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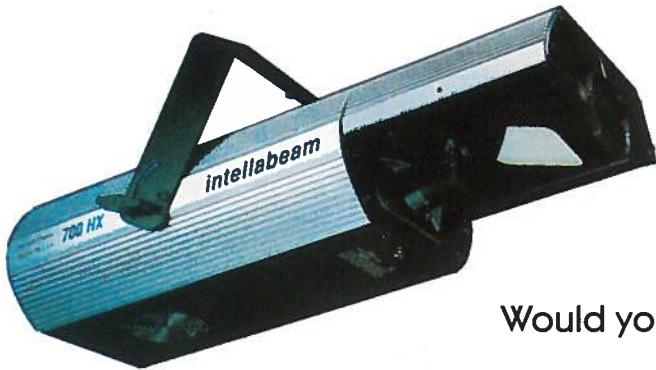
PHOTO: STUART COLWILL

- Production Arts: John Offord visits new base at Moonachie New Jersey
- Part Two of L+S's major review of automated lighting and control
- On Tour with Duran Duran and the Brit Awards
- The latest Paris Collection from SIEL
- Company profile: Antrepo - a unique French initiative
- Sound 94 at Sandown Park reviewed

MARCH 1994

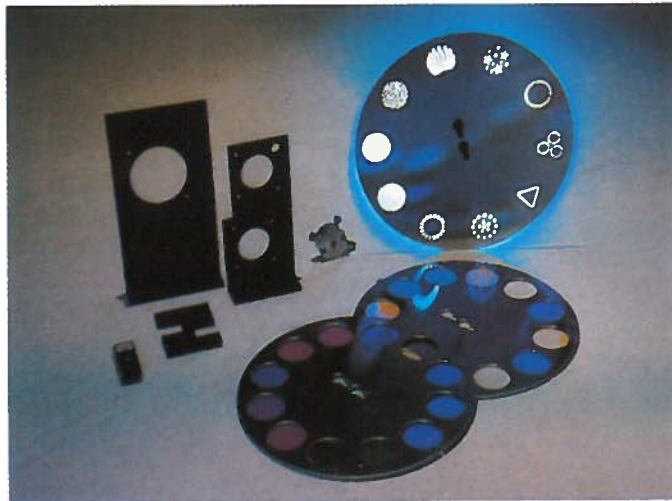
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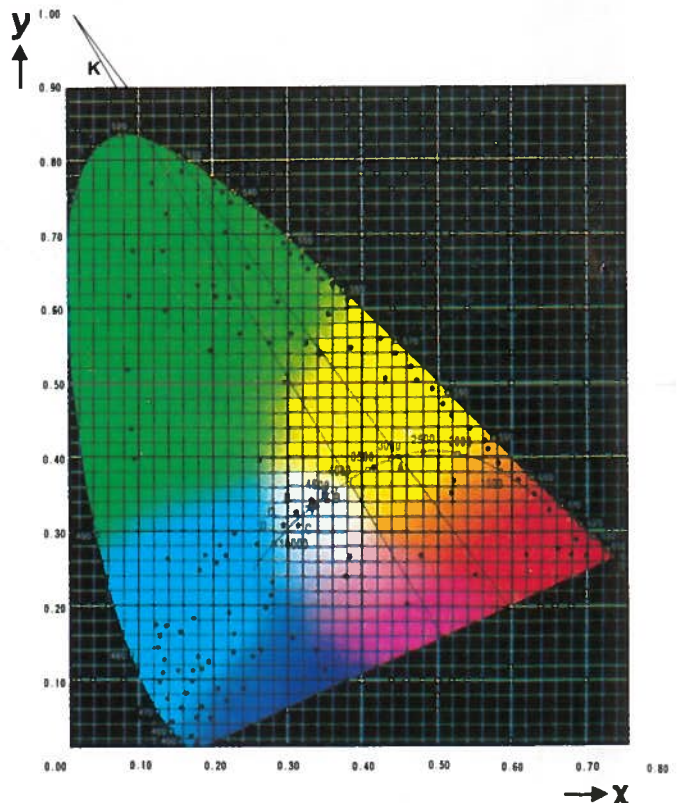
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LIGHTING+SOUND *International*

MARCH 1994

VOLUME 9, ISSUE 3

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The views expressed in *Lighting and Sound International* are not necessarily those of the editor or the Professional Lighting and Sound Association

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LIGHTING+SOUND *News* International



Industry Expertise works Olympic Magic at Lillehammer

The recent Winter Olympics in Lillehammer has drawn some of the largest TV audiences ever for a sporting event and it's not just down to the sport - the spectacular opening and closing ceremonies had a lot to do with it. As our picture above shows, the games opened with a flourish thanks to the efforts of the lighting and sound industry. There were a great number of companies involved in one way or another including equipment from Pani, Teatro, ARRI, Bell Lighting, Cruising Audio Concepts, Vari-Lite, Theatre Projects, Compulite, Vestax, Soundcraft, JBL, Sennheiser, Shure, Audio Technica and Yamaha to name just a few. L+SI will bring you more details on the design and production of the opening and closing ceremonies next month.

Light & Sound Show Gets Bigger and Bigger

Despite contracting with Earls Court Olympia Ltd for an additional 1,300 square metres of floor space in London's Earls Court 2 for the coming 1994 PLASA Light & Sound Show, P&O Events, the show's organisers, have advised the Association's executive committee that even more space may well be required, with demand for stands continuing at a high level.

Contracted sales have already passed 1993 totals, and the expectation is that the 1994 show (September 11-14) will be at least 15 per cent bigger than the previous event.

Many new exhibitors have already booked space, particularly in the pro audio field, and the area reserved for members of the Sound & Communication Industries Federation (SCIF) is proving very popular. In addition, sales plans agreed with the British Entertainment & Discotheque Association (BEDA) to broaden interest in this sector are now in place, and another

area of growth is anticipated from this quarter.

The PLASA Pavilion, providing small and emergent companies with a low-cost all-inclusive exhibit package, proved popular in 1993, and once again Lite Structures will be designing and building the site. Already, much interest has been shown, and early reservations are advised.

The PLASA committee and P&O Events staff, under the guidance of working group chairman Colin Whittaker, are currently discussing new special events as part of the show's programme of activities. With further function rooms in the north section of Earls Court 2 now available as a result of the Show's overall expansion, the 1994 PLASA Light & Sound Show is expected to achieve a considerable enhancement on the meeting and social front.

The annual awards, introduced in 1992 when the Show moved into Earls Court 2 for the first time, can now stand on record as amongst the

most authoritative in the industry internationally. Past winners and commended products have all gone on to collect further accolades at other shows, and, as the pages of PLASA's magazine Lighting+Sound International have testified, to become 'established' equipment within the industry. Details for the nomination of products for the 1994 awards will be provided to all exhibitors.

Introduced in 1993, the popular PLASA Show Daily, published by the Pro Sound News team, will again be produced for the 1994 Show and this will be backed up by the comprehensive Show Catalogue published by Lighting+Sound International. Both publications are provided free to all visitors.

The important show seminar programme, from which many new initiatives have emerged in the past, will also be in the hands of the team at Lighting+Sound International, and John Offord and Ruth Rossington at the PLASA Office in

continued on page 8

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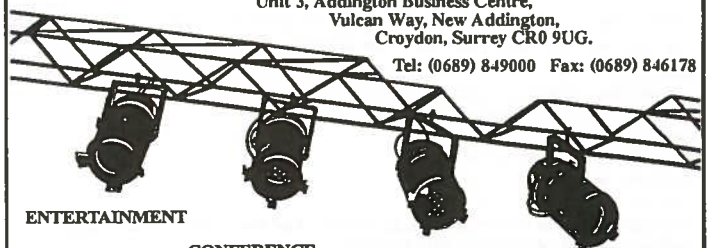
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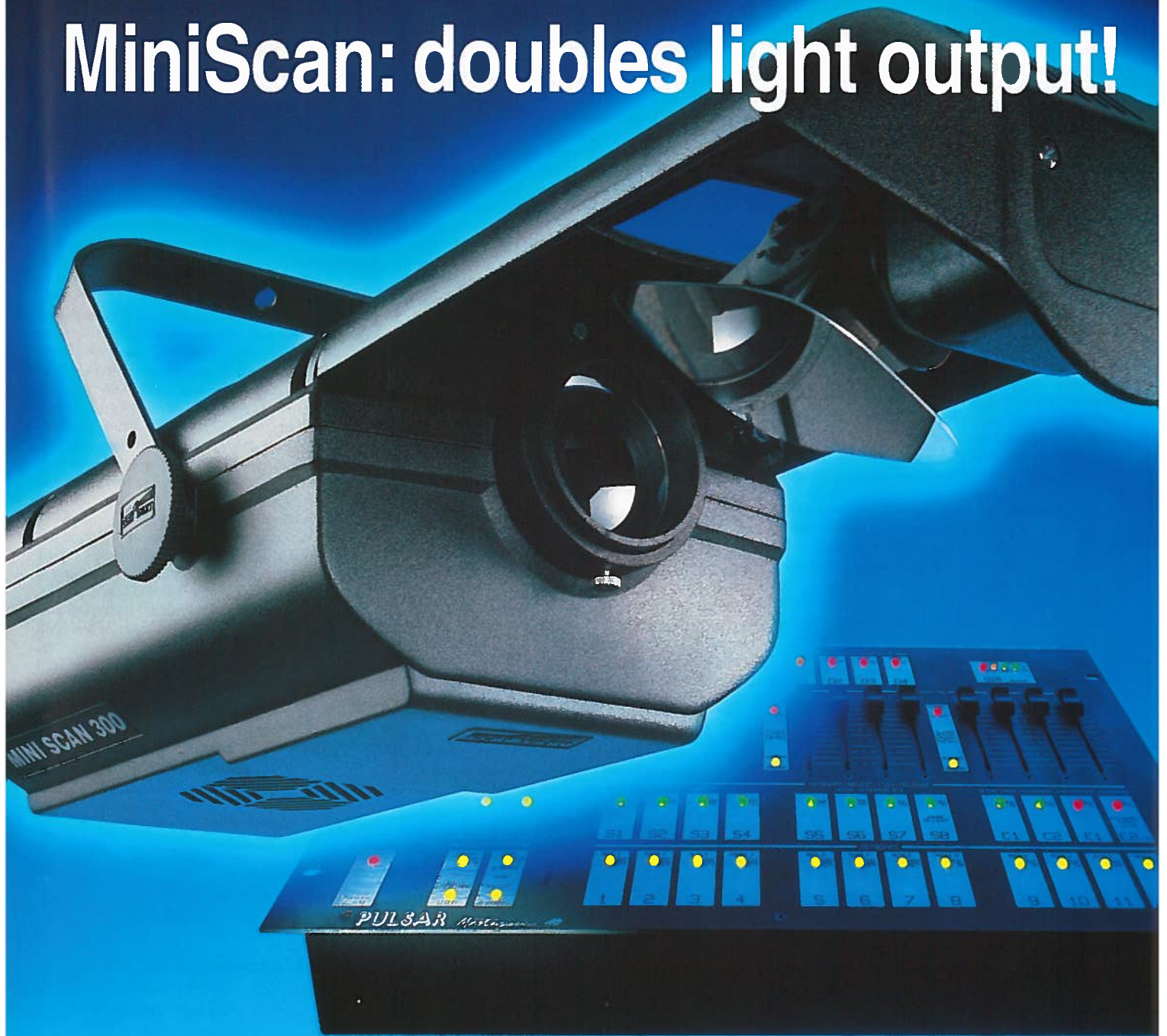
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PROFESSIONAL SHOW LIGHTING

continued from page 6

Eastbourne welcome ideas for subjects from the industry at large.

Year on year the PLASA Light & Sound Show's visitor count has increased and no effort will be spared to raise the numbers (and quality) yet again in 1994. Amongst the various plans, the show's manager James Brooks-Ward of P&O Events and John Offord of PLASA will be working jointly on schemes to attract associations and their members to Earls Court 2 during the event. This is an industry-wide effort and ideas are welcomed from organisations wishing to take part (please call James Brooks-Ward on 071-370 8179 or John Offord on 0323-410335).

PLASA chairman Tony Kingsley stated: "We already know that the PLASA Light & Sound Show 94 will be considerably larger than any of our past shows, and we are working hard as a committee, and with our organiser's total commitment, to make sure quality visitors come in increasing numbers. We're also keen to ensure that there is a full range of activities for both exhibitors and visitors to involve themselves in. These are just some of the areas that PLASA is working on to further the growth and professional standing of our Show."

Terry Denham of P&O Events, the show's director, said: "We are extremely pleased with the level of interest PLASA has generated. All our efforts will be concentrated on producing a quality audience for this prestigious event."

For further information on exhibiting or attending the 1994 PLASA Light & Sound Show at Earls Court 2 in London, contact P&O Events Ltd, Earls Court Exhibition Centre, Warwick Road, London SW5 9TA telephone 071-370 8179 fax 071-370 8143.

As you will have noted from the above news story, Philbeach Events, organisers of PLASA's annual Light and Sound show at Earls Court 2 have changed their name to P & O Events.

Synpase Revival in France

Urged on by the Minister of Culture of the day, the energetic Jack Lang, the French association Synpase, originally formed in 1988 has, since mid-1992 steadily revived itself as a living organism, and proclaimed itself 'ready for business' on its stand at the SIEL show in Paris.

In a report from Jean-Pierre Chapuis, president for 1994, made available at SIEL, he described the background work achieved during 1993 and outlined some of the association's plans for the future. The body is set to play a key role in the management/union scene and is recognised by the necessary authorities in this respect. It holds monthly open meetings of its board of directors and is now looking to provide members with regular information via a newsletter and various other publications.

Synpase states that its sole aim is to represent and defend the interests of the members of the distributive trades in the theatrical and audio-visual spheres and that at present it represents between 65 and 70 percent of the turnover in this sector of the industry.

New Name, New Look

The former Discoscene exhibitions have been renamed to better reflect the increasing diversity of the exhibitors and visitors.

To be known as SOL, the shows will continue to tour the regions and the first, SOL South, takes place on Sunday April 24th at the Post House Hotel in Southampton. SOL Wales and West has been rescheduled to Sunday May 8th at the Hilton National Hotel in Newport.

PLASA will now be more closely involved with these events and is working with organiser Terry Lees on the promotion of the show. Anybody interested in attending the SOL exhibitions should contact Terry Lees on 021-707 1925.

New Structure proposed for TDA

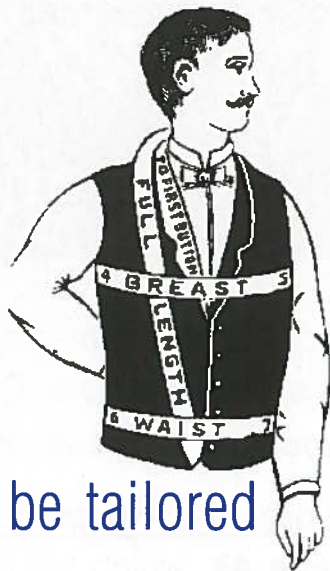
As a result of meetings held in Reno, Nevada over the weekend of February 5-6th, a new structure for the Association has been proposed that will see four classifications of membership for the future: Dealers, Manufacturers, Associates and Individuals.

Following the meeting held at LDI in Orlando last November where the role of the Association was discussed (and the possibility of changing the TDA from a dealer organisation with manufacturer support and potential involvement, to a fully participating entertainment industry association), an ad-hoc committee was formed to review manufacturers' concerns, obtain feedback from members and make recommendations to the TDA's board of directors. The proposed new structure would see a president, secretary and treasurer selected from and elected by dealers, manufacturers and associates and three vice-presidents, one each elected from the main sectors. A further three directors would complete the board, and again, there will be one from each sector, elected by that sector of the membership.

It was agreed in Reno that the ad-hoc committee should immediately commence work on specific details and make a presentation to the TDA membership during the forthcoming USITT conference at Nashville in mid-April, giving a further opportunity for member feedback.

A letter fully detailing the outline proposals was posted to all TDA members by president Paul Vincent on February 25th and initial reports reaching L+SI suggest that they have been well received. A full membership postal ballot on the subject is expected to take place in July.

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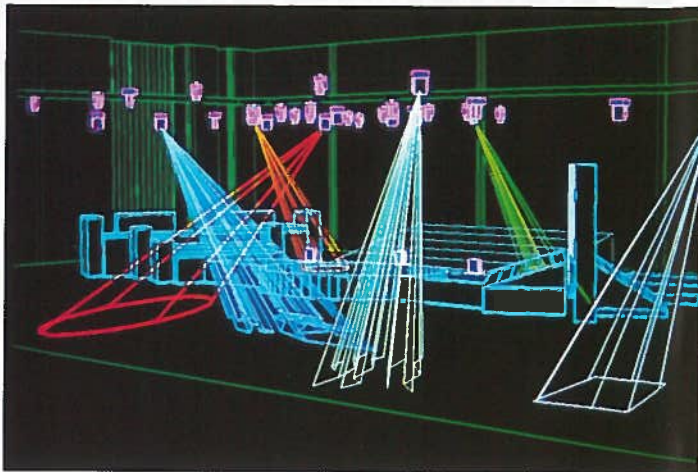
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CBC Spawns CAD System



During a recent visit to the Canadian Broadcasting Company's splendid new studio complex in Toronto, L+S editor John Offord and associate editor Tony Gottelier were introduced to a lighting design software package developed on the premises, with a strong bias towards solving the problems of managing entertainment lighting in the TV studio.

Some readers may remember that LXCAD was the system on which a paper had been promised at last year's Showlight but unfortunately, due to pressure of work, those concerned were unable to travel. The system, which was developed by software writer Robert Bell, with encouragement from lighting director Gilray Densham, is claimed to allow new levels of pre-production organisation as well as to provide real-time assistance in automated lighting operations. Now under the final stages of development as a commercial product outside CBC, it is hoped that the formal launch will take place at PLASA under Robert Bell's company Constant Productions. Meanwhile, it continues in daily use in CBC studios.

At present the system works on three levels under windows on AutoCAD, LXCAD in which the plots are generated, LXDB for reporting and LXMOV which provides real-time tracking in three dimensions. In LXCAD 2D plans and sections with beam projections (shown above) can be produced with help from the library of lighting instruments, including photometric data and precise values for foot candle distribution. LXDB summarises the data and prints out equipment schedules, summaries and totals directly from the plot. LXMOV is used in conjunction with a lighting desk, such as the Compulite Animator, and the system monitors the DMX output of the board and simulates the moving rig, with wire frame rendering of beams and gobo images in motion and in colour. Thus it provides both mimic and preview facilities.

All parameters of moving lights are visualized, including field angle, colour, position, gobo, focus and speed and the lights are sensitive to obstacles in their path so that together they provide a virtual tracking simulation. There are future plans to eliminate dependence on AutoCAD and to introduce full graphic rendering. The system can be used both pre-show and in live performance. CBC's new studios in Toronto, which include a significant and comprehensive DMX network, will be the subject of a future feature article in L+S which will include a major contribution from Gil Densham.

EAW appoints new LTP as UK Distributor

Eastern Acoustic Works has appointed Lighting Technology Projects (LTP) of London as the exclusive UK distributor for its full line of professional loudspeaker systems. The appointment takes effect immediately. "LTP has shown us that they have the technical expertise, service and support capabilities and industry connections necessary to fully develop the potential of EAW's advanced loudspeaker technology," EAW president Kenneth Berger told L+S. Andrew Stone, divisional manager of LTP, is also excited about the appointment. "We are proud to be associated with a company of EAW's reputation and a product line of EAW's quality," he said. "We plan to form active partnerships with dealers serving the theatrical sound, nightclub, installation and retail markets. We will also form partnerships with PA rental companies who can effectively demonstrate the capabilities of the EAW loudspeaker systems."



LTP is the newest division of the well established 14 year Lighting Technology Group with an annual turnover of £13 million. With over 70 people employed in sales and service branches throughout the UK, the company is able to provide extensive technical support and service backup to dealers and end users in all areas of professional audio. LTP's London offices in Abbey Road can be contacted on 081-961 6858.

Pictured above, Kenneth Berger (right) and Andy Stone seal the deal.

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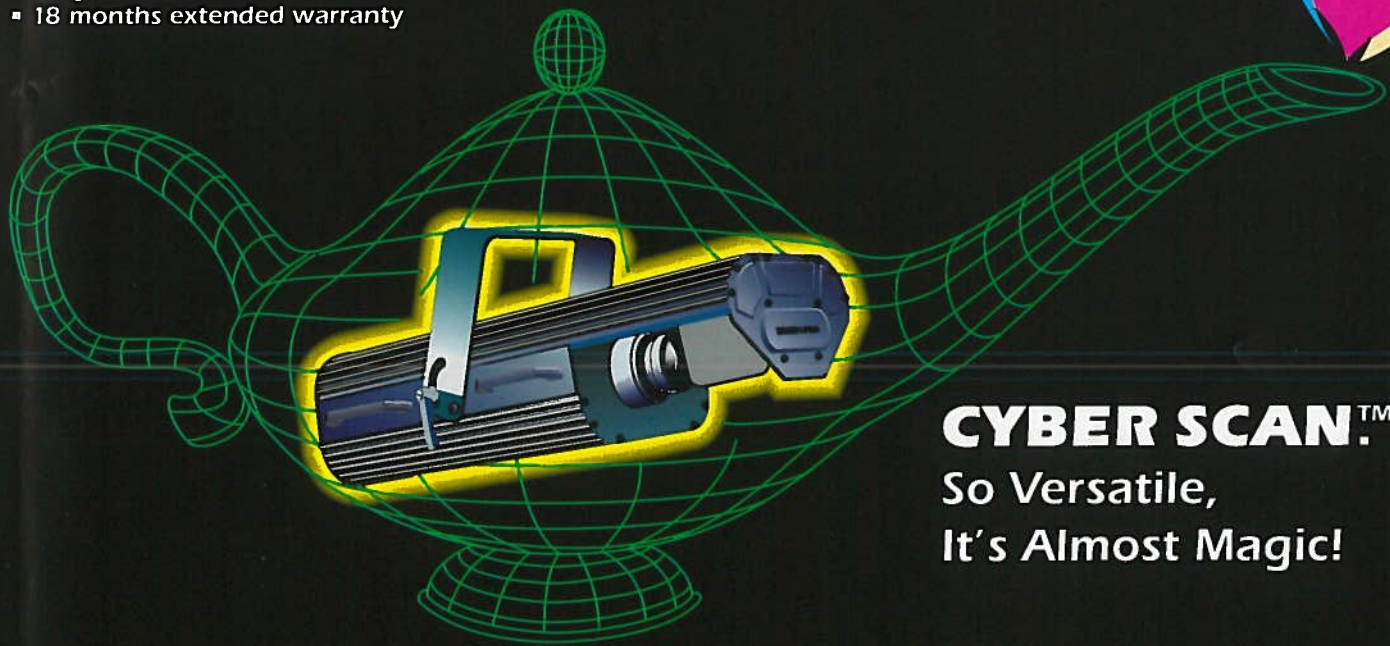
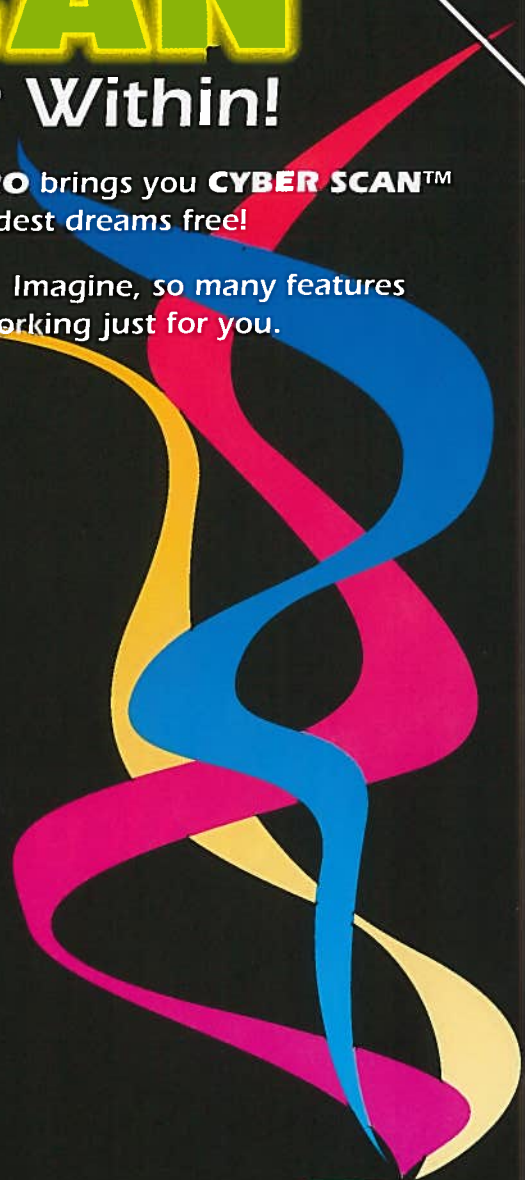
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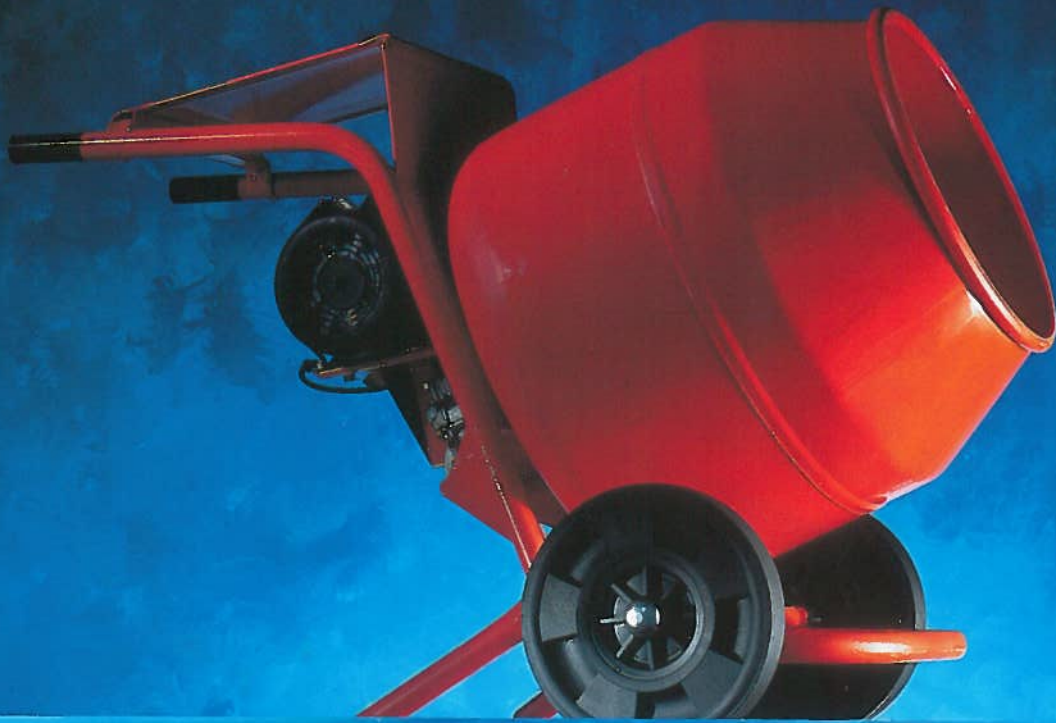


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M&M Camelont's Developments at Home and Abroad

Pictured above are scenes from M & M Camelont's recently held Open Day. The company invited the industry to their London premises to demonstrate the PLASA-launched Gobomaker and the MA range of lighting control products, alongside some of their more established product ranges. The event was also the launchpad for a new range of Microscrollers. Many industry people called in including several members of the STLD and ALD associations and lighting designer David Hersey.

Meanwhile, on the colour changer front, the directors of M & M Camelont have announced that Romator AB of Stockholm, manufacturers of Rainbows for M & M Camelont since their launch in 1988, have provided a cash injection which will allow the company to develop the next generation of Rainbow colour changers. The company's financial resources will now enable it to concentrate more funds on research and development than has been possible in the past.

Magnus Anuell will continue his R&D work on the Rainbow range for Romator and M & M Camelont will continue to work with distributors and dealers around the world in its new capacity as the exclusive world-wide agent for Rainbows. The new agreement, effective from 1st February 1994, assigns to Romator AB all product rights.

The company have also announced two major international installations for Rainbows. The first order, for delivery at the end of March, is for the Gothenburg Opera House, which opens at the end of September.

A mix of 8", 15" and 8-Lite Rainbows, all supplied with integral PlusCards, together with various power supplies and splitter boxes, are being supplied by M & M to lighting consultants Lightmen AB for installation in April by Avab AB of Sweden.

The second order, for Studio 40 in CBC's new Broadcast Centre in Toronto, follows the success

of an installation of Rainbows earlier last year. M & M Camelont is supplying, through its Canadian main dealer WestSun, 240 15" cyc Rainbows and 80 8", as well as 170 special power supply units.

Studio 40 (to be featured in L+SI in the near future), is the largest of CBC's three new studios and has 160 lighting battens interwoven with 84 scenery battens, all operated by computer-controlled winches. To prevent cable runs, which could conflict with scenery battens, each lighting batten is fitted with a Rainbow power supply, giving each batten its own self-contained system.

The vertically scrolling cyc Rainbows come complete with a feathered edge and fixed gel frame and, particularly important to CBC, the integral PlusCard in all the Rainbows gives the option of controlling the fan on a separate DMX channel, so that it can be regulated when complete silence is required.

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Things Cooking in the Kitchen

U2's Kitchen in the basement of their Clarence Hotel in Dublin opened in a blaze of publicity last month. The band, and principally lead singer Bono, have spent time, effort and contributed considerable personal artistic and technical input to the project that came to life in their home city a few weeks ago.

Principal installation company Audiotek of Dublin specified a diverse range of equipment to complement the somewhat unusual interior design. For the sound installation, the design put constraints on the bass bin locations which were sited in an architectural feature which borders the dancefloor and forms part of the water feature. The sound system is a mix of JBL bass bins, high boxes and Control 1s working with JBL's own control and amplification, plus BSS crossovers. Front end, the sound set-up comprises a Formula Sound PM90, and a host of Technics, Denon, Sony and Akai kit.

The brief for the lighting design of the venue was 'less is more' with the emphasis on the integration of the lighting elements with the atmospheric architectural design. To this end great use was made of Coemar Baby colour changers which bathe the venue in colour washes emphasising the sculptural pillars and shapes and producing stunning animated colour reflections on the wall and ceiling from a pool. The overall effect is highly atmospheric.

The central dancefloor effects were created by the new Coemar Microscan 575s, which were programmed by Carl Dodds and John Lindsell of Making Light Work on the new version 2 of ShowCAD. They also designed the minimalist rig which has made use of the new DMX driven Collyns Rafalflash to spectacular effect. The programming is crucial to the visual success of the design. The ShowCAD system is driven by a Roland MIDI keyboard for ease of use. Another interesting aspect of the system is the control of all off-floor lighting by the computer, a feature which puts the entire club atmosphere under the lightjock's control.

Carl Dodds and John Lindsell told L+SI: "Attention has been paid to the aesthetics of each and every piece of equipment, both in its relationship with the interior and its juxtaposition with the other pieces in the overall lighting design. Much attention was given to cable management in order not to disturb this relationship. The ShowCAD 2 system has been specifically enhanced for certain project crucial lighting tasks to ensure that absolutely no restrictions were placed on our programming creativity. All non-task specific lighting is under the control of the ShowCAD 2 system in order for the total dynamic of the space to be controlled and modified at will, enabling vast mood swings at the whim of the operator throughout the total space.

"Working particularly with Bono and The Edge a storyboard of lighting moments was created covering the entire course of an evening from the cool blue slow wandering circles of the start to the power peaks. Every possible moment of the night's dynamic has been investigated yet everything is available from a simple MIDI keyboard at the touch of a few keys."

ProSpot Follow-Up



Following our January news story on the setting up of The Moving Light Company in London, the picture above shows the full PanCommand ProSpot Old Vic demonstration set-up. Latest news is that ProSpot units are currently out on three tours: 24 are touring with Tommy Steele on a 22 week run, a further six are out with the Rocky Horror tour and 10 are adding a touch of magic at the Prince of Wales Theatre with Paul Daniels.

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Wybron's Biggest Scroller

Pictured right is the one-off 'Billboard Scroller' produced by Wybron Inc of Colorado Springs, USA for the forthcoming Phil Collins tour.

Based on a Tomcat structure, Wybron were responsible for the design and manufacture of the electrical, mechanical and software control of the 16 foot wide scroll system. The overall size of the unit is 20 feet wide by 16 feet high and a total run of 200 feet of various photographic images will be scrolled during the show. Pictured with the unit during trials are (left to right) Ken Fasen (in charge of the project), John Pickett, Dan Martino (sales manager), Mark Denning and Doug Christiansen.

Other Wybron equipment going out with Phil Collins includes 40 Coloram scrollers. Heavy use of Colorams is also reported from elsewhere: 90 are with Janet Jackson, another 90 are involved on the Walt Disney Holiday on Ice Aladdin production and a further 60 are being used on the current road tour of 'Tommy' in the US.

L+SI will provide a major review of the sound, lighting and AV equipment used on the Phil Collins tour when it kicks off next month.



Soundvision Expand

Soundvision are moving to new and larger premises in mid March. Having firmly established themselves in the UK market, the necessity to acquire space that would allow for further expansion has led to the acquisition of a two-storey 2,500 sq.ft former public house with private car parking facility.

The main floor will have an ambitious new showroom featuring both a purpose-built acoustic sound demonstration room and a dedicated hi-tech suite offering a comprehensive range of samplers, multi-track recorders, keyboards and signal processing equipment, whilst the ground floor area will accommodate an extensive workshop/service area.

Managing director David Graham told L+SI: "This is a significant development in the growth of the company and will allow Soundvision to naturally evolve and diversify into exciting new areas of the industry."

Soundvision's new address is Adelaide House, 383-5 Liverpool Road, Islington, London N1 1NP. Telephone 071-281 8121/071-609 3939.

A New Dimension

Lighting Dimensions (WL) of Dublin will in future be concentrating on extending its hire activities and increasing the range and quality of equipment available for hire. Andrew Leonard and Bernard Griffin have left the company to pursue careers as freelance designers and consultants.

Jane Cody, director of Lighting Dimensions told L+SI: "We view this as a very positive step for both parties and look forward to a long and successful commercial relationship with Andrew and Bernard in their freelance capacity." Dieter Hartfiel, Lighting Dimension's hire manager, will continue to make lighting equipment and rigs accessible to a wide range of customers and ensure that the company always has the latest technology available to service every type of event.

Northern Lights First


As one of Strand Lighting's biggest distributors, Northern Light of Edinburgh is installing the first Strand GSX lighting console in Scotland in the theatre at the Peterhead Academy, one of Grampian's leading secondary schools specialising in the arts.

Previewed at PLASA '93, the GSX console, combined in this instance with Genius 50 software, is ideal for smaller theatres such as the one at Peterhead Academy. The Genius software is available as a separate package in a variety of channel options and can be upgraded as required. Northern Light has also refurbished the lighting rig with two LD90 24x10 amp dimmer racks, upgraded the electrical installation with new lighting bars and socket boxes and installed a new grid with rope and hand winch set suspension.

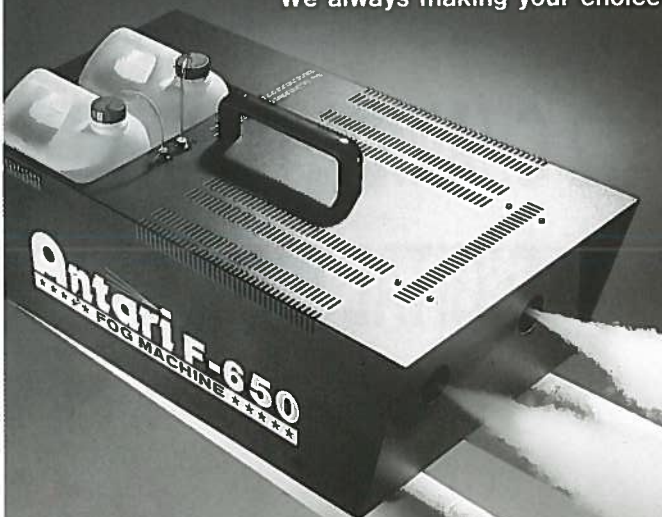

Marquee Award

Marquee Audio has the distinction of being the first specialist pro-audio dealer to be included in the Yamaha-Kemble (UK) annual award ceremony, which was held this year at the International Convention Centre in Birmingham.

Honoured as the largest Yamaha pro-audio dealer in the sound reinforcement market in 1993/4, Marquee received a trio of awards including the greatest increase in yearly sales and the third best sales in the UK per location, placing Marquee among the top 20 Yamaha dealers in the country. The presentations were made to Marquee Audio's managing director Spencer Brooks by Genichi Ito and Andrew Kemble, joint managing directors of Yamaha-Kemble (UK) Ltd.



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Lavender Hill Mob

Orbital, the audio hire division of Acoustic Associates, has just moved to new premises close to Clapham Junction Station. The 5,000 square foot Victorian building has had a varied existence as a dairy, plumbers' merchants and warehouse for Jackson's tea. A search of the building has unearthed plenty of cast iron pipes, and a direct-to (vinyl)-disk answering machine but no secret cache of Earl Grey!

Orbital's move was made far easier by their busy schedule of theatre tours, conferences and roadshows. Careful timing meant that the great majority of their hire stock was sent out on hire from the old premises and returned after use to the new building.

Orbital can now be reached at 117, Plough Road, Clapham Junction SW11 2AL, Telephone 071-978-7828.

Barbi's Home Disco

Towards 2000, Inc. of California recently wrapped up the installation of lighting and sound equipment in a disco - in Barbi Benton's and husband George's Colorado home! The unique residential discotheque project started with conceptual drawings shown by the clients in August of 1990. Barbi Benton (of Playboy fame) and husband George Gradow's 25,000 square ft. home sits in Aspen's secluded Starwood region and was designed by progressive architect Bart Prince. The luxury home features translucent stone floors underlit with fibre optics, twin lap pools (with his and hers water temperatures), and a 50 foot disappearing wall that provides a more spacious dining room for 'larger get-togethers'.

The couple wanted assurance that the discotheque could be a climactic focal point for their party guests. The design team for the project was headed by Towards 2000's Richard Rutherford. Originally the disco room had a ten foot ceiling, so the decision was made to re-excavate the floor, giving the room a new ceiling height of 16 feet. This provided for much better lighting look and a spectacular vantage point for non-dancers. According to Rutherford: "The primary design premise was to create a powerful and surreal 'off-the-planet-free-flying' feel. We accomplished this with an abstract combination of man-made crystal clusters, an 80 foot wrap-around mural, and very intense audio and lighting systems." The crystal clusters provided by Towards 2000 were initially designed and moulded at Roboshop/Landmark with much of the art direction by Ms Benton.

Each cluster contains several fibreglass resin pieces from five to nine feet in height, and several smaller crystals made of pure resins with 'floating' mylar to provide a more realistic look. Additionally, each base contains several thousand real gems and minerals. There is a casted steel support frame for each cluster to lend strength and mobility. Housed inside the base of each cluster are a Color Pro and several pinspots, which provide a pleasant static look while the Color Pros are programmed to interact with eight ceiling-mounted units over the 1,000 square ft dance floor.

The wrap-around mural was contracted through Towards 2000 with Richard Shelton of Los Angeles, once again with much input from Benton. Acute detail was paid to color and dimension to create a playing field for the lighting. The mural was mounted with 2" of padding to enhance the audio quality of the unusually shaped space.

While the initial lighting design called for four Intellabeam fixtures, they were later changed for eight Trackspots and an analogue controller, providing for simpler operation and more cost-effective lamp replacement. In addition to the disco's 14 Color Pro and eight Trackspots, the lighting plot includes an F-100 Smoke Generator, a Towards 2000 Volcano Smoke Ring (recessed into the wall), 32 Par 336 pinspots, 16 Scatterspots, an American DJ Beamer 40, a Pluton (on a two metre elevator), eight 50 watt Super Strobes, four FAL Ventaglios, and several 48" blacklights. For control the design team chose a pair of Pulsar Touch Panel II's.

The audio system is a tri-amplified combination of 12" TADs, 1" JBL compressor drivers, and a pair of 18" JBL sub-woofers with custom chrome grille covers. The amplifiers are all QSC, with processing gear by Rane, and the audio system has a separate 100amp isolation transformer to assure non-interaction with dance floor or special architectural dimming of any kind. Much of the audio design and fabrication was accomplished with the help of Mike Barber of L.A. Road Crew.

Ministry of Sound Tour 1994

London's dance club, The Ministry of Sound, have announced that they are taking their concept on the road this summer, featuring visits to no less than 20 major UK universities, 19 leading clubs, four major UK festivals including Reading, Glastonbury and Phoenix, and a further 25 European Club dates.

The Tour is a culmination of a highly successful year in which The Ministry have not only experienced a sharp increase in attendance at their London Club base, but have seen their first CD compilation album go to the head of the Dance Charts after just one week on release. All of the usual Ministry ingredients can be experienced on the Tour: a high tech sound and lighting system, the Ministry's famous DJs, merchandise, and a series of guest appearances from leading dance music artistes from around the world.

To assist in this comprehensive exercise, slated to reach audiences in the UK alone in excess of 100,000, The Ministry of Sound would like to hear from potential sponsors, in both technical and customer markets.

Those interested should contact Lynn Cosgrave in London, telephone 071-378-6528.



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Renovating the Beast

A stage adaptation of the Walt Disney classic 'Beauty and the Beast' has just opened on Broadway. The venue for this spectacular show is The Palace Theatre in Times Square, specially rented for the purpose by the Walt Disney Corporation. To provide a permanent Broadway venue for future productions, Disney has decided to buy its own theatre and has just completed negotiations for the purchase of the famous New Amsterdam Theatre on 42nd Street, at the heart of New York's Broadway and formerly the home of the Ziegfeld Follies.

Built in 1903 the theatre has a special history, and was probably the first building to be designed completely in the then emerging art nouveau style. Ironically its beauty was the talk of Broadway; now it's generally regarded as something of a beast. It was last used as a live venue in 1937 but since then the hand of time has not been kind and through its various incarnations, amongst them a cinema and TV studio, the theatre has fallen into a terrible state of disrepair and is in need of major renovation.

Connecticut-based Theatre Projects Consultants Inc have been appointed by the Disney Development Company to act as consultants on the project. Not surprisingly, TPC's brief is to restore the theatre to its former glory, and in the process of their work they will come across some exquisite murals, delicate plasterwork and a full stage multiple bridge lift - a legacy of the Follies' days. To aid them in the renovation they have pulled in a team of outside experts, including Craig Morrison, Jonathan Deans and Norman Rothstein to complement their in-house design team. TPC's Richard Pilbrow heads the team as director and David Taylor is project manager. Architects for the project are Hardy Holzman and Pfeiffer.

This is a flagship project for TPC who are hoping to have completed the full designs for the renovation by the end of this year and Disney are looking to 1996 as an opening date.

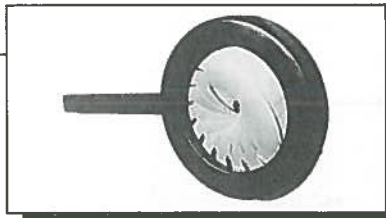
With an anticipated spend of \$21million the renovation of the New Amsterdam should provide a great step forward in reviving the fortunes of Broadway.

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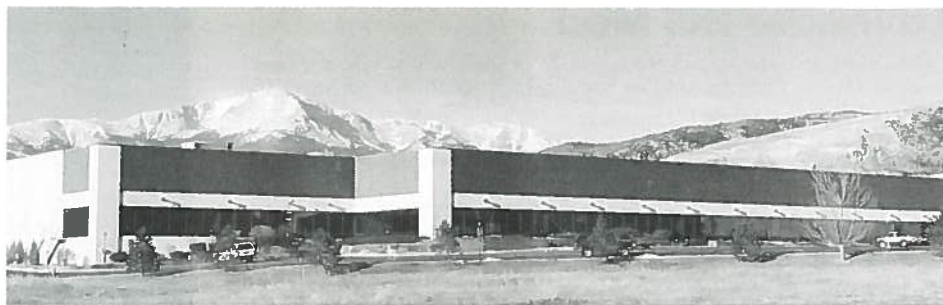


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Wybron's Mountain Palace

Pictured above, nestling in the foothills of the Rocky Mountains at Colorado Springs (Pike's Peak, 14,109ft is in background) is the new headquarters of Wybron Inc. The company is currently occupying 26,000 sq.ft leaving another 20,000 sq.ft available for expansion. A large demonstration studio and spacious product development area have been included within the new facility.

Ex PM aboard Martin

In something of a parliamentary coup, Martin Professional has secured the services of ex-Prime Minister Poul Schluter as chairman of its board of directors. Mr Schluter is obviously taking his duties seriously as he has confirmed, through Martin's helmsman Peter Johansen, that he will be attending the SIB exhibition in Rimini at the end of this month. "I am delighted to welcome such a senior statesman on board," Johansen told L+SI. "I think he will lend a great deal of credibility to our status in the industry."

Mr Schluter, a leading Euro-enthusiast, was a member of the European Council for most of the seventies, and following a period as State Auditor, Prime Minister for nine years between 1982 and 1993. He has been a Danish MP for 20 years and this year will seek election to the European Assembly. His appointment is seen as a preliminary step to a planned stock market flotation for the company later this year.

MS-Audiotron Change

Finnish company MS-Audiotron ceased trading last month. The decision was taken by owner Matti Sarapaltio after a spate of financial problems and was scheduled to allow the company to complete projects on the Finnish Opera House and Olympic stadium. A new company, Audiotron Ltd, has been set-up to continue the former's work. Two new business partners and outside finance are part of the package. Audiotron is working from the same premises as MS-Audiotron and has retained some of the original workforce.

Beware Nigerian Business Proposal

Several concerned PLASA members have contacted the offices of L+SI following a letter sent to them by a person who claims to be a senior manager in the Trade and Exchange Department of the Central Bank of Nigeria.

The letter proposes a business transaction which involves the transfer of \$50million from CBN into a nominated overseas account. Kalu is offering 30% of the total amount as an incentive to companies to set-up a joint venture account and is asking them to forward by fax, bank particulars including account name and number, together with the full address of the bank where the account is held. We would advise that any company in receipt of this letter does not, in any circumstances, make its bank details available to anybody claiming to be acting on behalf of the Nigerian Government.

This is not the first time such letters have been sent to PLASA members and the Association has acted swiftly on previous occasions to warn members of the dangers of making their account details available to overseas companies. Rather worryingly the writer has cited L+SI as his source for contact information and we can only assume he obtained the details from the member's listings which appear in a number of issues throughout the year. As this is a valuable service, designed to promote PLASA members, we will continue to run it, but will try, where possible, to ensure that the magazine does not get into the wrong hands.

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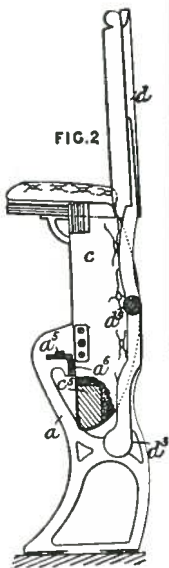
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BRITISH THEATRICAL PATENTS 1801-1900

Intro to Patent Abridgement
4407 of 1894 (A.R. Dean)

**4407. Dean, A.
R. March 2.**

Chairs. — For theatres &c. The seat *c* and the back *d* are pivoted in the frame *a* and weighted at *c'*, *d'* so as to assume a vertical position when the sitter rises. Stops *a'*, *a''* and *d'* may limit the motion. The movable parts may be arranged to move together by means of slotted or plain links or by gearing such as a toothed sector on the back and a pinion on the seat, and the counterweight on the back may work both seat and back. The back alone may be movable.



The British patent abridgements of the nineteenth century contain numerous variants of the theatrical tip-up seat, yet so many of these designs were never actually manufactured. Albert Reuben Dean however, was a specialist theatrical furnisher and decorator based in Birmingham, and his company regularly advertised in *The Stage*, boasting an impressive list of recent contracts won by tender.

One such success was The Gaiety Theatre in Douglas on the Isle of Man, built in 1900 by that prolific theatre architect Frank Matcham. Original photographs of the theatre's interior were taken in 1900, and localised 'blow-ups' have revealed details of the tip-up seat design which show that they are very similar, and being six years after the patent was produced, perhaps even improved upon!

SIEL Snapshots from Paris (FULL REPORT PAGES 54-59)



Sharing the load: Michael Musso (left) and Christian Léonard of ADB at SIEL.



L+SI's editor John Offord (left) is shown what a real Shadow followspot looks like by Clay Paky's Pio Nahum.



Birthday presentation: SIEL show manager Aube Jeanbart hands birthday champagne to Celco's Keith Dale (his age wasn't released to the press).



Lite Smiffs's Pat McGuane (left) with the latest addition to the team, Rod Bartholomeusz, who will handle international sales for the company.

MEMS 94 Line Up

MEMS 94 the annual technology-related event for the music, sound and recording industries, will take place at Wembley Exhibition Centre over the weekend of the 22nd-24th April 1994. The exhibition, sponsored by Making Music Magazine, is now into its fifth year and continues to grow. Visitors to the show will have the chance to try out products which they will only have been able to read about in the press - products straight from NAMM and the Frankfurt Musikmesse. The range on display promises to be larger than before with many companies exhibiting at the show for the first time. The exhibits will cover live performance, recording, composing, sound and light support, film and video production, broadcasting, computers and education.

In addition to the exhibition there will also be a series of seminars. These are free of charge to ticket holders but places are limited. For further details call MEMS on (0222) 512128. Admission to the exhibition costs £8 (£5 in advance).

AC offer Gelstream

AC Lighting claim to have found the answer to the problems of touring colour changer units in Gelstream. AC Lighting's Glyn O'Donoghue told L+SI: "For some time our customers have been asking for a colour changer that would stand up to being toured, work with conventional controllers and wouldn't cost a fortune. We've exhaustively tested Gelstream and believe this could fit the bill."

Gelstream features a built in switchable power supply and will operate with either an analogue or DMX control signal. It has a unique cassette loading design which allows fast and efficient re-scrolling.

Gelstream will be joined shortly by its sister product Spectrum which will benefit from the same robust design but will operate from a shared power supply/distribution unit and will allow up to 16 frame scrolls to be used. AC intend to offer Gelstream on a sub-rental basis to allow rental companies to 'try before they buy'.

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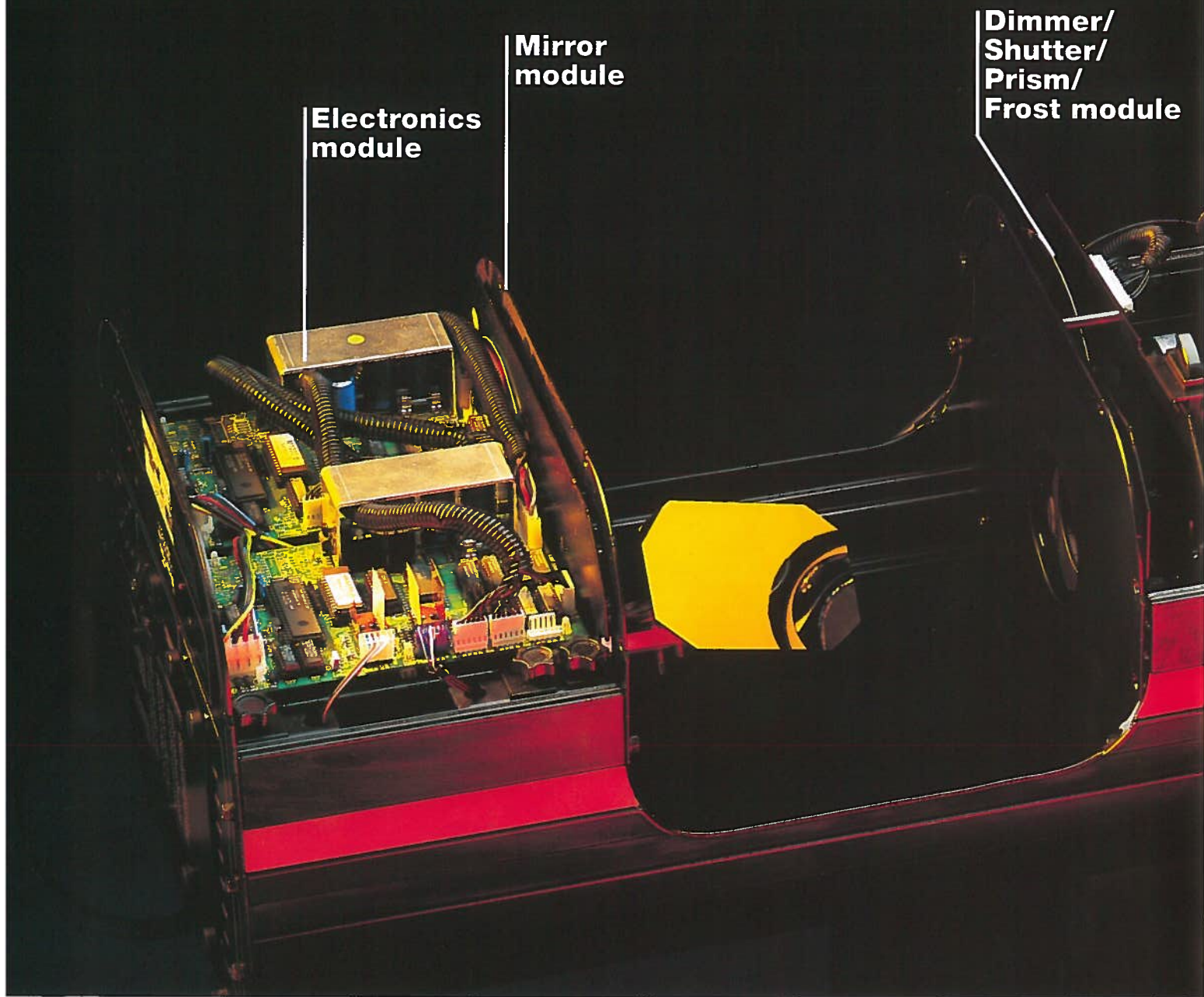
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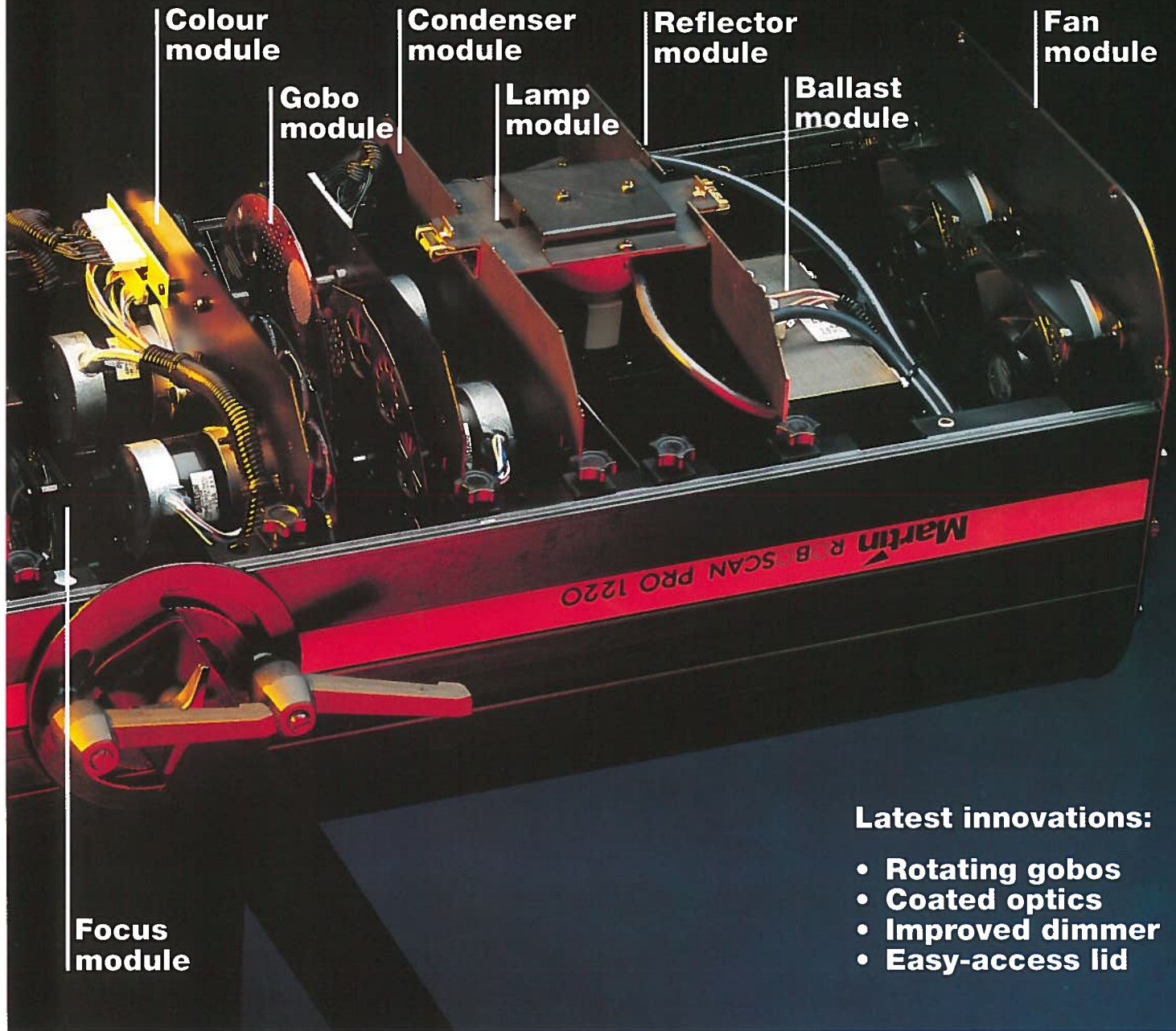
This uncommon flexibility - coupled with our quality craftsmanship - gives the Pro 1220 an average life span of 10 - 15 years. Other units, by contrast, are lucky to last 2 - 3 years.

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- Easy-access lid



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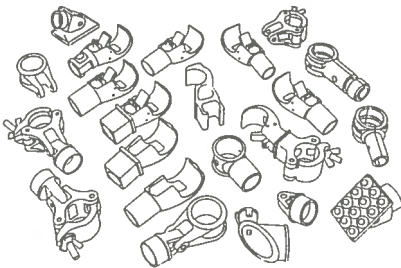
- 1200W discharge lamp
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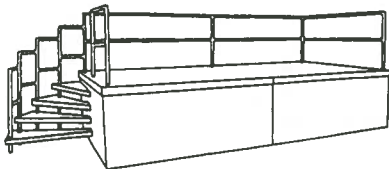
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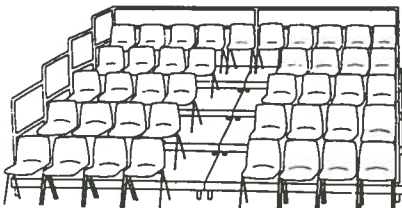
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Stage Door Opens

Based in north Surrey, Stage Door Lighting Productions are a new lighting service company with designs on becoming a major supplier of lighting services to the UK and international markets. Peter Feeney and Alan Coles recently joined forces to pool their combined 20 years' experience covering all aspects of lighting design and production in the entertainment industry, to set up Stage Door Lighting Productions Ltd. They report good reaction from UK and international production companies anxious to obtain the services of a company which reacts quickly, is flexible in handling all types of event from a product launch to a world tour and operates to high professional standards.

Stage Door Lighting Productions can be reached on (0689) 849000.

A Flurry of Florries

Michael Samuelson Lighting will host a seminar and exhibition of all the latest fluorescent light sources currently being employed in the film and television industry.

Four companies will combine on Friday 18th February to demonstrate a wide range of lighting. These will be Michael Samuelson Lighting with Videssence and their own 'snooker fittings' and 'flat lights', Rank Strand Lighting with 'Balcar', Cirro-Lite with the much used 'Kinoflo' and Bell Lighting with their 'Softlights' from Norway. The event will give members of the BSC, the GBCT and the STLD the opportunity to compare equipment and discuss techniques. Alan Bermingham, who has carried out extensive research into fluorescent light sources, will be in attendance to offer advice.

Proceedings will commence at Pinewood at 15.30pm and go on until 22.00pm. Light refreshments will be offered by Michael Samuelson Lighting. Anybody wishing to attend should contact Jane Curtis at Michael Samuelson Lighting on (0753) 631133.

V-100 in Frankfurt

The Intercontinental Hotel in Frankfurt has recently completed a major refurbishment of its conference facilities - including a full sound system using the Canon Wide Dispersion V-100 loudspeakers. Designed by ADT (Auditorium Design & Technology), the installation includes a fully integrated presentation system. The two boardrooms on the 21st floor each have an amplifier, slide projection, video projection and computer screen projection facilities. These and the lighting and curtain controls can be operated individually or simply by the press of a button.

Twelve V-100s are installed in clusters of four and groups of two flat on walls, ensuring full sound coverage and discreet siting. The Canon loudspeakers are being used as background sound, for presentations and for PA, the wide and even sound dispersion characteristics ensuring all delegates can fully enjoy the presentation, regardless of where they are sitting in relation to the speakers.

Harman add Studer

Harman International has signed a definitive agreement for the acquisition of Studer Revox AG from its parent, Motor Columbus, a Swiss public utility company, with the deal expected to be completed this month.

Studer Revox is one of the leading companies in the professional audio field with particular strength in the recording and broadcast areas, and is headquartered in Regensdorf, Switzerland. Principal subsidiaries are located in France, the United States, Canada, Germany, the United Kingdom, Japan, Singapore and Austria.

Aviator First

Northern Light has won the contract to install the first Aviator desk in the UK, as part of a major refurbishment of the lighting control systems in the Music Hall, Aberdeen. Working in conjunction with consultants Sandy Brown Associates for the City of Aberdeen, Northern Light is also carrying out a full refurbishment of the PA system.

SBA, who have worked with Northern Light on a wide range of projects, drew up the lighting specifications and the Aviator was recommended by Northern Light. In addition to installing the Aviator, Northern Light is also upgrading the sound system at the Music Hall with JBL speakers and C Audio amplifiers to greatly enhance speech reinforcement. Valued by Northern Light at around £100,000, the refurbishment will take place during February and early March.

AC on Tour

As the touring season looms, AC Lighting are all set for an eight date exhibition world tour of their own. Starting with the Frankfurt Music Messe as their first show they will be spreading the word about their exclusively distributed products: Wholehog, Gelstream and Procolor.

They will continue the European leg by promoting Jands lighting consoles and Strong followspots with SIB in Rimini and ABTT in London later this month, finishing off with their entire range at PLASA in September.

In the summer it's off to Asia with a 'behind the curtain' peek at Beijing in China, followed by the World Lighting Fair in Tokyo Japan and the Pro Audio & Light Asia in Singapore in July.

November will see their final date in Reno at LDI where AC's Bob Gordon will be highlighting the virtues of his US exclusive ranges of Rainbow colour changers, Jands lighting consoles and Procolor lighting filters.

Pink Floyd

Compulite are supplying two specially modified moving light control systems for the forthcoming Pink Floyd tour. These will be controlling a total of 36 moving mirror fixtures which are also being developed for the tour and controlled via a high level 15-bit protocol, to provide extremely smooth and accurate movement.

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Making Light on the Sabbath

When Black Sabbath took to the road for yet another World Tour their lighting designer Keith Mitchell chose 12 Martin Pro 1220s with rotating gobos to create the highlights.

The five week US leg of the tour kicked off in Boston, where Peter Moore, from Martin's US distributors Tracom, stopped off to programme their controller, which was to be a major element of the system. The rest of the lighting for the tour, which will also go to Japan and later to Europe, consisted of some 200 Parcans, ACLs, strobes and other conventional lights all run from a Celco 60. "It made sense, once the programming was complete, to provide a hook-up between the desk and Martin's 3032 PC controller, so that Keith could run his entire show from his board without needing to touch the 3032 at all, except for prior set-up. This was achieved with a Martin ADDA 12 interface," Peter Moore told L+SI.

Installing the ADDA 12 analogue interface meant that Keith also had the ability to trigger multi-part cues, consisting of both generic lights and Roboscans simultaneously. And he needed to devote less than 16 channels to access potentially thousands of cues, while continuing to use his favourite desk with no worries about channel restrictions.

Fox Fireworks Expand

Fox Fireworks, following a successful series of displays at Expo '93 in Korea, continue to develop the use of digital firing technology and the SMPTE/MIDI-based Pyrodigital system is now in regular use in the UK and overseas, in addition to their own development, Pyro-Tech, manufactured by Solid State Logic. "Technology has certainly taken the guesswork out of musical co-ordination," explained Andrew Jolliffe, of Fox Fireworks. "Fireworks can now be synchronised to the split second - not only with live or recorded music, but also alongside lighting and laser systems."

Fox are now rapidly expanding their overseas operations - by developing firstly a firm UK base. Existing storage and factory facilities are being extensively rebuilt, including the provision of a new packing building, increased magazine capacity and all round, safer layout. "We are not fireworks retailers or manufacturers," explained Andrew Jolliffe, "so our facilities have been designed accordingly - for preparing and shipping first-class displays." Fox now have offices in London, Paris, Seoul, Geneva, Lagos and Istanbul.

Group One launch new CP Mini Scanner

Group One Limited (formerly Celco Inc), based in Farmingdale on Long Island in New York State, have been instrumental in the appearance in the US of a new mini scanner from the Clay Paky stable.

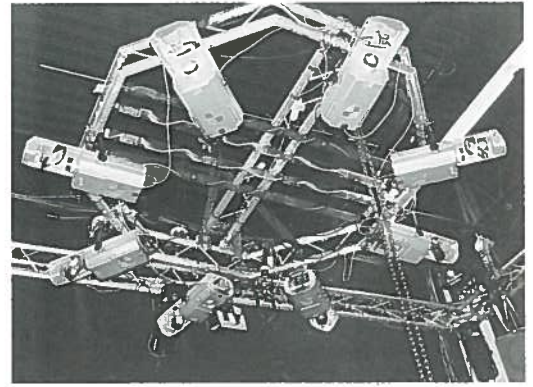
To be called Silverado, the unit (pictured right) is basically the Mini Scan but with the HTI lamp replaced with an M33 24V projector lamp. "Obviously there is a considerable saving in weight and of course, a significant cost saving," Vinny Finnigan, one of Group One's three partners told L+SI during a recent visit to their Long Island premises.

"While there is also a loss of colour temperature, the perceived brightness is really quite surprising, even alongside the Mini Scans. The colours seem much richer."

It has also enabled the manufacturer to jettison the discharge ballast and replace it with a simple dual voltage transformer, at the same time making the provision of a 115 volt model a great deal simpler. To avoid confusion with the Clay Paky Mini Scan product in the market-place, all such models will be finished in a silver livery to match the name. The list price in the USA will be \$1575 but it is not yet clear whether the Silverado will also be available in Europe.

With the pressure on costs, Group One have also addressed the control issue by having a budget controller manufactured locally under their Elektralite brand. The CPI will programme and control up to eight Silverados, Mini Scans or Golden Scans and provides up to 200 scene memories, 50 chases and 50 macros. Iris, colour, gobos and shutter are accessed by faders to facilitate easy programming, as are the speed controls, whereas beam position is adjusted by a joystick.

The 2u rack-mounting panel also has an LCD read-out for the instrument number being addressed, and offers MIDI in and out together with sound-to-light. It will sell through Group One's dealer network.



Group One's Norman Wright with the CP1 Elektralite console.

People News

As part of their planned expansion programme AC Lighting have announced the appointment of two additional personnel to their High Wycombe team. **Mark Tonks**, formerly sales manager with Cerebrum Lighting, has joined the sales department. In the sub rental department **LD Peter Keiderling** will be calling upon his many years of touring experience to demonstrate products and manage the rental stock.

HHB Communications have appointed **Steve Angel** and **Mike Bradley** to the board as sales director and technical director respectively.

Audix Communications, manufacturers of

Tannoy Systems, have appointed **Terry Gould** to the newly created position of customer services sales manager.

Joseph Manning has joined EAW with responsibility for the sales of its professional loudspeaker systems in Asia, Australia, South America and Africa. Prior to joining EAW, he was vice president of Burns Audio and before that vice president, sales & marketing for Apogee Sound Inc. EAW have also appointed **James Kawalek** to the newly created position of product specialist. Prior to joining EAW, Kawalek was national sales manager for Renkus-Heinz. He has also held positions with videowall manufacturer Imtech and AV company, Edwards Technologies.

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Alpha Sound

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PA System AS

Contact: Svein
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Frei Audio

Contact: Fernando Frei
Tel: 01 9416870 Fax: 01 9419976

Slovenia

SST

Contact: Jernej Podbevsek
Tel: 61 301434 Fax: 61 301404

South Africa

Lighting Unlimited

Contact: Ofer Lapid
Tel: 011 4042620 Fax: 011 4041458

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Contact: Peter Hallin
Tel: 086 409290 Fax: 086 409394

Switzerland

TDS

Contact: Jean Jacques Schenk
Tel: 0212 36300 Fax: 0212 33982

United Kingdom

AC Lighting Ltd

Contact: Glyn O'Donoghue
Tel: 0494 446000 Fax: 0494 461024

SOUND SHORTS

Raper & Wayman's installation division has been busy recently working in the Pascal Lecture Theatre, a new building on the Enfield Campus of the Middlesex University. In order to provide a clear line of vision and not to restrict projection lines, R&W utilised a central EAW AS300i loudspeaker, which was originally designed for mounting on the underside of canopies at the Anaheim Stadium. Amplification is by Yamaha and an Oxmoor 4x4 buffer amplifier was also used in order to link to other sites on the campus.

Audionics, the Sheffield based audio equipment manufacturer, has recently supplied the BBC World Service with two ACE MkIII mixing consoles. The nine channel consoles will be installed in BBC offices in Bangladesh and Pakistan, to enable BBC journalists to file programme material back to the UK via ISDN links. The company have also supplied the BBC World Service with new studio facilities for their Brussels Office.

Having launched their very first tour at the end of last year, new group The Band of Thieves have recently been introduced to Trantec radio microphone equipment. The group are presently using the Trantec S2 series, based on the professional S2RX auto diversity receiver. A true diversity receiver, the S2RX features two separate RF receivers which constantly monitor the incoming signal and, via digital audio switching, noiselessly switch between the two receivers to help eliminate the possibility of 'drop-outs'. The receivers can be supplied as either free standing or mounted in a 19" rack.

Thunderbolt Systems, of Cincinnati USA has invested in more Stage Accompany sound equipment. After a first 'trial' order of their Champion and Leader Series speaker cabinets a few months ago, owner Mike Stuckey has now bought a complete Performer Series P 2-26S sound system. One of the major accounts for Thunderbolt Systems is Willy Nelson for whom they provide concert sound.

Dimension Audio have purchased 10 new Sennheiser 1051 hand held radio sets, acquired primarily to fulfil 'question and answer' applications at conferences and presentations.

Ten pairs of Tannoy PBM 6.5 Mark II monitors are in use in the development offices and laboratory of E-mu Systems to provide both sonic accuracy and consistency of reference for all its sound development engineers.

Five Soundtracs consoles were recently installed in one of the world's largest mosques - Great Mosque Hassan II in Casablanca - by Tech Audio via Soundtracs' French distributor Origin V. A Megas Mix 16 channel desk was chosen for the TV/Video production room, an FMP8 production console for the prayer calls and production control room and an FMP16 for the mobile control room used for special religious events.

Another year of researching into the latest in professional audio equipment for Raper & Wayman is over, and the result is a huge 104 pages of reading for the industry. This is the sixth edition of the R&W catalogue, and, as usual, it contains a mix of new products together with the tried and tested perennials. A 'crib' page has been added for those readers without the time to hunt through to see what's new and what's been updated. Telephone: 081-800 8288 for a copy.

Tiger Hire in Oxford, has become one of the first UK sound companies to purchase the new Soundcraft SM16 monitor console, supplied by Marquee Audio. Within a week of delivery, Tiger Hire had the SM16 scheduled out well into 1994 with Teenage Fanclub, Juliana Hatfield and The Posies on their World Tour, which kicked off with a sell-out performance at The Forum in London. Advance bookings for summer include the JVC



Soundtracs FMP installed in the Great Mosque in Casablanca.

Grande Parade du jazz music festival held annually in Nice.

Hyperson Sonorisation has recently completed the installation of a comprehensive Meyer Sound system at Lausanne's oldest 'new' venue - The Metropole. Following a closure of many years, The Metropole has reopened as the home of the Ballet Bejart, complete with its new PA system comprising the compact Meyer Sound UPL-2 self-powered speakers and VX-1 stereo programme equalisers. The Metropole's house system can be supplemented by additional Meyer units which are hired in from Hyperson. These typically include the USM-1 high power stage monitors as well as UM-1C UltraMonitors.

The Limelight in Belfast has installed the Laboratory Series LS2 system from Production Services Europe (PSE), powered by Carver amps. The system, supplied by Midland Musical Services, will provide sound reinforcement for both disco and major live acts. Meanwhile, PSE has appointed a number of new distributors. Roy Robertson Audio has acquired sole distribution rights in South Africa, Madar Audio in Dubai now has exclusive distribution rights in the Gulf, while Okaamoto Onkyo in Hiroshima will distribute in the Pacific Rim. The Laboratory Series has also recently been supplied to The Complex nightclub in Leicester, Bonza Sound Services in Guildford, the World Party European Tour, and further afield, Caraway Audio in San Francisco, and Mexico's leading hire company Villanuevo Design.

beyerdynamics GB have been appointed sole UK Distributors for Omniphonics Research Ltd which adds a range of professional amplifiers to their portfolio of audio equipment.

Cadac's upgraded J-Type live mixing console is the first with the optional motor fader system and is destined for Sweden's new Gothenburg Opera House, which opens this Spring.

LMC Audio have supplied the audio visual department of the Guildhall School of Music and Drama with mains distribution equipment for its central control room. At the heart of the installation is an EMO sequential mains switching system, which powers all studio equipment up and down in the correct order to safeguard both the sound system and volatile computer memories.

Concert Systems have had a busy time recently touring with Little Angels, M People, Capercaille, Naughty by Nature and Galliano. They have also been raising their sporting profile by supplying sound for the Rugby League International matches. EMO GEQ60 graphic equalisers were used throughout for both FOH and Monitors.

EMO Systems have added a new distributor to their Far Eastern sales network. Hiroshi Systems Ltd have been appointed to look after sales of their products in both Hong Kong and China.

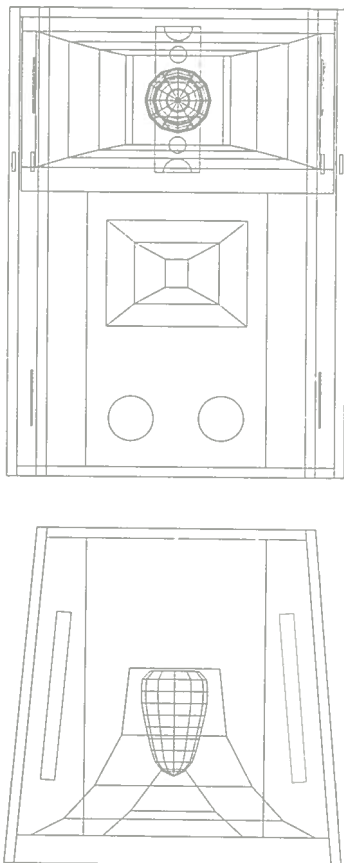
Sound rental company, SSE Hire Ltd of Birmingham have asked us to point out that it has no association whatsoever with SSE Marketing of London. Since the recent demise of SSE Marketing, and the subsequent termination of the telephone line, SSE Hire has been receiving many calls from SSE Marketing customers.



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ShowCAD goes to Hollywood

When specifying equipment for their UK Club in Wandsworth the setting for BBC TV's Dance energy, Essex-based leisure group First Continental installed ShowCAD to control the lighting. The PC-based system was good enough for them to commission it into a second venue, Hollywood Ipswich, shortly afterwards. The news that it will now go into Hollywood Southend as part of that venue's refurbishment, now due for completion and is under serious consideration for installation into the company's flagship, Hollywood Romford, is confirmation of first Continental's appreciation of the power and versatility of the system.

The system was also specified by PSD Electronics for Devenish's Rendezvous cafe/bar/disco on the quayside in Weymouth, Dorset, where a combination of Martin Scans and Zaps, Pars and neon were installed, complete with sound system. PSD have also landed the contract for The Sailors Arms in Newquay, one of the largest grossing pubs in the UK, and have specified ShowCAD as the control system. The refurbishment is due for completion around the end of March.

APRS 94 Show offers many Firsts

All the signs are that the forthcoming international professional audio exhibition, APRS 94 (Olympia, London, 22-24 June), will be as successful as any previous event. The show organiser has received applications for space from major companies and interest from would-be visitors is lively. Philip Vaughan, APRS 94 organiser, told L+S: "We're finally seeing a mood of optimism among manufacturers and distributors, and anticipate a very positive show with a really broad range of products."

New at the event will be a programme of workshops for visitors, a registration Helpline, a VIP Club where exhibitors can offer hospitality, improvements in the aisle widths, opening hours and the catalogue, and a special display for products being premiered.

The major extra attraction, free to visitors and new for 1994, is the 'briefing' - workshops and forums taking place throughout the three days of the exhibition. Topics for the briefing set so far are ISDN multimedia, theatre sound effects, automation, compression and creative use of EQ. There will be a daily Broadcast Forum and other highly relevant items, with the participation of Re-Pro, the AETI and Institute of Broadcast Sound. For further information contact the APRS in Reading, telephone (0734) 756218.

Carver appoints Sound Dept

The Sound Dept of Oxford have been appointed distributors for UK & Eire by the Carver Corporation. This decision has coincided with major changes in Carver management, philosophy and products. Carver are now able to offer a five year warranty on all newly introduced professional amplifiers. February saw the unveiling of the new Series 1 amplifiers, designed from the outset to work with all international mains supplies, as will be the case with all future developments with the new five year warranty arrangements indicating the confidence in this new range.

The five year warranty will be extended in April to cover the new Series 11 amps, which will bridge the gap between Series 1 and the PT Series, whilst also offering Medialink compatibility. Demand for the existing products is still high so it is intended that manufacture of the lightweight PM1201, 900, 600 and 300 will continue in parallel to service the touring market. Sound Dept will be providing full service back-up on all new products and will be continuing warranty and non warranty service for all previously manufactured products.

German Distributor for Rainbow

M & M Camelot has appointed Lightpower Showtechnik GmbH as the German distributor for Rainbow colour changers. Lightpower Showtechnik is a high profile sales and marketing company based in Paderborn, Germany, and sells a range of professional lighting products to all areas of the entertainment market.

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ASLEEP IN THE STALLS

The first of a regular series from critic Ian Herbert

February is often a busy month in the West End, when shows which held on for the Christmas trade give up the ghost and make room for new hopefuls. But the crop this year was a light one - not for lack of theatres, but from the present reluctance of producers to take risks. One fairly risk-free arrival was the now annual John Godber play, this time *April in Paris*. His last, *On the Piste*, involved the construction of an astroturf ski-slope on stage, but any engineers licking their lips in anticipation of the new one were sadly disappointed.

Like the play itself, a charming story of a Northern couple finding new life in their marriage on a weekend abroad, Robert Jones's set is a deceptively simple one. I don't know how much it corresponds to the one he built for the original Hull premiere in 1992, when Godber and his partner Jane Clifford played the sparring Al and Bet, but it works very well in the cosy confines of The Ambassadors.

The basic black box of the first act, with its free-standing white wall and floor, doubles as the house and the ferry to France, transforming itself over the interval into a gloriously colourful reproduction of a Renoir. For once I was glad to be in the circle, for Jones's Renoir spills over from the stage walls to fill the stagecloth. The recreation of the black and white house set, by the actors themselves, is very much part of the action, and the audience watch the original white floor being relaid while the white flat and black set are flown back and monochrome domesticity returns, broken only by the colour in the painting Al has done of the Eiffel Tower, unpretentiously symbolising the new richness he and his wife have found in their lives.

John Merrylees's lighting, adapted for London by Andrew Leigh, is of special importance to the production in its clear definition, sometimes by spots alone, of acting areas and atmospheres.

The theatrical event of the month, in every respect, was the Royal Court revival of Arnold Wesker's *The Kitchen*, which John Dexter first directed there in 1959 in a "production without decor", in spite of Jocelyn Herbert's credit as designer. The Court's new artistic director, Stephen Daldry, chose this as his debut production on the Court's main stage, and immediately set about transforming the theatre in a way that hasn't been seen since the wild hippy 'Come Together' festival back in 1970.

The entire stalls were built over and the acting space extended into the horseshoe of the circle, with slips to the proscenium and seating on what was the stage to create an in-the-round playing area. In it, Scott Fleary Ltd have built an entire restaurant kitchen for designer Mark Thompson, its gleaming stainless steel surfaces (by Met Scene Fabrication) and tiled floor (by Dave King) contained by a stainless steel counter on which at moments of stress (and there are plenty of these) the actors may parade. The pros itself has been tiled, its doors converted into arches that lead the action offstage and provide the exits to the street on one side, the above-stairs restaurant on the other. The effect as you walk into the theatre is an immediate coup.

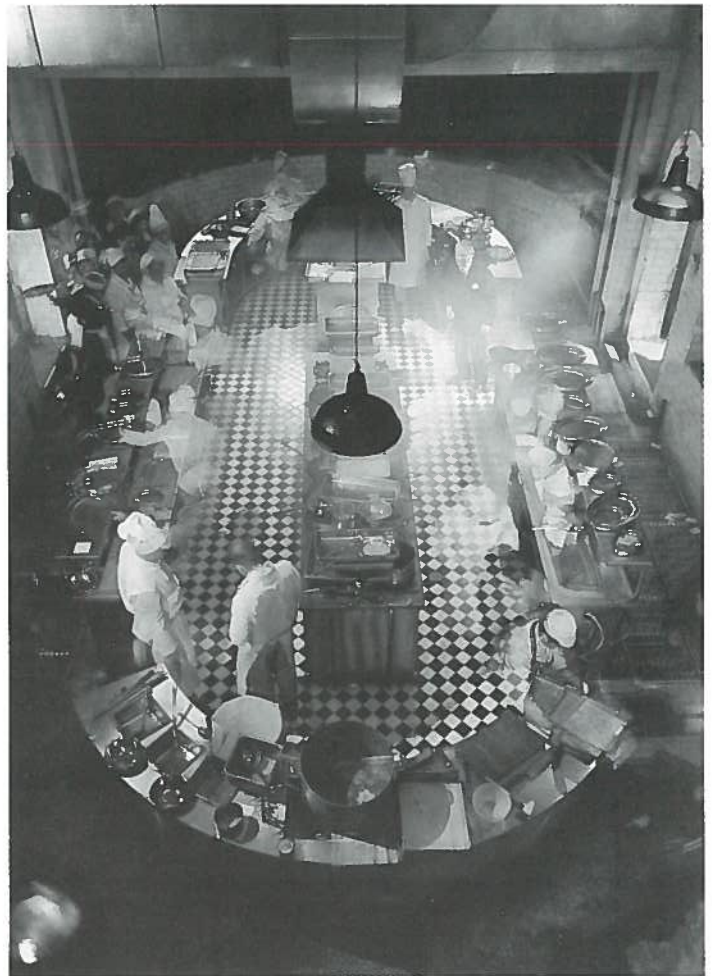
But this isn't one of those productions where you come out humming the set, however striking. It's a splendid fusion of theatrical talents, with the cast of 28 (count them) making sweet ensemble pictures with the aid of Johanna Town's lighting, largely big floods from the FOH perches but with a few well-placed specials to point up the mayhem when the play's central character (originally played by Robert Stephens, now well taken by Christopher Fulford) finally goes berserk and wrecks the kitchen. Above all, the sound is crucial, right from the opening when the ovens are lit one by one with a crescendo of whooshing gas. It's at this point you realise that the play's apparent high realism is subordinate to dramatic needs, for these ovens look real but run on sound-designer's gas.

The kitchen cast prepare imaginary food with all the right implements and equipment, and the sounds they make, the rhythms they create, are orchestrated offstage to a high degree by Stephen Warbeck's score and Paul



April in Paris by John Godber, at The Ambassadors.

Photo: Stuart Colwill



Arnold Wesker's *The Kitchen* directed By Stephen Daldry and designed by Mark Thompson now running at The Royal Court. Photo: Ivan Kyncl

"These ovens look real but run on sound-designer's gas."

Arditti's soundtapes - the expression 'batterie de cuisine' brought tellingly to life. The production is a stunner, and does more than justice to Arnold Wesker's youthful work.

Stephen Daldry's production of Machinal (see L+SI February '93) at the National, another show that plays on the dehumanising effects of our mechanised society, has just won Ian McNeil the Critics' Circle's 'Designer of the Year' award for the second year in succession. Just to show you that the critics are not completely infallible, I bring you a delicious story from the award ceremony. One of our more distinguished critics was standing next to Roger Allam when Tom Stoppard picked up the 'Best Play' award for *Arcadia*. "Excellent play, *Arcadia*," he said. "Have you seen it?" "Actually, I'm about to play the lead in it." Blushes from our critic, who tried to retrieve himself when the 'Best Musical' award went to *City of Angels*. "Wonderful show, that - I expect you've seen it?" I played the lead in that, too." Collapse of stout critic.

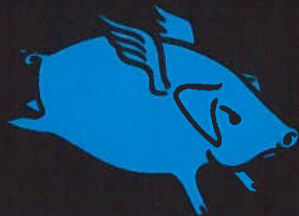
With its huge cast and massive building cost (estimates of the seats lost vary from 80 to 120) *The Kitchen* is probably the most expensive show in the history of the Royal Court, but as an almost guaranteed sell-out may recover more of its costs than one selling 20% of the full seating, a percentage not unknown to the Court. Students of theatre history might like to know that the first full run of the show, in 1962, played 86 performances, more than any other in the ESC's first ten years except, of course *Look Back in Anger*. It took £16,226 (60.7%) at the box office, and had production costs of just £2,051!

Today such a production cost would hardly cover a Fringe show, yet it is most impressive how production values are being maintained out there on the tightest of budgets.

At the 50-seat Etcetera theatre in Camden Town the other week I saw two shows which didn't let costs get in the way of a high standard of presentation. Kevin Laffan's sexy farce, *The Missionary Position*, had a cast of seven and a most ingenious foldaway set designed by Michael Folkard that took in half a dozen settings.

After a short break we came back to Godfrey Jackman's one-man show, *Bligh*, which boasted another full set, designed by Andrew Eastcott and built (as was the *Missionary Position* set) by Tim Jones. Here spars, sails and a wooden floor spoke of the harsh shipboard conditions for the captain of the *Bounty*, but when the action shifted to Tahiti, backlighting on the 'sails' revealed the silhouettes of islanders and created a softer atmosphere altogether.

Giuseppe de Lorio's lighting, in fact, made a valuable contribution to keeping our attention - one-man shows without intelligent lighting can be quite tiresome and I can sleep through them better than any other format. The arrival of sophisticated small-scale lighting and sound equipment has revolutionised the capabilities - and the ambitions - of fringe designers.



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THE NEW PRODUCTION ARTS

Manhattan link maintained, but major new facility in New Jersey propels leading US rental, production and systems company into a new era. John Offord has a guided tour and describes the background to the changes



Away from the city: Production Arts' New Jersey premises.

At the time of my previous visit to Production Arts, late in 1992, everything happened from their 11th Avenue labyrinth in Manhattan; if I hadn't had a tour guide on that occasion, I doubt whether I would have actually surfaced from within the building and found my original starting point. Well, a great deal has happened in the short space of time between my visits and when partner Steve Terry, my host in 1992, gave me warning of their planned move to new headquarters some nine miles away across the Hudson River in New Jersey, I was keen to see just how far the company had travelled, both literally and metaphorically: 1993 was a year of major change for Production Arts, but they seem to have mastered the move to perfection.

"In May last year we completed the change-over - and a major expansion - to a 60,000 sq.ft building in Moonachie," said Steve Terry. "Such a move had been under consideration for a number of years, and was motivated by the space requirements of the company. New York City industrial space is not well-suited to the large volume and size of projects characteristic of our core business. Large single-storey buildings are simply not available, and we had spread to three floors of a 12-floor building,

making it extremely difficult to service our customer base efficiently and quickly."

John McGraw: "We have always recognised the contribution that emerging lighting designers made to our business."

However, as Steve, executive vice-president, and partner and company president John McGraw explained, the corporate culture of Production Arts has always been that of a 'New York shop', and there is a strong commitment to service the City's entertainment production community. Recognising that certain key market segments couldn't be effectively serviced from outside New York, the company has wisely retained the first floor at 636 11th Avenue to provide a range of services.

City-side facilities still available (and in most cases expanded) include customer service for the film and video rental market (a large part of the company's business, and something that can only operate on a very quick turnaround), Pani projection systems, project management

(more of which later), counter sales for perishables under sales manager Kori Hansen, and a demonstration room, highly important to maintain Production Arts' vital links with designers.

"Members of the design community have always utilised us as a source of technical assistance, and as a place where hands-on evaluation of equipment was easily available," Steve Terry told me. "The new demonstration and programming room in New York allows this tradition to continue and console training, show programming and 'shoot-out' style evaluations occur on a regular basis."

The Pani projection system has now become a part of the designer's standard toolbox for industrial shows, and this is due, in large part, to the efforts of Production Arts over the past six years as the exclusive dealer for Pani products in the US and Canada. "In order to effectively interface with designers, producers and photo labs, Pani product manager Anne Johnston remains based in the New York office," explained Steve Terry. "She also oversees the Production Arts Lighting West operation which is managed in Los Angeles by Jean Doherty."

In addition to this activity, the New York



An 'overview' inside Production Arts' new base at Moonachie.



John McGraw, president of Production Arts.

office also acts as an important pick-up and drop-off point, and a fleet of four new trucks is in continuous two-way radio contact with the New Jersey base and traffic manager Jed Stiles.

However, the main part of this story has to be about the 'new place' in New Jersey, and after an early breakfast in New York and a right-to-the-minute pick-up by John McGraw, I was whisked out to Moonachie via the sometimes notorious Lincoln Tunnel.

Production Arts' new headquarters building comes in the standard international style of modern industrial building - their 60,000 square feet of space could just as well be in Eastbourne as far as the structure is concerned. It has all the usual attributes of accessibility and clear space and from there John McGraw, Steve Terry and team began to get to grips with their opportunity. It is certainly the most technically advanced building of its type I've visited, accurately reflecting the various market sectors of the industry serviced by the company.

It took the Production Arts management team around six months planning to implement the full infrastructure of the new building including data and telephone networks, compressed air, electrical power and lighting. The essential link with the New York office, for instance, carries up to 24 channels of voice and data simultaneously. When customers call the New York telephone number, the call is routed to a central receptionist in New Jersey. From there, the call can be directed to the correct destination in either place. And if you decide to talk about the rental side of the business, the company's rental management system (quite probably, according to the Steve Terry, "the first computerised rental system implemented by a US lighting company, and developed in-house") now connects to over 80 terminals and printers in New York, New Jersey and Los Angeles. It is serviced by a new ultra-fast mainframe running under the UNIX multi-user operating system.

The rental operation at Production Arts is responsible for between 55 and 60 percent of company turnover and employs the majority of around 90 employees based at either New Jersey or New York. "Touring crews who come to us to prepare tour packages now enjoy the benefits of an expansive 50,000 square feet of shop space, all on one floor," said Steve Terry. "Some of the largest touring projects we have undertaken, including the national tour of 'Tommy' and the Radio City Music Hall Spectacular, were packaged in the Fall of 1993, and we won rave reviews for our shop facilities from producers, designers and road crews."

John McGraw took me on a tour of the New Jersey premises, and after an initial gasp at the sheer size of it all, and the amount of activity



DMX talk at LDI in Orlando, November 1993: Production Arts' executive vice president Steve Terry (right) with Zero 88 Lighting's Peter Brooks.

taking place (I entered at level 2, from the office block at the front of the building), we homed in on the electronics area. "One of the things we've done," explained John McGraw, "is to maintain a back-up console for every type of console we have available for rental - all checked out and ready to go. If a service technician needs to send out a replacement he can come in knowing that one will be available. "It also allows us to have an area where we can offer training sessions on consoles or which we can make available to designers or technicians who come in and need to work. It also doubles in the testing of dimming equipment, consoles and moving lights."

The adjacent area is where fixture preparation takes place. Every ellipsoidal is cleaned and trimmed before it goes out, with air tools throughout the space and amp meters to check the wattage of the bulbs.

A completely new fabrication area includes space and equipment for aluminium and steel welding, a machine shop for custom production for the touring theatre market and an expanded woodworking department. Manager of this department is Richard Mone, who presides over a staff of four experts, who are responsible for manufacturing and maintaining Production Arts' own Unistrut system and aluminium carts to handle the horizontal members of the lighting elements. Tower sections are made of aluminium, three sections high, making a 21 foot tall boom. Various accessories include followspot cages, and the structure is strong enough to act as its own ladder. "We commonly involve locking

hardware so that fixtures can travel focused and will stay in focus through the truck ride to the next stop," said John McGraw.

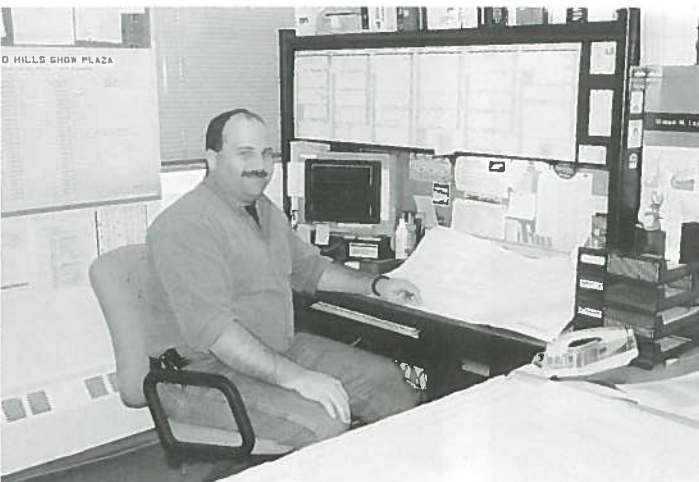
Another completely new element of the 'stock flow', and ensuring that equipment is well maintained and looks good, is a paint shop, with two new EPA-approved spray booths to allow painting of the inventory without the attendant dirt and paint dust.

Throughout the floor, a revised storage system using large wooden box bins, allows maximum use of the 22-foot ceiling height and new fork-lift trucks allow quick access to the vertical system. It has already proved its worth in the cable area. Motorised cable coilers are used and to make life even easier, Production Arts was one of the first shops in New York City to colour code its cables by length, gauge, etc.

Crew prep spaces cover a large area and have unhindered access to the five loading doors. There are facilities to enable touring productions to be pre-hung on support structures, cabled and tested. "We've had as many as four big productions being prepared here at one time," said John McGraw.

Next came the area where sales items such as lamps, filters and templates are stored, followed by the film and video equipment section and the special effects and Pani projection equipment space. By now we'd gone full circle and were back within the electronics area of the building. Equipment abounds, including an electronic engraving set-up.

The man in charge is shop foreman Tom Ferguson, who manages the entire rental shop, assisted by department heads for fixtures,



Project manager Michael Lay.



Jane Head is vice-president of sales.



Part of Production Arts' engineering section.

cable, film and video, electronics and Pani. Field service manager Jeff Kaye heads a team of four engineers who are responsible for electronics service on all Production Arts' rental and installation systems, and they are authorised to service dimming and control equipment for all major manufacturers. As Steve Terry explained: "This department operates under a mandate from Production Arts management that all products that are rented or permanently installed must be serviced (generally at a below-PC-board level) by in-house staff in order to provide the fast response demanded by a very competitive market. We have made a large investment in computers, test equipment and test jigs to allow total self-sufficiency in this area."

Moving into the lower floor of the front office block a special room is reserved for Pani slide and film scroller preparation, fog machine servicing, and so on. Next came the offices housing new ink-jet plotters and a Xerox copier for the engineering section which includes a large electronics fabrication area.

Production Arts' Systems Integration Group, headed by Steve Terry, provides design, building and installation services for a wide variety of projects including theatres, theme parks, TV studios, universities and cruise ships. Vice president of sales, Jane Head, directs her efforts in this area, and project manager Michael Lay oversees the smooth flow of the work. A new computer network is dedicated to CAD in New Jersey and provides work-stations for up to four engineers.

The company's abilities in show control have been further enhanced recently with the addition to the team of John Huntington as their in-house show control expert. (John's book *Control Systems for Live Entertainment* is due to be published by Focal Press this Spring). The



Test area for consoles, dimming equipment and moving lights.



The cable area.

recent and much publicised 'Buccaneer Bay' water feature project at the Treasure Island Hotel in Las Vegas utilised Production Arts show control abilities.

For sales and customer service, rental manager Wayne Lawrence supervises a staff of five sales people who have specialist knowledge including touring, film and video, industrial shows, Off-Broadway theatre and special events. They also handle sales activities for used and standard equipment that is outside the operational area of the Systems Integration Group. On the management and accounting side, operations vice president Mitch Gottlieb manages all personnel and infrastructure areas whilst comptroller George Alexander directs an accounting staff of four.

President John McGraw is also closely involved in the financial operation of the company, and as you would by now have worked out for yourself, has Production Arts computer system just the way he wants it. Out on the shop floor I'd asked him how much of their rental stock was in the building at that particular time and how much was out on hire. I expected a sensible guesstimate, but got the precise answer: on *that day* 37 percent in value terms. The reporting system is exceedingly comprehensive and apart from usual stock reporting can relate a complete picture of how many times a product has been hired out, what it has earned for the company and its relation to capital employed, etc. "It gives us an excellent guide as to what type of products we should buy in the future," he explained.

Everything, it would seem, has been carefully thought-out, from the detailed planning involved with the layout of the new premises through to a staff profit sharing scheme and a full health scheme for staff and their families.

John McGraw started his life in theatre in high

school. "They needed people to do things backstage and I just fell in love with it," he said. By the time he left he'd been involved with over 100 productions and after working in community theatre it was planned he would major in chemical engineering, but once again got involved in theatre, dropped out, worked in professional summer stock and on touring productions. He had the usual problems with his parents ("they thought it would be a wonderful hobby for me, but what about family life?") and after getting his national service out of the way went to New York and linked up with Peter Forward (whom he'd met at college) who had started a scenery company called Production Arts Studios.

"Peter asked me if I wanted to start a lighting rental company and as I'd had a little bit of experience in this area at Ithaca College we got together and began operations in 1971. At that time Steve Terry was master electrician at the Dance Studio of Harlem, and their shop was near ours. Steve had been a student of Peter's at City College in New York, and he often worked with us when he wasn't out touring. We recognised the value and knowledge he had and hired him full time. Two years later we sold him a portion of the business. In 1985 Steve and I bought out Peter and we've continued as partners since then."

Whilst the business was being built up, John McGraw was working as a Broadway electrician. "Someone called me one June and asked if I would like to take over 'Grease'. I agreed, thinking it would probably get me through the summer. I ended up spending seven years as the show's electrician! Some people say that Grease was the show that built Production Arts. That's not quite true, but it certainly fed me across all those years!"

Links with the roots of the theatre business



The Pani projection area.

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Close-up of the console back-up and training area.

are still jealously maintained, as John McGraw told me. "We have always recognised the contribution that emerging lighting designers made to our business. When we started operating, we began by servicing Off-Off and Off-Broadway companies. As those designers developed and went on to work on bigger projects, our own company grew as a result. Now we are capable of doing some of the biggest projects, we still recognise the value of those emerging people and we concentrate a certain amount of our resources to servicing those involved in the developing area of design.

"We certainly haven't turned our back on that segment of the market because many fresh ideas come from that area. They have particular requirements because of budgets and things such as electrical requirements in their buildings that cause us to be creative in what we do. We can then transfer that expertise into other areas of our work."

Recent Production Arts Projects and Activities

New York State Theatre at Lincoln Center: Complete engineering and installation of a new control system based on ETC's Obsession console.

MS 'Ryndam' for Holland America Line: The third of a series of ships built at Fincantieri shipyards in Italy: design/build of all lighting in the main lounge and disco for these three ships.

National Tour of 'Tommy': Provision of complete lighting and Pani projection package for the tour of this huge hit, designed by Chris Parry, which started in September 1993.

Metro Hills Show Plaza: Provision of complete lighting system to Technical Supply Japan for Las Vegas-style showroom located on a golf course in Mie, Japan.

Buccaneer Bay Water Feature at Treasure Island: complete design and build services for this Las

Vegas project which was designed by LD David Hersey. Provision of engineering and devices to marry custom dichroic filters to architectural waterproof fixtures, as well as engineering of a complex lighting control and dimming system.

NBC Studio 6A: Complete renovation of lighting system utilising ETC Obsession consoles and Sensor intelligent dimmers connected by an advanced Ethernet network.

Consulting - the DMX512 Network at CBC Toronto: Production Arts engineered and specified an involved DMX512 distribution network for Canadian Broadcasting Company Studio 40 in Toronto. This extensive network included patching and distribution to deliver DMX512 to 160 moving battens in the studio for colour scrollers, moving lights etc.

Product Development - AS-100 Image Scroller, new MAC-based Control Software: As part of an on-going programme to produce computer controlled accessories for the Pani Projection Systems, Production Arts developed the AS-100 scroller. This unit moves 100 feet of 8" wide film through the gate of a Pani projector in a precise manner. It is currently in use in the Cirque du Soleil showroom at Treasure Island and on the national tour of 'Tommy'.

A new version of control software is currently in Beta testing. This software package runs on Macintosh computers, supports an advanced graphical user interface, and, most importantly, allows complete integration of AMD-15 and A-32 slidechangers and AS-100 Image Scrollers into a single control system.

It also supports MIDI Show Control and direct reception of SMPTE time code. This results in a much more streamlined approach to programming Pani projectors. As part of the strong relationship between the two companies, Pani stocks and distributes all Production Arts accessories outside the USA and Canada.

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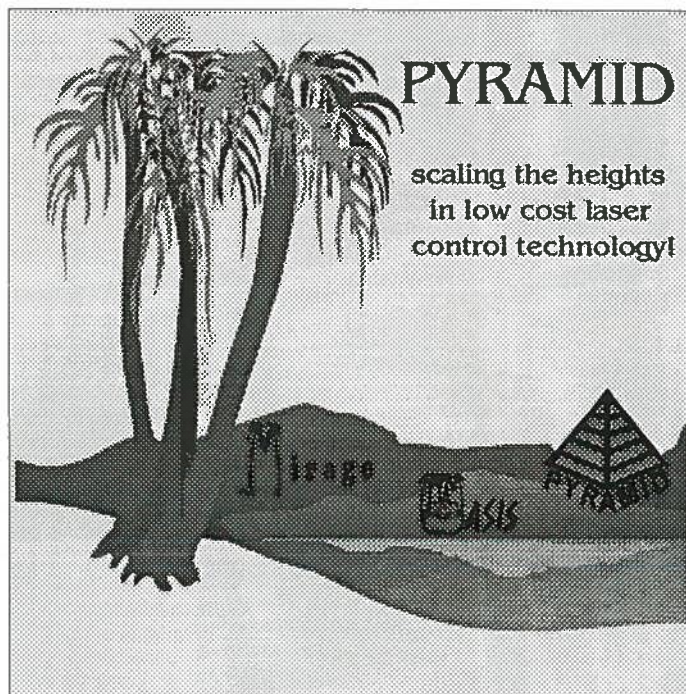
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AUTOMATED LIGHTING - THE SEQUEL

Part 2 - Universal Controllers

Richard Knight and Tony Gottelier follow up their moving lights survey (L+SI November 1993) with the definitive analysis of moving light control desks suitable for use in live performance.

Our original idea was to review automated lighting as it stood at the year end 1993. It seemed about time a snapshot was taken! It also appeared intelligent to split such a review into two articles, one charting the instruments available, as already published in last November's L+SI, and the other being a comprehensive review of moving light consoles. This, second edition of the moving light saga, has now been split into three: universal boards, dedicated desks and what have become known between us as 'nearly' moving light consoles.

We are very conscious of the difficulty of keeping this information as current as possible, and we are utterly reliant on the manufacturers concerned to initiate such information. Had such a review been undertaken six years ago it would have been extremely short and simple.

This is certainly no longer the case and in only a few years has turned into a truly daunting task. It has become apparent, with over 20 automated consoles now in existence, that the task of reviewing them is greater than two people can successfully handle on their own (and is also bigger than one article). It would be unhelpful to review a console without being very familiar with it and this has led us to invite actual users, who are familiar with a particular console, to contribute to this review. Whilst this approach was forced upon us by the scale of the work we had taken on, it has also produced a welcome and refreshing range of voices and variety of views. With a few notable exceptions the automated lighting industry usually functions in isolated compartments with little communication between participants. In fact, this is clear from some of the comments made by users who are obviously quite unaware that what they consider to be 'unique' features of a board are actually present on other desks. Generally, most people favour the desk which they know well and are familiar with, for obvious reasons - the learning curve involved in starting afresh is too much to contemplate, as we were to discover ourselves very quickly.

Automated lighting control is a relatively new discipline which no manufacturer of lighting instruments and consoles can, any longer, afford to ignore. It is where the bright software writers within the industry are working. The ideal is to create a console that allows the attributes of the moving lights to be used to their full potential. It must be possible to programme quickly and conveniently - if a 'look' takes too long to create, then it may never be made. Additionally, a great deal of moving light programming is done just to see what might work on stage, and it is accepted that a large part of this effort will be thrown away or, more usefully, adapted. This comes about, partly due to the difficulty in communicating lighting 'looks' from one person to another, and partly to do with a natural desire to experiment with new ideas. So a 'look' must be quick to make, and fast to edit or adapt.

Manufacturers of dedicated moving light systems are able to manufacture from scratch a desk that will have the primary purpose of serving their own system, connection with other systems being of secondary importance. They obviously know what the parameters of



Authors Tony Gottelier (left) and Richard Knight (second right) discuss automated lighting at the recent launch of the Status Cue desk and Cyberlight luminaire at Lightfactor.

their heads are, and what they may be in the future. They are also making systems that are fully self-contained and therefore the expenses involved in the creation of a console may be less of a consideration; the system and the acquisition cost being judged as a whole. In general, they are in hire rather than sales, making it easier to convey that their consoles are work-in-progress to the extent that they are subject to software updates. Dedicated boards which will be covered include: Altstar, Artisan and Mini (Vari-Lite), Intellabeam, Icon, Martin 3032, Pan Command, Starlite and Syncrolite. (The new High End Systems' Status Cue which, initially at least, would fit into this category, subsequently making the crossover to 'universal', isn't covered in this practical review since it hasn't yet made its debut in production form.)

Manufacturers of 'universal' automated lighting consoles have to create something that will run a wide variety of lighting fixtures of differing attributes and remain open enough to accommodate lights that have yet to be invented. The accepted protocol for controlling these moving lights has, for better or worse, become DMX512 ("life is what happens to you while you are making other plans"). While the debate rages about whether DMX is adequate, and even whether we can allow it to be improved or replaced on the grounds of greater resolution (there will always be a difference in approach from those using steppers as opposed to those with servos, and output tracking, as opposed to vector to vector) it is the only viable common protocol we have at present. Since it is possible to adapt it to 16 bits, why not get on with it? In fact, we found many universal console manufacturers backing this view.

The history of these 'universal' consoles is even shorter than the dedicated ones, and they have to somehow get a real return on investment in a less well defined marketplace. Here, there is a wide range of approaches, including adaptations or upgrades of existing consoles, as well as original desks, with correspondingly new and unusual ways of looking at the issues.

The major questions include treatment of Last Takes Precedence (LTP) and good old fashioned Highest Takes Precedence (HTP). Playback and LTP activation is an issue on any automated console and is part of the wonderful world of moving lights. Traditionally (if there is such a thing yet in automated lighting control) playback has tended to be vertical, rather than

horizontal, in order to deal properly with the issue of when to trigger LTP. In other words, on a button advance rather than next fader.

A number of consoles now allow a much wider range of playbacks, in part because of conventional lighting tradition. It is left up to the programmer to deal with the matters of LTP that this raises. Timing is a vast area, with some consoles making major breakthroughs. Timing is at least four times as important in automated lighting, as it is in conventional lighting and this has yet to be reflected in most consoles.

Many moving light manufacturers initially took the short-sighted view that sophisticated control was not their problem. They had their own methods of running their units, but these often fell a long way short of professional show standard. It is only since the advent of sophisticated control systems, and the acceptance of DMX, that the wider use of moving lights has taken off, particularly involving moving mirror units. Consequently, this has had a knock-on effect on the adoption of suitable consoles. All of this has resulted in much better communication, together with the sharing and exchanging of protocols between lights and console manufacturers, allowing boards based on DMX512 to access some of the attributes hidden in the instruments themselves. There are now intelligent units, such as Vari*Lite's, where the brain is, appropriately, in the head; dumb units, which is most of the rest, and an increasing number of semi-intelligent (dim witted) units. The same applies in reverse to the control desks, and it is a moot point which has the brightest future.

Even manufacturers of complete systems are now allowing their lights to be addressed by consoles other than their own, including Telescan and Vari*Lite's VL5s. The idea of interface protocols and 'bodge' boxes has thus come into play along with the arrival of multi-purpose protocol converters. This seems to be the start of closing the circle, in that the two separate lines of 'dedicated' versus 'universal' are no longer mutually exclusive. It is quite staggering to think how many lines of code have now been written in order to make moving lights move. Lines of code cost much money to write, and a great deal of that work has been duplicated over and over by different manufacturers out of the pressure of the two 'Ps' - pride and sheer paranoia. The notion that "if it's not invented here, we are not going to use it" seems to be fading at last which can only be a good thing.

Boards which fit into the 'nearly' or hybrid category are those which are generically standard lighting desks - such as the Jands Event and Event Plus which we found in extensive use for smaller shows - which have also had special software written for them to make them usable with driven lights too. Some of the others in this category are Strand Galaxy, Celco Aviator and Arri Imagine.

How the future of automated lighting pans out, is anybody's guess and any prognosis would be tilting at windmills. This review, and those that follow, are no more than a punctuation point in an on-going process.

FLYING PIG - WHOLEHOG

RICHARD KNIGHT

As Richard Knight is one of the authors of this piece, modesty prevents including his credits, though they are well known. He owns-up to being a complete convert to the Wholehog since first seeing it at PLASA '92. Since then he has programmed three shows on it, all with Stan Snape, using five Hogs altogether. Previously, he was exclusively a Vari*Lite specialist.

The Wholehog first appeared in public at PLASA '92, causing quite a stir and receiving a well deserved 'Best Product' award. That three dedicated individuals, not much money and a big idea, can achieve this is tremendous, and should bury the notion that all achievements in automated lighting require huge R&D departments and massive amounts of money.

The timing was exactly right as it created the possibility, for the first time for many, of using big DMX-based multi-purpose rigs including large numbers of moving lights. Because of the approach of the Wholehog, these rigs can contain a variety of different types of fixtures, driven as well as generic and any other DMX controlled device, all off the one console if so desired. If this is not desirable, because of fear of system failure, or antipathy towards 'virtual' control, you can always use two! So the Hog opened up the big opportunities which had previously been overlooked in mixing automated lighting of different types.

Previously, each manufacturer seemed to shun the idea of integration. Since the Wholehog's appearance, the pace of open-system development of both consoles and moving lights has been raised to an unprecedented level. Most automated lighting consoles have a detectable line of development from a particular discipline such as theatre or Rock and Roll (or indeed a previous automated console) and that lineage continues through to the moving light desk. The Wholehog appears to be an intuitive response to the issues raised in automated lighting, and does not seem to owe any single preceding lighting console any great debt; instead it takes an eclectic approach. And why not? The excellent thing about this console is that its flexibility leaves the programmer free to use the facilities in a way that suits the show and their own style. In practice, this will be based on their own history and previous experience. The Hog should, as a consequence, appeal to a wide variety of people with differing backgrounds in lighting.

The desk is in two parts, a lighting board and a computer, which is (and is referred to as) the brain. The splitting of it into two sections allows one to approach most programming tasks from the board portion, whilst allocating those best handled by a computer to be so manipulated. The board portion consists of six functional areas: faders, playback manipulation, scene masters, menus or palettes, the programmer and the parameter wheels. The numbers associated with this console are enormous to the point of not needing to know. 6,000 DMX channels available for instruments, coming out on up to 12 data links. There are 77 pages of playbacks, with 20 faders per page and these faders have select buttons to activate LTP and advance and reverse buttons, plus 28 separate scene masters. 65,000 so-called, 'scenes' can be placed into a stack on a single fader. Most satisfactory!

The board has two modes, programming and playback, though fader-playback is available in both. Programming mode accesses the palettes, focus presets and groups; there are more than

enough of these and they come in banks of seven which is a slightly eccentric number, maybe it's six and a spare? Playback mode accesses the scene masters, which can be activated independently of the fader playbacks and may be all 'information' or 'information only'. They can, therefore, be used as playback palettes and be flashed, added or swapped over a look being played back on another fader, or an adjacent scenemaster. Playback also provides global (non-active master) stacks and scenes. If the global is adjusted any direct copy of it will be updated. If the copy has previously been adjusted (or disconnected) then it remains unaffected by changes in the global. This is the principle of focus presets, hugely expanded.

"Since the Wholehog's appearance the pace of open-system development of both consoles and moving lights has been raised to an unprecedented level."

In my opinion, one of the great features of the Wholehog is that it is possible to label absolutely everything. A palette can be called 'yellow' and this will give yellow on an Intellabeam, a Goldenscan and a VL5, if that is what you want. Steps in stacks can be labelled, as can chases and scene masters. This makes it easy to find what you want quickly and is a refreshing change from dealing with numbers.

The programming section is used to assemble

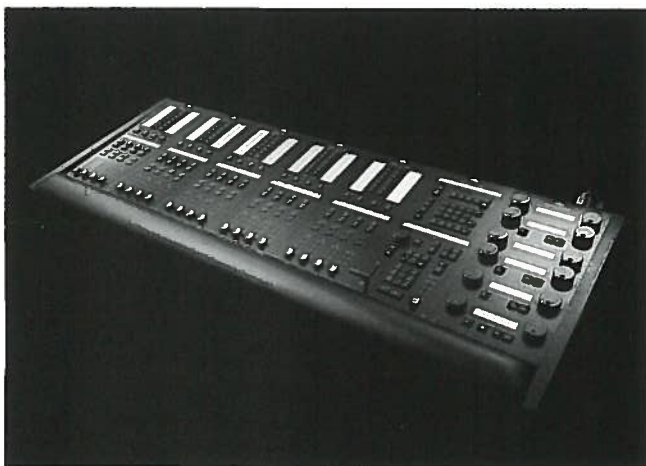
schedule, fixture library and patching are dealt with here, as are information displays, all on a big-sized screen. New fixtures are constantly being added to the library by those magnanimous men at Flying Pig Systems.

However, the treatment of time is presently surprisingly unsophisticated, given the major advances the Hog makes in most other areas. There is simply an up-time for a memory, a delay option, and a down-time. Thus, if you want a light to fade up in three seconds, while moving in 10 seconds, you will need to apply some deep thought as to how this might be achieved. The recent software release, which I have not been able to test out, with powerful new macro facilities, may just have resolved this issue. Otherwise, I am hopeful for version 2.0, as the company is well aware of the timing issues. The only other substantial hole I can find in this console is that, if one advances one step too far on a stack, reversing happens as a snap, whatever times are programmed in. There is a way out of this: by using the manual playback and sampling the step you want to manually go back to. Setting this up takes much longer than pressing reverse and I imagine it would produce unfortunate consequences with the LTP.

An excellent use of the number crunching ability of computers is Stack Synth. This is a way of creating loops very quickly by supplying basic information to the stack synth so it then creates all the missing information itself. There are a number of 'canned' effects available: circles, sine waves, etc. plus 'stagger to' and 'stagger from' which can be effective, or you can create your own effects. The stack synth will not

wholly substitute for own-designed sequences, whatever they may be. It does not have that human touch and should be accepted for what it is - a quick and very effective effects generator which can save a great deal of time and can produce shapes one wouldn't normally attempt, due to time constraints or the limitations of the human brain.

The desk now offers MIDI for playback purposes. This facility is new and comes with the latest software version 1.10, which points up the advantage of the new generation of 'soft'



Flying Pig Systems' Wholehog.

looks, and subsequently to edit them, and takes priority over any playbacks which are running unless 'blind' is used. It is very quick to make a look on this console by grabbing the component parts required to make either an 'information only' look, or a full parameter one. Assign, Append, Insert, Merge, Delete relate to where programmer information is going to be placed and Build, Edit and Clear relate to the contents of the programmer. These are powerful buttons!

Because it is so quick to make 'looks' on this desk it's also quick to make a mistake! The ease with which it is possible to copy work, both single scenes and entire stacks or chases, means that it is sensible to do so with experiments tried out on copies. If they don't work out, then delete them, or try something else. Looks can be shuffled, merged, split, inserted, edited, deleted, etc. The flexibility that the ease of manipulating looks provides, is one of the major achievements of the desk.

The brain, as well as being the information store, is also where number crunching is carried out - very sensible, as that is what computers are good at! The instrument

desks; they can expand and develop for the cost to the user of a new software upgrade. MIDI can be either done by the Wholehog's own timecode list, or you can use adjuncts such as Richard Bleasdale's SAM Mac. package. There is also the new arrival of a 'general purpose protocol converter' which may have profound implications for the future, as it appears to allow for the addressing of certain non-DMX units by the Wholehog - these include High End's Emulator, the Intellabeam and Cyberlight (on their own 12-bit protocol), Strand's PALS and the Martin Pro 1220. (The latter, incidentally, is shortly to be available in self-sensing Martin/DMX format, which means that it will also deliver tracking of the board's output, or vector-to-vector).

The people at FPS have a very friendly and open policy and welcome feedback. They also have an excellent attitude to back-up and an ongoing commitment to advancing the Hog's abilities. Whatever the future holds, I anticipate the Wholehog continuing to be 'out there'.

The board is distributed in Europe and the Far East by AC Lighting, and in the States via FPS's own office in California.

COMPULITE - ANIMATOR

MERVYN BARBOUR

Mervyn Barbour is a lighting director working for BBC TV in Northern Ireland where there is also a regular interchange of equipment and people with RTE in the South. He used Vari*Lites for several years before coming up with the proposition of converting his annual hire budget into the purchase of 30 Intellabeams. Here is his reasoning behind his selection of the Animator-48 as his preferred choice of control board.

The Intellabeam console was plainly not intended for 'live' operation, as it had really been designed for pre-programming operations, which would then be played back without a great deal of flexibility being afforded as to how one would change the parameters during this on-line operation. (Note: High End Systems are in the process of completing their Status Cue board which will address these issues and others - Eds).

Another facility which I considered to be vital was 'blind programming', a feature which is standard on a conventional lighting desk, but was lacking on half the moving light desks I looked at. One could wonder what use this facility could be, considering the need to see where the output of a head falls before you can focus it, but in practice after the initial plotting of the X and Y co-ordinates for the various scenes in the programmes, the rest of the parameters can be recorded 'blind' if desired; or more likely in TV, when you are actually rehearsing one cue, you're recording the parameters of another, i.e. time is of the essence.

The facility to have a desk which could address various types of intelligent lighting fixtures as well as a limited number of conventional dimmers was extremely valuable, as it didn't tie you to one manufacturer's products for a long time. It meant that in three years time I could upgrade to a different product line if by then a better unit was available, and still have familiarity with the control system driving the new heads. Furthermore, a desk that can address a mix of intelligent heads at the same time, i.e. Golden Scans for the long throws where luminous power is the necessity, and Intellabeams where size, weight or performance is a priority, has to be a really useful feature in the long term.

A desk which can talk to the heads in their own protocol is generally an advantage, as with Intellabeams the positional resolution is higher than standard DMX 512 and thus a slow pan from left to right of the mirrors will be less stepped in appearance. Also the little extras, like being able to reset each head individually, or turn them off from the desk, is a very useful feature. I have to say that this quality alone was one of the main reasons in my choice of desk, for in my TV studio I was able to split the I-beam protocol and feed it radially down a microphone tie-line to each lighting barrel on which I had a head, thus negating the need for a loop of data cable strung like a washing line between all the fixtures.

My attitude to a desk is: why push two buttons when you can push one? That way, hopefully, I've more time to devote to the creative bit, namely the effect that the heads are generating rather than worrying how to go about achieving it.

The provision of a programmable library of colours, gobos and positional information all accessed by one button-press is extremely useful, for I stick the colour or the gobo shape on top of the relevant key and this means the

minimum of thought process required to carry out the required action, hence maximum speed in plotting cues.

In television, I cannot overstate the value of inhibitive submasters, for if a light shines directly down the camera lens a flare will result (very difficult to avoid when using hand-held cameras with wide angled lenses) causing lift on the picture output. This can be equally spread across the three colours, which is more easily corrected by crushing the picture, or on a single colour, which cannot be corrected, and hence the final image will suddenly acquire a colour cast on it, probably destroying the lighting effect you were trying to create.



The Animator from Compulite.

The answer, of course, is to ride down the level of the light that is causing the flare, which many operators do (even Vari*Lite ones) by pulling down the grand master. However, this means all the luminaires will be reduced in level, thereby flattening the overall visual effect. Indeed, the racks operator driving the camera's iris may open up to correct for the reduction in light level, thereby cancelling the original corrective action. This is where the inhibitive subs come in, for you can easily programme them during camera rehearsal, to address only the lights causing your flare and ride them up and down, leaving the main body of the rig alone.

"The facility to have a desk which could address various types of intelligent lighting fixtures as well as a limited number of conventional dimmers was extremely valuable."

Moving lights are still mainly used for special effects i.e. on pop bands for beam work, or as gobo washes to set a particular mood, so the number of playback faders is crucial to the efficient operation of the system and also whether they are of a 'pile on' or 'multi-tasking' nature. It has been my experience that you may require at least five or six groups of memories playing back at the same time, all addressing different parts of the rig, with different crossfade times etc. This can easily be achieved on the Animator, as there are six chase playbacks as well as another two conventional A/B and C/D faders, which makes a total of eight, all feeding the output in parallel. I don't think you will ever

need more than that for the average musical item. There are also eight submasters, which could be used to store 'static' in-and-out cues. Quite a comprehensive array of features.

The provision of a second plotting trackerball is a nice feature to have, as you can use it to address the positional information of the fixtures while they are being driven from a 'live' chase playback, and hence modify their focal positions at will, thus giving you the maximum amount of flexibility on the fly!

Because of my geographical position there was no way I was going to purchase one desk only: although up until now it has never failed. An hour to wait in television terms to turn round a replacement desk is too long, never mind the minimum four to eight hours it would take to get to Belfast. So the opportunity to purchase a cheaper, smaller, Animator Compact as back-up was just the ticket, for it has all the major features of its big brother and can be used, if you wish, to drive the system for plotting the cues as well as, what I mainly use it for, playback. I find that ergonomically the main desk is best plotting the cues during rehearsal on the floor of the studio, where I can keep it permanently rigged, and the Compact is best suited rigged in the lighting control room playing back during transmission or recording the cues I have recorded on the main desk. That way I have the best of both worlds.

The topographical display, and the ability of the system to patch the fixtures in any orientation so that the heads will all track forward, or left and right, with the same movement of the trackerball, makes positional plotting a fast and efficient procedure.

Finally, the extra provision of a continual update in software versions, as new features get added and others fixed, without the need for any hardware modifications, or for an engineer to come and do it for you, is very desirable and cost effective.

The following is a footnote provided by Andy Dobbs at BBC Television Centre:

Specifically on the Animator 24, though all the boards in the range are similar in basic operation, it is a manageable size, needing one 14" monitor to provide feedback to the operator.

It is a 'Gentleman's console' - it will not let you embarrass yourself. If for any reason you adjust the focus of a lamp in mid show, forget it and then hit clear - the lamp won't jump back to its filled position, it will gently drift back, at the user-selectable rate.

The board will feel familiar to anyone who has operated a memory board, however, digging deeper will reveal many features: 'part cues' enable different parameters to change at different rates; hit 'go' and gobos can change immediately while beam movements can be slow. (The use of part, or more accurately multi-part cues, creates sophisticated timing possibilities, which proves it can be done on 'universal' consoles - Eds). Libraries of colour information can be used within memories, enabling lighting directors' preferred colours to be recalled quickly.

Editing cues whilst in mid-flight is easy. If there are multiple memories spread around the board, and all the presets are loaded ready for a monster cue sequence, adjusting a parameter on one lamp and pressing 'store' will only update memories where that lamp is involved at that place in the sequence.

'Snapshots' of the board layout may be taken, and have text assigned to them, making resetting complicated sequences a snap (sorry)!

The Animator is ideal for serious TV usage,

since when the board is well away from the studio floor in a control room, the feedback to the operator is excellent - not only of the state of all the lamps, but progression of crossfades, chase speeds, and which part of the board has control over which lamp. A useful option, especially when moving mirrors are involved, is to set up the trackerball so that the beam of light always moves in the same trajectory for a given trackerball direction, regardless of the orientation of the lamp. It's not the best board to busk on. However, with the addition of a 'macro wing' this problem can be overcome. Setting-up initially can be a little time consuming, but then being a console with a lot of personalising, there's a fair bit to do.

Authors' observations:

'Moving lights computer' it says on the front of the Animator-48 manual, which is to the point. Compulite's automated lighting consoles are in a style recognisable to theatre and TV studio lighting people and their appeal will probably be primarily in those areas. They are very much monitor and keyboard-based and what you see on the screen is lots of numbers.

The range of Compulite consoles was developed in Israel and is sold in the UK by a company of the same name, which is part of the Lighting Technology Group. Their technology is behind the control front-end for the **Telescan** system, which shows an excellent pedigree. In addition, Animator is the preferred desk for **Fly's** Fos products and other moving-head manufacturers also recommend it. They are primarily moving light consoles which can also deal with conventional lighting and assorted other DMX driven bits and bobs as well as certain dedicated protocols, such as the I-beam's own. There is also an output called S Mix, which accesses other manufacturer's protocols.

The Animator 48, not surprisingly, handles 48 moving lights of up to 12 DMX channels with an additional 240 DMX channels available for conventionals, scrollers etc. There is also the smaller Animator 24 and Compact, which is a reduced facility version of the 24, its primary purpose being to act as a back-up to the grown up versions. This concern over back-up is both unusual and welcome. The Animator 72 has now metamorphosed into the Animator 96. In addition, there is soon to be an Animator 'wing', the idea being that it can be added to an Ovation or Applause (conventional Compulite consoles) to add moving light facilities. This may well help cash starved rep theatres to ease their way into the world of automated lighting. It has to happen sooner or later!

This range of automated lighting consoles is the largest on offer from any manufacturer within the genre and along with a variety of additional devices such as Macro keyboards, Submaster wings, Remote controls etc it adds up to a commendable effort to suit the needs of a wide variety of potential users.

AVOLITES - DIAMOND II

CARL BURNETT

Lighting designer Carl Burnett took time out from his busy schedule prior to setting off on the current Wonder Stuff world tour starting in Seattle to give us his impressions of the Avolites Diamond II. His list of credits over the previous nine years includes The Red Skins, Sofia George, Annabel Lamb, Freddie McGregor, Fuzzbox, James Last and The Darling Buds. In 1993 he designed and looked

after the rigs for Glastonbury Festival, Phoenix Festival, Reading Festival and Womad in Bath.

The lovely thing about Avolites' new Diamond II is that it is so familiar. It feels comfortable standing in front of the board, as on the surface it just appears to be a normal Avolites desk, with the quality looks and feel that I have come to expect; also the Diamond II has all the usual Avo bits and bobs, Penny and Giles faders, add and swap buttons on all 180 faders, etc.

When it comes to operating the board with generic lights, the II programmes and behaves in much the same way as the original Diamond, except with the addition of a memory button. As with the Sapphire, this button must be pressed before a grab button can accept a memory, in order to avoid the chance of making an embarrassing mistake while programming. This feature does seem a little cumbersome at first but I soon became accustomed to it.

When you come to programming moving lights and colour changers the Diamond II comes into its own. The desk is completely software driven, so any button can do any function enabling me to customise the board to suit the way I operate. Nevertheless, as with most of the new generation boards, it is preferable to have a day in the warehouse setting it up, laying out colours, preset focuses etc, to make the job of programming at the gig itself much easier.



Avolites' Diamond II.

When in programme mode, all the swap buttons can be used to store colours. These are to be found on a colour-table wheel, and by the miracle of microprocessors, they can be called by name. So if ColorFaders or VL5s are to be used on the rig, you can spin the wheel until the colour required appears on the screen (say, LEE 139), and grab this into the swap button of your choice. Then, when programming your light or colour-changer, you can send the fixture to Lee 139 by grabbing it straight from the swap button. Using this method it is possible to set up the palette needed for the show before leaving the warehouse.

The preset focus for the moving lights works in the same way, so by doing a little pre-show or pre-tour work, all of the colours and preset focus positions can be recalled by simply reaching over to the button that holds that colour/focus and grab it to the luminaire.

One nice feature on the Diamond II is the graphic screen, at which it is possible to programme moving lights in seconds to do circles, ballyhoo, mexican wave and similar such tricky moves which are normally a struggle to achieve. A circle, for instance, needs only two points, the centre and the circumference, and that's it! Programmed!

The board automatically sets up a chase to execute the command, which brings me quite

nicely to another great feature, the 'chase unfold': when you need to modify a chase, or view the memories used in a chase, you can simply grab it and press the unfold button. The LEDs above the submasters go blank and show all steps on the chase across the sub master page. It is now a simple matter to grab the step or steps to be edited.

"When you come to programming moving lights and colour changers the Diamond II comes into its own. The desk is completely software driven, enabling me to customise the board to suit the way I operate."

I also find the 'home' feature particularly useful. This button sends all moving fixtures to their starting position, so that you avoid the stop point on the pan and tilt when programming.

I was a fan of the Diamond and anticipate becoming as great a fan of the Diamond II.

Authors' observations:

Avolites have a long track record of making touring boards, starting in 1978. Their consoles, while varying in size, channels and facilities, have all been in a consistent style. This style defined what a rock and roll 'live'

console should look and behave like. Big and beefy, lots of faders and very beautifully finished, complete with wood on the sides! Given that they do this furniture extremely well there is no purpose in Avolites changing it for a new generation of boards. So they haven't. The Sapphire and Diamond II look exactly as you would expect them to. They should make smooth the transition from generic lighting with some scrollers to primarily generic

lighting with scrollers and some moving lights. (Especially for those LDs who operate their own shows 'R&R' style and who have a tradition of using 'live' style generic consoles).

Given the advent of DMXable Vari*Lite VL5s, and the wide range of moving mirror units available, there is clearly room for desks that deal with moving lights competently without losing their original appeal. A number of people will use these consoles to introduce themselves to moving lights for the first time because the desks will seem very familiar. This does leave the manufacturers of this type of console with the interesting task of not only training people to programme and operate their desks, but also introducing them to the concepts of automated lighting for the first time.

The Diamond II is Avolites' top-of-the-range desk and, as one would expect, adds to the previous facilities on version one. This is a big desk! A Cruiserweight. There are 180 preset faders and 30 playbacks with 100 pages. Add/Swap buttons for all 180 faders mean a moving light can be channelled anywhere. It comes with a minimum of 1,024 DMX channels and can be upgraded to 6,000, which come out on eight lines. This is more than enough! Again it should be borne in mind that this is a generic console that has been upgraded to deal with moving lights. Where it will score

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is with mixed rigs. Its principles are the same as the Sapphire with lots of additional features. It has eight wheels, two are always pan and tilt and the other six are assignable to moving light functions. There are two wheels for chase rates. Groups are available which, given the physical size of the desk, is just as well and the number of focus presets goes up to 180. The use of a screen is optional on this desk, though we would regard it as essential.

So, Diamond II is designed to control many instrument types at the same time and, from an operator's point of view, it is often convenient to keep different luminaires on different faders - especially in a Rock and Roll show. Both the Diamond II and the Sapphire offer a 'banking system'. The Diamond II banks the preset faders and the eight wheels giving up to 108 channels per device! Bearing in mind that we now have instruments with 22 control parameters, who knows what is coming in the future.

There are 180 Hot Keys which may contain 'groups' (acting as 'selects' for groups of moving lights or dimmers) or preset focuses, in which can be included every attribute of the instrument. Once programmed, hot keys give instant access to any feature of the light. The 'animate' function creates sequences of up to 40 steps, instantly for circles, kicks etc. The personality file contains tables of colours or gobos, complete with names of up to 16 characters. Avolites can supply personality disks for different moving lights.

The Rolacue Sapphire is a continuation of the series, with added facilities for moving lights. It has 120 HTP and 392 LTP channels, which together define the maximum system size of 512 DMX outputs. If this restriction prevents you using as many moving lights as you would like then you are using the wrong board! The maximum number of Lo Res Intellabeams possible is 60, which would actually be too many to deal with easily on this console. The sort of set-up it would handle well might be 16 Intellabeams, 24 VL5s, 40 Rainbows and 60 channels of conventional lighting.

SEEFACOR - LIGHT CO-ORDINATOR

TOM LESH

Since 1987 when he became a freelance LD, having previously worked in numerous touring capacities for Entec, Tom has been working with Chameleon, Tasco, SeeFactor, Neg Earth and Supermick as LD on many tours. These include Siouxsie and the Banshees, Thrashing Doves, Ellis Beggs and Howard, Night of the Guitars, Europe PIL, EMF, Ian McCulloch, The Waterboys, The Creatures, The Godfathers, Alison Moyet, Lollapalooza, Living Colour, Paul Weller and Meatloaf. He's also worked on video promos and television shows as LD/technician.

Having used a fair selection of dedicated and not so dedicated controllers to run different types of moving lights and colour-changers, getting to grips with yet another console tends to be viewed with a healthy amount of cynicism.

Mastering the Light Co-ordinator, however, was a refreshing departure from spending days locked in rehearsals with a console, manual in hand, and FRUSTRATION! tattooed across your forehead. As is the nature of touring I was given half a day to learn the desk and to programme a show for that night.

Given that we were half-way through a tour at the time it was not the most envied of jobs but the desk proved to be a simple, hands-on one. It's very much a Rock and Roll console with faders, flash buttons and an idiot-proof programming sequence that produces results very quickly. It will control most types of moving lights and will also run strobes and smoke machines, which gives you a lot of flexibility if you like to control it all yourself.

"Co-ordinator is very much a Rock and Roll console with faders, flash buttons and idiot-proof programming that produces results very quickly."

The controls are laid out clearly, as are the procedures to control the various fixtures. There is a large Preset Focus menu to build your looks and cues from and, as all the control panels are modular, you can change the desk layout around to suit your own requirements. It is, overall, a very competent desk to work with and, given a bit of thought, can produce some great results. Its simplicity gives you more time and scope to play around and create, rather than having to worry about how many steps, or how long it will take to programme and save, as with some other consoles.

Co-ordinator's only real drawback is the colour scheme (very bright purple trimmings) and the fact that, as yet, no-one has seen fit to install a Cappuccino maker. The way lighting technology is going, soon there will be very little else that can be added to make life easier!

Authors' observations:

This is another one from the R&R and touring stable, this time from the US leg of the tour. Now, in its third generation, and available from Neg Earth Lights in Europe, the Co-ordinator doesn't think in channels or numbers, but only in luminaires - so many moving lights, so many colour scrollers, so many generics and so on - in fact you are not even aware how many channels you are dealing with. In this way each instrument, or group of functions, may be addressed as an entity with a recognisable designation automatically displayed.

Programming is via keypad or digital encoder, with pan and tilt focus adjustment from tracker ball. Intelligent patching, DMX addressing, and focus facilities all make for easier programming and editing. Playbacks are available as Goes, Chases or through 20 overlapping faders which provide direct access to 'stacks' of cues. These submasters operate on the principle of highest takes precedence for dimming or shutter functions, while all other attributes are LTP. The output board offers DMX as well as Color Mag, Showchanger protocols and MSC. The colour monitor is optional.



Light Co-ordinator from SeeFactor.

CELCO- NAVIGATOR

IAN HALEY

Ian Haley, who is perhaps best known for his lighting design work with Simply Red, has also used Navigator with Beverley Craven, 10CC, Carter USM, Incognito, at the Reading WOMAD and at Fairport Convention's Cropredy Festival.

The Navigator has many useful functions which help to speed up both initial programming and day-to-day focus updating while on tour. These features, combined with its small size and low cost, make it well worth considering for use with up to 16 fixtures such as Golden Scans, Intellabeams etc, as a desk for colour-changers or indeed almost anything DMX.

Firstly, the desk deals with fixtures rather than channels, which enables common parameters like iris or colour to be ganged together or copied between lights. The Preset Focus is very easy to implement, a must for touring or situations with very little programming time such as festivals or one-offs. The 60 sequences can be repeatedly called up from any of the 240 cues, although a maximum of 16 steps per chase is sometimes a little restrictive.

The recent launch of Celco's 'personality' cards has enhanced the desk further, allowing it to instantly learn the features of a given light, (names appear for colour, gobo etc instead of DMX levels). Additional programming features give 650 'programmable groups' to activate commonly used combinations of channels, for example 'back truss lamps pan and tilt' and 'autofade masking' for snap changes of colour or gobo when crossfading positions.

Initially the desk looks quite unconventional, (I'm sure most people reading this will have seen one by now) but it doesn't take long to find your way around the basics, with the more complex and powerful features learnt as and when necessary.

"The Navigator's preset focus is very easy to implement, a must for touring or situations with very little programming time."

Playback during showtime is very simple, some designers having it as a second desk for that 'Rick Wakeman' look, but still being able to concentrate on the main desk for their Par cans. A complete show can be reloaded from the memory card in under six seconds, handy for large cue-hungry shows or those fortunately rare occasions when, and this can happen with any computer board, the desk decides to hang up. Personally, over the past two years, I have found the board very reliable, even when hooked up to some of the most doubtful of power supplies.

Finally, but quite important, is the life saving service at Celco, where you can talk to them directly about any problems you're having with the desk, either technically or with programming, and they're always prepared to listen and help.

Authors' observations:

Navigator is the sleek, black surf board-style control surface, set aside by its large number of digital encoders, which has been appearing at the trade Shows since the summer of '91 - which makes it a pioneer in the genre of open-system moving light control.

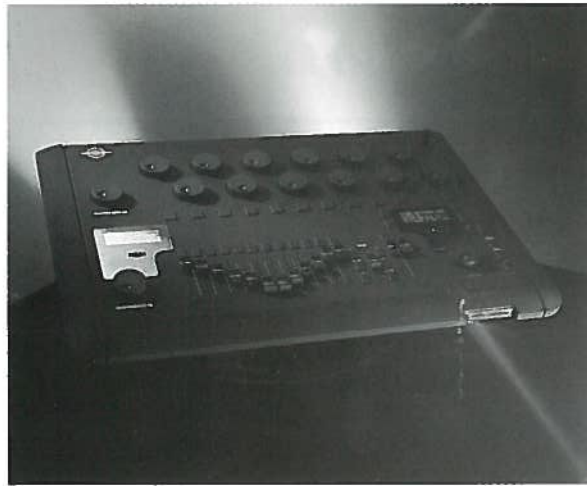
Its Celco pedigree has assured Navigator, and

the sibling Pathfinder, a ready acceptance amongst the many fans of the company's highly successful conventional desks such as the Gold, Major, Plus or Series 2. The Navigator offers 96 channels of control, or up to 16 standard individually driven heads, which can be softpatched to up to 512 DMX outputs which can be a mixture of dimmers, scrollers and movers.

Though this might be considered, a little limiting these days, the reality is, certainly in the touring arena, that Navigator would be used as a stand-alone system alongside the main desk and for most people such a board is an add-on anyway. The level of control provided is considerable, with personality cards to configure the board for the instruments in use, each channel assignable to HTP or LTP, 480 multi-part cues, 120 sequences and 36 preset focuses which can be globally edited to take account, for example, of a change in trim height.

A Stack facility enables the programmer to build eight lists of memories complete with timed crossfades and sequences. MSC is included, as well as external control from another lighting board and slaving to further Navigators or Pathfinders.

Pathfinder is a similar 60 channel board.



Celco Navigator.

for granted some of the older superlative features such as the built in ramps which, not only give you a massive variety of fade profiles to choose from, but also enable you to do instant circles, ellipses and figures of eight with moving lights - all with variable or dynamic sizing.

"It is with intelligent lighting that ShowCAD really shines - the 'personality' templates are like having a dedicated controller for every type of unit built into the machine.

However, it is with intelligent lighting that ShowCAD really shines - the 'personality' templates are like having a dedicated controller for every type of unit built into the machine.

Another advantage of ShowCAD which works really well, and a feature we really like, is that it affords the operator a great deal of versatility in choosing which control surface is needed for each type of production situation.

We also like being able to control other boards from one machine, or to accept cues from another external board, without the hassle of calling cues to other operators. On the other hand the superb built-in SMPTE facilities means we can set up 'canned' shows and leave them to run reliably hands-free for months on end if needed.

Authors' observations:

There has long been a split between those who are happy to operate lighting computers and those who prefer lighting to be controlled from boards. In truth the computer is probably better, and certainly faster, when it comes to programming, but has obvious drawbacks in a live performance situation. However, the ShowCAD people have addressed that issue by providing the ability to call cues either from a DMX desk, or a MIDI keyboard.

In fact, this system makes a very effective point for those in the computer camp. It proceeds towards its goal without the need to use a 'hard front-end' at all, except for the essential tracker ball. Rather, it utilises 'scene patches' to create soft boards, on the computer screen. It could be called 'the half Hog' without the control surface, for there is more than a passing reference between the two.

Of course, it will handle generics as well as moving lights, and it offers its own version of the aforementioned Stack Synth, for accessible elliptical tracking. Followspot simulation from tracker ball is an attractive feature, especially as a programming aid. 'Personality' screens, called templates, for several driven lights are provided, or you can make your own. These are a great time saver.

It is very comprehensive in its scope. 1024 DMX-512 outputs come as standard, with 8192 scene capacity and 9,999 steps per scene allowable. These scenes are saved on scene lists of which there are 8192, and as you can see these scenes are more comprehensive than the simple memories often described as scenes by others. This is a lot of capacity!

The real point about this control system is that it is low cost and capable. Some operators might have reservations about going into a big busk 'live' scenario with it, but with its programming power and given the time to programme, it can certainly be used to busk in a club or rave environment.

As an attachment or a back-up to your favourite console, it does have some very interesting possibilities in expanding the performance of conventional desks. If one elected to use a dedicated system such as Vari*Lite for a show, but wished to add some DMX fixtures to the rig, this would certainly be an option worth considering. They could talk through MIDI, for ShowCAD both accepts and outputs the protocol, and generates its own SMPTE, which means that it could also work well for a theme park/dark ride situation.

It has a software package and slot-in hardware card for an IBM type PC running under MS-DOS. Most schools have such computers and if you are the science teacher, about to gang up with the drama teacher about getting a new lighting desk, then this could well be the disk and card to hit the Head with! The range from school drama all the way to Disney-type applications is wide indeed. This system will add a lot of power for your pound.

ShowCAD is distributed by Cerebrum Lighting.

AXON - SHOWCAD

CARL DODDS

Carl Dodds and partner John Lindsell are best known for their monster lightshows at entertainment industry events, most recently on behalf of Coemar. The pair have also carried out considerable moving light programming for Scandinavian Television. Trained in lighting design at the Rose Bruford College, Carl spent several years at the Leeds Playhouse Theatre, the Birmingham Rep and as guest lecturer at Birmingham University Drama department before going freelance with Lindsell.

ShowCAD is our first choice of controller for all types of production mainly because of its amazing versatility and speed of use. As well as using it on light shows that have been commissioned for trade shows, we've also put it to work for industrial theatre and live TV broadcasts. A key advantage of ShowCAD is the fact that it uses industry standard hardware, i.e. a PC, so that the majority of the programming is carried out off-site on a laptop. The result of this is that valuable on-site time is minimised and not wasted putting in the basics - all your time can be spent being creative.

The easy-to-use intuitive point-and-click interface of ShowCAD is another key time saver when programming, aided by the vast amount of information you can label all your work with. There is no more trying to remember what 'B/LR_M_F' is as you can put 'back light right - magenta fill'.

Templates are a very new facility and it all too easy with a dynamically evolving system like ShowCAD to take



Axon ShowCAD.



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PULSAR - MASTERPIECE

ANDY DOBBS

Lighting operator Andy Dobbs is most likely to be seen through the showers of Golden Scan beams which are much in evidence on Top of the Pops and which are rented from Richard Martin Lighting. At present, Andy uses one or more Masterpieces or a Compulite Animator to control the moving light part of his show having started with a small rig of Clay Paky Golden Scan 1s and a BBC Micro which turned into an OSKA as the rigs grew. The largest rig to date, run from no less than three Masterpieces, was the Christmas 1993 Top of the Pops which involved a combination of 34 Clay Paky Scans.

The Pulsar Masterpiece 108 is only 19" wide. It doesn't have polished wooden end-cheeks or the ubiquitous comfy 'lean on pad' along its front and you don't need to structurally reinforce its resting place, as it's easy to place on your lap.

It is not a dedicated moving light controller, and as a result of this, the operator needs to know exactly in what order (in the DMX stream) the lamps' parameters appear, as all operations are carried out via a row of 18 faders which are paged six times to give the maximum 108 channels. This can make access to a particular lamp function slow for an inexperienced operator.

"The Masterpiece is small, affordable, flexible, playable and with some experience, very powerful and extremely fast."

The grand master acts on all 108 channels, so when the board is cleared down, every lamp parameter returns to zero, which looks messy, and if you've any graunchy irises in the rig, it's embarrassingly noisy. At this point the auto fade time between states has just been implemented. It's not yet ideal for automated luminaires, as the 'in' and 'out' times have to be perfectly matched to prevent 'jitter' on any parameter which has the same value in both states. Manual dipless crossfades are promised very soon.

On the positive side, the board is (for the experienced operator) averagely fast to build up static looks, and extremely fast to turn those same static focuses into a complete lightshow. This is partially due to 'pile adding', where if a parameter is 'on' in three places on the board at say, 10, 20, and 30 per cent, the output will be 60 per cent.

Up to 54 chases can run independently, all with their own timebases. Pointless? Far from it. For instance, if random splitting, wafting beams are needed then the Masterpiece can help. Split up your 18 lamps into three groups of six, and have one focus chase for each group of six lamps, each with its own timebase. Select a colour chase (which may be

manually stepped) and two fast shutter chases. There are now six chases running, and the whole set-up can be recorded as one 'environment' which can be recalled later by a single key.

Once the programmer has done his stuff, the sensitive bits of the board can be locked out, leaving just three pages of 18 effects to be 'played'. Great busking potential, and at no point does the end user need to know about what has gone on before him. Environments are easily MIDlable, may be faded between, or may be set up to run as a 'real-time' chase.

To sum up, it's not an easy board for the inexperienced to programme. Smooth manual crossfades aren't easy, and editing a state when you're just about to hit Go is not easy especially if you can't see the lamp in question. However, it is small, affordable, flexible, playable and with some experience, very powerful and extremely fast.

It's also the only board which comes with useful instructions on what to do when you spill your drink into it!

Authors' observations:

Masterpiece is essentially a programmable touch panel, but an immensely powerful one. It just stops short at the crossover point of a brown-box product and a fully fledged desk, so it's unlikely to have a major impact on the touring scene. Nevertheless, it has proved useful in repeat show situations such as 'Experiences' and was used successfully by David Hersey for the 'live' AV show in the British Pavilion at Expo'92 in Seville, for this purpose. Of course, its prime function is for discotheque use.

Its main limitations are that it has only 108 channels (it wasn't so long ago that this was a lot) and when dealing with 'intelligent' lighting, a lack of memory. Due to the way Masterpiece's memory is allocated to various programming levels it is limited to 216 'scenes' (static snapshots of all channel levels), and you can easily find yourself trying to exceed this limit with the large amount of positional data that moving light programming demands. This is partly assuaged by the Memory Card facility which allows you to re-install previously recorded programming in a matter of seconds. You can also hook several panels together to



Pulsar Masterpiece.

increase the channel capacity ad infinitum should this be considered viable.

Added to Andy Dobbs' points that the programmer has to be aware of which channel represents what on a fixture, Masterpiece uses manual faders with only the percentage level indicated, so it is essential to have a clear view of the fascia at least, while programming (always desirable whichever desk you're using!).

There is no doubt that Masterpiece can be used to create excellent moving light shows: Pulsar & Clay Paky's trade show spectaculars and Andy's own work on Top of the Pops prove that. However, it certainly requires a programmer who knows the unit very well to achieve the maximum results and if the programmer is not the operator as well, Andy's advice to lock-off the majority of the board is certainly appropriate.

MA LIGHTING - SCANCOMMANDER

DAVE BYARS

For the last four years Dave has been the lighting designer for Blur and is now creating designs for popular new band Elastica. Both these groups give Dave full creative and artistic licence to create a 'total environment'. Other credits include Pop will Eat Itself, Voice of the Beehive and Balaam and the Angel to name a few.

The Scancommander is very user friendly, easy and quick to learn. It's especially easy to pass your knowledge of the desk to another person, and yet the desk has a great capacity for 'advanced' programming so you can enhance your show as you go.

"The Scancommander is very user-friendly, easy and quick to learn and has a great capacity for 'advanced' programming."

Unusual features include the ability to 'followspot' instruments with a tracker-ball, and to track driven-yoke and moving mirror lights both together. It will control up to 16 units of any instrument controlled by DMX 512, no matter how many channels they need, and has up to 96 'extra' DMX channels for allocation to colour changers, generics etc. It has about 140 instrument personalities incorporated into the desk already.

Once the stage corners have been defined for any of those instruments you can forget about its location and concentrate solely on the beam position on the stage. Within the stage area, the pan control is true stage-left and right for all beams, and tilt is up-stage to down-stage. This allows true followspotting by different lights mounted at any angle and is also very useful for a very fast set-up even for untrained operators. To followspot a person walking across a stage using two I-beams and six VL5s with such ease is very impressive.

Authors' observations:

The Scancommander is a compact moving light desk produced under the banner of German board manufacturer MA Lighting and aimed at small to medium tours. On first sight it is reminiscent in appearance to the Masterpiece, but's that as far as it goes; faders and flash buttons replace the touch-keys. It is normally supplied with wooden side cheeks and

arm-rest, revealing its pedigree.

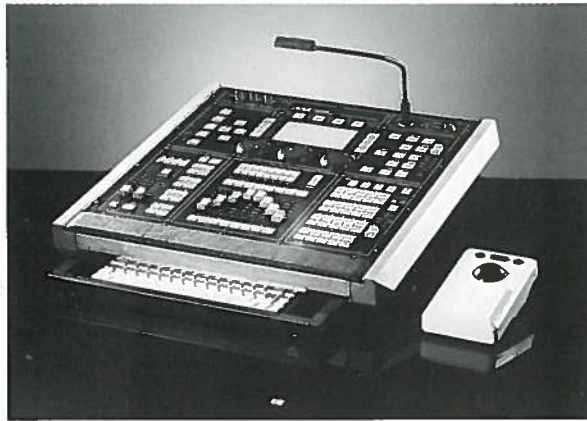
The number of personalities installed is a slightly irrelevant statistic, as many of them are instruments which are unlikely to be seen on the road, let alone in a theatre, almost anything that moves from DMX having been included.

Nevertheless, it shows a serious dedication on behalf of the manufacturers to make life as easy as possible for the operator, and it is the principle of this feature that really matters. By this process you select an instrument by name and the attributes are automatically assigned to the appropriate channels. You recall also by parameters, such as palette, gobo, tracking description.

However, you can always achieve direct access to individual presets when necessary. Simple, isn't it?

Elliptical tracking is provided and the controller provides some intuitive help in terms of knowing where a head is in the performance area in relation to other movers, enabling interpretive adjustments. Variable fade times are available. Should you need to edit a single function, each step can be accessed either for individual or global edit, or even while a sequence is running, you can take manual control of an individual head. MIDI, SMPTE, memory card storage and remote console control are other features.

While the tracker-ball is optional, our advice is - don't leave home without one. Scancommander is distributed in the UK by M&M Camelont Ltd.



MA ScanCommander.

Tony Gottelier and Richard Knight are working on a comprehensive book on the whole subject of Automated Luminaires which is to be published by Focal Press.

During the next weeks and months they will be gathering together the mass of material necessary for the successful completion of such a venture. It will be a Herculean task, and they are seeking help from all interested parties in the industry.

Any manufacturer or individual who has something to contribute on the subject whether, technological, historical or even purely anecdotal - for example, regarding a landmark show involving the early use of moving lights - are invited to contact Tony Gottelier at the address, telephone or fax number below:

The Old Mission House
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AUTOMATED LIGHTING

This is the second part of a major L+SI survey into automated lighting and control systems.

A comprehensive review of automated luminaires appeared in the November 1993 issue of L+SI.

The follow-up, offering a major appraisal of automated luminaire control systems, has been divided into three main areas and appears across three issues of the magazine.

Following the publication of all these sections a definitive copy of the combined surveys will be available to readers only on written request from the offices of Lighting+Sound International.

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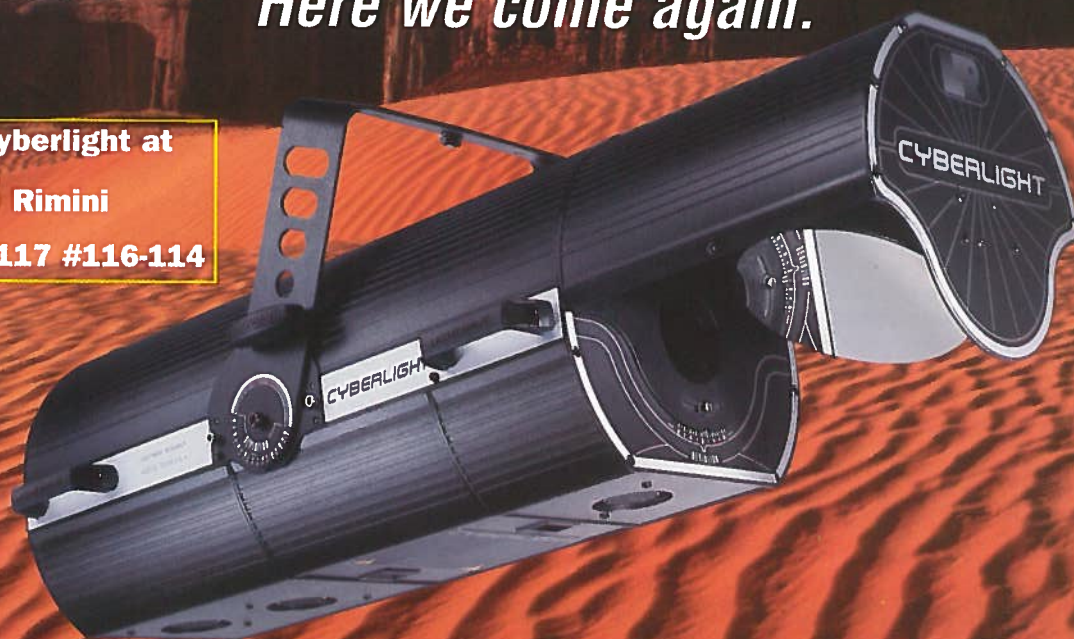
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"The Science
of Lighting"

ON TOUR

by STEVE MOLES
AND PRODUCTION NEWS

Duran Duran Sheffield Arena LD: James Mackenzie SD: Davy Moire

Some might say that playing to a half house at a venue like the Sheffield Arena is a sign of failure. But it doesn't have to be. Carried out properly with one end of the hall completely curtained off, the venue at least looks set for the show. In fact, Sheffield Arena have been doing this, when ticket sales have demanded, since last Autumn, and have also experimented with leaving the floor area clear of seats for standing punters.

That it works, and works well, was confirmed by the obvious enjoyment of the audience at Duran Duran's show in late January. Admittedly, in earlier years Duran Duran would have easily filled such a venue, but just because they can no longer do so is, however, not a reason to write them off. As with the efforts of the venue they tailored their show to suit demand, and besides, 7,000 is not an audience to be scoffed at. There is always a temptation with performers who have achieved great heights, to continue performing in the same idiom when their star has waned and there is no more pitiable sight than a ten truck production playing to a thinly populated house. Duran Duran didn't fall into this trap: though the production was modest it was fitting for the stature of the show and what it may have lacked in terms of scale it more than compensated for with its quality.

SOUND

The Flashlight PA was supplied by Britannia Row, although the front-of-house desk came from Bernard Browns of Dallas, Texas who had provided the Flashlight system for the US leg of the tour. Davy Moire, the sound engineer, had the desk shipped over as he, like many of his fellows, having used a desk he finds well suited to a particular show, likes to retain continuity. He is particularly fond of the Gamble FX for a number of reasons. In straight technical terms its 50 inputs meant he didn't need to cart two desks around to cope with the show, but it's the 'not so easily definable' qualities of the desk that confirmed his choice, as he explained. "What I like about the Gamble is its warm sound - desks like the PM3000 are fine but can sound 'transistory'. You can look at the curve on the real time analyser and they look the same for both types of desk in any given situation, but they sure don't sound the same."

Davy is also a keen exponent of the Flashlight system, citing its even dispersion as one of its better qualities: "In an arena like this I can be certain there are no hotspots," and equally favouring its power: "When it's arrayed correctly it's awesome." Davy had the system split with about 85% flown, including a full horizontal row of sub bass cabinets amidst the array. On the floor to either side of the stage were further sub bass cabinets surmounted by the wide angle 'Floodlight' cabinets.

Davy used the band-selectable and programmable time delays of two BSS four-way crossovers to ensure perfect synchronous sound and he also commended the in-built temperature processor that is a feature of these BSS units. "It's a simple function that compensates for abrupt temperature changes. I don't need it here despite the fact that I believe the ice floor is still down from



Icons of the eighties Duran Duran in performance.



last night's hockey game, but in the outdoors it's great, especially in late summer when a sudden temperature drop at dusk can totally mess up your sound." Overall the sound was, as Davy intended, 'awesome', though personally I prefer the term 'bloody loud'. As with 'louder doesn't necessarily mean better' it also doesn't necessarily mean worse either, and despite a slight ringing in the ears when I left, the quality of the sound throughout the show was excellent.

LIGHTING

The lighting system, supplied by Light & Sound Design, featured 20 Icons, 16 in the air and four on the floor. Steve Payne, the tour's production manager, was quick to extol the virtues of the Icon, but with one reservation. "They've been absolutely perfect throughout the US tour, yet over here last night for the first show of the European leg, we experienced some problems. Apparently the US lamps are still running on software version P whereas here they are on version R. When lighting designer James Mackenzie ran the show on disks brought over from the States some of the cues panned off position." It must be said that James put in a day's re-programming for the Sheffield show and there were no glaring problems in the light show - just the inevitable odd sticky gobo wheel and even then he was quick to dial the offending lamp out of the scene.

James, who was previously featured in this magazine with 10cc last year, took over as LD for Duran Duran in November, and having already trained on the Icons back in June he was well set to run the show. The rig is fairly straightforward in structure. A rear truss supports a cyclorama lit by Molemags with a black sharktooth hung a couple

of feet in front of it. To the front of stage is a 48 foot span of mini truss with five Mole 8-Lites facing out into the audience and four Icons hung beneath. Between front and rear trusses the main rig consists of two 'V'-shaped trusses of LSD pre-rig with six Icons on each, the truss sections (six per 'V') are all fully loaded with Pars except at each Icon location where two lamps have to be removed. The Pars all appeared to be ACLs and Very Narrows although 'Slim', a large genial American, who runs the conventional lights from a Celco Gold was unsure: "It's so long since I looked at a plot I don't remember." I only mention this as much was made of the interplay between the two light sources, Icon and Par, and very effective it was too. Much of James' choice of colours was very retro seventies, as seems to be the fashion at the moment, with two or three strong contrasting colours in use at any given moment. However, he didn't rely on this - calling upon a battery of six FOH and five on-truss followspots to overlay even more colours upon the band.

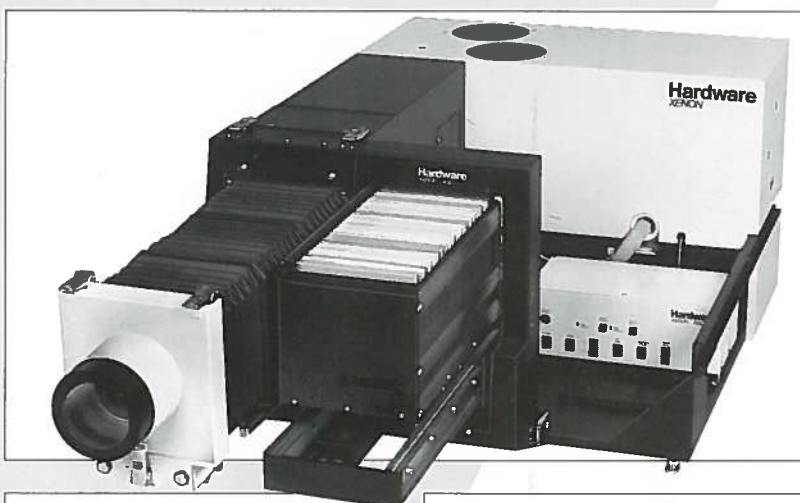
As there was no stage set, only low, one foot high risers for drums and two keyboards, the heavy use of followspots worked very well, lighting only the bodies targeted and not leaving great gobs of colour all over the place as can be the case with a more substantial stage set. When the mood allowed, James used the cyclorama to project gobos from the Icons. Nothing new here you might say, but he did produce one especially notable effect. Selecting colours down in the pale blue green end of the spectrum he projected soft-edged pools of light filling the cyc, and then slowly, almost imperceptibly, he rotated two over-laying colour wheels within the lamp which gave a distinctly dreamy watery texture to the screen, like seeing bright sunlight dancing on the surface of a swimming pool.

The band themselves gave a sparkling performance, drawing upon their full repertoire of songs. They've certainly lost none of their craftsmanship and worked very hard to please. The delivery was fresh, and even songs from the very start of their career like 'Girls on Film' were carefully reworked to sound contemporary.

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**SALES AND
RENTALS**

Brit Awards 94 Alexandra Palace

The Brit Awards, after a decidedly amateurish opening few years, seem to have finally settled down to a format that works and a standard of presentation that is comparable to our American cousins who excel at such blatantly self-aggrandising events.

Last year at Alexandra Palace two vestiges of blight remained: a general fumbled handling of the radio mic situation, and, on the visual side, a contrast on stage that was so acute as to render the setting invisible. Talking to Derek Zieba from Dimension Audio, who was contracted to supervise all aspects of the sound design, and Paul Weber of Entec who were the main contractors for both sound and lighting equipment, the marked accomplishment of this year's show was entirely attributable to producers Initial TV, and both men singled out Producer Andy Ward as pivotal in pulling together the expertise required.

Derek Zieba became involved in this year's Brit Awards at the direct request of Andy Ward. He and Derek have worked on a number of projects together over the past few years - 'Light the Darkness' for the international Red Cross in Geneva and 'Red Square Invites' - to name just two. Derek's appointment was further re-enforced by the inclusion of Andy Rose as broadcast engineer, the two men had also worked together on the 'Christmas in Vienna' show that had featured Dionne Warwick and Placido Domingo, last year.

It was not just an 'old boys club' that heralded Derek's inclusion; the sound problems of the previous year had to be eliminated and experience showed Derek was equal to the task. With the addition of a 'live audience', a well-controlled sound system was even more essential. The live audience was a well conceived refreshment to the show; the usual crowd of apparently comatose record industry aparatshiks who sit around the dinner tables in tuxedos and reminisce about the days when great rails of cocaine were de rigueur for such events, are visually un-stimulating. Derek's expertise fell in two camps, as he explained: "Essentially I had to combine two technologies, a standard left and right stage PA for Meatloaf primarily and Van Morrison, and an extended delay system right down that enormous barn of the Alexandra Palace Great Hall."

The Entec PA, a JBL Concert System, was installed and maintained by Mark Langley and his crew with Mark responsible for an enormous array of control equipment. Front of house were two Yamaha PM3000 (one each for Meatloaf and Van Morrison) and a Soundcraft 8000 to take care of everything else (video send, audience response,



Above, the main control position at Alexandra Palace and, below, the Pet Shop Boys mid performance.



hand-holds, walk on music etc), back stage two more 40-channel desks (Midas XL3s) were used for monitors. In the hall 40 Community RS220 loudspeakers were used for the delay system, "a small trapezoidal cabinet with excellent vocal reproduction, ideal for that all over sound" as Derek Zieba put it.

The Awards featured the largest videowall of its kind yet to be seen at a UK live event. The 22' x 13' wall, supplied and crewed by video services company Creative Technology, consisted of 48 Sony RVP400 cubes in an 8x6 cube configuration, positioned 20 feet above centre stage on a box truss platform.

On the lighting side Paul Weber cites his and Entec's well established experience in the field of rock and roll for TV (Wired, Big World and Big World Cafe for example) as the key to this year's success. "It's about making the cameras do things, just putting loads of light on the principles for example is not good enough, the camera will automatically iris right down with the consequent loss of a decent visual image. Mike Sutcliffe, the lighting director for Initial TV has worked with us a great deal over the years. What makes him especially adept in this environment is, I believe, the fact that he started off as a cameraman, moved into lighting, and has during that time taken the time and trouble to learn about what lighting equipment we use in rock and roll and how it can work for him."

The lighting system comprised 400 odd Par 64s used almost exclusively for audience light, with 24 Golden Scans and over 100 Vari*Lite's for the stage. There were also 36 Robocolors on stage, a lamp not likely to make much impact amongst such a powerful array, however when focused to point directly into the cameras they proved to be a remarkably powerful on-screen effect.

Despite Entec's reputation with the producers they were not given an open cheque for the five articulated lorry loads of equipment they supplied, and what was a well run event was spoiled for them when seven climbing harnesses and a 5 kW HMI bulb were 'misaid'. This should not detract from the praise they deserve, as Paul Weber himself said when asked what won the contract for them: "We were seen as the only company who could do the job properly." He appears to have been proved right.

Ripping Good Yarn

Tales of tour jackets being ripped by frenzied women might be the lingua franca amongst road crew as they while away the wee small hours in the back lounge of a tour bus, but they are not the kind of story we might expect about a senior manager at Meteorlites.

Of course, rumour has a marvellous habit of embellishing the truth but then, as with all rumours, there's no smoke without fire. However, as the trick with a plastic bag, a length of electrical flex, and a pair of nylon stockings recently demonstrated, the truth is often stranger than fiction and can sometimes move a nation. Whilst Tony Panico's encounter with an over-excited Italian lady may appear commonplace, his response is commendable and worthy of note in these pages.

"I was on my way to Los Angeles where I was to be a guest of Bandit Lites at a Performance seminar. The departure of my flight from Heathrow was delayed by half-an-hour - some trouble with the ovens apparently - but apart from that all seemed well. Approximately two and a half

hours out from London, somewhere over Iceland, the captain came on the public address to report that there was a problem with one of the engines (I learnt later it had failed completely) and we would be turning back. For me it ruined the whole purpose of my trip and the delay would mean I'd missed the seminar. Although the news was disappointing for me, it was as nothing to the dramatic effect it had upon the elderly Italian lady seated behind me. Speaking almost no English (but presumably detecting the unease of other passengers) she became absolutely panic stricken. I tried to reassure her - I speak pretty good Italian, and eventually, with the assistance of the cabin staff and the administration of oxygen, was able to calm her. Unfortunately such was her terror that in the uproar she ripped the Tour jacket I was wearing!"

Not a story to bring down a Government you might think, but a worthy deed nonetheless, even more so when you consider that Tony was intending to fly to Los Angeles, a city beset by more than its fair share of calamities over the preceding few weeks and not exactly 'the world's favourite destination' at the time.

Tour Talk



In case you're wondering what the man who writes On Tour looks like, it need concern you no more. Here is L+SI's scribe Steve Moles (left) getting the Aviator low-down from Celco's Keith Dale on stand at SIEL in Paris last month. (See full SIEL report this issue).

Icons go Dutch

Utrecht's immense Prins van Oranje Hall, situated in the large trade fair centre behind the bustling Central Station, opened recently with a spectacular sound and light show. With its startling dimensions of 162 by 84 metres, the hall is the biggest building of its kind in the Benelux.

Even more impressive than the hall itself is the show top producer Frank Wentink put together at the opening. For the performance Wentink, well-known for his contribution to the yearly World Press Gala, mounted an orchestra and ballet on a moving stage, installed on rails, which slowly travelled the full length of the hall. He then added into the mix fireworks, lasers and some major lighting effects. A crew of 30 technicians and 100 musicians and dancers spent four long days setting the stage and rehearsing the spectacle.

Wentink entrusted experienced lighting designer Ruud Pouwels with the task of developing his outline ideas into a grand lightshow. Pouwels is by no means a new face on the scene, for in his 14-year career as a lighting designer he has toured with many theatre productions, tradeshows, fashion shows and groups. He worked for years with the Dutch band Los Lane and accompanied them on their successful tour with Prince. He has also twice toured Europe and the USA with Dutch cult band Xymox.

More recently, Pouwels has become a specialist in moving lights. After mastering the Martin Roboscan, he learnt to operate the Intellibeam at High End Systems in Austin, USA, and then moved on to San Jose and Los Angeles to familiarise himself with the latest technology - including the Pan Command PC and the Pro Spot. At the end of a long trip he found himself in Birmingham, UK, where he was trained as an engineer for the new LSD Icon at Light and Sound Design.

He then seized the opportunity offered by the opening ceremony to use the LSD Icon. Assisted



The Icon lights and control system installed for the opening in the Prins van Oranje Hall.

by lighting designer Michel Suk of Shiner Light Rental, who was responsible for the technical co-ordination of the Icons, he presented the audience with a magnificent show.

By illuminating the walls, ceiling and corners of the hall, he emphasized its huge proportions. The Icons were put to work on the moving stage and used to highlight a platform carrying a group of vocalists which was lowered from the ceiling. The lights were flown in for the occasion from the UK, but the possibility of a distributorship for the Benelux countries is now under discussion. Other equipment was supplied by the Amsterdam-based rental company Jansen & Jansen.

The Prins van Oranje Hall will be the main performance arena in the country, surpassing even the Ahoy venue in Rotterdam. Phil Collins'

planned performance in April, which is expected to draw a crowd of 25,000 to Utrecht, will be a fitting first tour to enter the venue.

Equipment List

- 24 x LSD Icons 600 W HTI
- 208 x Par 64s and 36s
- 8 x Molefay 8-lite medium
- 40 x ADB fresnel 2 kW
- 10 x Niethammer Profile 2 kW zoom
- 12 x Selecon 1.2 kW zoom
- 8 x Avolites Geljet scroller
- 2 x Avolites 180 ch Avolink
- 96 x Avolites 2 kW dimmer
- 84 x Avolites 5 kW dimmer
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FRANCE COMING OUT

John Offord in Paris for SIEL 94

SIEL, held in Hall 3 of the City of Paris exhibition centre at Porte de Versailles, is a neat and purposeful show; it's tidily laid out, has wide enough aisles (in most cases), not too much noise, and sensibly sectorised areas. You can feel 'at home' in your particular patch, if you have one, whilst still feeling part of the whole. It's like that every year.

The difference this year, for me at any rate, was that some of the fences the French have set around themselves for many years have started to come down, there is a great deal more cross-border activity, and this is extending rapidly across the market from the big international players to the mid-range and smaller company level. Size doesn't seem to be a barrier any more. At least two British PLASA member companies are in the process of buying their way into the French market and taking a leading role in setting up partnership companies, and others are ever more firmly ensconced with leading distributors such as Sonoss, Dimatec and LCB.

In the other direction a handful of major French manufacturers such as Juliat, RDE and Mobiltech now have established connections with the UK (and elsewhere) through their own distributors and in return, many more UK operators, for instance, are becoming ever more aware of their merits. The links from France through to Belgium and Holland in particular seem as strong as ever, and SIEL now has much more of a pan-European feel about it. It goes without saying that it is *the* show for France, for whatever you may want in the entertainment business, and remains one of the leading national shows in the world for our industry.

To business, and before I start on this year's run-down of new products, you'll notice the total absence of 'sound'. I'll soon be doing the annual Frankfurt run, and there seemed little point in this report doubling up on the latest news from that sector.

ADB extended *their* show to five days and played hosts to delegates from 25 countries plus 25 French distributors who were drawn to Paris a day early to witness the launch of five new products, the star of which was Vision 10, the first of a completely new generation of top-end lighting control systems which integrates state-of-the-art theatre playbacks with

advanced motion control and hands-on playback for show lighting. Around 20 are already scheduled for installations world-wide. Modular architecture and advanced software allow for customising front panel controls and major features include 1024 DMX outputs, user programmable control of automated lighting fixtures and accessories, direct control and access of any element at any time, 499 programmable macros, instant back-up electronics in 19 inch rack, two S-VGA monitors, on-board displays with 250 LED characters, floppy and hard disk storage, PC compatibility and MIDI, SMPTE, RS232 and RS 485 interfaces. It is interesting to note that leading Belgian production company Arf and Yes had a say in the design of this desk, at the specific request of ADB.

Eurorack 60 is a new, compact intelligent dimming system offered as an economical alternative to the established Eurodim 2. Configurations include 24 x 3kW, 12 x 5kW or a mix. Aimed at the professional stage and studio markets, the system features individual addressing (patch) and curve selection, professional grade filtering, optional remote programming, selective diagnostic and various protection options.

ADB's new and portable Memopack is designed for venues where decentralised dimming is required and can be networked in a Eurodim 2 or Europack 60 system. Completing their all-digital range is Micropack, a new 6 x 2.2kW pack for general purpose applications combining high quality and low cost with 'above average' performance.

Completing the new offerings on stand was Eurospot, a family of 500/650W spotlights designed as an economical solution for a wide range of requirements, from small theatres through to clubs and showrooms. The range consists of a PC, fresnel, three zoom profiles, two of them with condenser optics.

There have been some subtle movements amongst the men at the top of ADB. Manfred Bruns remains as president of the whole ADB operation worldwide, whilst Michael Musso and Christian Léonard have re-deployed themselves, evened out their work-loads and hopefully saved a lot of wasted travelling time between them. Musso now has overall control of the theatre and TV lighting division whilst Léonard, at his own request, takes full control of all French operations, including the airfield lighting division, from the company's Paris office. His responsibilities also cover operations of ADB's luminaire manufacturing facility at St. Quentin. The new arrangement will give Christian Léonard the chance to push ADB harder into the French market from a desk in his home country.

Robert Juliat's main objective at their home exhibition was to show the completed range of double condenser SX profiles. The two notable additions to the line-up are the 1.2kW 'Athos' profile and a 2kW tungsten version. An excellent new feature is an internal colour holder located between the lenses. Because the beam is larger in diameter between the lenses, more of the colour gel is covered - resulting in a stronger colour saturation. In addition, not having the colour in front of the lens stops colour bounce, reducing FOH glare.

The slot can take frosted glass or heat shield as required - or, as I was reliably informed, double colours, one in each slot. Tom Mannings of **Découpe Ltd**, Juliat's UK agent, told me he was in the middle of showing the 'slot' to Adrian Hicks of M&M Camelont and was immediately asked whether he'd like a colour changer for it. Nice thought . . .

Juliat's stand had a huge range of equipment, including AVAB control desks, but what placed many people on 'hold' was the new Highlight 3D lighting simulation programme, designed to be simple to use but at the same time very powerful. It has been developed by Gerald and Kathinka Van Tongeren of **Stage**, Robert Juliat's



Michael Musso (left) and Christian Léonard present ADB's new Vision 10.



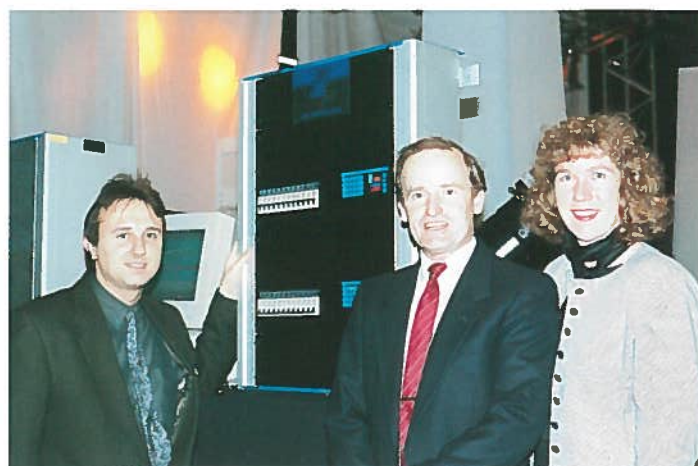
International line-up on the Sonoss stand (left to right): L+SI's Barry Howse, Christine Czech of Columbus McKinnon, Mervyn Thomas of James Thomas Engineering, Wally Blount of Columbus McKinnon, Colin Whittaker of Celco and Daryl Vaughan of Wybron.



Découpe's Tom Mannings (right) and Patrice Bouqueniaux of Robert Juliat show the new internal colour holder designed for the SX range.



The product that deserves a name: Avant premiere on the stand of LCB for Zero 88's new ID 1216 portable digital dimmer. David Cateral (left) shows the 'front' whilst Paul Fowler lifts the lid off the outputs.



Stephane Colin (left) of RDE with David Stressing and Ann Brodhurst of ESP, their UK distributors. Equipment in picture is RVE's new HDI analogue and digital dimmer cabinet.

Netherlands agent. Highlight is modular in make-up and allows the user to design and light a production on computer. There's nothing new in this, but the accuracy of colours and luminance control certainly is. You input colours as data in the form of a graph found on swatch colour books and output levels of luminaires as luminance graphs. Textures can be scanned in and applied to your set design developed from basic primitives such as circles and cubes. The programme comes with comprehensive files of textures, colours, luminaires, etc. and the results are surprisingly life-like due to the accuracy of the input data. It is even possible to input a coloured gobo pattern and project a light through, producing a coloured beam as it strikes the floor. The programme is expected to cost around £1500 and will be distributed through the Juliat dealer network.

Final note from Juliat's was that they are due to take hold of the distributorship of UK-based XTBA products in France.

Zero 88 came up with the goods on the stand of their distributor LCB. innocuously titled the ID1216, their new 'ready-to-go' digital portable dimmer unit turned a lot of heads. The ID bit stands for Intelligent Dimmers, but I'm sure someone's going to come up with a fun name for this nice piece of kit. There are two basic models: ID 1210 with 12 channels x 10A and ID 1216 with 12 channels x 16A.

The ID's uniquely designed protective casing, made from lightweight high impact polyethelene, provides heavy duty protection and its interlocking design enables stable stacking during use or transportation. It has 'easycarry' handles and optional castors - indications that the people at Zero have, as they told me, taken the project on and through development to completion from a starting point that was a totally blank piece of paper.

The removable protective front and rear clip-on doors open to reveal a rear input/output panel with the option of a variety of national and international connectors and a front panel

with multi-language LCD display and mains protection devices. The back-lit status display has user-selectable menus written in English, French, German and Spanish and features facilities such as selectable start address, channel grouping, preheat, topset, softpatch, emergency back-up memory states, selectable dimmer laws and full test diagnostics. There is a visual graphic display of channel input levels.

The 'voltage management system' is a unique feature of the ID Series whereby local mains voltage fluctuations are automatically compensated. Another special feature is controlled temperature monitoring. The ID's have fan-cooled ventilation, but in the unlikely event of overheating, Zero 88 have included a progressive shut-down device. This enables the operator to programme a progressive order of channel priorities which will intelligently limit the pre-determined output channels (closing down circuits) until the dimmer is brought back to a secure operating level - a boon when working in high ambient temperatures. Zero expect to be in full production with the ID's in the May/June period.

Also new from Zero 88, and as a reaction to customer demand, a negative voltage output card for their popular Level Series of 2 preset manual lighting desks. This will enable customers with negative input dimmers to

update their lighting desks without having to replace the complete system.

Pani of Austria had their own half of the Durango stand, and badged it Pani France. It was but one example of the collaboration I mentioned earlier, because the rest of the stand was taken up with Cerebrum Lighting showing the ShowCAD system, courtesy of John Lethbridge, and Anytronics products supported by the ever-smiling Bob Hall.

But back to Pani. Hermann Sorger and Stefan Etmayer showed the maroon coloured production model of the new BP2500 Halogen stage projector that was originally launched at PLASA. It has been refined since last September and offers substantially improved efficiency and uniformity of light output. For example, the unit can equal the brightness of the 5000W BP5 halogen unit. On the news front, Pani reported that no less than five BP12 Platinum projectors had been used on the opening ceremony of the Winter Olympics at Lillehammer in Norway. Also, watch this space for a totally new projector to be launched at PLASA 1994.

Mike Lowe, the Brit from Italy who loves a touch of Paris every year, had yet more sensible products to add to his Teatro range. He'll have the full works in Rimini later this month, but for starters there was a big 2500W strobe, brother to the 1500W unit first seen at PLASA. Next comes Riga A, a range of 500W low cost asymmetric floodlights supplied either as a single unit or in combinations of three or four units. They are aimed at the small user market, are very competitively priced and can be either floor mounted or suspended. Barn doors are available and the units can be connected in any configuration.

The Linea 1/3/4 range of 300W floods from Teatro comes in a stylish aluminium housing in either single, three or four compartment modes. A wide range of accessories is available, and again, each compartment can be separately powered. Mike Lowe has plans for a big batch of these units to enhance his SIB display at Rimini. On a final news point, and also from



Highlight clarity on screen: new computer design power from 'Stage'.



Stefan Etmayer and Hermann Sorger show the new Pani BP 2500 halogen projector.



Teatro's Mike Lowe goes to full power with the new 2500W strobe.



Cerebrum's John Lethbridge in familiar pose as he exposes the virtues of the ShowCAD control system.



The new Stage 12 control desk from Jands.

the Winter Olympics, a line-up of 12 Teatro 2500W HMI followspots were used during the Lillehammer opening ceremony.

Yves Ruellan of **Hardware for Xenon** showed the company's completely new 2000W Xenon projector, which uses the same lens system, front end attachment and other good things from their established 5000W unit. This one can be truss hung and produce a 25m wide image at a maximum distance of 160 metres. It will be in full production within two months and fits nicely into the company's range. Another Hardware for Xenon operation will see the light of day in May; a US subsidiary commences work from a base in New Jersey and Ruellan is hoping to follow up later in the year by establishing an office in Los Angeles.

David Stressing of **ESP** was at Siel to assist with the launch of the new **RVE** dimmer, High Intensity Integrated (HDI). This is a new digital and analogue system which has been purpose-designed with flexibility in mind. The cabinets are built in blocks of 12x3kW or 6x5kW and both dimmer sizes can be used in the same cabinet. Control is via DMX or analogue 0-10vdc, and each block has its own keypad for patch, DMX validity, four curve selection, with eight possible, fluorescent mode, channel test, override lighting, rise and fade time and memories. Each HDI control panel will accept up to eight programmable chase effects plus up to 128 back-up cues. Control is also possible direct from a PC with the use of 'Lightcreator' software. Also launched was the portable version of Digipack, a system that has all the features of the cabinet built into a robust case. **ESP** also distributes the highly successful range of **DIAFORA** colour changers and on show at the event was the Colourart with DMX or analogue control. It boasts a list of features including first channel designation up to 24 colours, no initialisation time, a self-test facility, fan speed control direct from control desk, fan speed control by light output sensor, fault diagnosis direct from a PC, two DC motors and high impedance non-active



Philippe Coudyser of Sonoss shows Effects Lighting's new Cirrus Low Smoke machine.

input. In the event of power failure, the last gel position is kept and recorded and scroll time end to end is 1.5 secs. Diafora's 5k, 3k and 2k versions all have the same features as does the latest member of the range, the 160mm aperture waterproof changer. Diafora were the first to manufacture this type of changer in a 5k version and have high hopes that this new neat and compact form will be just as successful.

Strand Lighting showed a wide range of controls, dimmers and spotlights including Galaxy Nova, Light Palette and PALS. Peter Ed told me that the GSX with Genius, previewed at PLASA last year is now a fully functional lighting control system for between 25 and 125 channels, and offers, due to its separating software and hardware, as previously described in this magazine, the chance for the user to pay only for what is needed. Standard features include VGA monitor, automatic and manual cue playbacks, three effects playbacks and 24 submasters with fade times. Optional features include advanced effects, colour scroller control and MIDI Show Control.

Strand have also been busy adding functions to the LD90 dimmer rack that was first launched at SIEL in 1993. SWC (System Wide Control) offers a hand-held programmer and preset panels for rigging and preset control. 'Outlook' is a range of fader and preset panels, that connected with the LD90, offers very capable architectural control with up to 16 rooms at eight presets per room. Both Outlook



Strand Lighting showed a broad range of their luminaires and lighting control products.



The new Diafora 1k colour changer for outdoor use in its 'wet box'. A new 5k changer is expected to join the range in the near future.

and SWC work both together and with standard lighting control systems, giving flexibility for backup, stage manager and FOH control at very little extra cost.

Finally, 'ANDIDIX' (Is this connected in any way with Andy Collier, Strand's business development manager?) is a lightweight modular 24-way rack for touring and rental use. It employs the same processor as the LD90, offers the same level of features, and is also hard fired, for good dimming of inductive, fluorescent and low wattage loads.

Pulsar gave their new Zero 4001 its first French showing following PLASA, but the company's sales director Derrick Saunders will always find something totally new for you to talk about if you ask him nicely. Abiding by the straightforward formula of doing simple things well, this time round it was a 12 channel single preset desk with master and flash buttons. An 18 channel version is on the way. After reminding me about the 'real' Shadow followspots from **Clay Paky** (our printer had placed the wrong picture into the page when we featured it in our January issue!), Derrick expects the first UK local authority installation of one of these units to be announced soon. Once the Shadow has worked its way into the thinking of lighting operators, I'm sure they are here to stay. 'The Shadow is a change in concept,' said Derrick Saunders, 'but it's got everything going for it.' As for the rest of Clay Paky, they are keeping their powder dry for SIB in Rimini...

Sonoss are doing exceptionally well for a handful of leading international companies including **Thomas, Celco, Wybron, Columbus McKinnon** and **Stage Accompany**. Keith Dale and Colin Whittaker were hard at work as usual for Celco, making their pitch with Aviator with the R180 and R360 channel versions on view. One of the latter desks has already been installed at the new 7000-seat Zenith venue at Pau in South West France, and numerous further contracts are on the order books.

Daryl Vaughan of Wybron showed one of



Yves Ruellan with Hardware for Xenon's totally new 2500W projector. A USA subsidiary company is to be launched this spring.



Bob Hall of Anytronics with Brigitte Delehaye of Durango.



Celco's Colin Whittaker (left) with Daryl Vaughan of Wybron on the stand of Sonoss. (Look closely and you'll see they aren't holding hands - it's all down to camera trickery).

each of their Scroller range, courtesy of Celco Aviator control. It was Wybron's debut in France, and they unveiled a new Scroller for the Thomas 4-Lite unit - an adaptation from their 5k. As for Thomas themselves, they reported business 'back home' was booming, so much so that shift work may well have to be introduced to cope with demand.

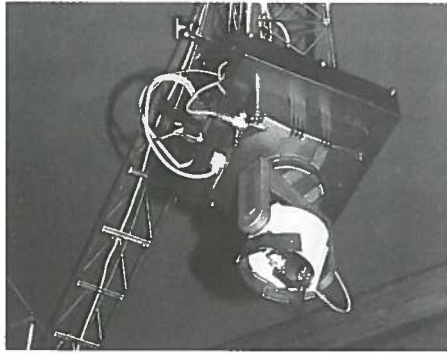
Crystal Equipment had a stand full of **Compulite** lighting control equipment, but what drew attention was a neat and well-thought-out small control desk called the Toddler. This is the offspring of the 24/36 channel digital lighting control desks from Theater Technisch Lab in Holland, but without the manual faders. This, at first glance, might seem a little useless but the Toddler allows for channel and level selection via up and down buttons. The channel capacity increases to 160 and is therefore suited to exhibitions and displays where, once programmed, the lighting states may remain the same for many years. The desk is also ideal as a supplementary desk for controlling colour scrollers as the memories can either sequence automatically or be triggered from a remote contact enclosure. A soft-patch is provided for the output which enables any of the control channels to be patched to any of 240 DMX output channels - a facility which will soon be added to the standard desk.

Optikinetics announced a new method of gobo manufacture where the gobo is produced by chrome etching. The image is taken from a laser printer copy or equivalent and photographically reduced and transferred directly onto a pre-coated toughened edge ground piece of glass that holds the information. The rigid substrate ensures accurate focusing of the image. This new process holds detail down to one tenth of a millimetre, and, you won't be surprised to learn that, as the chrome etched gobos will withstand high temperatures, they are ideal for use on Optikinetics' high powered Solar 575 projector.

Jands' new Stage 12 and Stage 24 desks were



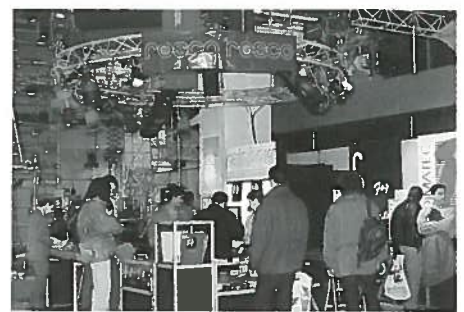
Jean Michel Gache of Europierre (left) with David and Karen Hickford of Laser Innovations and the new Pyramid laser control system, and below the new Pan-Scan from Laser Innovations.



shown on the stand of **ESL**, both featuring two pre-set operation with two grab faders for phantom third and fourth pre-sets, a unique feature. Using DMX outputs they can be used to extend the pre-set facilities on the Event, Event Plus and ESP11 consoles and DMX compatibility provides the link with other consoles, colour scrollers, moving lights and dimming systems by means of a simple, common data path. Additional features include Wide Mode operation to double the available control channels, Add/Solo functions on all channels and masters and a Chase function which can be assigned to any or all channels. The units were originally intended for Jands' home market in Australia, but have proved popular internationally with entry-level users such as schools and amateur theatres.

Also on ESL were **Doughty Engineering**, who launched their new Eclipse lighting stands. This is a compact range designed to provide a stable platform for the mounting of location and photographic floodlights. The stands are constructed from aluminium and steel, and offer usable heights ranging from 760mm to 3.2m with maximum load capacities of between 5kgs and 12 kgs.

Mobil-Tech, who supplied much of the trussing for the other stands at the show, say they have now completed the reorganisation of their complete range of stands and trussing. Products are divided into four groups: the



Dimatec and their Olivier Bordini played host to Avolites, M&M Camelont and Rosco with Rick Salzedo, Adrian Hicks and Peter Richards respectively taking care of the appropriate business. UniPar coloured Pars provided much of the lighting.

Economic range, the entirely new SP range (a robust three-legged range of push or winched stands, plus accessories), the Professional range (robust four-legged range of push or winched stands plus accessories) and the aluminium and steel Lift Tower range. New products shown at the exhibition included the DM2000 - a simple bridge of two stands from the Economic range with a single 3.5m long bar across, suitable for the disco market and the DM4000 which is the same but with a 4m ladder section between stands. However, the most important new product shown was the addition of 3D angles to the Mobil-Tech range of steel trussing including 60, 90, 120 and 135 degrees. These angles and the new three and four way sections will give customers an option to the cube system. The Mobil-Tech range is distributed in the UK by ESP (UK) Ltd.

Laser Innovations showed their new Pyramid laser controller, a neat and small but powerful system that is ideal for small clubs and discotheques, and able to produce excellent graphics, animations, effects and text. Shows can be saved on memory cards. Features include the Smart Card, a pre-programmed memory card that stores effects, shows and images which can then be modified by the operator and returned to the card. Patterns (using four oscillators), beams, high resolution graphics, animations/sequences and text are available, with single or two-line scrolling and animations which are available pre-programmed onto the Smart Card. Accurate adjustment of effects is by rotary encoders and a fast colour lock and blanking allows for multi-colours in text, effects and graphics. An internal sequencer can be programmed to trigger effects manually or to music.

Also new from the company is their Pan-Scan, an effects head that works off the Clay Paky PinScan, giving 'laser effect mobility' via a fibre fed laser beam projection unit. It has 360 degrees pan rotation and 227 degrees tilt rotation and can be controlled by Laser Innovations' new Pyramid and existing Oasis



Andy Trevett and Mervyn Lister with Doughty's latest range of stands.



Abstract and Novalight products on the stand of Ultralite. Four products from Abstract will be launched at Rimini.

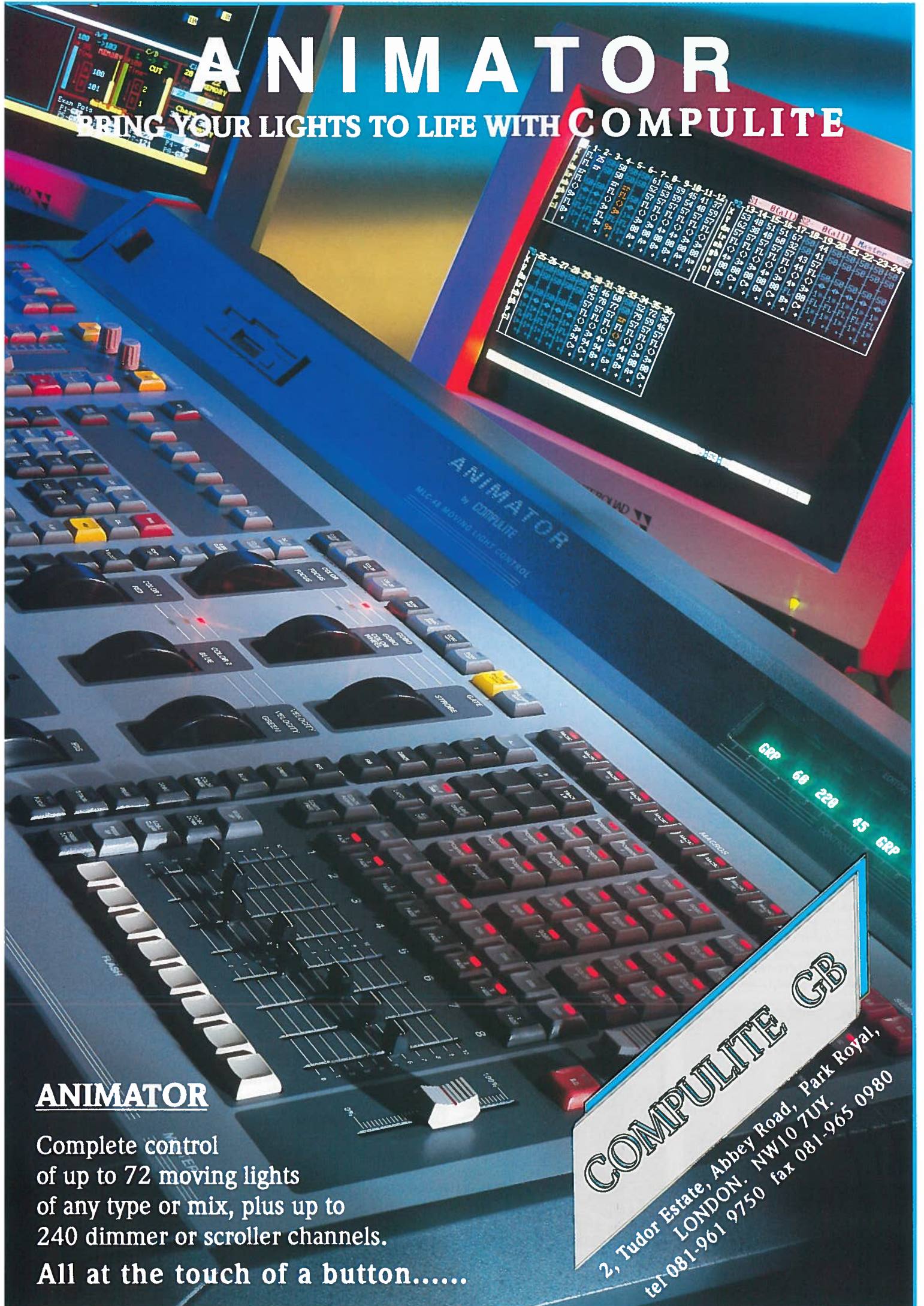


Hervé Legois of Mobil-Tech France shows their new, fast truss coupling system (right) and the SP1 TA stand (left).



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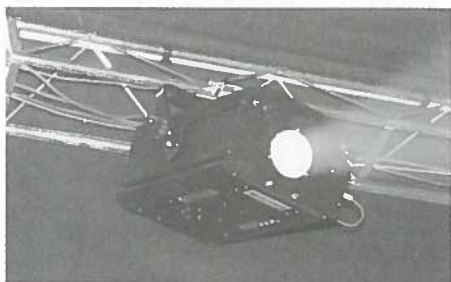
David Manners of CCT was in Paris with the company's new internally wired bars and grids for the suspension and electrical connection of luminaires. These consist of a C-shaped 50mm extruded bar with an internal rib for strength, earthing and assembly mounting. The slot is closed off with a matching extruded filler to further increase strength. Sockets are fixed on the bar via a specially designed mounting platform with a range of sockets available. Wiring connection may be via terminal boxes, Socapex or Lectriflex style connectors. Manners told me that the bars have recently been specified by Telestage Associates for use in four studios for the Wharf Cable TV complex in Hong Kong and, more bizarrely, put to use by the police control centre at Godstone to carry the camera surveillance units that monitor traffic on the M25!

I mentioned at the beginning of this report I would put 'sound' to one side, leaving the way clear for the forthcoming Frankfurt Music Fair report. In the same way, it seemed equally wise, and a lot less straining on my brain, not to seek out any new equipment designed for discotheque use. With SIB Rimini also in sight, and the likelihood of product changes between now and then, it also seemed more sensible to hold this sector over too.

So, look out L+S's major reviews following these events.



Lighting designer Carl Dodds shows off the Coemar Nat on the stand of Collyns. There will be three units in the range come Rimini, and numerous refinements have been added following the unit's initial exposure at LDI in Orlando in November.



Griven's new Baccarat was launch at SIEL. The aluminium unit comes in two versions, 575HMI or 1200HMI, and provides six colours plus white with auto rotation of beams to music plus strobe effect. Full details will be provided in our SIB report.



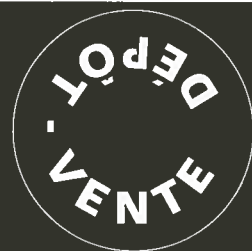
CCT Lighting's David Manners with their new internally wired bar on the stand of Panavision.



Gilbert Boisseau of Prolux (left) and Lighting Technology's David Morgan man-handling the new Caterpillar unit that caused heads to turn at LDI, with Philip Norfolk. Watch for early news of ever closer links in France for Lighting Technology whose Garry Nelson is already permanently camped in Paris.



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ANTREPRO: BONNE MARCHE A PARIS

John Offord visits a unique new operation in the French capital

A second-hand equipment sales operation, owned in large part by major rental operations from within the industry, and operated, so I am told (and I have no reason to believe otherwise) on, or as near as you can sensibly get to the principles of *égalité, fraternité* and *liberté*, has been running for eight months in Alfortville, a suburb in south-east Paris. In France, this commercial system is called 'dépôt-vente'.

The idea of setting up Antrepro the 'communale' was down to Jean-Jacques Perroy, formerly of Régiscène. He talked to 20 or so major rental companies and operators in the country, who, having been persuaded it might well be a 'bonne idée', proceeded to back the operation, between them taking up 60 percent of the share capital. Named in no particular order they are: Dispatch, FiatLux, JLC, Lumison, Magnum, Melpomen, Panatechnic, Potar Hurlant, Scenic Sound, Slade, SPL, Sodespec, Jean-Lux Félix, Bernard le Dû, Gérard Pernet and Pascal Graticola and the people who run the day-to-day operation, Jean-Jacques Perroy and Jean Moizo. Klaus Blasquiz and Joseph Cohen handle the company's marketing.

A major rule quickly adopted was that the company would take great care not to flood the market with masses of one type of equipment, either by brand or generic product, so that established trading conditions would not be disturbed or de-stabilised. Generally, major equipment distributors are consulted by the men at Antrepro as the occasion may from time to time demand.

"When a company wants to sell equipment we work out with them a sensible price,"



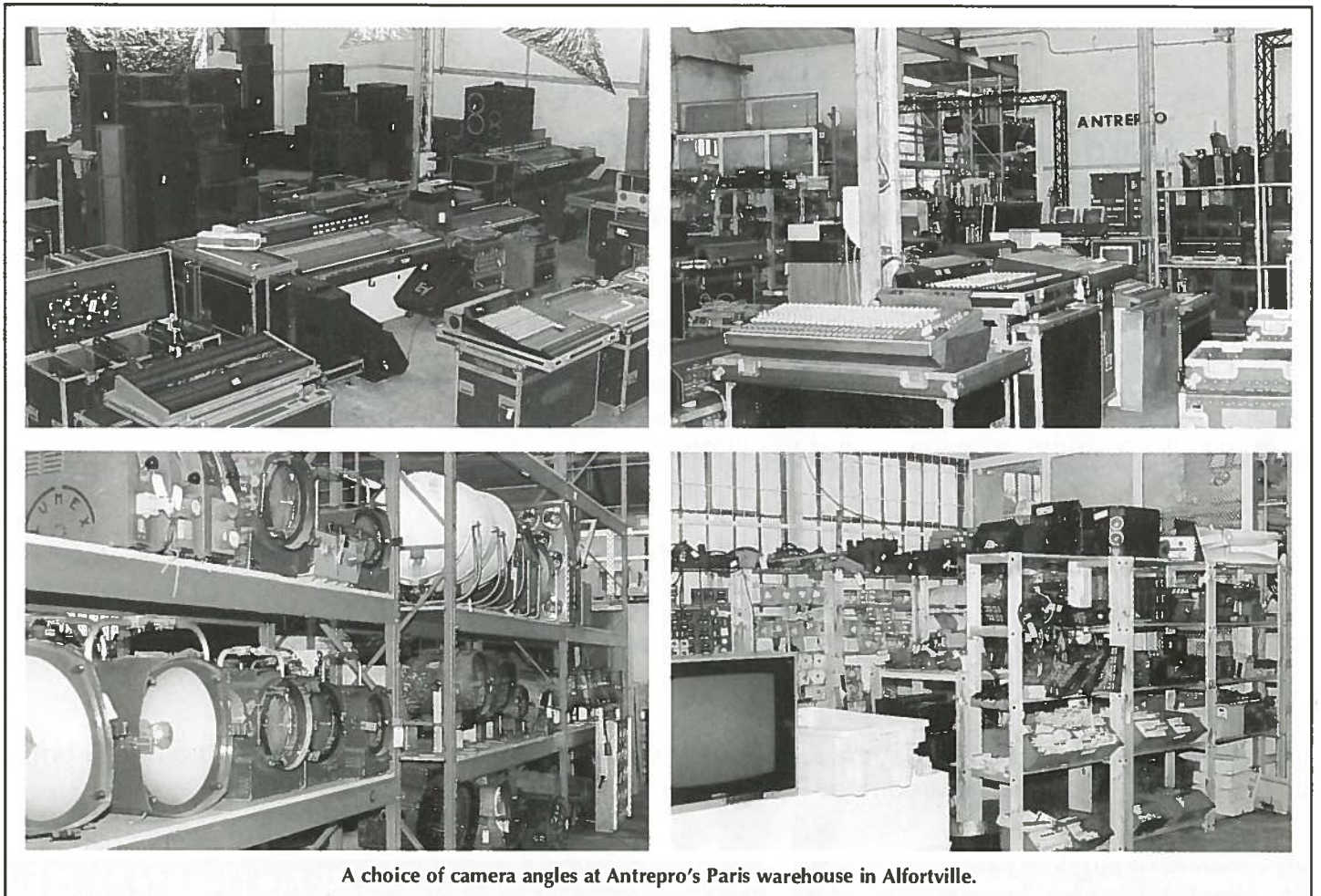
Left to right: Joseph Cohen, Thierry Argenot, Jean Moizo and Jean-Jacques Perroy of Antrepro.

explained Joseph Cohen, acting as general interpreter for our group conversation. "Antrepro's margin is 25 percent for lower value equipment, but this reduces to 15 percent on more valuable items." The contract price stays fixed for one month, but in the unlikely event that no sale is achieved in this first period, the price reduces by 10 per cent, a system which seems to follow a common rule on this type of trading in France. Happily for Antrepro this further reduction has never had to be

applied. Where a mix of equipment is submitted for sale, and when some items will obviously sell faster than others, a sensible accommodation is agreed up front.

The operational team of Perroy, Moizo, Blasquiz, Cohen and Thierry Argenot (who runs the technical and information database) now manage a busy operation that has stock of around 40 companies' equipment in its warehouse at any one time.

"Antrepro wants to see the market regulated



A choice of camera angles at Antrepro's Paris warehouse in Alfortville.

and is very sensitive to the role it plays," continued Joseph Cohen. "We can also play a very useful role in the process of general trade where, for instance, a theatre wants to invest in new equipment. Selling off the old equipment can provide part of the funding for the new and the whole process can be better organised."

One of the company's ambitions is to help establish a recognised pricing structure for second-hand equipment. "It will be good for the industry as a whole, and very useful for insurance companies to have access to this kind of information. It will also prove important to have pricing information available for credit companies who are looking to provide finance for equipment."

I asked whether equipment submitted for sale was tested or checked in any way before being placed on Antrepro's sales list, and what rights the buyer had. It proved to be a case of 'buyer beware' and 'sold as seen'. "We ask the seller to provide full information to go with the equipment," said Cohen, "so that if there is any defect then this is declared at the time. It is largely a moral contract and trust has to be involved; if a seller isn't honest then it is unlikely he will be able to sell again through Antrepro. To date we have experienced no major difficulties."

Only professional equipment from theatre and touring is accepted for sale, but occasionally, if a mixed range of equipment is entered, a small amount of mobile discotheque or hi-fi gear finds its way onto the lists, but this would never account for more than 95 per cent of the total amount of equipment available.

The main fear of Perroy was that the trading levels would fall back after Antrepro's buoyant start in June 1993, but the operation has kept its head above water and is now running at a



Strand and Avo desks line up against a bevy of Pars and assorted 8-Lites.

steady rate. Word has got round the industry, and visitors to Antrepro's warehouse now include those from bordering countries, including the UK. "We want people to call Antrepro when they have a problem. When they wish to sell something we want them to think automatically of using us," said Cohen.

When the company opened its doors for the first time, visitors spent a great deal of time looking at the equipment available and talked to each other quietly behind the scenes, attempting to establish who had submitted the various goods for sale. However, this would have been a difficult task. Only Perroy has the knowledge of where equipment has come from and this information is not disclosed. "This discretion has been accepted and buyers are

already much more relaxed about the situation," said Cohen.

"Originally, official distributors selling new equipment were afraid about the potential competition from Antrepro, but they've seen how it works and actually send people to us and the whole system works together. There is an important role for us to play in the overall market. A strong and well regulated second-hand market often provides the cash from within the system for companies or venues to buy more new equipment."

A subscriber to Antrepro buys the right to have advance information of all 'new' equipment placed for sale, and this gives a 48 hour advantage. On the general information front, Antrepro make full use of France Telecom's excellent Minitel information system, courtesy of Sono magazine's information sector.

From any corner of France you can view on your screen Antrepro's full range of available equipment at the touch of a keypad. Amazingly, this route already provides the contact for over one-third of all sales made.

Having set themselves up in France where they are already well-established, the early and continued interest from outside the country has persuaded the company to widen its horizons, and they have already decided to market their activities on a broader European stage.

Will we even see the situation where a 'Glass's Guide' for Lighting and Sound Equipment becomes the 'bible' of a structured second-hand market for the industry? Will we see a time when the industry chatlines in one-upmanship wrap around comments like 'How many 'miles' has your five year old Avo done?' - or product descriptions such as 'nice body, smart trim, excellent condition for year'?



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SOUND 94

Ruth Rossington has a Day at the Races

Having never attended any of the previous SCIF shows I had little idea what to expect when I arrived at Sandown Park for the annual gathering of the Sound and Communications Federation. What I found surprised me. For one, there were less companies exhibiting than I'd anticipated, but despite this, I could probably count on one hand the number of manufacturers *not* represented. For two, considering that SCIF is hedged in by the AES and Frankfurt Shows, there was a surprising number of new products. And for three, though the aisles were not packed and the visitors seemed somewhat sparse, there was nevertheless a real air of business about the place - you could almost taste it.

The exhibition grapevine was also hard at work and the news that was tapping down SCIF's wires was of a possible eventual merger with the PLASA Show. To a man, it fed into everybody's conversation and it will be interesting to see what decisions the members of SCIF reach over the next few months. However, Sandown Park hasn't given up its race just yet, and the SCIF runners were away before I'd even crossed the starting line. Still, I can cover the ground with the best of them, and with saddlebag in tow, I conducted my own stewards enquiry into the sound products and services on offer.

The unrelenting forward march of computer-based technology across the science of sound was again in evidence, this time on the stand of **Peavey Electronics**, who were drawing what crowds there were with a computer implemented system for signal processing - MediaMation. Unlike the various computer control protocols which are used to manipulate and/or monitor remote hardware/signal processing units/mixers the MediaMation is the entire sound system, apart, that is, from the power amps and transducers. The MediaMatrix operating software provides a visual interface for the Peavey MediaMatrix digital signal processing card mounted within the PC. Each DSP card utilises five Motorola 56000 processors and the number of cards used is only limited by the number of available card slots in your PC. Individual signal processors can be called up from the Windows menu and placed on the user's screen, in much the same way as a designer creates a block diagram of an audio system. Once the audio chain is determined, the user then 'wires up' the devices using a mouse, allowing all



PLASA chairman Tony Kingsley (left) pictured at Sound 94 with Ken Walker, chief executive of SCIF.

interconnections to be accomplished with simple 'point and click'. Each DPS implemented signal processor can be adjusted and individually 'metered' within this architecture. Other notable new product releases were the IP Series of power amplifiers and a number of speaker systems including the TSL-1 theatre surround speaker, the PR-1280 and PR1580 enclosures and the ERW subwoofer.

The main theme of the **TOA** stand was digital technology and spearheading the onslaught was the company's new matrix management system, the FE-2200 Series. This facilitates exact signal distribution at the touch of a button and its smart-card programmability and remote control via LCD touch-screen paging microphone was being demonstrated at the show. Also on stand was the new slimline multi-channel P-60F amplifier with corresponding M-243 mixer which will no doubt find its stomping ground in the multi-source/multi-zone environments. There were also numerous additions to the V-Series range of modules, a new AX-1000A automatic mic mixer, and the F-333, the latest to join the 'Fashion' collection of speakers.

Without wishing to belittle the products, the biggest attraction on the **Next Two** stand was the promise of champagne and a suave gentleman with a bow-tie tinkling the ivories. The company are building quite a range of loudspeakers for sound reinforcement and had numerous additions on show, most notable of which were some new moulded cabinet speakers, and additions to their range of driver units including a new patented moulded cone and surround unit. I didn't get the champagne, but I got a plastic bag for my trouble.

Michael and Gwen Leaver of **Adastra** were not only showing their range of amplifiers, drive units and speakers, but they too were offering a magnum of vintage champagne on each day of the show. I missed out there as well.

Still, it was good to share a cup of tea with the ever young Andy Wood of **Harman Audio** who have recently introduced the new expanded range of JBL Sound Power Series speakers into the UK market. The Series consists of four individually tailored cabinet systems designed specifically for installation, touring and portable applications. The I-Series pulls together a wide range of cabinets from two-way high-mid and full range through to sub woofer enclosure, whilst the T-Series, which also offers a full range, has tapered cabinets which can be

assembled in flown clusters or ground stacked. It also boasts a somewhat unique integrated aluminium corner-mounted hanging system which allows the cabinets to be flown 'flush' to each other. In addition, there was an upgraded version of the existing M Series cabinets, plus a Sound Power system controller, the C236. **Canford Audio** had a batch of new products including their own CCM3 mixers and M-S microphone pre-amplifiers, and Rockustics loudspeakers.

Marquee Audio had the world-wide launch of the Soundcraft Delta Theatre console, which was on show alongside an impressive mix of new and established pro-audio projects. The aforementioned Delta Theatre console is a dedicated version of its progenitor Delta and represents a powerful upgrade tailored to the needs of theatre sound. It features individual routing to the four group busses, six auxiliary sends with pre/post switching, two fader controlled stereo returns, with a 6x4 matrix on-board as standard. The desk is available in 8, 16, 24 and 32 channel frames, which can be fitted with combinations of mono or stereo input modules. Amongst the Denon range of pro-end products was the new DN1000 rack-mount single CD player, and from C Audio a new line of power amplifiers. First-time exhibitors **Cloud Electronics** were pleased that the recently introduced CX233 and CX122 mixer zoners were proving themselves with SCIF members who have widened the unit's application.

RCF launched the long-awaited 2000 Series of programmable mixer amplifiers, pre-amplifiers and power amplifiers. Ranging from 60W to 400W, the 2000 Series offers modular type



TOA's Brett Downing (right) demonstrates the matrix system to Ian Ramsay of DP Sound.



Allen Hendrix demonstrates Peavey's MediaMation computer system.



The champagne set from Next Two: Ray Morrison, Janet Dean, Tone Buck Edwardsen, Kevin Tester and Barry Breach.



Ken Achard of Peavey with the IP Series of power amplifiers.

flexibility in a complete integrated form. Main features include five true 'Universal' inputs on Din and XLR, 48 volt phantom power supply on all inputs, on board programming of priority levels and optional chimes (on mixer amplifiers and pre-amplifiers) alarm/priority separate override input and 24V DC power supply. The 2000 Series also consists of four 100 volt line power amplifiers (60W, 120W, 200W and 400W). Again, these feature a separate alarm/priority override input. Further additions to the RCF 8000 Zone PA management system were announced including the 'Critical Path' monitoring of loudspeakers circuits to comply with the requirements of BS7443. A new digital matrix signal routing system, the MC 2030, was shown for the first time. This provides maximum configuration of 16 inputs and 32 outputs with a possible 64 with the addition of a slave/module. Also on show from the RCF Pro Audio division was part of the Monitor Series of compact loudspeakers. Included in the range are the Monitor 4T and 4WT, 100 volt line versions, with a wide frequency response and the Monitor 8 which has been specified extensively throughout the leisure industry since its launch in September last year. For Delta PA SCIF was to be the launchpad of the new PASO 8000 Series

amplifiers. These are available with a choice of slot-in modules in six models: three mixers and three slaves ranging from 60W, 120W through to 240W. The amps can be operated from AC or 24V DC power supply and offer phantom power for electric microphones, balanced mic inputs, plus a four-level hierarchical microphone precedence.

With systems on show from a range of manufacturers, **Shuttlesound** were sure to be an attraction. Of particular note was the new Altec Lansing DTS 645-8F enclosure which employs new Duplex technology making for a very compact enclosure which promises excellent dispersion control. There was also an opportunity to witness in the flesh Sabine's ADF-2400 automatic digital filter devices which were launched in November, following neatly in the footsteps of the award-winning Sabine FBX-900.

I have a feeling **Canon** are quite enjoying their reputation for slightly avant garde stand design and now seem set on a course of outdoing previous performance at every turn. I don't know whether it was the elegant mural, Sean Martin's black eye or the new V-SB100 that caught my attention, but something certainly drew me towards the new sub bass system. This is a single channel low frequency loudspeaker enclosure.

Built with to the same wedge design of the V-100, it also shares the easy-to-install philosophy courtesy of a quadrant form and an optional bracket mounting kit. With extended bandwidth and increased low frequency system power handling, the V-SB100 has been developed primarily to complement the V-100, but is also compatible with most other manufacturer's loudspeakers.

Sound Dept had the first showing outside America of the Leviathan II - an enormous tri-axial horn loaded system from Community. Ken Berger was over from the US to help **EAW** introduce a number of new items, alongside the first fruits of their recent alliance with Siemens. New offerings included the CH Series of mid-high array modules which have applied the principles of Virtual Array technology to the problems of speech articulation in large or reverberant venues. Part of the CH Series is to receive its baptism at the strangely named Crystal Cathedral in Garden Grove, California, as part of a total renovation of the sound system there. The compact UB12 surround system was also getting an outing and is designed for background/surround sound applications and for nearfield reproduction where extremely low frequency response is not required. For **Metro**



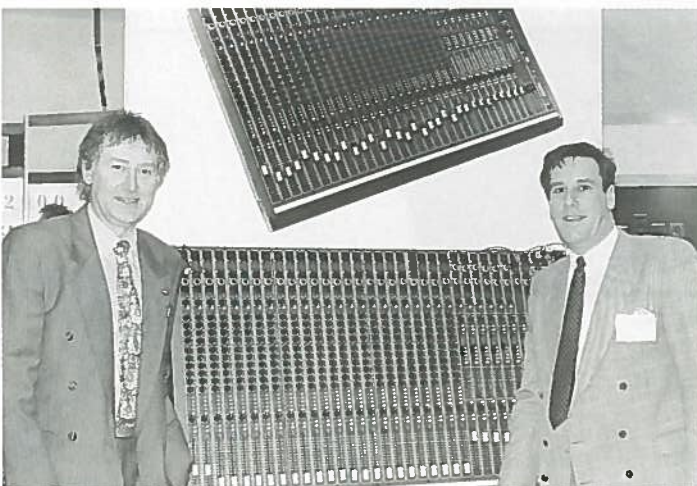
RCF Electronics UK's Phil Price (left) with Linton Smeeton.



HW International brought a range of products from Shure, QSC and 3G to the show.



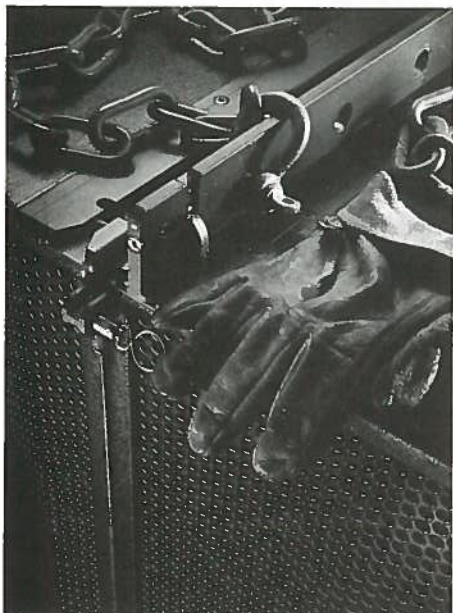
Jasper Whittaker (left) and Bill Woods of Shuttlesound with Altec's DTS 645-8F.



Pete Child (left) and Robert Lingfield of Hill Audio with the Gigmix desk.



Canon's Sean Martin, complete with black eye and the V-SB100 speaker.



Ready for action: the SoundPower T Series from JBL on the stand of Harman.

Audio, SCIF also presented an opportunity to display a new UK market partnership with Siemens and their UK pro-audio partner, Multiremote with a range of public address and conference systems.

Audio Technica continue to develop products for the installation market and showed their new microphone management system, the AT-MX341. This 'SmartMixer' is a micro-processor controlled automatic switching, four-channel microphone mixer. **Beyerdynamic** had a new range of wireless microphones comprising the S150 single channel and the S250/350 true diversity systems. Recent additions to their line of distributed products

include the Omniphonics range of amplifiers and the PRE-1 audio resolver/pre-amplifier, shown alongside the new LINK series of power amplifiers.

If the list of 1993 installations is anything to go by, **Audio Projects** are enjoying a measure of success with the NexSys computer controlled amplification systems. The latest release of its control software was on stand, alongside the latest update of another software package, the Ease electro-acoustical analysis system, which features enhanced room modelling, as well as increased display and printing options, and an ever-expanding loudspeaker database.

Hill Audio, now part of the **Millbank Electronics Group**, demo'd the Gigmix and Stagemix mixing consoles. As the names suggest both have been aimed at specific sectors of the market. Available in 16, 24 and 32 channel frames, Stagemix provides eight discrete output mixes plus two separate effects sends from each input channel. Additionally, each input has a mic splitter facility, insert points for individual channel treatments, overall channel fader and a dim control which will eliminate feedback at the push of a button. The on-board equalisers on each of the Stagemix's eight output groups offer comprehensive output EQ. The Gigmix has eight subgroups, eight fully routable lines returns and six discrete auxiliary sends. A single master control to switch Aux 3 and 4 from pre to post fade is a rather unique solution to a common problem. Additionally, the input channels feature mic and line inputs, individual insert points, 48V phantom powering, and Hill's four band phase coherent fixed equaliser. Millbank themselves featured the recently launched Talisman Ultima range of integrated amplifiers.

As UK distributors for Shure QSC and 3G, **HW International** had a full range of products on show. SCIF was the first platform for the new ST2500 teleconferencing system from Shure, together with a portable automatic sound mixer,

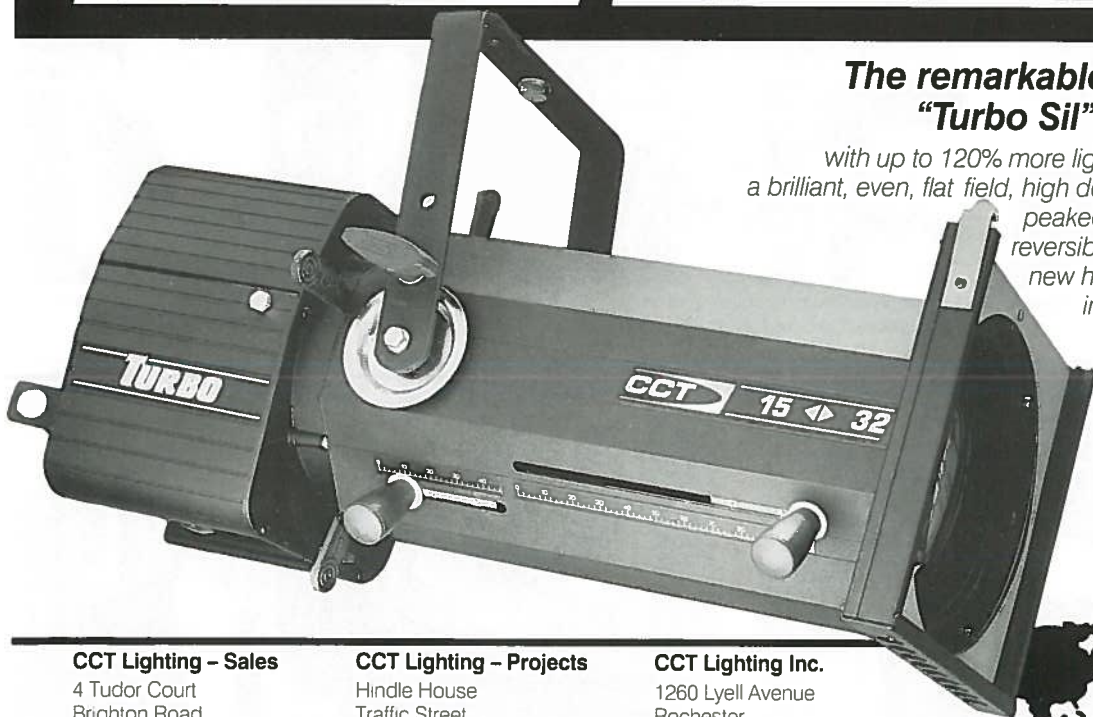


Rob Diddington of Sennheiser UK with the new SK50 16 channel switchable transmitter.

the FP410. From 3G came the new Mynah Si mixer with full stereo input and also the new HP400 and HP200 power amps redesigned to be smaller, lighter and, best of all, cheaper. The latter was to become a common theme as HW announced a reduction in price on the QSC range of amps too. Frankfurt inevitably came into the conversation and Dennis Harburn of HW hinted at interesting things to come.

So there you have it, that's what SCIF 94 had to offer. Now the Sound and Communications Industries Federation has to decide exactly what it wants to do with its show and choose its course for 1995.

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EQUIPMENT *News*

Product Updates from Martin

In a month packed with activity, Martin Professional announced a series of product enhancements.

Firstly, they unveiled an HMI version of the Pro 1220, their top-of-the-range robotic light for touring. Already available with a 1200W MSR lamp, the company believes that the additional option of a 1200W HMI will appeal to many production and television LDs who prefer the different quality of light produced by the HMI.

In the meantime, RoboColor 2 is due to appear, with more dichroic colours and more chromatic effects. Eleven rich dichroic colours are now on offer plus open white and blackout. Colours can be sequenced at high speed or changed slowly for gentler effect and adjacent colours can be mixed to achieve subtle splits. The shutter of the RoboColor 2 will also double as a highly effective strobe, and will not only strobe black to white, but also from red to white, or between neighbouring colours. Precision optics have been employed and the focus is manually adjustable. The life of the ENH 250W lamp in the RoboColor 2 is extended by voltage control, soft start and ultra-efficient cooling.

The Magnum Pro 2000 is a second generation high performance smoke machine using microprocessor-based technology and a specially designed heating element for longer life and reliability. Martin's engineers looked at the traditional problems associated with smoke machines before they embarked on the Pro 2000, and set about overcoming them in the new design and a new and extremely durable heating element was developed for the purpose. In combination with the high pressure pump, this it is claimed, will deliver more smoke more precisely. The output of the machine is variable and can be controlled over a wide range of pressures.

The Magnum 2000 microprocessor control, in harness with these other components, will not only influence reliability but will also provide extra controllability, including auto-timing and memory functions, say Martin. Off-board control is via 0-10V analogue from any standard desk. A slave facility allows an infinite number of add-on units and both electronic and mechanical, re-settable, overheating protection is built-in.

For further details contact Martin Professional in Denmark, telephone 45 86 21 44 11.

MEC Systematically Going Forward



With the popularity of medium-duty truss systems over the last decade, the MEC Structural System is claimed by manufacturers MEC Systems to be unique in several respects. According to the company solid precision die cast end spars eliminate tube end damage and the six way joint cube, offers the major benefit of stocking one component as opposed to the more traditional 'junctions' or 'corners'. Square, triangular and ladder sections are all compatible with the joint cube and the claimed strength is immense.

The system is available in 250mm or 330mm configurations and a 4-way winched system with a die cast sleeve is available as standard with a 360kg hand winch and 600kg and motorised systems are available to order.

For further details contact MEC Systems in Battle, telephone (0424) 893424.

Sabine Adds FBX-1802

Sabine have announced the latest addition to their range of automatic feedback controllers, the FBX-1802. This is a dual channel version of the award winning FBX 900 Feedback Exterminator, which like the 900, automatically senses feedback, determines its frequency, and places narrow notch filters to remove it. Nine filters are available per channel. The user can choose to lock the 1802's filters to prevent them from increasing in depth. The total number of filters to be activated as well as the width of the filters can now be set allowing the user to set up the FBX for optimum performance in any situation. In addition, peak output is now increased to 23dBV.

Sabine FBX Feedback controllers and ADF Workstations are exclusively distributed in the UK and Ireland by Shuttlesound Ltd in Mitcham, telephone 081-646 7114.

Cirrus Lowsmoke

The Effects Company have launched the 'Cirrus' lowsmoke - a new method of producing low lying smoke. According to the company, the Cirrus removes the need for freezing tunnels or heavy converted refrigeration units and consists of a small sophisticated 'box of tricks' that attaches to any 'Supersmoke' machine and with the aid of a CO₂ cylinder, produces an effect that is virtually indistinguishable from traditional dry-ice.

It is linked electronically to the main smoke machine and operates 'in tandem' via a standard smoke machine controller, therefore even 'timer' operation is possible. CO₂ usage is very economical - even a small 6.35kg cylinder will give 9.5 mins of continuous low smoke. The whole system can be ducted and may be operated by 0-10v controllers/lighting desks. Further details are available from The Effects Company in Crawley Down, telephone (0342) 718399.

New Software for Light Commander II

MA Lighting Technology of Eisingen in Germany has developed new software for the Light Commander II. The desk can operate in wide mode by which the number of channels will be doubled to 48 + 6 or 96 + 6 channels, depending on the respective version.

Apart from doubling the channels, the update also enables several extensions without changing the basic method of work of the console. The new software makes it possible to save a show on sequencer through MIDI, and all programmes can further be deleted by an all-clear-function and the current crossfade-step can be modified directly. DMX-Patching on 256 channels, as well as the possibility to store all the parameters set for the chases are also available now. A separate fade in/fade out time can be assigned to sequences.

The new software can be installed by simply exchanging two eproms which can be obtained from MA distributors, with MA's world-wide sales representative Lightpower, Paderborn (Germany), or directly with MA. Please note, however, that old programmes will be deleted and will have to be entered once again when installing the update. This also applies to the data stored on the card.

Further details and cost of upgrade can be obtained from MA Lighting in Eisingen, telephone (49) 9306 2459.

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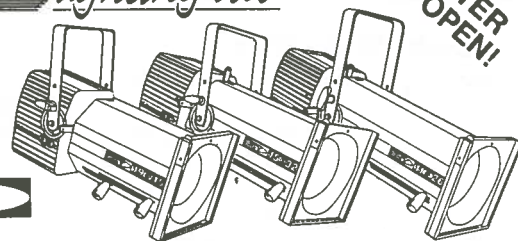
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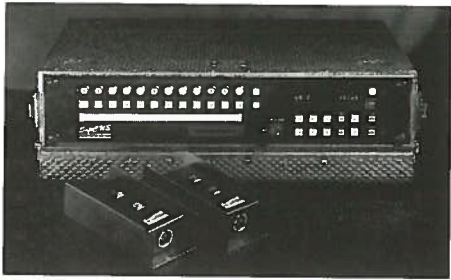
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Hell Upgrade



In keeping with a policy of continual product improvement, Howard Eaton Lighting has announced the release of version 2.12 software for the SoftCUE advanced cueight system. The latest version provides cueight alert, stage manager alert, cueight hold and extended Midi Show Control functions.

The new stage manager alert function allows any remote cueight station to signal a warning to the stage manager, independently to the current standby status. Cueight alert allows the stage manager to rapidly flash a cueight's standby lamp whilst still calling the show using SoftCUE's normal playback facilities, whilst QL hold allows easier manual override. Specific Midi Show Control messages are generated in response to the press and release of each remote cueight's acknowledge push. These messages are available via Midi to other products that require triggering from stage events. SoftCUE is designed in the UK by Andera Ltd for Howard Eaton Lighting Ltd. For further details contact HELL in Lewes, telephone (0273) 400670.

Celestion KR1

The Celestion KR1 is a compact loudspeaker, suitable for professional multiple installations for background music. Integral mounting points are a special feature of the loudspeaker and hardware is available which allows for flexible installation. A 135mm mid/bass drive unit and a coaxially arranged tweeter are fitted into the bass reflex enclosure and has a 75W power handling.

For further details contact Celestion in Ipswich, telephone (0473) 723131.

Direct to Disc

Vestax have introduced the HDR-4 and HDR-6 hard disc recorders. These are ready to use 19" machines with on board disc drives factory fitted. HDR-4 (four track) gives 6.5 mins recording time and the HDR-6 (six track) gives 10.4 mins. Expansion of these times is possible with additional hard disc installation. On board digital mixing and three band EQ is also provided, with four aux send and return built in. CD quality master tapes may be made without any losses through analogue mixers between the MTR and DAT.

For further details contact Vestax in Haslemere, telephone (0428) 653117.

Colortran Medallion

Colortran has unveiled the Medallion control console which combines state-of-the-art integration of a lighting control console with a PC's user friendly features. Operating on IBM OS/2 software, the Medallion (pictured right) showcases 1536 channels x 1536 dimmers, 1,000 cues per show, and supports remote peripheral devices on the ColorNet system for peripheral control.

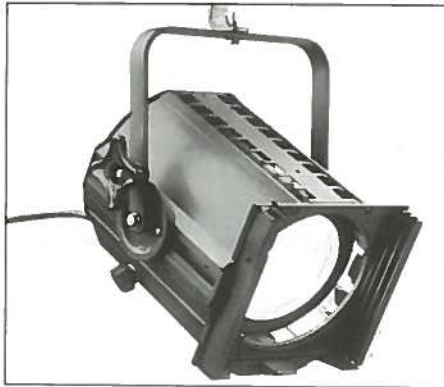
This network of Medallion devices provides open ended lighting control of a multitude of peripherals including remote video and macro control stations, submaster outrigger (for remote control of 32 additional submasters), hand held remote, and the magic sheet which provides stylus/template format for control operations.

Colortran has also released a new line of Studio Fresnels which combine a doubled walled housing with a full selection of one, two, or five kilowatt instruments. The lamps are available in both manual and pole operated versions. The optical train in both consists of a bipost halogen lamp, a pure aluminum coated Alzak reflector, and a low expansion fresnel lens mounted in a hinged door for rapid lamp replacement. A thermally insulated focus knob is standard in both manual and pole operated versions, and a single 360 degree rotation of the knob spans the entire spot to flood focusing range in one easy adjustment. The pole operated fresnels add the convenience of remote adjustment of the fresnel's vertical and horizontal movement. Three remote 360 degree turns tilt the fixture across a 45 degree field. The heavy formed steel yoke with reinforced cast aluminium corners keeps the fixture firmly mounted during remote panning operations.

For further information contact Colortran in Burbank, telephone (818) 843 1200.



New Compact Range



The Compact 6F from Selecon.

An intermediary range between Selecon's 500/650W and high performance 1200W luminaires, the Compact 6 are 650/1.0kW or 1.0/1.2kW fresnels and PCs which are aimed at the schools and theatre group markets.

Using industry standard six inch (150mm) lenses, the Compact 6 range performs as well as other leading brands providing further choice for those who don't need the superior performance of the Selecon 1200 range which use seven inch (175mm) lenses. The range is available with or without mains power isolation microswitch.

For further information on the range contact Selecon New Zealand Limited in Auckland, telephone (64) 9 3601718.

Intellabeam Protocol

Towards 2000 has released the brand new i2DMX interface unit. The company already provides a line of Intellabeam accessories including custom gobo wheels. The i2DMX provides a solution to running DMX channels along and sync'ed with the Intellabeam or Trackspot fixtures, but without the need of using separate controllers, or being forced to run the Intellabeams DMX from another desk.

The i2DMX provides 4 DMX channels per unused Intellabeam fixture address which can then be used to control dimmers, scrollers or other compatible units. The DMX channels can now be written into the Intellabeam presets for synchronised play back just like any other parameter on the Intellabeam. Towards 2000 has also released a wireless remote system available for use with the F100 smoke generator. The system consists of a wireless transmitter and a receiver that is patched directly into the F100-10 volt remote input.

Multiple machines set to the same address can be controlled in unison or up to eight separate machines can be effectively operated individually. Each smoke machine requires a receive module and can be operated from a single transmitter. Effective range is 3-400 ft. A wired base station is also available. This unit needs only to be powered by the same electrical phase as the smoke machine and the house cabling will transmit the necessary information.

For further information contact Towards 2000 Inc in Burbank, telephone (818) 557 0903.

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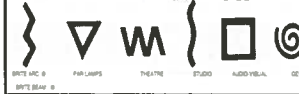
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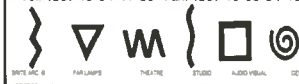
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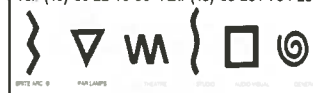


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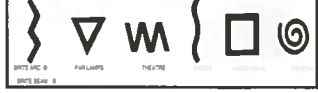
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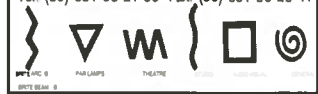
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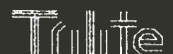
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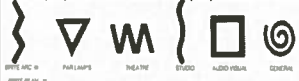
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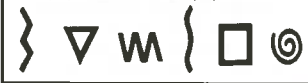


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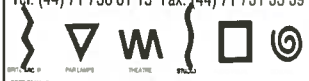
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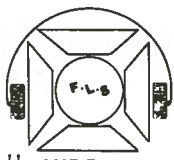
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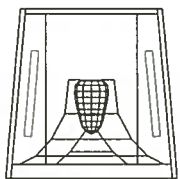
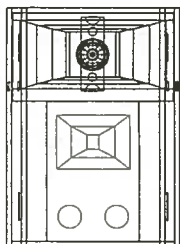
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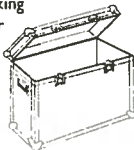
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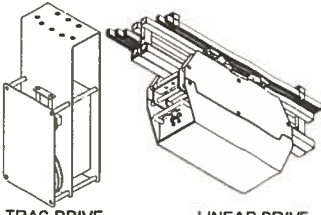
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VIEWPOINT

Graham Walne compares Arena Touring with Theatre

Last year I had the good fortune of lighting the Bolshoi at the Royal Albert Hall, an experience which I described for L+SI in the February '93 issue. This summer, promoter Derek Block takes the Bolshoi (and a massive theatre) to six venues in the British Isles and the production system to be employed is more at home with Rock and Roll than Tchaikovsky and I will be involved with technology and systems somewhat alien to my 25 years in theatre. This set me wondering what other differences there were.

The production management for the Bolshoi seasons involves Chris Vaughan and Simon Tutchener (and also Peter Hillier), no strangers to these pages, and it was to Chris and Simon that I was able to turn for advice. To contrast their considerable background in touring I sought the advice of Caroline Hughes, a legendary production stage manager with a formal theatre training and 12 years in theatre, now more often found in conference work.

Firstly I was interested to know how people got into arena touring and if a theatre background was essential. Caroline thought many had come in to conference work through audio-visual companies although most show-callers were from theatre. Both Simon and Chris echoed this. Simon explained: "I went to drama school and worked in theatre, and got my first tour by someone seeing a theatre show I had lit. Today young people come in through lighting companies, or the 'Transit' tours working with a mate's band, putting guitars together and realising that there is more money to be made by hauling lumps of steel around."

Chris agreed: "Some start by being designers purely for bands, just using what's in the venue. They have no technical experience, but they learn their stagecraft as they go along." So what kind of people work in touring? Simon: "Many are kids who played with electronics at school, and have no 'showbiz' background. There's a lot of crossover of both technology and people these days and a lot of this is down to money. In the early eighties trade show people used fast rigging, such as pre-wired bars with multiway connectors. With things like this (and Vari*Lite technology) they could knock three or four days off build time."

How essential is this approach? "With theatre you tour to very similar venues, almost all are proscenium with flying facilities, whereas we play in theatres, sports halls, and ice rinks, so you have to plan all the way down to the last detail," said Simon. "It used to be that some bands would bring trucks that were never opened! But budgets are tighter now so planning gets more intense. It's hard to think of a theatre show of the scale of a major arena band that could play six cities in six days, utilising just seven or eight trucks." Chris agreed. "Audiences for theatre are greater than for Rock and Roll, although on the face of it it doesn't seem that way; people will want to go and see a theatre show for months in the same place, whereas it's very rare for a band to be in that situation so we've had to design the technology, and the hierarchy, to deal with that. It's not enough just to be able to design a show, you also need to be involved in how that show goes together, the elaborate build-up and de-rig; designers in touring can't just sit back and say "that's what I want."

Caroline, no stranger to mega West End musicals and international trade launches, found the time pressure incredible. "The work is phenomenal and I don't think a theatre crew could do it; as individuals they could, but here they are led differently - it's a different mentality. It also has to do with leaving things in a degree of finish and

unfinished. There are some raw edges because that's how it should be, they don't have time to do theatrical masking. If you see all the workings at the side it sometimes enhances the whole effect and is part of the excitement, but it can also be distracting and insensitive. If something goes wrong with the in-ear monitor someone has to come on stage and change it. In theatre you couldn't do that! If it's been theatrically staged the guy who's waiting for this to happen can't sit on the PA and join in the numbers! Since they don't rely on some caller to cue entrances they're used to having their own responsibility and dealing with it, which makes each individual highly responsible - which is good - but in the theatre crews won't do anything unless they're told! By putting a theatrical convention on top of a Rock and Roll convention you are, perhaps, stifling people's abilities."

Having watched both theatre and touring crews I felt the latter respected their work space better. On one occasion at Hammersmith Odeon I was impressed by the crew carefully returning every nut and bolt back to its box, not after the whole fit up but during it. Caroline explained: "They live out of road boxes so they have more respect for them

"By putting a theatrical convention on top of a Rock and Roll convention you are, perhaps, stifling people's abilities."

and, don't forget, they have humpers!" Simon felt some perceived differences between theatre and Rock and Roll weren't actually there. "I see things go together in a very similar fashion; the hierarchy is very similar. Some Rock and Roll shows have been put together in a very theatrical manner like 'Take That' which I'm doing. It has a director, choreographer, and show caller, but then it has Rock and Roll PA and lighting."

This prompted me to ask if Rock and Roll couldn't develop its own style without copying theatre. Simon disagreed: "The very nature of both is live performance so there are bound to be similarities." Caroline pointed out that in conference work conflicts often arose between the needs of the event and those of the video companies relaying and recording it. "Anyone with a theatre background looks from the front at the whole picture, like the old master carpenters used to do. Video just looks at quality of picture and that always gives you the dichotomy about how bright the lights should be on stage."

I could identify with this having spent my early life watching Robert Nesbitt and John Rook carefully preventing the atmosphere of the London Palladium from being transformed into that of a television studio, something more recent transmissions have failed to do.

Another area which interested me was the problem of communication. Simple things like the sheer size of arena work means it takes a long time to walk from one end of the rig to another, a factor I learned at the Albert Hall. Caroline confirmed this: "In conference we have a production manager and crew just allocated to comms and they're the first thing that go in; in theatre it would be the last! It's not just physical size but organisational size, theatre is smaller and so it's easier to find the centre of decision making. A tour I've just completed had tour, production and band manager, and a promoter. I knew who was paying

the bills but he wasn't always the one making the decisions. Another thing that goes in first is the catering because on a big event and in unfavourable circumstances this at least ensures that people are fed and watered. They are going to be working the most ridiculous hours for a set fee whereas theatre people get overtime, so there has to be some give and take."

"We provide these things because we ask more of them," explained Chris. "On tour the crew are available 24 hours (they sleep for some of that) but some of the places we go have no facilities. Tour buses are also good because they have to be; people will work for 16 hours a day, finishing at two in the morning and they'll do two nights like that but without these things on the third night they'll crash."

These pressures prompted me to ask how the touring world addressed safety requirements. Chris replied: "We have an innate sense of responsibility of what we are dealing with. Every show is inspected by Health and Safety officers. It's a regular part of the daily schedule, and we have regular meetings with them about every detail." Simon also pointed out that the touring world is obliged to address these issues because they go to so many countries where regulations differ. "This forces the issue," he said. Chris agreed. "There are many irresponsible producers who would do the thing more cheaply and work the crew harder. Health and Safety is one way of ensuring that standards are adhered to."

Chris's reference to the commercialism of touring led me to ask about the reported reasons for the reduction in the number of tours this year. "It's getting horrendously expensive; production costs have gone up and accountants and lawyers are becoming involved and narrowing down the margins. This is making it difficult to invest money in the sort of live shows we became accustomed to in the eighties. With the general recession, record sales have dropped off so that record companies can't afford to kick in tour support for the small to middle size bands. Too many times the numbers don't add up and there's a real danger that the bottom will fall out of arena touring."

Is the recession shaping the design of touring? Both Simon and Chris felt that there were signs of realism. Simon: "A few years ago people took huge rigs for the sake of it and that has a budget reflection." Chris: "The Squeeze tour I did last year took just one truck, the production cloth was cut to what was feasible, but everything, including the crew, was taken care of. It was at the right level."

My final question concerned the view that touring was better paid than theatre. "I can't comment on touring, but these days some theatre crews with overtime would earn as much as conference crews who are on a fixed fee," observed Caroline. "In conference this is new, the gold has gone."

"In touring, if you want the money you have to leave your wife and kids," said Simon, "so many people stay with the stagehand companies. But the money is still there, and that can trap you. Luckily, we can all enjoy new challenges like the Bolshoi tour."

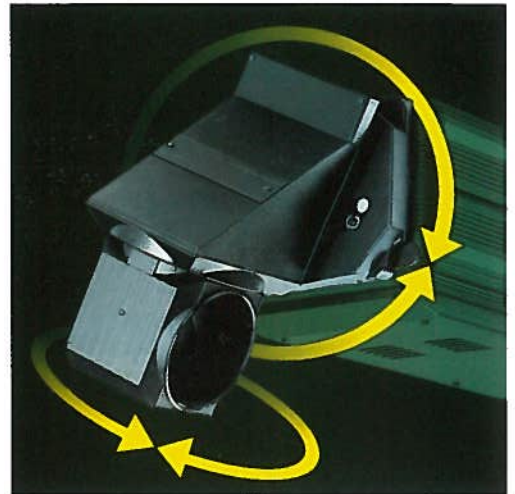
On this at least, theatre's tradition, Rock and Roll's technology, and touring's planning, are working together in harmony and learning from each other, and no doubt L+SI readers will hear more about it in due course!

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on page 66 this month**

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