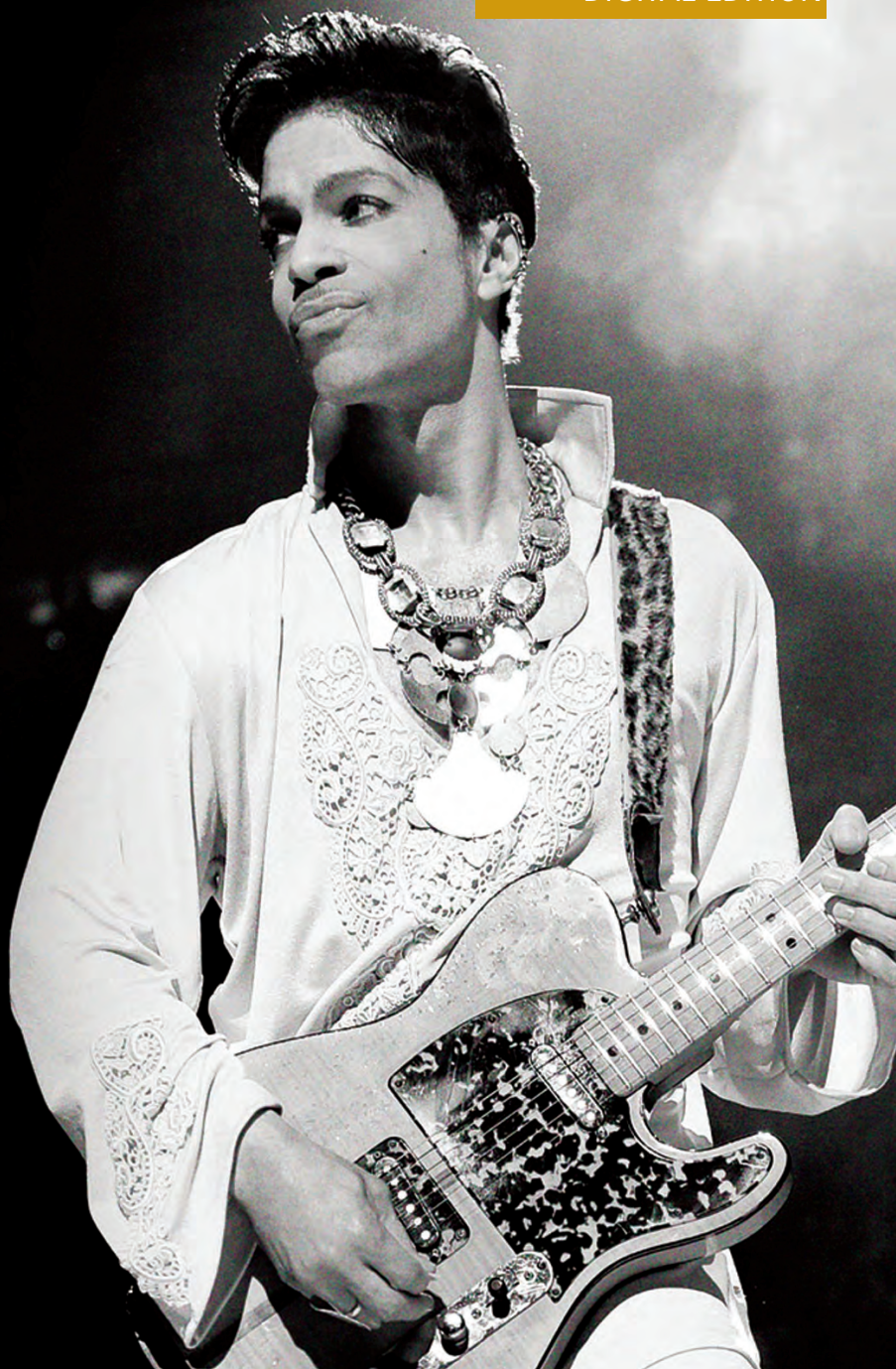


# CX

MONTHLY TECH NEWS  
For Entertainment and Broadcast

CX 71, JUNE 2012 . \$5.50



## Purple Pain

Mysteries abound

## Empire Bound

Toowoomba's treasure

## Bootleg Beatles

Doin' it with house rigs

## AV Partners

Everything old - new again

ISSN 1320-5595



9 771320 559004

## NEWS:





Sydney shuts venues / What if no curtain tags? / Fantastic tech venue template / Biz: Hard core collection / Unpaid work traps - LPA

## GEAR:

Lucas Nano 300 from HK / Lab Gruppen E Series Amps / Chromlech JARAG / Decimator Design MD-DUCC / Audix FP7 Drum Microphones / Furman Power Conditioners

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---	--	---	---



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CCP Productions, AU  
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CenterStage Productions, USA  
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Cine Electric, Ireland  
Cine Services, Inc., USA

CinequipWhite Inc., USA  
Colour Sound Experiment, UK  
dbn Lighting Ltd., UK  
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DPL Production Lighting Ltd., UK  
DRP Group, UK  
E&K Deko / Lights International, Greece  
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Eventech, Estonia  
Gaco, Latvia  
GLS Lighting, USA  
Heroic Productions, USA  
HSL Group Holdings Ltd, UK  
Intelligent Lighting Creations, USA  
Legend Theatrical, USA  
Light Source, Inc, USA  
Lite Alternative Ltd., UK

Live Technologies LLC., USA  
London Light, UK  
Lots Of Watts, AU  
LX 2000 Stage Lighting Hire, Ireland  
LX Communications Ltd, UK  
Main Light Industries, USA  
Neg Earth Lights, UK  
NMR Staging & Events, USA  
Panelux Ltd, UK  
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Production Express, Inc., USA  
Production Resources Group, UK  
Production Resources Group, USA  
Production Services Ireland (PSI), UK  
Purple Sheep Lighting, UK  
Rentex Computer & Audio Visual Rentals

Resolution X, AU  
Rubicon AS, Norway  
Saville Audio Visual, UK  
Scenery First, Inc., USA  
SFL Group, UK  
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Sound By Design, UK  
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SVL Productions, USA  
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### Lighting Designers

Adrian Goldberg  
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Bruce Ferri  
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James Bedell  
Jason Showers  
Len Schnabel  
Matt Mills  
Nick Jevons

Olivier Ilisca  
Paul Normandale  
Rob Sinclair  
Sam Tamplin  
Stephen Page

### Venues

Barbican Centre, UK  
Faith Christian Family Church, USA  
Hope Community Church, USA  
Lincoln University, UK  
Northern Stage, UK  
Qld Conservatorium Of Music, AU

Scampo Restaurant at the Liberty Hotel, USA  
Sidney Stringer School, UK  
Sydney Town Hall, AU  
The National Theatre of Faro Islands  
University of Derby, UK  
University of NSW, AU

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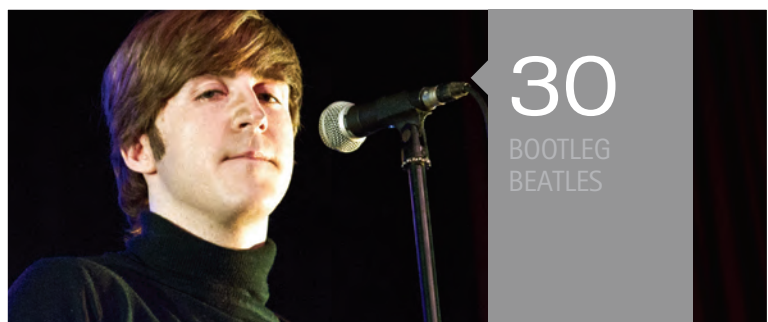
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CX 71 June 2012. Volume 3, issue 71. ONLINE EDITION

### VISIONARIES AND VANDALS

Mayor Ross Miller gets the CX tick of approval for saving the Empire Theatre in Toowoomba back in 1994 – the year of the first ENTECH. So it is a shame that almost no one in Sydney can claim credit for venue innovation or civic commitment to venues since Utzen sketched the Opera House sails. (Sydney Theatre and Concourse excepted) Our news report reveals in depressing detail how Amalgamated Holdings, the Rydges and Greater Union people, will stuff the historic State Theatre by spending as little as possible on renovation.

### PURPLE PAIN

We sent a draft of our Prince story to his tour director for comment before publication. This unleashed a campaign to squash the story, which included leaning on various Australian production crew. While it isn't possible to know with certainty whether this is ordained from above, it's fair to assume that paranoia and pedantic media control are directed by His Purpleness. They even forced the ushers to crack down on punters taking phone photos – first time we've seen that.

### PERTH AND VEGAS

A long way apart, but CX ventures to both towns this winter. We also plan an extended road trip up the Queensland coast to visit and report on things that matter from this expanding and highly populated area. Wherever you are, we are always interested in things that may be news here in CX. Keep the lines open, talk to us here or at [Facebook.com/cxmagazine](http://Facebook.com/cxmagazine)

### BLOG

In May we started [cxmagblog.com](http://cxmagblog.com) and had 5000+ reads before the month was out. It's an extended conversation, and a forum for you as well. With our Facebook page reaching over 12,000 people per week, we feel more connected than ever before. Our 'other' media network components, CX2 APP, CX-E digital, CX FLASH (email news) and CX TV are powering as well. Thanks to everyone who reads and contributes.

## CX EDITORIAL

### SAFETY

CX are delighted to present a seminar on outdoor event safety at ENTECH in Melbourne (July 18 and 19). Last issue we gave over 12 pages to the Indiana Disaster Report, and had a lot of positive feeds. In bygone times, we would have had flame mail from you for giving over so much of your mag on a 'safety' issue. Proves that times are a changin'.

### ON CXMAGBLOG.COM

Maiz writes about whether you are actually counted as 'employed': At their triennial Congress in May 2012, the ACTU released the results of a significant enquiry, by way of a document called "Lives on Hold – Unlocking the potential of Australia's workforce". If you don't have a full time job but do things to earn money, then your state of unpermanence is now known as "insecure work". Note that it's not you who is insecure – you might be perfectly happy – it's about the job. And the employers.

### CHEAP STAGE: HOW ABOUT FREE?

Also on [cxmagblog.com](http://cxmagblog.com): While it is probable that Mortlake (western Victoria) farmer Ray Anderson is a very capable stage builder, his gesture in providing a free stage for Leighfest (Lawson's Park, Inverleigh) amplifies concerns at a lack of standards for outdoor events. "We milk cows for a living, and music is our love", he said.

- Julius



### PUBLISHERS PANEL

CX Magazine is published in Australia by Juliusmedia Group Pty Ltd, under license from CX Network Pty Ltd

Juliusmedia Group ACN 134170460  
CX Network ACN 153165167

Mail: Locked Bag 30 Epping  
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Web wrangler: Nicole Bull

CX-TV production:

Cameron Glendinning

Layout design: NEOwerk, Quito

Nadia Hidalgo / Karla Espinosa

Printer: Printed in Australia

Distribution: Fairfax

CX-TV hosts: Meg Mackintosh  
and Sophie Pearson

CX-TV camera: Dribbles

CX-TV is at [www.cx-tv.com](http://www.cx-tv.com)

Coffee: Rob Forsyth

Happy hour: Concourse Bar

Accountants:

Kieren Martin, Watkins Coffey Martin

Official airline: Virgin Australia

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## CX INDUSTRY NEWS

# Sydney Venue Disaster Looming

### Shut down all conventions - then disable the State Theatre

**A**fter Utzen sketched the Sydney Opera House sails on paper in the 1960's, the State Government at the time had the guts to build it. Since then Sydney has not kept up with venue investment and in 2013 will lose more venues.

The new State Government will see massive economic losses when it bulldozes the Sydney Convention and Exhibition Centre, along with the Sydney Entertainment Centre. The promise of a new, larger facility in three years is hollow because the 'private capital' funding mechanism has not been revealed.

CX has been surprised at the lack of reaction from the Meetings Industry Association, and the muted response of the Exhibitions and Events Industry Association. The latter at least are 'concerned' about the 65 major events that will vanish from Sydney across the projected three year construction period of a new facility.

The EEIA think the government will actually deliver on a new facility, and have not questioned the three year build period or pushed very hard for temporary exhibition facilities.

Several blocks uptown, the heritage listed State Theatre will now have a shoddy cut-

price renovation because its private enterprise owners, Amalgamated Holdings (Greater Union and Rydges Hotels) have managed to water down plans for the stage rebuild so they can reap more profits from an attached retail development. Earlier plans had a real stage and tower, with loading facilities. The approved 'cheaper' plan adds only a small stage extension, no tower, and retains the quaint chain motor and cage lift which guarantees every bump in takes five times longer.

In complete contrast is Melbourne, where a slew of beautiful and functional theatres survive downtown, and there are three arena venues within walking distance of the CBD. Sydney will soon have just Allphones Arena, 17km west.

The Capitol Theatre and the Star Lyric Theatre are the only viable large musical theatres in Sydney, now that the State will not get a proper stage and tower. It will remain as a 2,000 seat theatre with limited use.

Meanwhile Star Casino owner Echo is under siege from Crown, who may launch a takeover and attempt to wrangle land within the nearby Barangaroo development for a Sydney Crown. The NSW State Government is presiding over a series of developments that could put the state's economy into reverse.



While State Theatre's future is assured, it will not get a workable stage & tower

# Picture briefs



PHOTOGRAPHY BY MARKBEDSON.COM

## ETC Ion goes Grammar

At the Memorial Hall (Caulfield Grammar Wheelers Hill Campus), manager Brad Dart shopped for a new console. "Everything steered us towards the ETC Ion console," he remarked. "Over the past couple of years we've had to hire one in from Clearlight Shows for designers and as it seemed to be the most preferred console, it made sense to get one and save hire costs." So they did!



## YTT's Big LED Looks

**C**hannel Ten's Young Talent Time returns after a 24-year absence from our screens, and there's no doubt it packs a visual punch. The panorama of LED walls from TDC are

fed from thirteen coolux Pandora's Box Media Player Pro's run from a Pandora's Box Media Manager Pro and a MA Lighting MA2 console by Paul Colleson. Francesco Calvi does lights, on a rig from Chameleon. It looks lush!



## VOICE = 128 SONGS

The day after one of the contestants appears on Network Nine's hit show The Voice, their track is up for sale on iTunes. To make this be, record producer, Dubowsky – also known as Eric J – is slaving around the clock at Studios 301 in Sydney, with a Pro Tools HDX system. The songs become overnight hits!



## MAGNA SNAGS THOMSON

Magna Systems will represent now Thomson Video Networks' full range. "Their products are a great fit with our current portfolio," said Magna Systems Group Sales Manager Stephen Clemesha (pictures, left). Thomson's Tony Berthaud (right) added, "Magna's approach dovetails with our emphasis on selling systems rather than one-off products – which is particularly invaluable".

## ENTECH to CONNECT

**J**ust fifteen years since last showing in Melbourne, ENTECH returns this winter in a boutique format. While ENTECH '97 was a mega event sprawling across Jeff's Shed, the July 2012 edition promises more intimacy over at the Melbourne



Park Function Centre on July 18 and 19. Organisers ETF have cast the trade exhibition as an affordable niched event, but have wisely accelerated their educational seminar offerings to include a useful and appealing slab of topics. Presenters will include PLASA, with some overseas industry experts, and topics will range through lighting, audio, safety and rigging. **More info at [www.entechconnect.com.au](http://www.entechconnect.com.au)**

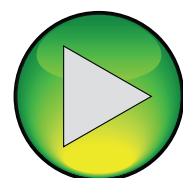
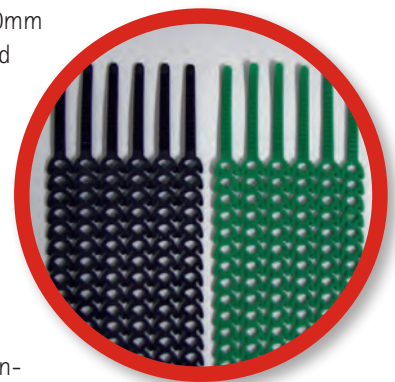
## Gearhouse Ups The Chains

**G**earhouse Broadcast has added ten Sony HDC-2500 camera chains along with a lot more. They particularly liked the standard 2X slo-mo capability, plus multi-format 24p and 4:4:4 functionality. Gearhouse has purchased the highest spec Sony camera chain available. Sony's Garry Rhodin (above) is: "very happy we can continue to be their equipment supplier of choice."



## RapStrap Changes your Gig!

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# What If?

## ‘What If’ your drapes have no fire tags attached?

By Chris Johnston, Project Engineer & Trainer

**Y**ou walk into an Auditorium, Theatre, Theatrette, School, Club or Public Hall to advise on sound, lighting or stage equipment and notice that curtains have no fire tags attached to the rear.

Your Duty of Care is to understand that these curtains could be flammable if they are not fire-retarded and could easily catch alight, especially if in contact with stage lighting fittings which as we all know can get very hot.

The law states that a curtain in any of these venues must comply with current Building Code Australia (BCA) being AS 1530 Part 3 and for NSW, additionally, compliance with AS 1530 Part 2. AS 1530 Part 3 test is an index for "Spread of Flame" and "Smoke Developed" while Part 2 is an index for "Flammability" usually carried out by the Australian Wool Testing Authority (AWTA) or another approved testing authority.

It is also law that a tag must be sewn to the rear of each curtain stating the manufacturer, fabric type, fire-retardant treatment, test report number and cleaning instructions.

Unfortunately there are unscrupulous curtain dry-cleaning companies in this country that make money out of removing tags from permanently fire-retarded curtains then convince the venue operator into a contract to dry-clean and fire retard them sometimes every year. As a result, the venue cannot verify if the curtains comply or not due to the lack of a fire-tag, so agree to get the curtains treated. These curtains invariably fall apart long before they should.

If a non-approved method of dry-cleaning is applied to a treated curtain it could negate whatever fire-retardant is present in that fabric and render it non-compliant and which could ultimately catch alight.

Different levels of fire-retarding exist,

both permanent and non-permanent, that must be taken into account when cleaning as it dictates what cleaning method are acceptable.

Companies have been blamed for supposedly supplying curtains that have had their tags removed or have been dry-cleaned or fire-retarded by a third party which then later catch alight. This obviously leaves the original tag owner liable, plus the venue operator, if a fire does occur.

In many instances manufacturers of cheaper curtains using non fire-retarded fabric have illegally attached tags which have been removed from compliant curtains. Usually these bogus tags are obvious as they are invariably affixed with staples and not sewn on.

There are many traps for unwary players and we should all be aware of potential problems that could occur if the fire retarding laws are not followed.

Jands insist that all drapes should be manufactured with fire safety as a first priority. We only build safe drapes, and what other kind would you want?

This article forms general opinion only and must not be relied on without a detailed, professional risk assessment undertaken specific to your situation. Consult a professional staging company every time you consider anything that may involve risk with flown objects or people.

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# SHARPY

# 5 ★ ★ ★ ★ ★

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## DO NOT ACCEPT IMITATIONS!

### To all lighting industry stakeholders

CLAY PAKY S.p.A. has become aware of some attempts to market products, primarily manufactured in China, which appear to be copies of CLAY PAKY's SHARPY spotlight.

CLAY PAKY commits significant resources to ongoing research and development to create new products such as the SHARPY spotlight. Besides being original designs, these products bring about innovations that benefit all lighting industry stakeholders.

In order to protect its innovations, CLAY PAKY systematically invests in intellectual property.

Please note in particular that: CLAY PAKY S.p.A. is the owner of registered Community design N° 1234009-00, which protects the SHARPY spotlight in all EU countries. The same design has also been protected in China (201130039967.8) and the USA (US 29/387.114).

CLAY PAKY S.p.A. has filed patent applications to protect the technology used in the SHARPY spotlight in China, Germany, Italy, the United Kingdom and the USA.

**It is important to be aware that it is not only those that manufacture copies of products, covered by exclusive rights, that are punishable by law but also those who import and distribute such copies.**

CLAY PAKY S.p.A. will proceed with appropriate actions with the relevant authorities in all countries where its intellectual property is registered in order to protect its proprietary rights and hinder those who, by manufacturing and selling counterfeit products, not only harm CLAY PAKY S.p.A. but also hinder progress in the industry as a whole.



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Photo: NPG Records

## HERE'S A VOICE IN THE DARKNESS,

as CX reflects on a show that left Mr and Mrs CX cold. Very cold as we waited for our ride outside Allphones Arena earlier than planned. Because we were bored out of our minds.

 A large, stylized purple graphic of Prince's symbol, which is a combination of a circle, a cross, and a triangle. The word "PRINCE" is written in a serif font inside the circular part of the symbol.
 

PRINCE

By Julius Grafton

performs in the dark as crew quit 100,000 people at \$170 can't be wrong. Right?



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Photos: NPG Records

**C**ursory research would reveal that the Welcome 2 Australia tour was not to be performed in the round at all, rather it was performed on the signature Symbol stage which pointed to the short end of the arena. Prince and his ensemble thus worked with most of the audience behind. We sat in this nether zone, in the cheap seats, prepared to spend only \$170 each. What looked like a row or two of \$99 seats were way up in the Gods, price leaders so the adverts could say 'from \$99'.

Earlier setlists from his US tour would have also rung alarm bells, due to the unknown tunes from many of the many releases by this enigmatic, secretive and brilliant musician. Every show has a totally different list, and the encores range from one, to four, containing between one and 11 numbers. Eclectic?

But it's the sheer indulgent wank factor of an artist who can do no wrong that leaves

you either on the page or outside in the cold. "Worst gig we've ever been to", muttered another early depart-er midway through the extended encores, which seemed to occupy the show from minute 70 onwards.

### Technically

The Symbol stage stands high enough for a short person to exist underneath, and Prince has his own elevator for entrances. LED along the outlines of the stage give the lighting director a tool to work with, along with a LED screen that is folded around the grand piano on stage element left.

Forty tonnes of lights (PRG), video screens (Big Picture) and V-Dosc line array (JPJ Audio) are flown, with two cable drops at the rear quarters. FOH and video control are against the venue floor located at the rear quarters, and a scaffold tower houses the Muse, DJ or musical director (unsure what he does up there) opposite the end of the stage. This

little stage/tower has its own LED screens on two sides, and lights up sometimes.

The whole show lights up sometimes. The rest of the time it is refreshingly dark, with whole parts of songs performed with no lighting.

At first I thought there was an outbreak of incompetence at the Grand MA, especially as at the show start (late, at 8.20) we had house lights off and then five long minutes of nothing at all, except ushers rushing about in the dark trying to seat people in the gloom. The sweep of a flashlight anywhere near the stage would reduce the crowd to excitement.

Slow hand claps led to a show commencement, with not much in the way of lighting for a while.

Prince is a control freak performer who has no set list and who boasts in media of having over 200 songs and being able to lengthen them at a whim. "Roughly 200-300 songs with variations 4 each of them", he

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told Nui Te Koha from News Limited. "4 example: based upon crowd response any song can be lengthened or shortened with a simple cue: Raspberry Beret's second verse and bridge can be added if the audience sings louder than the lead singer. Also depending upon the diversity of the crowd we can quickly segue in 2 Cool, The Time's theme song."

In reality the gig is a jam session, and what happens with the lights is either incredibly clever of the lighting director, or they are completely racing to catch up. I got the impression the random selection of songs from the stage meant the LD was spinning the cue wheel so fast it seized up.

Three backup singers and two dancers, nominally known as The Twinz, appear and disappear. The Twinz apparently were raised in Australia, and go by the surname of McLean. They are reported as being associated with the artist known as Prince for some years, and also reported as appreciating the no swearing, no drinking, no bad things vibe. The road crew were advised not to swear within earshot of the artist.

Between numbers, a Prince Sign appears on the video screens with a lightning effect, and a synth pad rumbles away. This appears to be the cover for Prince making his mind up about what is next. We see this a lot.

Around song number four, or medley number four, Prince introduces Cassandra O'Neal on keyboards. This is during another dark and gloomy minimalist lighting phase, and about 5 seconds later one followspot dowsers on, and drunkedly probes around the stage, settling on the grand piano, half a kilometre from the band position. That's it for Cassandra who remains unseen.

Regaining composure, or working to The Plan, the LD manages to catch a Princely command for 'Light the crowd', which allows the retina to digest the surroundings for a while. The very next such command, several numbers later, results in no reaction from the lighting department. The darkness is maintained. This is very clever stuff!

## Bad relations

Working behind contracts, non-disclosure agreements and layers of legality, the Prince machine maintains secrecy and torments its workers with frustration. CX could not confirm all the rumours we heard about this tour, despite shipping this very article to

**"THIS IS REAL  
music played by real  
people"** In fact there are a lot  
of declarations from the stage,  
and a lot of 'moments' but no  
real 'show' per se.



Photo above: NPG Records



the main operative, tour director and lighting designer Demfis Fyssicopoulos (pictured above) before deadline for comment. He replied that he could not comment.

Reports from the US had the main carpenter quitting once the set was loaded for Australia, and the guitar tech departing the tour early on. For many years Prince has had a reputation amongst crew as an artist for whom continuity of employment is not guaranteed.

The guitar tech on the first Sydney gig

had a nightmare scenario, trying to keep up with what was next.

"A suited tech shoves a long pedal board out onto the stage at the singer's feet", Marcus Teague wrote in an excellent piece on thevine.com. "Prince stomps on something with no audible result. He fiddles with pedals, the stage-hand comes out, jiggles things around and it's still not happening. Prince tries again, gets a guitar hum in response and tosses his axe high through the air in disgust. The poor tech catches it and then drags the pedal board back into the depths for an inspection. So we miss out on guitar histrionics at the end of '1999'".

"My band are tighter than a mosquito's arse", Prince declared on stage, along with multiple reminders that "this is real music, played by real people". In fact there is a lot of declaration from the stage, and a lot of 'moments', but no real 'show' per se.

While we couldn't complain about the musical integrity of the show, or the sound (JPJ Audio, V-dosc) a quick look at the CX archives brought back a scenario from exactly 20 years ago – the last time we did a Prince live story in Sydney. That 'Diamond and Pearls' tour was a proper concert, with a beginning, middle and defined end. This W2A tour was anything but.

Back in 1992 while sitting chatting to David Natale, the Clair Brothers engineer for the Prince tour, another sound engineer from the USA suddenly appeared at the mix position, straight off the United flight from L.A. It was an awkward moment, since Natale was not advised the new guy was coming. Through the gig, engineer # 2 sat making notes. It seemed like someone in the Prince command had demanded a new engineer, but left the incumbent in the dark.

Which is where we found ourselves, 20 years later on.

With around \$17 million box office and a probable \$3 million in merchandise, (hoody jackets at \$100 and T-Shirt at \$50) there is no doubt the tour was a great success. The A party (including the Tour Director, DJ, Twinz, Prince, Security, Manager and an entity referred to as 'model/dancer') got back on the jet and flew off in a cone of secrecy. The B party (band, crew) caught a commercial flight home. The C party (Australians) all went back to their lives, shaking their heads at the carnival and chaos that surrounds an artist who operates wholly on their own level.

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# AV Partners ramp up!

## TERESA AMEY

### on life after Staging



**T**he era of Staging Connections domination of the Australian audio-visual rental business is over, with the market leader now fragmenting after its disastrous expansion by acquisition scheme collapsed late last decade.

From a far-flung empire reaching to China and the Middle East, the firm bought and sold lighting firms, added on the ETF trade show business, and developed a head office mentality that suffocated many of its talented people.

One of these was Teresa Amey who spent fourteen years at Staging Connections before being 'released' about 18 months ago. She joined a long list of departures, and now features on a list of industry insiders who are now legitimately taking on their former employer.

CX caught up with Teresa at Sydney's Swissotel in the CBD, one of a small but growing number of in-house AV venues for AV Partners. AV Partners was the brain child of Gary Hackett, a Staging Connections founder who sold his shares into the public float of the group, and then discovered the public company machine was at odds with the way the A.V. industry works.

After a respectable and quiet period in the wilderness, abiding by the non-compete provisions in his contract, Gary



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re-emerged several years ago with AV Partners, a new take on the way he built Staging Connections up to a 60 million dollar turnover.

Staging pioneered the in-house AV model where the hotel or convention centre took a percentage of the business, in return for the AV firm having an in-house exclusive and supplying equipment on the premises. It started in the USA, and in the hands of Gary Hackett became a no-brainer, as venues everywhere flocked to the model.

Fast forward to now, and Teresa is out on the hustings drumming up new venues for AV Equity, the umbrella company that oversees AV Partners.

## Explained

"So what is AV Equity?" CX asked?

"We set up a venue, invest and install equipment, and then facilitate the partnership", she explained. The partnership is then between AV Equity, the venue, and the manager who runs the AV team.

"We make a large investment in a venue, and then run the team. Our manager has a minimum of ten percent of the equity in their venue. There's a lot of interest in this".

The first AV Partner site was Hamilton Island, a former jewel in the crown for Staging Connections, where former manager Phil Delangen won the contract. More followed, in WA (Perth Convention and Exhibition Centre) and other states, with NSW including Four Seasons and the Swissotel.

Each venue is a separate company, and the group doesn't actually have a 'head office' as such. "There's no head office overheads, no red tape, and no debt. We work with people you trust, there are no '15 processes'.

Teresa says there is demand for what AV Partners have, and that they are talking to many venues, not all of whom necessarily fit the model. "This is an industry we know inside out. We believe you have to do the absolute best you can do, and be proud of the service you provide."

## Early days

It's a long way from managing a hotel in Cornwall back in Teresa's native England. "In 1995 I migrated here and then came a stint at Fairchild Audio Visual as an event co-ordinator. "I'd organise drivers each day, liaise with hotels and arrange drop offs."

Soon she was at Staging, where her venue management experience got her the job.

After training she ended up as the Event staging manager at Novotel at Sydney's Brighton Beach, a reasonable cycle ride home to Cronulla. Not long after, she moved up to start the theming dept. "That was a Gary challenge for me – I had nailed the hotel, what can I do now? 'Start the linen dept' he says.

"I became venue service manager – with 8 Sydney venues. I ended up with 20 in Sydney across 8 years. Gary would sell them, then I'd put the team together and set them up. I learned a lot!" - JG

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David Stephens  
Technical  
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## New Venue for School Performing Arts Tech Training

# Inside a purpose built complex: tech choices, ideas and solutions

**B**uried in a backstreet in Sydney's inner western Burwood is a remarkable performing arts training facility shared by twelve Sydney high schools. Run by the Catholic education system, Southern Cross Catholic Vocational College is probably the ideal template for future high school-based facilities.

CX went inside. Here are some impressive features: there is a 450 seat performing arts venue with a DiGiCo SD8 audio console, heaps of Nexo PA and a GrandMA 2 lighting desk. Overhead is a Slingco



By Julius Grafton

Cablenet tension wire grid platform, a 'virtual floor' allowing up to 8 people at once to walk around and hand focus lights or re-rig things.

The venue has multiple modes of operation, and tielines back to a highly capable recording studio with oversized control room – in which students can watch proceedings on large panel displays.

So why has a school gone to these lengths for entertainment production training?

Flash back to last decade. The federal government introduced vocational

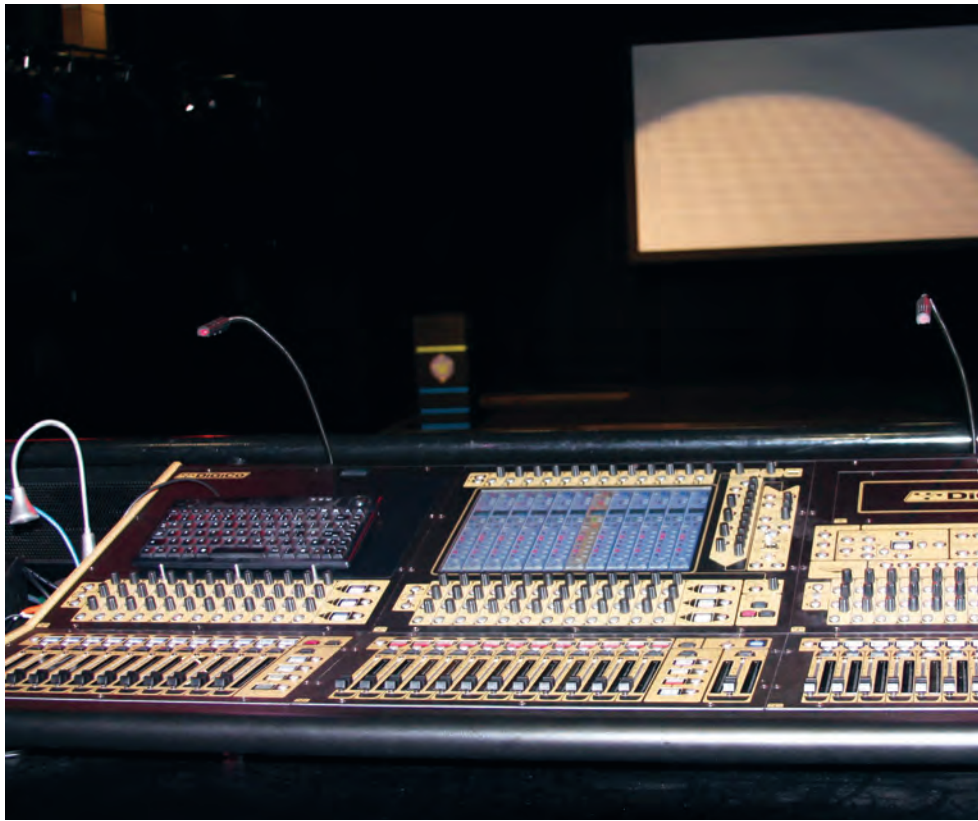
education training into the senior school syllabus in the middle of last decade. Initially delivering qualifications at Certificate II level, it soon moved up a notch to provide, in some cases, a professional trade entrance qualification, the Certificate Three.

The Trade Training Centres in Schools Program then came along, and provided \$2.5 billion nationally to enable secondary schools to seek funding for Trade Training Centres. A bunch of Sydney private school networks applied for money.

Along came the Catholic system in Sydney, and the successful project is Southern Cross College. It is a dedicated trade training centre, so the performing arts complex sits amidst catering, graphic design, automotive, business, beauty and a host of other courses.

Each high school trumped up equal funds, and the commonwealth matched those funds. The eventual budget was \$22 million, to build the facility, of which the performing arts complex and studio is a significant part.

The result is that students from 12



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FOH console

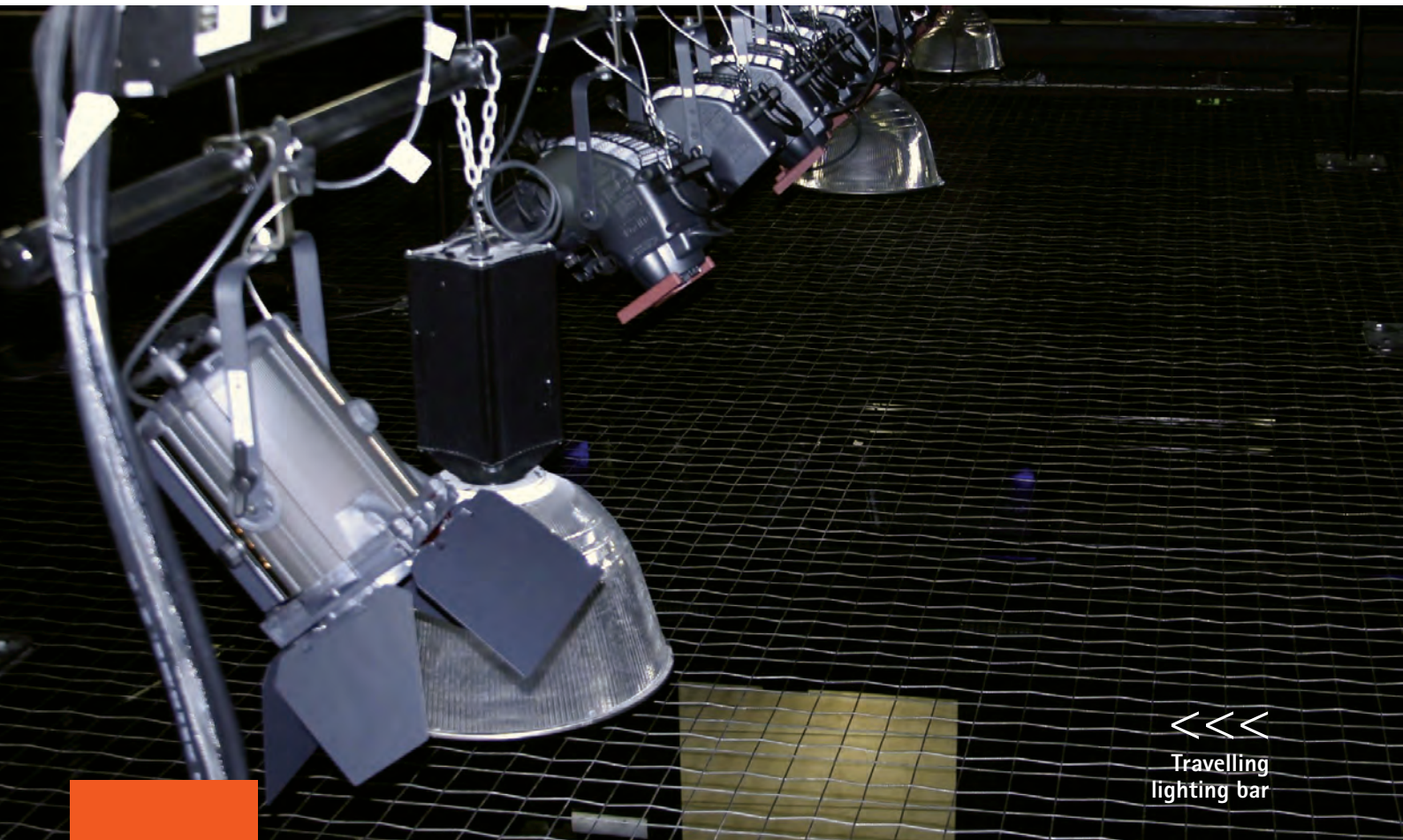
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Travelling lighting bar



Venue studio

participating schools across the Sydney basin, are now booked into the VET courses at Southern Cross College across their final senior two years of high school.

## How to start?

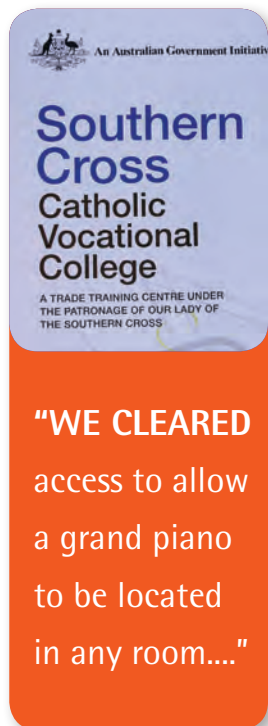
School system funding percolates downwards from the Commonwealth, where the national government funds education as a pillar of the future. Australians rate this highly. So \$22 million for a facility like this is a good investment.

CX saw exceptional value for money on our tour of the complex. We have benchmarks – other modern era projects, like Hillsong Convention Centre and Sydney Theatre cost around \$44 million almost a decade ago, and would probably cost half again in today's dollars.

The Catholic Education office initially invited Scottt Willsallen's Auditoria consultancy to advise on aspects of the performing arts spaces. He joined with architect Peter Morson from Thomson Adsett.

"They initially engaged us on a small scope, for advice, rough budgets, room sizing and ceiling heights", Scott told CX. "We then joined the project design team for the detailed design phase where we submitted designs for acoustics, audio, lighting, staging, video and general design elements".

"I was surprised at the commitment from the architect and the Catholic Education Office", Scott continued. "We modified corridors, doorways and floor coverings, all to ensure clear access for technical equipment and musical instruments. We cleared access to allow a grand piano to be located in any room on the ground floor including the recording room, the green screen room and the MPC. There is lift access to every floor of the building including the grid level. Scott says the scope was broad and the timeframe relatively tight. "There was a target completion for funding. So it was all we did for a couple of months - full design team meetings over nine weeks, then the project was lodged for the Development Application and the



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>>>  
Very neat  
cable work  
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>>>  
Softgoods and  
cable grid above

job went out to tender".

At the time Auditoria had Scott on audio, audio-visual, and control aspects, and Ian Anderson working on lighting, rigging and documentation. Luis Miranda did a lot of the schematics and CAD drawings.

"We engaged Peter Griffiths from Acoustic Studio to sub consult on acoustics", Scott explains. "The scope was too big and the studio required specific skills that we didn't have experience with at that time. It is a box within a box construction and a floating floor – quite intricate. Peter works incredibly well together with us and the quality of the facility is testament to the strong collaboration between Auditoria, Acoustic Studio and the Architect".

**"IT WAS A DIFFICULT situation for them as the builder and electrician hadn't done this kind of project before."**



educational environment access for only 4 people would be too limiting so Slingco designed the system for 8. "

"The tension wire grid has a perimeter catwalk which we thought important in an educational facility where class sizes would likely be greater than the capacity of the grid. The perimeter catwalk is not only somewhere for the students to wait their turn but also somewhere for those who are not comfortable with heights – the grid is not for everyone." "The rigging system is very flexible, there are 7 beams that run the length of the room, lighting bars are mounted to 4 of the 7 beams with beam trolleys to allow movement up and down-stage +/- 2 metres, there are 7 lighting bars in total. The remaining beams are used for mounting of chain hoists, again on beam trolleys and can pass over the lighting bars maintaining flexibility in lifting positions. The builder was appointed, then Jands tendered for the Slingco mesh grid, the lighting bars and softgoods (drapes).

"Rutledge won the tender for provision and installation of lighting fixtures, audio and AV throughout the building. It was a

**Design choices**

"The design process was interesting. Ian and I were convinced it had to have a tension wire grid, primarily due to safety reasons. This one was specially engineered at double the typical capacity of 4 people. We reasoned that in an

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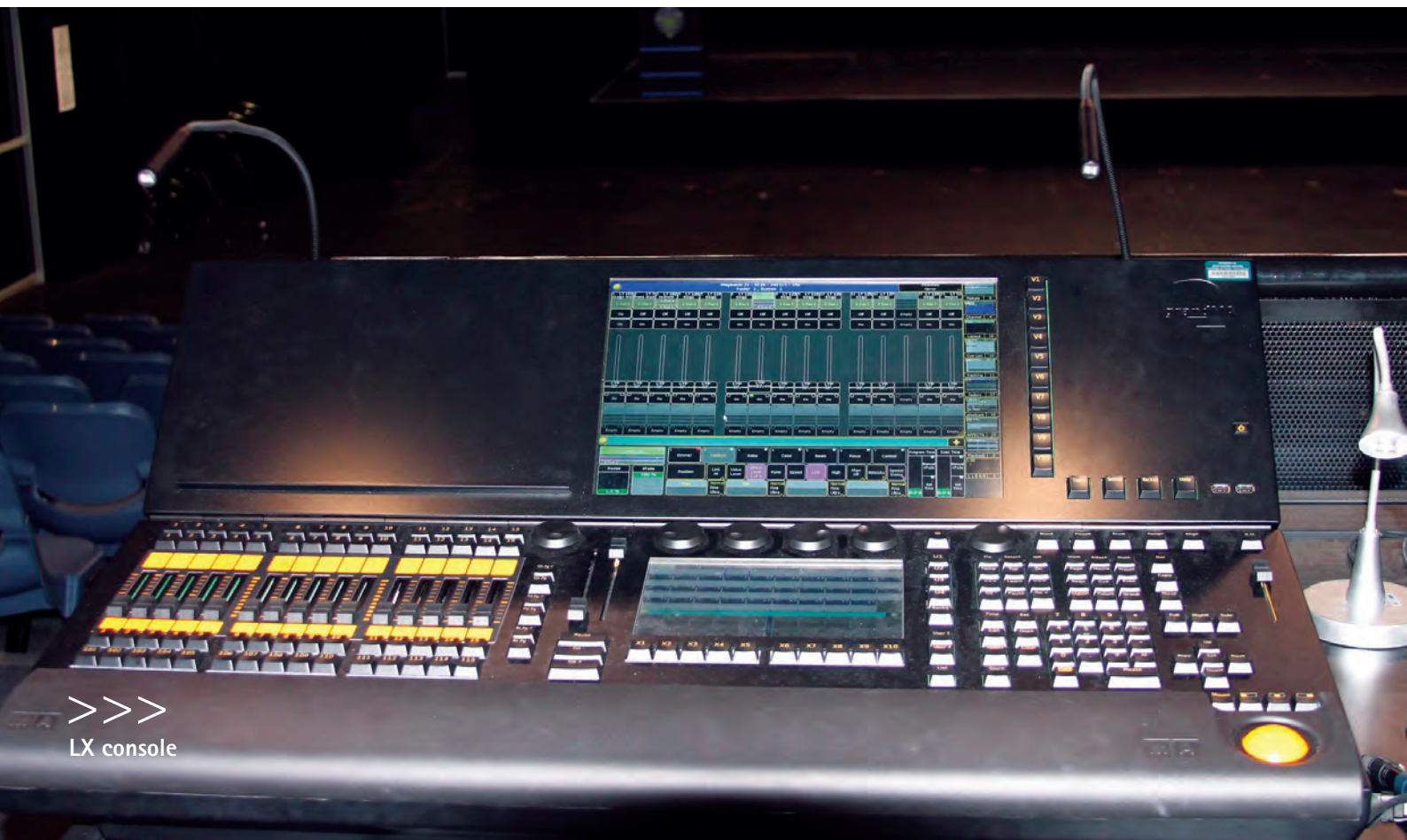
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>>>  
LX console

difficult situation for them as the builder and electrician hadn't done this kind of project before. There are details like cable separation, which while this is important on a hospital or apartment block, it is critical on a job like this. The Rutledge team kept pushing the importance of this. Bosco Tan was the main man for Rutledge. He was really focussed on not just getting it done, but doing it really well."

"The equipment choices are driven by the application – it was important to us that students who go to the facility are exposed to real world equipment. There are many types of conventional fixtures and a small number of moving lights, the students are trained in not only the operation of the fixtures but also the installation and maintenance. Six modes of operation had been identified by the architect and all technical systems and infrastructure has been designed to easily cater for these modes with minimal changeover time.

"There is full assembly mode, with the stage at the end. Or you can have the stage in the centre with a smother for large back stage area. Then there is the stage on the

## Cable Grid Rules!

Imagine an exhibition centre, where instead of half or a whole day of rigging points, with cherry pickers, crew and safety management on high alert, the riggers just walk overhead and rig safely while setup happens on the floor below? The cost savings in venue time would fast pay for the cable grid, not to mention the safety benefits. The more you think about it, the more sense there is with a cable net. The only downside? You may see the outline of a light beam. So what?

side wall, or the stage in centre (theatre in round), banquet style (table and chairs) or art gallery layout flat floor. So we designed for all those considerations. Using tension wire grid made even more sense, put lights, truss, drapes and loudspeakers wherever you want."

"I wanted a speaker system that sounded good, requiring no additional tuning, and the flexibility to hang wherever you want. There's a bunch of connections in the roof, and all have an amp channel behind each. There's a set of NL4's (speaker connections) scattered throughout the grid. We have more amplifier channels than in use at one time. It's the same with the dimmers, there is no patch anywhere. Every outlet has a dimmer – that's a safety element, and more functional."

## Practical approaches

The acoustics in the performance space need to be variable – for a band: soft surfaces, but for acoustic performances opened up so that 70% of the surfaces are

reflective.

With a lot of students available to close drapes, why pay for a push-button system? Then there are the tie lines back to the recording studio, so you can record anything that happens in the venue.

Scott specified 48 audio lines for inputs, a bunch of outputs and fibre tie lines duplicated for the side stage or the end stage room format. On the level 1 catwalk are multipin connectors so you can drop a set of passive audio splits down to a stage monitor console – anywhere in the auditorium.

Over in the spacious studio control room are 64 channels of record on Pro Tools, with 48 channels of Focusrite ISA mic preamps, and a rack full of Apogee D/A and A/D converters.

The Digidesign mix console has two video displays on swing arms, which can swing out to let the engineer see into the recording rooms. These are duplicated to overhead large screen displays so students can see what's going on. It's a big control room to allow space for students, and a big bench so 2 or 3 people can be involved in a project.

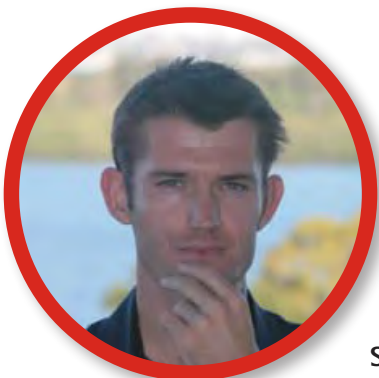
"I chose the 5.1 Dynaudio Air system", Scott explained. "It has a simple remote, with 3 settings for 5.1, stereo or nearfield."

Upstairs is an edit suite classroom with 16 iMacs for students, with tielines from the studio to the teachers position. The teacher has a little mixer which can send inputs from the studio or a local source to each student Mac, which in turn can record the stereo teacher feed or a local input.

Finally, the last word came from David Stephens, the Technical Training Manager at the college. It's his space to manage, and he describes it as 'brilliant'.



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a speaker  
system that  
sounded  
good...."**



**Scott Willsallen**

**DPA**  
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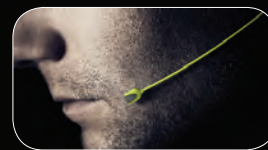
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# THE BOOTLEG BEATLES

## Magical Missing-gear Tour

### "BUT JUST THINK

how much it costs to fly an orchestra  
over here and keep them?"



### "WE'D NORMALLY

have a Vox but (tonight) we've  
got an Ampeg. Now that's  
completely wrong!"

Story and pictures by Brian Coleman



It has taken some 30 years for UK based The Bootleg Beatles to grace the shores of Terra Australis. The world acclaimed Beatles tribute band lists amongst its achievements a performance at the Queen's Golden Jubilee party at Buckingham Palace in 2002, and the recreation in 2009 of The Beatles performance on the former Apple Corps rooftop. The band has also supported a formidable array of frontliners including Rod Stewart, Bon Jovi, David Bowie and Elton John. And their audiences have included Paul McCartney, George Martin and the late George Harrison who commented "You probably know the chords better than I do."

CX was invited to Wests New Lambton, Newcastle, NSW where Kim Player from RockCity Event Marketing (REM) and publicist Lionel Midford were instrumental in hooking us up with cast and crew of this dynamic act.

Minutes into the first set the boys nail the most talked about chord in the world at the start of A Hard Day's Night: Fmaj played on a 12-string with a G note top and bottom alongside a Cmaj with a D played on bass guitar, plus a Dsus4 on rhythm. Yeah! And you know it's going to be a good show!

"The Bootleg Beatles have never, ever used backing tracks or synthesised sounds in any way. Everything is natural. When we do things like Penny Lane, even the fireman's bell is played. Absolutely everything," says the band's 12-year veteran sound engineer Marc Langley.



## Ef-fi-cien-cy n.

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Anthony Tillman, Malcolm McKew and Kim Player

## Touring Down Under

The Bootleg Beatles did have some trepidation about the tour, given Australia's profusion of Beatles tribute bands. Whilst it's not quite a tour that simply used existing in-house systems there was a surprising frugality of equipment and crew on tour. Budgetary constraints meant that compromises had to be made on technicians, backline equipment, orchestral musicians, sets, lighting, and even instruments. And at this venue the foldback was mixed from the FOH desk.

Marc Langley is very objective about the band's inaugural 'testing the water' Oz tour, which despite an economy of equipment has wooed local audiences with exemplary performances in sometimes almost comical circumstances.

"I'm amazed, some of the clubs we've done have had virtually no PA at all. I mean we did one the other day and I think we had Bose 802s and no subs, and I thought 'no way is this going to work' but the punters loved it. I thought it sounded 'orrible,'" said Langley.

At Wests Newcastle, local audio suppliers Value Audio was contracted through Abstract Entertainment to supply a Meyer MSL-3A system, and Langley was given a 32-channel Allen & Heath analogue mixer.

Wests house technician Anthony Tillman from Scion Audio assisted in hooking the Meyer system up to the house JBL system



Marc Langley

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for additional sound reinforcement, which Langley said he kept on a separate mono fader to "try out and see what happens".

"I can't run as much as I'd like to on this desk because I don't have enough... because I'm having to do monitors here as well. I know it's terrible and I never do it, only on this bit (of the tour). It's a tour where I've had a different PA, different system every day," says Langley.

"We don't take back-line (equipment) with us when we go abroad. We hire all the back-line, the drum kit, everything. The only thing we bring with us is guitars, snare drum and hi-hats, which is why we've got the wrong bass amp with us tonight. We'd normally have a Vox but we've got an Ampeg. Now that's completely wrong!" laments Langley. Also noticeably missing was the band's name on the front skin of the kick drum.

"We usually have an orchestra as well. Our own orchestra has been with us for twelve or thirteen years. But just think how much it costs to fly an orchestra over here and keep them? So we're just not doing much in the way of numbers that need orchestration. We're just simulating little bits here and there and just getting away with it: a little bit of extra guitar here, a little bit of extra bass instead of a cello, and stuff like that," says Langley.

"The orchestra side is quite interesting. Sometimes we have hired them in. We tried it with 'hired'; we've had some brass that we hired in for a couple of shows on this (tour). But it's never going to sound the same, no matter how good they are because our guys have been playing for so long; they're worn into it, they know exactly...and it just gels. Also we carry our own violins, violas and string section (in the UK) because any good classical string player has got a very expensive piece of equipment, and they don't like me lifting the bridge and putting pick-ups underneath and stuff like that. They get very

upset. So I have all my own strings with Baggs bridges fitted and stuff, just so we can do Walrus and get some real power out of it," says Langley.

"And with our own drum kit at home I've got the mics built into the shells, because obviously you didn't see The Beatles with mics all over their kit. So we're trying to look as authentic as possible," he says.

Langley, who now lives in Brighton, UK started his career mixing at his place of birth, the Isle of Wight where he mixed at some of the famous Isle of Wight Festivals. He has mixed for acts including The Troggs, Clannad, and Van Morrison. But he doesn't whinge about the equipment

shortcomings on this tour, choosing instead to get on with the job, however he is aware that audiences are increasingly perceptive when things are omitted.

"A lot of the punters come up to the stage and they're looking at the guitars and they know what guitars (they expect to see). We don't bring all our guitars with us because it costs too much; it's too silly because normally we've got up to twelve guitars on the stage at any one time. So we just bring two 'first half' (guitars) and two 'second half,'" he says. And he humbly accepts

any mixing console that he is given, although he has his preferences.

## Mixing the Bootleg Beatles

"I use a PM5D (Yamaha digital) a lot because I can find one of those wherever I go, and it's much easier to rock up with one of those and stick my card in (show file) and I know what I've got. We do stuff in South America, Paraguay and places like that. If I asked for a Digico or a Digidesign I just wouldn't get it.

Microphone pre-amps mean a lot, but a lot of the new (digital) stuff is much



**ADAM HASTINGS....**  
is hauntingly similar in looks to John Lennon



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better now, like the Midas PRO2. Digidesign is a good sounding board and so too is the Soundcraft V1 series. So there's a lot of choices out there now and it's changing all the time. But when you're talking about a big desk (as in analogue) you're talking about racks of outboard gear, and you take up such a large footprint that very often you're not allowed to go down amongst the audience. So they'll stick you way out somewhere where you can't hear what the audience is hearing," says Langley.

Alongside the Allen & Heath desk sits a laptop, and Langley explains: "I've got a lot of effects that I use in the laptop now; I'm using a thing called Bloxpander, which is a VST host that allows me to have an effects rack in my laptop using VST plugins.

"One of my favourite effects is a tape phase simulator, which is of course what they (The Beatles) used in the studio then. I use it to give a nice natural sounding tape phasing--I probably won't be using that tonight," he smirks, adding, "But I usually use it on Magical Mystery Tour, Lucy, and stuff like that.

"I basically use an analogue straight slap sound, some analogue delays and some reverbs, but not too modern--and a lot of it depends on what I get. In here I will use a 'stereo hall' (effect) and I'll just use a 'mono room' but I tend to change the parameters a lot. I would normally run compression on the vocals but they haven't given me any tonight, so I won't have any," adds Langley.

Despite a plethora of equipment that was left off the tour the act looked and sounded very good, and was enthusiastically received by the Wests sell-out audience, which was not deficient in seniors. However a motherlode of SPLs, along with all the UK trimmings, could have rocketed this show into another dimension.

## The band

Of particular note was the warmth of the Gretsch Guitar via the Vox amplifier played by Andre Barreau (Beatle George). And even though the Hofner bass played by David Catlin-Birch (Beatle Paul) in the first set was sacrilegiously channelled through an Ampeg amplifier instead of a Vox it sounded great; and it was refreshing to hear the bass project, as bass and kick drum were mostly suppressed in the early

## Summary

"The boys are really good," says Langley, "Perth was our best show. We played the Astor Theatre--I think that's what it's called--and it was just a very good show--good sound system in there.

We had a monitor system with a monitor desk, so I could concentrate purely on doing front-of-house and I didn't have to worry about changing the monitors as I'm changing the front-of-house etcetera, which is a big bonus. It was almost Beatlemania, it was great.

"There's talk of us coming back, and when we do we'll bring the orchestra and do a couple of big theatre shows. We'll do it properly," said Langley.

In fact, New Zealand has already taken the initiative, booking The Bootleg Beatles complete with orchestra for a stint of two-and-a-half-hour shows in Auckland in October 2012. Come on Australia!

Beatles days.

The vocals were not only authentic but these lads can really sing great leads and harmonies, and they subsequently nailed every Beatles classic. And new Bootleg Beatles addition Adam Hastings (Beatle John) who joined last year replacing founding member Neil Harrison has not only got the

guitar and vocals down, but he is hauntingly similar in looks to John Lennon.

But a contender for the MVP (most valuable player) award must surely be Hugo Degenhardt who painstakingly emulates Ringo Starr's distinctive drumming style of maniacally slapping the open high-hat like he was trying to fend off a swarm of killer bees.

"If you listen to the early stuff you can barely hear a kick drum at all. But then we'd go and do universities, and the punters--the kids--they want to feel it, so you can't please all the people," says Langley.

"Because we go through the numbers in chronological order and we get sort of more modern as we go along I used to have the subs in the system kicked off for the first half. And then I used to bring it in for the right period--sort of warm the whole thing up. But we've decided now to start it off with a bit of kick as well just so the young members can appreciate it more, or else you find it's a little bit of a flat start. I think the idea is to be a little warmer than the average modern sound, a little more mid, low-mid area, and not so much sparkle," says Langley.

## Lighting

"We try to spec the lighting, and normally we'd have back-projection as well, but in a lot of these places we can't do it because the only screen they've got is too far forward. You can't put projection on the sides because it detracts from the show. You can't have people looking at that; it just doesn't work. Our back projection is all backdrops and moving images and original video clips of the period as well. It makes a big difference to the show. We can't run that (here) so we're mostly just relying on the guy that they've sent to do the lighting.

"Normally we'd run par cans and some specials. The idea is to be more black and white for the first period, then get more psychedelic once we hit the Sgt Pepper era. Then we use the UVs and we put oil wheels on the backdrop. We also have what looks like an upright piano with different fronts. So it starts off with a black front, and you pull it out and you've got a psychedelic front--pull that one out and then you've got the Fender Rhodes front; so the piano changes through the periods as well," says Langley.



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# An Empire Strikes Back

One hundred years on, it's take three for a cultural icon



**T**oowoomba is two hours up the road from Brisbane. Just close enough to be next door, without being quite close enough to regard as a commute. Not quite far enough away to justify a decent or affordable airline service. Positioned perfectly as the gateway to an area of huge richness and significant industry. Toowoomba is the place that everyone in Australia has heard of but can't quite position. It's a very big town, over 350,000 people in the catchment area and the biggest inland regional city in the country.

Driving into Toowoomba from Brisbane, you'd have to be blind not to notice a huge white fly tower just off the main drag and, if you have even a fraction of a venue background, it beckons like a magnet. A quick detour into Neil Street reveals an enormous art deco frontage, topped by a massive sign.

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Empire operated for  
twenty two years  
through the start of the  
Great Depression and  
received upgrades to  
sound and colour. Then  
disaster struck.

John Maziels reports:

You can - and should - check out the history of the building on the Empire's website, because it's a worthwhile read. [www.empiretheatre.com.au](http://www.empiretheatre.com.au) The building went up in 1911, designed as a theatre with the dual function of movie house, the custom with so many grand performance spaces. That's back in the days when silent cinema was the rage, and dirt-floor venues with deckchairs were the go in towns outside the capital cities. The original Empire operated for twenty two years through the start of the Great Depression and received upgrades to sound and colour. Then disaster struck. In February 1933 fire erupted and the building was burnt to the ground, leaving only the front and back walls. There must have been a lot of skilled labour available at the time, because it took only nine months to completely rebuild the Empire as a 2400-seat art-deco masterpiece.

For the longest time - forty years - the Empire Theatre sat at the centre of Toowoomba's cultural activity, being used for meetings, concerts and plays as well as movies.

In 1971 the economics of the cinema



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business and competition from TV forced its closure as a movie house. The seats and fittings were removed and the dress circle was abandoned; it became a department store for a while then home to TAFE students who were able to practice housebuilding in a space so big that it would swallow ten homes and have room left over. Finally the ultimate insult: the occupants went, the doors were closed and the Empire was left to rot: a conspicuous dormitory to vagrants, graffitiists and pigeons.

You'd think that a town as big as Toowoomba would always have been a dead cert for a significant performing arts complex, but it seems not. In the absence of the Empire, the Town Hall's City Theatre took up the slack. Located about a block away, the City Theatre has a tra-

ditional 450-seat raked auditorium with proscenium, stage and flies. But changing audience tastes, the impracticality of providing disabled access and retrofit for code-matching modernisation, the need to share a congested foyer with the council offices, no dressing rooms and a complete lack of air-conditioning took the shine off its future.

Bizarrely the Empire Theatre, an obvious candidate as a performance space, was sitting on the next block waiting for a bit of vision. It was a lonely wait for almost 20 years. In 1994, Mayor Ross Miller set up a restoration committee and eventually took a plan to council to buy the theatre and restore it for the community. The building was deemed to be structurally sound, but totally derelict and even the pigeons were having second

thoughts. The decision was touch and go. Council voted four in favour and four against, and Mayor Miller used his casting vote to break the tie. Council put up the \$13.5 million it was going to take to make the building usable and work commenced.

It took way more than nine months to create Empire Theatre Mark Three, but it was worth the wait. In June 1997 a black tie function marked the official opening and Toowoomba's Empire Theatre was back in business.

## The Empire Bomber

A good theatre has a special feel, complemented by special features. The Empire certainly has the feel, but it's in the features department where it blows away other venues, and it punches way above its weight.

The first thing you notice when you walk into the Empire is just how big the space is. 1567 seats: a thousand downstairs in the raked stalls and the rest in the dress circle.

The next thing you see is a classic heavy main rag anchored by exquisite tassels, surrounded by the most amazing proscenium arch. More about that in a second. You assume that there's some sort of stage behind the curtain, although nothing prepares you for the reality.

If there's one thing that you should notice when you walk into the Empire, it's the amazing light fitting on the ceiling. Known as "the Bomber" from its shape (or possibly because someone thought it might come down during the war), it was claimed to be the largest cinema house light in the world when it was first installed in 1933. At 20 metres long it's as big as the front of a suburban home, and the design theme is replicated in other fittings around the room. The version of the Bomber we see now was faithfully recreated during the restoration from photos and heritage descriptions, but has some neat modern touches. It's lit all white, with the lamps divided across forty eight discrete control channels. That creates some interesting opportunities, and the house staff love to show it off as part of a sound-and-light show. Tour groups are treated to an animated lighting display set to a musical theme, providing yet another unexpected "wow" moment.



Kerry Saul and Tim Panitz



Steve Alexander  
head of audio



Somewhere over  
the rainbow arch

## Tonight, featuring: the proscenium!

The grand proscenium arch is thought to be unique, the only one surviving in the southern hemisphere. It's almost as big again as the actual stage opening. It too is lit from behind, originally by twenty seven 1K cyc floods arranged in RGB triplets, but more recently the floods were replaced with LED fittings, taking the power consumption from 27kW flat stick down to less than 800W. No, not a misprint: under eight hundred watts.

The Empire went onto the contestable power market at the beginning of 2011, which has been a bit of swings and roundabouts. The supply authority charges on the basis of your peak demand, and a theatre "peak" might only occur for thirty minutes... or even just five seconds. A challenge to get the measurement right, because most of the time a theatre is dark but being charged at the rate for fully-lit.

Reduction of power consumption is a serious undertaking for the Empire

".....IF YOU  
start adding  
moving  
lights  
instead of  
conventional  
lights it adds  
considerably  
to the set  
up time, and  
there often  
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Clearly audible but barely visible - the Ti array with subs in the juliet balcony

team. Tim Panitz, Technical Manager explained that the bottom-line impact of switching to LED wash was clearly visible: "The month after we put them in, we could see the difference in our maximum demand - which always occurs just before a performance starts. All the foyers are full, everything [in the house] is lit and the A/C is running flat chat." So taking well over 26kW-hours off the bill each night becomes a substantial benefit, with strong return on the investment.

### Leader of the Pack

In January this year, Kerry Saul became General Manager of the Empire complex, almost fifteen years since he was first head-hunted from Mackay to open the theatre as Technical Manager. "I was ready for a move. The art deco era of the theatre was what interested me, as well as having a couple of theatres to operate (the City Theatre was part of the scope). I did the same thing that international artists do

when they first walk into the theatre: it was 'Oh. Wow!'"

Kerry is the sort of manager who is focused on his people and how they work. His love of theatre shows, and it shows in the people under his leadership. He still feels the excitement of doing a job he clearly relishes: "being able to create major community productions and have an entire team work together in an arts venue... stay in an industry and have a job, but still be able to do the art."

His on-arrival job was to get the theatre running. "Before we opened we imported Phil Bowman from QPAC for a week. We picked up a dozen Source Fours out of Brisbane for the opening. For the first six months we had to hire a rig in for each major gig. That sounds easy if you're in a capital city, but it doesn't work out in the sticks. The labour cost of hiring in and returning to Brisbane was killing the economic model."

Over the years, Kerry has completed works that weren't quite finished at open-

ing ("we didn't have all the ropes in place for a while") and built up the team as he built the business. It's challenging, because the two hour drive to Brisbane makes it just close enough to take an audience away rather than bring shows in. But the Empire has been commercially successful to the extent that he now has regular bookings, seventeen people on permanent staff, and a large team of volunteers who work through "Friends of the Empire Theatre". He is passionate about training, and is encouraging providers to bring recognised training on-stream through the Theatre's venues. He knows that there's a need to train teachers.

### Empire the Producer

Each year the Empire Theatre acts as producer to do a big show from ground up. A creative team is brought in and paid to run the show using a volunteer cast. In this way Toowoomba has seen runs of Chi-



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cago, Beauty and the Beast, Spamalot, Boy from Oz, Cats, and earlier this year: Wizard of Oz. There is an expectation that around 6000 people will buy tickets for the season.

One thing this certainly achieves is an increase in skill levels, for everyone involved. Oddly, changing labour laws designed to protect the interests of employees have had the opposite effect. Kerry Saul notes that he no longer has the ability to pay a junior at lower rates than a senior, and this has changed the job mix - not necessarily for the better. Where the company used to be able to encourage development of talented beginners, and give them a small compensation, those people now have to be paid substantially the same rate as an experienced hand. If it costs as much to use a raw recruit as it does to pay someone with experience and developed skill, and if there is limited budget (because there always is), guess what happens? A well intentioned rule doesn't always have the desired outcome.

## Lightly does it

Tim Panitz came on board as Head of Lighting two years after the re-opening of the Empire, and spent the next next six years building up the lighting rig. It was a challenging line to walk, and you can download the fine detail on speeds and feeds and costs of the theatre here: <http://bit.ly/cx71-empire-details> (download links

are hidden at the very bottom of the page). Everyone expects a venue the size of the Empire to come with a spectacular complement of permanent lighting, but each purchase has to be justified against the work coming in. And, as Tim points out, fitout took second place to the walls. "When I started there were eight 2k Fresnels, six 2k profiles that couldn't be used because they wouldn't fit in the FOH bridges, twelve PCs, and 20 Selecon 1200s. There were also some 650 Acclams, but they couldn't be used because they were too small for the space. They were no more use than indicator lights".

It was a pretty quick decision to convince Council at the time that there was an economic benefit in having their own lights. That was when they got the 2k rig and they ended up with "64 on stage": 2K Fresnels arranged on the stage bars as sixteen sets of three colours plus white. But now that has been reduced to sixteen sets of three colours and twelve TW1 movers, a combination that delivers the same effect with more artistic possibilities.

Movers are a blessing and a curse, Tim tells me: "Primarily we're a community venue that does commercial product. If we're designing a show from scratch, then movers would be faster to set up. But we have to maintain the balance of conventional and intelligent fixtures." For a touring production, the paramount need is to replicate the lighting designer's plot quickly and effectively at each venue. "It's

no use having a rig with entirely moving lights; touring community productions don't use movers because they are too expensive to take round."

Many of the shows that come to the Empire are classic box set theatre shows. The show has been plotted and set for a notional conventional rig in a theatre which seats 300 people. Contrast that to the Empire which seats 1500. "If you start adding moving lights to replace conventional lights it adds considerably to the setup time, and there often isn't that time in the schedule. The company comes in at 9AM for show which will open at 7.30PM - there isn't the time to relight [and replot] the show from scratch, so we're committed to provide conventional lighting as required."

The Empire does now have a good stock of movers, which get used for touring gigs and country rock shows. They certainly reduce labour costs for some types of shows, and movers always give the option to trade off focus time (for specials) against plot time.

## Sound thinking

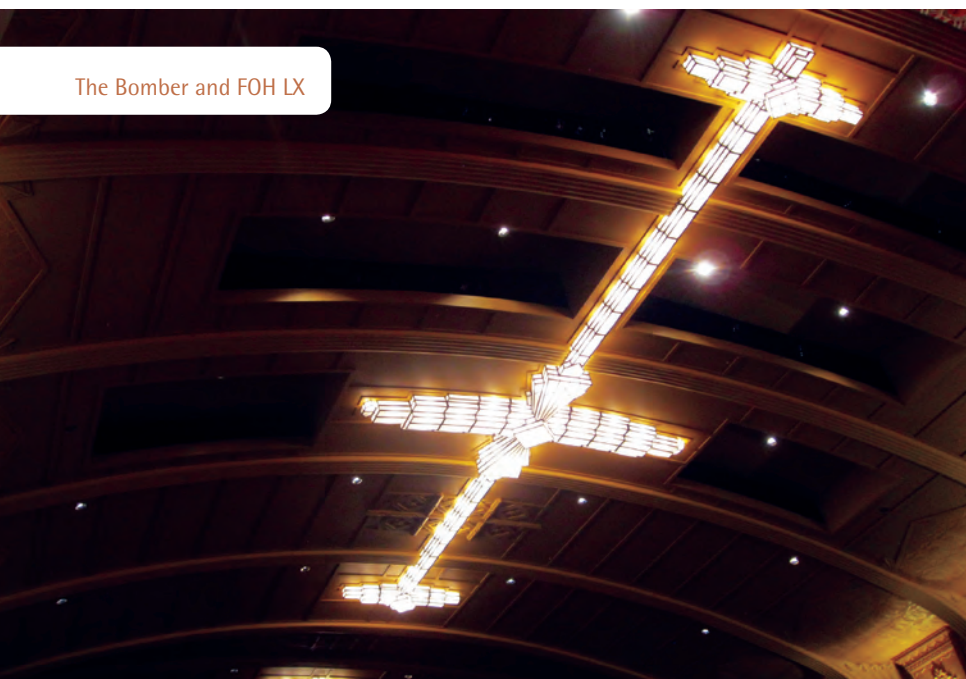
As with lighting, the Empire has worked hard to provide a sound system which meets the needs of clients, satisfies riders, and protects the heritage listing of the theatre. Steve Alexander is Head of Audio, and has the job of building an equipment list which achieves all that and more. Control is a Midas Pro6 with 56 gazintas (plus 8 stereo returns), and 16 matrix/16 aux outputs in addition to the main L/R.

Every so often, a client comes in and asks if they can hang a PA. The answer is "actually no, you can't", which is the downside of Heritage Listing. So the house system has to be a winner.

It's clear that Steve is very focused on the aesthetics of what he does, and talks with parental pride. He didn't ever think he could be happy working in a venue, but the siren call of the Empire won him over. He's actually come back to town: Steve grew up in Toowoomba and remembers the Empire as a birdsnest. After 18 years as a soundie on the road, constantly loading and unloading trucks, he's clearly glad to have a home base.

Steve told me "there are only two places the stacks can go. The proscenium is a

The Bomber and FOH LX



defining factor in the room, and we can't put in a centre stack because of looks, sightlines, mechanics and approvals". The original speakers were arrays located in the juliet balconies either side of the stage. For the most recent revamp, Steve scoured the market for what was available, compared needs and style of show, and did a shoot-out with several systems in the room. The spec to the manufacturers included tight requirements on weight, width and colour match against the proscenium. The choice was narrowed to D&B, and although the T-Series had been out only a short time, they plotted well in a software modelling of the room. Steve also found that D&B were willing to do the painting in the factory, and he went to the extent of doing a pantone match against the house paint. There was lots of careful woodwork done to allow the speakers to be flown, to good effect. The combination of positioning and colour makes the stack fade into the proscenium, and the juliet balconies are used to provide an inconspicuous home to the black B4 subs which round out the bottom end. And it's so nice to be in a venue which doesn't doofa-doofa you at the first row of the stalls.

The D&B arrays were flown and positioned according to calculations and dimensions derived through the software model, toed in slightly, tweaked for a bit of uptilt into the balcony, and finally tightened on the main arrays so that a little more sound pushes into the under-balcony area. The design allowed for small front-fill boxes for first few rows, generally matrixed just to send the vocals.

The T-Series installation was so effective that the original under-balcony delay speakers were found to be not necessary. Steve took the opportunity to turn them around to point back into the audience, where they are great for surround effects like rain, or additional reverb.

Audio mix position can be in the centre of the auditorium at the expense of forty seats, or at the dedicated position right at the back of the stalls under the balcony. Under the balcony? Doesn't that mess with the ability to hear the mix? No, says Steve. There are some local delay speakers that help mixers who are unfamiliar with the room, but they are only there for confidence. The trick is to mix sitting down: "if you stand all the highs go, and the balance engineer ends up winding in highs to compensate"

I asked how useful is the room without amplification? Pretty well, but again local knowledge counts

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all the highs go,  
and the balance  
engineer ends up  
winding in highs  
to compensate"**

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a lot. Even though the Empire isn't as live as a concert hall, in the hands of a good performer sound projects, and apparently it works for opera. What it doesn't do is carry sound from a box set when eight hundred people are laughing. For most companies, that's a problem they'd like to have, so the solution is to apply judicious amounts of audio lift, either with plate mikes or careful miking of the cast.

## We open in Venice, we next play...

The Empire gets tours which don't have dedicated lighting people, so what are the house guys given in advance of a show? A plan, possibly plotted for the Empire, which they set up in advance. Typically the client doesn't have time to fully re-light the show, just look at it quickly. Touring companies sometimes have their own console, which allows a plug and play with house lights; everyone else gets the Grand MA.

Tim Panitz unfolds the story. "The production manager will be working off a design which has been done at the start of the tour, and they're trying to replicate

that look at each venue. The Empire poses challenges in that it's so much bigger than just about anywhere else the company would work. The lighting plot will be sent and discussed in advance, but touring companies still express surprise when they arrive to find that a 650W Fresnel that they've specified at a height of four metres has turned into a 2K Fresnel from 8m." Tim's team knows that their translation will do more or less the same job, but the users don't always follow that.

Which leads to the obvious question: is it that today's LX techs don't understand inverse square law? Tim says less and less so. He says it's great when they deal with a major company because an experienced lighting designer typically comes in knowing to expect a good crew, people who understand the constraints of the house and can work with the designer to provide exactly what is wanted. "The better the designer, the more they trust the house. You know what your room can do; you know what that lamp from that throw can do. In preproduction the less experienced designers, who think they're on to a really good thing, insist on specifics even though the house guys know it won't work. Then when the client gets

here.... tears." The message is clear: trust your local sheriff.

## More than just pretty

Possibly the most impressive features of the Empire are the things that the public never notices or sees. That starts with the air conditioning system. In such a huge space, traditional air handling wastes a lot of energy with a design that treats the whole room, even though most of the volume is empty space with a temperature rating of "who cares". The Empire solves that with a Krantz microclimate air conditioning system that uses a plenum under the floor and outlets at the back of each seat to deliver conditioned air to a space no more than three metres above the audience. Saves a motza, and it's effective.

The very spacious stage has eighty rope lines, and lots of wing space. The area at the front of the stage is on a lift, and can be moved to stage level, house level, or pit level where it provides enough room for thirty musos (note: not packed like sardines). Interestingly, the stage-plus-wing space is big enough to be used as a function area in its own right, and is regularly booked for dinners and balls. Not surprisingly, it dresses up and lights rather well, and few venues offer 80 ways to fly decorations.

Behind the stage, and accessible directly through a full height soundproof door in the middle of the cyc wall, is a rehearsal space ("The Studio") that has a floor area the size of the main stage. Blocking nirvana! The Studio comes with a fixed lighting grid, so it can double as a small performance space, or for recitals seating up to 150. There are dressing rooms for over sixty people, and separate space below stage for the orchestra to bump in and tune up. Nice.

Immediately to either side of the main theatre, the internal function and bar areas have been turned into airy spaces which feature natural light, interesting angles, exposed original brickwork, and some fascinating history.

Over the years Council acquired more land to build a restaurant and conference facility, and two years after opening purchased the adjacent deconsecrated church which has been remodeled to provide yet another small performance space - complete with pipe organ.

## Wrap

Looking back twenty years to when the idea was mooted, everyone is amazed that there was ever opposition to the Empire project, and that the detractors were so vocal. The Council's decision to invest ended up being a primary election platform and Ross Miller, now regarded as a visionary, was voted out of his position as Mayor just one month before the fully renovated Empire opened in June 1977.

Kerry summed up the community attitude to the Empire complex:

"There's been an amazing change in public perception over the years. It was a theatre that half the community didn't want. Now it's in the psyche of the community as a cultural icon".

That's a lesson that can be learned by Councils and communities everywhere: if you want a vibrant arts and cultural outlook in your area, then you have to invest in buildings, plant and people. It's a significant up-front cost, and it's a scary thing to justify to the ratepayers. But, as Toowoomba (and Willoughby) found, it's an investment that just keeps giving back.

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**Lots  
of  
Watts**

By Jimmy Den-Ouden



## HK Audio Lucas Nano 300

Deceptively small, the Nano packs a punch



PLAY  
VIDEO

The Lucas Nano 300 is an easy one handed lift.  
A VERY easy one handed lift...

**C**ompact sub & satellite systems were all the rage for a while, especially in architectural applications. But tiny wee satellites often lacked convincing low mids, so architectural applications is typically where such systems have remained in confinement. The Lucas Nano 300 from HK might change that.

The basic system includes a sub and pair of satellite mid-high speakers, which conveniently enough travel attached to the back of the sub. The subwoofer is an 8" active unit, with internal amplifier for the satellite speakers. It's rated output power is 160W @ 2 ohms, achieving a stated peak

SPL of 118dB. That's quite impressive from a box measuring only 30 x 39 x 42 cm. Frequency response is stated at "44Hz - fx". Integrated carrying handles make it easy to handle, and with the satellites attached the whole system weighs in under 11kg. That's \*ridiculously\* lightweight - solo artists could easily carry the system into their gig in one hand and a guitar case and mic stand in the other.

The satellites are 13 x 13 x 11.5 cm in size, with a stated frequency response of 190Hz - 20kHz. Looking at the cutaway the internal driver appears to be a 4", but it's not actually stated anywhere. Power rating on the satellites is 35W, but you can stack

two of them together to effectively double this. The dispersion pattern is 60 x 40 degrees (H x V), though I'm yet to figure out how this is maintained when stacking the boxes - comb filtering would be expected. Still, it seems to work. Mounting the satellite speakers is really simple - "easy click" type clips allow them to attach to the sub, each other, or a variety of desktop and wall brackets. You can even perch them atop a mic stand, plus there's a sub mounted pole kit available.

The satellites connect to the sub with a 6.5mm jack lead - note that a 6.5mm instrument lead is NOT the same as a 6.5mm speaker lead! The wall mount plate

incorporates a flylead with 6.5mm jack connector. I reckon the satellite speakers are the best part of the system. They have the low-mid conviction that smaller drivers really can't fake. Overall response of the system is quite smooth, and the HF rendition is very good considering the mid/high is driven off a single driver. The sub level is adjustable from nothing all the way up to "DJ" levels. 1 o'clock on the dial seemed about right to me.

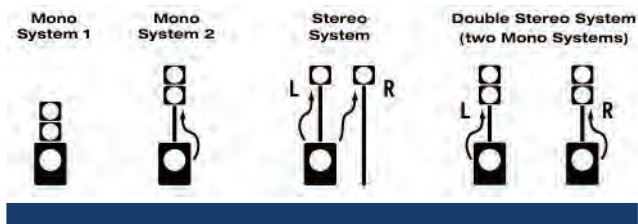
The integrated mixer has 6 dedicated inputs, of which up to 4 can be used simultaneously. Channel 1 is switchable between XLR mic and line input, and has a XLR / 6.5mm combo jack. Channel 2 can accept an instrument signal or stereo line in (again on 1 or 2 combo jacks), and the third channel is for stereo line signals such as an iPod or laptop. Twin RCA inputs are the default, and plugging a device into the 3.5mm stereo input then bypasses these.

Each channel input has a level and "contour" control. For mic input, the contour gradually applies a "vocal" EQ. For line sources, it boosts low and high end. There is no phantom power for mic inputs, but if this is important it's easy enough to run an external mixer. The key point about the mixer functionality is that it's quite easy to understand and get working quickly. Plug in a source, turn up the knob, and go.

The Nano system will run in mono or stereo mode, and you select the mode with a switch labeled with the corresponding satellite box configuration (side by side for stereo, one atop the other for mono). Integrated speaker connections mean you only need to use a cable to connect a satellite speaker if it's on its own – on top of the sub or another satellite the connection is automatic.

Connecting a vocal mic up to the Nano yields pleasing results, though the dynamic nature of vocals means you do hit the limits of the system pretty quickly if you're over-enthusiastic with the level control. Playback signals work well, with a nice full range feel to the sound. Feedback rejection is surprisingly good, as is the directivity of the satellite speakers. Overall the Nano system is not soul smashingly loud, but taking into account its size it really does produce a lot of level. While it probably won't keep up with a pair of 10" and horn plastic boxes, it's a lot friendlier on the eye, and the back. The Nano will satisfy a lot of users who need something that is easy to carry and setup, and simple and quick to get a decent sound out of.

**Brand:**  
**HK Audio**  
**Model:** LUCAS  
**Nano 300**  
**RRP:** \$1299  
**inc GST**  
**Product Info:**  
[www.hkaudio.com](http://www.hkaudio.com)  
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[www.cmi.com.au](http://www.cmi.com.au)



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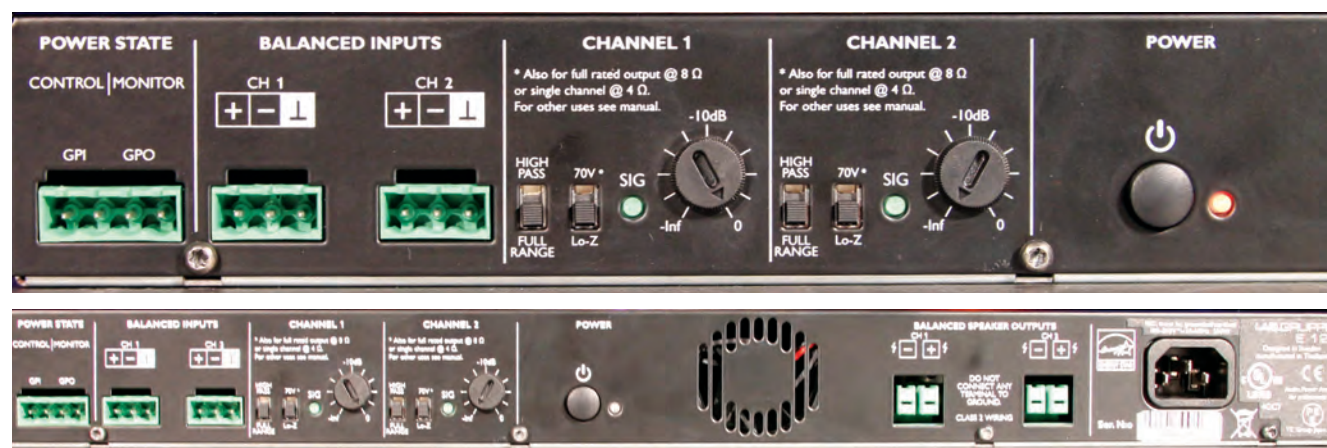
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By Jimmy Den-Ouden



# Lab.Gruppen E12-2 Power Amp

## More for less...



**H**ere at CX we've spent a lot of time looking at ways to make lighting more energy efficient. Greener. This said, there's a big white audio shaped elephant in the room that has yet to have its presence acknowledged.

I have this theory that when I rock up to a gig and switch on a few 40A Wilcos for audio power, I'm actually doing the planet a favour. After all, all those people who are here watching my gig aren't at home with their lights, TVs, stereos and heaters running. On a "Watts used per punter basis", being at a gig can actually be a pretty environmentally sound decision. The PA goes on at the start of the day and off 12 hours later, and for much of this time it's just sitting at idle. Many venues are completely dark for the remainder of the time. So audio power consumption on a gig could reasonably be considered acceptable. But venues aside,

what about the installed sound systems?

Shopping malls, function centres, restaurants, office buildings, airports, and a myriad of other places in our world all have installed sound systems. Some of these are used for paging alone, some run background music, or even foreground music. Typically such systems run 12-24 hours a day, every day, year in year out. A single amplifier running background music can chew in excess of 5000kWh of power in a year – costing

around \$1000. I haven't figured out what it would cost on an AM1600, though I suspect it would be enough to raise a few eyebrows here at CX...

Lab Gruppen has turned its attention to power efficiency, with the new E series amplifiers. The entire E series range has a few commonalities. All models are 1RU in size, all can run 70V or impedance driven systems, all are dual channel units and none of them has a single button on the front panel. They're really designed as install amplifiers. The base model is the E4-2, which drives 200W into 8 ohms on each channel, our test unit was the E12-2, which is good for three times this output. Interestingly enough, different impedance loads don't actually change the power output.

None of this is really revolutionary though. What makes the E series special is the "green factor". First up, they're efficient when running. A lot of thought has

**Brand:** Lab Gruppen  
**Model:** E12-2  
**RRP:** E12-2 – \$2199 inc GST, E8-2 – \$1875 inc GST, E4-2 – \$1545 inc GST.  
**Product Info:** [www.labgruppen.com](http://www.labgruppen.com)  
**Distributor:** [www.hillssvl.com.au](http://www.hillssvl.com.au)

also been put into the power management side of this range. First up, you can remotely power the amp on and off via a GPI contact closure type interface. You can also monitor its power state remotely via a GPO type interface. Great for installers of automated system. Better yet, the amp has an auto shut-down which occurs when there is no signal for 20 mins. The turn-on signal threshold defaults to -56dBu, and can be adjusted. The auto shut down can also be disabled via a button sequence. Wake up takes 1.8 seconds and the amp fades the audio level up nice and smoothly when this happens.

The power button is on the back, along with switches to alternate each channel between 70V and impedance drive, as well as HPF. Each channel has an adjustable input attenuator that is sensibly enough marked in dB from unity all the way down to nothing. Don't go looking for XLR or Speakon connectors – Phoenix style connectors apply for input and outputs as well as the power interfacing. This is a further win for installers – saving at least \$20 per amp in connectors plus the time required to solder the XLRs. Assembly of the Phoenix terminal blocks is quick and easy, but in our experience replacing these is very costly – don't lose them! Front panel indicators include power, temperature, plus signal and limit LEDs for each channel.

### Putting it into practice

We put the amp on the bench and tested it connected to an 8 ohm speaker, as well as an in-line ammeter on the power cable. In standby mode the current draw was a negligible 33mA, and with the amp on the E12-2 was pulling around 150mA at 240V. Running some moderate level BGM through the amp didn't actually see the current draw change very much – 153mA. Just for laughs, I plugged the E12-2 into a big sub, punched 50Hz tone down the line, and turned it up a whole lot. Current draw jumped to around 1A. I still wasn't hitting limit or clip on the amp, but our building was definitely out of headroom.

Obviously the higher the output, the more juice the amp will chew through. Still, it's a lot less than a comparable amp with a transformer based power supply. Based on its size and lack of weight it seems the E12-2 has a switch mode supply.

The single cooling fan ran up at start up but quickly settled – it seems like the amp needs to be doing a fair bit of work in order to switch the fan on. Venting is front to rear, so stacking a dozen of these puppies on top of each other in a rack wouldn't be a problem provided the rack had adequate airflow internally. Noise floor of the amp when passing no signal was very low.

Ultimately you could conceivably use a rack of E12-2 amps to build the lightest monitor amp rack of all time, and it would probably work for a lot of applications. With a maximum output of 600W the E12-2 isn't really big enough to run a lot of the newer line array and large format boxes, but that's not its purpose in life. It's really designed for install, and in this application it promises some long term savings on labour, weight, cooling and ultimately dollars.



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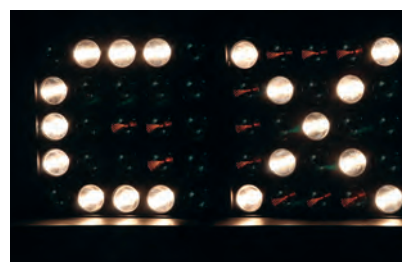
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PLAY  
VIDEO

# Chromlech JARAG

We switched it on, and everyone in the office went diving for sunglasses

By Jimmy Den-Ouden

In an age where so much of what we look at is LED based, it's a bold move to release a big incandescent fixture. In the case of the Chromlech JARAG though, we think it's a good thing.

The JARAG-5PAR30 is a chunky fixture, yet surprisingly lightweight for its relative bulk. It comprises a five by five matrix of PAR lamps, mounted in a metal box. Each lamp has its own internal dimmer. Considering the amount of internal electronics involved in such a feat of control, the JARAG really doesn't weigh a lot, tipping

our parcel scales at a shade over 17kg. It's dead square and stands up by itself just fine. Multiple units can be stacked and bolted together, or you can fly it using the attached yoke bracket. Power connects via PowerCon, with 5 pin XLR in and loop connectors for DMX. A simple 4 character LED menu system handles setup.

Dimming is cleverly handled on a single PCB, with flyleads out to each of the 75W

Edison screw lamp bases. Full tilt on every lamp sees power consumption at 1875W. Pulling the JARAG apart was seriously easy – two plastic lock screws on the back yielded full access to the control circuitry – great in case you need to do a field replacement of the control board. I would like to see some kind of door switch interlock system for a little added safety, but then you're hardly likely to be pulling the thing

apart while it's energized anyway. That would be a really dumb idea (unless you're a suitably qualified service technician). Build quality feels decent – not outstandingly robust, but the unit would certainly travel fine if suitably cased.

Getting to the lamps on the front is also easy – the front cover panel is sheet metal with punch outs for each lamp. To remove it, just pull and six little clips will release allowing access. Importantly, there's a safety wire so the front panel can't fall down and kill someone below. The Chromlech website details some other front panel options including mirror finish versions.

## Control options

JARAG is DMX controlled, and will occupy 6, 25 or 31 channels of real estate in your data stream per unit. You'll really want to give them individual addresses, and we'll discuss the reasons for this a bit later on. We began in 25 channel mode, and just pushed every fader up at once to see if it was working. A few blindingly bright seconds later, we decided it definitely was. The first thing to know about this fixture is that it's extremely bright at full intensity.

Further investigation showed basically 1 DMX value for the intensity of each lamp in the matrix. This would be the mode you'd use for pixel mapping – albeit with monochromatic pixels. 6 channel mode uses the internal "sequencer", presenting a variety of effects with adjustable size, speed and intensity. We ran in this mode off a simple 1 preset console and were able to setup and run some nice effects fairly easily. The sequencer holds 128 factory sequences, but can also be programmed with 128x 32 step user defined sequences. This is done using a computer and downloadable software.

Want your name in lights?

In addition to patterns, the JARAG can also display letters and numbers. Again, this is just a case of having a few channels set at the appropriate values to engage this function, then one more channel allows you to scroll through the alphabet. See the pics. 31 channel mode gives you both matrix and sequencer functions – I didn't read the book since it all seemed to work very well before I got to that.

So far as applications go, JARAG is really designed to be something you look at far more than something you use to light stuff up. It fills this role very nicely, and indeed I've seen it used to great effect on several shows recently. From flown FOH truss positions spelling out words, though to upstage pattern effects, it does look good. Not to mention bright. Did I mention it's really bright?

For something that pulls just a bit less juice than a 2K Fresnel, it's certainly a lot more interesting to watch. Multiple units stacked together running the internal effects further enhances the effect – check out the official JARAG video on the chromlech site for further info and ideas. Just be ready to run a dedicated 10A feed to each unit.

**Brand: Chromlech**  
**Model: JARAG-5PAR30**  
**RRP: \$4499**  
**inc GST**  
**Product Info: [www.chromlech.fr](http://www.chromlech.fr)**  
**Distributor: [www.showtech.com.au](http://www.showtech.com.au)**

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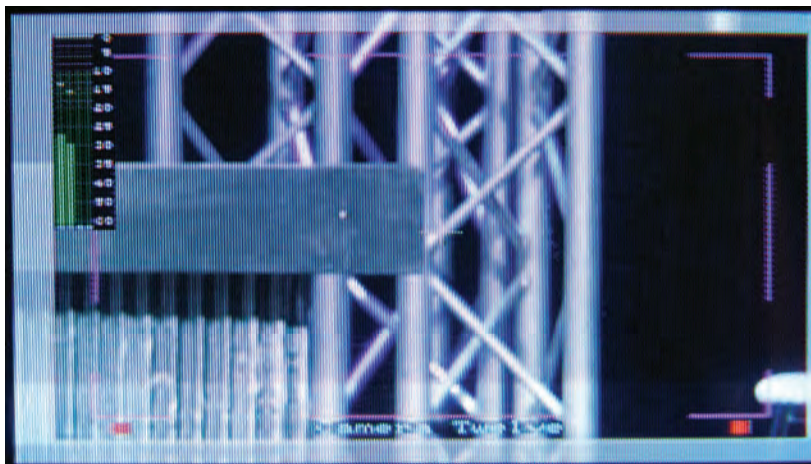
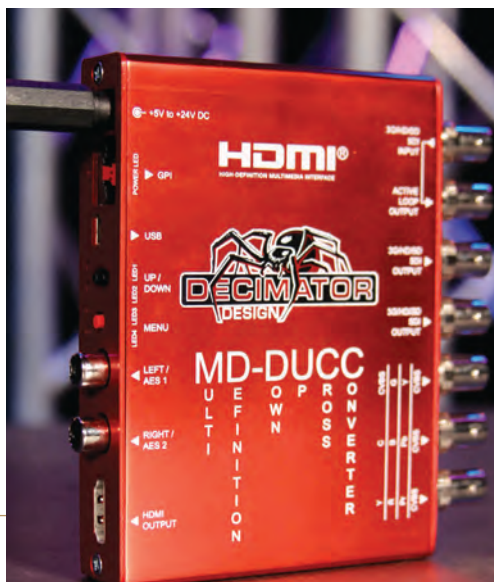
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By Jimmy Den-Ouden



## Decimator Design md-ducc Convert up, down and across...

**W**ith so many different video formats, the process of dealing with more than one within a system has become a bit confusing. The MD-DUCC from Decimator Design is a Multi Definition Down Up Cross Converter.

Physically, the MD-DUCC is a nice little piece of engineering. Digital video conversion can be a heat intensive process. Its solid metal case acts not only to protect the unit, but also to dissipate heat without the need for cooling fans. All BNC connectors are along one side, starting with an input for SD SDI / HD SDI / 3G, complete with active loop through terminal. The device can be forced to a specific input mode, be it SD, HD, or 3G but by default its single input connector will auto-sense the signal type.

Next up are two SD SDI / HD SDI / 3G outputs from the converter. Last up are three BNC connectors for analogue – these can be configured to output component, RGB, or composite and Y/C. An HDMI output sits on the opposing edge of the case, adjacent to the twin RCA audio outputs. Output format for the HDMI socket can be set to a variety of DVI and HDMI modes in component or RGB, complete with embedded audio pass through. The RCA connectors can each function as a mono analogue, or a stereo

AES output – this function is switched for both sockets simultaneously.

A little further along the side is the configuration section – Decimator Design has chosen a tricolour LED based system for this. Four LEDs tell you where you are in the menu system, which is navigated using the Menu/Up/Down buttons. The only hassle with it is that as with every tricolour LED, the difference between red and orange is virtually impossible to discern.

A mini USB port allows for software control and updates of the unit. Last up on the side of the case is the power input, and an RJ45 connector used for the tally interface.

### Conversion

There are a few parameters you need to set correctly to get the right results from the converter. How you set these depends on what you're trying to achieve. First up is the output format – this should reflect the native format of the device to which the MD-DUCC is sending signals. So if it's an HD mixer, choose a native output format. This defines how many pixels are in the video signal output by converter.

Next up is the aspect ratio. This is commonly confused for a pixel count; it's not. It relates to how the image is spread across the fixed number of output pixels. So if you're inputting a 4:3 image and want to display it on a 16:9 device, you'll need to select the right SD to HD aspect conversion.

There's an inbuilt character generator which is capable of displaying "graticules" for safe action area, safe title area, and also a centre cross. The unit can display on-screen audio level me-

tering for its input source – up to 16 channels worth (4 groups of 4). A variety of scales are selectable including AES, VU, BBC, EBU, DIN and Nordic scales. The orientation and construction of the meters can also be configured, as can the reference level.

The PC software allows you to customize colour and transparency for the various overlays, as well as adjust stuff like audio meter ballistics. Making the tally light up is as simple as shorting two lines on the RJ45, GPI trigger style.

The process of downconversion is that of essentially throwing away picture information to make an image fit into fewer pixels. So purely by the nature of what it is, downconversion results in quality loss. Similarly, upconversion is the process of generating information to fill pixels that don't exist in the source. On the basis of these immutable truths, the MD-DUCC actually does a pretty good job. It's likely to find a happy home in control rooms – especially for monitoring applications. The on-screen options for tally, audio level and various other graphics are great – these alone make the device worth the price.

Conceivably the MD-DUCC could be used in applications where digital signals are already in use, but analogue monitoring has yet to be updated. Not that there's a lot of 4:3 systems left, but it's nice to know there's still a way to use them. Once this happens though, it's nice to know the product still has a purpose in life when used in an exclusively digital facility.

**Brand:** Decimator Design  
**Model:** MD-DUCC (Multi Definition Down Up Cross Converter)  
**RRP:** \$764.50 inc GST  
**Product Info:** [www.decimator.com](http://www.decimator.com)  
**Distributor:** [www.avgroup.com.au](http://www.avgroup.com.au)





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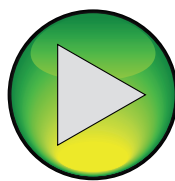
By Jimmy Den-Ouden



## AUDIX FP7 Kit

# How good can seven mics for under 700 bucks be?

**I** did a venue installation some years back. It was a little community thing; a love job with a second hand PA, console, and some very simple processing. The PA actually sounded pretty good, but was seriously let down by shitty mics. Somebody sourced a cheapo “no name” drum mic kit on eBay – 3 of them failed to work at all, while the rest just failed to sound any good.



PLAY VIDEO

Audix by contrast has a good name – one that is recognized by professionals. The FP7 Fusion series is an entry-level drum / instrument mic kit, with enough basics to mic up a standard drum kit quite effectively.

It comes in its own metal road case, which has enough room and foam cutouts to add an additional 4 mics plus some accessories. A bonus for beginners is the included “cheat sheet”, which lists basic specifications for each mic as well as the applications for which it is suitable. It also lists some basic mic techniques and positioning tips for each mic.

The f6 dynamic is designed as a kick drum mic, and indeed it looks like a more ergonomic version of a D6. It feels good in your hand, carrying a decent amount of weight. The f6 has a dual pop screen arrangement - there's a foam screen inside the mic basket as you'd expect, and removing this reveals a second screen that slips over the capsule inside.

The f5 dynamic mic is listed as suitable for snare, bongos, timbales, guitar cabs, and general instrument use. It's very reminiscent of an i5, which is popular on some of the international input lists I see. Again, it's built very nicely and feels good. The f5 is supplied with an MC1 mic clip, being the only mic in the kit that isn't compatible with the six included DCLIP mic clips.

The DCLIPs are a vast improvement over previous generations – strong yet flexible. Anyone who ever owned a D2 or D4 will remember the brittle plastic clips they were supplied with. Great mics, but the clips broke easily. Thread adapters are also included in the FP7 kit.

Toms, congas and the like are addressed with three f2 dynamic mics. Again, drawing inspiration from the D2 / D4 series the f2 has a shape which is familiar yet somehow more aerodynamic. It was nice to note that each mic has a serial number, and the three in our test kit were within 20 units of each other. Not quite matched pairs, but pretty good for consistency purposes.

All the mics discussed thus far have a hypercardioid pickup pattern. This is a good thing if you're looking for isolation of individual instruments, but remember that most hypercardioid mics have a rear lobe. So you need to be careful about what's behind the mic as well as what's in front of it.

The final inclusion is a pair of f9 condensers, which are cardioid mics. The included literature suggests that you can either use the f9s as a pair of overhead mics, or one on hats and the other as an overhead. Ours were sequentially serialized. A pair of wind-socks is supplied, so like the rest of the kit you could use these outdoors.

## Listening test

Figuring the best way to evaluate drum mics was to listen to some drums through them, I invited one of my mates and his drumkit into the CX bunker. I did a quick mic up, patched everything into my audio interface, and hit the record button. Our studio is acoustically fine for the speech stuff we normally do, but not ideal for recording live drums. Even so, the results were very good straight out of the box.

Listening back, I pushed up channels and immediately (even with no EQ) had a drum sound most people would consider pretty acceptable. Some EQ minor tweaks on the kick and snare mics, a few roll-offs on the overheads, and I was happy. Spending a little more time on positioning of the mics and The noise floor on the f9 condensers is a little higher than on any of my normal overheads, but not enough so to be a bother when used on drum mics. The f2 tom mics are definitely my pick of the bunch – they're great. Granted, recording drums in a studio isn't the same as reinforcing them live on a stage, but I really can't see any problems us-



See and hear Mike Smith audition these microphones at CX-TV.

ing the FP7 kit in live applications.

The real kicker here is the price. The FP7 kit really is incredible value for anyone wanting some well-constructed, versatile, entry-level mics. The build quality is right, and they're very user friendly for novices and experienced users alike.

**Brand:** Audix  
**Model:** FP7 Fusion Series Drum Mic Kit  
**RRP:** \$691 inc GST  
**Product Info:** [www.audixusa.com](http://www.audixusa.com)  
**Distributor:** [www.productionaudio.com.au](http://www.productionaudio.com.au)

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## Furman PL-PRO DMC E Power Conditioner Good power can be hard to come by...

By Jimmy Den-Ouden

**T**he technology modern industry hangs off our power grid means voltage supply isn't always perfect – especially in industrial and commercial areas. Every morning as the world cranks up, huge loads are placed onto our supply. The energy companies bump up the supply with variable tap transformers to



compensate. The reverse happens at night once everything shuts down – suddenly the supply goes high and the powers that be have to rail it back down to normality.

These voltage spikes can be problematic where gear is concerned – especially modern equipment which uses switchmode power supplies. Logic circuits (in other words anything digital) tend to respond

especially poorly to bad power. As if minor fluctuations in power aren't already enough to worry about, under and over voltage supply can do even worse damage.

Surge protection comes in different flavours and prices – starting around \$17 from the local hardware store. Thing is, you tend to get what you pay for. If you're willing to entrust protection of your gear to a flimsy MOV inside a powerboard then that's your prerogative. If you want something more robust, check out the Furman range of conditioners. We spent a morning in the loading dock playing with a PL-PRO DMC E conditioner and some step up transformers.

The PL-PRO DMC E conditioner is a single rack unit device with a 15A IEC input, and 11 IEC outlets (10 on the back, one on the front). There's a blue LED meter on the front panel which can read supply voltage as well as current consumption. Dual pull-out LED rack lights are also included, and these can be dimmed with a knob. There's also a USB power socket, so you can even use it to charge your iThingy.

There are several other models in the range, but the common thing between them is their core purpose – supply voltage protection. The conditioners do two things – firstly they smooth out surges in the incoming power supply. The kind of surges generated when fluoro lamps are started, sending popping noises through your sound system. These are the same

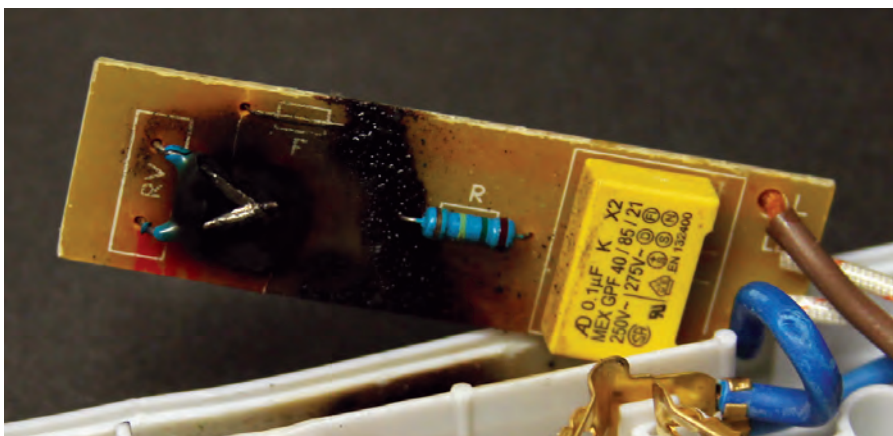
**Brand:** Furman  
**Model:** PL-PRO DMC E Power Conditioner  
**RRP:** \$765.00 inc GST  
**Product**  
[www.furmansound.com](http://www.furmansound.com)  
**Distributor:**  
[www.jands.com.au](http://www.jands.com.au)

kind of little voltage fluctuations which send your switchmode devices crazy, and cause problems like DSP and console crashes.

The second level of protection is extreme voltage. Most gear will deal with slow fluctuations in the supply – up to around 10%. Sudden big spikes in voltage are another problem entirely. If the site sparky accidentally wires a supply phase to phase rather than phase to neutral, the incoming voltage can exceed

350V pretty rapidly. In the event incoming supply exceeds 274V the Furman conditioners will shut down completely, fully isolating themselves and all connected equipment from the over voltage supply. The whole process happens inside 1 nanosecond – probably faster than a human could isolate the gear assuming they knew about the problem. Once the supply has been restored to normal voltage, the operator can manually reset the unit by turning the front panel switch off and back on. A powerboard with an MOV tries to shunt excess voltage away from the connected supply, but can't actually isolate the connected devices from it completely. So in other words, your gear can still get fried.

The PL-PRO DMC E is the flagship model in the Classic range, so it's not exactly cheap. Slightly less fancy models are available from around \$230. Sure it's still more than the \$17 powerboard, but then considering the price tag on most production gear, the Furman conditioners are actually pretty cheap insurance.



This MOV device was part of a cheapo "surge protected" powerboard we tested with an extreme voltage spike – it fried completely, meanwhile the Furman was fine!

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# biz talk

By Julius Grafton

## HARD CORE COLLECTION How the good - and the bad - get paid

**M**ick Gatto is a professional advocate well known across Melbourne, available for hire. He has handled some high profile corporate collections, and is certainly the kind of professional we would recommend if you are owed 200 grand by someone shifty. Especially if they are from the suited end of town. Mick and his associates make a pretty sight camped in the reception area.

For the rest of us, whose average bad debt is eight grand, what are the options? A quick call to the lawyer will reveal it costs far too much to enforce collection through the courts while represented by a solicitor. This is correct. So what now?

It's probably good to step back a little and review how the debt arose. Did we manage this job the wrong way, or is the debtor just someone who attempts evasion. Ric Birch is owed a legitimate \$350,000 by the organisers of the Commonwealth Games in India, and they added insult to injury by asserting his 'work was not up to scratch'. This is the old 'we contest your bill' trick.

Is your debt contested? Or are they just slow? Or they cannot pay you? Have a look into these, because the correct collection action must fit the debtor.

Assuming proper, timely and repeated mail, email and telephone action has resulted in no action, hit the switch to collection. If category two (slow but not contesting the bill) call an agency, like Pru\$hka. They charge up to 20% if they collect, zero if not. Give them 30 days only.

If your former client looks likely to contest the bill, visit your local court. In NSW, Lawlink publish a 'how to' on collection. Often the counter staff will give you a brochure, and you can prepare your own legal action.

In all categories, if you have a bastard debtor or sub-human situation, hit the switch to an almost-Mick-Gatto solution. Unless you can afford The Man, or near equivalent, himself. Only do this where you are SURE you are in the right, and all reason has failed. Otherwise you could be defaming someone innocent, which is bad.

Here's how it works:

First, do a Company Search via the ASIC website. Pay no more than \$20 to one of

the search firms on the website, to get the names and home addresses of the Directors of the miscreant firm. Make sure they have not (illegally) put the company address in place of their domestic address.

Now call around the Process Server profession. Be clear as to what you want - these guys can sidetrack you quickly to try to convince you to hire them for collection, if you appear

**IS YOUR DEBT contested? Or are they just slow? Or they cannot pay you?**

unsure. They can talk.

Tell them (the process server mob) that you need a statement of claim served on a debtor, at home, on a Sunday evening. Yes you heard this right. And you really need a larger gentleman with a loud voice for this job. Have them price it up. If they demur, call another one. There are a lot of



bounty hunters on the web. Be prepared to pay more than the going rate for this show stopper.

## THE MAIN EVENT

Now word-up your Server. Have him (or her) read a little script. The statement of claim should be clear – name of firm, details of your work done, specifics as to invoice dates, amounts, and as much salient information as possible.

This document is sealed within a nice big envelope, with the miscreant Director's name and home address on the front. Have a neat little extract printed up for the process server.

For best effect, they arrive after dark, knock loud, and read out the extract in a nice loud voice so everyone within the postcode can hear. Words like: "Hello Mr. Subhuman. Our client CX Reader has prepared a statement of claim in the amount of \$8,000 plus COSTS and this is contained within the envelope. Do you contest this account?"

If yes, they have connected and can give

you feedback.

Usually no, so they can go on with the public broadcast: "Hello, hello .... Do you hear me? I am a process server acting for CX Reader, Mr. Subhuman. Why will you not come out to talk to me? Do you hear me, sir?" (Remember, you've paid extra for a LOUD voice!)

More: "Ok, I hear you, You are calling the police. I will leave now, but the statement of claim is on your doorstep. Thank you very much for attending to your overdue debt matters".

Whether or not your Debtor is actually there, actually accepts the envelope (it can be dropped on the doormat) or not, doesn't matter. What matters is they have been blindsided by you, embarrassed at home, and they know you mean (legal) business.

Be prepared to properly pay your process server for this, it is a golden technique.

And if the big man doesn't get through the gate, ask for an attractive female process server. Believe me, they have at least

"HELLO,  
HELLO .....  
Do you hear  
me? I am  
a process  
server acting  
for....."

one of these in stock as well.

## NEXT

Assuming your passive-aggressive (but fully legal) approach has not worked, now go and see the clerk at the Local Court. Pick a time when they are not in session, because there will be a lot of people, police and law professionals requiring clerical help and you'll be ignored.

At a suitably quiet time, tell them nicely about your debtor, and they will direct you to a website or give you a brochure with templates and how-to so you can prepare your very own legal documents!

Then you take these wonderful documents back to the clerk, they scrutinize them, and if all correct they stamp them.

You are then able to serve them on the debtor yourself, or redeploy the process server to deliver the missile to the moron.

Next month I'll tell you everything that can go wrong!

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# Internships, Vocational Placements & Unpaid Work

**W**ork arrangements that fall within the scope of the Fair Work Act 2009 (the Act) create an employment relationship and require that the Australian minimum wages and conditions of employment be met. If the arrangement creates an employment relationship under the Act and the employer fails to meet their obligations under the Act, they can face penalties of up to \$33,000 per breach.

An Employer may be approached by interested persons to enter into unpaid working arrangements – the three most common are vocational placements, work experience and internships.

## Vocational Placements

A vocational placement is formal work experience that is a mandatory part of an education or training course. These arrangements are referred to as "vocational placements" and are defined as being:

- Undertaken as a requirement of an Australian-based education or training course;
- Authorised under a law or an administrative arrangement of the Commonwealth, a State or a Territory; and
- Undertaken with an employer for which a person is not entitled to be paid any remuneration.

If the above criteria are met, the person will not be covered by the Act and is therefore not entitled to the minimum wage and other entitlements provided

**UNPAID WORK EXPERIENCE placements and internships are only lawful if the intern or work experience participant is not an employee.**

by the National Employment Standards (NES) and Modern Awards. However, it should be noted that the exclusion from coverage under the Act does not limit any obligation that may arise under other legislation, including workers' compensation laws, workplace health and safety, discrimination and other relevant laws.

## Work Experience & Internships

Unpaid work experience placements and internships are only lawful if the intern or work experience participant is not

an employee. A range of factors are relevant when determining whether the parties intended to create a legally binding employment relationship, including:

- **The purpose of the arrangement:** Was it to provide work experience to the person or was it to get the person to do work to assist with the business outputs and productivity?
- **Length of time:** Generally, the longer the period of placement, the more likely the person is an employee.
- **The person's obligations in the workplace:** Although the person may do some productive activities during a placement, they are less likely to be considered an employee if there is no expectation or requirement of productivity in the workplace.

- **Who benefits from the arrangement?** The main benefit of a genuine work placement or internship should flow to the person doing the placement. If a business is gaining a significant benefit as a result of engaging the person, this may indicate an employment relationship has been formed. Unpaid work experience programs are less likely to involve em-

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ployment if they are primarily observational.

■ **Was the placement entered into through a university or vocational training organisation program?**

If so, then it is unlikely that an employment relationship exists.

Whether not an employment relationship exists depends on the specific circumstances and any agreement reached between the parties.

## Volunteering

Volunteer work is generally only performed in the not-for-profit sector, including charities and community service organisations, where people offer their services to assist in the organisation's goals. However, a business and person can't simply characterize what is actually an employment relationship as volunteer work. All the relevant factors outlined above need to be considered.

## Unpaid Trials

Trial work involves a person performing work (or 'trailing') at a place of business. If this is at the request of the employer or it is expected that the person will be performing productive activities, the person would normally be an employee in these circumstances and entitled to be paid as such.

If a work experience placement or internship is used to determine a prospective employee's suitability for a job, the person would be considered an employee for the trial period and should be paid as such. Similarly, probationary employees are paid for all hours worked.

While this does not prevent a person taking up employment after a genuine unpaid work experience or internship, each situation should be carefully con-

**THE MAIN benefit of a genuine work placement....**  
**....should flow to the person doing the placement....**

sidered to determine if the facts have given rise to an employment relationship.

The Fair Work Ombudsman (FWO) has recently announced that Professors Andrew Stewart and Rosemary Owens of the University of Adelaide Law School will be undertaking research into the range, nature and prevalence of unpaid work arrangements in Australia.

For more information, visit the "Apprenticeships and traineeships" section of [www.fairwork.gov.au](http://www.fairwork.gov.au)

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# The Big One

part 2



By Paul Matthews

**W**e stay technical this month. Just as last month we found that good 'ole 100v Line PA was the solution in an unusual situation, this month we take a look at a situation where conventional 8 ohm speakers and amplifiers were used in an application which would normally have most contractors reaching for their transformers and impedance meters.

Soccer fields are big things. Everything seems to be measured in multiples of 100 metres. From the dawn of time this invariably meant constant directivity horns all over the place and fig 8 stretched everywhere through lamp posts, trees and over toilet block roofs. Sometime in the '90s, after occasional outdoor rock concerts began to blast these fields, people started to wonder what it would be like to have a footy field PA system that you could actually play music through.

So many of us PA installers either started out as, or see ourselves as electronics techs. In traditional electronics, all the power is centralised and only tiny signals travel long distances. With "wide band" footy field PA we need big power. We're faced with the need to be able to get thousands of watts over very long distances without losing half of it in the cables.

There's three ways to skin this cat. **First:** use 100v Line PA but simply beef up the size of the transformers so that each one is rated around 250w (for each full range box) instead of 25w (for each horn). Even today there are dozens of footy fields and race courses wired this way by not-so-intelligent contractors.

## ....AFTER

occasional outdoor  
rock concerts began  
to blast these fields,  
people started to  
wonder what it would  
be like to have a footy  
field PA system that  
you could actually  
play music through.

**Second:** Move the amplifiers closer to the speakers (or even inside them). Great idea for stage work. Not so good when the amplifiers need to be squeezed into the base of a lamp post or left mounted high up on a tower and be expected to work for decades without the need to hire a boom lift every time one stops working. And remember - even if we do put our amps "out there", we still have to get 240v power to them!

**Third:** Stop thinking like an electronics engineer. Start thinking the same way as the sparkies who get the power to the footy field lighting posts in the first place! Electrically, a speaker is nothing more than an electric motor. It's just that instead of running off the 50Hz mains, it runs on anything between 20Hz and 20kHz from an audio amplifier.

240v power distribution on big sites is all about getting power where it has to go without losing too much on the way. This is done by using deliberately thicker cables for longer cable runs - to reduce voltage drop. It's common to see small 15A lighting loads on distant poles fed from cables 16mmSq or larger - the same cable size which is rated to carry 80A for the short run of mains coming into your home.

At a typical power of 250w per speaker at 8 ohms, our line is already working at 44.7v FSD. So for our super duper footy field system, using 100v line is only really going to give us an efficiency of about 2.3 times what we would otherwise have if we just connected the damn speaker straight to the amp with a big fat bit of wire.

Add to this the fact that if we use 100v line for such high power levels, we need

to factor in the loss across the transformers themselves and also consider the enormous cost of such huge beasts and where the heck we are going to put them. Then we also (still!) have to upsize the cables – because even at 100v line, the losses when transferring 250w of power in to an 8 ohm load still means there's going to be around 2.5A flowing during signal peaks. That sure isn't going to get down the end of the field through the trusty old Tandy fig 8 cable is it?

We're going to have to start thinking like the electrician and drop a lot more copper in the ground. Cost wise, in a typical installation more than 50% of the speakers will still be within 100m or so of the club house amplifier rack. It's probably only 20% or so that will need to be on really long lines which will need to be massively over sized.

Even at today's high copper prices it's going to work out cheaper to just treat the whole system the same was as if it was a conventional 8 ohm PA, but with the speaker lines much longer and fatter than we would otherwise use on a set of line arrays or ground stacks.

So how do we work out what size cables we need? Well.. we can use the same book as the electrician does. In fact we can even use the same cable if you like – a good idea because the roll price of standard single insulated 240v rated building wire from the local wholesaler is a hell of a lot less than that overpriced American stuff your speaker supplier wants you to use. It will work just as well because with cable, well.. only one thing matters and that's size – in millimetres squared. Don't let anyone else tell you otherwise.

**WITH CABLE, WELL... only one thing matters and that's size – in millimetres squared. Don't let anyone else tell you otherwise.**

We already know the load (8 ohms). We can set a maximum loop resistance for our line depending on how much power we're willing to lose. Here at PA Matthews Audio we generally aim to keep the loop resistance lower than 1 ohm so even at this point the power loss will be of the order of around 12% or 30 watts, a loss easily compensated by upsizing the amplifiers.

The electrician's cable bible (AS3008) sports a table which will give you voltage drop (in milli volts per ampere per metre) for all the common electrical cable sizes. Now I'm not about to spill the beans as to exactly how the maths is done (trade secrets?). By using these figures you can very easily work out the resistance of each cable size per metre. You then work out the length of all your speaker runs and use this to work out the minimum cable sizes you will need for each run with a view to keeping the resistance below 1 ohm. If you can't make one size work then you go up to the next size, etc, until it does. Parallel conductors are allowed too, remember!

Sure – you're going to need some creative workmanship behind the rack and at the speaker to terminate 10mmSq cables into a speakon connector (try using short fly leads). But here in lies the secret to high powered, distributed PA: COPPER.

And at the (recently completed) Blacktown Districts Soccer Fields at Rooty Hill all the Bose '802's sound great and the customer is very, very happy.

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on the bass, other than hearing him play Smoke on the Water as he set up.

"But what songs are we going to play?" I worried. "The crowd's not going to like it much if we stuff it right up."

"Shit, what does that matter," he argued. "Look, it's Saturday night, we're in the country, and the audience is getting nicely pissed. What can go wrong?" and with that he disappeared into the crowd to find some 'boxhead' to play drums.

I sincerely hoped he would be successful - a two man trio is a little bit too minimalist for me.

Have you seen the amateur video of a '70's Who concert in America? The one where they're only a few minutes into the show and Moonie takes a backward dive off the drums, knocks himself unconscious and is carried off by paramedics. Pete Townshend goes up to the microphone and asks "Can anyone here play drums?" and then has to audition the prospective Who drummers from the line that instantly forms at the side of the stage. Well I didn't want to be in that position.

Luckily a couple of minutes later Wally emerged from the crowd with a soul mate he introduced as Phil, who seemed to be half in the bag but assured us he could play drums.

So it was on. We were definitely going to be the support band, which left me with another problem. Who was going to mix? I figured that although Wally could find

some boxhead to play drums, he was unlikely to find another one that could mix. So I adjusted the desk for a 'set and forget' mix, put the compressor on hard limit, and went off to work out some songs.

Ten minutes later we were on stage playing. Phil the drummer had a VB carton on his head with a couple of eyeholes punched out, and was introduced by Wally as "...and on drums, Mr Boxhead". He stood up, took a bow, and promptly fell off the drum riser. Thoughts of The Who's video started coming back to haunt me, but luckily he clambered back up and settled himself back on the drum stool.

We played an eclectic collection of songs, wisely sticking to the time honoured rules of nothing too complicated, nothing too new, and nothing with more than three chords!

This consisted of every Chuck Berry, Rolling Stones 12 bar that I could think of, plus Summertime Blues and others in a similar vein.

Wally was in his element, jumping and waving the bass around and occasionally even hitting the right notes, but after forty five minutes Mr Boxhead was starting to audibly wilt and his timing, never good to

start with, was becoming more erratic as we ground on.

As we neared the end of our second rendition of B-B-B-Bad To The Bone (by popular request - from Wally, who knew the chord!), I saw a couple of familiar faces in the crowd. The band had arrived! We were saved.

I pointed them out to Wally.

"Thank you very much everybody," he said, "We're the Road Crew and we'll see you again soon. The Jerries will be on after this short break." And that was it; we were finished.

Wally gave Mr Boxhead a couple of precious tinnies from his Esky, slapped him on the back and pushed him back into the crowd.

The Jerries came on a few minutes later, the night was a success, and everyone went home drunk, deaf and happy.

Johnny came up to me

afterwards.

"Hey, thanks for helping us out like that, Dunk, mate" he rasped. "The pub manager reckons the whole thing went great."

He paused for a moment, and then continued.

"Do you reckon you could do it again tomorrow night?"

...INTRODUCED by Wally as "... and on drums, Mr Boxhead." He stood up, took a bow, and promptly fell off the drum riser.

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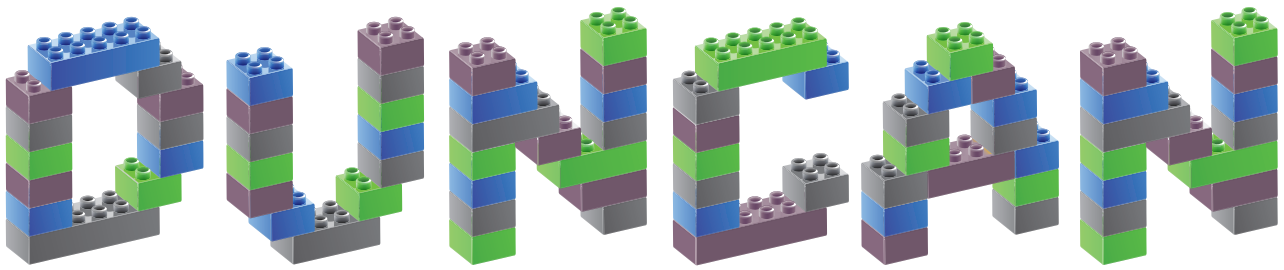
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# FRY



## Many thanks for your support - I'll wear it tomorrow

(This is from the Best Of Fry, since Dunc is missing, hopefully not munted, at presstime).

© 1997 Duncan Fry

**I**t's the phone call that everyone dreads when you're doing a country gig. You've travelled way out into the country for a couple of gigs (in this case Mildura, from one end of the state to the other, 333 miles, 500 odd k's). Everything is unpacked, set up, checked, and ready to rock. All it needs is the band. You wait, the crowd starts to dribble in, you play a couple of tapes, you wait some more.

Then the pub manager comes in.

"Is there a Duncan here? Phone call for you mate."

Me? Who'd be calling me up here? "Hello?"

The rasping tones of Johnny, lead singer for the Jerries, greets me.

"Dunk, mate."

"Johnny, where are you? You're supposed to be on any minute!"

"Jeez mate, the car's broken down in Woop Woop. We won't be able to get there for another couple of hours. Can you let the pub manager know?"

"Shit, he won't like it," I said "There's a big crowd here already and they're getting nicely hosed. There'll be trouble if something doesn't happen soon."

"Yeah, well, do the best you can mate.

We'll be there as soon as possible" and with a click he was gone.

Do the best I can? What sort of an answer was that!

I went over to Wally, who was doing stage and lights, and filled him in on the situation.

He had worked with the band for a couple of years and obviously knew them much better than I did.

"Ah that bloody EH wagon" he sighed.

pretty sick of my 20 Top Partystoppers tape by then."

"Two hours away... I dunno," he said, opening his trusty Esky and reaching for another can. He took a long sip and then inspiration struck him like the proverbial icepick in the forehead.

"I know what to do," he exclaimed "...we'll play as the support band. You can play guitar, I'll play bass, and we'll get some box-head to play drums. What do you think?"

**"WHERE ARE YOU? YOU'RE SUPPOSED TO BE ON ....."**

**"Jeez mate, the car's broken down in Woop Woop. We won't be able to get there for another couple of hours."**

"That thing breaks down more than it goes. I wish they'd get something decent. Why don't they get a Tarago?" (every band's dream vehicle at the time). I think Wally also envisioned himself cruising around in it in relative luxury compared to the old F series Toyota.

"So what are we going to do for a couple of hours to keep this lot happy?" I asked. "There's no support band, and they'll be

Great idea, eh?"

Hmm, as great ideas go it wasn't much competition to sliced bread, CDs or television, but I could see his point - there wasn't much else we could do. I hadn't played a note on the guitar in public for a couple of years, and I had no idea of Wally's prowess

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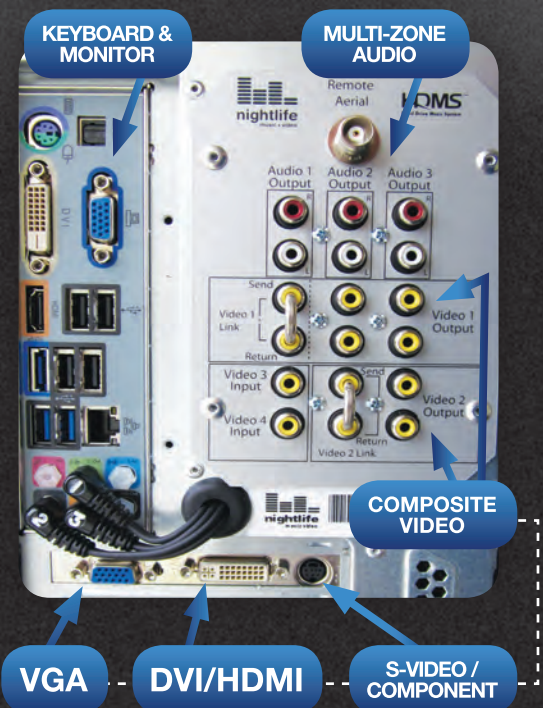
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