

Connections

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of **MIX**ing **CONSOLES**

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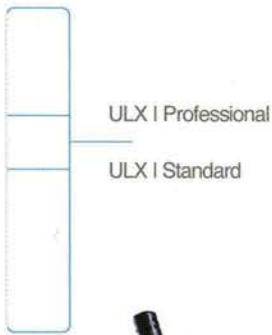
**MOVING
LIGHTS**

- RIGGING LINE ARRAY : IT'S FAST!
- DID WE FIND THE BEST CLUB PA IN AUSTRALIA?

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From the editor:



A Future Light - not so far away.

Many of us in the lighting biz have long thought about the potential for a video projector coupled with a moving light. Then along came the High End Catalyst - the cutting edge of this kind of technology.

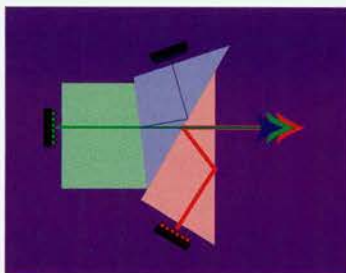
There were also plenty of examples of much cheaper options at last year's PLASA tradeshow which simply married moving yokes to various projectors - some very nicely done and some not. So, the concept of using the imaging capabilities of video projectors as lights is something that we are likely to see more of in the next few years.

Another technology that is just about to explode into widespread use would have to be LED technology. The ultra high brightness of these units are now capable of some serious candelas. I have seen (though not yet in Australia) MR16 sized lamps that would be the equivalent of a 15W filament in output, capable of 16.8 million colours. The one I am thinking of is pre-programmable so that all you have to do is tell it what colour it is, and then you can power it from any 12V source - or you could put data down the 12V as well, and control the lamp colour in real time. Pulsar have a LED unit that is not far from the size of a Par38, and I would guess the output to be equivalent to a standard 80W or 100W filament lamp. (see this month's Market Report)

Certainly with the LED units, it won't be long before someone decides to try to add some lenses to make a focusable profile. That is where we may see lighting steal another piece of technology from the video projector manufacturers.

The problem with making a LED Profile is getting all of the LEDs into a very small point source - which is required for the optics of a good profile. You can quickly see that putting 36 red, 36 green and 36 blue 5mm LEDs into same position and size as a typical filament is next to impossible. Sure, the expensive "RGB" LEDs could work, but their optics are not that precise, nor can they be especially bright when compared to a dedicated LED. However, the video guys have been combining separate RGB images for a long time, and the simple prisms they use may be the solution.

The high end video projection manufacturers take a white source, carefully align it and the prisms so that the light is individually reflected off each imaging panel, the reflected lighted is re-combined within the prism, and then emitted as a single white light source. It doesn't take a



very big stretch of the imagination for some manufacturer to decide to use half of this process, and make a single piece device that has any number of high output LEDs. What you end up with is a very tight point light source, with all beams travelling precisely parallel out from the surface of the prism - the

most ideal situation for then focusing and projecting that image (not to mention use of gobos etc).

There you have a profile with full RGB colour mixing - which is intrinsically better than CMY because it is adding light rather than subtracting it. Capable of VERY saturated colour, low heat, low voltage, plus it would have an output equivalent of, say, an old Strand Prelude. Not only that, none of the technology is really new, so it could be developed and built within a year.

I wonder how long it will take before this lamp (or something similar) becomes a reality - maybe there is already something special being prepared for this year's PLASA.

**- John Grimshaw
Editor**

From the publisher



Thanks *so much* to Los Angeles based Aussie audio legend and guru Bruce Jackson for the image of a bloated me with my feet up - ('Piss and Vinegar', letters, July). I'm actually missing some weight, but have managed to locate more of said *Piss and Vinegar* from the cellar. I'm here, and I'm guiding the direction of what you read in these pages, with editor John Grimshaw. He sometimes gets flack he doesn't deserve for things in the magazine. Blame me instead. We've changed the brand of coffee we drink and arranged a no-holds-barred comparison of digital mixers for next month. There is a *WINNER* and a surprise *LOSER!*

• RE-ORDERED ARRAYS

Just when we thought everyone was devoted to the Line Array, along comes proof that the point source array is very hip and now. We report on the Funktion-One push in this issue. It seems there is a lot of life left in the non line array world. After all, L-Acoustics (famous for V-dosc) recently released the *non-line-array* ARC, didn't they? Food for thought.

• TRAINING MOVES

Our Technical Training activities expand soon with new venues in Sydney and Melbourne. It marks a shift out of the TAFE system and into theatres, allied with John Grimshaw's committee work at Create, where a new national standard is about to be released. This will see courses like ours become the 'front end' of a proper Certificate Three for entertainment technicians. Our five day courses in Sound or Lighting next run early October in Sydney and Melbourne.

• (YOU SHOULD) OWN YOUR MUSIC -!

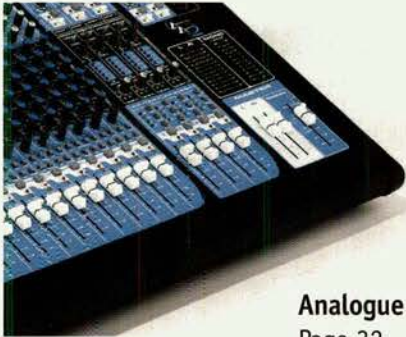
Wily Sydney musician Tim Freedman bucked the system some years back and released his band The Whitlams independently. The record companies loathed him - while he carved a sustainable niche. Last month the Hillsong Church crashed into the ARIA charts at number 4 with Blessed, their independent live CD. Duncan Fry lets loose on the record companies in *I want my MP free*, on page 57. And I fully agree.

• CREDIT WHERE DUE

We are grateful to a number of organisations lately. When we run our sound and lighting training courses we have been fortunate that some rental and production companies see the value of concise technical training by supplying us with a considerable quantity of equipment. So thank you *Lots Of Watts*, *T?AC* and *Chameleon*. All the equipment arrives on time and in perfect working order - which is exactly what you'd expect and hope for. It sets a great example for our client students, who now know what to expect in terms of equipment standards in the future.

**- Julius Grafton
Publisher**

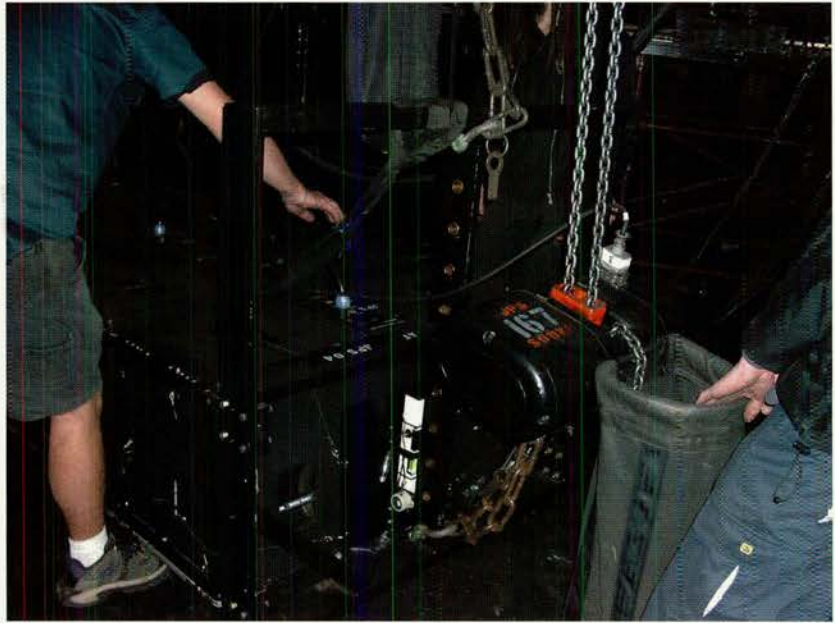
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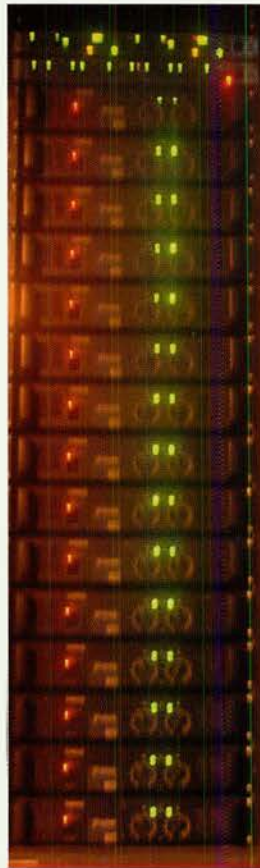
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On the Cover...

Special thanks to Coemar for supplying the light for the cover shoot.



• Photo by Daric Gardiman
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UPCOMING REPORTS:

- Sept - Signal Processing and Control
 Portable Projectors
- Oct - Studio Monitors and
 Outdoor Lighting

NEXT ISSUE:

Onsale 4 September, subscribers earlier. See pullout card for EASY cost saving sub!

Next month:

Small Digital Mixing Consoles Which is the best?

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Connections

The Asia/Pacific Professional Audio and Visual Technology Monthly **AUGUST 2002**

New entry level qualification for tech's

A national technician's qualification is close, as CREATE prepare final standards for 2003

A national qualification for sound and lighting technicians will be formalised soon providing a Certificate Three for industry entry level. This will formalise industry training which until now has not been unified.

Existing technicians will have the opportunity to achieve a Certificate Four qualification through assessment of recognised prior experience and refresher study. This will be offered by registered training organisations with suitably qualified assessors.

The Certificate Three qualification aims to take entry level students, then provide ten units of study (probably 300+ hours), and produce a professionally employable technician. To achieve Certificate Four, industry experience would be added.

Create is a government body who are establishing a training framework for the entertainment, film, TV and performing arts industries. The national technicians qualification was released as a draft document last

year, and is being finalised for the end of this year. Connections editor John Grimshaw is on an industry committee overseeing the qualification standards.

This opens up training opportunities for next year - NIDA (Sydney) have just launched a 320 hour, 16 week Certificate Three in Entertainment Production Skills, commencing in March. It costs A\$4,500.

More details from www.nida.unsw.edu.au

☐ Meanwhile, Connections have moved their induction courses for audio and for lighting from the TAFE system into theatres. The five day courses will be registered as a starting module of the new Certificate Three packages next year.

Training dates have been announced in Sydney and Melbourne for October. In Sydney the courses will be run at Riverside Theatres in Parramatta, and in Melbourne at the VAC. Info at www.conpub.com.au

Apple swoops on Emagic, tells customers to walk on the wild side

It wasn't the kind of news Emagic users wanted to hear. The well regarded German software company did well on the Windows PC platform (as well as Mac) with their top selling music software. Then Apple moved in last month, buying the firm and unilaterally terminating future PC versions. The new 5.2 upgrade for Logic will be the last Windows version.

"There were a lot of confused people - including us", said Chris Cumming, the spokesman for Australian importers Electric Factory.

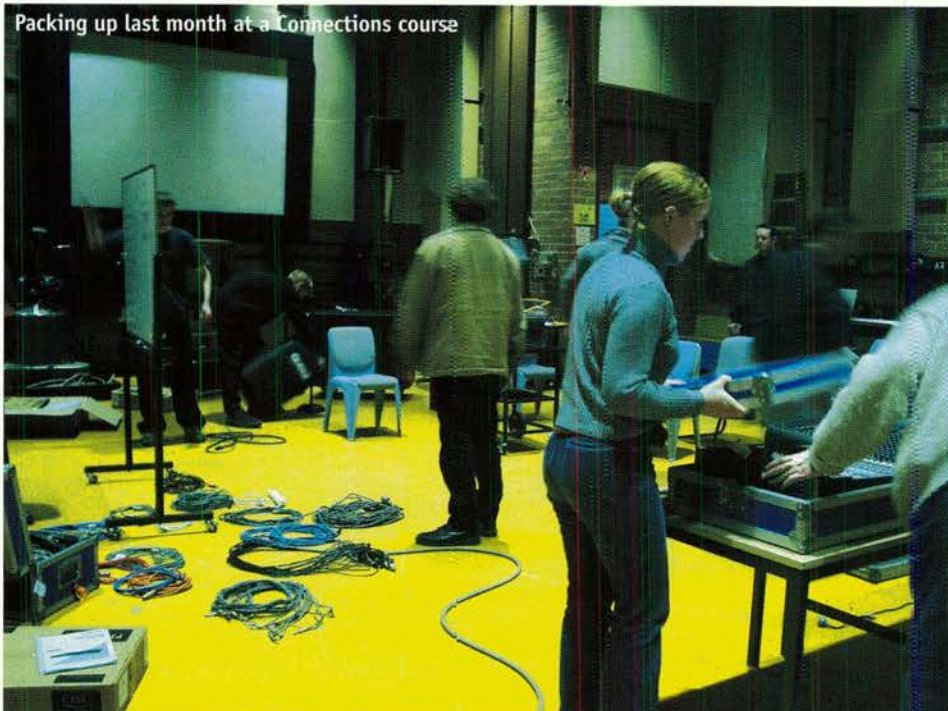
200,000 copies of Logic have been sold in the past decade, mostly for PC. Yet the newly acquired firm thinks PC users will migrate to Mac. Helpfully they are offering a free crossgrade for registered Logic 5 users before the end of the year. All Logic users need to do is abandon their PC, and buy a new Mac.

Logic is increasingly competing against Protocols - particularly since they released their hot new Control product (see *Connections July for review*). Protocols is still mainly a Mac product despite growing availability on the Windows platform.

It's not hard to imagine that if Digidesign (manufacturers of Protocols) were not an Avid company, then Apple would acquire them too.

Meantime fellow German music software house Steinberg is probably calling in the valuers, they offer Cubase and Nuendo on Mac and PC platforms. It would make sense for Apple, who have vowed to 'invest their way out of the downturn', to strike there too.

Packing up last month at a Connections course



Facility heads to reveal new technology directions for major venues

Hillsong and Sydney Opera House technical managers to tell NT conferences about major new investments and new venue directions following refits

The two landmark Sydney venues couldn't be more different. The Sydney Opera House needs no introduction, and Hillsong Church is about to become the largest church in the region.

Technical managers from both will host a keynote session at the NT conferences and

The church is a leader in audio visual delivery, pioneering use of new technologies. They record material for audio CD and DVD, and have ordered three new Yamaha PM1D audio consoles for the new arena.

Sydney Opera House audio chief **David Claringbold** (left) will talk about the changing needs of a facility that expects to stage well over 2000 events this year. The Opera House recently installed a Euphonix System 5 mixing platform, rewriting the way a complex audio delivery platform is used. 'The House' as it is affectionately known in the biz is undertaking a large rebuild across the next two years.

The NT Conferences are scheduled for Sydney in the first week of November, and Melbourne the second. Conference streams include audio, lighting, vision and entertainment safety. The conferences are hosted by Connections magazine. More info at www.conpub.com.au.



FUTURE TECHNICAL DIRECTIONS FOR MAJOR VENUES is the Keynote Session at the NT Conferences in November. David Claringbold from the Sydney Opera House is one of panelists. He is pictured with the new Euphonix System 5 mixing platform (Connections, July).

detail how rising production values and changing customer expectations have affected recent and ongoing multi million dollar refits.

Hillsong production manager **David Watson** will reveal the technology within the new \$26 million church expansion that opens shortly. Hillsong have extensive production requirements, delivering large scale audio to over 3000 seats in the new building, alongside the existing facility in Sydney's northwest.

• **Meanwhile, Hillsong's annual major event** was held last month around the Homebush Bay Olympics site. With over 30 venues in use for literally hundreds of sessions, the major event was a nightly rally in the Superdome.

Lots of Watts co-ordinated production, which included a Jands Production Services V-Dosc line array system, and the first local use of a PM1D digital console (far right). Yamaha PM1D specialist **Alex Wong** was on hand to assist. Observe console city, below.

Lighting Director **Ian Anderson** was at home and happy with a new Grand MA console in light-land, pictured left.



Traditional vs high-tech: LX evolves

Image projection moves to the shopfront, and borrows from the old Pattern 23

When Timothy Schwan, the CEC of Sydney real estate chain Di Jones, saw the use of projected imagery to promote stores overseas

featuring long life lamps are emerging. So where does this leave the traditional theatrical profile spot, used for gobo projections for the last 40 years or so?

Seemingly in with a chance, according to our research.

Connections priced a hypothetical installation like Di Jones, with the Clay Paky VIP300 listed at \$1,629 (plus a 3000 hour lamp at \$368.50) for a total of A\$1997.50.

A Selecon Pacific architectural profile spot, a close relative of the theatre profile, with a gobo holder came in at A\$1540, and with a 9000 hour lamp added for \$164 totalled \$1704.

Without comparing footprints of these units, or actual light output, it is interesting to see the price points. The Clay Paky device boasts electronics for remote control, whereas the Pacific doesn't - so the price differential of 10% means little.

Meanwhile, Avsound have already had other real estate agents contact them regarding similar projects.

"Even when I was focusing one of the lights I had enquiries from two different people walking past!" said Giles Wragg, Avsound's project manager. "It's been a very successful project.

The fixtures have been in place and running for three months now with no problems and they're all on the original lamps. They switch on every night at 5pm shutting down either at midnight or the next morning, depending on the branch."

The gobos were manufactured by Lighting By Design in Queensland.



he knew he wanted a similar effect for his own stores.

On his return to Australia he consequently purchased five Clay Paky VIP300 projectors from Avsound. These have been permanently installed into the five Sydney metropolitan branches of Di Jones - two at Double Bay, Woollahra, Mosman, and Balmain.

The growing use of gobo projection has brought equipment to the market, aside from VIP projectors. Opt: make a GoBoShow range, and other self contained solutions

EAW LINE ARRAY FOR IJS

IJS Concert Sound and Lighting in Brisbane have recently taken delivery of a new EAW KF760 Line Array Speaker System. The system comprises of 12 x KF760 and 4 x KF761, complete with all rigging hardware. The system is joining the 32 cabinet KF750/KF755 system IJS has very successfully utilised for a large number of well know Queensland festivals and projects over the past 4 years.

"The industry is now sold on the use of Line Array technology for certain applications and our success with EAW products made the addition of a KF760 system is a natural progression for the continued growth of our company," stated Ivan Simon, Managing Director of IJS.

Graeme Stevenson, General Manager for Production Audio Services, went on to add, "Ivan's purchase of KF760's now offers the Australian market a wider choice of Line Array product to rent. When partnered with Deluxe Audio's system, (owners of another 16 cabinet KF760 system), IJS and Deluxe has the capability to operate a complete 32 cabinet concert system."

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Reel-y good idea!

The OB duces have been doing it for decades. But the live audio community have just caught on. It's the common domestic hose reel, with your mic cables wound on, plugged end to end. Have one reel for each cable length, and colour code your cables! Too easy. Seen at the Civic Hotel. See p.24



Death potential

Following our Test and Tag story last month, a reader reports immediately calling in an electrician to test a large inventory of rental cables. Lo and behold, a number of IEC cables failed. The earth resistance must not exceed 1 ohm, but our picture shows a 2.6 ohm resistance on one IEC cable. We checked a bunch, some failed. So, take care, and get properly tested.

On Training

Just a few comments in regard to the national training framework. It's about time that something like this was put in place. How will a person with many years of experience in a particular field be able to gain the necessary qualifications? Surely they will not be forced to sit the entire course, as many of them could most likely teach it!

Secondly, if such a framework is to be pursued, an INDUSTRY WIDE award system should be put in place.

-Name Withheld on request

- The national training and qualification framework currently being pulled together by Create Australia (I am on the committee) does not look at any "recognition of prior experience" because its purpose is simply to design the courses. It will be up to the Registered Training Organisations (RTOs) who deliver the courses to provide an 'assessment only' version. This will happen. On your second point, market forces will dictate the actual pay rates earned for the time being. -Ed

It's true....

In regard to the tagging stories in your July issue, I think that I can confirm that the story about one of the crew refusing to rig untagged equipment as being true, although the crew member in question was from one state and the company from another and large gig in yet another state.

Pete Wilhelms, Production Manager, Active Lighting

Conventional -v- Moving Lights

As a manufacturer dedicated to the development of 'conventional' luminaires I was very interested to read your comparative cost analysis in last month's Connections. I believe there are further issues which need to be taken up in your analysis.

1/ Plotting time - The additional cost imposed for the programming of moving lights compared to conventional lights isn't accounted for in your equation. This can be very significant, to the extent that producers are wary of and will negotiate on the number of moving lights to be used on commercial shows. Coincidentally the points Graham Walne raises in the same issue regarding control consoles add weight to this point.

2/ Maintenance Cost - Would be very interested to hear from rental companies / theatres with a number of moving lights as to whether the figure you quote for maintenance is realistic. The feedback I have received would indicate it is grossly understated. Given the complexity of moving lights, number of moving parts and so on I would guess that a much higher percentage of the capital cost should be allowed for.

3/ Lamp life, its a difficult one to calculate but you have made no allowance for the significant increase in lamp life from tungsten halogen lamps which are operated at less than full voltage, i.e. dimmed. This is very significant, in practical terms you should get much greater life than the quoted average life hours, up to double, in a typical theatre.

4/ Nine Year break evenis it realistic to consider a moving light with a nine year economic life? While conventional luminaires may well continue to operate well for nine years and more, will moving lights without significant and costly upgrades?

5/ Security - One of 22 lights failing on a show places represents a much greater significant risk to the continued successful operation of the performance than one failed fixed luminaire out of 48. There is also the likely service down time to consider. To fix a conventional luminaire it is typically a case of

replacing the lamp which can be accomplished by most people. Servicing moving lights typically requires a trained service technician, often located off site.

6/ Brightness: the perception of brightness is relative I don't see either has an advantage.

7/ Fitness for purpose - The price range of the moving lights with which have based your comparison on don't come with shutters. Can a multi purpose venue operate without any such beam shaping capability?

- When low levels of light are required can moving lights deliver with the same degree of subtlety that a fixed luminaire can?

- The recently developed capability of fixed luminaires to use low cost plastic projections greatly extends the ability to use projections, combined with the movement capability of moving lights there is a whole new world of visual effects which is only now starting to be explored.

My guess is that the emerging trend of a mix of both types of luminaires will continue for the immediate future. Both offer different and complimentary strengths. Used creatively by such designers as Trudy Dalgeish for the AO's production of Sweeney Todd the result is much greater than either of the parts alone.

- Jeremy Collins, MD, Selecon

- The article was intended as a starting point for people to think about the numerous implications for making this kind of decision. Many times I have met people that are looking to specify moving lights into a situation where they have not been used before. The most important thing is for people to make this kind of decision based on as much experience as possible - be it their own or purchased from a specialist advisor (and preferably not a sales person). The variables I listed in the original article and yours above should ALL be considered in a real analysis - and every venue will come to different conclusions. -John Grimshaw

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Funktion-One arrives down under for Norwest

It's not a line array. Maybe that's why so many eyebrows were raised with this latest arena system purchase?

Sydney and Brisbane based Norwest Productions has announced the purchase of a forty eight cabinet Funktion One speaker system. The initial delivery comprising eight Resolution 5, eight downfill and eight Resolution 218 sub bass cabinets was delivered last month, with the balance in the first week of September.

The system is scaled to enable Norwest to service clients in all major Australian entertainment centres including Superdome and Colonial Stadium. The Funktion One system has recently been used extensively on world tours by artists including Jamirauoi and The Chemical Brothers.

"The time is right, and if it's the wrong choice, it's not the end of the world", Norwest's Chris Kennedy told us.

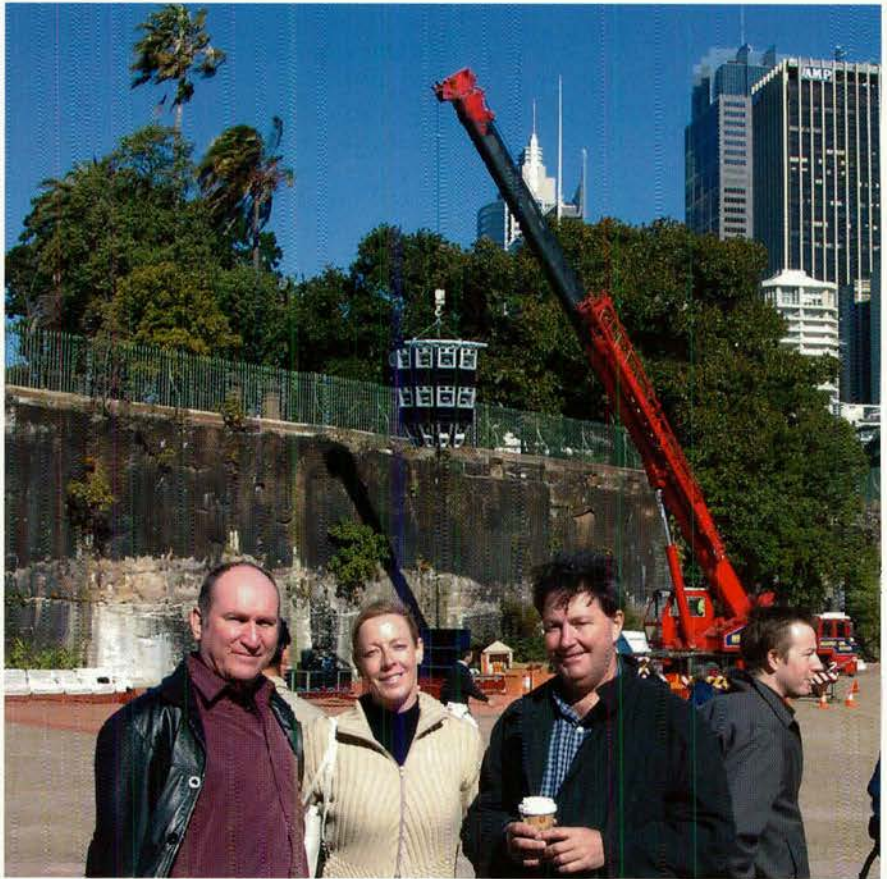
The system was demonstrated to Sydney Opera House audio management at presstime, an event pictured at right. The demonstration is believed to have been the final in a selection series by the Opera House, who plan a system acquisition for outdoor concerts on the forecourt. It is understood Meyer Sound Laboratories and L-Acoustics have also demonstrated systems.

Chris Kennedy confirmed Norwest is not backing away from the line array trend. They still plan addition of EAW KF 760 line array elements to their existing KF 750 system, despite selling off their older KF 860's.

Norwest were the first Australian audio company to demonstrate a line array, with the importation of a V-Dosc rig for Metallica and Van Hallen concerts in 1998. Norwest subsequently bid for the Sydney Olympics with both V-Dosc and EAW line array components, and a selection was made in favour of EAW for a variety of reasons.

Funktion One was founded by Turbosound pioneers Tony Andrews, (on hand at the Opera House) and John Newsham.

"It did the Tokyo Dome with 43,000 seats



with just one 2 tonne motor per side. Each box measures just one metre by half a metre, by half a metre, weighing under 50kg," Kennedy told us.

Meanwhile, Norwest have opened a Brisbane branch run by Graham Whitehouse who has worked extensively for Norwest. Over the last two years Norwest has had at least one major system in Queensland almost every week with clients including Big Brother, AM2, SAF, the Goodwill Games and many others

Funktion-One Australia distributors Frank and Julie Hinton (John O'Donnell not pictured) with Norwest Productions Chris Kennedy at the Sydney Opera House demo. The tiny PA is in the background.

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BSS challenge market

BSS's Soundweb signal processing system will be seen in many more Australasian installations, if the firm's new distributor Jands have their way. Jands relaunched BSS and Soundweb, claiming it was the world market leader in 8 x 8 dsp matrix dsp distribution and control. Expect some action, since Peavey's MediaMatrix has had a disproportionate market share in the region, according to Jands. Symetrix also aspire to grow market share in this sector.

Osmond Electronics adds more Macs

Osmond Electronics in Adelaide have increased their Martin inventory by adding 12 MAC600's, 12 MAC500's and 12 Atomic 3000 strobes with Detonator remote units.

Show Tech

Tiny Good from Showtech has successfully passed his certificate IV in workplace assessment and also successfully obtained his Federal Workcover Assessors Licence. Tiny will be able to train and test people in Rigging, EWP and forklift to obtain federal licences, under the federal guidelines and system. Showtech expect to announce course dates for early next year.

Unistrut rules!

Here's a good idea for installing lights where the idea of hanging a 2" pipe doesn't appeal. Unistrut can be bolted to the roof, or chased 50mm in, for a very need heavy duty track. The adaptor (below) twists in, and the spring holds it there. Safe and fast!



Nova's 3 month studio build - from scratch!

Setting up a new radio station from scratch has been a dream come true for Adrian Harper, chief engineer at Nova 100 in Melbourne.

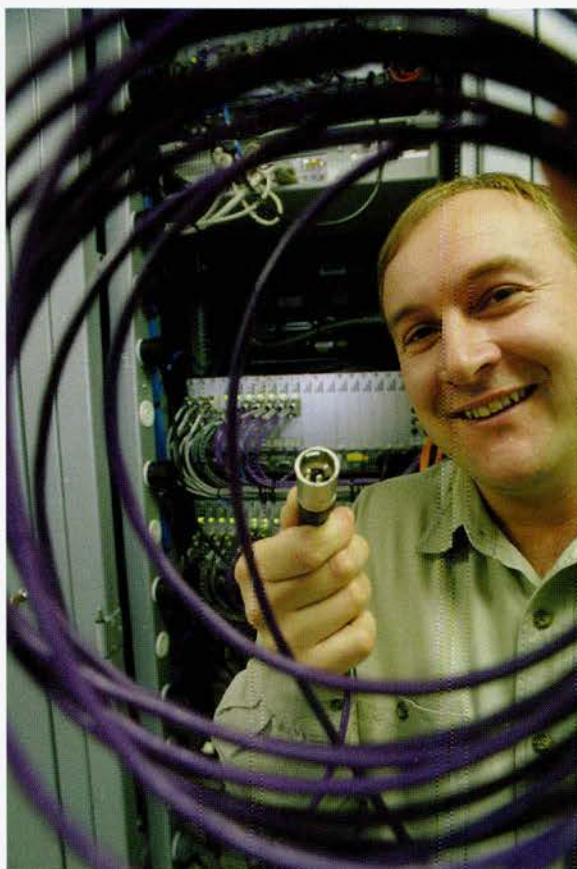
Nova 100, Melbourne's first new commercial radio station in 21 years, is based on a radical new formula for commercial radio of less advertisements and extreme music variety. Within a few months of hitting the airwaves, Nova 100 took over as the number one radio station in Melbourne and has had a significant impact on the radio advertising market.

"From an empty shell, the station was completed in three months," said Mr Harper. "We chose quality equipment and cabling throughout, providing us with unprecedented performance and functionality with less chance of maintenance problems in the future."

Approximately 30 kilometres of Belden cables have been installed throughout the state-of-the-art digital facility in a new building overlooking the Yarra River in Richmond.

Facilities at the station include three production studios, two on-air studios, a news on-air studio, a news preparation booth and a news production room with four editing workstations.

The master control room is a feature of the station foyer with floor to ceiling glass that shows the central area where the mixing,



routing, distribution and processing for broadcast is performed. This provides a central point for interconnection of studios, external broadcast feeds, office IT and to the transmission site at Mt Dandenong.

HELs establish in Melbourne

Hungarian based lighting specialists Hells have established an Australian office, their fourth. Already operating in Yugoslavia and Vietnam, Hells chose Melbourne as their regional base for eventual activity in South East Asia as well as Australasia.

Headed by co-founder Zoltan Seles, Hells Australia Pty Ltd initially distributes professional lighting equipment from German makers Avab and Transtechnik and South American TV and Film lighting company, Dexter.

Hells are here for the long haul, according to Zoltan, who started the firm in 1989 in his native Yugoslavia. The move into Hungary came with regional

instability, but Hells made solid progress building the business there and eventually in Yugoslavia when the war ended.

Central to Hells range is the film and TV market, but performing arts markets will also be targeted. An Italian range of moving lights and entertainment equipment may also be offered by Hells in the region.

Of particular interest to TV stations and broadcast facilities is the Transtechnik Voyager studio automation system, a complete line of control and robotic fixtures for a quick reset, focus, and patching film studio.

Hells: +61 3 9846-8127. www.hells.com.au



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New Faces

Coemar De Sisti Australia have just taken on **Julian Silveri** as a new warehouse team member. Julian will be assisting with the day to day running of the warehouse and handling the technical side of their range of products.



Dean Ashton Heads Up IAG Pro In Oz

Dean Ashton has been recruited to head up national sales and marketing for the Pro Division of IAG Australia Pty Ltd.

His aim is to gain exposure for the Wharfedale Pro brand. He started his professional life with a disco equipment hire company in the early '80s before moving into the AV market, installing numerous pavilions at both World Expo '88 in Brisbane and Expo 92 in Seville, Spain.

Returning to Australia he enjoyed further AV stints with Total Concept Projects, Gearhouse Systems and then in sales with Audio Telex.

• IAG Australia Pty Ltd +61 2 9521 4844



2002 FIFA World Cup

We asked Jason Owen about his Best Gig, and he detailed just WHY there are so many barber shops in Korea. Plus, the story of The Big Microphone!

Well, where do I begin? This has to be one of the best gigs I have ever worked on because...

I was in South Korea for 52 days in total. I had 3 days off in that time. We were on site for between 10 and 17 hours per day. We were always tired - yet not from work. Jack and his mate Daniel are dead set legends!

All in all I would have worked no more than 3-4 hours per day. There was so much down time it's not funny.

Having the privilege of being able to travel to six different Stadiums in South Korea I got to see different size cities. Seoul the Capital has by far the worst traffic I have ever seen anywhere in the world. Yet for most the rest of the country isn't too bad. You can definitely tolerate it. Best you learn Korean though, as there's not too much in English.

The local currency there is WON, which was quickly renamed to "Goo Goos" - so in bloke terms, a beer in a hotel costs say 5000 Goo Goos. Now the exchange rate is approx 700 Goo Goos = 1 AUD ... so the beer costs \$7.14AUD.

However if you are resourceful like the Bytecraft boys (onya Rob and Don) and myself you manage to find cheaper places to buy beer. Like a 750 Long neck for 1000 Goo Goos. How's about \$1.40 sound?

One other thing you should keep in mind if you ever travel to Korea is that the good old Barber shop is, well, sort of a *little different* over there. Let's just say it's a Haircut with a happy ending. Now depending on how many rotating Barber signs there are out the front of the shop tells you what you get. Funny how the Korean men always have good haircuts! (*Happy ending? Huh? - Ed*)

So for some technical garble, I was actually amazed half the stuff actually got to air. We had Hairdressers, school leavers, people who thought a CCU was just a panel with knob thingy's, you name it we had everyone except for an abundance of Tech's. For those of us that had an idea what we were doing it was just a comedy of errors. We would chat daily between venues to discuss the daily gag.

One example would be the Bigger Microphone story!

Situation goes like this; we are trying to line up a BP (Broadcast Partner) to do a stand-up that runs for 10 minutes. We being the TOC Crew which is where I spent most of my time.

We are communicating with our people up

on the Announce platform via Two Way radios - we cannot, however, get any audio.

I am trying to explain to a female person/tech/unknown that she needs to plug the microphone in to a little Mic/Line amp to run the signal down the 300 odd meters of cabling so it will get to us.

She returns with a comment of, "Oh F**k this too hard. Can't I just use a bigger Microphone?"

Let me just say you should have seen the looks on our faces in TOC. My lord, and these people get paid.

The killer was definitely the conversation about line-up levels. The confusion between different db scales was just unreal. You must remember there were about 10 different nationality's all throwing in not their 10 cents worth, but about \$50 worth, each! A dead set mockery, I'm sure this event was just a magnet for Oxygen thieves!

Another good little coup for the Bytecraft boys and myself. We were kicking around a little Jack Daniels Soccer Ball that I had won the night before in a Arm Wrestling Comp (I know, don't ask - very messy night) on the side of the field at Gwangju, when I thought - 'ah bugger this, throw me the Rugby ball.'

Well, bad move - just as we were kicking it around the good old FIFA Gods walked past. All I have to say "NOT HAPPY, JAN"

Of course all these shenanigans only happened during down time. We started playing ball because I was sick of playing on the Internet. But in reality everybody did do their job before there was any mucking around.

After all that, Korea is a nice place the people are super friendly and are always willing to help you. Safety on the street is on no concern, even if you have two left boots on at 0530. I had a great time working for HBS (Host Broadcast Services) and would take any more work they sling my way. It would be great if I got a gig where I actually got to use my brain though, I managed to clog it up with JD and Rice and what I hope was Pork! Woof Woof!

PS: You can live there very cheaply just be prepared to walk that extra 10 minutes and you will save heaps of money.

Da a Mingo!

• Jason Owen is the Director of Day 2 Night Pty Ltd in Sydney



Technical Training

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Courses are properly structured to provide a learning outcome for each lesson. We supply lots of modern equipment. Held with the kind co-operation of VAC and Riverside.

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This course delivers sensible safety induction training for *anyone working on stage*. Includes sessions on power, handling, industry practices, height safety and much more.

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Host: John Grimshaw. \$550/\$690 (includes OH&S day)

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Learn all aspects of life as a lighting technician, with modern equipment including moving profile and wash fixtures. We also touch on design aspects. Includes guest LD.

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Sherrit Audio installs Brass Monkey

Sherrit Audio Services has designed and installed a major PA and lighting system in Melbourne.

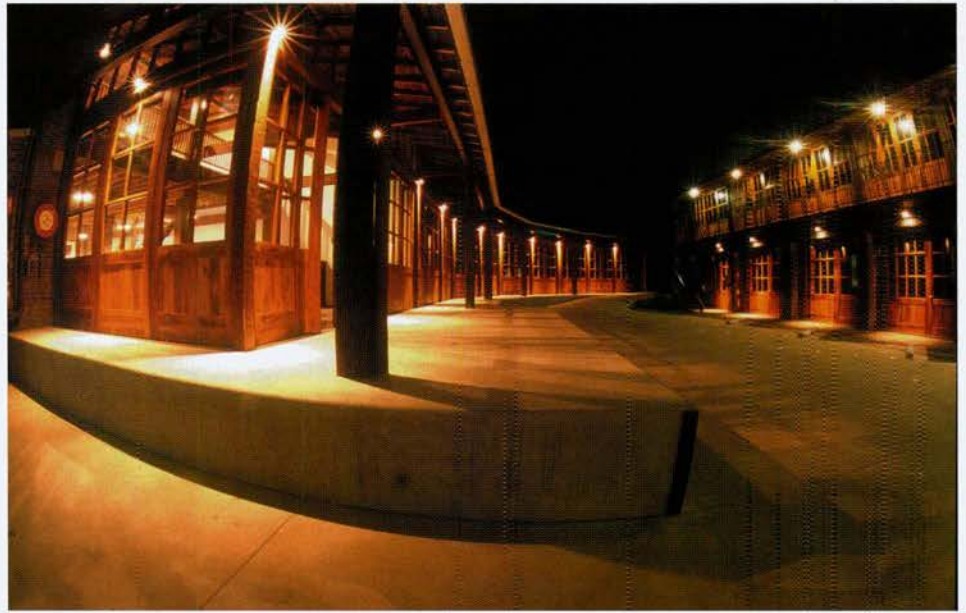
The hotelier group wanted a venue that in its design could cater for a broad market, over an extended trading period. They have designed what they call "3 clubs in 1". The shell contains a main band/disco venue, a dance club, & a restaurant/bar accommodating duo acts.

Sherrit Audios aim was to have the three clubs operating without the noise affecting another. Their audio system, includes 3 separate PA's, consisting of EAW, XTA & Crest. They can be run separately in each club with minimal noise spilling into the next, or they can be integrated into one, with a DJ controlling it from the main room. All of the systems can be accessed, analysed and maintained via laptop.

The rigging of the PA is non-conventional with a special grid system designed which was suspended from the balcony. This was to assist with the noise spillage and direction of sound.

The lighting used a variety of Mac's and some lasers. The club has 6 turntables and 8 CD players. Also part of the design is an outdoor speaker system, a CD/DVD Juke Box system.

• **Sherrit Audio Services**
+61 3 9523 5375



TAG moves to old factory

Australasian waffle and capuccino specialists (and sometimes pro audio distributor) TAG is moving to the old Starkeys Ginger Beer factory at Stanmore near the Sydney CBD. The sprawling 100-year-old factory buildings have experienced a number of incarnations before taking shape as a design, media and technical centre. TAG will occupy a purpose built section representing around a third of the complete development.

Technical Director Anthony Russo stated that TAG had seized on the opportunity to buy into the project. "It's incredibly difficult to find this type of historical building. We didn't need asking twice."

The new place is at 43-53 Bridge Road, STANMORE NSW 2048, and the new phone number is Ph +61 2 9519 0900. Their new web site is at www.tag.com.au

Digigram buys Innova SON

Digigram, an innovator in digital audio network solutions, completed its acquisition of French-based Innova SON, one of the pioneers in the design of digital audio mixing consoles. The deal completes a move made by Digigram when it acquired a 44.76 percent stake in Innova SON in January 2001. Digigram now owns 100 percent of Innova SON.

Innova SON will preserve its own identity and commercial autonomy within the Digigram group. Innova SON products will continue to be distributed by the company's established network, while Digigram will provide sales support in markets that the company has yet to penetrate. Innova SON's current management remains in place.

Innova SON was one of the first to offer fully digital consoles for live sound.

OFF-SITE CONNECTIONS

The event company, Off-Site Connections Event Management, has opened an office in Cairns as part of an expansion strategy to enable them to service their clients Australia-wide, as well as internationally.

Nick Millis who was most recently Business Development Manager-Southern Region for Hyatt Resorts Australia, based in Melbourne, will head up the Cairns office.

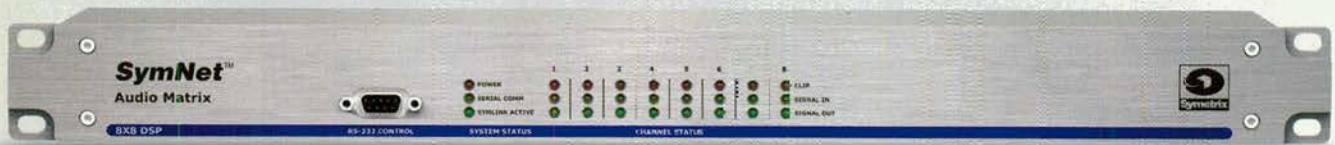
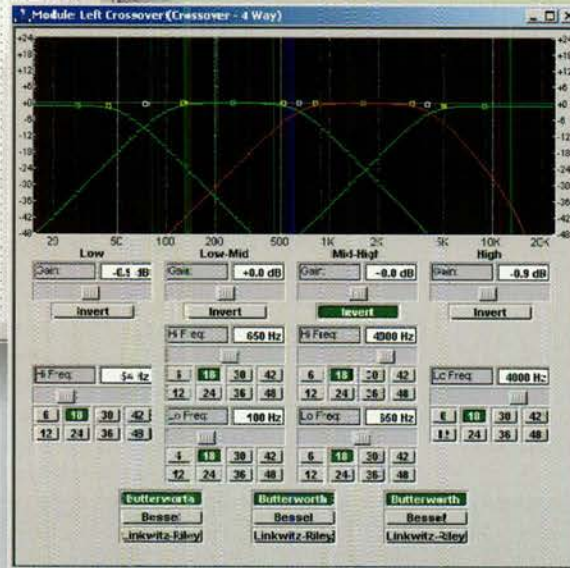
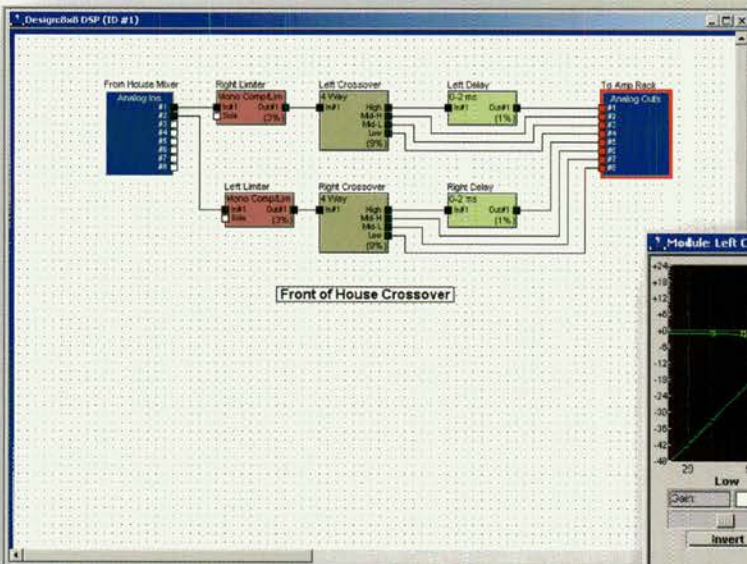
Off-Site Connections Managing Director, Peter Kinnane, has indicated that this latest move into Tropical North Queensland is a logical progression for his company.

• Off-Site Connections Event Management (Brisbane) +61 7 3252 4773
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Symetrix

ELS ramp up for Spirit Of The Dance

By Mandy Jones

Irish dance show The Spirit of the Dance did a major tour of the region this winter. The show features an impressive lighting design.

For Queensland company Entertainment Lighting & Sound, Spirit has confirmed them as a key player in the 'major league' of Australian lighting hire companies. ELS Director of Operations Craig Denne explained the growth of the company since Managing Director Phil Stafford started it 14 years ago has been consistent.

"Equipment-wise, we're the third largest hire company in Australia. We do a lot of corporate work on the Gold Coast but we got this tour primarily because they wanted to use High End equipment. Basically we could supply every single moving light for the whole tour from Hobart to Perth. This show is very polished and fully programmed so they don't want to change equipment."

Having done a number of major tours and events in recent years including the city lighting for the Good Will Games, ELS had more than enough gear to supply the tour.

from other international dance tours is the approach of the producers in the overall design of the show and their use of theatre and arena venues. Technical Director David Comeau explained:

"If you limit yourself to just arena rigs or just theatre rigs then you're reducing the amount of markets you can enter. In North America this show plays arenas and theatres and there's no difference from a technical point of view because the way we've packaged the tour technically it'll do both.

"By giving this flexibility to the promoter quite frankly you're achieving more revenue. From a business standpoint Australia is large and spread out and there are pockets of population so it's not like touring Europe. You can't just do one show or two weeks with this tour. There are costs that you have to spread over months and you have to be flexible in order to place yourself in as many markets as possible".

As General Manager of Stage Group International, David and his team were engaged by the producers to replicate the show worldwide.

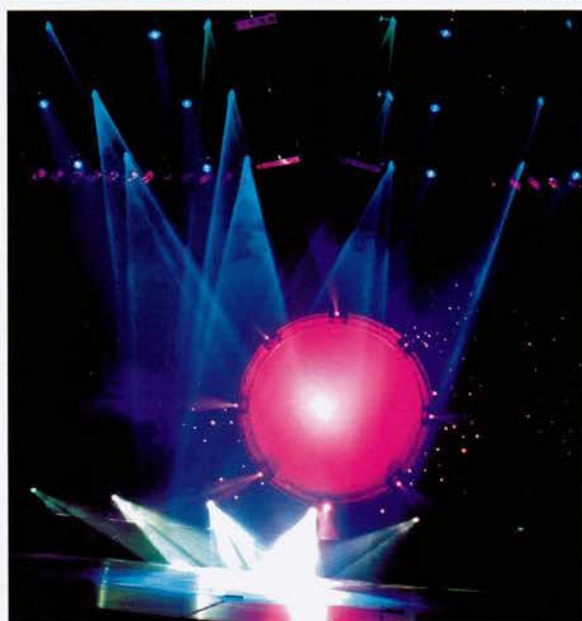
"From our point of view we tender and contract the rigs, we get spec sheets from different companies and engage equipment, staff, production management and the rest of it. Our aim is to maintain the look of the show and reflect the audio needs of the show," he said.

The system ELS supplied included 14 x Cyberlight Turbos, 18 x StudioColors, 8 x Technobeams, 8 x StudioSpot 250's, 156 x Par 64's, 48 x ACL's, 32 x Source Four profiles, 18 x 1k Zoom Profiles, 2 x MSR 1200 follow spots, 9 x Coloram Par 64 scrollers with 2 x 24 way PSU, 2 x DF50 Hazers, 1 x F100 fogger, and a WholeHog II with 2 monitors. They also supplied HP12 dimmers, DMX and power distribution systems, 22 x 1 tonne motors, 2 motors controls, 24 x 3m sections of box truss, and a 5m tri-truss circle.

"Because we do this worldwide, we standardise. The circle truss, all the automated fixtures, you can find them in just about any market. Our lighting director Paul Burgers can walk in using the same equipment from a different hire company and with the same type of console completely replicate the show. We want it to look exactly as the designer has intended no matter where we go and without having to reinvent the wheel."

The lighting design is complex in every way. Combining the precision of theatrical dance states with the scale and attitude of rock and roll, the lighting is an active element of the show. David explained the complexity of the rig is required in order to create mood, atmosphere and theatrical looks no matter what venue they're in, and without having to cart around a large set. •

(L to R) Paul Burgers, David Comeau and Craig Denne)



"We've got something like 160 moving lights, plus things like Space Cannons and Kolorados, and lots of truss. Phil has always invested in High End gear so whenever something new comes out he adds them to stock. I've been there for two and a half years and in many ways ELS is still a little-known company but I think tours like this will definitely build up our profile. And this one is certainly the biggest tour we've taken on. There's a semi and a half full of lights, truss and motors on this tour."

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*Leonardo da Vinci was among the first to use science to enhance his art. Being a musician, he also applied his genius to define the phenomenon of sound:
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RIGGING LINE ARRAYS

Just how fast do they go in the air? We investigate:

How many benefits does a proper line array bring a concert sound engineer? I got up far too early one frosty morning to find out.

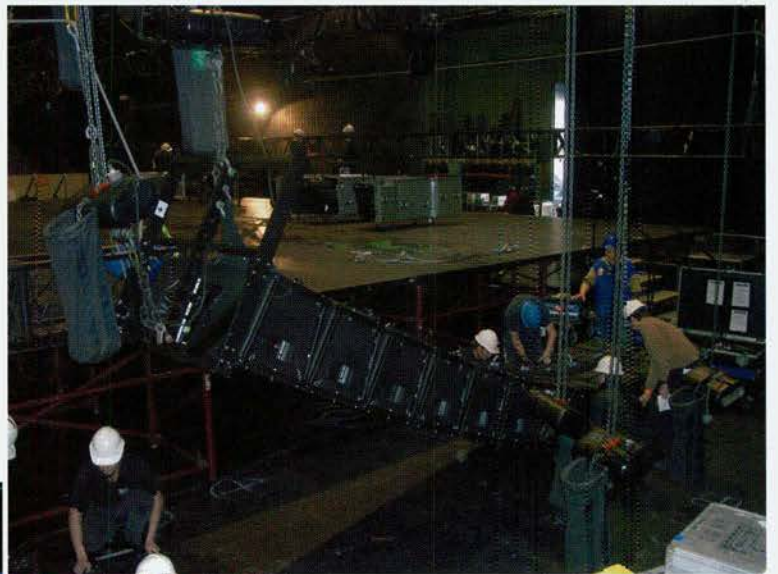
Bob Daniels is a senior system engineer at Jands Production Services, and qualified to setup their JBL VerTec system. This day it was scheduled to be unpacked at 0800, and courtesy of a dozen half frozen Lock and Load crew, the whole systemsystem including stage monitors came out of a single lightly packed 42' trailer in quick time.

The show was a one night arena performance (12,000 seats) for pop act Ronan Keating, and the complete system would go straight back into that pantech 16 hours later for an interstate linehaul. Jands provided 36 VerTec VT 4889 line array elements, each sitting on its own dolly with wheels, and 48 Jands subwoofers, each containing one 18" 2242 speaker.

Unlike some arena tours, this one picked up the entire sound system in Australia rather than flying in mixers and effects and even stage monitors. Jands supplied an XL 4 console for FOH, plus a Midas Heritage 3000 for monitors. With everything in between.

The three JPS sound crew were Bob and his assistant Dameon Pryor, plus Bart Barkman to system manage the monitors. They met up with the English sound crew of two for the first time, then efficiently manoeuvred their inventory around the skeleton of the stage where a Bytecraft crew were working with riggers to get the trusses up.

0830. The FOH console and racks were wheeled into position. Soft covers came off the VerTec boxes, and were folded and stored for loadout. The sound mains distribution



Lining up the VerTec boxes (top).

Two chain motors and a rigging frame support up to 18 boxes (above)

Flown: the wheel dollies easily come off each box as it leaves the floor (left). The train of boxes at the bottom of the picture are another six for a side array, to cover the horseshoe shaped Sydney Entertainment Centre. 12 VerTec boxes each side cover the front area. The top box is laser pointed to the top row of seats, the second chain motor allows some vertical adjustment of the array.



Kylie Minogue "Fever" Tour / System by Capital Sound, JK

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M3D
54" w x 20" h x 30.5" d
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415 lbs (188 kg)
Max Peak SPL 145 dB
Companion M3D-Sub available

M1D specifications are preliminary and subject to change. All M Series Loudspeakers are self-powered.



“One thing I learned from Bill Graham is that collectively, our ultimate goal is to please the audience. No matter how big, no matter how small.”



system was positioned for the house electrician to energise.

0900. Two chain motors were rigged to points left of the front of the stage. Bob called for twelve VerTec boxes to be lined up beside the stage. Each box has its own rigging components pinned within a frame at each side. Bob walked down one side of the twelve boxes, releasing four pins on each box to free the hinge bars that are captive within the end frames of each box.

All line array systems feature very modern rigging systems. VerTec is no exception. Essentially you line up the boxes in a train, slide the hinge bars across the narrow gap between boxes, and pin lock it into place.

Bob will pin the VerTec cabinets to the required angles between each cabinet as per today's venue prediction spreadsheet, previously prepared using JBL Line Array Calculator software.

0930. The twelve stage left boxes are locked together. Bob has twice checked each pin is secured in place. The train of twelve boxes is lined up face down on their wheeled dollies. A loom of speaker cable is pulled from the stage left VerTec cable cases and laid on top of the train of boxes. Each third box is plugged in. Jumper leads then daisy chain the next two boxes, so that one amp rack feeds three boxes.

"Notice how we haven't lifted a single box!" says Bob. "This is 20 years too late!"

At the top of the array, a smallish square plate is clipped into position. It has a small industrial laser of about 5milliwatt capability mounted to it pointing directly out at 90 degrees from the array face. This will show Bob where the top of the array is pointed when it reaches its trim height.

Cabled and rigged, the train is raised slowly. Two loaders form the dolly parade, and unclip each castor dolly as each box raises off the deck.



Captive rigging system with pins and sliding bars all contained within each box. JPS have a single VerTec cable and accessory case for each side of the stage, with cable looms, jumper leads, and rigging items for the fly frames.

Mac2000s for hire. grandMAs too.



Not that sort of Grandma! We mean the new grandMA lighting console from MA Lighting. grandMA features 3x touch screens, motorized faders, 2024 channels, 4 DMX outputs, built in UPS, keyboard mouse and trackball. Control includes audio input, SMPTE Timecode entry, MIDI in/out/through and DMX in.

The Martin Mac2000 is a 1200 watt automated profile which features CMY colour mixing, indexable rotating gobos, strobe, smooth dimming, prism, frost, colour correction and much more.

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Each dolly stacks onto the one before with castors locking into slots. Bob is activating the chain hoist control for the front and rear hoist, with his eyes glued to the motors and the boxes.

0945. The left array is up just clear of the floor, and a smaller array of six boxes for the side seating is also ready to fly. Both cable looms are neatly taped together using sparse amounts of black PVC electrical tape. "This isn't a permanent installation," Bob admonishes the loaders, "so one twist of tape and make sure the end is easy to find when we load out!"

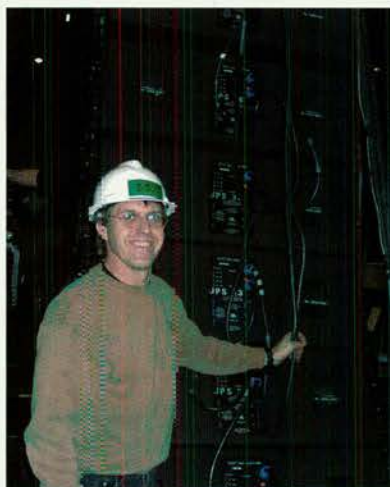
1000. Both arrays are up in the air, the bottom of the main array is 7.5m off the floor, verified with a tape measure gaffed to the bottom of the lowest box. "Don't pull them down, I need the tapes in the air well after you all leave", Bob warns. The lasers at the top of the main and side array have been turned off, having indicated the top of the array is just over the uppermost row of seating, way up in The Gods.

The crew reassemble on stage right, and repeat the process. Meantime, Bart gets the stage monitor system set up off stage left, as Dameon readies the Crown amp racks.

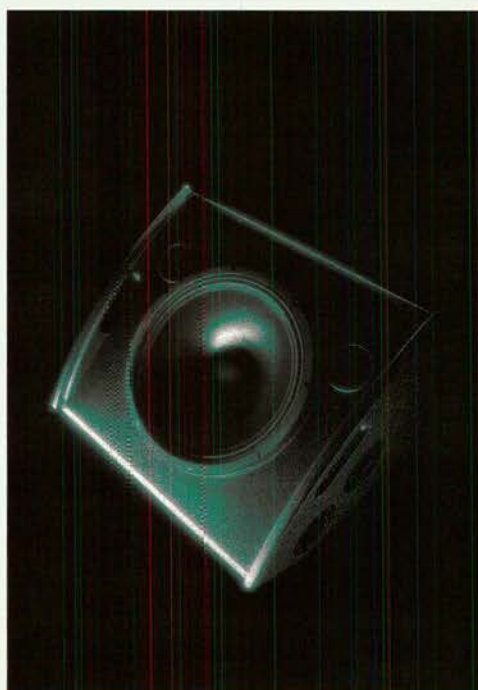
While it's still an hour until sound will be made, the flight of the four line arrays has been executed quickly and without great physical exertion. It's arrived in less than half the truck space of an older composite system – saving tens of thousands of dollars in show transport costs alone. And, going up fast it has cleared the deck for other departments.

Finally, there is a tangible improvement in sound quality from brand new systems like this one – so everyone wins!

-Julius Grafton



Happy crew. Bob Daniels (left), Bart Barkman and Dameon Pryor (above).



MAX and MAX12. Monitors which are jokers.

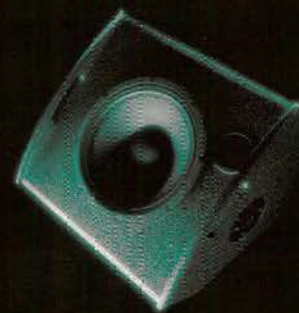
If you think d&b's MAX and its little brother MAX12 are monitors with remarkable punch, clear balanced sound and excellent feedback rejection, you would be perfectly right – but there's more. Beyond their design function as monitors, the coaxial extremely compact MAX and MAX12 cabinets can be used in a variety of stacked or flown configurations. MAX and MAX12 are just as happy performing as a flexible high power PA linked to a C7-SUB subwoofer, and when MAX is fitted with MAN stud plates it can play the part of a downfill in an arrayed C4 system. So you see, MAX and MAX12 are your jokers with the power of an ace. We'll be happy to demonstrate just how powerful a pair of winners they are.

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d&b audiotechnik



Is this the best (small) Club PA in Australia?

Julius Grafton thinks it may well be!

Pic: Jeremy Simons



The Civic Hotel's cellar venue possibly has one of the best club live sound systems in Australia, at least the best in Sydney. And it only holds 200 people!

Brothers Jim and John Kospets got a hold of the heritage listed old pub some years ago after it fell into disuse. It was a stamping ground of heritage rock acts around the late 1970's. I mixed there in a beer haze. Now the old keg cellar (*hail the womb!*) is a cozy and extraordinarily well equipped live venue.

It took the brothers a few years to get the cellar ready. They got the main hotel bars, gaming and restaurant going upstairs first. Then they needed to remove hundreds of tonnes of dirt and rock in small buckets, since the cellar floor needed to be dug deeper. Space is at an absolute premium down there, so the tech spec was dreamed up well in advance. Room for the subwoofers under the stage was carved out of bedrock.

Luke Everingham (*pictured*), of Everingham Audio came onto the scene a few years beforehand, having a former relationship with the brothers from his days as founder of Damien Gerard Studios. Luke sold the studios and became a farmer some time ago, but was forced by global agripolitics to scale back his cattle. The Civic came along and he re-established his audio links. It means splitting time between the 1,500 acre farm at Knorrit Flat near Taree, his wife Debbie and two children – Ben and Gabi.

The sound spec in the Cellar, official name Civic Theatre, is awesome. The console is a concert board, a Ramsa SX-1 52 channel board, which came out of the Olympics at a knock

i12 T12

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The i12 (installation) cabinets are manufactured from inert MDF panels for maximum acoustic damping, while the T12 (transportable) is constructed from rugged, multi-ply hardwood to increase its durability for the knock of everyday transport and rental use. Both systems offer internal steel bracing that doubles as the flying points, accepting M8 eye bolts strategically placed to distribute the weight of the enclosure evenly. The T12 is further enhanced by an integral pole mount and a recessed carry handle. The T12 can also be used as a low-profile stage monitor. Its conical coverage pattern gives the performer greater freedom of movement than allowed by conventional horn-loaded designs.

For applications requiring extended bass, the rugged T40 companion sub is the ideal choice. Multi-ply hardwood construction, durable 15" transducer and high sensitivity and SPL make the T40 an outstanding value.

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i15 loudspeaker

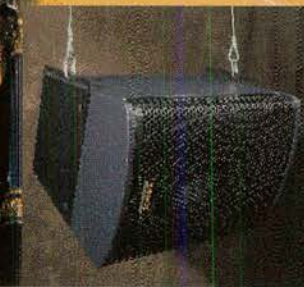
The installation series features a size and performance for all applications i8, i12, i15 and the optional TX2 stereo controller extends HF and LF and includes an internal sub out



TX2 stereo controller



T-40 Sub



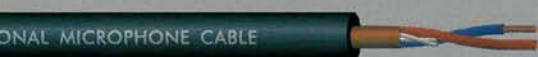
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Microphones do their best work with the best cables and the best cables result from the finest engineering. With the purest copper, extremely low conductor resistance and dense screens with high insulation resistance it's no wonder microphones love them! But for those very serious Bavarians from Klotz, reproduction quality is just the start. They believe that a cable should provide years and years of trouble free service. So they test them for dielectric strength with voltages in the kilovolt range, they build special apparatus to assess tensile strength and flexibility and they have custom ageing facilities with extreme temperature fluctuations. They leave no cable drum unturned!

So if you're considering mic cables, consider Klotz - your microphones would prefer it!



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The Cable With A Million Uses. MY206 (6.4mm OD, PVC Jacket, Spiral Copper Wound) \$A 2.25/Mtr (\$NZ 2.95/Mtr)



BALANCED PATCH CABLE
Super Flexible Heavy Duty Patch Cable. MY204 (4.6mm OD, PVC Jacket, Braided Shield) \$A 2.25/Mtr (\$NZ 2.95/Mtr)



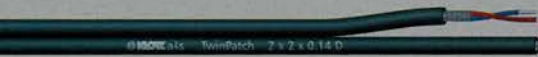
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The World's Finest Studio Cable. MY250DD (7.0mm OD, PVC Jacket, Twisted Conductors, Double Spiral Shield) \$A 3.95/Mtr (\$NZ 5.15/Mtr)



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MultiCores TwinPatch 2 x 2 x 0.14 D
Stereo Mics Prefer It! TP414 (3.4x7.0mm, PVC Jacket, Tinned Copper Spiral Shield) \$A 3.95/Mtr (\$NZ 5.15/Mtr)

Microphone cables are only one Bavarian speciality. Klotz also manufactures MultiCores and MultiCore/Stagebox Systems, Digital Patch and Digital MultiCores, Cables for Speaker, Video and Camera plus Hybrids (Signal+Power and Video+Audio).

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INSTALLED

down price from the usual \$140,000+ these sell at. Shoehorned into the mixing box and angled upwards for space, it sets the tone of the system.

Think all frills.

Onstage in a tiny wing area is a Yamaha GA 32/12 foldback desk. Onstage are eight foldback sends – four sidefills and four wedges bolted to the ceiling in between the lights. Every foldback send has a Yamaha 31 band EQ, a Behringer Feedback Destroyer, and a channel of compression. The smallish stage has a DJ console behind it, in an opening in what is also the band room wall. The PA racks are onstage in the back wall for effect – they are part of the décor.

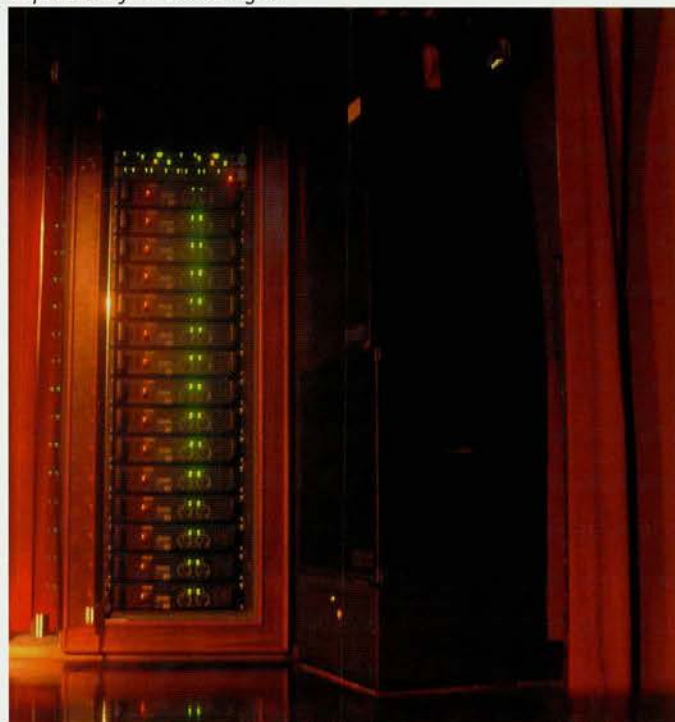
Space is at a such a premium the keg ramp acts as the gear loadin, and also as – the keg ramp, with bulk beer rolled across stage, past the foldback nook, into the remaining beer cellar next door! Little risers under the sidefill also have mic draws in the bottom. Oversized drawers under the foldback desk have mic stands and booms in them!

The speaker system of choice is by Klipsch, an eclectic brand whose name was less prominent for a decade or so, until new distribution in the region brought it back. Luke had an earlier association with Klipsch through his studio days, and choose the Civic specification based on what would best do the job.

Out front are eight KP 362 boxes, and four dual 18" subs. The KP boxes have a 15" driver, a horn, and a ultra-high device in each, with a passive 3 way crossover network. An active crossover separates the subwoofers from the KP boxes, at 150Hz crossover point. "They are all incredibly well balanced" says Luke, "one 18" speaker per KP box is just right, and needs little in the way of EQ or gain alteration (between 18" speaker and KP box)."

Yamaha P4500 amps do duty, with one side of amp per KP box (8 boxes = 4 amps) and interestingly one whole amp per dual 18" sub. But not as you'd imagine, with one 18" speaker per amp side. Instead, Luke has wired the sub woofers to 16 ohms, with each 8 ohm 18" driver run in series with its neighbour and the resulting 16 ohm dual sub then run from one whole Yamaha P4500 in bridge mode! Luke's theory is that you cannot be absolutely sure of the

Here's a new concept: make the amp rack part of the stage set! Klipsch sidefills are on right.





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phase relationship between the left and right channels of a stereo amp. Therefore, because two 18" speakers are loaded right next to each other, if there were a phase imbalance the output of the pair would be denigrated. So, run them in bridge mode!

The headroom on the house system, which is augmented by 4 KI 102 little boxes (8" woofer, 1" horn) half way down the room, is sensational. Every act that has worked the room, including INXS (but excluding one younger act with an engineer who is a known idiot) has run the system well under limits.

The stage also has headroom galore, the four wedges are quite close to the hearing equipment, given the low roof, and the whole stage monitor rig is healthily powered with more Yamaha P4500 amps.

Backstage is a Mogami stagebox with broadcast splits and earth lift switches on each channel. A trap in the roof leads to the outside, so an OB truck can be used. Innovation abounds, because mic cables pass through two round ports to the stage. I saw a really cool thing at Civic. Mic cables are plugged end to end and rolled continually onto a common garden hose reel! One reel for 10m cables, and one for 6m cables, both are colour coded. This is just the BEST way to keep and dispense cables! You unroll what you need, and don't need ties. Plus, the cable lasts longer – and it's quicker to deal with these pesky but essential accessories which are an Audio Fact of Life (AFOL).

Another AFOL is effects and processing, and Civic has enough of whatever you need to make life happy.

Everingham Audio have done several other live sound club installations, made more attractive by the fact that Luke is an electrical contractor. He did the electrical installation at Civic, and has a good attitude towards the proper way to do things. Allied with a personable, knowledgeable, and honest demeanour, his return to audio is not a moment too soon. •



Stage monitor console, 8 sends, tucked in a side stage passageway. Processing rack (right) is part of the stage design.

Panasonic

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The **AG-MX70** digital A/V mixer provides broadcast-grade 4:2:2:4 digital component picture quality.

It features more than 600 effects patterns and a 30-frame graphics buffer for roll, crawl and logo animation using title files downloaded from a PC.

A large LCD panel with a matrix menu helps ensure quick, easy operation. Offering optional 3D video effects and SDI interface, this A/V mixer is ready for full-fledged digital post-production.

The versatile **AG-MX70** is right at home connected to a digital editing system, or when used as a switcher either in the studio or at live events.

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Allen&Heath live sound mixers:
ML5000 / ML4000 / GL4000 / ML3000 / GL3300 / GL2200



By John Grimshaw



We were initially surprised to find that Yamaha were making a foray into the highly competitive world of video projection. With the high calibre of electronics in their pro-audio catalogue, there certainly is an expectation that a projector bearing their name will be of decent quality - so we put it to the test...



(above) Inputs; (below) Controls



Resolution:	1024 x 768 pixels
Imaging System:	1x 0.9" DMD (DLP), with tri-colour wheel.
Lens:	built-in... f=35-42mm F=2.7-3
ANSI Lumen:	800 (specified), 365 (measured)
Weight:	7.8kg
Dimensions:	415x129x422 (WxHxD)
Vision Inputs:	6 total - 2x RGB, 1x DVI, D4, Video and S-Video
Vision Outputs:	none
Vision Source:	All standard TV (excluding Aus HDTV 1080i), and computer signals up to UXGA.
Price (rrp inc GST):	\$16,999
Sales Enquiries:	1800 331 635
Internet:	www.global.yamaha.com

The Yamaha DPX-1 is a single chip DLP projector with a native resolution of 1024x768. Initial setup and testing on video sources showed some initial good contrast ability and ease of use. After colour calibration against the reference monitor, the images were certainly quite good - excellent saturation in blues and to a lesser extent the reds. I would have preferred a little more green than the projector wanted to output, but high colour saturation is something that most projectors at this level do not really try to achieve. In all, a good colour balance was achieved, coupled with quite a decent contrast. A nice feature is that these levels (and numerous others) can be recorded to one of six memories for later recall if specialised image control is required for different sources.

While testing the video input capabilities, I discovered that the unit cannot display high definition (1080i) digital broadcast signals, but it can deal with standard definition digital. This is probably because the unit has not been redesigned specifically for our market.

The pixel-by-pixel display ability and precision RGB overlay for each pixel was excellent on all tests. The internal timing lock and phase auto-setup to the VGA signal was

reasonably accurate, with only minor adjustments required to display fine pixel mesh-grids without 'rolling' distortions.

I found it hard to find tests that the projector had difficulty displaying - the 256 grey (and colour) ramps were quite even, with no visible dithering effects to produce very dark grey shades. Perhaps the unit could have done with a better ability to display extremely dark or light greys, but this would be nit picking - the subtle detail in "film noir" type scenes/images is quite visible.

The ANSI brightness measuring showed that the projector is certainly intended for a controlled environment - though the lower brightness makes the contrast of this unit quite impressive.

Some of the biggest benefits of this projector are physical. When these guys say "no noise emissions" they really mean it, with the projector's fan noise being suppressed to very impressive low levels. Also, there is a plethora of video inputs to choose from. Another feature which I quite like is that the input button on the projector itself allows the user to specify the input and the signal type at the input without having to navigate through annoying menus. Once set, the remote control automatically selects the type of signal at the input that you last chose. The input buttons are all backlit for low light operation.

Another change to the typical single chip DLP is with the internal colour wheel - there is no white, just RGB. Many projectors of this type rely on the white in the colour wheel to really push the overall brightness of the projected image. Yamaha chose to remove this, resulting in considerably darker blacks and better saturated colours.

The large foot print (greater than A3) allows for some good design features - like a recessed lens. I also like that they haven't wasted time putting speakers or any kind of audio in the projector.

Recommendations: Despite being a little less bright, this is a good projector, with solid abilities. Ideal for use in a controlled environment (and especially with a good screen surface).

Connections would like to thank the following for equipment used in this review:

- DisplayMate - software for display evaluation www.displaymate.com
- DGTEC Set Top Box from Anderson Audiovisual +61 2 9586 3230
- Pioneer Plasma PDP-433 MXE (reference monitor) from Pioneer 1800 060 852
- Kramer VP-4x4 Matrix RGB switching from AV Technology +61 7 5531 3103



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MARKET REPORT ANALOGUE MIXING CONSOLES

This month's report on "Analogue Mixing Consoles: Live and Studio" should give you some indication of the vast range of product that is out there. Many manufacturers have numerous more models than the ones listed here (they were limited to four models only) - if you look at the Soundcraft entry in the Distributor List below, you will see that they have a whopping 62 desks in their live line up.



Amek BB100



Behringer MX1604A

Some distributors included more information about their products. This is what they wrote:

Samson's 'TM' powered mixers are an all-in-one package designed for small clubs, theatres, monitoring, and live reinforcement applications. Multifaceted in an easy to use tabletop or rack mountable style that also features a fan-cooled bipolar design.

Founded in 1973, **Soundcraft** first made its mark with the launch of the Series 1, the first mixing console in a flightcase. Back in the early 70's, the music touring business was just beginning - and the transportable mixing desk quickly became popular among the bands and the new PA companies that were springing up to rent out sound equipment. Today Soundcraft has a network of 88 distributors selling and supporting its products world-wide. Part of the Harman Pro Group, Soundcraft is still very much the dedicated professional mixing console designer and manufacturer it was back in 1973. It now boasts a range of mixers that are designed for use in live sound, recording, post-production, TV and radio production and disco applications.

When he founded the company in 1989, **Uli Behringer** had already gathered years of experience in building audio equipment. He had done a lot of listening to musicians and engineers about the problems they had with their gear - not to mention the problems they had paying for it. All this helped establish the philosophy that made Behringer famous: High-Quality Products At Fair Prices. Now in 2002, Behringer has become one of the worlds largest professional audio manufacturers. Its range of Audio Technology products cover

Allen & Heath GL Series (GL2200, GL3300, GL4000 - Dual Function FOH & Monitor Console) Inputs: Range of 12 units with 12 to 48 inputs; Outs: 4 or 8 group options; Aux: 6 to 10 aux; EQ: 4-band EQ (mid sweep), GL4000 full sweep; Features: 100m faders; Individual channel PCB's; Nuted pots *From \$4,595*

Allen & Heath MixWizard Series (Rack-mount Multi-Use Consoles) Inputs: Range of 4 units with 12 to 20 inputs; Outs: L/R or 4 group options; Aux: 6 aux; EQ: 4-band EQ (hi-mid and lo-mid sweepable); Features: 100m faders; Individual channel PCB's; Nuted pots *From \$2,995*

Allen & Heath ML Series (ML3000, ML4000, ML5000 - Dual Function FOH & Monitor Console) Inputs: Range of 12 units with 24 to 52 inputs; Outs: 4 to 8 group options; Aux: 8 to 16 aux; EQ: 4-band EQ (mid sweep) to all sweep with parametric; Features: 100m faders; Individual channel PCB's; Nuted pots *From \$19,995*

Amek BB100 (14 position chassis) Inputs: 8 + 2 stereo; Outs: 2 dual subgroups fitted, 8 max; Aux: 8 sends (selectable); EQ: Mono- 4-band, stereo- 3-band (HM & LM sweepable); Features: Up to 4 clean-feed outs with talkback \$43,110

Amek BB100 (22 position chassis) Inputs: 16 + 2 stereo; Outs: 2 dual subgroups fitted, 8 max; Aux: 8 sends (selectable); EQ: Mono- 4-band, stereo- 3-band (HM & LM sweepable); Features: Digital inputs with sample rate converters \$63,340

Amek BB100 (30 position chassis) Inputs: 24 mono; Outs: 4 dual subgroups fitted, 8 max; Aux: 8 sends (selectable); EQ: Mono- 4-band, stereo- 3-band (HM & LM sweepable); Features: Optional high quality i/o transformers \$86,330

Amek BB100 (38 position chassis) Inputs: 32 mono; Outs: 4 dual subgroups fitted, 8 max; Aux: 8 sends (selectable); EQ: Mono- 4-band, stereo- 3-band (HM & LM sweepable); Features: Extensive digital I/O options available \$121,930

ATI Paragon 8 MX 2 (Preamp/Mixer - Pro Rack Mount) Inputs: 8 channels; Outs: 8 direct + monitor + L&R; Aux: Each channel has line level return; Features: API patented limiters each channel \$9,880

ATI Paragon Paragon II (Mixing Console - Monitor) Inputs: 48ch spaces; Outs: 20 stereo masters +L&R; Aux: 20 stereo aux.; EQ: Low and hi-pass filters, 4-band para EQ; Features: Super-clean ATI patented pre amps *From \$220K*

ATI Paragon Paragon II (Production Console - FOH) Inputs: 48 channel spaces; Outs: Multiple multi function assignments; Aux: 8 mono and 4 stereo; EQ: Infinite headroom, 4-band parametric; Features: Automation; VCAs; Full dynamics, +24dB H'room *From \$240K*

Behringer MX1604A Inputs: 4 mic/line, 4 stereo; Outs: LR, monitor, 2 groups; Aux: 1 post-, 1 selectable; EQ: 4-band EQ (high/mid/low/low-cut); Features: Ext PSU; 1 phone output; Tape In/Out \$499

Behringer MX1804X Inputs: 6 mic/line, 4 stereo; Outs: LR, monitor, 2 groups; Aux: 1 internal FX, 1 selectable; EQ: 4-band EQ (high/low/ mid sweepable /low-cut); Features: 40w ext. PSU; 24bit digital FX; 7-band graphic EQ \$849

Behringer MX3282A Inputs: 24 mic/line, 4 stereo; Outs: LR, monitor, 8 groups; Aux: 2 pre-, 2 post-, 4 selectable; EQ: 4-band (high/low/ mid sweepable /low-cut); Features: Talkback; Internal mic; 150w PSU; 2 phones out \$2,599

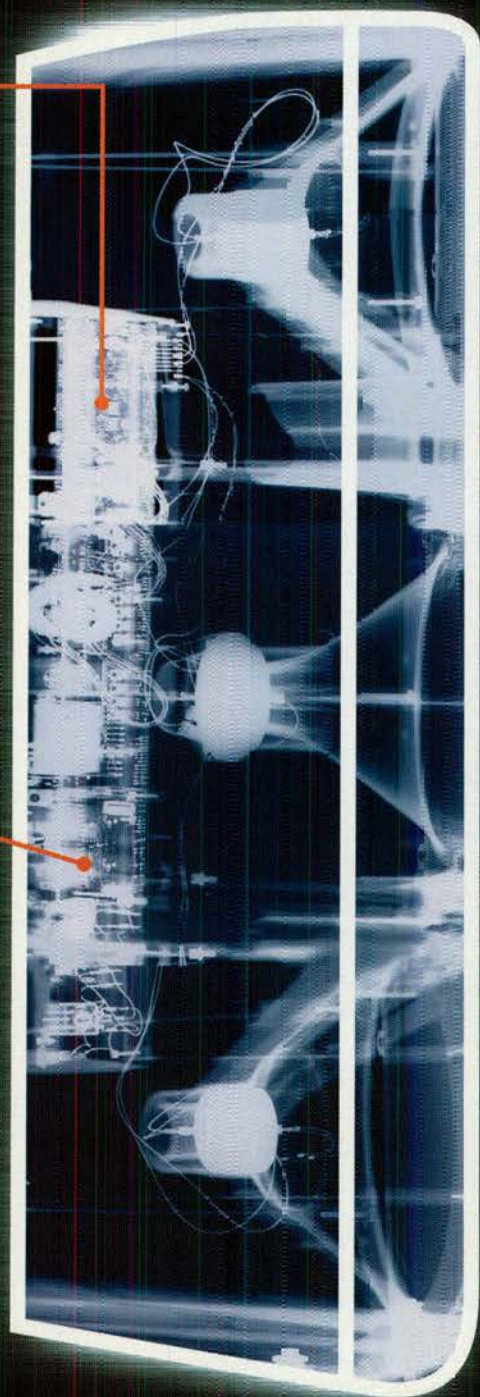
Behringer MX602A Inputs: 2 mic/line, 2 stereo; Outs: LR, monitor; Aux: 1 post-; EQ: 3-band EQ (high/mid/low); Features: Ext PSU; 1 phone output; Tape In/Out \$199

Cloud CXM 12 (Nightclub/Disco Mixer) Inputs: Up to 12 mic or stereo line input modules; Outs: 2x stereo main, 1x

Brand	Vendor	Phone	Internet	Live Studio
Allen & Heath	Technical Audio Group	+61 2 9519 0900	www.tag.com.au	28
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ATI Paragon	Group Technologies	+61 3 9381 4911	www.gtaust.com	2 1
Behringer	Behringer Australia	+61 3 9877 7170	www.behringer.com.au	7 4
Cloud	Bose	+61 1300 368 436	www.bose.com	3
Crest	Production Audio Services	+61 3 9415 1585	www.productionaudio.com.au	10
Dynacord	EVI Audio	+61 2 9648 3455	www.eviaudio.com.au	4
Inter-M	Magna Systems & Eng.	+61 2 9417 1111	www.inter-m.com	6
Jedia	Network Ent. Technology	61 2 9905 5997	www.network-et.com	2
Mackie	Australian Audio Supplies	61 3 8415 1466	www.ausaudio.com.au	5 5
Midas	EVI Audio	+61 2 9648 3455	www.eviaudio.com.au	4
Peak Audio	CMI	+61 3 9315 2244	www.cmi.com.au	2
Peavey	Australis Music Group	+61 2 9698 4444	www.australismusic.com.au	9
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SoundTech	Audio Telex	+61 2 9647 1411	www.audiotellex.com.au	4
Studiomaster	Network Ent. Technology	+61 2 9905 5997	www.network-et.com	2
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Vinal	LSW	+61 2 9568 2100	www.vinal-audio.com	8
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nearly every step on the path your signal takes, while continuing to offer professional quality at affordable prices. Behringer make a large range of mixers that are too numerous to mention in total for this comparison. To see the complete range please go to www.behringer.com.au or email sales@behringer.com.au

Crest Audio X-series consoles offer application-tailored solutions for fixed installations, churches, stadiums, auditoriums, regional tour sound, broadcasting, and corporate A/V applications. Each model incorporates the features, flexibility, audio quality, and rugged build required for its intended purpose, which makes X-series consoles powerful professional tools, and exceptional value. X-series consoles share the research and design insights that inspired Crest Audio's J12 flagship console. This engineering pedigree ensures their exceptional sonic performance, superior build quality, and intuitive control surfaces. The X-series purpose-driven designs provide feature-sets optimised for the chosen application while keeping console cost and complexity manageable.

The **Ramsa** WR-S4400A Series of mixers provides the user with a wealth of professional features, and the consoles are laid out in an intelligent and intuitive way. These versatile mixing consoles are designed for use in both permanent and portable systems.

ATI Paragon II Mixing and Production consoles feature ATI's respected patented preamps which are capable of +24 dB input level without distortion. All channels have studio quality gates and compressors, infinite reverb, EQ and other features too numerous to mention. Paragon is the Rolls Royce when it comes to analogue mixing desks. The same applies to the Legacy studio series. The preamps, EQ and dynamics can be purchased as separate modules.

st.music, 1x st mic; Aux: 2x aux and 2x record outs; EQ: 3-band mic & 2 + 1 sweepable-band on line modules; Features: Optional module for 3 additional zone outputs \$3,000

Cloud CXM 16 (Nightclub/Disco Mixer) Inputs: Up to 16 mic or stereo line input modules; Outs: 2x stereo main, 1x st.music, 1x st mic; Aux: 2x aux and 2x record outs; EQ: 3-band mic & 2 + 1 sweepable-band on line modules; Features: Optional module for 3 additional zone outputs \$3,100

Cloud CXM 8 (Nightclub/Disco Mixer) Inputs: Up to 8 mic or stereo line input modules; Outs: 2x stereo main, 1x st.music, 1x st mic; Aux: 2x aux and 2x record outs; EQ: 3-band mic & 2 + 1 sweepable-band on line modules; Features: Optional module for 3 additional zone outputs \$2,900

Crest X-Eight HS (X-Series - FOH/Monitors) Inputs: 24-48 mono, 4 stereo inputs; Outs: 8 group, LCR or mono, 4 x 12 matrix; Aux: 8 aux, selectable as pre/post and stereo; EQ: 4-band EQ, two mid sweeps all mono inputs; Features: Auto-change over power supplies \$33,000-53,000

Crest XR20 (X-Rack - FOH) Inputs: 20 mic/line inputs; Outs: 4 groups, L/R & mono; Aux: 6 aux, selectable pre/post in pairs; EQ: 4-band EQ, two mid sweeps all inputs; Features: 100m faders; Lamp socket \$5,995

Crest XRM (X-Rack - Monitors) Inputs: 20 mic/line inputs; Outs: 12 mono, select. as stereo; Aux: 12 aux; EQ: 4-band EQ, two mid sweeps all inputs; Features: 100-240V power input \$6,995

Crest X-VCA (X-Series - FOH) Inputs: 24-48 mono, 4 stereo inputs; Outs: 8 VCA's, 8 groups, LCR or mono; Aux: 8 pre/post; EQ: 4-band EQ, full parametric, all mono inputs; Features: 8chs of onboard dynamics \$48,000-78,000

Dynacord MP 7 (Powermate - FOH) Inputs: 3 mics, 4 stereo; Outs: 300w/side powered desk; Aux: 1 FX send; EQ: 3-band EQ; Features: Built-in FX, EQ \$3,799

Dynacord PM 1000 (Powermate - FOH) Inputs: 6 mics, 4 stereo; Outs: 500w/side powered desk; Aux: 1 F/B, 2 FX; EQ: 3-band swept EQ; Features: Built-in FX, EQ \$5,144

Dynacord PM 1600 (Powermate - FOH) Inputs: 12 mics, 4 stereo; Outs: 500w/side powered desk; Aux: 1 F/B, 2 FX; EQ: 3-band swept EQ; Features: Built-in FX, EQ \$5,459

Dynacord PM 600 (Powermate - FOH) Inputs: 6 mics, 2 stereo; Outs: 300w/side powered desk; Aux: 1 F/B, 1 FX; EQ: 3-band EQ; Features: Built-in FX, EQ \$3,674

Inter-M CMX1664 (16ch & 24ch) Inputs: 16ch mono input, 4 stereo; Outs: 4 bus, LR & mono; Aux: Aux 1/2, pre Ch 1/3, aux 3/4, post Ch2/4; EQ: 3-band EQ (all sweepable); \$2,500

Inter-M CMX2464 (24ch & 16ch) Inputs: 24ch mono input, 4 stereo; Outs: 4 bus, LR & mono; Aux: Aux 1/2, pre Ch 1/3, aux 3/4, post Ch2/4; EQ: 3-band EQ (all sweepable); \$3,670

Inter-M CMX3268 (24ch & 32ch) Inputs: 32ch mono input, 4 stereo; Outs: 8 bus LR & mono; Aux: Aux1/2, 3/4, 5/6, 7/8, mix L&R, Group 1/2, 3/4, 5/6, 7/8, on/off; \$5,700

Jedia SM28 (SM) Inputs: 24 mic, 4 stereo; Outs: L, R + 4 groups; Aux: 4 pre/post-; EQ: 3-band with mid sweep; \$3,999

Jedia Tripac1242 (Tripac) Inputs: 12 mic, 4 stereo; Outs: L, R + 4 subgroups; Aux: 4 pre/post-; EQ: 3-band EQ with mid sweep; \$2,399

Mackie CFX12 (12x4x1 Mixer) Inputs: 8 mic/line mono, and 2 stereo line channels; Outs: 4 s/groups, XLR/TRS outputs, sub & utility outs; Aux: 4 aux sends, 2 stereo returns; EQ: 9-band st. graphic+3-band EQ (sw/mid 100Hz-8kHz); Features: Sub-out from 18dB/oct. 75Hz internal cross-over \$2,095



Mackie DFX6

Mackie DFX6 (6x2 Mixer) Inputs: 2 mic/line, plus 2 mic/line or 2 stereo line inputs; Outs: LR stereo outputs; Aux: 2 aux sends, 2 aux stereo returns; EQ: 2-band (12kHz & 80Hz), 75Hz low-cut filter; Features: 32-bit EMAC digital effects, vocal eliminator \$1,095

Mackie SR24*4 (24x4 Mixer) Inputs: 20 mic/line, 2 stereo line inputs; Outs: 4 s/groups, "double-bused" sub outs for eight trk rec.; Aux: 6 aux sends, 4 stereo aux returns; EQ: 3-band EQ (sw/mid 100Hz-8kHz), low-cut/mono ch.; Features: Low-noise mic pre's; Built-in power, SR32*4 avail. \$4,795

Mackie SR40*8 (40x8x3 Centre Master Section) Inputs: 40 mic/line, 4 stereo; Outs: 8 buses, balanced outputs; Aux: 8 aux sends, 4 main st.aux returns & 4 "B" rets; EQ: 4-band EQ, high and low sweepable; Features: 12 x 4 matrix mixer; Communications/Talkback section \$22,995

Midas Heritage 1000 (Heritage - FOH/Monitors) Inputs: 44 mic, 4 stereo; Outs: 10 groups, 10 VCA masters; Aux: 10 switchable; EQ: 4-band EQ (hi-mid and lo-mid sweepable); Features: XL 3 style mic pre-amps; EQ \$135,697

Midas Heritage 2000 (Heritage - FOH/Monitors) Inputs: 44 mic, 4 stereo; Outs: 12 groups, 10 VCA masters; Aux: 12 switchable; EQ: 4-band EQ (fully sweepable); Features: XL 3 style mic pre-amps; EQ \$168,006

Midas Legend 3000 (Legend - FOH/Monitors) Inputs: 48 mic, 4 stereo; Outs: 8 groups, 10 VCA masters; Aux: 12 switchable; EQ: 4-band EQ (hi-mid and lo-mid sweepable); Features: XL 3 mic pre-amps; EQ \$90, 812

Midas Venice 320 (Venice - FOH) Inputs: 24 mic, 4 stereo + 4 stereo returns; Outs: 4 groups; Aux: 2 pre-, 2 post- and 2 sel (eg); EQ: 4-band EQ (hi-mid and lo-mid sweepable); Features: XL 3 mic pre-amps; EQ \$9,499

Peak PMA-184 (Compact Powered Mixer) Inputs: 6 mic/line, 4 stereo; Outs: L/R; Aux: 1 pre-, 1 post-fade; EQ: 3-band EQ (sweepable mid); Features: 32 digital FX; 400 watts per side \$1,895

Peak PMA-184 (Compact Mixing Console) Inputs: 6 mic/line, 4 stereo; Outs: L/R; Aux: 1 pre-, 1 post-fade; EQ: 3-band EQ (all sweepable); Features: 32 digital FX \$1,295

Peavey RQ2310 (RQ23 Series - FOH/Monitors) Inputs: 10 or 18 inputs; Outs: L, R, sends & mono outputs; Aux: 2 pre- monitor sends, 2 post- FX sends; EQ: 3-band, sweepable mid freq. & shelving bass; Features: 60mm fader; PFL & mute on all inputs RQ2310 - \$1,095; RQ2318 - \$1,595

Peavey XR1600F (Powered mixer) Inputs: 20 channel, 3 power amps; Outs: 200W X3 @ 4Ω; Aux: Each channel has digital effects sends; EQ: 2x 9-band graphics, 3-band EQs; Features: 16 stereo digital FX; Low noise mic preamps \$4,495

Peavey XR2012 (Powered mixer) Inputs: 12 mic/line & 4 stereo; Outs: 2x400W @ 4Ω; Aux: 2 Monitor, 1 EFX, & 1 aux send; EQ: Dual graphics, 3-band EQ with mid sweep; Features: 60mm fader; Low-Z mic preamps \$4,995



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Peavey AA AAM2443

Peavey AA AAM2443 (Peavey AA) Inputs: 24 channel mic/line; Outs: 4 bus; Aux: 6 aux sends; EQ: Low/high, sweepable mids, low-cut filter per input; Features: 100mm faders, soft-knee compressors on 4 groups \$7,077

Peavey AA RQ2310 (RQ Series) Inputs: 8 mic/line, 2 stereo line; Outs: Left, Right, Monitor 1&2 and mono outputs; Aux: 2 pre monitor sends, 2 post effects sends; EQ: 3-band EQ with mid sweep; Features: 60mm faders, mute and PFL per input \$1,149

Peavey AA RQ2318 (RQ Series) Inputs: 16 mic/line, 2 stereo line; Outs: Left, Right, Monitor 1&2 and mono outputs; Aux: 2 pre monitor sends, 2 post effects sends; EQ: 3-band EQ with mid sweep; Features: 60mm faders, mute and PFL per input \$1,649

Ramsa WR-S4412A Inputs: 12mic/line, XLR or TRS jack input; Outs: 4 groups, LR; Aux: 4 aux, 2 pre-, selectable; EQ: 3-band EQ (mid sweepable); Features: 100mm faders; Selectable phantom power ea channel \$4,125

Ramsa WR-S4416A Inputs: 16mic/line, XLR or TRS jack input; Outs: 4 groups, LR; Aux: 4 aux, 2 pre-, selectable; EQ: 3-band EQ (mid sweepable); Features: 100mm faders; Direct out ea channel \$5,165

Samson TM300 (Powered 2x 150w @ 4Ω) Inputs: 6 mic/line channels; Aux: 2 aux sends per ch & 2 aux returns; EQ: 3-band EQ on each ch; Features: 3-preset DSP FX; Dual 7-band EQ \$1,249

Samson TM500 (Powered 2x 250w @ 4Ω) Inputs: 8 mic/line, 2 stereo channels; Aux: 2 aux sends per ch & 2 aux returns; EQ: 3-band EQ on mono ch, 2-band EQ on stereo ch; Features: Built-in 256 DSP FX; Dual 7-band EQ \$1,699

Sony SRP-V110 (Audio Mixer) Inputs: 10 mic, 8 stereo line inputs; Outs: L, R, 8 bus design; Aux: 9 aux sends & stereo pair; EQ: 3-band EQ (mid sweepable); Features: Superb sound quality \$3,500

Sony SRP-X100P Inputs: 9 stereo & monaural analogue channels; Outs: LR outputs, switchable to mono outputs; Aux: Two, mono sub-outputs; EQ: Wide, 30dB headroom on mic inputs; Features: 100Hz high-pass filter in mic. mode \$1,090

Sony SRP-X351P (A/video Mixer amp) Inputs: 4 mic, 3 line; Outs: LR, Video switcher; Features: Ideal with LCD projectors \$2,200

Sony SRP-X700P (A/V Mixer/amp) Inputs: 6 mic/line, video/RGB; Outs: LR/Video/RGB; Features: Rated power 2x150w@8ohm \$3,900

Soundcraft MH4 (24 - 48 chan - Dual FOH and/or Monitors) Inputs: 24 - 48 mono, 4 stereo; Outs: 8 groups, LCR, 20 x 8 matrix; Aux: 8 mono + 4 stereo. All pre/post assignable; EQ: 2 x sweepable shelving, 2 x full parametric; Features: LCR Pan, Mute & MIDI snapshots From \$60,895

Soundcraft Series Five (24 - 56 chan - FOH) Inputs: 24 - 56 mono, 4 stereo; Outs: 8 groups, LCR, 16 x 10 matrix; Aux: 8 mono + 4 stereo. All pre/post assignable; EQ: 4 band (all full parametric); Features: LCR Pan, Mute & MIDI snapshots From \$108,995

Soundcraft Series Five Monitor (40 - 60 chan, 32 or 24 bus - Monitors (32 or 24 bus)) Inputs: 40 - 60 mono, Stereo optional; Outs: L/R & Alt L/R + stereo wedge; Aux: 34 (mono/stereo assignable); EQ: 4 band (all full parametric); Features: Integrated BSS & dbx control From \$136,995

Soundcraft SM20 (32 - 56 chan - Monitors (20 bus)) Inputs: 32 - 56 mono; Outs: Stereo wedge; Aux: 27 (mono/stereo assignable); EQ: 2 x sweepable shelving, 2 x full parametric; Features: Integrated BSS & dbx control From \$62,995



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ANALOGUE MIXING CONSOLES

SoundTech MM10SD (Mega Mix Series) Inputs: 6 mic/line, 2 stereo line; Outs: 330 W per channel; Aux: Effects send and return; EQ: 3-band EQ per channel + 9-band graphic; Features: Subwoofer-output; 128 digital effects \$1,999

SoundTech QM6 (Mega Mix Series) Inputs: 4 mic/line, 2 line; Outs: 100W mono output; Aux: Effects send and return; EQ: 2-band EQ per channel + 3-band master; Features: Built-in reverb \$669

Studiomaster STUC1 (Compact) Inputs: 4 mic, 2 stereo; Outs: L, R & control; Aux: 2 pre-fade; EQ: 3-band EQ; \$POA

Studiomaster STUT206 (Trilogy) Inputs: 14 mic, 2 stereo; Outs: L, R + 4 subgroups; Aux: 4 pre/post + 2 pre-fade; EQ: 3-band EQ w/mid sweep; \$POA

Vinal PM-602D (6ch Stereo Powered head - Small PA, Monitors) Inputs: 6 balanced XLRs & 1/4 inch jacks; Outs: 2x 150watt @ 4? + record out; Aux: 1x aux, 1x tape, main; EQ: 5-band stereo EQ + 2-band ch EQ; Features: Headphone jack; Digital delay; Effect send & return \$549



Vinal PMX850D (8ch Stereo Powered mixer -) Inputs: 8 balanced XLRs & 1/4 inch jacks; Outs: 2x 250watt @ 4Ω + record out; Aux: 1x aux, 1x tape; EQ: 7-band graphic EQ, parametric EQ;

Features: Headphone jack; Digital delay; Effect send & return \$1,095

Yamaha EMX5000-12 (EMX - Powered FOH + Mon) Inputs: 8 mic/line + 2 stereo + aux + 2tr; Outs: Stereo + 2 aux + 2EFX + mono (sub); Aux: 2 aux, switchable pre/post-; EQ: 3-band EQ (sweepable mid); Features: 2 x SPX digital FX; 500 watts per channel \$2,295

Yamaha EMX88S (EMX - Powered FOH + Mon) Inputs: 8 mic/line or 6 mic/line + 2 stereo/aux/ 2tr; Outs: Stereo + mon + EFX out; Aux: Mon + FX; EQ: 3-band EQ per channel + 7-band graphic master; Features: SPX digital FX; 400 watts per channel \$1,595

Yamaha GA32/12 (GA - Live & Studio Applications) Inputs: 32/24 + aux + 2tr; Outs: Stereo + 10 mix busses; Aux: Mix busses switchable from aux to group; EQ: 4-band EQ (mids sweepable); Features: Centred master section \$5,395 (24 ch)

Yamaha M3000A (M - FOH & Mon. Applications) Inputs: 24/40/56 + 4 stereo; Outs: Stereo + 16 mix busses; Aux: Mix busses switchable from aux to group; EQ: 4-band EQ fully sweepable; Features: 8 x VCA groups \$24,500 (24 ch)

Yorkville Sound PowerMax 16

(Powered Mixer - FOH & Monitors)

Inputs: 16 channel, 2 x 800w FOH, 2 x 275w F/B amps; Outs: 18 mono, 2 stereo channels; Aux: 2 pre, 3 post-fade; EQ: 3-band ch. EQ; 3x9-band stereo and mono graphics; Features:

Defeatable Channel Overload Protection \$6,850



Studio Consoles

Amek Media 51 (56 inputs) Inputs: 28 M1-RN mono input modules; Outs: Comprehensive surround mixing & monitoring; Aux: 4 stereo returns, 8 aux sends & divergence control; EQ: EQ by Mr. Rupert Neve; Features: Freestanding console / optional floor stand \$125,335

Amek Media 51 (88 inputs) Inputs: 44 M1-RN mono input modules; Outs: Comprehensive surround mixing & monitoring; Aux: 4 stereo returns, 8 aux sends & divergence control; EQ: EQ by Mr. Rupert Neve; Features: 19" rack-mount PC for automation computer \$175,265

Amek Media 51 (120 inputs) Inputs: 60 M1-RN mono input modules; Outs: Comprehensive surround mixing & monitoring; Aux: 4 stereo returns, 8 aux sends & divergence control; EQ: EQ by Mr. Rupert Neve; \$225,000

ATI Paragon ATI Legacy Inputs: 1-100 - your selection; Outs: As ordered; Aux: As ordered; EQ: API patented pre amps and parametric EQ; Features: Custom assembly Pricing dependant on custom order

Behringer MX2442A Inputs: 16 mic/line, 4 stereo; Outs: LR, monitor, 4 groups; Aux: 4 post-, 2 selectable; EQ: 4-band EQ (high/low/ mid sweepable /low-cut); Features: 720mm x 495mm x 97mm (WxDxH) \$1,799

Behringer MX2642A Inputs: 8 mic/line, 4 stereo; Outs: LR, monitor, 4 groups; Aux: 4 post-, 2 selectable; EQ: 4-band EQ (high/low/ mid sweepable /low-cut); Features: 19inch rack mountable \$999

Behringer MX3242X Inputs: 16 in-line, 32 mono; Outs: LR, monitor, 4 groups; Aux: 1 internal FX, 3 post-, 2 selectable; EQ: 4-band EQ (high/low/ mid

sweepable /low-cut); Features: 19inch rack mountable \$1,999

Behringer MX9000 Inputs: 24 in-line, 48 mono; Outs: LR, monitor, 8 groups; Aux: 6 pre/post-, selectable; EQ: 4-band EQ (high/low/ mid sweepable /low-cut); Features: 935mm x 745mm x 220mm (WxDxHrear) \$4,295

Mackie 1402 VLZ PRO (VLZ PRO) Inputs: 14 line inputs (6 mono, 4 stereo pairs); Outs: LR stereo balanced outputs; Aux: 2 aux sends, 2 stereo aux returns; EQ: 3-band active EQ (80Hz, 2.5kHz, 12kHz); Features: Built-in power \$1,895

Mackie 1604 VLZ PRO (VLZ PRO) Inputs: 16 line inputs; Outs: 4 subgroups w/left & right assigns & direct outs; Aux: 6 aux sends, 4 stereo aux Returns; EQ: 3-band active EQ (sweepable mids); Features: Built-in power supply, rack mount kit included \$3,695

Mackie 1642 VLZ PRO (VLZ PRO) Inputs: 8 mic/line, 2 stereo mic/line + 2 stereo line; Outs: LR stereo balanced outputs; Aux: 4 aux sends, 4 stereo aux returns; EQ: 3-band active EQ (80Hz, 2.5kHz, 12kHz); Features: Rack mountable \$2,995

Mackie 8•Bus Series (8•Bus Series) Inputs: Either 32 or 24 channel; Outs: 8 subgroups; Aux: 6 aux sends/channel, 6 stereo aux returns; EQ: Full parametric Hi-Mid w/separate band center 24•8 \$9,995; 32•8 \$11,995

Soundcraft 328XD (16ch) Inputs: 16 + 5 stereo, 16 tape returns; Outs: 8 groups, L/R, studio L/R; Aux: 2 (pre/post- assignable) + 2 x internal Lexicon FX; EQ: 3 x fully parametric; Features: 160 x 715 x 537mm, 15kg \$15,995

Soundcraft FX16 (16 chan) Inputs: 16 Mono, 4 stereo; Outs: 2 groups, L/R; Aux: 3 (pre/post- assignable) + 1 x internal Lexicon FX; EQ: 2 x fixed shelving, 1 x sweepable mid; Features: 148 x 443 x 442mm, 11kg \$2,995

Soundcraft Ghost LE (24 or 32 chan) Inputs: 24/32 Mono, 4 stereo, 24/32 tape return; Outs: 8 groups, L/R, studio L/R; Aux: 10 (pre/post- assignable); EQ: 2x fixed shelving, 2x fully parametric; Features: 228x1059x780mm, 44kg (24ch) From \$14,595

Soundcraft M Series (4, 8, or 12 chan) Inputs: 4/8/12 Mono, 4 stereo; Outs: L/R only; Aux: 4 (2x pre, 2x post); EQ: 2 x fixed shelving, 1 x sweepable mid; Features: 119 x 397 x 490mm, 6.75kg (4 chan) From \$1,495

TL Audio M3 Inputs: 8 mic/line inputs with discrete value mic pre-amp; Outs: Stereo value output stage Aux: 2 aux sends and 2 stereo aux returns; EQ: 4-Band EQ (hi-mid and lo-mid sweepable); Features: 19inch rack mountable \$10,599

Yamaha GF24/12 (GF) Inputs: 24/16/12 + 2tr; Outs: 4 groups + 6 aux + stereo; Aux: 6 aux (switch pre-/post-); EQ: 3-band EQ (mid sweepable); Features: 24ch 20kg \$2,995 (24ch)

Yamaha MX20/6 (MX) Inputs: 20/12 + 2tr; Outs: 4 groups + stereo; Aux: 2 aux (1 switch pre-/post-) + FX; EQ: 3-band EQ; Features: 20ch 9.5kg \$1,595 (20 ch)



Mackie 1642
VLZ PRO



Yamaha GF24/12

Since the mid '60s Yorkville has established a high profile in the professional powered mixing console sector. Yorkville make their powered consoles easy to use, compact, high powered, dependable and feature-smart. The smallest, the M8 Powered Mini Mixer is the size of medium book, 8-channels with 2x 85 watt power amplifiers (at 4Ω). Yorkville's range also includes: Micromix Box Mixers; Powered DJ Mixers (at 2x 240w - 8Ω); the Audiopro series - 12 or 18ch configuration, 2x 400w and 255 pre-set digital FX processor, ideal for small gigs; and finally the PowerMAX series, for full concert production. Yorkville have a powerful solution for all audio demands.

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PHONIC

This is the most comprehensive document covering intelligent lighting currently available in our region of the world. To help you make sense of the explosion of choice, we have divided up the report into five categories - Moving Head Profiles, Moving Head Wash, Moving Mirror, Colour Changers and DJ/Club Effects. To be included, each device must be able to emit light and be controlled by DMX (or other data) protocol...



Coemar CF7 Hex



Elation Colour Spot-250



FAL Three-Sixty



FAL Three-Sixty 2 PB

MOVING HEAD - PROFILE

Item (lamp, power consumption) Colour; CTO/CTB; Beam Angles; Effects Control; Other Features; Price

Clay Paky Golden Spot (1200 HMI, 1920VA) Colour: 2 wheels (10 cols)-CTO/CTB: 2 filters; Beam Angles: fixed 24° lens; Effects/Control: 2 effects wheels, rotating gobos, and 3 way prism; \$12,999

Clay Paky Stage Light 300 (HTI300, 350VA) Colour: 1 wheel (12 cols plus open)-CTO/CTB: 2 filters; \$5,999

Clay Paky Stage Profile Plus SV (1200 HMI, 1920VA) Colour: CMY-CTO/CTB: 2 filters; Beam Angles: 16-24° (via remote zoom); Effects/Control: Framing + 2 Gobo Wheels; Features: Silent Version \$26,999

Clay Paky Stage Zoom (1200 HMI, 1920VA) Colour: CMY -CTO/CTB: 2 filters; Beam Angles: 16-24° (via remote zoom); Effects/Control: 2 gobo wheels; Features: Electronic ballast available \$18,999

Coemar CF7 Hex (Philips MSR 700 SA, 1440VA) Colour: CMY colour mix system-CTO/CTB: via optional filters; Beam Angles: 1 to 69° DMX zoom system; Effects/Control: 2 prisms, 3 special focus lens, iris, zoom + focus; Features: Carbon Fibre body, Power factor corrected ballast \$15,744

Coemar iSpot 150 (CDM 150 SA-T, 240VA) Colour: 1 wheel with 8 colours; Beam: 19°; Effects/Control: rotating gobos (6), strobe, dimmer and remote focus; Options: DR1 (remote display replicator); Features: internal DMX recorder for stand alone operation \$3,310

Coemar iSpot 575 eb (HSD/MSD 575, 1440VA) Colour: 2 wheels for 7 colours-CTO/CTB: on 2nd wheel; Beam Angles: 21 / 25 / 27 plus iris; Effects/Control: DUAL rot. 6 gobo wheels, rot. Prism + dimm/strobe; Options: DR1 (remote display replicator); Features: Electronic ballast + PFC TBA

Coemar ProSpot 250 LX (HSD/MSD 250, 480VA) Colour: 1x 12 colour wheel; Beam Angles: 12/15/18°; Effects/Control: 6 rotating gobos, rotating prism, remote focus; Options: DR1 (remote display replicator); Features: Power factor corrected \$4,210

Elation Colour Spot-150 (CDM150, 300VA) Colour: 1 disc (11 colours + spot)-CTO/CTB:; Beam Angles: 19° beam angle with manual focus; Effects/Control: 11 Gobos + Spot ,dimming, Pan 530°, Tilt 280°; Options: *Rotating Gobo Model also Available; Features: Built-in mic, LED display + 2 axial fans \$2,999

Elation Colour Spot-250 (MSD250, 500VA) Colour: 1 disc (11 colours + spot)-CTO/CTB:; Beam Angles: 15° beam angle (optional 12° & 18° lens); Effects/Control: 3-facet Prism, Strobing, motorized focus, dimming; Options: Additional Gobos, Optional Roadcase; Features: 6 interchangeable gobos, rainbow fx, LED display \$3,999

Elation Colour Spot-575 (MSD575, 900VA) Colour: 2 discs 64 colour combos [Disc1. 9 colours + white] [Disc2. 6colours+32K & 56K filter, UV filter +White]-CTO/CTB:; Beam Angles: 15°, 18° & 22° Motorized multi-step-zoom; Effects/Control: 3-facet Prism, Strobing, 2 motorized gobo wheels; Options: Additional Gobos, Optional Roadcase; Features: 6 interchangeable rotating, 9 fixed gobos(w shake) \$5,999

FAL Three-Sixty (PF3600) (MSD250, 950VA) Colour: 7 Colours + White-CTO/CTB:; Beam Angles: 14°; Effects/Control: 7 gobos + clear, Strobe + Rainbow; Features: Pan 360° Tilt 300°, music activation + DMX512 \$3,299

FAL Three-Sixty 2 PB (PF3622) (MSD250, 900VA) Colour: 9 colours + white; Beam Angles: 14° or 18° models; Effects/Control: 8 interchangeable rotating gobos, Prism, Focus; Features: Compact design, Pan 360°, Strobe, dimmer + shutter POA

FAL Three-Sixty 4 (PF3604) (MSR575, 800VA) Colour: 7 colours + 2 colour temperature correction filters, UV + white (24 Colour combos)-CTO/CTB:; Beam Angles: 13, 17 or 23° beam angles; Effects/Control: 5 changeable



iSpot 150

Brand	Distributor	Phone	Web	Mov. Head		Colour Changer	
				Prof Wash	Mirror	DJ FX	DJ FX
Abstract	ULA	1800 648 111	www.ula.com.au		2		
Artistic Licence	Bytecraft Entertainment	+61 3 8710 2555	www.bytecraftentertainment.com				18
Clay Paky	Show Technology Australia	1800 646 666	www.showtech.com.au	6	5	7	6 5
Coemar	Coemar De Sisti Australia	+61 3 9467 8666	www.cdaust.com.au	9	8		
ColourLED	Coemar De Sisti Australia	+61 3 9467 8666	www.cdaust.com.au				18
DTS illuminazione	Hels Australia	+61 3 9846 8127	www.hels.com.au	2	2	2	12
Elation	LSW	+61 2 9568 2100	www.elationlighting.com	3	2	7	2
FAL	LSW	+61 2 9568 2100	www.fal.it	4	1	11	4
Futurelight	Coemar De Sisti Australia	+61 3 9467 8666	www.cdaust.com.au	6	3	7	2
Geni	Show Technology Australia	1800 646 666	www.showtech.com.au	2		6	2 36
Getlit	Total Concept Projects	+61 2 9648 3945	www.totalconceptprojects.com.au	3	3	2	1
Griven	Universal Lighting & Audio (ULA)	1800 648 111	www.ula.com.au				4
High End Systems	Universal Lighting & Audio (ULA)	1800 648 111	www.ula.com.au	3	3	3	3
Infinity	Universal Lighting & Audio (ULA)	1800 648 111	www.ula.com.au		2		2
Lightemotion	LSW	+61 2 9568 2100	www.lswonline.com.au	2			
Martin	Show Technology Australia	1800 646 666	www.showtech.com.au	5	4	4	3 10
Pulsar	Total Concept Projects	+61 2 9648 3945	www.totalconceptprojects.com.au				6
Robe Show Lighting	Universal Lighting & Audio (ULA)	1800 648 111	www.ula.com.au	4	3	2	2
SGM	Universal Lighting & Audio (ULA)	1800 648 111	www.ula.com.au	3	2	2	1
TAS	Coemar De Sisti Australia Pty Ltd	+61 3 9467 8666	www.cdaust.com.au	2	2	3	1
Vari*Lite	Jands	+61 2 9582 0909	www.jands.com.au	2	2		

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Garth Brooks

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Human League

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SHOWtechnology



High End Systems Studio Spot 250



High End Systems x.Spot



SGM Giotto Spot 250



Martin Mac 250

MOVING HEAD - PROFILE (continued)

Item (lamp, power consumption) Colour; CTO/CTB; Beam Angles; Effects Control; Other Features; Price

rotating + 7 fixed gobos, 3D Prism; Features: Frost, Pan 450°, Strobe, dimmer + shutter POA

Futurelight MH-420 (CDM-T 150, 240VA) Colour: 1 wheel with 12 colours-CTO/CTB;; Beam Angles: 19°; Effects/Control: 11 gobos, manual focus; Features: Master/Slave mode \$2,806

Futurelight MH-660 (HSD/MSD 250, 480VA) Colour: 1 wheel with 12 colours-CTO/CTB;; Beam Angles: 12 / 15 / 18°; Effects/Control: 6 rot gobos, rot prism, remote focus + dim/strobe; Features: 16 bit Pan + Tilt \$4,714

Futurelight MH-680 (HSD/MSD 250, 480VA) Colour: 1 wheel with 7 colours + CMY modifiers-CTO/CTB: on FX wheel; Beam Angles: 15/18/22/26 + frost all via DMX; Effects/Control: 5 rot + 6 static gobos, focus, rot prism + dimmer; Features: UV filter, strobe, 16 bit Pan/Tilt \$5,784

Futurelight MH-860 (HSD/MSD 575, 1440VA) Colour: 2 wheels with 9 colours each-CTO/CTB: via 2nd colour wheel; Beam Angles: 15/18/22 via DMX + frost filter; Effects/Control: 6 rot+9 stat gobo, rot prism, iris, focus; Features: 16 bit Pan + Tilt \$6,776

Geni Oby 3 (MSD 250, 300VA) Colour: 1 wheel (12 cols)-CTO/CTB;; Beam Angles: 14.5°; Effects/Control: 6 rotatable gobos, rotating prism, focus, strobe; Features: Fast pan and tilt, 24kg \$3,999

Geni Oby 5 (HMI 575, 920VA) Colour: 2 wheels (12 cols)-CTO/CTB: filters on second col whhel; Beam Angles: 15°; Effects/Control: 2 gobo wheels (1 rot), iris, strobe, focus; Features: Fast pan and tilt, 26kg \$5,999

Getlit G Spot 150 (CDM-SA/T 150/942 G12, 300VA) Colour: 11 colour plus open-CTO/CTB;; Beam Angles: Standard 19 degree; \$1,522

Getlit G Spot 250 (MSD/HSD 250 GY-9.5/2, 500VA) Colour: 11 colour plus open-CTO/CTB;; Beam Angles: Standard 15 degree; Effects/Control: motorised focus, 3 facet prism, smooth dimmer; Options: Optional 12 and 18 degree beam angle; Features: 2 glass 3 metal gobos extra as standard \$2,717

Getlit G Spot 575 (MSR/HSR 575/2 GX 9.5, 900VA) Colour: Wheel 1 9 dichroic filters plus open wheel 2 6 dichroic filters plus colour temp filters-CTO/CTB: Colour temp filters 3200K, 5600K and UV filter; Beam Angles: Standard 15, 18 and 22 degrees; Effects/Control: Motorised Iris focus smooth dimmer 3 facet prism; Features: 2 glass 3 metal gobos extra as standard \$4,728

High End Systems Studio Spot 250 (MSD250/2, 375VA) Colour: 12 colours-CTO/CTB: CTO filter; Beam Angles: 18; Effects/Control: 7 rotating indeaxable litho gobos, plus 4 effects; Options: Optional 27 & 40° lenses; Features: frost, strobe, iris, remote focus \$9,000 approx trade price

High End Systems Studio Spot 575 CMY (MSR575, 700VA) Colour: CMY-CTO/CTB;; Beam Angles: 18; Effects/Control: 10 rotating indeaxable litho gobos, variable frost; Options: Three lens options available (12, 18, and 30°); Features: Convection cooled, flicker free electronic ballast \$18,000 approx trade price

High End Systems x.Spot (MSR700SA, 1050VA) Colour: CMY plus 5 fixed colours-CTO/CTB: 2 wheels, one each for graduated CTO and CTB providing; Beam Angles: Zoom 12-45° (4:1) or 15-30° (2:1); Effects/Control: 21 litho gobos/effects over three wheels; Options: Plug-and-Play Framing shutters & Lithomotion; Features: Iris, variable strobe, fixture talkback, macros POA

Martin Mac 2000 Performance (1200 HMI, 1920VA) Colour: CMY + 1 Col Wheel-CTO/CTB: Variable Wheel; Beam Angles: 10-28° (via remote zoom); Effects/Control: Framing; Options: wide angle lens (35°); Features: Electronic ballast standard POA

Martin Mac 2000 (1200HMI, 1920VA) Colour: CMY + 1 Col Wheel-CTO/CTB: Variable Wheel; Beam Angles: 10-28° (via remote zoom); Effects/Control: 2 + 1 gobo wheels; Options: wide angle lens (35°); Features: Electronic ballast available POA

Martin Mac 250 (MSD250, 300VA) Colour: 1 wheel (12 cols plus open)-CTO/CTB;; Beam Angles: User config-14,17,21; Effects/Control: remote focus, full control remotely; Options: wide angle lens kit; \$5,999

Martin Mac 500 (HSR575, 960VA) Colour: 2 wheels (14 cols)-CTO/CTB: col wheel (4 CTC filters); Beam Angles: 17°; Effects/Control: remote focus, full control remotely; Options: wide angle lens kit; \$12,999

Robe MSZoom 250XT (MSD250/2) Colour: 7+3 colours (on two wheels)-CTO/CTB;; Beam Angles: multistep zoom 15/18/24/24/26°; Effects/Control: 3 static, 5 rotating gobos; Features: remote focus, strobe, in built macros \$5,800

Robe Spot 160XT (CDM150SA/T) Colour: 11 colours-CTO/CTB;; Beam Angles: 19°; Effects/Control: 7 rotating gobos; Features: shutter, strobe, 530° pan, 285° tilt \$3,100

Robe Spot 250XT (MSD250/2) Colour: 11 dichroic colours-CTO/CTB;; Beam Angles: 15°; Effects/Control: remote focus, 6 indexable rotating gobos; Options: 12 or 18° lens; Features: 3facet prism, strobe, 14-16DMX channels \$4,700

Robe Spot 575XT (MSD575/2) Colour: 2 colour wheels, 81 combinations-CTO/CTB: 2 CTO filters; Beam Angles: multistep zoom 15/18/22°; Effects/Control: 6 rotating, 9 static gobos on 2 wheels; Features: gobo shake, strobe, UV, Iris, prism \$8,200

SGM Giotto Spot 1200 (MSR1200SA) Colour: 72 colour combinations-CTO/CTB: 2 CT filters; Beam Angles: Multistep Zoom 9,12,15,18°; Effects/Control: 4 rotating, 4 fixed gobos (24 combinations); Features: Flicker free elec. ballast, variable frost and iris \$16,000

SGM Giotto Spot 250 (MSD250) Colour: 8 colours plus Woods filter-CTO/CTB: 2 CT filters; Beam Angles: Zoom 9-24°; Effects/Control: 2 rotating prisms, 4 fixed gobos, 8 rotating gobos; Features: Flicker free elec. ballast, variable frost and iris \$10,000

SGM Giotto Spot 400 (MSR400SA, 600VA) Colour: 8 colours plus Woods filter-CTO/CTB: 2 CT filters; Beam Angles: Zoom 9-24°; Effects/Control: 2 rotating prisms, 4 fixed gobos, 8 rotating gobos; Features: Flicker free elec. ballast, variable frost and iris \$12,000



DJ Scan 150 XT



Spot 150 XT



Wash 150 XT



Spot 160 XT



Wash 250 XT



DJ Scan 250 XT



Spot 250 XT



Scan 250 XT



MS Zoom 250 XT



Scan 575 XT



Wash 575 XT



Scan 1200 XT



Spot 575 XT



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Vari-lite VL1000



Clay Paky Golden Colour



Coemar CF7 WZx



Elation Colour Wash-250



High End Systems Studio Beam

MOVING HEAD - PROFILE (continued)

Item (lamp, power consumption) Colour; CTO/CTB; Beam Angles; Effects Control; Other Features; Price

TAS ProSpot 250 (HSD/MSD 250, 480VA) Colour: 1 wheel with 12 colours-CTO/CTB;; Beam Angles: 12 / 15 / 18°; Effects/Control: 6 rot gobos, rot prism, remote focus + dim/strobe; Features: 16 bit Pan + Tilt \$4,714

TAS ProSpot 575 (HSD/MSD 575, 1440VA) Colour: 2 wheels with 9 colours each-CTO/CTB: via 2nd colour wheel; Beam Angles: 15/18/22 via DMX + frost filter; Effects/Control: 6 rot+9 stat gobo, rot prism, iris, focus; Features: 16 bit Pan + Tilt \$6,776

Vari-lite VL1000 (1kW Tungsten/575W MSR, 1000VA) Colour: CMY-CTO/CTB: Advanced CMY system for light pastels including CTC. Colour frame clips also provided on front of unit; Beam Angles: 19-70° . Fully automated zoom mechanism; Effects/Control: Fully automated shutter system, 5 rotating gobos; Options: Iris Module; Features: Lightweight, truss mount ballast for Arc version POA

Vari-lite VL2202 (700W MSR, 700VA) Colour: 2 x 12 way wheels interchangeable colour/gobos-11 colours standard-CTO/CTB: Full range of colour filters available; Beam Angles: 13-35° . Fully automated zoom mechanism; Effects/Control: 5 rotating gobos, 11 fixed gobos, iris, focus; Options: Full range of colour filters and gobos to suit; Features: 0.3° . Pan and Tilt resolution POA

MOVING HEAD - WASH

Item (lamp, power consumption) Colour; CTO/CTB; Beam Angles; Effects Control; Other Features; Price

Clay Paky Golden Colour (1200 HMI, 1920VA) Colour: CMY + Amber-CTO/CTB: Variable wheel; Beam Angles: up to 50°; Effects/Control: beam shaper; Options: Colour Cyc (80°); \$12,499

Clay Paky Stage Colour 1000 (1000w Halogen, 1200VA) Colour: CMY-CTO/CTB: 2 filters; Beam Angles: up to 50°; Effects/Control: 2 effects filter and frost filter; Options: Colour Cyc (80°); Features: electronic dimmer \$8,999

Clay Paky Stage Colour 1200 (1200 HMI, 1920VA) Colour: CMY + Amber-CTO/CTB: Variable wheel; Beam Angles: up to 50°; Effects/Control: 3 frost filters; Options: Colour Cyc (80°); Features: electronic ballast standard \$18,999

Clay Paky Stage Colour 300 (HTI300, 350VA) Colour: Col Wheel-CTO/CTB: 2 filters; Beam Angles: up to 50°; Effects/Control: beam shaper; \$5,999

Coemar CF7 WZx (Philips MSR 700 SA, 1440VA) Colour: CMY + wheel with 6 colours-CTO/CTB: on c/wheel; Beam Angles: 14- 44° DMX control + peak/flat mode; Effects/Control: Rotating beam shaping glass + flat field filter; Features: Carbon fibre + power factor correction \$14,380

Coemar Pro Wash 575 LX (HSD/MSD 575, 1440VA) Colour: CMY + wheel with 7 colours-CTO/CTB: on c/wheel; Beam Angles: 9.5-34° + 44° wide mode; Effects/Control: Rotating beam shaping glass + flat field filter; Options: DR1 (remote display replicator); Features: Power factor corrected \$6,940

Coemar ProWash 250 LX (HSD/MSD 250, 480VA) Colour: CMY + wheel with 6 colours-CTO/CTB: on c/wheel; Beam Angles: 14-31° manual zoom + 41° wide mode; Effects/Control: Rotating beam shaping glass + flat field filter; Options: DR1 (remote display replicator); Features: self test of optic sensors during reset \$4,210

Coemar SuperCyc (2 x MSR1200, 3840VA) Colour: CMY-CTO/CTB;; Beam Angles: narrow, horizontal, vertical and wide lenses incl.; Effects/Control: dimmer and slide in lenses; Features: DMX controlled Pan and Tilt. 1000lux at 25m ! \$22,330



Coemar Pro Wash 575LX

DTS Etnalight (HMI 575 W discharge lamp, 800 VA) Colour: CMY-CTO/CTB;; \$3,173

DTS XR7 (MSR 575 W discharge lamp, 800 VA) Colour: CMY-CTO/CTB;; Beam Angles: 3 light beam angle; \$3,533

Elation Colour Wash-250 (MSD250, 500VA) Colour: CMY colour mixing: 4 colours, 32K & 56K CTC Filter, UV filter, + White-CTO/CTB;; Beam Angles: manually adjustable 8° to 22°; Effects/Control: 180° Beam Shaper, Wide + Flat beam, Frost Filter; Options: Optional Roadcase; Features: Strobe, dimmer, Pan 530° , Tilt 280° \$3,999

Elation Colour Wash-575 (MSD575, 850VA) Colour: CMY colour mixing: 6 colours, 32K & 56K CTC Filter, UV filter, + White-CTO/CTB;; Beam Angles: remote adjustable, motorized zoom 7° to 28; Effects/Control: Beam Shaper & Frost Filter; Options: Optional Roadcase; Features: Strobe, dimmer, Pan 530° , Tilt 280° \$5,999

FAL Three-Sixty 3 Colour (PF3613) (MSR575, 800VA) Colour: CMY colour mixing-CTO/CTB;; Beam Angles: Selectable 18° and 38°; Effects/Control: Fast shutter, adjustable strobe, 0-100% dimming; Features: Pan 390° , Tilt 270° , DMX512 POA

Futurelight Exterlight (HSD/MSD 250, 480VA) Colour: CMY-CTO/CTB: Manual filter; Beam Angles: 8 to 20°; Effects/Control: rotating beam shaping filter; Options: Infra Red remote controller; Features: Inbuilt time clock, IP44 rating, sunset activation \$5,750

Futurelight MH-640 (HSD/MSD 250, 480VA) Colour: CMY + wheel with 7 colours-CTO/CTB: on c/wheel + UV; Beam Angles: 8-22° + soft filter; Effects/Control: rotating beam shaping filter; Features: DMX strobe and Dimmer \$4,580

Futurelight MH-660 (HSD/MSD 575, 1440VA) Colour: CMY + wheel with 8 colours-CTO/CTB: on wheel + UV; Beam Angles: 8-22° + soft filter; Effects/Control: rotating beam shaping filter; Features: DMX strobe and Dimmer \$6,776

Getlit G Wash 150 (CDM-SA/T 150/942 G12, 300VA) Colour: 11 colour plus open-CTO/CTB;; Beam Angles: Standard 19 degree; \$1,522

Getlit G Wash 250 (MSD/HSD 250 GY-9.5/2, 500VA) Colour: CMY-CTO/CTB: Red, Green, Blue colours and 3200K, 5600K UV filters; Beam Angles: min 8 degrees and max 22 degrees; Effects/Control: Smooth dimmer, frost and beam shaper; \$2,717

Getlit G Wash 575 (MSR/HSR 575/2 GX 9.5, 900VA) Colour: CMY -CTO/CTB: colour temp lters 3200k, 5600k and UV filter; Beam Angles: min 7 degrees and max 28 degrees; Effects/Control: smooth dimmer, frost and beam shaper; \$4,728



Shiva

mirrored projector

Shiva is quality throughout. Sleek die-cast aluminum case outside, inside: large optical path, AR & IR coated lenses, nine exchangeable gobos, nine dichroic colors + white, strobe and dimming. Shiva comes with standard DMX512 control (4 or 6 channels), and uses a HSD 200 lamp.



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ABN 89 062 241 785

Martin Mac 200C Wash



Martin Mini Mac



Vari-lite
VL2402



Abstract VR8



Getlit G Scan 250

MOVING HEAD - WASH (continued)

Item (lamp, power consumption) Colour; CTO/CTB; Beam Angles; Effects Control; Other Features; Price

High End Systems Studio Beam (MSR700SA, 1000VA) Colour: CMY plus 3 fixed colours-CTO/CTB: CTO filter; Beam Angles: Zoom 15-30°; Effects/Control: Beam shaping, variable frost, electronic strobe; Features: Flicker free ballast, electronic strobe, PC lens \$16,000 approx trade price

High End Systems StudioColour 250 (MSD250/2, 375VA) Colour: CMY plus 7 fixed colours-CTO/CTB: CTO filter; Beam Angles: Zoom 21-25°; Effects/Control: Beam Shaping Elec Focus, 7 Litho Gobos, 4 Effects; Options: LAD (Laser Aiming Device); Features: Iris, frost, 3 & 5 pin DMX, onboard programming \$8,000 approx trade price

High End Systems StudioColour 575 (MSR575, 700VA) Colour: CMY plus 5 fixed colours-CTO/CTB: CTO filter; Beam Angles: Zoom 8-22°; Effects/Control: Beam Shaping; Features: convection cooled silent operation \$15,000 approx trade price

Martin Mac 2000 Wash (1200HMI, 1920VA) Colour: CMY+ 2 Col Wheels-CTO/CTB: variable wheel; Beam Angles: up to 80°; Effects/Control: PC or Fresnel lens options; Options: motorised barndoors; Features: electronic ballast standard POA

Martin Mac 300 (MSD250, 300VA) Colour: CMY-CTO/CTB: optional dichroic filter; Beam Angles: 18° standard; Effects/Control: variable frost filter; Options: optional 59° diffusion lens; \$5,999

Martin Mac 600 (MSR575, 960VA) Colour: CMY+ 1 Col Wheels-CTO/CTB: Dichroic CTC filter; Beam Angles: 25° standard; Effects/Control: 2 beam shapers & frost filter; Options: wide angle lens 65°; Features: electronic ballast available \$11,999

Martin Mini Mac (150HTI, 200VA) Colour: Col Wheel-CTO/CTB;; Beam Angles: 40° (optional 23°); \$3,599

Robe Wash 150XT (CDM150SA/T) Colour: 11 colours-CTO/CTB;; Beam Angles: 20°; Effects/Control: PC lens; Features: shutter, dimmer, macros, on board programming \$2,750

Robe Wash 250XT (MSD250/2) Col: CMY plus 3 static colours-CTO/CTB: 2 CTO filters; Beam Angles: 8-22° manual zoom; Effects/Control: beam shaping, frost filter; Features: strobe, uv, built in macros, remote control fan \$4,700

Robe Wash 575XT (MSD575/2) Colour: CMY plus 4 static colours-CTO/CTB: 2 Cto filters; Beam Angles: Zoom 7-28°; Effects/Control: fresnel lens, beam shaping, frost filter; Features: strobe, uv, built in macros, remote control fan \$8,200

SGM Giotto Wash 1200 (MSR1200SA) Col: CMY plus 5 fixed colours-CTO/CTB: CTO filter; Beam Angles: Zoom 18-35°; Effects/Control: Fresnel Lens; Options: Motorised Barndoors; Features: Flicker free electronic ballast \$15,000

SGM Giotto Wash 400 (MSR400SA, 600VA) Col: CMY plus 7 fixed colours-CTO/CTB: separate graduated CT wheel; Beam Angles: Zoom 9-24°; Effects/Control: Beam Shaping; Features: PC Lens, Flicker free elec. ballast \$12,000

TAS ProWash 250 (HSD/MSD 250, 480VA) Colour: CMY + c/wheel with 7 colours-CTO/CTB: on c/wheel + UV; Beam Angles: 8-22° + soft filter; Effects/Control: rotating beam shaping filter; Features: DMX strobe and Dimmer \$4,580

TAS ProWash 575 (HSD/MSD 575, 1440VA) Col: CMY + c/wheel with 8 colours-CTO/CTB: on c/wheel + UV; Beam Angles: 8-22° + soft filter; Effects/Control: rotating beam shaping filter; Features: DMX strobe and Dimmer \$6,776

Vari-lite VL2402 (MSR 700 SA) Colour: CMY + 12 way colour wheel-CTO/CTB: CTC Colour Filters Available; Beam Angles: High speed (1.8s) 12-57° Beam Spreader mechanism; Options: Full range of colour filters available; Features: Hangs on 19" Centres. 25kg POA

Vari-lite VL2416 (MSR 1200 SA) Colour: Patented DICHRO*TUNE Radial CMY System. Changes in 0.35 seconds-CTO/CTB;; Beam Angles: 5-55° . 'Beam Spreader' zoom mechanism; Effects/Control: Rotating Par 64 type front lenses; Options: Beam Collimator for very tight 2.5° beam; Features: Lightweight-only 28.6kg POA

MOVING MIRROR

Item (lamp, power consumption) Colour; CTO/CTB; Beam Angles; Effects Control; Other Features; Price

Abstract VR8 (HQI150) Colour: 12 fixed colours-CTO/CTB;; Effects/Control: 12 static gobos; Features: lamp incl \$2,420

Abstract VR8 Rotating (HQI150) Colour: 12 fixed colours-CTO/CTB;; Effects/Control: 8 rotating interchangeable gobos; Features: lamp incl \$3,150

Clay Paky Golden Scan 3 (HMI1200 WGS, 1920VA) Colour: 1 wheel /7 colours + open-CTO/CTB: 2 filters; Beam Angles: 11° standard; Effects/Control: 4 rotatable gobos, prisim, frost; Options: touring version with PFC; \$8,999

Clay Paky Miniscan HPE (HTI300, 350VA) Colour: 11 col / 3 col splits-CTO/CTB;; Beam Angles: 17° standard; Effects/Control: 6 rotating gobos, 2 frosts, prism; Options: wide angle lens; \$4,599

Clay Paky Stage Scan (HMI1200 WGS, 1920VA) Colour: CMY-CTO/CTB: 2 filters; Beam Angles: 13-25 Multi step zoom; Effects/Control: 4 static 4 rotating gobos 3 Frosts 5 way prisim; \$15,999

Clay Paky Super Scan Zoom (HMI1200 WGS, 1920VA) Colour: CMY + 1 wheel (7 col and open)-CTO/CTB: 2 filters; Beam Angles: 8 to 16°; Effects/Control: 4 static 4 rotating gobos 3 Frosts 5 way prisim; Features: Built in PFC POA

DTS Bravoscan 3 (HMI 575 W discharge lamp, 800 VA in built factor correction) Colour: CMY-CTO/CTB;; \$1,904

DTS Easyscan (Halogen Lamp 250W24V G6,35) Colour: CMY-CTO/CTB;; \$777

Elation JOY-300 (HTI300) Colour: 9 colours + UV + White (28 colour combinations)-CTO/CTB;; Beam Angles: 16° beam angle; Effects/Control: 3+5 way prism, Frost filter, Dimmer/Shutter; Features: 5 Rotating + 3 glass + 1 fixed gobo, LED display \$3,499

Elation VISION-575 (HMI575) Colour: 11 colours + 32k + 56k filters, UV + White -CTO/CTB;; Beam Angles: 15° beam angle (optional 12 & 18° lenses); Effects/Control: Rotating prism, Frost, Dimmer/Focus/Shutter/Iris;

Features: 6 interchangeable + 11 fixed gobos + strobing \$3,499

Elation VISION-575 (MSD200) Colour: 11 colours + 32k + 56k filters, UV + White -CTO/CTB;; Beam Angles: 15° beam angle; Effects/Control: Rotating prism, Frost, Dimmer/Focus/Shutter/Iris; Features: 6 interchangeable + 11 fixed gobos + strobing \$2,999

FAL FAL2000 (PF3013) (HSD200, 900VA) Colour: 9 colours + 2 colour temperature correction filters + White-CTO/CTB;; Beam Angles: 13.2° Beam angle; Effects/Control: 4 rotating + 3 fixed gobos, prism, strobe; Features: rainbow effect \$3,899

FAL Modulo (PF4080) (MSD250, 600VA) Colour: 9 + white; Beam Angles: 15° beam angle; Effects/Control: 7 gobos + white, Fast, Continuous 360° Pan & Tilt; Features: strobe, Mountable to any angle \$4,999

FAL Roulette 575 (PF3055) (HMI575, 800VA) Colour: 9 colours + 1 colour temperature correction filters+ white-CTO/CTB;; Beam Angles: 13.58° beam angle; Effects/Control: 7 rotating + 7 fixed gobos + clear, Prism + strobe; Features: Strobe, Frost + dimmer \$4,799

FAL XLD 2500 (PF3071) (HMI2500, 3500VA) Colour: 7 colours + white + bi-colour positioning-CTO/CTB;; Beam Angles: Remote selectable 10.3°, 12.2° + 14.8°; Effects/Control: 2 Bi-Directional Prisms, 4 changeable (56mm) gobo; Features: Strobe, Frost, dimmer + Focus via remote control. \$15,990

Futurelight SC-250 (HIT 150w, 360VA) Colour: 15 colour on 1 disc (inc 3 bi-colour + UV)-CTO/CTB;; Beam Angles: 19°; Effects/Control: dimmer + strobe; Features: 9 rotating gobos with indexing \$1,712

Futurelight SC-570 (HSD/MSD 250, 480VA) Colour: 1 disc of 12 colours + CTO/CTB/UV filters-CTO/CTB: on FX wheel; Beam Angles: 15°; Effects/Control: rotating prism, frost man focus, dimmer + strobe; Features: 9 interchangeable gobos \$2,792

Futurelight SC-780 (HMI 575, 1440VA) Colour: 1 disc of 12 colours + CTO/CTB/UV filters-CTO/CTB: on FX wheel; Beam Angles: 15°; Effects/Control: prism, focus, rot prism, UV, dual gobo wheels; Features: 11 static + 6 rotating gobos + iris \$5,286

Futurelight SC-980 (HMI 1200, 2160VA) Colour: 2 discs of 9 colours inc CTO/CTB/UV-CTO/CTB: on 2nd colour wheel; Beam Angles: 15 / 21 / 28 via DMX; Effects/Control: prism, focus, rot prism, UV, dual gobo wheels; Features: 5 static + 4 rot gobos, multi-step zoom + iris \$8,456

Geni Mizar (HMI1200 WGS, 1920VA) Colour: 1 wheel (7 col and open)-CTO/CTB: 3200K filter; Beam Angles: 14.4°; Effects/Control: rotatable prism, 5 rotatable gobos, remote focus;; Features: Small compact unit, can stand upright on stage \$5,699

Geni Mojo Scan 2 (EHJ 24v 250w, 350VA) Colour: 1 wheel (14 colours)-CTO/CTB;; Beam Angles: 14.24°; Effects/Control: 13 gobos; \$899

Geni Shiva 250 (EHJ 24v 250w, 350VA) Colour: 1 wheel (9 + open)-CTO/CTB;; Beam Angles: 14.25°; Effects/Control: 9 gobos, strobe, dimmer; \$1,199

Geni Shiva R (MSD 200, 300VA) Colour: 1 wheel (9 + open)-CTO/CTB;; Beam Angles: 14.25°; Effects/Control: 6 gobos with rotation, strobe, dimmer; \$1,999

Getlit G Scan 250 (MSD/HSD 250 GY 9.5/2, 500VA) Colour: 11 dichroic filters plus open-CTO/CTB: colour temp filters 3200K, 5600K and UV filter; Beam Angles: Standard 15 degree; Effects/Control: Motorised focus, smooth dimmer, 3 facet prism; Options: 12 and 18 degree beam angles; Features: special effects wheel with frost filter \$2,047

Getlit G Scan 575 (HMI 575 GS, 900VA) Colour: 11 dichroic filters plus open-CTO/CTB: 5600°K and 3200°K CTF; Beam Angles: Standard 15 degree; Effects/Control: Motorized focus + Iris 3 facet prism, combined dimmer shutter; Options: 12 and 18 degree beam angles; Features: special effects wheel with frost filter \$2,409

High End Systems CyberLight Turbo (MSR1200SA, 1300VA) Colour: CMY plus 8 static colours plus corrections-CTO/CTB: 2 CT filters; Beam Angles: Variable Zoom 13-22 & 16-26°; Effects/Control: 4 rotating indexble gobos, 8 static gobos; Features: variable frost & strobe, iris \$19,000 approx trade price



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Martin Mx-1



Coemar i Cyc250

Each of the distributors were given the opportunity to expand a little further on their range of products. Here is what they had to say:

Coemar have two ranges for their moving yoke lights. The "i" range is the top of the line version with the best optics and features. The "Pro" range gives the same Coemar quality with a slightly reduced set of features, at a far lower price.

The **ColourLED** range of colour changers are manufactured in Melbourne to world class quality. Custom units are also available at reasonable pricing.

DTS, the world's leading producer of par cans, was founded in 1980. Thanks to a constant research and the use of the most advanced technologies, D.T.S has become a middle size company employing 90 people. DTS offers a great variety of products and services as a plate turning on behalf of a third party, professional lighting for the entertainment industry and civil lighting. The high level of quality and reliability achieved at all stage of produc-

MOVING MIRROR (continued)

Item (lamp, power consumption) Colour; CTO/CTB; Beam Angles; Effects Control; Other Features; Price

High End Systems Technobeam i (MSR575, 375VA) Colour: 12 static colours-CTO/CTB: 1 CTO filter; Beam Angles: 11-17° manual zoom; Effects/Control: 7 lithos plus 4 effects all rotating indexable; Options: LAD (laser Aiming Device); Features: remote focus, strobe, iris \$8,000 approx trade price

High End Systems Trackspot (M33, 350VA) Colour: 8 static colours-CTO/CTB: CTB filter; Beam Angles: 12°; Effects/Control: 9 static gobos; Options: strobe, linear dimming; \$3,600 approx trade price

Infinity Super Leo ARC (HQI150) Colour: 17 Colour/Gobos-CTO/CTB;; \$1,040

Infinity Winner (ELC5/H) Colour: 11 fixed colours-CTO/CTB;; Effects/Control: 15 gobos; Features: strobe \$585

Lightemotion KF20 (MSD200, 280VA) Colour: 9 + white; Beam Angles: 13.6° beam angle; Effects/Control: Strobe, Rainbow, 7 gobos + clear; Features: Moulded Plastic Housing, DMX512, Music Activation \$1,199

Lightemotion PANDA (EFR, 180VA) Colour: 14 colours; Beam Angles: 14.6° beam angle; Effects/Control: Strobe, Rainbow, 14 coloured gobos + clear; Features: Moulded Plastic Housing, DMX512, Music Activation \$699

Martin 518 (MSD250, 300VA) Colour: 1 wheel + 14 colours-CTO/CTB: 2 x CTC filters; Beam Angles: 16° manual focus; Effects/Control: Frost filter/ prism; Options: wide angle lens (16°); Features: optional stand alone with music trigger POA

Martin 918 (HSR575, 960VA) Colour: 2 wheels (10 col each)-CTO/CTB: interchangeable colours; Beam Angles: 17°; Effects/Control: 2 gobo wheels (1 rotate/indexable); Options: wide angle lens (23.5°); Features: Same functionality as Mac500 POA

Martin Mx 4 (CDM 150, 200VA) Colour: 1 wheel 15 cols + 2 col splits and open-CTO/CTB;; Beam Angles: 16° manual focus; Effects/Control: 19 gobos; Options: wide angle lens (28°); Features: multiple stand alone modes \$1,999

Martin Mx-1 (ELC 5 (250w 24v), 300VA) Colour: 11 col / 3 col splits-CTO/CTB;; Beam Angles: 16° manual focus; Effects/Control: 18 gobos; Options: wide angle lens (28°); Features: multiple stand alone modes \$1,299

Robe DJScan 150XT (HSD150) Colour: 11 static colours plus UV and 3 multicolour filters-CTO/CTB;; Beam Angles: 19°; Effects/Control: 13 static gobos; \$1,500

Robe Scan 250XT (MSD250/2) Colour: 11 static colours-CTO/CTB;; Beam Angles: 15°; Effects/Control: 6 rotating indexable gobos; Options: 12 or 18° lens; Features: 3facet prism, smooth dimmer, shutter, strobe \$3,500

SGM Gallileo IV 1200 Live (HMI 1200) Colour: 16 fixed colours-CTO/CTB: CTO filter; Effects/Control: 2 gobo wheels, 4 fixed, 4 rotating; Features: Prism, Iris, Electronic Ballast \$10,700

SGM Victory II 250 (M33 24V 250W) Colour: 16 fixed colours-CTO/CTB: CTB filter; Effects/Control: 7 gobos-4 rotating, all interchangeable; Features: frost, rotating prism, linear dimming \$3,900

TAS CompactScan (HSD/MSD 250, 480VA) Colour: 1 disc of 12 colours + CTO/CTB/UV filters-CTO/CTB: on FX wheel; Beam Angles: 15°; Effects/Control: rotating prism, frost man focus, dimmer + strobe; Features: 9 interchangeable gobos \$2,792

TAS DigiScan (HMI 575, 1440VA) Colour: 1 disc of 12 colours + CTO/CTB/UV filters-CTO/CTB: on FX wheel; Beam Angles: 15°; Effects/Control: prism, focus, rot prism, UV, dual gobo wheels; Features: 11 static + 6 rotating gobos + iris \$5,286

TAS HT Scan (HMI 1200, 2160VA) Colour: 2 discs of 9 colours inc CTO/CTB/UV-CTO/CTB: on 2nd colour wheel; Beam Angles: 15 / 21 / 28 via DMX; Effects/Control: prism, focus, rot prism, UV, dual gobo wheels; Features: 5 static + 4 rot gobos, multi-step zoom + iris \$8,456

COLOUR CHANGERS AND LED EFFECTS

Item - Type of light (lamp, power consumption) Colour; Beam Angles; Effects Control; Other Features; Price

Artistic Licence Colour-Fill Colour wash (LED fixture VAith 100000hr, 30w @ 24v) Colour: RGB; Beam Angles: 23°; Effects/Control: millions of colours possible via low voltage dimmer; Features: Interior soft wash fitting \$2,100

Artistic Licence Terra-Fill 250 Colour wash (LED fixture VAith 100000 Hrs, 24w @ 24v) Colour: RGB; Beam Angles: 23°; Effects/Control: millions of colours possible via low voltage dimmer; Features: Inground lantern driveway rated \$2,900

Artistic Licence Water-Fill Colour wash (LED fixture VAith 100000 Hrs, 24w @ 24v) Colour: RGB; Beam Angles: 23°; Effects/Control: millions of colours possible via low voltage dimmer; Features: 1m underwater full IP rated \$2,500

Artistic Licence Water-Pipe 1000 ext 1m strip light (LED fixture VAith 100000hr, 18w @ 24v) Colour: RGB; Beam Angles: 45/100°; Effects/Control: millions of colours possible via low voltage dimmer; Options: Various lengths available; Features: Exterior IP 65 rated \$2,700

Clay Paky Combi Colour 575 spot (HMI575, 640VA) Colour: 2 wheels (6 col and white); Beam Angles: Standard 20°; Effects/Control: 2 frosts, dimmer, strobe.; Options: 10° and 6° lens; \$5,499

Clay Paky CP Colour 150 Flood (CDM150, 200VA) Colour: CMY; Beam Angles: 10-80° (depending upon lens); Effects/Control: mechanical dimmer; Options: Barndoors, hanging brackets; \$3,499

Clay Paky CP Colour 250 Flood (HSD250, 300VA) Colour: CMY; Beam Angles: 10-80° (depending upon lens); Effects/Control: mechanical dimmer; Options: Barndoors, hanging brackets; \$3,999

Clay Paky CP Colour 400 Flood (HSR400, 450VA) Colour: CMY; Beam Angles: 10-80° (depending upon lens); Effects/Control: mechanical dimmer; Options: Barndoors, hanging brackets; \$4,499

Coemar Colour Cyc 250 LX Flood (HSD/MSD 250, 480VA) Colour: 1 disc with 5 colours; Beam Angles: 9.5, 13.5, 24, 55 + 71 via included lenses; Effects/Control: rotatable beam shaping via lenses; Options: DR1 (remote display replicator); \$3,004

MARKETREPORT

tion has been certified by the quality system standard UNI-EN-ISO 9001

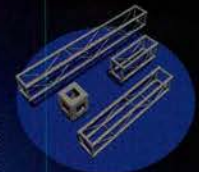
With evolution comes change. **Elation Professionals** specializes in premium lighting products that offer superior performance for professional stage, club and institutional use. The company offers a complete product line that includes special effects, intelligent lights, controllers, stage lighting and accessories. For more information on any Elation products logon to www.elationlighting.com"

Futurelight are one of the most respected mid priced manufacturers of professional robotic lights.

High End Systems has consistently been a quality manufacturer and the choice of touring professionals worldwide. ULA and High End offer a 2 Year Factory Warranty on High End Systems products

The new **Martin Mac 2000** wash is the one of the brightest fixtures available (33000 lumens), consistent with the Mac 2000 series, electronic ballast, flat field and colour, zoom, super wide angle lens and option of motorised barndoors.

TAS is a marketing name owned by Coemar SpA of Italy. It is used for an affordable range of hi-tech lighting fixtures. Italian technology at leading prices



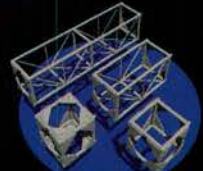
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300mm Alloy Tri Truss



400mm Alloy Box Truss



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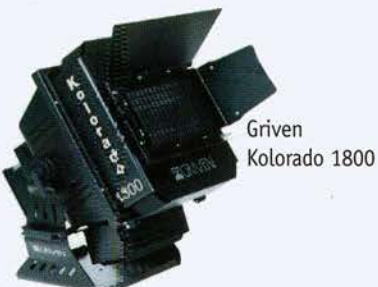


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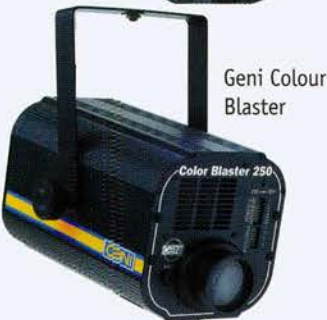
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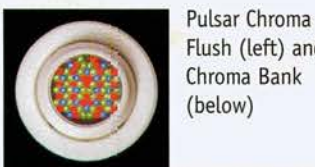
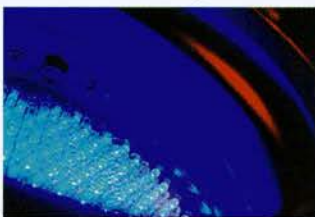
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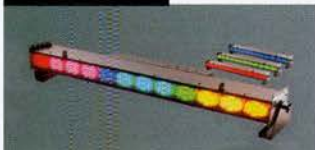
Griven
KolorStream
2500



Geni Colour
Blaster



Pulsar Chroma
Flush (left) and
Chroma Bank
(below)



COLOUR CHANGERS AND LED EFFECTS (continued)

Item - Type of light (lamp, power consumption) Colour; Beam Angles; Effects Control; Other Features; Price

Coemar i Cyc250 Flood (HSD/MSD 250, 480VA) Colour: CMY; Beam Angles: 9.5, 13.5, 24, 55 + 71 via included lenses; Effects/Control: rotatable beam shaping via lenses; Options: DR1 (remote display replicator); Features: DMX controlled dimmer \$4,258

ColourLED IP66 LED Wash (48VA) Colour: RGB; Beam Angles: 22°; Effects/Control: DMX control of RGB + intensity; Options: 24v DC PSU; Features: 100,000 hour estimated lamp life \$1,100

ColourLED Linear LED strip light (48VA) Colour: RGB; Beam Angles: 22°; Effects/Control: DMX control of RGB + intensity; Options: 24v DC PSU; Features: 100,000 hour estimated lamp life P.O.A.

ColourLED Par 46 LED Wash (48VA) Colour: RGB; Beam Angles: 22°; Effects/Control: DMX control of RGB + intensity; Options: 24v DC PSU; Features: 100,000 hour estimated lamp life \$950

ColourLED RSL-53 module Wash (48VA) Colour: RGB; Beam Angles: 22°; Effects/Control: DMX control of RGB + intensity; Options: 24v DC PSU; Features: 100,000 hour estimated lamp life \$650

DTS 250W 24V (250 VA 24V G6.35 halogen lamp) Colour: CMY; \$729

DTS MSD 250 (MSD 250 discharge lamp) Colour: CMY; \$793

Elation Pro Colour Spot (SC150) Colour: 10 colours + 10 split colours + White; Beam Angles: 10-19° Beam angle; Effects/Control: 0-100% Dimming, Frost filter, DMX512; Features: Colour Scroll \$-

Elation Stage Colour Flood (3x HPL575) Colour: RGB colour mixing; Effects/Control: 0-100% Dimming, DMX 512;; Features: A Par-can with RG,B colour mixing. \$999

FAL Colour Tronic (PF3008) (HMI1200, 1900VA) Colour: 2 discs 18 colours (31 colour combinations); Beam Angles: 25°; Effects/Control: smooth dimming, Fast strob, 2x 3D effects filters; Features: Rainbow effect \$4,499

FAL Ground Colour (PF2972) Outdoor (ENL, 60VA) Colour: 6 colours + white; Effects/Control: Link upto 4 units, Rainbow, speed adjust; Features: Water proof upto 1m, 4000 hr lamp, DMX512 \$799 per unit

FAL Tri-Colour (PF2945) (HSR1200, 1900VA) Colour: CMY wheel + RGB and Amber (virtually infinite combinations); Beam Angles: 16° to 26° beam Angles; Effects/Control: Dimming, Shutter, Rainbow effect; \$4,499

Futurelight CC-200 Profile (HSD/MSD 250, 480VA) Colour: 2 discs of 12 colours; Beam Angles: 11-20° + DMX frost filter; Effects/Control: 2 gobos, 4 pseudo iris apertures, dimmer + strobe; Features: DMX controlled dimmer, strobe and frost mode \$1,636

Geni Colour Blaster spot (EHJ 24v 250VA, 350VA) Colour: 1 wheel (10 col + open); Beam Angles: 14°; Effects/Control: 0-100% dimming; Features: audio or DMX control \$649

Geni Mojo Colour spot (EHJ 24v 250VA, 350VA) Colour: 1 wheel (15 colour + white); Beam Angles: 14°; Features: audio or DMX control \$459

Getlit G Whizz Dichroic downlight (dichroic 50w, approx 80w at 240v) Colour: 1 disc 6 colours plus white; Beam Angles: 38 degree; Effects/Control: can be wired to have dimming control; Features: Colour scrolls from 1 sec to 15min \$661

Griven Kaliedo 575 flood (MSD575) Colour: CMY; Features: IP Rated \$5,800

Griven Kolorado 1800 flood (MHD1800) Colour: CMY; Features: IP Rated \$9,200

Griven KolorClip 150 flood (CDM150SA/T) Colour;; Features: IP Rated \$1,999

Griven KolorStream 2500 beam (HMI2500) Colour: CMY; Features: IP Rated \$12,150

High End Systems ColourPro Fx Profile (MSD250/2, 375VA) Colour: CMY; Beam Angles: Zoom 17-37°; Features: strobe, twinkle wheel for fibre optics \$4,600 approx trade price

High End Systems ColourPro Hx Profile (MSD250/2, 375VA) Colour: CMY; Beam Angles: Zoom 17-37°; Effects/Control: Beam shaping, strobe, frost; Features: strobe, woods filter \$5,000 approx trade price

High End Systems ColourPro Hxi Profile (MSD250/2, 375VA) Colour: CMY; Beam Angles: Zoom 17-37°; Features: strobe, woods filter, iris \$5,000 approx trade price

Martin CX-2 spot (ELC 5 (250VA 24v), 300VA) Colour: 1 wheel 15 col; Beam Angles: 5 various beam angles available; Effects/Control: electronic dimmer / strobe; Options: 28° wide angle lens; Features: Econo mode (reduced power) \$1,099

Martin CX-4 spot (CDM150, 200VA) Col: 2 wheels (9 cols); Beam Angles: 5 various beam angles available; Effects/Control: mechanical dimmer/strobe; Options: 28° wide angle lens; Features: master slave configurable \$1,799

Martin Pro 400 Spot (MSD200, 250VA) Colour: 2 wheels 12 cols; Beam Angles: 5-33° via lenses; Effects/Control: variable strobe /mech dimmer; Options: 33° wide angle lens; Features: CTC filters \$1,899

Pulsar Chroma Bank bank of 12 LED Floods (LED, Max 150w) Colour: RGB LEDs; Beam Angles: Fixed; Effects/Control: DMX Controlled via special power supply; \$14,837

Pulsar ChromaFlush LED Flood light (LED, Max 50w) Colour: RGB LEDs; Beam Angles: Fixed; Effects/Control: DMX Controlled via special power supply; Options: Up to twelve units controlled per supply; Features: recessed downlight \$1,132

Pulsar ChromaLight LED Flood light (LED, Max 50w) Col: RGB LEDs; Beam Angles: Fixed; Effects/Control: DMX Controlled via special power supply; Features: Up to 12 units controlled per supply, adjustable down light \$1,132

Pulsar ChromaPanel Tile Effect Panel (LED, Max 50w) Colour: RGB LEDs; Beam Angles: n/a; Effects/Control: DMX Controlled via special power supply; Options: 600x600 Panel; Features: Intended for multiple unit stacking \$1,761

Robe Beam 250XT Profile (MSD250/2) Colour: 72 combinations over 2 wheels; Beam Angles: Zoom 11-20°; Effects/Control: frost filter; Features: shutter, dimmer \$1,900

Robe EColour250XT Fresnel (MSD250/2) Colour: CMY; Beam Angles: Manual Zoom 8-22°; Effects/Control: frost filter; Features: convection cooled, IP67, remote lamp off \$5,200

SGM ColourLab250 Profile (M33 24V 250VA) Colour: 39 colour combinations; Effects/Control: 7 position gobo

wheel; Features: CTB colour correction, strobe, linear dimming \$2,650

TAS Colour Beam Profile (HSD/MSD 250, 480VA) Colour: 2 discs of 12 colours; Beam Angles: 11-20° + DMX frost filter; Effects/Control: 2 gobos, 4 pseudo iris aperatures, dimmer + strobe; Features: DMX controlled dimmer, strobe and frost mode \$1,636

DJ AND CLUB EFFECTS

Item (lamp, power consumption) Description; Beam Control; Other Features; Price

Clay Paky Astroraggi Power (HSR400, 550VA) Description: Centrepiece effect generating 102 beams of light; Beam Control: beam direction rotation and speed control; Features: 0 -100% dimmer \$4,599

Clay Paky Astroraggi Twin (150w 24v, 500VA) Description: Similar to Astroraggi Power but with 2 lamps internally; Beam Control: beam direction rotation and speed control; Features: 2 lamps in 1 housing providing multiple beam effects \$2,299

Clay Paky Astroscan (1200 HMI, 1920VA) Description: Pyramid mirror head on a golden scan body; Beam Control: 4 rotatable gobos iris, dimmer, strobe; Features: built in PFC \$9,999

Clay Paky Tornado (HMI575, 650VA) Description: 1 lamp source with 6 mirror heads; Beam Control: 6 white or 6 different colour; Features: strobe, rainbow effect POA

DTS Fantasy-star () Description: moonflower; Beam Control; \$230

DTS Fog 1000 (, 1000 VA) Description: fogmachine; Beam Control; \$198

DTS Fog 2004 DMX (, 1800 VA) Description: fogmachine; Beam Control; \$793

DTS Strobe dmx (High quality Xenon Linear lamp XOP 15) Description: Strobe; Beam Control; \$634

Geni Burst (HSD200, 250VA) Description: Rotatable drum mirror with colours and gobos; Beam Control: pan and tilt on barrel mirror; Features: Audio and DMX control \$1,499

Geni Mojo Moon 2 (EHJ 24 v 250w, 300VA) Description: Coloured moon flower mirror with rotate and tilt; Beam Control; Features: Audio and DMX control \$399

Geni Mojo Ray (EHJ 24 v 250w, 300VA) Description: multi colour rays that spin and twist; Beam Control; Features: Audio and DMX control \$459

Geni Spyro G (EHJ 24 v 250w, 300VA) Description: moonflower effects that spin and twist; Beam Control; Features: Audio and DMX control \$749

Infinity Rover (ELC5/H) Description: 11 fixed colours, 15 gobos; Beam Control; Features: strobe, barrel "revolution effect" \$595

Infinity Super Scimitar ARC (HQI150) Description: 17 colour/gobos; Beam Control; Features: strobe, barrel "revolution effect" \$1,040

Martin Acrobat (ELC 5, 300VA) Description: Over 50 ever-changing and moving colour gobo beams; Beam Control: 18 gobos / 14 cols; Features: pan/tilt revolving mirror \$1,199

Martin Ego 1 (ELC 5, 300VA) Description: Razor sharp flower effect and new gobo combinations; Beam Control: precise optics and focus mixing gobos and colours; Features: Variable behavior-to adjust how aggressively the effect reacts to music \$999

Martin T Rex (ELC 5, 300VA) Description: 48 multi dynamic light beams; Beam Control: 19 gobos / colours; Features: Quad angled mirror \$899

Martin Wizard (MSD250, 320VA) Description: Full house club effect; Beam Control: 80 combinations available; Features: Rotating barrel mirror and moonflower dishes \$1,999



Martin Ego 1



Martin Wizard



Martin Acrobat

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Gangstar Studios

New: Genelec monitors.

Hindsong Studio

New Equipment - TC Electronic Unity DSP card for their O2R, with M2000 and Finalizer software - they report it sounds awesome!

Nu-Town Studios

Latest Project - Greg Hopping and the team at Nu-Town are currently producing the first single from international diva Wanda Dee's next album "I Found Myself In You". Wanda was the voice of the KLF and her album is due for international release in September.

Disk-Edits Pty Ltd

New Equipment - DTS encoding hardware. Full timecode imbedded encoding with real time decoding. Capable of all bit rates and supports audio CD encoding.

Latest Project - Recording of Adelaide Symphony Orchestra in their new Studio/Home, the "Grainger Studio", Hindley St Adelaide. The recording forms part of a series of educational material for the orchestra.

Southside Production Studio

New Equipment - DP3
Latest Project - Live Album Recording - 'Devoted' (Sun 14th July 2002) 12 Songs. Release for conference 'THE EDGE' September 2002

NSW

ARTIST	PRODUCER	ENGINEER	SESSION
Bush Traks +61 2 66891290 Ruth Miller (ruth@bushtraks.com) www.bushtraks.com digital multitrack studio			
Asia Lee	Brian Lee/Dave Highet	Dave Highet	Album
Evan Heaven	Evan Heaven	Dave Highet	Mixdown/master
Ewan James	Charlie McNeil	Dave Highet	Mixdown
Durga Babies	Michael Turner/Tim Tonkin	Dave Highet	Album
Damien Gerard Sound Studios +61 2 9555 1710 Marshall Cullen or Di Dofel (dgss@optusnet.com.au) www.damiengerard.com record, mix & master with William Bowden. New Protocols suite			
Grow your own volume 7	Russ Pilling/Marshall Cullen	Russ Pilling/Marshall Cullen	album
Shifter	Shifter	Russ Pilling(rec) William Bowden (master)	album
Nic Dalton/Half a cow	Nic Dalton	Russ Pilling	mixing
Five Flavoured	Five Flavoured	Dave Trump	record, mix ,master
Feral studios +61 2 62993224 Jon Robertson (replicate@austarmetro.com.au) 32 trk recording and mixing			
The rUg	Jon Robertson /band	Jon Robertson	demo
Malakai	Jon Robertson	Jon Robertson	demo
Kandi Doz It	Jon Robertson	Jon Robertson	album tracks
Gangstar Studios +61 2 4739 0451 Dave Dwyer / Rebecca Dwyer (gangstar.records@bigpond.com) www.gangstar.com.au 96 track digital recording & mastering suite			
Sarah Charlwood	Dave Dwyer / Rebecca Dwyer	Dave Dwyer	Demo/Album
Bernie Segegin	Dave Dwyer	Dave Dwyer	Album
Julie Woodward	Dave Dwyer	Dave Dwyer	Single
Glister	Dave Dwyer	Dave Dwyer	Mixing
Hindsong Studio +61 2 6582 7070 David & Lyn Hinds (hindsong@midcoast.com.au) Private Project Studio specialising in advertising jingle/soundtrack work and record/songwriting facility for owners' duo 'BALANCE'.			
Post for Film and Television			
Tamworth Country Music	David & Lyn Hinds	David & Lyn Hinds	Promo Video Soundtrack
Milkbar Recording Studios +61 2 9516 4559 Dave Sykes (info@milkbarstudios.tv) www.milkbarstudio.tv One stop shop for all your multiformat, surround sound, recording and mixing requirements			
Duncan James	Paul Mc Kercher and DC	Paul Mc Kercher	Album
Midstream	Dave Leslie	Mick Searge	EP & Single
Floyd Vincent	Floyd Vincent and Brent Clake	Brent Clarke	Album
Porcelain	Robbie Porter	Gareth Stuckey	Album
Nu-Town Studios +61 2 95163306 Greg Hopping (nutown@yahoo.com) Recording & production enviroment			
Wanda Dee	Greg Hopping	Sofie Loizou	Single
KEL	Greg Hopping	Greg Hopping	Album
Southern Out Post	Agent Patric	Sofie Loizou	Album
Voices of Life	Sofie Loizou	Mark Worrall	Album Demos
Soundwarp +61 2 9905 7144 (mastering@soundwarp.com.au) www.soundwarp.com.au Audio Mastering			
Jeremy Donovan	Ian Casey	Meredith Brooks	Album
Merv Benton	Canetoad	Meredith Brooks	Album
Peso Kim	Peso Kim	Meredith Brooks	Album
Toyota Gympie Muster	Trish Larfield	Bill Syrratt	4 x Compilation Set
Martin St James	John Rix	Meredith Brooks	Album
Studios 301 +61 2 9698 5888 Steve De Fina (steved@301.com.au) www.studios301.com Recording and mixing studios for all genres of music including full scale orchestral film scores			
2BL	Rob Feaster	Rob Feaster	Record and mix EP
Gangway	Daniel Vandenburg	Harry Vanda	Mixing
Stephen Rae	Daniel Denholm	Daniel Denholm	Mixing
Miss Radio	Tom Misner	Tom Misner	Mixing Album
Opera Australia	Richard Lush	Richard Lush	Recording
The Vault +61 2 9555 8298 James Cadsky (Cadsky@Ozemail.Com.Au) Ssl 4040e/G Mix Suite Protocols 5.1 Mix Plus 24i/o 48 Trk Analogue			
Peabody	David Trump	David Trump	Album Mix
Andy Kent	Andy Kent	Cameron Mc Cauley	Mastering
Jacqui Seczawa	Robbie Porter	Fabian Weston	Mixing
Trackdown Digital +61 2 9550 6890 Mike Duffy (tdmail@trackdown.com.au) www.trackdown.com.au 64 track ProTools digital studio - music and post audio			
Post for Film and Television			
Fairey Tale Police Department	Yg-Emtv T. Lista, K. Schiller, S. Ryan, E. Bell	Animated TV Series - Post Audio	
Tabaluga 3	Yg-Emtv T. Lista, K. Schiller, S. Ryan, E. Bell	Animated TV Series - Dialogue Record/Edit	

VIC

Crystal Mastering +61 3 9326 2318 Joe Carra Mastering Suite			
Inxs Remixes	Rachelle/Denny	John Ruberto	Mastering
Sgt Slick	Andy J	John Ruberto	Mastering
Groundswell	Band	Joe Carra	Mastering
Rhibosome	Band	Joe Carra	Mastering



Tascam's big adventure

It seemed like a good idea at the time. Tascam were rolling on a product wave with the DA 88 8 track DTRS digital audio recorder selling a storm. For almost as long as Connections has been around, which will be 10 years at Christmas, the venerable DA88 has been a mainstay of studio and post world, outselling the ADAT.

Within Teac Australia, the local distributors, a feeling emerged that the specialist pro audio market would be better served with an autonomous distribution arrangement, but still linked to the large Teac company.

Long serving Tascam product specialist Travers Falkiner left the building, and established his own distribution business, named Tascam SRD (Southern, Regional Distribution).

Almost immediately tensions developed between Teac, who retained the stock and the accounts, and Travers - who represented the product through the southern half of Australia.

Travers claimed Teac had dragged their heels establishing a Northern franchise, and that this lost the brand momentum.

It all came to nought, and accountancy firm Judson and Co are picking over the pieces. Teac executive Cameron Keating told Connections the firm spent considerable time sorting out the mess caused by the collapse of Travers' business, and that he expected to appoint several new reps soon.

Nothing has been heard of Travers Falkiner since.

Edensound Mastering +61 3 9682 9066 (mart@edensound.com.au) www.edensound.com.au Focusrite "Blue" Mastering Suite at Metropolis Melbourne

The Revelators	James Black/Joe Camilleri	Martin Pullan	Album
Unity Hall	Laurence Maddy	Martin Pullan	Single
Max Merritt and the Meteors	Wal Bishop	Martin Pullan	Live at Crcwn Album
Totally Gourdgeous	Penelope Swales/Sirri Metsar	Martin Pullan	Album

Lo Ricco Sound Studios +61 3 9701 6220 Marcello Lo Ricco (info@lssproductions.com) Recording Studio

The Love	Brad Meekoms	Marcello Lo Ricco	EP
Dominic Starvaggi	Marcello Lo Ricco	Marcello Lo Ricco	Album
Bernadette Conlon	Bernadette Conlon	Marcello Lo Ricco	Album
Zero Options	Band	Marcello Lo Ricco	Demo
Quips	Band	Marcello Lo Ricco	Demo

True Form Recording +61 3 9391 0907 Neil Gray (trueform87@hotmail.com) Mackie 24Tk. Recorder/Editor Classic Analogue Console/Outboard

Groundswell	Band	Simon Banko/Justin	Mix Album
Abreat	Neil/Band	Neil Gray	EP
The Living End	Neil/Band	Neil Gray	Demos

Wombat Rd Recording Studio +61 3 5145 4204 Barrie Clissold 24tr digital and 16tr analogue. Mastering and Duplication

Sheen	Band/Clissold	Barrie Clissold	Album Tracking
Oxygen	Band/Clissold	Barrie Clissold	Demo CD
George Rawlings	Barrie Clissold	Barrie Clissold	Album Tracking
Melb. Youth Orchestra	MYO	Barrie Clissold	Live Recording

Select Sound/Coral Sea Studios +61 7 4031 1760 J. Sarchfield (selectsound@austarnet.com.au) Cairns only acoustically-designed facility, full digital and analogue services provided

NZ Tourist Board	Nigel Pegrum/G. Pierson	Nigel Pegrum	8 CD music project
Andy Collins	Jimmy Mann	Nigel Pegrum	CD - Independent
Andrew Namoc	Nigel Pegrum/Brett Tyrell	Nigel Pegrum	Arts Queensland
In Touch Media	Mark Mannock	Nigel Pegrum	TV Jingles

Taramalin Sound +61 7 3208 9736 Allan Lahey (allan@taramalin.com.au) www.taramalin.com.au 32 tracks digital 16 tracks analogue and Pro Tools M5000 recording console

Gordon Mc Dowell	G McDowell	A Lahey	Album
Got Rot	Got Rot	A Lahey	EP
Eye In The Sky	K Freeman A Newman	K Freeman A Newman	Single
Sam Derchie	Sam Derchie	A Lahey	Album

Disk-Edits Pty Ltd +61 8 8340 1377 Neville (nclark@disk-edits.com.au) www.disk-edits.com.au Audio Mastering & Post production

Suffering City Vol.1	Suffa MC	Neville Clark	Mastering/CD manufacturing
Angelik	Super Nova	Peter Kolomitsev	Mastering/CD Manuf
Culture Of Kings Vol.2	Culture Of Kings	Peter Kolomitsev	Mastering/CD Manuf
RPM-7	Bordertown Christian Centre	Neville Clark	Mastering/CD Manuf

Post for Film and Television

The Heist	OASIS DVD	Neville Clark	Assembly/Prep. of 5.1 audio
4th Angel	OASIS DVD	Neville Clark	Prep. of 5.1 audio
Mad Max	OASIS DVD	Neville Clark	Scene music edits/DTS Encoding
Ali	OASIS DVD	Neville Clark	5.1 Prep/DTS Encode

Earsight 0407 970425 Steve Fieldhouse (earsight@senet.com.au) ProTools TDM MixPlus facility available for mixing, tracking, editing, remixing and soundtracks

Found Objects	S. Fieldhouse/Chris Lambert	S. Fieldhouse/Chris Lambert	CD tracking
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Southside Production Studio Matt Wever (wevers@iprimus.com.au) Southside Christian Centre, in-house production facility.

Southside Christian Centre	Matt Wever	Matt Wever	Album 'DEVOTED'
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Satellite Recording Studio +61 8 9470 4003 Darren Halifax (darren@satelliterecording.com) www.satelliterecording.com Pro Tools Mix Plus. Acoustically purpose built recording room.

Telstra Mobile Net	Suzie	Darren Halifax	Audio for annual production
Rhondas Organ	Rhondas Organ	Darren Halifax	Demo
The Dave Mann Collective	Dave Mann	Darren Halifax	Single
Mr Sandman	Mr Sandman	Darren Halifax	Demo

Sonic Lab +61 8 9375 3902 Mark Whitehouse (info@procop.com.au) www.procop.com.au

Tonga Choir	Elizabeth Baker	Mark Whitehouse	Mastering
Robyn Henderson	David Price	Mark Whitehouse	Record/Edit
Alien Love	Ben Glatzer	Mark Whitehouse	Mastering
Kate Modby		Liam Collins	DVD Authoring
Crimes of the Promary	Ben Glatzer	Mark Whitehouse	EP Mastering

Witzend +61 8 9336 1888 Alan Dawson (witzend@highway1.com.au) 16 track analog, 24 track digital

Richie Pavledis	Richie / Alan Dawson	Alan Dawson	Album
The Beat	Alan Dawson	Alan Dawson	Demo
The Bayou Bros	Alan Dawson	Alan Dawson	Album

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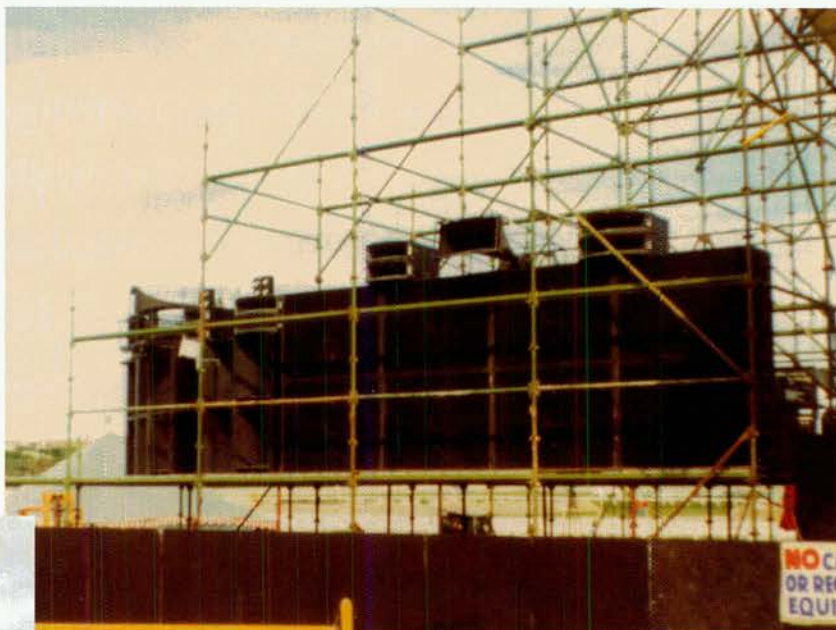
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Memories. Many bad ones. Here is the E.L.O. FOH cray, with a Revox reel to reel tucked away. The first documented case of musical augmentation or enhancement!



Here is the ELO PA, by Jands (above). Check out the long throw horns! This is circa 1977, we think. The stage is below, right.

TRUCKS. You gotta love them. This Acco (left) motored the Ted Mulry Gang around Oz at about 75kph. Jim Murray, valiant Sherbet roadie, attempts to right the D Series Ford, which fell over (at right).



An earlier Sherbet voyage, this time in a nice F350 (below).



STOLEN AUDIO VISUAL EQUIPMENT

Over the weekend of the 20th and 21st of July, the Sound Advice premises in Molonglo Mall was broken into. The following equipment was stolen:

- 1 x NEC MT-1056G XGA LCD Projector
Serial Number: 2640050NB
- 2 x Sony 32" Plasma Screen in Silver
Serial Numbers: 2000680, 2000686
- 2 x Pair Sony Plasma Speakers
Serial Number: 2000731, second not available
- 2 x Sony Adjustable Wall Plasma Brackets
- 2 x Pioneer 7300D DVD Players
Serial Numbers: BCNN000298AU, BCNN000281AU
- 2 x NAD T751 Digital Amplifiers
Serial Numbers: Not available
- 3 x Pair JBL Control 25 Speaker - Black

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90mm wide x 60mm tall	\$252 mono	\$324 colour
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I Want My MP Free

Hands up who hasn't downloaded music off the Internet? Hmm, I thought so. It's hard to find someone who hasn't - it's very easy, even with Napster gone.

Luckily for the record companies my tastes in music, like most baby boomers, lie in the dim dark past. I'm not interested in buttboy bands or the latest drivel from Snoop Doggy Doo, and if I see another unshaven doink with rings through his ears, nose, mouth wearing ill-fitting pyjamas and a tea-cosy on his head trying to be the new Mick Jagger I'll go heave.

I'm really only interested in music that, if it hasn't paid for itself many hundred times over by now then the companies just haven't been trying hard enough. And they try pretty hard.

The truth is, the recorded music industry in its present form is on the verge of dying. It might not have turned up its toes and shuffled off its electrical coil just yet, but its money making CD shaped heart has stopped pumping dollars into Conglomo Music Inc and is shrivelling up and starting to smell.

The CD is just not the cash cow that it once was. The genie's out of the bottle, Pandora's box has been opened, they're trying to shut the stable door after the horse has bolted.... (Hey Dunk, surely you could have thought of one more cliché - Ed)

Forget copy code, encryption or spoiler systems to prevent you from making a digital copy of your CD that can be bypassed with a black Texta. Music fans want the music. They're not bothered if it doesn't have 20 - 20KHz response - especially if it's going to be ripped to an MP3 with a built-in brick wall filter at 16KHz. If you're happy with the sound that comes out of your CD player, just plug its left and right outputs into your computer's sound card. You'll be hard pressed to pick the difference, and you might add some analogue warmth at the same time!

Call me a conspiracy theorist if you will (and where big business is concerned there's a pretty good chance of being right!) but I think the reason for the push to all digital systems is removing access to any analog I/C.

Everyone agrees that CDs are over-priced. Well over-priced. But the record companies are hooked on it. It gives them an artificially inflated paper value of their catalogue, which in turn looks good on the corporate accounts. But as Enron, Worldcom, HIH and many others have found out, what looks good on the accounts can be a long way from the truth!

Remember the Grammy awards this year? With that mewling and puking speech from Grammy chief Michael Greene* about music downloads. Jeez it should have come with a government health warning, or at least a "look away now if you don't want to lose your dinner" advisory.

And then he introduced three young uni students he had hired - Tyreena, Tarquin and Tyrone or something similar - who had managed to download more music tracks in three days than they could listen to in five lifetimes or some such crap. These poor bastards looked really uncomfortable as they realised they had been sucked into becoming 'the enemy'. Now music downloads had a face - it's those evil young people; lock 'em all up, all our misfortunes are their fault.

But are they? So what if sales are down 10%. Maybe people would rather spend money on food than an over-priced CD that might have only one or two good tracks on it. And surely the record companies have got to take some blame for the ills that have befallen them? Let's face it, signing Mariah Carey to an \$80 million contract, losing 10mill on the next album & then paying millions more to get out of the contract can't have been good for EMI's bottom line, can it? That's US dollars, too!

And why would you sign Michael Jackson to a contract with more digits than an international phone number, and then blow squillions on a fizzer like Invincible when it must have been obvious to anyone except Sony that he was yesterday's hero and well past his abuse-by date?

Some putting-your-own-house-in-order-first seems necessary here. I'm not a religious person, but didn't Jesus say (and I'm paraphrasing from Sunday School memories) that you should take the tree trunk out of your own eye before you complain about the speck of dirt in mine?

Let's compare a CD to a DVD. Your average CD costs anywhere from 50 grand to a couple of hundred thousand to record, has maybe nine or ten tracks, and sells for around twenty eight dollars Australian. A DVD of a movie like Shrek, say, can cost a couple of hundred million to make, has outtakes, bloopers, missing scenes, singalong stuff, commentary by the director, games and music tracks on it. And it costs about thirty six dollars Australian.

There's not really much comparison where value is concerned, is there?

But by a strange coincidence, the companies who produce these value packed movies on DVD are the same Engulf and Devour (thanks Mel Brooks) conglomerates that produce the CDs with 2 good songs and seven fillers. Are CD buyers being played for suckers or what?

CDs (at the right price) may become just part of the package, along with a tour poster, concert tickets, other tangible stuff THAT CAN'T BE DOWNLOADED and needs to be original to have any value. Maybe we'll end up giving the music away to sell the poster. Won't that be a can of worms for copyright and royalties?

Look, I'm not against copyright. I sell lots of copies of my book and I'm grateful for the copyright protection on it. And I've tried not to be greedy. Books cost a large amount of money to print and the retail price reflects the costs involved in publishing it. I've refused to give in to demands to digitise it and make it available on CD, even though I could make a truly staggering amount of profit; eg. \$1 cost and \$49 sell! (Think about that next time you buy some software - the other CD scam!)

But I haven't, for the simple reason that once it's digitised it's out there. All control over who has it and pays for it evaporates into ones and zeroes that can be distributed around the world in the blink of an eye. Doesn't matter if it's pictures, words or music - it's all data to a computer.

The following quote from online commentator 'Major Bellows' sums up the state of play in one succinct phrase. "Digital music is the meteor that may wipe out the recording industry dinosaurs unless they learn to evolve."

I wish I'd said that!

"Its money making CD shaped heart has stopped pumping dollars into Conglomo Music Inc and is shrivelling up and starting to smell"

* Michael Greene - a man who apparently earns US\$2 million a year from this 'non-profit' organisation!

Want to comment?
Email me at
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Forward Features List

Vision

March - Installation Projectors
May - Plasma Displays
July - Video distribution
September - Portable projectors
November - Systems Control

Lighting

February - Dimmers
April - DMX devices and networks
May - Effects and Consumables
June - Luminaires
August - Intelligent Lights
October - Outdoor LX equipment

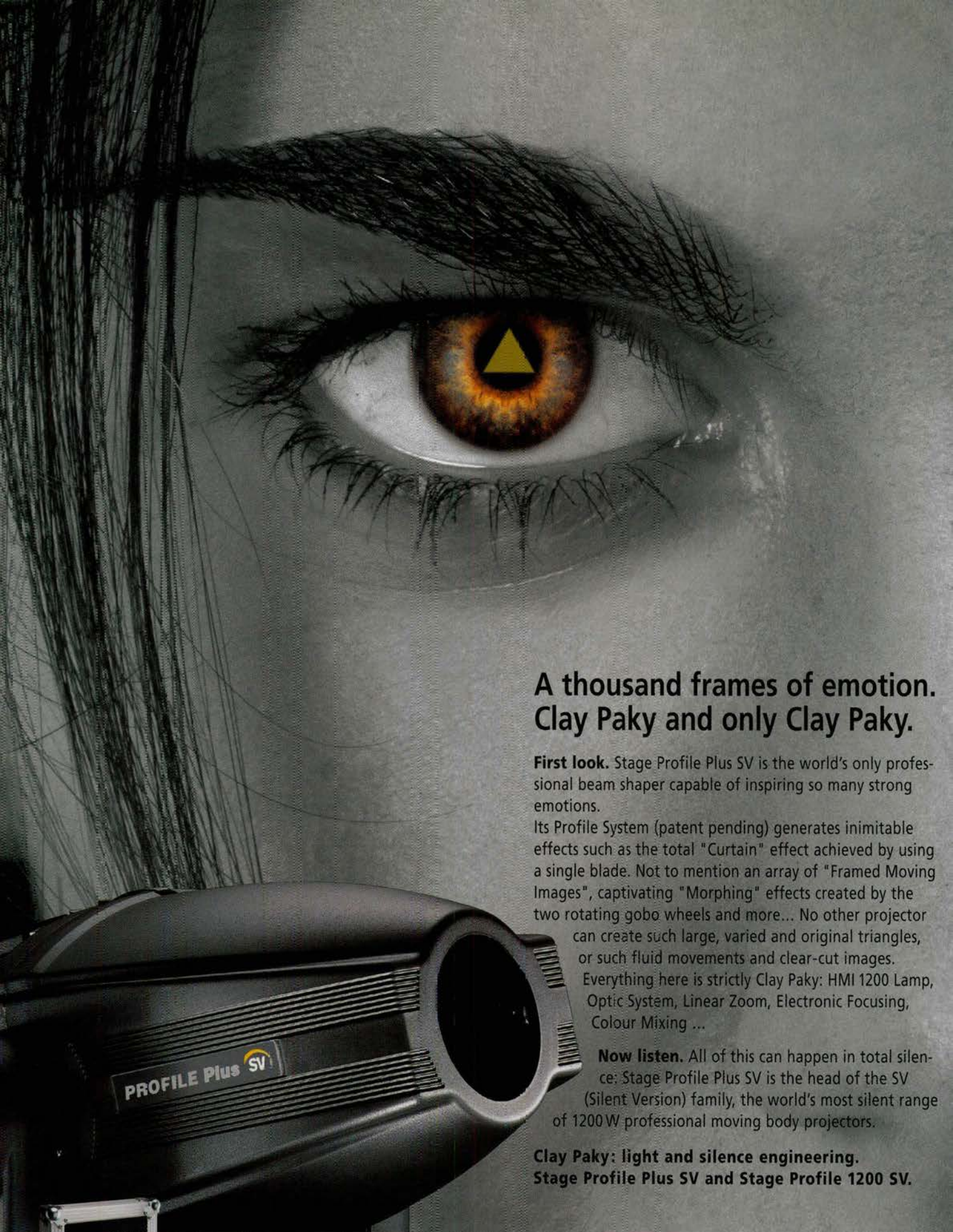
November - Rigging
December - Lighting Control Desks

Professional Audio

February - Digital Recorders
March - Microphones
April - Commercial Audio and Communications
May - Amplifiers
June - Small PA boxes
July - Wireless Audio
August - Analogue mixers
September - Signal Processing & Control
October - Studio Monitors and Headphones
November - Digital automated mixing consoles
December - Big PA Boxes

Deadlines

General deadline: 15th of the month prior. Classified advertising deadline: 20th of the month prior. Features (Market Report) deadlines: 1st of the month prior. We go to print the last week of the month, and the magazine appears in the first ten days of the month. See www.conpub.com.au for updates.



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