had to be obtained for the event from Westminster City Council which represents the interests of the Royal Parks. One of the main service companies sub-contracted by Unusual was the omni-present ShowSec International whose security team rose in number from four, upon Unusual's arrival on site on June 17th, to 450 on show day, with several remaining in the park until July 5th when the site was finally cleared.

Among the other rarely acknowledged suppliers hired to assist Unusual with the creation of the concert venue were Arena Seating (5,000 seat VIP tribune), Eve Trakway (3,000 metres of trackway), Star Hire (2,000 metres of Steelshield fencing for the perimeter fence), Beaver 84 (control barriers), Black & Edgington (four clearspan VIP marquees), Search (portacabins and dressing rooms), Bowood (1,500 toilets and shower facilities) and caterers Eat Your Hearts Out. Power supply company Templine, meanwhile, was supplying sufficient power for a small town in the shape of five and a quarter megawatts laid on for the PA systems, lighting, the outside broadcast truck, backstage village and food/merchandising stands.

Together with colleague, Tony Wheeler, site manager Chuck Crampton designed the backstage village which, due to the artist bill increasing in size during the planning of the event, was subject to amendments several times. 400 people were expected backstage on



The massive Clair Bros rig - a 1,000,000W system valued at around £3 million and weighing over 100,000 kilos.

show day, but that was a piece of cake for Crampton. "We had 28,000 backstage passes issued on VE Day, which was probably an all-time record!"

MR PRODUCTION

26 years after working with The Who at the now-legendary 1970 Isle of Wight Festival, Mick Double was once again enjoying (if that's the correct word) a rare reunion with Messrs Townshend, Daltrey and Entwistle. His duties as production manager also extended to Eric Clapton who he has worked with for 11

consecutive years and beyond, so it was no surprise to find him with his hands more than full when I met up with him at a rehearsal in Hayes, five days before the show.

How did he get involved? "When we were doing the Albert Hall shows earlier this year with Eric, I was asked by Harvey Goldsmith if I wanted to work with Dennis Arnold on producing a show at Hyde Park. When I discovered that both Eric and the ex-members of The Who were doing it, it was a bit of a shock, but luckily I was able to delegate most of the production duties to a friend of mine, Ian Day, and Dennis and I gradually pulled a team of people together."

Double described the Masters of Music venue as one of the best outdoor sites he had ever seen, but whether it was the largest ever in the UK depended on how one measured it. Statistics aside, the sheer technology behind the event and quality of the bill alone justified the use of the word 'mammoth'.

"I first worked with Eric in the 1970s doing monitors and when he played at Blackbushe in 1978 he probably had more people there. But this is the biggest one-off rock show I've done and certainly the biggest ever seen in London. Where this show is different is in the way the acts are spread across the programme. It's not like there's a revolving stage, they are on for 10 minutes and then they get thrown off

quickly. People don't really get value for money that way.

"The decision was made that all the acts would do their regular show, although Quadrophenia isn't what you'd call a regular show. Not yet, anyway! They are doing what can only be described as an extravaganza."

Stage management was hired by Double and Dennis Arnold in the form of Steve Jones from Stage Miracles. "Steve has a team of 30 people working for him, while Dennis and I ensure the bands are ready and on time for their performances, because we were given a very

METEORLITES PRODUCTIONS

Masters Of Music at Hyde Park

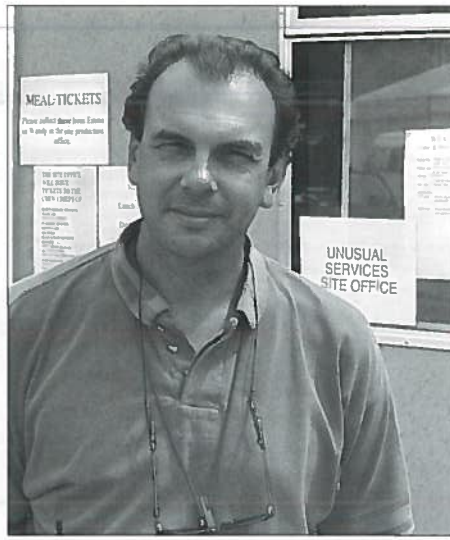
Sting ● Paul Weller ● Phil Collins ● Alanis Morissette ● Eternal ● REM
Iron Maiden ● Mike and the Mechanics ● Echobelly ● Hole
Donnington Monsters of Rock ● Jethro Tull ● Chris de Burgh ● Marillion
Heroes del Silencio ● Jimmy Nail ● Thunder ● The Greenbelt Festival
Megadeath ● Marcella Detroit.....

Who says we don't do rock 'n' roll anymore?

For quotations contact Tony Panico on 0181 236 1100



Lighting designer Tom Kenny.



Site manager Chuck Crampton of Unusual.



Sound consultant Chris Hey.

strict 9.30pm curfew (which actually overran). We fought it long and hard, but there was no way around it if we were to do the show. With the Euro '96 final at Wembley the following day, it was expected that several thousands of football fans would be hanging around in the area, so for safety's sake, the authorities decided to close Park Lane off to traffic for an hour after the show, and that's a first."

SOUND

It has been a busy year for Spencer-Hey Associates, the audio system design team formed at the beginning of 1996 by Steve Spencer and Chris Hey after leaving their posts at Britannia Row. With Spencer taking care of Simply Red's Old Trafford show and the Hyde Park audio 'buck' stopping with Hey as sound consultant, June 29th certainly was a big day for the enterprising pair.

Hey's call to relieve Double of part of his production burden came in late February. Four months later, the workload was beginning to take its toll. On show day, he said: "It's been a fantastic month for us, what with today's shows, the recent dates with M People and the rehearsals for Lord of the Dance in Dublin." 'Big' is a word that can safely describe the Clair Brothers PA system, specified and designed by Hey for the event. In the middle of such a busy period for large-scale outdoor shows, availability was a prime concern and the lion's share of the eventual rig was shipped in from Audio Rent in Switzerland, Clair Bros in the USA and also from Japan, following Bon Jovi's recent Japanese tour.

A 1,000,000W system valued at around £3

million and weighing over 100,000 kilos, it was one of the largest ever assembled for an outdoor presentation. The 266 JBL-loaded speaker cabinets spread around the park included 140 Clair S4s on the main front-of-house system, 16 P4s for the infill and 108 S4s distributed among nine satellite delay towers.

Seven Edwin Shirley trucks transported the huge rig which was subsequently manoeuvred by 58 one- and two-ton motors. There were two types of S4 cabinet - the S4P long-throw and S4F medium/short throw - and there were 30 of each per side of the main stacks. The S4 has 18" lows, 10" mids, 2" compression drivers and tweeters in four-way boxes; the R4 is a three-way box with 18", 12" and 2" speakers, and the P4 has two different types of 12" and 2" speakers in a three-way box.

On one of my pre-show site visits, Hey escorted me around his system pointing out that the sound was drawing around 400 amps, three-phase. "Although the system mainly consists of standard Clair S4 boxes, I basically specified how I wanted it put up, and the layout of the delays." The PA was driven by a veritable battalion of Clair-modified Carver 2.0 amplifiers and, for the P4s, a rack of Crests. To assist with the set-up and calculation of the nine delays, Hey used the t.c. electronic TC-1380 delay unit.

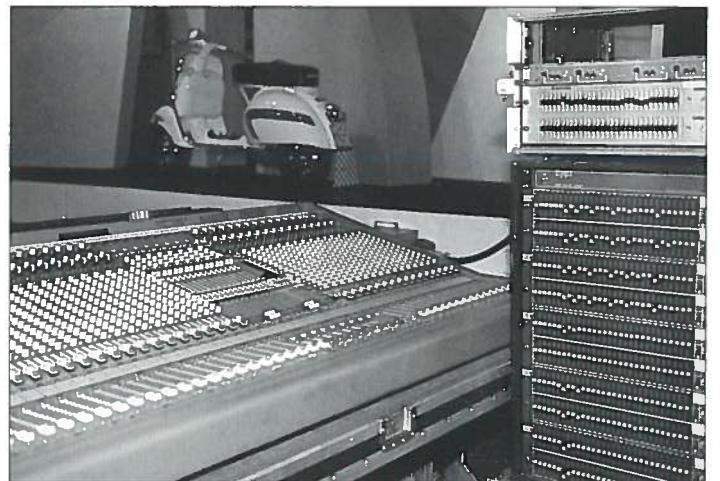
Of the towers, Hey commented: "There's about 100 metres distance between them, and they are in tiers with each carrying an average of 12 S4 cabinets." A total of 32 Clair 12 AM wedge monitors were positioned around the stage and for Dylan and Morissette, extra S4s

were placed on 1 x 18" bass bins. Dylan also used a bank of Clair 115s, which each comprised 15" and 2" drivers and a tweeter. A number of R4 monitor fills were required for Quadrophenia, to playback sound effects such as the roar of motorbikes to the artistes on stage. These effects were generated both by samples, 'played' by keyboard player, Jon Carin, and the soundtrack of the video which occupied four channels on one of Kob's PM4000Ms.

Adding further weight to the monitoring was a front fill of four blocks of four P4s under the front of the stage. Despite the growth of in-ear monitoring, only Alanis Morissette, Roger Daltrey and Gary Glitter (for Quadrophenia) used the Garwood Radio Station, with Daltrey wearing just one ear mould. While Morissette used her own system, the others were supplied by Hand-Held Audio, which also provided the radio microphones. "Because there are quite a few actors with speaking parts in Quadrophenia, there has been a sizeable requirement for radio gear," explained Mick Shepherd of Hand Held.

"For Pete Townshend and the actors we have four Samson UHF Synth headset mics, and there are two hand-held Samson UHF's acting as MC mics for the Clair Bros crew. We've also supplied two additional Samson UHF mics and two Garwood Radio Stations for the crew's 'shout' or communications system which is run by Rick Pope."

The microphone selection for Quadrophenia largely reflected The Who's long-term choice of Shure, with 10 of Daltrey's favoured SM58s, 12 SM57s, two Beta 52s on Zak Starkey's kick



Left, the Celco and Icon desks in the lighting control area, and right, a Midas XL3 and processing racks for Clapton's monitoring.



Left, lighting crew chief Paul Hawkes, with Tony Panico of Meteorlites and Tom Kenny, and right, Quadrophenia FOH engineer, Dave Kob at the PM4000M.

drums, four SM81s around and above his kit, SM7s on brass, four ECL 24/Beta 58 radio systems and a WCM16 headset on an ECL 114 radio system for Stephen Fry. With regulars such as engineer Robert Collins currently occupied on the Mark Knopfler Golden Heart tour, Eric Clapton's crew for Hyde Park was almost completely new. Mick Double said: "We normally use Concert Sound and have their monitors as part of our band gear. We have an arrangement with Concert Sound whereby we use members of their team regularly and on this show there are five of their guys looking after the Eric Clapton side of the show, in conjunction with Clair Bros, so we are nicely self-contained. The rest of the Clair Bros crew have been mostly concerned with Quadrophenia rehearsals at Bray. We've used both companies in the past, but for this show we really needed to pull together a big sound system and it evolved that we would use Clair with Bob Weibel as crew chief."

One staggering fact about the show was that the combined audio input channels required for the main PA totalled 600, as a result of each act demanding its own FOH and monitor consoles. Mick Double said that although all of the performers gave their services without charge for the benefit of The Prince's Trust, a sizeable budget was set aside for production and crewing costs which, for Quadrophenia in particular, ran steeply. With the artistes' discerning needs all catered for, the mixing tent became known as console city!

In order of appearance, Jools Holland had a Yamaha PM4000 at FOH with Ron Burrows engineering and a Midas XL3 monitor board, Alanis Morissette also used a Yamaha PM4000 FOH with a Ramsa S840 on stage, and Bob Dylan's FOH engineer, Ed Wynne had a Clair custom board FOH while a Ramsa S840 was operated on stage by Jules Aerts. At the serious end of the bill, long-time Who associate Bobby Pridden was overall sound consultant for Quadrophenia, which used two Yamaha PM4000Ms, at FOH with Dave Kob and on stage with Dave Skaff, as well as a stretch desk to deal with the actors' mics. Eric Clapton had a PM4000 at FOH with Concert Sound engineer Chris 'Privet' Hedge and a Midas XL3 monitor board in the hands of CS colleague Steve May, plus a stretch desk for the choir which appeared on Holy Mother.

Meanwhile, all of the front of stage 'support' acts were controlled by Harrison FOH and monitor desks. On the eve of the show, soundcheck day, Hey said: "Eric, Quadrophenia and Bob Dylan are bringing the

consoles and control equipment that they have been using for the past couple of weeks in rehearsal. The other control equipment is already here because those bands are not touring or rehearsing directly before the show."

Only 30 minutes before Glitter's mike stand and Daltrey's head connected in soundcheck, Clair Bros' Dave Kob took me through the configuration of his two 40-channel PM4000Ms: "There are 19 people on the stage for Quadrophenia, so I am sub-grouping the inputs into percussion, brass, drums, bass, guitars, Pete Townshend, Rabbit on piano, synths, lead vocal and chorus. The two hand-held mics and two headset mics that are used for the actors and dialogue readers are sub-mixed on the monitor stretch and then sent out to me, because Dave Skaff on monitors can actually see what is happening on stage and know when to bring up the channels."

NOT QUITE AS EASY AS ABC

With the whole show being recorded for broadcast and a possible long-form video release by Chrysalis (for Allied Vision), HBO (for American broadcast on July 14) and Manor Mobiles' two audio recording trucks, a complex A-B-C audio switching regime which interfaced with BSS splitters was devised by Chris Hey to smooth the change-overs between acts: "There is a stage box for each of the A and B systems, and there is only ever one console connected to them at any given time. We start the show with Jools Holland's desk connected to the A system and Alanis Morissette's to the B system. As soon as Jools has finished, we not only change all the input side of it, we leapfrog over to Bob Dylan's own FOH and monitor console which has to be connected to the stage box."

On top of this, there was a C system for the ancillary video inputs, compères, emergency microphones and the front of the stage acts

performing during main stage change-overs, although this control system did not interface with the splitters. "After each main act, videos are played for 10 minutes, which doesn't involve us other than pushing up the fader," explained Hey. "During that time, we set up one of the support bands on the front of the stage and they play for 15 minutes. That is followed by another 10 minute video slot while we set the stage for the next main act which would already have been line-checked on the unused system. Simple really! But I certainly wouldn't want to have less time to change over!"

IN THE MARQUEE

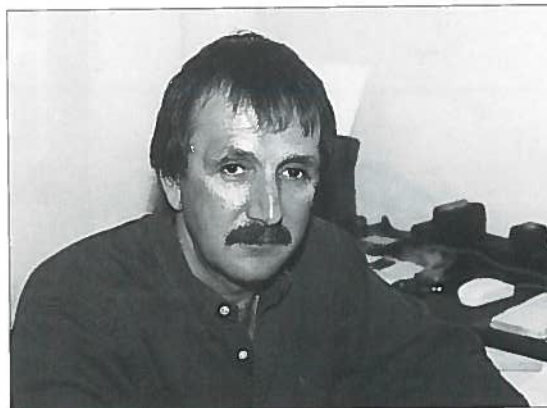
The presence of JBL at the show extended far beyond the inclusion of its loudspeakers in the Clair cabinets. Backstage after the event, the privileged party-goers were treated to an outstanding performance by the Mike Flowers Pops for which contractors Entec Sound & Light specified a JBL Concert Series PA rig.

This consisted of eight JBL 4873 full range and six 4788 sub bass cabinets, powered by two Crown Macrotech amp racks, each containing two 1201s and four 2401s. Harman Audio supplied a Soundcraft 48-channel K3 theatre console for the band's engineer, Steve Ludlum to use at FOH, while Entec's Paul Keeble controlled the monitors via a Midas 40-channel XL3, after the intended Soundcraft SM12 was kept busy by Chris Evans' TFI Friday.

A total of 16 Entec bi-amp floor monitors (10 x APW-212s and 6 x 115s) were powered by three Crest Quad bi-amp racks. Mark Gander, vice-president of JBL, explained that the connections between his company and Clair Bros for the Hyde Park show and party in particular, were evidence of their unique positions within the international pro-sound reinforcement industry. "Since the beginnings of large-scale rock touring in the 1960s, through the '70s and '80s to the present day, JBL has worked intimately with Clair Bros to provide custom solutions to its speaker requirements, and many of those solutions have resulted in standard JBL products."

LIGHTING

With the concert planned to start in the early afternoon and end mid-evening, there was little that lighting designer Tom Kenny could do for most of the production apart from enhancing what was already in daylight with large colour washes. Although sunshine was forecast, the weather was fairly dismal on the day, but it did at least give Kenny



Production manager Mick Double.



The massed crowds at Hyde Park . . .

the chance to 'shine' a little more than expected. The only point in the show when the lighting became truly obvious was during Eric Clapton's set which began at around 8.30pm.

In the week prior to curtain-up, Kenny covered his approach: "The show has been bought by every major TV company in the world, so what I'm doing is mainly for the cameras on the day. I asked lighting cameraman Eugene O'Connor to look at the vision

screens and keep an eye on everything, because the television aspect is very important.

"The scale of the system makes it akin to a rig on a huge rock show. There's a lot of detail for the stage because it's so big and we have every part lit. It's a very gleaming show even for the people at the back, and that's a long way! Obviously, the stage needs to be enhanced from behind for television, and for that we have six 4kW HMI lights and eight 2.5kW HMIs with

colour changers. A lot of people would take the view that lighting isn't really necessary for a show in daylight, but I've done them so many times in the last few years and it's important to the punter to see a lighting rig because it's part and parcel of a rock show."

After liaising with Tony Panico at Meteorlites, Kenny designed a rig which included 12 front and rear followspots (eight 2kW Super Troupers and four on-stage Pani truss spots), a total of 15 Pallas 4 x 1kW groundrows, 52 Par 36 molefay units, 78 six-lamp bars, eight Wybron eight-light scrollers and eight PanCommand XL Ranger nine-light scrollers. To fulfil Kenny's wish for Icons and Vari*Lites, Meteorlites also hired 40 Icons, an Icon desk and 20 VL5s from Light & Sound Design. Meteorlites' Andy Stacey looked after the dimmers, as controlled by one Avolites 48-way and four 72-way systems. "The Icons are being run from their own dedicated desk by Pete Barnes while I operate the conventional lighting from a Celco Gold Series 2 90-way board," explained Kenny.

"The intelligent technology, such as the colour changers, is being handled by an Avolites 30-channel Rolacue desk, whilst the VL5s are operated by Pete from the Icon desk via an interface unit." Kenny, who saved his programming duties until 48 hours before the show, added: "Because of all the artiste variations, we have a different focus for each act, so there has been quite a lot to take on. Quadrophenia is very theatrical and a bit like a Floyd show because there is so much going on. It has to look very bright and white, and we are using the Icons as key lights rather than moving them because there is little point."

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Quadrophenia takes to the stage.

Arriving in London on June 10th to make final changes to the lighting design in connection with the Jumbotrons, Kenny returned 10 days later to oversee a number of the Quadrophenia and Eric Clapton rehearsals. Hyde Park marked the first occasion at which Kenny joined forces with Meteorlites, and he hopes it won't be the last. "Meteorlites have done a really good job and they have a fine crew. The hardest task has been finding people to work on the show because so many are out on tour already, but the main players are all there."

He was not the only person pleased with the interaction with Meteorlites, a company which is currently enjoying one of its healthiest years in recent history, with its involvement in Euro '96, various television dramas, Lord of the Dance and Paul Weller. Tony Panico commented: "The team we have for Hyde Park have been truly wonderful. Tom Kenny is someone we've wanted to work with for a long time. He knows exactly what he wants and it's a pleasure to help him realise his plans. Attending production meetings allowed me to grasp the whole concept of the show from Jonathan Park and other key players. But once you get on site things do tend to change."

Things certainly began to change three days before the show when the lighting was rigged. Lighting crew chief, Paul Hawkes, was one of many to scratch his forehead: "Because the infrastructure of the whole show has been quite vast, you don't really know how all the engineering elements are going to fit together until you get on site. We had to juggle the rig around to provide a decent set of sight lines for the Jumbotron screens, estimate the trim height (the screens did not arrive until Thursday), take into account that they move and also the weight displacement of the roof."

With 150,000 ticket holders all leaving the site at once after the show, and taking well over an hour to do so, Harvey Goldsmith instructed Kenny to design some lighting which would both entertain and act as practical illumination upon exit. "Goldsmith wanted interesting lighting for people to see as they left just to make it look very eventful, so we have lots of icons and architectural lighting to make the whole place light up like a circus. The event has been designed so that from the minute people enter the venue to the minute they leave, it would be a show never to be forgotten."

Well, for me at least, the plan worked. It was a show which, like Live Aid, will be remembered for a long, long time. And even if The Beatles were absent, a splendid time was still guaranteed for all.



Eric Clapton closed the show with a classic hits 'n' blues package.

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PARK LIFE

In the run-up to the Masters of Music concert, Mark Cunningham visited Jonathan Park to discuss his spectacular set and design philosophies.

Hyde Park has become so increasingly synonymous with designer Jonathan Park that the uninformed might be forgiven for believing he was named after the place. Already, Park has added his touch of genius to Handel's Tercentenary, Pavarotti In The Park and last year's monstrous VE Day celebrations, so it was no surprise to learn that he was chosen to conjure further architectural magic for the landmark Masters of Music concert on the same hallowed ground last month.

Unlike those other memorable events, where the theme and performers were pre-defined, Masters of Music was but a loose idea with little direction when Park first became involved in the project in February. At that time, Harvey Goldsmith's Allied Entertainments was planning an untitled show with an unconfirmed list of possible performers, none of which was to appear on the final bill. It is, therefore, a tribute to Park's razor-sharp imagination that he not only dreamed up one of his most potent designs ever for a rock and roll show but, on the day, the impression was that the stage had been purpose-designed for each of the legends who agreed to perform.

In his King's Cross office during the frenzied run-up to the big day, Park said of the project's evolution: "I did some doodles and everybody seemed to like them, so I took on the design of this very large event that had no performers! Neil Young and Rod Stewart & The Faces were the names being thrown around when I was first involved, but plans quickly changed and a long time passed during which very little happened because getting acts together for this was a tough job. The biggest coup was, of course, having the world premiere stage performance of Pete Townshend's *Quadrophenia*. Ordinarily, that very important highlight of the show would have had a major influence on my stage design, but by a fortuitous coincidence, the architecture of the stage that I had already developed fitted very nicely with the concept of *Quadrophenia*. It is quite a large project to do in such a short time, essentially less than 12 weeks, so it has been hectic with lead times running very close to the edge. Most of my time has been spent specifying what is going to be there and making sure it's all going to work."

Knowing that the lion's share of the show would take the form of a celebration of rock and roll, past and present, Park approached his overall design with dynamism at the forefront of his thoughts. He was keen to provide the most exciting visual backdrop possible for the army of television cameras covering the show for an international audience. "You can't design a set specifically for five acts, but we've aimed to give each act their own identity and have a good looking stage with three-dimensional attributes. So when the camera is looking at the stage from a number of angles, it looks different and there's something behind the performers as well as the lights that gives the setting some sort of feeling. Ultimately, what you're concentrating on is the energy of the performer, so anything we do is only an enhancement.



Jonathan Park with the set model for *Quadrophenia* above, and below in close-up.

"I was trying to portray some sort of animation in the middle of the day that represented rock and roll and could be seen by thousands a long way from the stage, as well as working on television. I chose some large multi-purpose white spiky shapes as a backdrop, which would add some kind of dynamism and also take colour from the lighting. I normally attempt to create a stage picture which has a strong architectural form and is memorable. When you see these things from a long way back, they look flat but when you are close to them and looking at the stage through a television camera, what you want is a bit of texture, grain and edge to it all."

In this particular case, Park's 'hook line', used as its source a deconstructed circle at both sides of the stage, pierced through each centre by what looked like a futuristic 120ft high spike or mast, topped with an aircraft warning light. Although a large stage (200ft wide overall), the budget was not infinite, and Park was forced to design something fresh and original using only a standard Edwin Shirley roof and stage kit. The result, whilst also resembling a distressed ghetto blaster, appeared to pay homage to the event's main sponsor, MasterCard's famous dual spherical logo: "I couldn't do anything with the roof but by the means of these big circles and the spikes, at least the architectural feeling could be transformed. Rather than have a normal monolithic tower block of PA at either side, I decided to hang it off one tower so that it had a lighter feel and the audience would look right past it.

"I always make models of these things because it makes things so much easier to explain. The three-dimensional drawings



produced on the computer show how everything relates to each other in scale, but the real sweat is in turning it into reality."

QUADROPHENIA

For the performance of *Quadrophenia*, Lady Luck was clearly on Park's side. He managed to incorporate his deconstructed circles theme into the show by making the roundels part of the set, pulling up a red bullseye disc in each middle and highlighting a small tail. Hey presto, two instant 'Q' logos!

"In this section of the show, the inner stage picture changes to one that is very specific to this Mod opera, and we needed to bring visual information in behind the band, as well as having lots of explanatory footage and graphics on the video screens. The original idea was to create large painted backdrops which represented certain parts of the scenic setting, but these would be extremely expensive and difficult to change between each part of the performance. The stage is so big that it would be wholly impractical to start using huge scenic cloths. So I suggested that we shrink the intended backdrops down to a series of large 16 x 10ft 'postcards' which depicted parts of the story and the idea was well supported.

"At various times during the performance these postcards rise or drop into position, and as the show progresses, the backdrop to the stage gradually fills up with a collage of these. It starts with the terraced house in which Jimmy was born and ends up with the pirate ship he imagines as he rows out into the bay, which is different to what happened in the Franc Roddam film, of course. On television, the postcards will appear as large coloured backdrops to the close-ups of the performers, while to the audience they will still make sense even from a long way away."

FRAMING SLOWHAND

Like the show's production manager, Mick Double, lighting designer Tom Kenny has been a familiar face among Eric Clapton's and The Who's entourages for several years and in the final stages of Park's design, his input proved invaluable: "It was useful to have someone who knew both these acts. When Tom came in, he not unnaturally wanted to put in quite a lot of lights because he's going to need to pour light at it to bring it out. He also needed to have a high degree of redundancy so that he could light the different performances from a variety of positions.

"We realised how essential it was that the last part of the show with Eric Clapton looked quite different from *Quadrophenia*, so Tom suggested lowering the lighting at that point with the set changing to a regular set piece that Clapton is used to which can be brought in and erected quickly."

ALL THE PARK'S A STAGE

Built on-site by Edwin Shirley Staging one week prior to the show, the stage was positioned to the north of the park to enable greater access for load-in and out, which was a major improvement over the logistics of VE Day and other past shows. "It was intended that the trucks would have the shortest distance to travel to the stage once they entered the park. Over the course of the last few big events, our stages have gradually migrated around the park and I think we now hold some kind of a world record for Hyde Park!"

Edwin Shirley's Tower system stage featured a 60ft high roof - the same one used for VJ Day

on Horse Guards Parade, but without the front balcony. For Masters Of Music, this became a peak with the columns moved out to the sides to achieve a large covered inner area of approximately 80ft square. The depth may have been colossal, but only the front half was used for the performance, while the back half became a setting-up and storage area for equipment when not in use.

With literally several scores of musicians appearing in the headline and support bands, it was imperative that the large number of drum and percussion kits, keyboard rigs and backline equipment were kept out of sight, behind the black backdrop which lifted up to 10ft from the stage to allow the necessary items of equipment to be accessed quickly. In between the main performances, the front curtain was drawn to allow all the movement on stage to be obscured from the audience, while the support bands played at the front of the bow-fronted stage, their backline raised into position by a hydraulic lift, again to enable quick change-overs. Not only was there no thrust at the front of the stage, but Park also decided to keep the traditional 'ego ramps' out of his design: "Apart from everything else, they are quite difficult to use and they need a lot of rehearsal, especially if the performer goes out in front of the PA, for feedback reasons. We really wanted to contain everything in the one area, within the stage aperture."

As our discussion was brought to a natural close by Park's intense pre-show activities, he stressed how eager he was to see the fruits of his labour come into full being. "I've really enjoyed this project and on the day I hope that we have achieved the three main things I always strive towards. Most importantly, the bands should feel sufficiently comfortable to be able to play, the audience should be able to see them, and the setting should be interesting. It has been amusing to have had a concept at the beginning which was to do with architecture and memorability, and some sort of theme without any discussions with artistes or directors, and to find that all the performances can work within it."

Jonathan Park's status in the premier division of stage designers is permanently sealed and his latest project, a Celtic dream design for Irish dancer Michael Flatley's Lord of the Dance touring show, will no doubt add further weight to his unique record of achievements. But on the night of Saturday 29th June, one hopes that he allowed himself the rare indulgence of putting his feet up and wallowing in the aftermath of what was arguably his greatest rock and roll triumph to date.

Hyde Park Special - Part 3

IMAGE CONSCIOUS

Masters of Music proved to be the ultimate showcase for the latest generation of Jumbotron video display screens. As Screenco loaded out for the big day, MD David Crump told Mark Cunningham that being at the back of the crowd is no longer the disappointment it once was.

After its busiest-ever 12 months as vision screen supplier to tours by Rod Stewart, M People, Oasis, Tina Turner and countless other performers, Hampshire-based Screenco scored its most significant achievement to date at the Masters of Music concert as the co-ordinator of all the video display aspects of the show, including sister company, Creative Technology's camera work.

With a crowd of 150,000 stretching back as far as 500 metres from the stage, the value of Jumbotron screen technology has rarely been greater and Screenco was required to supply four screens - two JTS 35s on-stage and two new generation JTS 17s out in the field as delay relays. The Quadrophenia set demanded a central screen located above the stage in a landscape aspect ratio to enable the showing of 1960s Who footage, scenes from the 1979 Quadrophenia movie and new footage directed by Aubrey Powell that was to be shown in a Cinemascope-type format.

Producer Steve Swartz approached Screenco's MD David Crump for further screens to be added, but was politely informed that due to the demands of other summer outdoor events, none was available. To add a further headache, Crump was informed that Eric Clapton insisted on performing with the screens at either side of the stage.

How did Crump rise to the challenge? "We came up with the idea of having a pair of 1:1 aspect ratio screens, which are not standard television aspect ratio, and devising a way of moving them. They are two 5 x 5 metre screens, made up of 24 modules, which for most of the show are located in a typical PA position and flown from the roof of the stage. But for the Quadrophenia set only, we track them together on a track suspended under the ESS roof." After consultation with Jonathan Park and Edwin Shirley Staging, the JTS 35 screens were built into the set design drawings and, to Crump's relief, it was fortunate that the ESS stage roof was able to tolerate enormous weightloads.

"The screens will be on a cantilever



Anita Page and David Crump of Screenco prepare for load-out to Hyde Park.

downstage of the main support towers, and they have to track out past those towers. Those two screens weigh almost five tons each and are suspended from above and have to move in an accurate, controlled fashion, completely in vision during the show."

Suspended from beam trolleys which were fixed to an 80ft I-beam, the screens were able to move from side to side, powered by a computer-controlled winch motor system from Unusual Rigging which is normally used for the movement of scenery. I watched with fascination as the two on-stage screens came together for the first time shortly before a soundcheck of Quadrophenia. A few adjustments later and the screens appeared to lock together seamlessly. "Those motors can control the screens to within a millimetre," said Crump. "It's a similar system to the one we used on Genesis' We Can't Dance tour, where we had three Jumbotrons tracked together which also moved apart, but they were ground-supported on trolleys."

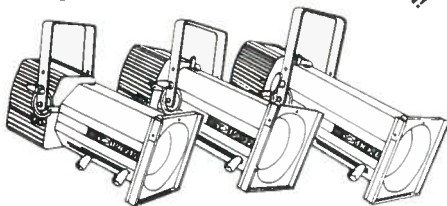
While the use of winch motors to unite and separate the two screens solved the problem of satisfying the two main artistes' requirements, it meant that the control method of video images to them needed further thought: "The screens need to carry two separate images at one point, and one strange aspect ratio image at another. So we are using Creative Technology's new OB truck, which is switchable between 16 x 9 aspect ratio and the more conventional TV format 3 x 4 aspect ratio which allows us to output in either standard.

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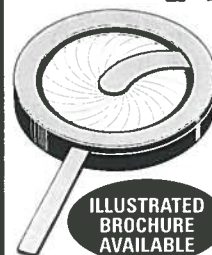
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The massive screens, which were suspended from beam trolleys, were able to move from side to side, powered by a computer-controlled winch motor system from Unusual Rigging.

We are using a two-channel DVE (Digital Video Effects) system to enable us to squeeze and manipulate pictures to fit in the different aspect ratio screens.

"A similar technique is used by Dick Carruthers on Oasis, but it is more complicated on this because we have to simultaneously output to conventional shaped screens down the field. The stage screens will be driven as one screen and even when they are apart they will be showing one image - what we feed them will have two images side by side, but split down the middle with one side per screen. By sending two separate feeds to the effects unit, you can end up with different shots on each screen, such as a close-up face on one and a shot of a guitarist on the other."

JTS 17: THE NEW GENERATION

In order to synchronise the video pictures with the sound heard around the venue, Screenco installed its two additional screens 100 metres from the stage, either side of the arena, with the video picture delayed by approximately one-third of a second. The most common way of achieving this is by the use of a Pioneer hard disk video recorder, which is able to record on one part of the disk and read on another, and then output a delayed signal.

Suspended from conventional ESS structures, the two screens used for the delay system were the new 3 x 3 JTS 17s with Masters of Music only the sixth time they had ever been seen in Europe, after shows with Tina Turner and M People. Despite costing twice the price of the JTS 35, Crump predicts a great future for the new JTS 17, of which Screenco own the only system in Europe: "The JTS 17 is a much higher resolution system, designed ideally for smaller screens with shorter viewing distances. These daylight TV screens use thousands of miniature cathode ray tubes which are mounted together in a matrix.

"On the JTS 35, the distance between each red-green-blue cluster is 35mm, and that has been reduced to 17mm on the JTS 17, which automatically makes it by far the highest resolution available for a daylight display system. Effectively, by reducing that distance to 17mm horizontally and vertically, the resolution is quadrupled because there are four times as many pixels in any given area. You can have a screen that is one-quarter the surface

area and achieve the same resolution. So on larger screens, you are getting very close to standard television resolution, which no one has ever come near to achieving before with daylight screens. It also means that you can reduce viewing distances and can comfortably watch it from 10-12ft away, whereas historically you had to be between 25-40ft away from the screen to appreciate the images."

Traditionally, the display devices manufactured by Sony for Jumbotrons have been designed for permanent installation. Screenco's business, however, has been based on purchasing these devices and repackaging them for mobile configurations. But the advent of the JTS 17 has seen Sony building bespoke modules and providing Screenco with them as a turnkey package. "We have now set up a manufacturing division," said Crump. "Not only is the arrangement with Sony saving us money, but we also wanted the additional control of working with sub-contractors that we know and trust."

Another new development from Screenco in its early stages at Hyde Park was the replacement of its conventional co-axial video cable with fibre optics. "Traditional cable is prone to interference and signal loss, and it was thought that being such a huge venue, this would be the ideal place in which to introduce this new cable system which will provide distinct advantages in such a huge venue. It is a very thin cable which has a box on each end to modulate the video signal on to a laser and it fires down the fibre optic to a decoder at the other end. It will result in a much cleaner feed to the screens than would be experienced with conventional transmission technology."

BEHIND THE LENS

Screenco's crew loaded the screens and control equipment into Hyde Park from its Eastleigh, Hampshire base on Thursday 27th June, followed the next day by Creative Technology's OB truck. "With so many input and output feeds, we need maximum sophistication and CT's truck has a Bosch BTS 32-input three mix effects mixer with a linked Abacus DVE. It's unique because it's a serial digital truck which is very rare, and it's actually bigger than the Chrysalis truck which is handling the televised show. It's all pre-configured beforehand and it saves a lot of time."

For future broadcast purposes, Chrysalis installed cameras and crew on behalf of Allied Vision. In the CT truck, vision screens director Kevin Williams took isolated feeds from Chrysalis's close-up cameras to add to CT's own camerawork. "CT are also controlling the three manned Thompson cameras, two of which are in the pit and one on side stage. We also have three minicams which we can put on drums, keyboards, guitars or other appropriate locations, depending on the act. That gives us six of our own sources, and we will also take around six feeds from Chrysalis's main transmission output. The difficulty is that we cannot direct those cameras, so we'll have to take whatever comes our way and mix it in as required. They have two cameras at front of house on long lenses which will concentrate on the main artistes, so we'll definitely take those two feeds. Obviously, with a show like this Chrysalis really rule the shots, because they are earning the majority of the money through selling the show to TV companies."

Other responsibilities on Screenco's and CT's shoulders included playing in commercials between acts and relaying messages, such as public transport and emergency information, via a graphics display system. Williams also supplied images from the OB truck to monitors in the press centre and backstage hospitality marquee, as well as ISO recording Quadrophenia on eight Betacam machines. The pre-recorded footage shown during that part of the show was run from two Sony CRV laser disc players and controlled by a Macintosh computer to ensure tight cueing. Even Quadrophenia's musicians and actors were assisted by the Screenco/CT alliance, as Crump explained: "Everyone will need vision as well as audio monitoring, and we've put some monitors on stage so that they can minutely time the music and dialogue to synchronise with the footage."

PULLING AT THE HEART STRINGS

This being a charity show for the benefit of The Prince's Trust, Screenco was asked, like most suppliers, to keep the cost of its services as low as possible and Crump believes that, under the circumstances, he and Dennis Arnold at Harvey Goldsmith Entertainments struck a favourable deal. But the increase in large charity events since Live Aid has presented problems within the rental industry. "It has been increasingly difficult for suppliers to keep on doing charity events. More so with companies like Screenco than PA or lighting companies, because we have a very narrow window through which to earn our money. We normally have three months every year in which we work flat out, while the other nine months are comparatively quiet, so we have to maximise the opportunities to earn revenue in a short space of time. It's fair to say with something like Hyde Park that because of the amount of touring work we have this summer, if it had not been a charity show we may well have turned it down."

But three days after the show, Crump was glad he'd accepted the job, and reflecting on a hectic run-up to the event and all that the show entailed, he added: "Like VE Day, it was a massive challenge and a bit of a nightmare for everyone involved behind the scenes. Unusual's tracking system worked perfectly and, technically, it was the highlight for us of an extremely rewarding day."

Photos: Mark Cunningham, Jonathan Park, and Pete Cronin/Mojo Working 96.

DIAMONDS ARE FOR EVER

Steve Moles reviews Neil Diamond's performance at Wembley Arena

Neil Diamond is to music what the Reverend Kim Sung Moon is to religion. Not easily pigeon-holed against any of the major orthodoxies, he is, nonetheless, a force to be reckoned with. Every couple of years his stage show swings through Europe, and each time he plays to sell-out houses: you couldn't wish for a more bankable artiste. Whether rock or punk, disco or grunge, he's out-lived them all and will surely outlive the current genre of Britpop. In a methodical fashion he has plundered the musical heritage of American folk, rock, blues and country music: it would be easy to accuse him of producing a schmaltzy AOR amalgam of them all, but that would be disingenuous. For a start, if the accusation were true, he would hardly have lasted the 30-plus years he has, and certainly not in the peak position he has continually held. So what defines this consummate performer?

SOUND

Front-of-house engineer Stanley Miller is an icon of the sound industry. He did his first show with Diamond in 1966 and has mixed him ever since. In-between times, he built up the renowned StanEl PA company, designed and built what came to be known as the JBL Concert Series PA, and much more besides. Like the artiste he works for, Miller is of maturing years, but his desire to push along the technology of his trade has not grown flabby with age. True to type, there's an element of the nutty professor in Miller, and this is clearly reflected in his front-of-house set up, which is without doubt the most unconventional collection of equipment to grace a riser in recent years, and one that would leave many an engineer feeling a little insecure.

At the heart of his approach is the use of computer technology. Miller uses a modified version of the JBL Concert Series (owned by Neil Diamond) positioned in four clusters around the circular stage (all venues are played in the round). All components are driven by Crown amplification and Miller uses the Crown IQ system to remotely control and monitor them. He is especially fond of the predictive element of the Odep function, the monitoring of the output transistor that allows measurements to be taken before overheating becomes a problem; and he also likes the system's ability to control input to the amps in precise 1dB increments.

It is with the mix technology, however, that he's stretching himself: "I'm using a software system called SAMM, developed by Innovative Quality Software, that controls, via MIDI, all the digital mixers." Miller has 11 ProMixers tucked away in draw-pull racks to the side of a 24-channel Yamaha PM3500. "The SAMM system allows me to run the show in scenes, just like lighting. Every function of the ProMixer is recallable on every channel, EQ and gain. It's possible to run up to 16 mixers, each handling 16 channels so there's the potential for a 256 channel mix." And, it must be said, without

taking up 10 rows of seating to do it.

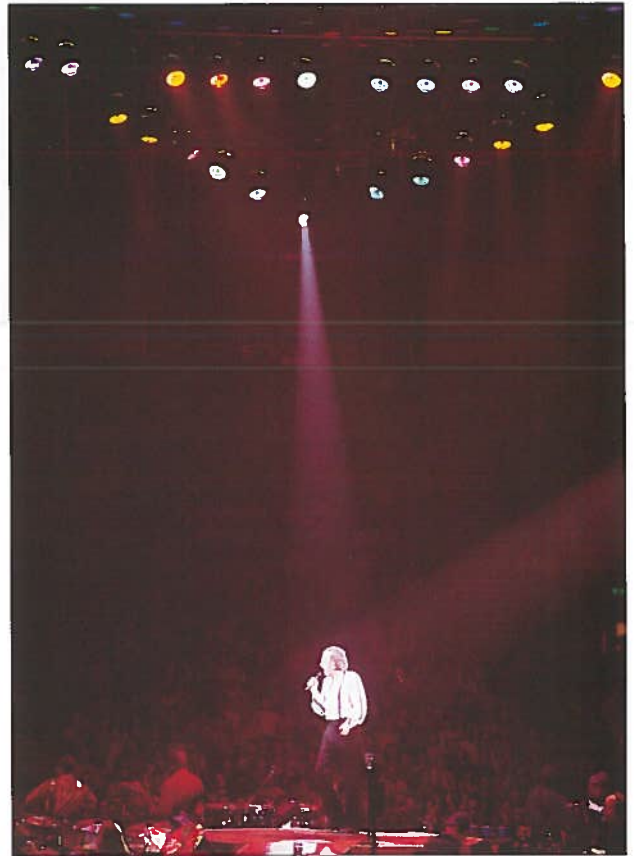
"The Yamaha (used for the final mix) was chosen for its MIDI programmable mutes." The 10-piece band is effectively mixed down in sub groups on the ProMixers giving stereo inputs to the 3500. Diamond's voice and the bass guitar are input direct, the only effect is a

"Neil Diamond is to music what Kim Sung Moon is to religion. Not easily pigeon-holed against any of the major orthodoxies, he is, nonetheless, a force to be reckoned with."

little echo on his voice from a Lexicon PCM70. He changes his set frequently so Miller uses the SAMM to take all the donkey work out of setting the control parameters for each song. "The pre-set I have for the beginning of each song ensures that everything is already there," he added. "It gives me a reference point to start from and, in fact, moving hall to hall, I find there's little to change - maybe just the balance between his voice and the band."

Power-failure and software crashes would leave your average sound engineer feeling a little vulnerable with this set-up, but Miller has it covered. He's taken the obvious route with un-interruptible power supplies for the computers, but has extended that logic to the entire FOH riser system, the whole monitor control system beside the stage and the more sophisticated elements of the backline gear. It does mean carrying around a fair amount of added weight in batteries, but when there's three 40ft trucks just for cables because all cabling run potentially hundreds of feet from the flown system to dimmer/amp world in the far corner of the arena, the additional weight of batteries is small beer.

In the event of a crash on the SAMM system alone, Miller has set-up his MIDI program scenes to start from 11, allowing him to use the first 10 that are in-built on the Yamaha itself and which are set up as generic pre-sets for the core functions of the various song styles. He doesn't expect to have to use them, but he's prepared. Miller was also at pains to point out that: "Not only is this the most sophisticated set-up I've used, but also one of the most economical. The cost of the front-of-house gear totals somewhere in the region of \$100,000. Not bad for something that gives consistently better sound, and a more consistent sound room to room!" Monitors also warrant a mention on the technology front. Bernie Becker (Diamond's recording engineer) feeds a full mix to every band member, who each have an Ashley Audio VCA control unit to create their own mix to the Garwood In-Ear system in use.



This leaves Diamond, who eschews the In Ear system on Miller's recommendation: "He needs the contact with his audience, I just don't believe he'd be comfortable with the distancing that the In-Ear system can create." It's an arguable assertion, but as all good monitor men know, the perfect stage sound is three-fifths psychology and two-fifths audio science, so he's probably right in the way that matters. Besides, with the wedges set beneath the stage and the side fills (neatly tucked in behind the flown PA clusters) feeding just a single mix to the one artiste, Diamond is subject to a considerable benefit from the In-Ear system, although indirectly.

The end result is, as you would expect, polished: Diamond's voice firmly out front, the musicians a couple of dB below, their musical nuances coming and going like waves lapping at the shore. He has a luxurious voice, sonorous and bassy, with a surprising punchy quality in the lower registers around 400Hz that can catch you unawares. For all the predictive elements of the technology employed, it was nice to note that human failure was still possible. When Diamond introduced the band, each took a brief solo raised prominently in the mix, for guitarist Hadley Hopkins the increase in level came 10 seconds too late and was the perfect reminder that this was real, live and happening before our ears.

LIGHTING

Lighting designer Marilyn Lowey is of similar pedigree to Miller - though not so long in the tooth as he - having done five major tours with Diamond since joining the entourage in the eighties. Unlike most eminent designers on the

concert circuit, Lowey has studied for her trade, having both a BA and a Masters degree, the former in Fine Art, the latter embracing the specialisation of Theatre Technology.

Not restricted to one church she also designs for theme parks, the growing market of cruise liner shows, and L+SI readers will recall a feature on her last year for her design at the Lido de Paris. Like Miller, there's a lot of technology in the light show. The main contractor Obie provide all the trussing (a large four-pointed star) and the modest conventional part of the rig, just eight Par cans, a dozen eight-lights with colour changers for audience light, and the associated control gear.

On a note of safety, to give technicians access to the rig, Stage Rigging provided a bosun's chair elevator run from an electric hoist. With a load arrester in parallel, this made for a very secure device and solved the problem of how to dispose of a rope ladder once the punters are let in.

Having used the Pan Command system for the past four tours, Lowey felt it was time for a change, and change in a big way is what she's done. This system has 160 VL5s, 45 Coemar NATs, 20 Clay Paky HPEs and five of the 2500W NATs linked to a Wybron Autopilot system to take the place of on-stage followspots. "I chose the VL5 for its crisp, bright colours," Lowey explained. "The 1200W lamp is quite beautiful. But for a hard-edged light, I wanted colour cross fade - the show demands that kind of sensitivity - so before the tour I arranged a show-down with all the other hard-edged moving lamps and I chose the NAT. The textures they can create are phenomenal, the way they rotate is gentle, graceful. They are not a rock and roll fixture and are more theatrical in the way they move."

Lowey believes this is the first time Autopilot has been used for an in-the-round show and it's certainly a first for a show of this stature to use Coemar NATs. Costume designer Bill Witten concealed the Autopilot belt-pack (specially reduced in size by Wybron) in Neil's outfit and sewed the infra-red/ultrasonic transmitter into the decor of his shirt for a totally unobtrusive look that others would do well to emulate. Lowey's justification for the



when Neil brings in a new song and she's not here." Not easy when the temptation must be to do what you want. A Wholehog II, operated by Martin Phillips, was the desk of choice for the NATs and HPEs, a decision made by show programmer Arnold Serame who was looking for something quick and versatile.

The staging and integrated set was built by Tait Towers, a simple uncluttered circular structure in three main

pieces. The outer circle of the stage can rotate while the band remain stationary in a slightly lowered section within, whilst the centre-piece is elevated with ramps running down to the perimeter. Rotation is used only occasionally, as Diamond shifts around quite easily under his own devices and works different areas of the room from different parts of the stage.

The lighting of the show, both performer and stage, was consistently interesting and although the potential was always there, there was never any danger of it falling into the trap of being over-lit. In a curious contradiction, the outstanding element of the way in which the stage was lit was in how little you noticed the NATs. With no large moving mirror to draw attention and no moving yoke either, the rotating periscope-type device was both discrete and effective, delivering sharp images with the minimum of hoo-ha.

Neil Diamond has a reputation for being the best artiste in the world to tour with: generous, caring and thoughtful. Most of his touring entourage, starting at the top with tour manager *sans pareil* Patrick Stansfield, have been with him for years. It's always possible for a star to attract the best - and Diamond certainly has in terms of personnel - but it's another thing to retain them and even more to sustain their commitment and enthusiasm. Perhaps that's part of his secret?

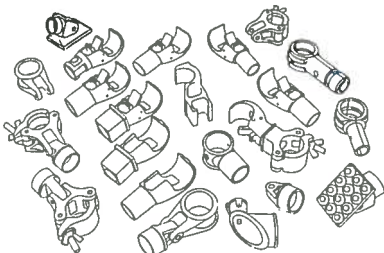
Smith runs the conventional gear, what little there is, from an Avolites QM together with some of the VL5 cues, as well as calling the house followspots, whilst Greg 'Gorgo' Wershing runs the bulk of the VL cues from an Artisan. "The challenge for me," noted Jim, "is in trying to figure out what Marilyn would do

large number of lights is simple and clear: "In the round, your lights are your scenery - you are dependent on how much atmosphere you can create above the stage. You need a lot more lighting than for a conventional end-on show as you are effectively creating the front of stage look all the way round."

Texture and beauty are adjectives that crop up frequently in Lowey's conversation: "The HPEs are there for another texture - some of the VL5 colours are quite beautiful." And, true to her word, those are the subjective impressions that are transmitted. Some of the motion sequences, especially from the VL5s, linking movement with progressive colour-chasing in long waves rippling around the rig like the leg motion of a millipede, are quite exquisite and must have taken considerable care to programme. Front-of-house is, like sound, equally burgeoning with equipment. Lowey employs Jim Smith as tour lighting director, because commitments preclude her attendance at every show, although she does make most of them.

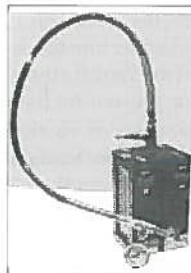
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ANXIOUS IN THE STALLS



(L-R) John Fraser and Neil Pearson in Peter Hall's *Mind Millie For Me* at the Theatre Royal, Haymarket.

Sorry, I'm not quite with it this month. Theatre Record has been moving offices, and I seem to have left my brain in the old one. Still, the experience of moving was a fascinating one, and I have nothing but praise for the guys who helped me pack and shift 25 years of theatre archive across Twickenham. Not being able to find half of it now is my fault, not theirs.

I was less impressed by the performance of British Telecom. We've moved about 50 yards outside the area served by our old telephone exchange, and the series of 'sorry sir, that's quite impossible' responses I got when trying to stretch that 50 yards had to be heard to be believed. Finally, I found someone prepared to ask within the secretive halls of BT (did you know they're not even allowed to tell you where the exchanges are?) and Theatre Record has kept its old number. Mind you, having told me it would take an unspecified number of weeks to put into effect, they switched the phone the next morning, leaving the office with no phone for two days before the move. I thought I'd take this little saga a little further, so I rang the number given in the latest phone book for BT Public Relations. Number unobtainable. I should have guessed.

There's not been much to excite in the theatres since we last met, which in these circumstances is perhaps just as well. The lads in the West End must be a little anxious, though, since a number of shows have made very quick exits lately. First to go was *Tolstoy*, a curious attempt to make a star vehicle for F Murray Abraham out of the last days of the Russian novelist. Even if it had been any good it would have been a shade heavy for the West End - great chunks of it seemed to be written in a particularly clunking blank verse. Still, there were effective variations of level from Tanya McCallin's set and Ian Somerville's lighting was something special: it's not often you meet with a designer bold enough to paint with light, seeking big bold colour effects with which to wash the stage, but here is one who does it well and excitingly.

Gerald Scarfe supplied some suitably flashy sets - three of them, which is generous these days - and cheap-joke costumes for Peter Hall's vulgarisation of Feydeau's *Occupe-toi 'Amelie* into *Mind Millie for Me*. I don't suppose you can blame Joe Atkins' lighting for the fact that they all looked too far over the top (as was the breakneck acting), or for the not completely surprising result that this ambitious but sadly misconceived production ran five weeks rather than the six months that were planned. Hall's next London venture, the transfer of his Stratford *Julius Caesar* which opened a week later at the Barbican, was much more what one would expect from this fine director, though here one could blame Jean Kalman's lighting for spilling so washily over John Gunter's marbled flats that they seemed very flimsy, not the substantial, monumental setting that was obviously intended.

The next West End casualty was an American comedy, *Sylvia*, starring Zoe Wanamaker as a dog. If you find that rather a hard concept to swallow, you're in good company: almost all the critics hated it and only the most devoted dog lovers in the audience felt any better. Once again, the sets (by Hayden Griffin) were one of the show's few more enjoyable features. Cleverly flown, they offered some good hard-edged Manhattan skyline effects, and Howard Harrison's confident lighting gave the right kind of interior/exterior contrast. And of course there was a practical lamp-post...

You can't really call the production of *Dames at Sea* a failure, since it won rave reviews and ran for its originally advertised short spell as part of the Covent Garden Festival. But it had been hoped to extend the run, until the producers found that the audiences just weren't there. *Dames* is deliberately a small-scale show, an affectionate American spoof which does for Dick Powell/Ruby Keeler movies what Sandy Wilson's *Boyfriend* did for the 1920s English musical comedy. It is orchestrated simply, for two pianos and drums,

and in this incarnation had a cast that included Kim Criswell, whose singing style can take the paint off the back row of the Palladium without mechanical assistance. Strange, then, that such an intimate show, in a theatre as small as the Ambassadors', should call for mics on all its six principals, and pipe in the tiny band (who didn't seem to be in the pit) through what sounded like the worst kind of church-fete public address system. Phil Craxford did the sound - I wonder what his excuse is. With sets whose tackiness could just about be explained away as following the spirit of the spoof, the show offered a very lightweight evening - so lightweight that it comes as no surprise that the paying audience was less drawn to it than the critics. The other Covent Garden Festival musical, Frank Dunlop's revival of *Camelot*, seems also to have suffered from pretty terrible sound, but the blame here lies with the almost impossible acoustics of Freemason's Hall - or perhaps with the folk who were optimistic enough to think they could overcome it.

The night after *Dames at Sea*, I was facing a quite opposite sound problem. The Drill Hall (which you can call off-West End) is a small, friendly house, but it has a very wide stage and presents traps for the unwary actor, singer especially, who has to reach an audience that almost surrounds the stage to 180 degrees, on a steep rake of seating. Phil Willmott knows the space, and I'd guess that it's because of unsatisfactory experience with microphone sound in his South Pacific that he decided to let his cast for *Funeral Games*, Joe Orton's deservedly little-known film script, perform without mics for the songs with which he hoped to enliven it. This is fine when you have five burly policemen bawling out 'Keep Young and Beautiful', but less effective when former glitter rocker Adam Ant has his number. Mr Ant was never far from a powerful sound system during his chart-topping days, and without it he is very embarrassing as a singer. Well, no, he's not. He's simply inaudible, particularly against the heavy harmonium-like accompaniment which Anne Marie Lewis Thomas supplied in competition.

It rather surprises me that I'm still having to make these somewhat puerile comparisons of sound quality in major professional theatre productions. Good sound is relatively cheap these days, and it surely shouldn't be beyond any sound designer's wit or budget to lay on a system that enhances speech or song rather than distort it. Enhance - make louder and more audible. Distort - make it sound as if it's coming out of a speaking tube with a dent in it. You'll tell me it's not as easy as it seems. It seemed easy enough in Scarborough for *By Jeeves*, and that was in the round. It should be a darn sight easier in a standard, small proscenium theatre. When folk are paying around 30 quid a ticket to go to the theatre in London, as they are now for musicals, they have a right to expect the best. When they don't get it, either in the writing (*Tolstoy*), the direction (*Millie*), or the technical set-up (*Dames at Sea*), they stay away. And that's when West End producers are right to be anxious.

Ian Herbert

Ian Herbert is the editor and publisher of the critical journal, *Theatre Record*.



Hugo Roche (left) of Sysco with Jim Baker.



The Masdar installation crew relax in one of the Waltzers.

we got involved in the first place was because this was clearly going to be something different and out of the ordinary."

As well as FAL Pro Scans and 50k of Electro-Voice sound, GUSH has five video screens, a full-colour laser system and a chill-out room with separate sound, light and vision mixing. The DJ booths on both the main dancefloor and in the Chill Out room have been designed to allow four-deck mixing, using vinyl, CD and DAT. Most of the control gear and amp racks are housed in a new, purpose-built gantry, overhanging the dancefloor.

DESIGN

A giant painted tap, depicting the club name, marks the entrance to the chill-out room, with its 3 x 4 videowall and Mad Lighting effects, which is, in turn, approached from a bar decked out with reconstituted fairground waltzers and a giant missile - should patrons need reminding of where they are.

A whole ride's worth of 15-year-old waltzers have been stripped out, sponged on top and vividly painted. A white polyester sheet offers back projection possibilities from a moving mirror head fitted onto the front of an LCD projector (a Mushroom Lighting idea).

As for the imposing missile in the bar/restaurant, this had started life as a float in the Royal Navy and was later purchased from a marine scrap yard. The club added the fins.

The design team seemed to come together by osmosis, as into the picture drifted 3D artist Sian Davies, who fell into the project straight from college in Newcastle. "I finished just as Martin Rushent was getting GUSH together and I've been doing drawings for around a year-and-a-half; I must have designed about 500 clubs in the process." The club, she says, is a combination of all the best bits.

All the decor is detachable so it can be changed every three to six months and Davies has introduced original ideas like the 'shower unit' type entrance in which smoke will billow down like a decontamination centre with the five-headed mutated creature glaring out of the cotton backdrop.

The pièce de résistance is the unique theme bar that heads into the main dance space. Dubbed 'Ye Nan's Settee' it's like yer granny's drawing room, with old lampshades suspended from a net, patchwork and crocheted walls, a bar-front of tasteless album covers (from The Bachelors to Bygraves) and all kinds of salvaged artefacts. "Basically it's any old tat," says Davies,

"all sourced from charity shops and jumble sales. I originally envisaged it as a padded wall with large buttons, but the idea developed overhead instead. I'll probably replace it with bottle tops and plastic cows in six months!"

Davies is just one of a team of artists who drifted into the cosmic ambit of the club's movers and shakers, and lived in the office building before finding a house. Others in the team are 2D specialists and include Jenny from Nautilus, responsible for the giant tap, plus backdrop painters Greentree & Dicken, while Theresa is a tapestry designer who normally designs cushion covers on computer. In the chill-out room, with its bright purple and green murals, these designs have been blown right up and then painted. Another designer, Claire, designed the giant vivid tube of lovehearts.

What wall space doesn't feature some element of design is painted matt black. The chill-out room smacks of total dedication. It also features intelligent use of the Opti K1 and Solar 250 projector effects, as well as the Mad Scans, Stars and colour changers.

SOUND

As the club is built inside a former base building, with huge tree-lined car parks adjacent, acoustic isolation was of less concern than with most rural or even urban sites, but the sound system (E-V Deltamax) is also far more powerful than the norm, with 9kW of sub-bass and 50kW overall. As there are audio and musical polymaths behind the GUSH project, the sound system is surprisingly well-deadened outside and inside, and the acoustics are far better than is the norm for

purpose-designed clubs, let alone converted 'cold war' base buildings.

Through his studio work, Martin Rushent had been an avid fan of Electro-Voice and it's no surprise that the customised Deltamax system, put in by Sysco, is one of the largest E-V sound systems ever installed in a UK club, with 46 boxes (and ancillary equipment).

The main room, which doubles as a live and standard dance room, features 18 E-V DML-1152 AS hi/mid boxes combined with 12 E-V MTL-2 subs and four Sysco custom TL880D super-low subs, originally designed for ultra-low digital cinema applications and capable of reproducing frequencies right down to 23Hz. Run as a flown three-way system and driven by a selection of 13 E-V P-2000 and P-3000 amplifiers, the rig also features E-V DM controllers, Rane EQ and a Klark Teknik comp/limiter. In addition, a pair of E-V DML-1152s are used as stage side-fills. The chill-out room hosts further E-V kit in the form of six hi/mid DML boxes and four MTL-2 subs, which is also run as a three-way flown rig with P-2000/P-3000 amplification.

Hugo Roche of Sysco would not support unconfirmed rumours that the Deltamax had been measured at peak delivering 132dB, but it didn't stop a smile breaking across his face when the suggestion was put to him. The E-V cinema bass system has been remodelled to fit the stage constraints. "They wanted clarity and headroom in the system. Combined with the idea of discreet stacks, it means that every stack has to be high-powered - so we do need a high SPL. If you are trying to create a dramatic venue you need that capability," he explained.

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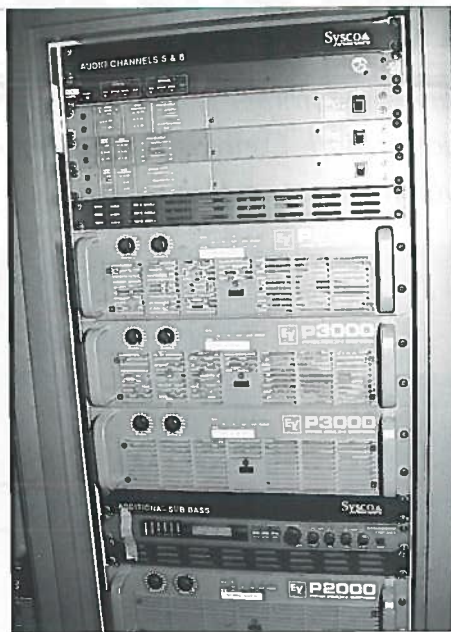
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Everything from the control racks through to the loudspeakers emanates from Sysco, taking, and distributing, nine separate feeds around the venue. This includes source material from the Vestax PDT5000s, Pioneer CDJs and Sony 60ES DAT, located in the various rooms, put through Cloud CMX mixers, modified by Ben Duncan Research. There is also a Mackie 32/8 house mixing desk in the equipment inventory, and a Formula Sound AVC2 for system protection.

The amp racks up in the gantry are enormous, housing the E-V power stations, the signal processing and Rane programmable EQ. "We built the room around the amp rack to enable us to keep it to a reasonable temperature," adds Hugo. "There's 17,000cu.ft. of air being moved around! That's some heat dissipation."

LASER

The only lighting that didn't emanate from Lightmasters or Mushroom is the specialist laser equipment from Sussex-based Laser Magic. Operating from a PC running Windows 95, it is the first UK installation of the Pangolin system, for which Laser Magic are the sole importers. The system features polychromatic acousto-optical modulation (AOM), the latest 68000 scanners and the Spectra Physics 5W Chroma 5 white light lasers. "It's our top-of-the-range system," explained director Les Call. A second, fibre-fed head is run off a PM 22 controller, so that while one system delivers high-definition graphics onto a big screen, the other is generating beams, patterns and downrange effects.



The main amplifier rack.

VIDEO

Every bit as state-of-the-art is the video system, under the control of resident video jock Matt Northmore. The inventory includes an Electrohome ShowStar and smaller Hitachi systems, with a Sanyo above the door of the chill-out room - plus a couple of Kodak Ektapod slide projectors from which they will eventually produce dissolves.

Up in the gantry, the major equipment is a Panasonic WJ MX-50 projector, running through three Hi 8 inputs, while three S-VHFs

will be running the videowall (a further projector will be sited in the restaurant area).

GUSH is also unique in using the French video company V-Form for their video mixing and the company arrive from France every weekend under contract to work exclusively for the club. Eventually, the venue will be set up with no fewer than 16 projectors, split in batches of five through the three zones with one on the 3 x 4 videowall, run through an eight-way matrix.

FINALLY . . .

Clearly the club still has some way to go, and eventually it will house its own fully-featured studio with Ambisonics. That it progressed as far as it did before D-Day says much for the tireless efforts of the production team. "Ten of us did 110-hour straight shifts before we opened," reckons Jim Baker. "People would work until they dropped, then take two or three hours sleep and then re-enter the fray."

The keystone of the operation is an intelligent music policy, which will favour innovative - even challenging - DJs and artists. No other club has been privileged to have Prodigy perform there and feature nights include events such as 'Drop The Bomb' on Friday, while an early Saturday programme included a sound shoot-out between the Megadog and GUSH systems. Plus, of course, there is a succession of top DJs from the UK and US to occupy the decks.

Meanwhile, GUSH is set to be one of the first clubs in the world to be playing live every week on the Internet, while providing free entry to its members.

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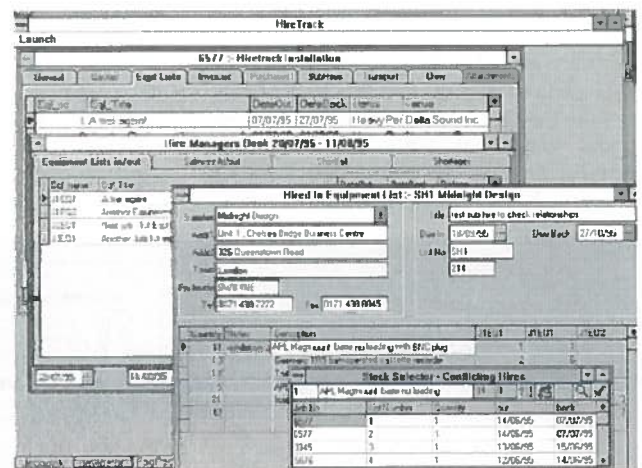
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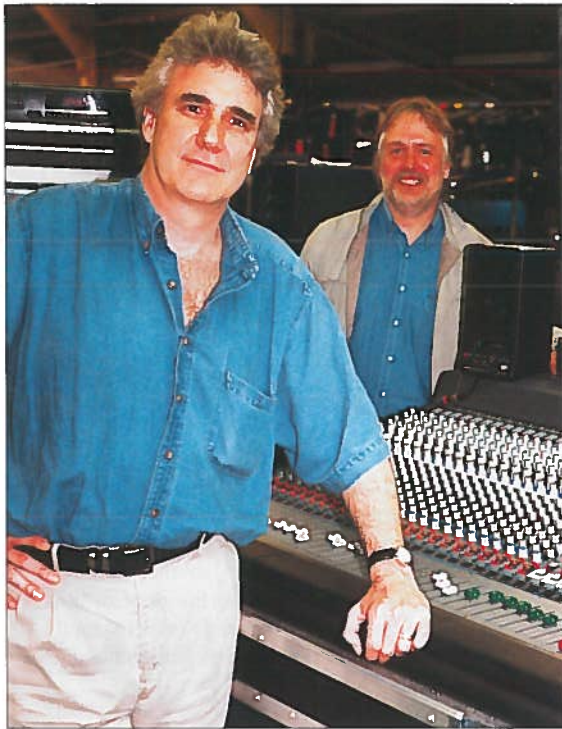
Celebrating its 21st anniversary this summer is one of the UK's most influential pro sound companies, Britannia Row Productions. Mark Cunningham talks exclusively to Bryan Grant and Mike Lowe about the company's Floydian origins and its championing of a certain brand of blue box

Pro sound rental companies come and go, but there is one industry giant which looks determined to stay around forever. Today, as the audio force behind such stadium acts as Simply Red, Peter Gabriel, Oasis, The Cure and, most crucial of all, Pink Floyd, Britannia Row Productions has earned a reputation for handling the most demanding shows with maximum ease. But such expertise does not come lightly and in its 21-year lifetime, Britannia Row has witnessed, and played a major part in, some of the greatest revolutions in concert production technology.

It was in July 1975 that 'Brit Row' began life by way of a shrewd move by Pink Floyd who over the years had accumulated a substantial arsenal of sound, lighting, projection and staging equipment which was now overseen by a formidable road crew. The band had also acquired a converted chapel in Britannia Row, a difficult to negotiate side street in Islington, north London, firstly as a storage facility for their wares, but later to provide offices and a base for their own recording studio. When the band returned from a North American tour in the summer of 1975 with no further touring plans until January 1977, they made the decision to keep their crew employed and maximise their investment in equipment by hiring it to outside parties.

The early days suffered from the kind of naivety that the Beatles displayed with their Apple venture, but by the time Bryan Grant arrived on the scene in 1979, most of the teething troubles had disappeared. By 1987, when former Emerson, Lake & Palmer road manager Mike Lowe joined, the company had long been at the top of the industry ladder with a success story that few could equal.

Unknown to me at the time, when I was one of the crowd at the Floyd's awesome Knebworth Festival performance on July 5th 1975, I was witnessing the first major show supplied to by Brit Row (dates with T-Rex and synthesiser wizard Tomita soon followed). The company was then run by the band's production manager,



Bryan Grant (left) and Mike Lowe.

Robbie Williams, Graham Fleming and Mick Kluczynski. In July 1977, after the last date of the band's 'Animals' tour of North America, half the rig remained on Long Island where Kluczynski stayed to form Britannia Row Inc, which eventually folded four years later.

Back at base, Brit Row carved its assets into two distinct areas: an audio division, managed by Williams, and a dedicated lighting rental service with Fleming in control. This all changed, however, when Grant came into the picture to rationalise the business and improve communications between departments.

A New Zealander who came to England in 1970 and ran IES with fellow Kiwi, Dave Hartstone before joining Brit Row, Grant says of the early days: "That the Floyd had their own rental company wasn't unique. The Who used to have ML Executives, the Stones had their

mobile studio and Cliff Richard had his own system. Up until about 1975, bands toured incessantly. And it was only from around the mid-1970s that the gaps in-between a major band's touring plans began to widen, so that it was eventually not uncommon for a band not to tour for two or three years, depending on the size of the act. Quite a few groups hired out their PA systems so that they could see some added return and keep their crew employed while they were off the road.

"That was when tours became organised in a much more structured way. Britannia Row was formed at the start of that new approach. However, because of the level of investment required, and running costs, very few groups now own their own PAs."

BUILDING THE BUSINESS

Grant's main task upon his entrance to the company was to devise and sell recording and touring packages to prospective clients. "We carried on like that as Britannia Row Productions until 1984 when Robbie Williams and I bought the equipment from the Floyd and set up as an independent company. It was then that we concentrated on audio. Back then, of course, everything

was housed within the same site in Islington, which ended up being a pretty crowded building!

"I started at Brit Row just as the Floyd were planning the first live shows of 'The Wall' and finishing that album, part of which was recorded at Britannia Row Studio. The rig that went out on the shows was the Altec 'Stanley Screamer' concert system, designed by Stan Miller, which we used to call the 'Flying Forest'. It had Gauss on the bottom end and there was a series of different sized constant directivity horns. It was flown from a grid with the bass stacked on the floor, and the Quad system was by Martin - a very good system for the Floyd at the time. Not many bands could have got away with lookalikes performing the first number, but the Floyd's shows were always about more than just the band members.



Above left, Pink Floyd's landmark performance of *The Wall* in Berlin, 1990 and right, their 1994 *Division Bell* tour, touching down in Lisbon.

"I've always felt that part of their success has been because they always wanted to push boundaries and give an immense production value to what they do. Their concerts are multi-media events and that tradition stretches way back to their psychedelic period with the oil slides. They are certainly largely responsible for the way concert productions have grown more sophisticated over the years."

Through its strong links with Pink Floyd, did Brit Row become an automatic choice of rental company for that particular breed of large-scale show? "Yes," says Grant, "but it was a double-edged sword because we found that a number of bands were a little hesitant about using Brit Row in those early days, believing that we could only do major shows and might not be interested in smaller, more straightforward shows. But that has never really been the case because we did then, as we continue to do, a wide variety of events."

"More than anything though, with our background, we have always been interested in doing things that are different. And essentially because we are also tourists, we like to get involved in projects in some odd parts of the world. We've supplied to shows for the President of Togo in Africa, and also in India, Ethiopia, and, of course, the 1992 Olympics in Barcelona. Because of the demanding and off-beat nature of those events, they are fascinating to get involved in and in no



Dire Straits at Blenheim Palace in 1992.

way do they frighten us."

An industry pal of Grant's since 1973, Mike Lowe initially began his career at Brit Row as a temporary measure in 1987, but never left. "Our success has definitely been based on a series of events," adds Lowe.

"I think that by doing the abnormal types of

shows, we have developed the ability to think laterally and we are constantly stretching ourselves. On the Peter Gabriel 'Secret World' tour, a very major competitor said that kind of sound design couldn't be done, but we proved them wrong. We were also into doing in-the-round shows in the 1980s with Whitney

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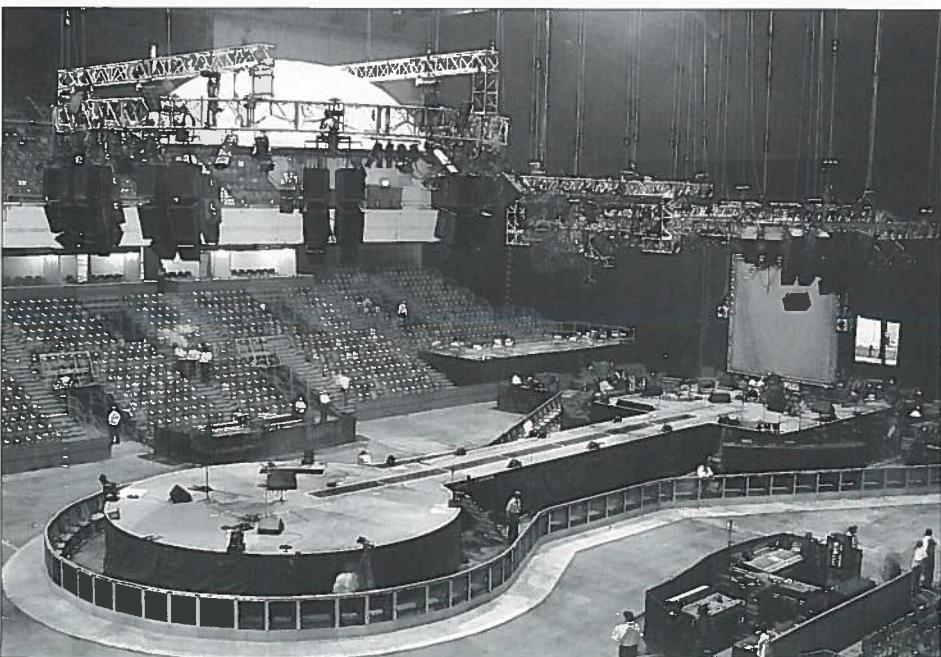
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The massive technical set-up for The Cure at Texas Stadium in 1992.



1992: Brit Row were involved with the opening ceremony for EuroDisney just outside Paris.



The main cluster for Peter Gabriel's 1993 Secret World tour.

Houston, George Benson and Anita Baker, many years before it became common-place."

HIGHS, MIDS & LOWE

It would appear that Brit Row's close association with Turbosound owes much to Lowe's past. He joined Turbosound in the early 1980s when the company had initiated its development programme for the TMS-3 system. "The guys who were there, like Tony Andrews, wanted to concentrate on design and manufacture, but they also had a fledgeling rental arm - Turbosound Rentals - which I ended up managing until 1985. By that time, there was a conflict of interest between the rental and sales arms of the company which was not making things smooth.

"Samuelsons were on the acquisition trail and they bought Theatre Projects which included TFA Electrosound, run at the time by Bill Kelsey. Bill didn't fancy the corporate style of business so he dived out and I was asked to step into his shoes. I relieved Turbosound of its conflict of interest by amalgamating Turbosound Rentals with TFA and I stayed there for a couple of years, but got fairly disenchanted with the set-up."

Prior to the Samuelsons deal, Grant and Lowe were working together on several projects where Brit Row supplied control equipment to drive Turbosound Rentals' loudspeakers. "I had also done some work with Bob Stern of North-West Sound who had the Eagles and Joni Mitchell, and we would support them in Europe," comments Lowe. "Bob had been taken over by Maryland Sound (MSI) and its head, Bob Goldstein, was looking for a similar relationship to the one that North-West had with us. Because the whole TFA/Turbosound thing went down in 1985, I introduced him to Bryan and Robbie Williams, and they did a deal whereby they took on MSI stacks and racks for a number of years, using Brit Row control systems. That was the basis of the system which went out with the Floyd world tour in 1987."

What led to Lowe joining Brit Row? "Bryan and Robbie knew that I had handed in my notice, and they asked if I would take over Robbie's job for a year while he was on the road. It was a great opportunity and within that year it became very apparent that the production manager role was made for Robbie. So I stayed on and Bryan and I bought Robbie out in 1991. Of course, Robbie has since gone from strength to strength."

FLOODING THE MARKET

The point at which Brit Row began to seriously consider Turbosound as its main source of arena and stadium systems came in September 1988, when Samuelsons was being radically restructured and the Islington boys saw an opportunity to purchase its entire TFA Turbosound stock, while also taking on many of the accompanying crew. Pink Floyd used Turbosound for its Quad system on its 1989 London Arena shows, along with the MSI at front of house. The band then adopted Turbosound's next generation, Flashlight, for the 1994 'Division Bell' tour.

"The early tours with the TMS-3 system, back in the early 1980s, were with Peter Gabriel and David Gilmour as a solo artist," explains Lowe. "We beta tested the prototype Flashlight system in 1989 and used it at Glastonbury and Roskilde,

just as we began to get production line equipment going. Roger Waters' 'The Wall In Berlin' followed and artistes such as the Pet Shop Boys and Cliff Richard went out with it in 1991. By the time Flashlight went on its first stadium tour with Dire Straits, we had pretty much disposed of our stock of TMS-3s in favour of this new Turbosound product."

These days, it is hard to think of the name Britannia Row without thinking of stadium shows and blue boxes. So how much of Brit Row's and Turbosound's current success depends on each other? "They certainly get the feedback they deserve from the product's involvement on high profile tours and it's a very happy relationship we have," adds Lowe. "We feel that together we have developed a great system. The guys who designed it, Tony Andrews and John Newsham, are now separate from Turbosound and have their own design company, Funktion One. It's definitely been a healthy two-way street, but operating a sound rental company is, to a degree, like operating a mixing console. One fader is your kit, others drive the service, technical back-up and so on. And you are constantly adjusting that mix. If at any time you neglect any of those areas for too long, it's like forgetting to push up those faders during a show. A major problem, in other words! Flashlight is a great system, probably the best around at the moment, but it is only one of many components in our service, and a rental company is a much more complex beast than just the equipment."

Five years ago, in June 1991, Britannia Row moved its enterprise out of its original, claustrophobic home and into the current



Backstage for Depeche Mode at Crystal Palace in 1993.

purpose-built premises in Wandsworth. This move coincided with the decision to fund expansion with venture capital. Lowe explains: "We had developed the Flashlight system and as we were running down our stocks of TMS-3 it became apparent very quickly that everybody wanted Flashlight. We believed we had a very good system and we needed to supply the market, but the finance required to beef up our supplies of Flashlight and keep the market happy meant that we needed substantial investment and venture capital was the only way."

Will this Turbosound connection last indefinitely? Lowe remains cautious: "Who knows? We are now looking at the next generation of equipment and have a whole new list of design parameters this year. Undoubtedly we will be talking to Turbosound, but it is fair to say that the relationship we've had has changed slightly since they became part of the Harman Group. On one hand the whole thing is wide open, but on the other there is a lot of history between us."

WINNING CONTRACTS

Like many areas of high competition sales, the pro rental industry seems to have become increasingly cut throat and Brit Row has gained a reputation for flexing its muscles when it suits. "In audio rental there is a pyramid and at the bottom are tens of thousands of small businesses running PA hire services from vans, dotted all over the world, with systems for pubs," comments Grant.

"Right up at the top of that pyramid are large companies supplying the systems for shows like Hyde Park which Clair Bros are doing and Oasis at Knebworth and Simply Red at Old Trafford, which we are doing, as well as stadium tours. When it comes to those top level tours and events, there may be two or three companies bidding for the contract and at that level everyone behaves themselves price-wise because there are so few players in the game who can deal with it, and they know the costs involved. But the more you go down that road, the more cut-throat it becomes."

"It would be very wrong for people to accuse us of being predatory, price-wise," Lowe adds.

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Above left, view from the sound control area at Knebworth in 1990, and right, the extensive set-up for the Red Square concert in 1992.

"Our competitors say this of us time and time again, and a few of them have the nerve to say it to our face. Every time that's been said about any tour, I have always invited the competitor to go back to his office, pull out his quotes and come back to my office to compare them with mine. But no one has ever taken me up on that. I cannot think of a job in recent history that we won on price. Our service does come at a premium, but our clients expect that."

In-between major tours, are there any other levels of the business that Brit Row approaches in order to keep the equipment in use? "We supply to a very broad range of levels within the industry, from small clubs upwards," says Grant. "We have to be broad-based and realise that small bands sometimes become very big. We like to feel that we don't lose sight of that fact, so

we're quite prepared to do anything really. The oldest client we have, which has stayed with Brit Row for that very reason, is The Cure. I've been handling The Cure for 16 years and we're out with them yet again this summer. It's been great to watch how their audiences have grown up with them. In the very early days you'd never see any cars in the car parks at gigs because their fans couldn't afford such luxuries. Things are different now!"

TODAY & TOMORROW

Brit Row made the announcement earlier this year that it would steer away from involvement in many of the large one-off events which had previously helped to make its name. This decision coincided with the departure of Chris Hey and Steve Spencer who, since the late

1980s, had worked on a number of the company's major productions. The pair have since formed Spencer-Hey Associates to provide a system design service for shows such as June's all-star Prince's Trust concert in Hyde Park (see main feature this issue).

Lowe explains the changes: "We decided to not commit ourselves to isolated events which would often not be profitable. When we are committed to a band doing an arena tour, and they want to do a multi-band festival in the middle of that, then it is sensible to take it on. We are doing some special events this summer with M People, Simply Red and Oasis who are among our top touring accounts and they get the service they deserve.

"But quite often, one-off festivals can interfere with supplying that level of service. So

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it is a flexible decision based on logistics and economics. It's all about being a focused business and we are now concentrating on touring accounts.

"Chris and Steve felt that they wanted to get more into production areas which weren't our core business. That's really where their hearts were and they have since formed Spencer-Hey Associates for that very reason. There's no point in this business fighting what people really want to do and they are immensely talented in that field."

Grant adds: "The amount of audio production design work that we do is as much now as it ever was; it's the non-audio aspects of production that we are steering clear of. We're working on some big projects for the autumn as well as preparing designs for 'Heathcliff' which are very complex. Right now, Chris and Steve are doing an enormous amount of work for Sony and they are handling all of the aspects including lights, transport and staging. Now, for us, that would be a lack of focus."

14 years after closing its original USA base, Brit Row opened its current operation in New York State on February 1st, 1995. Not that the company had been absent during the interim, according to Lowe. "We had been in America for years, touring with many UK accounts with up to three rigs over there, which were stored in friends' warehouses in Los Angeles or Dallas, Baltimore or New York.

"It obviously wasn't going to slow down, so we felt that we should invest in our own warehouse space. And because of the large number of acts wanting to use us for US tours at the time, we



Simply Red's stunning set for their Life tour which started out on the road last year.

also needed permanent technical back-up. Once we made that decision, we suddenly acquired an overhead, so at that point we began thinking about domestic US accounts, with acts such as Yanni, the Beastie Boys and Foo Fighters. It's gone very well. Many of the very large projects include UK accounts working in America, such as Oasis and The Cure."

Lowe insists there is no requirement for further international expansion. "America and Europe

are the key markets. With the Flashlight system we can quite comfortably tour in the Far East and Australasia because there is Flashlight available in those territories, and we have good relationships with all of those people. So we can go over with consoles and monitors, and pick up stacks and racks over there. It doesn't make too much sense at the moment to change anything. I think we have plenty to occupy ourselves with already."

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SECOND TAKE

John Watt's View from Beside the Camera

I don't know how many copies of L+SI get delivered to the Palace (the one at the end of The Mall, not Cambridge Circus), but I guess I can risk mentioning that my knighthood came close this week and then disappeared quite rapidly. Actually, if I do end up in the Scrubs for treason, I reckon I could talk my way out because I've been practising talking my way past guards at the NEC all week. As usual it started with a phone call: "Watty, it's only a little thing, but could you help out for a couple of days?" I could. "We've got Cliff Richard, David Essex et al . . ."

"Hang on," I say. "You said it was a little thing."
"Oh, I don't want you to light it - there is a proper stage bloke doing that, but could you light Princess Anne shaking hands in the foyer?"

It's work, I thought, so I agreed. Most readers can skip the next bit because they've probably been there: the location is 60ft square, nine feet high, glass doors down two sides, glass-fronted offices on the other two, suspended ceiling, open prairie-type vista outside. Camera and line-up positions vague. I can see the flares already.

On the recce, the PR lady warns to my economically-truthful suggestions that I'll pull out a few ceiling tiles and 'hide' the lamps above. I am already into that skill which lighting directors are supposed to have in much greater measure than the meteorological office at Bracknell, even with their weather model computers, i.e. just decide what the weather will be doing at 6.30pm next Monday and try not to be influenced by the fact that on the recce it was an exceptionally bright day. I settle for a couple of hundred foot candles (2000 lux) and therefore think about 14 HMI 575s will do. This is a rather big guess that could go badly wrong, as it might be 10 times brighter outside than in, and my suggestion, if this should happen, that the best way to explain why HRH had a black face against the brilliant blue sky outside would be for her to go down on one knee and sing 'Mammy' doesn't go down too well.

I was already atop the customary rickety steps (held together by sticky labels marked BS safety tested Jan 85) with only my nether regions still visible beneath the ceiling, when enter stage left the PR lady: "You know we agreed you could remove some tiles to hide your lamps?" I remember, and ask if this has changed. "Oh no, you can take them out, but the Chief Exec says they must go back before the night!"

Well, a 575 HMI doesn't make much of a show through a ceiling tile, so it was plan B -

stands, stage weights and several hundred-weight of mixed dingle. Result: lamps too low and HRH more than a bit flarey. The good news was that the evening light was about the same stop as my level inside - eat your heart out Ian McCaskill. Anyhow, bang goes the knighthood - maybe I should take up weather forecasting full time.

I guess you don't immediately think of Ringwood in Hampshire as a centre of entertainment lighting manufacture, but it is. The STLD were recently in a position to take up a long-standing invitation to this not so far-flung outpost for our business to visit two companies, both on the same industrial estate. It was good to see 30 members of the society picking nearly the hottest day of the year to venture Southwards.

"... abstinence makes me better qualified to monitor the effects of Old Thumper on the assembled company, whose lighting theories became wilder under its influence."

AJS have a number of distinct facets to their business: they distribute the New-Zealand manufactured Selecon luminaires in the UK, representing a very broad range from 650W to 2.kW and including PCs, Fresnels, profiles, followspots and even cyc lighting. Adrian Sant, AJS MD, gets a kick out of sourcing the slightly 'out of the ordinary' bits and bobs amongst the essentials of theatrical life. So whether you need a control system or colour filter, multi-tool or make-up, it will be found on their shelves.

Alongside all this operates the AJS hire company, aimed more at the theatre than TV, but the boundaries are pretty blurred nowadays, aren't they? It's a clever guy who can tell key lighting from a Fresnel and that from a modern PC. So what's the difference, I hear you say. Well, some PCs will spot down to four or five degrees, becoming a sort of high-class Par can in characteristic terms - three lights in one? You won't all agree I know, but it's a thought. They hire control systems, sound equipment (including a large range of properly-licensed radio mics), smoke machines, rostra - you name it. In their demo area, which doubled as a sauna on the day we visited (it's not usually like that), I was particularly taken with a couple of profiles cool



enough in the gate to utilise standard colour transparencies. OK - not for the big stage, but for close-range architectural or display work, a useful addition. Sadly, our party were dragged away for our next tour before curiosity turned into firm orders, though at least one visitor was seen loading a followspot into his car 'to test'.

Across the road from AJS is Doughty Engineering, run by managing director Mervyn Lister. Time was when Doughty earned a respectable living making parts for agricultural machines, and part of the business still does just that, but it's the sort of general engineering plant that can turn its hand to almost any wadget imaginable. It was this that led the aforementioned AJS to ask if they could knock up a few hook clamps some years ago. This they did, and the rest is history - a vast range of grip equipment now pours out of this plant to the four corners of the world.

Stands ranging from budget models for schools to the mighty Zenith range, which can lift loads of 150kg six metres into the air. As you know, I hardly ever criticise, particularly when I have named names, but I think they lie. That stand looks good for a ton to me - they've missed a trick not photographing Andy Trevitt, their sales manager (a nice little man who reputedly suffers from acrophobia), on top of one. For our visit, a skeletal metal man greeted us at the door to remind us how versatile all this hardware is.

We toured the factory to see the precision and care that good old-fashioned engineering brings to provide practical and safe solutions to lighting rigging problems.

Unfortunately, just when we thought we had finished loading our brains with technical information, we were made to attend a lecture at a third set of industrial premises, namely the Ringwood Brewery. There, precision of a different kind was employed in a strange process of mixing hops, barley and yeast culminating in something called Old Thumper. I've been off beer since stealing a bottle on an all night get-in at the Haymarket, Basingstoke in 1950-something, and this makes me better qualified to monitor the effects of Old Thumper on the assembled company, whose lighting theories became wilder under the influence of this harmless-looking beverage.

Freelance secrets were spilled from hitherto firmly sealed lips, and had this gone on much longer, we may well have featured in the less respectable end of the tabloid press. As it was, we repaired to a local hostelry for simple country fare and just one more glass of Old Thumper.

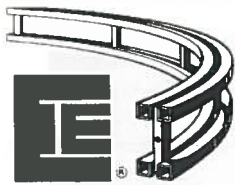
Incidentally, if you should visit Doughty, you will see Mervyn Lister's latest Porsche parked outside (you and I get a new lawn mower or a golf club in the spring, he gets a Porsche). Do not, under any circumstances, ask him 'if it goes'. Demonstrations require the victim to make a return visit to collect their stomach.



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GLANTRE



ON TOUR

by STEVE MOLES

AND PRODUCTION NEWS

The Smashing Pumpkins

Manchester Nynex Arena

LD: Andy Liddle

SD: Micky Sturgeon

The Smashing Pumpkins' music is powerful and loud, a bit like heavy metal, but a lot more sinister. Where metal draws on phantasmagorical allusions, sword and sorcery stuff, the Pumpkins' music can wallow in the realms of despair. It's like comparing the slightly camp horror of a Hammer film with the more bloody realism of, say, Friday the 13th. In essence, of course, both movie genres are appealing to the same teenage audience who want to be frightened out of their wits, excited, thrilled, and then go out for a pizza and a good snog.

The difference is that Hammer was OK for the sixties and seventies, but kids today (summoning up my best patronising old fart cliché) are a lot more sophisticated and like their schlock laid on with a trowel. So it is with music, which no doubt explains why former arena rockers like Iron Maiden and Black Sabbath are reduced to playing the Leeds Town & Country Club these days, while bands like the Pumpkins take their place.

SOUND

"Got your ear plugs?" I was warned by long-time Britannia Row sound man Micky Sturgeon. "It's about 115dB most of the time and at least 110dB constant." Well, that's consistent with their predecessors, I thought, and is essentially the goal that's been set for front-of-house engineer Bruce Knight. Fresh from touring with Faith No More (dare I say it, a wittier version of the Pumpkins) Bruce has a sizeable array of Flashlight cabinets to cover what is a half-hall version of the Nynex Arena, with both upper bleachers and one end of the room curtained off. With the nose-bleeds gone, the eight-wide, three-deep wrap each side was flown a little lower than would be the norm for this hall. Coupled with the foreshortened throw distance, this makes the teeth-rattling level easily achievable throughout the seated area and most of the floor. There are 20 subs per side, on both floor and stage, and for the 3,000 or so manic crowd surfers packed at the front of stage, there's a row of near down-fills neatly rigged beneath the main PA to ensure they get their full helping.

The PA is not Bruce's system of choice but he is more than happy with the way it projects (even the Michael Schumachers of this world have to drive second cars occasionally): "The boxes really throw," he says, and he's also very flattering about the service he receives from Brit Row - "rockin" was just one adjective used. Some problems were encountered at smaller venues in Germany as one or two places had no flying facilities and the PA had to be floor stacked: "Five high is not an option without a forklift and at four high I was hardly getting over the audiences' head."

But then five high on a sprung dance floor with this type of audience is not a safe option as Micky Sturgeon pointed out. Besides, such venues are



The Smashing Pumpkins - akin to heavy metal, but much more sinister.

not really the environment this system was designed for and any PA is going to present problems if floor stacking is the only option.

For a band like this, there's a lot of hardware out front. Besides the Gamble EX56 there's a Midas XL3 16 channel stretch and a small car park of racks. There are 43 inputs from the stage plus 17 channels of effects, consisting of all the usual suspects: Lexicon 480L, Eventide H3000SE, TC Electronics 2290 etc, and a Behringer UltraBass. In fact, Bruce's set-up looks like an advert for Behringer with 12 channels of the MBX2100 inserted and 14 Intelligates: "All very sturdily constructed and cost effective," he added, "with reasonable quality VCAs. The compressors are clean, no hiss, and the gates are quiet and don't flutter."

Add an Ultrafex II, an Exciter and a PEQ2000 parametric all from Behringer and there's a hefty investment by Brit Row. A 16-track mix is recorded to ADAT on two Fostex machines, chosen for their in-built editing facility (although apparently this is not used). The mix is big and confrontational - 20 channels from the drums thunder round the room with a fat guitar sound trowelled on top. Lead vocalist Billy's voice is strained, screaming into his Shure B58 for the first five numbers, then sounding raw and less coherent for the rest of the evening when the quieter numbers surface. There is that jet engine whistle around 6.3kHz for several songs, but thankfully it's not persistent. Despite what seemed a consistent pressure level for the one hour I listened, it wasn't a whistle that accompanied me home.

LIGHTING

Lighting on this tour has been, to say the least, a little fraught. What started off as a show with plenty of pre-programmed looks, but a completely unstructured delivery ("We want you to feel your way through the songs each night, be kinetic," to paraphrase the band's instructions), faltered just a few shows out from rehearsals. So, at very short notice, Andy Liddle, who in fact had been brought in just to programme the moving lights for the show, was suddenly promoted to LD for the tour. Taking over a show that the client was already uncomfortable with put Andy Liddle in a very

awkward position. He chose to leave the essential nature of the rig (supplied by Neg Earth) unchanged, despite being offered one day in a venue to re-design and build.

The more difficult challenge was to construct a new show. With back to backs like Paris to Birmingham and Glasgow to Dublin, programming time was at a premium and he'd only just completed training on the Avolites Diamond II prior to the tour. Retaining the basic structure and lamp hang of the rig proved a wise

decision and Andy was well supported by his crew who give him as much desk time as possible (crew chief Ian Cameron has even promised him a pair of white gloves for the last show), but the job has become a poisoned chalice.

Despite open admissions that "Andy has restored the confidence of the band, understands their music, and has done a great job," from members of the production team, he apparently isn't 'a big enough name' to take over the tour when it moves to the US in June. That's production's prerogative, but the old adage about a bird in the hand holds true. Notwithstanding Andy's own protestations about the lack of polish in his lighting (programming on the hoof as it were), this is an accomplished show. The band are of the shrinking violet, falsely modest school of thought (perhaps underlining why lighting has become the itch they cannot scratch?). They insist on dim stage lighting, no open white and no followspots.

Thus 20 Cyberlights, 120 Pars, eight Death Stars and a couple of mirror balls are used in somewhat unusual ways. Andy will, for example, put very narrow beams from the Cybers across the stage above the heads of the band and light the musicians with only 4kW of amber from perhaps just one side. This is enhanced by some striking abstract video projection on the rear cyc for the great majority of songs.

Two Barco 8100s (from PSL) run a series of surreal, overlaid and frequently morph'ed images. The inter-play between imagery and lighting, particularly in choices of colour combinations and lighting target areas, is what gives the show such a distinctive look and Andy gratefully acknowledges the support of Richard Shipman, the PSL projectionist. When video is absent, Andy at least has ground rows to light the cyc and put reflected light behind the band. In fact, this is the key to his achievement, with the band's dislike of being conventionally lit he uses any and every surface available to light them indirectly.

Nihilism is the flavour of the show: the strong visual images from video and particularly some of the harsh colour combinations chosen by Andy complement the music well. It's not Friday the 13th, but it could be Damien Hirst.

Judith Durham

York Barbican

LD: Chris Lambourn

SD: Eddie Richardson

Last year, the Seekers surprised everybody by coming to England and playing half a dozen of the country's finest arenas. Not the kind of band to break any records for ticket sales, they nevertheless made a creditable showing which, in part, explains the six-week excursion undertaken this year by their erstwhile lead singer Judith Durham. A further reason is the lasting appeal of the quintessentially poppy tunes written for them by Tom Springfield, Dusty's brother. Songs like 'World of Our Own' brim with happiness and are free of the rancour and cynicism of modern living. If Judith Durham were to omit them from her set, on the premise that this is a solo tour, then she would lose her franchise all too rapidly. The song's sentiments may be naive, but they are also quite refreshing. Even an arch cynic like Eddie Richardson, Judith's front-of-house engineer (and I can say this with authority because he is a good and lasting friend) was to be seen tapping his size 10 boot to just about every jaunty number.

SOUND

This tour is not a re-run of last year's outing. Judith is playing the 1,000-2,000 seaters in the UK, and the production is modest to say the least. Eddie Richardson has a very presentable EAW system from John Henry's. The desk is an ageing 40-channel Yamaha PM3000c, which, as Eddie explains: "lacks for nothing in terms of what is needed for the show, but at some point in it's life it's been dropped . . ." a dent in the chassis bears witness to this, " . . . and it exhibits a few quirks." Channel 39 was, in fact, inoperable, but not an issue as Eddie still had three spare channels. However, mid-way through the show, distortion began to creep in out of nowhere which was cured by a sharp blow to the cushion bar at the front of the board.

The biggest problem for Eddie is Judith's voice: bell-like and charming it may be, but it's not the most powerful instrument in the world. Coupled with the decidedly geriatric nature of her audience and the concomitant need to keep level way down, this creates conflict already. The band, a five-piece of drums, bass, guitar and two keyboards are, by necessity, kept back in the mix, and complaints come all too readily if it gets too rocky, leading to a curious dislocation between her vocals and the band, especially the drums. It's a frustrating dilemma; amplifying her voice is essential, but if you then bring the band up to meet it in the mix, you're hurting her audience.

Eddie has two weapons to aid him, the first being an AKG 5900: "The three caps in a triangular arrangement capture her voice well," he explains, "even when she sings off mic - and it effectively excludes all the backwash." His second resource is a pair of BSS901 dynamic equalisers: "I can hit exact frequencies in her voice." The PA consists of a pair of subs and six KF850s each side (driven by C Audio amps), most of which is flown to keep it away from the tender ears in the front row seats. At such relatively low levels the PA works well being just a little lazy around the low mid, although that may be purely a reaction to the absence of punch which, in all honesty, can't be there.



Judith Durham, erstwhile lead singer of the Seekers, at the York Barbican.

Judith Durham was apparently on form, her voice clear and true with some real power around the 800 to 1kHz mark, but she appeared to sing from the chest rather than the stomach and consequently didn't have the strength to sustain a note for long. That said, she did bravely sing the first verse of Amazing Grace unaccompanied, note-perfect, but a little breathless. Monitors were, like the PA, a modest affair: Aiden Gregory had John Henry's own design wedges (did I see a couple of bullets in there?) and a pair of KF300s for side fills, run from a Soundcraft 24-channel Delta.

With drums hidden behind a cymbal high perspex screen and both keyboard set-ups also screened by waist-high black boards, there wasn't a lot to contend with, perhaps the occasional sibilance in her voice, but nothing serious.

LIGHTING

Chris Lambourn got the lighting designer's job courtesy of a Shirley Bassey tour he took to Australia a few years ago. Judith saw the show, made a point of seeking (no pun intended) him out and as a result, he lit last year the Seekers tour. Judith takes a keen interest in lighting, at least from the conceptual angle. For this tour she showed Chris a video of a recent Joe Cocker show: "Unfortunately," said Chris, "the budget didn't run to 80 Vari*Lites." But he has got six Clay Paky Super Scans, 116 Pars and five 1kW Robert Juliat zoom profiles for key light on the band members, all courtesy of Neg Earth Lighting. The rig, also from Neg Earth, is a simple two truss configuration, no nonsense, with the greater bulk of the lighting on the rear truss.

The Super Scans are, like Eddie's desk, getting a bit worn: "Despite their age, they are still effective. There's a couple of moody numbers

where I can use the cone gobo and they make for a good re-focusable profile lamp." Chris is using an Avolites Sapphire for control, a desk he trained on last year and hasn't used since. He uses a fair bit of beam work - there's even two sets of aero's in there, so smoke was a necessity. Because Judith is asthmatic he elected to use an LSD Cracked Oil machine, running before the show and during the intermission, but not while she is on stage.

Being sensitive to such things, Chris went to the trouble of getting the technical information on the oil and faxed it to Judith, who then presented it to her personal physician for approval. The biggest problem Chris faces is sustaining the smoke in modern venues, where all the heating and air-conditioning functions are automated on computer control. He feels that many venues don't seem to know how to override these systems and, of course, the effect of the smoke is lost. Fortunately, this is not the case at the York Barbican where the staff and stage crew all know their business and like to say yes. It's a moot point, but with atmospheric effects not the sole preserve of the concert industry, this is a problem that needs solving. Chris uses a standard five colour wash and has a small cyclorama for contrast and depth. He lights the cloth from behind which appears to deepen the colours. The ubiquitous 105, a popular yellow, was transformed to a deep sulphurous shade and looked wonderful.

This was a workman-like show with little room for lighting pyrotechnics, but Chris did find room for some movement cues and they didn't look at all out of place - a bit Joe Cocker-ish really. Judith's performance was a little flighty to start, her between-song banter was very rushed for the first few numbers, but she settled down. Although she's from the same generation, Cher she isn't, but at least she wears her own hair.

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ON A SHOESTRING

The Octagon's resident lighting designer Fiona Lewry describes the 'joys' of lighting a production on a tight budget

Every year the Linbury Trust give an award for stage design, and this year the winner was Es Devlin for her design of Christopher Marlowe's *Edward the Second* at the Octagon Theatre in Bolton. The design turned the Octagon into a huge, dilapidated, tiled bath-house, and as chief electrician/lighting designer, it was my job to light it.

I would like to be writing this article about the minor problems I had programming the VL5s, and how the half a dozen Digital Light Curtains made a big difference, but sadly the only thing digital in the LX department at the Octagon is my stop-watch! The Octagon opened nearly 30 years ago, and much of the lantern stock dates from that time.

As with most classics staged at the Octagon, *Edward the Second* was an innovative, modern dress production, and the lack of money in the production budget didn't stop the directors asking for things which my £200 (double my normal!) wouldn't stretch to. The nightclub scene (those of you who have worked on productions of *Edward the Second* may not remember this one), demanded moving lights. So instead of VL5s, I used five community extras wielding pinspots to followspot the actors. We backlit them with a gobo rotator (borrowed from the Library Theatre) fitted with one of DHA's psychedelic gobos. And the cost of this psychedelic movement - £12 for the gobos.

The stage was cut through with a semi-circular floor-forge covered trench. The designer wanted a strip of neon running through the trench for one particular scene, and also specified that when the neon wasn't on, it should look like there was water in it - in keeping with the bath-house theme.

Fortunately, Sainsbury's was doing a special offer on turkey foil in the run-up to production week, so I brought in six rolls with which to foil the bottom of the trench, borrowed dozens of linolite fittings from Alex McBride at West Yorkshire Playhouse, Simon Mills at Contact Theatre and Jeremy Newman-Roberts at Nottingham Playhouse, found someone to supply lamps at a pound a piece, and sat up till half past three one morning wiring them in and gelling the underside of the trench with industrial quantities of ND210. At 3.30am, Es commented that our invention had produced the required effect and that it *did* look like there was water in the trench - but that may have had something to do with the glass of wine in her hand! Total cost for the lamps, foil and gel (and farewell budget): £150.02.

In common with all designs, the set model was presented to me with strategically placed clip-on spot lights which created great lighting effects through the windows suspended from the grid. After some quick calculations, I worked out that to achieve the same effect using a lantern, I would have to rig something approximately a metre above the height of the

theatre roof. The obvious answer was to backlight the windows and use custom-designed gobos to create the window shapes on the floor. My diminished budget meant that DHA weren't going to get in on the act on this occasion. As a compromise, I cut my own gobos out of lithoplate. If you're lucky a friendly printer will supply the plates for nothing, but



Edward the Second on a shoestring at the Octagon Theatre.

cutting it is a slow and laborious process, so the only cost, apart from time, was the plasters needed for the blisters on my fingers.

I also cut a KK wheel out of litho to create a rippling water effect, and used a couple of psychedelic flower gobos I had designed and cut for a show about five years ago for a party scene. (Top tip for cutting litho - borrow a cutting mat from the design department and take it very slowly). A further element of the design called for industrial-style lighting. In an earlier production of *The Accrington Pals*, the Battle of the Somme had been achieved by a curious flown structure fitted with eight aeros which tilted up to blind the audience as the boys 'went over the top', so I fitted these into Par cans. With only 64 dimmers, having eight lanterns on one circuit is a real joy!

One of the bonuses of the set design was its very pale colour. I used this to optimum effect by only having about a dozen or so pieces of gel covering a very limited spectrum in the entire rig. Cheap and appropriate, one might say. This naturally included a 243 backlight with an intense blue in it, although I rejected my usual Lee 119 in favour of (living dangerously!) HT120, as it matched the colour of the Queen's frock. Total colour cost for two sheets of HT120 and two of HT118 was £20.01.

Running a department of only two technicians is understandably limiting. If there is a large sound rig to be installed during production week, only one person is free to do all the focusing, plotting, running-in of onstage LX and practicals. My hard-working assistant, Paul Bunn, was too busy fitting mics borrowed from Brent Lees at the Dukes in Lancaster and John Owen at Contact Theatre into the white baby grand piano to help, so the lanterns which the HT118 were intended for were never run in.

Doing things on the cheap inevitably leads to certain effects being sacrificed due to lack of time and people. Dark time between the plotting session and the first night? That's a novel idea. Having worked at the Octagon for over five years, I now find I'm quite adept at focusing with the working lights on. Not an ideal situation, but I have always felt that putting the carpenters into darkness when there isn't actually a completed set to focus on is a little pointless.

In an ideal world, I wouldn't have to spend time borrowing equipment from other theatres; I would have the necessary budget to cover the purchase or hire of the neon for the trench and my hands wouldn't have to pay the price of hours of cutting gobos.

At the same time, however, the reciprocal borrowing and lending arrangements with various theatres throughout the North is the most valuable asset I have. Every summer, the Tempus racks in the Bill Naughton Theatre (the black box attached to the Octagon) and all my Par cans go off to Lancaster for the park season, and my 252 is rarely in the Octagon unless I am using it for a production.

With a little imagination, vast amounts can be achieved with little money. I put a glass moon gobo - a legacy of an earlier production - into a Sil 10 which was used to followspot Gaveston's song, and later to work as a helicopter search light during the hunt for him. My doing this may have had something to do with the director's obsession with the moon, but (to throw in a touch of pretentiousness) it also helped to show that everything - even nature - was conspiring against him. Pretentiousness over!

Every year, the lantern stock at the Octagon is completely stripped down and maintained during the theatre's dark period. So whilst the gear might be old, it does work to the best of its ability. I may have a ridiculous number of Patten 23s, but at least they do everything a Patten 23 should, and with a bit of light frost in the front and an iris, they are great for specials.

There is hope on the horizon, however. A recent award from the National Lottery to the Octagon means that we should be able to start turning the LX department into something that is ready to greet the 21st Century. No doubt we shall still be cutting gobos; until designers only design windows into their sets which can be found in a gobo catalogue, there will always be a need for the hand-carved variety (unless production budgets suddenly escalate). And I won't be getting rid of the Patten 23s, the 750s or the 252s.

Cheap lighting is not necessarily bad lighting. Numerous articles have been written by boys talking about their toys, but more digital, colour-changing, coffee-making special effects do not immediately stamp quality on a lighting design. A lot can be achieved with a little imagination and lithoplate.

PLASA ASSOCIATION NEWS

continued from page 30

April 1995 also saw PLASA join the information superhighway when its World Wide Web site went on-line. All PLASA members are referenced on the Web and visits now average over 2000 a week. The evolution of this site, as a source of immediate data on and for members, is regarded as an essential part of the future development of PLASA.

The issue of standards is of great relevance to the entertainment technology industry and PLASA, in recognition of this fact, appointed a full-time Standards Officer in June 1995. Access to new or changing regulations and standards is vitally important and PLASA is committed to providing timely information to members through a monthly newsletter, together with details on the WWW. The close working relationship PLASA already had with other trade associations was formalised in September 1995 when it joined forces with VPLT (Germany) and ESTA (USA) to form the World Entertainment Technology Federation (WETF). WETF is working on technical standards, trading methods, training and education, and the enhancement of prospects for industry growth internationally.

Four new membership schemes were initiated in 1995, each addressing an area of concern for PLASA members: **Credit Circle:** A resource to enable members to avoid trading with companies who have defaulted on payment. **Status Reporting Service:** Business reports on an as-needed basis. **Legal Advice Service:** Free preliminary advice from PLASA's solicitor who specialises in the entertainment industry. **Industry Insurance Scheme:** An industry specific insurance scheme with a specialist broker.

PLASA has continued to play an active role in other areas of the industry with representation on 20 British Standard Institute (BSI) committees and with its chief executive, John Offord, chairing the informal Entertainment Industry Forum which is dedicated to the task of advancing the lighting and sound industry. Sponsorship of industry events is considerable and includes Lighting+Sound International, providing administrative support for Showlight '97, a colloquium aimed at lighting for the performing arts. PLASA also provides advice on industry training and organises or sponsors technical or business seminars. It supports the



Bridget Beaurepaire (P&O Events), Barry Howse (PLASA), Bryan Raven (White Light), Nikki Scott (Stage Technologies), with Nicola Rowland and Stephanie Clare (P&O Events).



David Catterall (ETC Europe), Peter Brooks (Zero 88) and Peter Hind (Total Fabrications).

export activities of its members and, through joint ventures with the DTI, has organised funding for British representation at overseas events.

The highlight of the year for the lighting and sound industry is the PLASA Show. Held in September 1995 at Earls Court 2, London, the PLASA Show was a milestone in the history of the association with over 14,500 visitors, 264 stands and 300+ new product launches. Success creates success and the achievements of 1995 have led to the biggest move yet for the show. The venue for 1996 is Earls Court 1 (see main news, page 6), the largest exhibition centre in London, offering increased floor space, improved access and areas for specialist markets such as recording and sound installation.

PLASA is well positioned for growth and, as always, the heart of the association is its members. The blueprint for PLASA in 1996 is to continue on a path of development and throughout forthcoming issues of L+S, we will document the work of PLASA and other industry associations.



PLASA's Pam Revington (left) and Norah Phillips (right) with Sandy Grant (second left) and Jim Maycock of the Altai Group.



PLASA committee member Peter Walker (NSR) with Tim Brown (Apple Sound).



PLASA Standards Officer Tony Douglas-Beveridge with Leon Pieters (Ampetronic).



PLASA committee member Ian Potter (Leamington Sight & Sound) with Mike Earnshaw (Technotronics) and Scott Calkin (Mad Lighting).



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TWENTY, NOT OUT

Lee Baldock travelled to Dial's Bradford showroom, on the occasion of the company's 20th Anniversary

I first met Andy Blackwell of Dial Sound and Lighting just a few weeks ago, on an aeroplane. Conversations being the unpredictable creatures that they are, it emerged on that flight that the Post Office in Wilsden, West Yorkshire, where Andy's mother was born during the 1920s, is the same Post Office that my girlfriend lived in with her family during the 1970s. What's more, our very own Ruth Rossington grew up in the same village. Small world, eh?

So, as you can probably imagine, things felt very familiar when I recently visited Andy Blackwell at his offices in Bradford. A great deal has happened since L+SI last visited Dial Sound & Lighting. That visit took place in the Spring of 1987, when John Offord talked to Andy Blackwell at the company's showroom on Bradford's Euroway industrial estate. In the troubled economic times since that interview, the magazine has documented various comings and goings within the industry, but Andy Blackwell and Dial have, for the most part, remained noticeably constant.

Some things have changed, of course. The April 1987 issue of L+SI which carried the feature on Dial also carried articles on two nightclub installations that the company had been involved in - Leisure World at Bridlington and the Frontier Club at Batley. At the time, the company was undertaking installation work all around the country, from Blackpool to Bridlington and from Bognor to Inverness. Now, however, Dial no longer takes a direct part in installation work. Consultancy and support is now the order of the day, but work still arises far and wide, via the many design companies with which Dial collaborates in the Yorkshire area.

Andy explains the change: "We've done everything at one time or another, including retail. We first moved into installations in around 1979, doing work for breweries such as Tetley, John Smith and Bass. We also did a lot of work for Ladbrokes, but it became clear to



Andy Blackwell at his office in Bradford - hub of the Dial operation.

me quite early on that it would be more profitable supplying equipment to trade, and that was the way I wanted to take the business. We concentrated on supplying to electrical installers, and now our involvement with installation is on the commissioning, trouble-shooting and maintenance side."

While the general Dial strategy may have passed through various phases of development, the underlying theme has always been survival. The company's growth has been carefully and shrewdly controlled, with an awareness of the dangers of overstretching.

One of the main strengths of the company has always been the strict cash and carry policy. It is to Andy's credit that he has always resisted the option of accepting business on a pay-later basis. As he explains: "We've certainly lost a lot of business because of it, but it means that we're still here today."

Andy came into the industry through a

perhaps unusual route. He was the manager of a small band for a time in the sixties (because he was the only person they knew with a telephone in his house), before training as a photographer, which gave him an understanding of, and affinity with, light: "Photography is very relevant in a way - you deal with light, and how it allows you to see things," says Andy, and continues in a self-mocking tone: "It's got nothing to do with sound, of course."

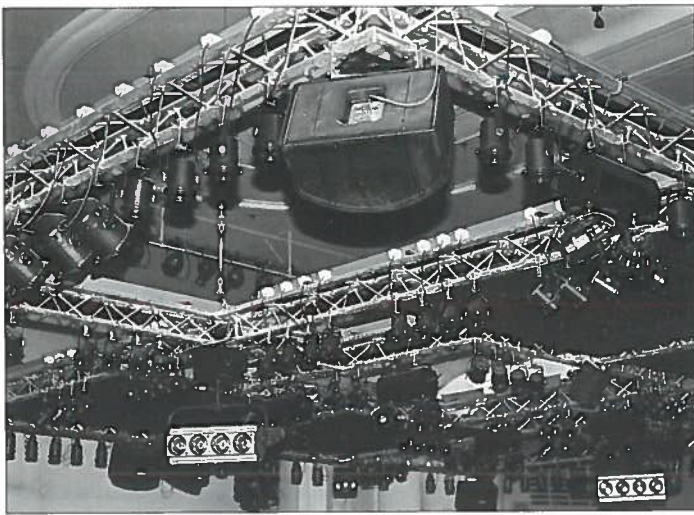
During a spell as a car salesman, Andy took a Saturday off to go rally-driving (one of his great loves) and was subsequently fired. As he remarks, this was probably the best thing that could have happened to him. Some time later, he started up Dial, which was known at first as Shipley Dial; Shipley was the name of the town where the company was based and 'Dial' was to convey the idea that a simple telephone call was all that was required in order to get hold of anything to do with sound and lighting equipment.

In between getting fired and starting Dial, Andy had been involved in a short-lived entertainment business partnership, the collapse of which left him wiser, but inevitably poorer. Andy's wife Kris joined him in Dial, and it took 12 years for the couple to work steadily back from less than zero to a position where they and the company were comfortable. It was a hard time for all, as Andy illustrated with a typically humorous reference to a phenomenon which happened too soon for the company: "Do you remember the disco boom in the seventies? Well, we missed it!"

From the time that Dial was 'over the hump', Andy has concentrated on ploughing profits back into the company, through training, refurbishment of the showroom and investment in stock, which he sees as an essential part of any dealer's business. He has built a solid and comprehensive dealership over the years, carefully picking and choosing the



One of the landmark installations for Dial was the Frontier Club in Batley (left), which re-opened in 1987. The company has also provided the technical know-how for some of the major UK breweries and one such project was the The Royal Oak in Leicester (right).



Further Dial projects have seen equipment supplied to Bridlington's Leisure World (left) and The Chained Bull in Leeds (right).

companies that he wanted to deal with. His longest and most mutually beneficial relationship is with Pulsar, which, of course, includes the Clay Paky range. In total, there are 39 major manufacturers of both lighting and sound equipment represented by Dial, including Citronic, Panasonic, Technics, Optikinetics, Bose, JBL, ElectroVoice, Denon, RCF, Peavey, Le Maitre, Griven, Jem, Rosco, Abstract and Adda, to name a few.

Much of the work that comes Dial's way is from endorsements from the companies he represents. This applies particularly to his longer term dealerships, such as those with Bose and Pulsar. Although he is reluctant to pick out any one company above another, he also has a great deal of respect for Denon, whom he considers to be particularly professional and supportive.

The commitment to professionalism is being further strengthened with the ongoing work towards BS EN ISO 9000 accreditation, which the company hopes to achieve in the latter part of this year. The value of this to Dial and to other companies in the industry is very clear to Andy: "It's an expensive process, and we know that we already operate to a very professional

"We've got to become professional and be paid for our professionalism . . . to undervalue a product undervalues our industry."

standard, but for the future it is very important that we are recognised as being ISO 9000 accredited."

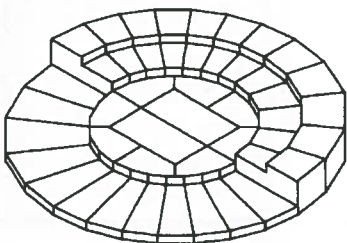
In the intervening years between that first interview with John Offord and the Dial of the mid-nineties, the company has clung tight to the main tenets first raised by Andy in 1987: "We are still a very new industry, and yet there are cowboys out there - and discount merchants - and they are not the answer to it. We've got to become professional and be paid for our professionalism . . . to undervalue a product undervalues our industry."

These beliefs are still held by Andy today, and whilst in many respects, he finds encouragement in the forward progress made by the industry, he continues to feel frustrated by certain practices and disappointed by the late-payers that have such a negative effect on the industry as a whole, as well as by those that

continue to accept it as a way of doing business. Being the kind of man who will pay a bill just as promptly as he will send out an invoice, he is proud of the conscientiousness and professionalism that have always been central to Dial's business philosophy. "The industry would be a lot better off if it was paid for what it does," he adds. There is no sense of bitterness in this - Andy's approach to business means that he is paid for what he does - just a feeling that the industry as a whole is being continually undermined, and is suffering as a result. When asked if the relative youth of the industry is still responsible, he says: "It's not so young any more. I think that although the industry has grown older, it just hasn't grown up."

Today, still in the Euroway showroom and offices, Andy continues to run the company with his wife Kris, and two other staff members, their son, Mark Blackwell, and Simon Bolton. The company is now enjoying its most successful period, and the four staff are kept extremely busy. But typically, Andy has no definite plans for expansion, and why should he? It is perhaps his priceless ability to appreciate when he is well-off that has made the company the well-balanced and successful 20-year old that it is today.

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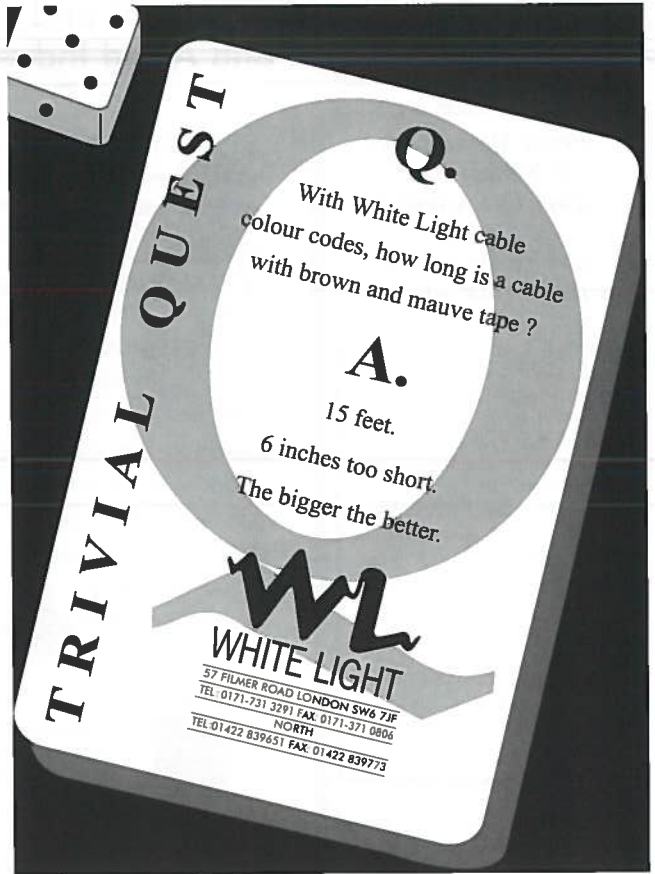
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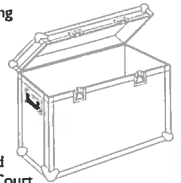
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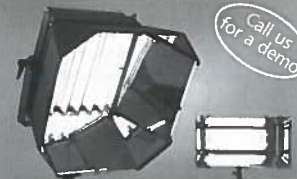
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Steve Moles talks to Sound Engineer John Lemon

Adelaide was a quiet, almost sleepy city in 1958 when John Lemon happened upon the world. He had a charming early childhood, surrounded by hundreds of children and an older sister: "My Dad was a chartered accountant and the administrator of the largest facility for mentally retarded children in Australia. There was a big home and a couple of farms so life was always busy, raising funds, working on events."

It was a seven-day-week life-style, which was to prove useful preparation for his future life on the road. At the age 11 he went to Westminster College: "A dodgy public school in Adelaide. I had a fairly strange relationship with school." This is something of an understatement when one learns that it was at this age John started to go blind. "I knew something was wrong, but it wasn't until I was 16 that I was finally diagnosed." Incorrectly as it happens, the ophthalmologist, summoning up all the subtlety that has made Australia famous, casually told John, "Of course, this means you'll be totally blind by the time you're 21."

It was not until John was 30 years of age that he finally reached the leading eye specialist in his disease, Professor Eric Bird in London, and received the correct diagnosis. He has Star Guard disease, a variant of Retinosa Pigmentosa. The names are meaningless, but the effect is akin to putting the flat of your hands in front of your face and only being able to see things at the very periphery of your visual field. But we're racing ahead.

While still at school, John did a number of things that were to influence his eventual decision to become a full-time sound engineer: he took an extra mural course in electronics at a local technical college, building primitive amplifiers and the like and he also helped his older sister run her weekly discos at the YMCA. At the age of 14 he started to do some occasional work at weekends with Trevmar Sound, an Adelaide PA company run by Trevor Marshall who gained some notoriety as the designer of the filters for Moog Synthesizers. By the time he left school, he was all set to go on and study law, but it wasn't to be: "I hung out at the University bar and ended up travelling around with local bands. I remember my first mixing desk, Big Bertha, an eight channel affair

with simple bass and treble controls. The amplifiers were built in and the inputs were all Din plugs!

"When I finally got my hands on a WEM Audio master sometime later, a desk we all dreamed of, I found it was much the same thing with just much better silk-screen printing."

In 1977, after a year of bumming around, he moved back to Adelaide, thinking that perhaps he should pursue that law degree after all. Again, it clearly wasn't part of his destiny. The day he returned he met up with Rum Jungle, a relatively successful band on the Aussie music scene, who later fragmented into the Sports and several other groups. They knew John and his

"A man who is quietly going blind will, by necessity, hone his other senses, hence the powerful memory and the acute ear."

capabilities - he'd fixed their blown PA at some dodgy out of town gig a year earlier - and asked him to mix their sound. He also met Jane, the drummer's sister, who he later married and the couple have now been together for almost 20 years. One thing led to another: he moved to Melbourne and worked for Nova Sound, Australia's second-largest PA rental house at the time, and then on to Sydney two years later to work for Jands.

Both companies gave him varied work on national and international acts, and for the first time in his life an income that meant more than just getting by. Throughout this time his eye condition was deteriorating and his driving licence was taken away, but he still managed to do his job, loading trucks and all the other things expected of a crew member. He also began to develop a prodigious memory - so much so, that by the time he had been at Jands a year they offered him a management role.

This might all be unremarkable were it not for the fact that John had told no-one in the



John Lemon with wife Jane.

business of his condition and that by this time he had already passed the 21-year deadline set by the doctor back in Adelaide. His big leap of faith came in '84 when, following an Australian Tour by John Williams' Sky, they asked him to mix for their European Tour. "Jane was on holiday in Bali when the call came. I

couldn't contact her and she returned home just the day before I was due to leave. We agreed in 24 hours to move to the UK lock, stock and barrel. Jane followed me over about four weeks later, having tidied up our affairs."

It was a bold move. He had no pedigree in the UK to pull in work after the Sky tour ended and within months of arriving decided that it was time for a little honesty about his condition. "Production people were uncomfortable with the idea of me on tour, but the musicians had a completely different outlook."

In a very telling observation, many musicians recognised that a man who is quietly going blind will, by necessity, hone his other senses, hence the powerful memory and the acute ear. It's a persuasive argument borne out by a successful career ever since. He is currently in remission - that is, his sight hasn't deteriorated further for some time now, though if you're in any doubt, Professor Bird has classified John as clinically blind.

How long he has before the lights finally wink out is anyone's guess - perhaps never. Whatever happens, John delights in his work and, in a self-evident truth, doesn't regard his condition as a barrier to doing his job well. A sought-after engineer, he now divides his time between his new home in Ireland with Jane and working on the road.

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		FPF	24	Navigator Systems	53	Slick Systems	30		



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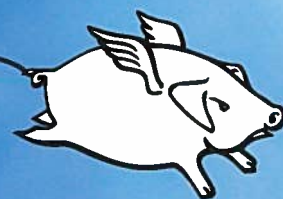
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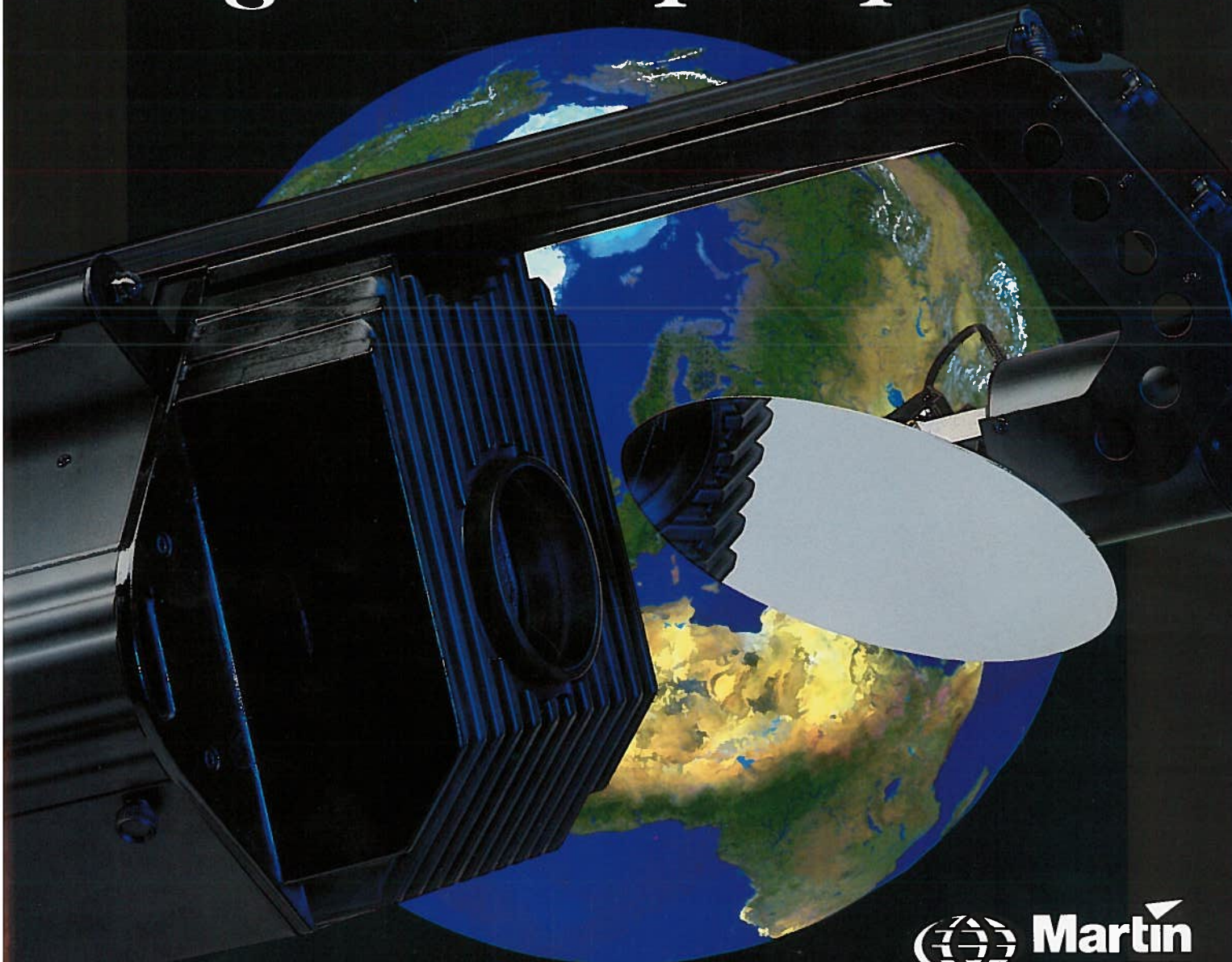
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