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May - June 2000

d-movie



at **e**-cinema?

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Full report

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PRESENTTECH

WE'VE DECIDED TO TURN THIS MAGAZINE INTO A POWERHOUSE! Now we're five (issues old) we know who you are! Your magazine has esp. No - when we analyzed the data from ENTECH (our trade show) we see that our readership is 90% professional.

So to pursue the kind of reader we need, we've come up with the ultimate magazine marketing proposition. Send it FREE to anyone who fits!

Now this magazine is available by FREE SUBSCRIPTION to anyone who fits our criteria. To kick this off we've sent out 10,000 copies of this issue, and as you'll notice, we have a tear-off form on the cover so you can activate your free sub. Or, pass it along to someone you know who may like \$36 (more from NZ) worth of magazines for free!

If you've already paid for a sub (and around 1,000 people have done this, thank you) then you have two choices.

Choice one: give us your data on the form and convert your subscription to a free one. Then Jenny will mail you a cheque for the balance of issues outstanding on your sub. TELL US you have paid already!

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It's important to know that you DO have the option of NOT giving us all the data we request on our FREE SUBSCRIPTION form, you can instead pay for your sub and have your details remain confidential. Or, take \$36 in value for free, in exchange for giving us your data.

OUR SCHEDULE -

Now that ENTECH is over (until February 2002 anyway!) we move back into our bi-monthly issue mode. So expect the next issue of PRESENTTECH in early July, thence September.

Julius Grafton, Publisher

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EVEN BIGGER SHOOTOUT IN LA

InfoComm International (June 15th) becomes even more important as shootout in Singapore cancelled

ICIA and its Projection Shoot-Out partners — Crestron Electronics, Extron Electronics and Stewart Filmscreen have further strengthened the Projection Shoot-Out to be held during InfoComm International at Los Angeles during June. This is against news of withdrawal of the Shootout from the InfoComm Asia show next March 21-23.

New Shoot-Out categories for L.A. include a Shoot-Out of the large screen outdoor displays and home theatre projectors. They've also retooled the specification criteria by category and the resolution displayed criteria by category.

For the first time ever, ambient lighting will be allowed in the Shoot-Out area to demonstrate how projectors are used in 'real-world' environments.

Manufacturers will be permitted to distribute an ICIA approved standardised Shoot-Out Spec Sheet for their product. This will reduce the confusion for the viewer and serve as a consistent educational tool.

In addition, INFOCOMM 2000 attendee's have a chance to compete for US\$6,000 in prize money in the first annual World Plug and Play Championship throughout the three days of INFOCOMM. Contestants are invited to compete daily in the first-ever INFOCOMM Plug and Play Championships - a timed

competition to determine who can take a projector out of a box, hook it up, turn it on and bring it in focus in the shortest amount of time. There will be two daily winners who will go on to compete in the first-ever World Plug and Play Championships on Saturday afternoon in an elimination tournament at INFOCOMM.

This year the ICIA Projection Encounter is a two-part exhibit. The 12,000 square foot Projection Encounter has a set of rooms for novices to learn the basics of projection technology and display. In addition, they've adding a more advanced set of rooms for AV professionals to learn the higher-end detail of projection display and devices.

The newest encounter is the ICIA Audio Encounter, a four-room, 7,000 square foot museum-like exhibit targeted toward system integrators. Attendee's will see, hear and participate in the 20 minute Audio Encounter which will feature an audio host providing educational material on the following four disciplines:

- Microphones and Mixers
- Processors
- Amplifiers/Speakers
- Systems Integration Beginner/Advanced

continued on next page

Truck time! Normally we'd prefer not to run a picture of a truck here, but the new fleet at the Sydney arm of the Staging Connections global conglomerate do look good. Love the extra door and the tail lift!



Iridium - how we failed you!

In June last year we acquired an Iridium hand held mobile satellite phone and field tested the bulky thing from very remote sites all over Australia. We failed to bring to your attention the unsavoury fact that the thing worked very poorly indeed.

Now the Iridium system of up to 88 satellites is being shut down, and the satellites destroyed to crystallise losses of US\$8.4 billion.

Any reader who purchased a handset now has a \$3,000 doorstop.

We discovered in June that you could try six times to log on, needed to stand rock still, and needed to be outdoors in the clear- usually under a hot blazing Northern Territory sun- in order to get an (expensive) connection.

It was very tragic.

And we should have told you this, then.

(Sorry!)

HITACHI'S NEW LCD PROJECTOR

XGA Resolution, 1000 Lumens



The Hitachi CP-X940 (above) is a lightweight projector of only 4.45 kg and has a footprint equal to a sheet of A4 paper. The CP-X940 completes a family of data projectors from Hitachi with varying resolution, designed for desktop or mobile use

Featuring true XGA resolution (1024x768) using a three layer 0.9" polysilicon active-matrix TFT panel, a long-life 150W LW lamp, and advanced optics, the

CP-X940 produces an overall brightness level of 1000 ANSI Lumens, one of the highest brightness figures achieved in this size of projector, says Hitachi. Image size is manually adjustable from 23 through to 300 inches. High picture quality at other than native XGA is assured with Hitachi's unique data loss compensator circuit. VGA and S-VGA expand, and S-XGA compresses, with little image degradation.

The CP-X940 features a wide range of inputs and outputs to cope with today's multimedia needs, includes RGB inputs for connection of two PC's, an external monitor connection and a video player input plus serial control terminal. Stereo speakers are built into the small case.

- The Hitachi CP-X940 is available from Hitachi resellers around Australia now at a RRP of \$12,950 including tax. www.hitachi.com.au

Jack Morton Productions to purchase Caribiner for US \$90 million

The Jack Morton Company, which is part of the Interpublic Group, will buy most of Caribiner's subsidiary businesses in the United States, United Kingdom, Australia, New Zealand and Asia

The 2000 revenues of the combined companies are expected to top \$425 million, the companies said.

Jack Morton, a marketing communications company that creates events and programs using presentations, media, live entertainment and training, is part of IPG's Allied Communications Group.

Caribiner employs 120 people in Australia and NZ.

InfoComm 2000, a poultice of attractions

from previous page

ers will be allowed to pick their favourite computer in a real-time computerised vote. This is for people who can't tell the difference between one monitor and the next.

As if all that isn't enough, InfoComm features a Presentations Innovations Showcase where you can test the latest innovations in presentation technology in a special area. It's designed to help presentations designers, delivery and training professionals do their jobs better.

ICIA and Presentations Products, Inc. will partner to bring the first Videoconferencing Connection, a multimedia exhibit designed to demonstrate the power of videoconferencing globally. The Videoconferencing Connection covers more than 5,000 square feet of special event and exhibit space. Videoconferencing manufacturers, dealers and service providers will exhibit in 20 booths surrounding the Videoconferencing Connection and demonstrations include:

- Extreme Videoconferencing - an outrageous demonstration of the power of videoconferencing technology from the show floor and its uses throughout the world.

- The Videoconferencing Doctor Demonstration - hundreds of medical professionals from all over Southern California will see a live telemedicine demonstration directly from the INFOCOMM show floor.

- Computer Convergence in Videoconferencing - see first-hand how the computer, videoconferencing and AV industries are converging to offer one of the world's most powerful communications technologies.

Finally, ICIA is building a home theatre right on the show floor to give the attendee an opportunity to sit down, relax and enjoy the awesome power and comfort of Home Theatre technology. The Home Theatre Experience is a more than 5,000 square foot area including the theatre and exhibitors from the home theatre market. Enjoy the movies!


- ICIA is hosting a fully sponsored breakfast for Australian, New Zealand and Asian attendees at INFOCOMM. The breakfast will be held on the Friday 16 June at INFOCOMM. Terry Friesenborg will give an update on ICIA's international expansion and education in our regions. Don't miss this opportunity to network with industry peers from our local regions. Seats are limited so book now with Brett Bower on +61 2 9531 6777

- INFOCOMM International attracts more than 22,000 attendees, has over 450 Exhibitors and runs more than 85 AV Industry Seminars and Workshops.

The show runs June 15 - 17 at the Anaheim Convention Centre near L.A.

A special deal is offered for travel from Sydney, Go to www.icia.org for more.

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Presentations Academy Opens Down Under

ENTECH the venue as ICIA expand training

ENTECH 2000 saw ICIA's Presentations Academy come to Australia after a successful tour of the United States. Presentations Academy at ENTECH was a half day seminar that ran each day on the show floor in the ICIA theatre. It was aimed at everyone involved in making business presentations as part of their day to day job.

Local industry experts included Richard Payne from Online World in Melbourne, Bruce Brown from Audience Motivation and Brett Bower: ICIA's Australian representative.



Brett Bower discussed the importance of effective business communications and then guided audience through the processes of selecting an appropriate venue for a meeting or conference. It didn't take long to realise that the best looking hotel function rooms were not always the most functional- and that venue banquet kit that says the room can fit 300 people doesn't always take into account staging or rear projection.

The main section of the day was given to Richard Payne who gave a lively and interactive presentation on how to create a more effective PowerPoint slide show. Richard gave the appreciative audience some very practical advice and tips on how to spruce up any business presentation.

Bruce Brown wrapped up the day with an overview of how to work with audio visual, from selecting the right gear for the presentation, to explaining how larger events come together and the logistics involved.

The seminar was sponsored by Presentech Magazine, Kodak Projectors, Gearhouse Staging and Designed Exhibitions. Each delegate walked away with a complete set of speaker notes and copies of their slide presentations.

Presentations Academy was such a success that talks are underway to run Presentations Academy again later in the year as a road-show in Brisbane, Sydney, Melbourne and Auckland.



Playoff's champ to LA

The first ICIA Presentation Play Offs concluded at ENTECH, with the winner off to represent Australia against the world in Los Angeles at InfoComm International.

The inaugural competition saw entries from leading design professionals and corporate presenters from across Australia. After the initial judging session, three entries stood out, all three finalists were presentation designers.

Steve Wihongi (right) from Incyber Graphic Design, **Bruce Cranston** (middle) from Brilliant Images and **Jennifer Hodgson** from Elefont Creative were asked to give their presentation on stage to a live audience to in front of the judges at ENTECH. The judging panel was made up of Max Hitchens, Leanne Christie and Doug Malouf - all seasoned professionals in the presentations industry.

It took the judges more than fifteen minutes to finally decide that Jennifer Hodgson from Elefont Creative had won the Australian Title of Presentations Playoffs Champion.

She will compete in the world final at InfoComm in LA, June 15 to 17.

ENTECH attracted around 5,000 trade visitors to Sydney in March. The tradeshow featured a dedicated AV pavilion for the first time, attracting around 40 exhibitors. They joined over 100 other companies who displayed more than \$10 million worth of equipment at the three day event. ENTECH returns to Sydney in 2002

Nothing Else Compares to NEC's PlasmaSync public display impact.

If your public image matters, you'll opt for NEC PlasmaSync monitors. Only PlasmaSync 50-inch and 42-inch monitors offer you a Digital Video Interface terminal. So they eliminate the need for ultra-fine picture adjustments and deliver clear, high-quality, superb images with virtually no flicker or jitter. What's more NEC PlasmaSync are the only plasma monitor to incorporate an image-splitting processor, allowing you to display a single image across four monitors with 100-inch impact. With a sleek 8.9cm profile and tamper-proof controls, you can create a PlasmaSync display just about anywhere. Mount it on a wall or hang it from a ceiling. Arrange a demonstration. And find out why, with NEC-Nothing Else Compares.



PlasmaSync Display Monitors



PlasmaSync 50" & 42" Display Monitors

NEW HoloPro screen works well in daylight!

By Julius Grafton

iMovie now Free Download for PowerBook and Power Mac G4 Users

For those not quite ready for Final Cut Pro, Apples cool iMovie video editing software, is now available as a free download for Apple PowerBook and Power Mac G4 users.

With iMovie, users can import video from a digital video camcorder directly into their FireWire enabled Mac, rearrange clips and add special effects like cross-dissolves and scrolling titles. Completed iMovies can be stored on the computer, as well as transferred back to a camcorder for viewing on a standard TV or VHS videotape; or saved as a QuickTime file and emailed.

I've seen something I didn't think possible. A sheet of glass, slightly opaque, on which an image is projected from an ordinary graphics projector. In daylight.

Science has allowed this happen. Sandwiched between two sheets of the glass is a holographic projection surface, with a virtually invisible deflection grid inbuilt. It optimises light striking the screen from an angle of 36.4 degrees off horizontal. The screen I saw had a projector sitting on the ground, tilted upwards 36.4 degrees.

Normally projectors don't produce a square image when used at this extreme angle. You knew that already. But Herma Projection Screen Technology, the importers of this HoloPro screen, have some solutions with some projector vendors. I saw a Sharp Notevision 6 working very nicely on the screen, they have worked with Sharp and used software to correct the massive keystone issue.

The HoloPro screen comes in four fixed sizes - 50, 67, 100 and 112 inches diagonal.

• Contact Herma on +61 2 9290-1255 or see www.herma.com.au



ENTECH also produced winners, at the ENTECH 2000 Awards. The sellout dinner was held on Monday 6th March at the Badgery Pavilion in the new Sydney Showgrounds. Space Age Communications won Best Audio Visual Integration Firm. Ley Langford (left) and Neil Langford (Centre) are pictured with staff from Sony Australia - who took two awards - one for the Best Ultra Portable Projector (Sony VPLCS1) and one for the best Large Screen Projector - won by the VPLX2000/FX2000. Other audio visual winners (amongst 48 awards in total) include Barco, who won Production of the show (vision) for the DLite screen, and Crestron, for Innovation in Vision Design with the CNMSX-AV. Caribiner took the Best Audio Visual Services Company award, while Staging Connections CEO Gary Hackett was awarded the Audio Visual Industry Development Award.

NEW Apple Final Cut Pro 1.2.5 Video Editing Software Supports Wide-Screen Format

Apple's new Final Cut Pro 1.2.5 offers support for capturing, editing and exporting 16:9 media: YUV processing for preserving values of the original source material; and "make reference movies" which saves rendering time and disk space by mirroring file sizes and using "pointers" to source files.

The features join enhancements found in Final Cut Pro 1.2, which include: Power Mac G4 optimisation; increased rendering speeds; improved batch capture; 3JKL2 keyboard commands; and support for PAL, the dominant video and broadcast standard in Australia and the region.

Final Cut Pro 1.2 is through Apple authorised resellers for AUD\$1595.

• More information on Final Cut Pro can be found at www.apple.com/finalcutpro.



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PEOPLE

Haycom Staging Sydney are happy to announce the appointments of **Ian Eden** (ex StagingConnections) as Technical Manager, **Peter Foley** (Freelance) as Account Manager, **Phil Clark** (ex Gearhouse) Account Manager, and **Dave Mogan** (ex Gearhouse) Warehouse Manager.

• Contact them on Sydney +61 2 9557 1666.

Down Melbourne way there have been changes most notably that of **Ron Cairns** joining Haycom Melbourne after 13 years at Intercity / Gearhouse.

• Contact Haycom Melbourne +61 3 9529 3044.

Gearhouse Scoops Awards

Gearhouse offices in Melbourne, Sydney, Brisbane and Gold Coast have all received Awards for Excellence in the state finals of the Meetings Industry Association of Australia (MIAA), for Stage Management and/or Production.

Gearhouse Queensland received a Certificate of Merit for Event of the Year, in the Queensland MIAA Awards for supply and technical management of the RAQ Fashion Awards.

Russell Bennett, Director of Marketing with Gearhouse received an Award for Excellence at the NSW Awards and went on to receive the National Award for Excellence - Best Operations Person at the awards held in Hong Kong recently as part of MIAA's National Conference.

PIXELITE INSTALLS PRESTIGE PROMOTIONAL SCREEN ON SYDNEY BUILDING

PIXELITE is to install a unique giant LED screen to the front fascia of the Channel[V] building at Fox Studios Park in Sydney. The screen will mostly display the 'Live' Channel[V] broadcast as it goes to air each day on the Australian Cable Television network, Foxtel. The video screen is outdoors and sited in a very high visibility location.

The client's brief was for a high resolution all-weather LED screen capable of running broadcast-quality promotional, advertising and live video material in all outdoor daylight, night-time and weather conditions with total reliability and minimal maintenance.

PIXELITE, which won the contract against top-level international competition, specified a 9 sq m (3.45m wide by 2.6m high) PXT-1204 LED screen with a 12mm pixel pitch, 5000 Nits brightness and a 140 by 60 degree optimum viewing angle. 10-bit processing is also a feature of the modules, designed by sister Avesco plc company System Technologies in Belgium.

Says PIXELITE MD Graham Burgess: We can inte-

grate screens to give a building a totally unique and dramatic effect. The possibilities are only limited by your imagination. You have the opportunity to change the whole mood and ambience of the surrounding area through a screen and what you put on it - any combination of digital art, text, imagery and video footage."

• Meanwhile, **Lighthouse Technologies**, the Hong Kong-based giant screen specialists, have acquired Pixelite from Avesco plc. This will create the world's most broadly-based giant screen sales and installation operation with core offices in Hong Kong, Europe and North America, and associated offices in Australia, Africa and Asia.

Lighthouse is already a major player in the giant video screen market whilst Pixelite, headed by Graham Burgess, Dave Gunn and Simon Taylor, has an outstanding track record in the giant screen business in the UK and Europe.

www.pixeldisplays.com

NEW TOUGH DVD

Pioneer Electronics has announced the launch of its second generation industrial DVD-Video player. The DVD-V7300D offers increased durability, making it ideal for use in training facilities, corporate presentations, education, exhibition halls, retail stores and kiosks.

The DVD-V7300D is designed with a multitude of applications in mind. The RS-232C control function allows several players to be connected together and controlled by a scheduling PC using similar command sets to Pioneer Laserdisc players. This way the creation of stunning multi-screen video collages for exhibitions or other presentations have become more convenient than before. The RS-232C control also allows for use of a separate control box or a touch screen.

One of the leading features of DVD-V7300D is its component video output capability for applications that require content with high end video output.



Component video gives the professional user full access to the superior video quality of DVD, and the three separate terminals allow for connection to professional and broadcast video monitors, as well as to advanced display systems like plasma panels and video walls.

It features both NTSC and PAL video playback. An NTSC or PAL external black burst sync signal can be applied through the EXT SYNC IN terminals to enable clean switching with other video sources. Pioneer's previous industrial player supported only NTSC video playback.

• \$A2,200 (inc. Tax) Call 1 300 364 765

INFOCUS AND PROXIMA ANNOUNCE MERGER AGREEMENT

InFocus and Proxima HAVE announced that they have entered into a definitive agreement to merge the activity of the two entities.

InFocus will make a public exchange offer to all shareholders of Proxima. The transaction will bring together two of the world's leading names in multimedia projection solutions.

The combined company will be the world's largest developer, manufacturer and marketer of multimedia projection products and services.

This transaction will create a company with technology development and manufacturing centres in the US and Norway, worldwide strength in sales, service and marketing and the most comprehensive product line in the industry, they say.

The new company will be well positioned to exploit the tremendous opportunities in the global multimedia projection market which, according to estimates by the industry analyst firm Pacific Media Associates (PMA), is currently growing at over 40 percent per year.

By combining their research and development efforts, the new company expects to accelerate development of the most technologically advanced and complete product offerings across a variety of market segments including business, consumer and education. The company further expects to accelerate availability of these products worldwide through an expanded sales, service and marketing organisation.

"This business combination will result in a very strong company from top to bottom," said InFocus Chairman and CEO John

V. Harker. "The opportunity to combine the complementary strengths of two very strong organisations will allow us to create the preeminent multimedia projection company".

The newly formed company will be called InFocus and will continue to market

all three of its popular brand names: InFocus, PROXIMA and ASK.

On a proforma basis, the company would have had total 1999 revenues of approximately US\$689 million and net income of US\$44 million.

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Is the next generation flat-panel display technology coming?

Cold Cathodes technology is being touted as not only replacing current CRT technology - but as being able to build direct-view displays larger than the 50-diagonal limitation of most Plasma technologies at less than 4-inches thick.

Segmented photocathodes are set orthogonally to an array of control grids. The display panel's resolution is defined by the number of control grids (horizontal resolution) and the number of segmented photocathodes (vertical Resolution) placed in a given area — the display's input side is illuminated by an electrominescent panel.

This segmented cold cathode can be used for multicolor displays resulting in three times as many control grids as a monochrome display for the same horizontal resolution.

- KNews

BARCO Signs Digital Cinema Agreement

Agreement allows BARCO to develop a new range of projection systems using Texas Instruments DLP Cinema technology

BARCO's new Digital Cinema business unit has signed a cooperative development agreement with Texas Instruments (TI). The agreement will allow BARCO to develop a completely new range of projectors that will have the capability of replacing 35 mm film projectors in cinema theatres around the world.

At the heart of TI's DLP (Digital Light Processing) technology is the Digital Micromirror Device (DMD), an optical semiconductor chip that has an array of

1,310,000 hinged, microscopic mirrors which operate as optical switches to create a high resolution, full colour image.

TI has developed DLP Cinema technology working in close cooperation with key players in the movie industry, and will work closely with BARCO to develop commercial products based on this technology which meet the requirement of studios, film distributors and exhibitors alike.

MITSUBISHI ELECTRIC LAUNCH X70U

Interesting features in new ultra portable

The new Mitsubishi Electric LVP-X70U Multimedia LCD data projector weighs just 3.2kg and offers brightness of 1100 ANSI lumens.

The ultra portable projector features a handy moving image PIP (Picture in Picture), which allows two moving images from two different sources (such as video and PC) to be displayed on the screen simultaneously.

X70Us Digital Keystone Correction System corrects the slight trapezoid effect within a range of 15 degrees, helping to correct distorted, jagged images caused by projecting images slightly off axis to a screen.

'Cineview' Built in Line Doubler memorises previous and next-image fields and then processes the signals with extra motion detection to smooth out horizontal and vertical lines for finer, sharper moving images.

For clarity of colours and superior reproduction, the projector features Natural Colour Matrix, a special algorithm developed by Mitsubishi that allows the projec-

tion of RGB (red green blue) and YMC (yellow magenta cyan) colour spectra that are said to be equal to those of CRTs. To bring out the best in even the most subtle colours, like pastels and skin tones, all six colours can be manually adjusted.

Other features include a USB mouse port - allowing direct connection of a mouse to the projector, and a laser pointer built into the remote control

- It sells for a RRP of A\$8,900 (PLUS tax).

Mitsubishi Electric +61 2 9684 7777



HITACHI'S LATEST PLASMA DISPLAY

New 25" Model Added To Plasma Family

Hitachi model CMP205SXU is a new generation plasma display with an SXGA input capability (1280 x 1024) and wide viewing angle. It's ideal for computer users in the fields of CAD/CAM and graphics design, large room presentations, monitoring applications and information kiosks.

Panel depth is only 122 mm and weight 20.5 kg, making it ideal for narrow desk mounting. It's impervious to the effects of magnetic fields and radiated fields, ideal for use in industrial arenas that have precluded traditional CRT monitors.

RRP is A\$17,400.00. inc tax.

Ultra portable? Try Super Portable, says Epson

These ARE small, just a handful. We think magazine pictures don't really show scale!

EPSON has announced a complete line of what they call the industry's lightest super-portable projectors. The new series includes the EMP-710, the EMP-700 and the EMP-500. Weighing only 2.6kg, the EMP-710 is also one of the industry's first three-LCD XGA (1024 x 768) resolution super portable projector to achieve 1000 ANSI lumens, by employing Micro Lens Array (MLA) technology.

"These super-portable projectors provide mobile presenters with superior image quality without compromising weight, size or affordability," said Tom Squillaciotti, Business Manager, Multimedia Projectors at EPSON Australia.

The EMP-500 and EMP-710 delivering 800 ANSI lumens each. EMP-500 offers true SVGA (800 x 600) native resolution, while both the EMP-710 and the EMP-700 offer XGA native resolution. Each projector will also feature the latest generation of EPSON's SizeWise resizing technology. This gives the projector excellent versatility by allowing it to accept every major notebook resolution. For example, SizeWise technology in the EMP-710 and EMP-700 allows for compatibility with resolutions from VGA (640 x 480) up to UXGA (1600 x 1200) with virtually no picture content loss.

All three multimedia projectors are enhanced with several advanced features including picture-in-pic-

ture technology, 15 degree digital keystone correction, electronic zoom, improved remote control, lockable screen menus, & on-screen help.

The EMP-500 and EMP-710 are EPSON's first projectors to offer increased contrast, featuring a typical 400:1 contrast ratio, the highest of any LCD projector.

EPSON's three-LCD projection system produces superior image quality when compared to single-chip digital light processing (DLP) and other single-imager projection technologies, they say.

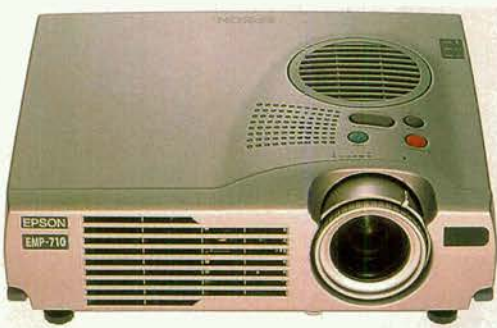
EMP-710 A\$12,780

EMP-700 A\$10,950

EMP-500 A\$8,770

(all INCLUDE tax)

Call +61 2 9903 9000



Epson EMP 700 / 710

Crestron Intro Pre-configured, Pre-programmed Home Automation Packages

Crestron Electronics announce the introduction of Whole House Audio and Home Theatre packages for its *Crestron Home* control and automation system. The pre-configured, pre-programmed packages tie together the dozens of audio, video, information and environment components scattered throughout the house into a single integrated system.

Crestron Home Audio packages allow the homeowner to enjoy music of their choice in every room, selecting audio sources, adjusting the volume, and switching channels or disks with fingertip control. The Home8 package allows control of up to eight separate audio sources, distributed to eight rooms or zones. The Home16 package adds a second processor for up to eight sources and sixteen zones.

The Crestron Home Theatre Control System (TCS) operates all home theatre components as a single

automated system to complete the entertainment experience. The TCS allows control of up to two RS-232 controlled devices and four IR controlled components.

The theatre system may be customised with expansion modules for controlling lights, screens, drapes and projector lifts.

The Home8, Home 16 and TCS systems may all be seamlessly integrated with a host of other automation and control capabilities as part of a complete Crestron Home system.

All are also fully compatible with two-way Internet control, incorporating Crestron e-Control Internet-based control. Each Crestron Home system can access news headlines, weather, stock prices, MP3 audio and more.

• www.crestron.com

NEW ISCO OPTIC

Isco-Optic the German AV lens manufacturer has released two new products. The universal 0.75x wide angle attachment lens for LCD and DLP projectors is designed to work with nearly all makes and models of projectors. The lens is supplied with a special mount and does not fit directly onto the prime projector lens.

The lens is particularly useful for rear projection applications where space is at a premium.

The ex tax list price is A\$3,900.

The new Isco-Optic universal 16:9 conversion lens allows LCD and DLP projectors to project full 16:9 images. Because it uses optical decompression there is no loss of image content or brightness as happens with electronic decompression. It has already proved to be popular in the home theatre market where DVD is taking a hold.

The ex tax list price is A\$1,730.00

• Isco-Optic lenses are distributed in Australia by Electrosonic Systems.

• Electrosonic Systems has been appointed Australian distributor for **Samsung video presenters**.

The range includes the new model SVP9000 with a 1,500,000 pixel CCD, SXGA resolution and USB port. It is designed for high-end presentation and video conferencing applications.

There are also specialist models designed for medical applications with microscope attachment.

EFI Launches New eBeam Electronic Marker System

Tool to transform ordinary whiteboards

SONIC DVDit

New Magic Pty Ltd are pleased to announce Australian distribution of the Sonic Solutions DVDit range of products in Australia and New Zealand.

DVDit includes—

- Integrated DVD-R support - Write DVD files directly to disc.
- Drag-and-drop menus
- Slideshow Creator and more.

www.newmagic.com.au

Electronics For Imaging has officially launched its eBeam meeting and teleconferencing software to the Australian market. A new tool that converts any whiteboard into a digital workspace, eBeam allows users to capture text and diagrams in real time in colour on their personal computer. Words and images can be viewed, saved, edited, shared and printed using any Windows PC. eBeam can also be viewed in real time across the world using any Java-enabled web browser.

The eBeam system weighs less than 500 grams and can easily be carried in a laptop case. Setting up eBeams sensing devices takes less than three minutes and eBeam sleeves fit standard dry erase markers, so no special supplies are needed. Any



word or image then drawn on the whiteboard appears on the desktop in colour.

Meeting notes can be exported into a variety of popular formats for easy insertion into documents, spreadsheets, e-mail and web pages. Meetings can be broadcast over the Internet or corporate intranet in real time.

- eBeams recommended retail price is A\$899. Call 1800 800 469.

Personal Tools:

Want to see the best streaming audio and video movie trailer we've ever seen?

Yep, that's right, we've finally seen the future of animated movies over the web. The movie trailer for the upcoming Disney May 19th release of DINOSAURS is on the web. But, to see it the way it NEEDS to be seen, you MUST have the latest version of Apple's QuickTime (4.0). We promise you that this will be the MOST IMPRESSIVE streaming animation you've seen on the Web yet. Promise.

Just go to:

<http://disney.go.com/disneypictures/dinosaur/flash.html>

Again, you won't be disappointed!

-KNews

Zandar unveil new multichannel video monitor

Zandar Technologies debut the new MX-18 multiviewer - which allows you to video-split up to 16 video pictures, and view them real time.

It offers a full range of PAL and NTSC video output formats including composite, s-video and component - all in the slim 1 rack unit tall device pictured below.

High quality video scaling is used to reduce the size of each picture to enable a tiled display of up to all 16 channels.

Zandar also have released a new high resolution multi-viewer, and are a must-see at InfoComm International in June.

- www.zandar.com



What's in a Name?

LEGALESE

A lot, if it starts with 'e'
by Madeleine Murray

With his bright blue eyes, and enthusiastic manner, Ralph Kerle seems like a remarkably nice guy. Eventually the lunch conversation moves to children, and Kerle pulls out a picture of his twin four-year-old sons, Morgan and Blaze, and 22 month-old-son,

Campbell aka Tank. At this point, it's obvious that Kerle is a genuinely decent, gentle guy. So what chance does he have against Rupert Murdoch, and a phalanx of lawyers? Kerle's eight-year-old company is called Eventures, and last year, e Venture Holdings was registered. This was the e name for News Limited's latest multimillion dollar internet startup company, a joint venture with Softbank, the world's leading e-commerce venture capital company.

Confusion is rife. Kerle regularly receives e-mail and phone calls for Murdoch's company. He has a folder of about five hundred e-mails, some with sensitive information, such as a CEO applying for a job. He even gets e-mails about his own case!

It all started in '92, long before the e word swept the planet. Kerle, who had been in theatre for fifteen years, started an event company, and registered the company name as Eventures Australia Pty Ltd.

In July last year, Kerle saw an ad for a position at a company called e Ventures. Nothing much happened, until a few weeks later, another notice was put in the paper, advertising for a CEO for Eventures Australia. This time, the name was spelt in exactly the same way as Kerle's company.

Kerle got some legal advice, which suggested that both companies might be able to operate since they were different types of business. The lawyer also warned Kerle against taking on the Murdoch camp, who had registered the domain name, e-ventures, but continued to trade as eVentures.

Then Kerle's company started getting e-mails, then more e-mails, and one day, they got 60 phone calls for the internet venture capital company. "It's just gone on from there. There is real confusion in the marketplace." Kerle said, pulling out a red folder of e-mails, about the size of a large encyclopedia. "I'm not allowed to show you

these, because they are confidential. And I'm not going to."

The e-mails are on all sorts of sensitive subjects—a CEO's full package and recommendation from the Board, details about how e Ventures will list on the Stock Exchange, complete PowerPoint presentations to potential partners, 14 page project timelines, total lawyers' agreements. "From the information here, I can start up an e-commerce business right now, at the highest level. Even their own lawyers have sent us legal agreements by mistake!" Kerle exclaimed.

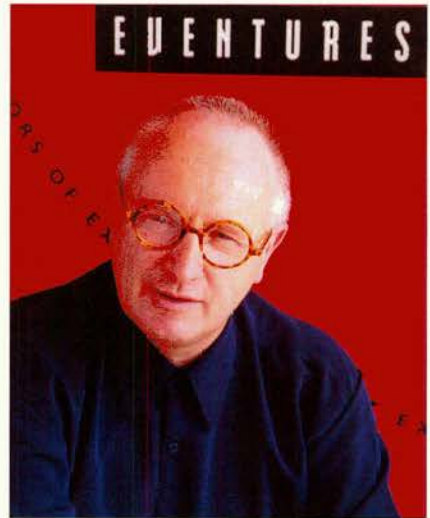
At this point Kerle was peeved, and sent e Ventures a letter asking/telling them to stop using Eventures name. e Ventures refused, so Kerle offered to sell his name to them for \$250,000. Kerle figured this was a reasonable price to put on eight years of building up an event business, and its good will. Eventures has produced hundreds of events, and has clients including Rolls Royce, and Disney.

"The more it goes on, the more I like it. And the price might escalate!"

The next step was a December meeting with Allen, Allen and Helmsley lawyers, on the 35th floor of the Chifley Tower. "Very expensive sandwiches," Kerle noticed. The News Limited lawyers refused the sale offer, adding that they valued Kerle's company at the sum total of Eventures' two yellow pages ads. "I thought that was a particularly stupid comment," Kerle sighed. "We thought the man hadn't handled the issue very well at all. If I were in his position, I would want to be mindful that I made some realistic offer, or at least wasn't insulting."

Kerle's lawyer and QC warned him that he would need infinite resources to take the issue to court. At the moment, Kerle has a watching brief to see how similar cases develop in court.

The next day, Eventures received an entire event brief sent by a publicist—for the launch of E Loan, an offshoot of the e Ven-



tures company. Being an event company, with a sense of humour, Kerle thought, "I'm a good Carlton-Fitzroy boy, who went to the Victorian College of the Arts. There's nothing like a good demonstration event!"

On the night of the E Loan launch at the Australian Technology Park, ten models, dressed in suit and briefcases, paraded outside with placards, saying, "Rupert may own the world, but he can't own Eventures Australia!" and "Do you know what E Loans' CEO's wage packet is? Eventures knows!"

Even though the name issue is difficult to convey on a placard, Kerle's little show was effective. It seems that the main discussion at the press conference was about the name confusion.

Kerle admits that he looks forward to the e-mails. It is fun reading other people's mail, especially Rupert Murdoch's. Kerle is adamant that he has not revealed any of the contents of the e-mails, even though he has received threatening letters from the e Ventures solicitors.

"What's the outcome?" Kerle laughs. "I'm having fun! We are staging our own events, and leveraging the profile of our company. And they're not going to take my name away! They're not going to allow me to stop trading. The more it goes on, the more I like it. And the price might escalate, if they do wish to buy it out!"

"In the meantime, we'll pursue an event strategy. After all, we're an event company. And we'll protest on the streets!"

Events are detail ma

Did you remember the crew meals?

By Julius Grafton

Of course we should've been slightly better prepared, but the number of 'extra' items we scrambled to arrange, and pay for, made the event department at ENTECH 2000 a stressful place to be.

ENTECH is primarily a trade show, a very large one at that. But a lot of visitors come for the myriad of events and learning sessions held in and around it.

There's three ways to arrange an event. Way one is to totally put yourself in the hands of a professional organiser, who in theory has a complete template of all possible costs for any particular event. Way two is to hire a production manager and hope they are shopping in all the right places. Way three is to cut sponsorship deals and call in whatever slim reserve of favours you may (think) you have.

Guess which one we choose?

Hiring the rooms and venues for seminars, training sessions and social events was the easy part. Once contracted, you inspect the room and observe that there is nothing much in there. You'll then pay for everything you need.

Our Awards dinner at least came with seating and table settings as part of the \$70 per head package with the venue. It was when the pre production meetings for the dinner started that the horrifying scope of using a venue that is a bare shell (an empty pavilion at the Showgrounds) became evident. We needed, in no particular order, a stage, drapery along all four walls, dance floor, power hookup, dressing rooms and to build a complete kitchen and bar. The food and beverage

department at the venue were terrific and looked after that part without hassles.

The events producer for the awards dinner was Meri Took, who is also the CEO of Staging Rentals in Sydney. He is an absolute expert and a professional rock who suffers no compromises. In our case he was the difference between success and disaster.

Meri took control of technical issues which became more and more complex, and included hiring loaders, riggers and a high-lift machine. Schedules were made and amended, and the phone traffic became intense as the launch hour ap-

***You inspect the room
and observe that there
is nothing much in there.
You'll then pay
for everything
you need.***

proached.

In the end, the awards dinner involved no fewer than eight production companies or technical suppliers, and somewhat more than fifty crew worked on it at some stage across the three day setup/removal phase.

Have you every tried to do a seating plan? Lucky for us we've had four previous goes at this, and on this occasion it was simply a matter of investing about 16 hours of time, then arranging large printed table plans and alphabetical seating lists.

A problem on the day, however, meant some tables needed to be moved due an unforeseen technical issue that in fairness was no-one's fault. This rendered the printed table plan useless, and meant getting the serving staff to take / direct people to their designated table number.

Worse still, in true ENTECH style the weather turned ugly and heavy rain wiped out the planned outside welcome drink, which meant a lot of people rushing into the venue as soon as they arrived. And of course there wasn't a lot of space, aside from at tables. The need to get people in early also curtailed the rehearsals, which luckily didn't affect the smooth flowing of a show with 48 awards, 3 musical acts and a three course meal. It was all over by 11pm, bar the usual lingering, yelling and drinking.

Some credits: Lighting supplied by ULA, rigged by Phase Shift, Vision by Technical Direction, Pani Projections by The Big Picture, Staging by Staging Rentals, Rigging by Pollards, and sound by Showcorp. Many others donated people and gear, thanks!

SIMPLE MEETING, RIGHT?

With the awards setup grinding along its timeline nicely, we were hard at work elsewhere creating five different Seminar venues around ENTECH. These varied from a simple room where we would have demonstrations of control desk products, to a large tented venue built on the trade show floor for the ICIA Presentations Academy.

In every case we had negotiated contra sponsorship agreements for the techni-

athons

cal requirements of each room or venue. And in every case the designated company (there were three) were terrific and responsive. Thanks to Gearhouse, VideoPlus and Technical Direction Company.

Naturally the equipment suppliers were happy to provide gear and crew, but didn't expect to provide stages, drapery and power connections. These all required sussing, as did adequate blackout provision for each room/venue.

This created a bit of a 'situation', when the helpful venue events manager offered to have some windows blacked out by way of taping black plastic to them. Without disclosing there was a cost involved, the bill eventually came in at \$500 - later halved under protest.

Also hard (we tried) to cost out in advance were power hookups, which in some cases came on two invoices - one for a venue electrician to actually hook up the distribution board, and another bill for rental of the distribution board from a third party!

The little things like seats, signs and fiddly details like where are the light switches, and when or where is the air-conditioning controlled from, could drive you crazy.

A big trade show alone can't always attract trade. Support EVENTS are required! ENTECH hosted almost 40, across three days and nights.

A basic checklist for most events/presentations

- Room/venue contracted on paper
- Realistic space allowed for stage
- Space for Video projection & screen, front or rear projection
- Space for technical control, sound, lights, vision
- Dressing room(s)/space for presenters available?
- Chairs included/excluded in quote
- Space for catering station, tea/coffee area, bar
- Seating plan approved by venue
- Technical quotes confirmed in writing
- Stage and dressing, drapes
- Tables, lecturn, dressing, signs
- Sound system fully specified
- Is sound replay required? IE: CD, tape
- Video and data projection, screen
- Source devices like VCR, laptop PC required?
- Stage lighting specified and quoted?
- Can you dim the room lighting and from where?
- Does the room/venue have drapes to block daylight?
- Does the room/venue have power, how much and where?
- If inadequate what cost for provision of required power?
- Is professional rigging required for flown (hanging) items?
- Do all technical suppliers understand what the event is about?
- Is there provision for setup time and rehearsal (and mistakes)?
- Do the food and beverage people know exactly when setup and rehearsal are scheduled?
- Is the schedule viable for everyone, especially you?
- Is there a timeline for the event and leadup?
- When exactly will tables/chairs be setup, and by whom?
- Can you change/amend technical requirements, and by when?
- Does the venue have a cutoff for final numbers, and when?
- Do you have a list of people in charge of various functions and numbers?
- Is your talent/act/MC/staff locked in?
- Do you need crew meals, crew catering and at what time(s)?
- Do you need transfers/cars for anyone, who and when?
- Is the script/schedule confirmed?
- Are normal event considerations like car parking, access, transport, proper venue description, timing etc all satisfactory?
- Do you have rooming and travel to arrange?
- Did you know you are entitled to contra flight(s) and hotel room(s) where the travelling party exceeds a reasonable number?
- Are you stressed out yet?





SCREENS

Panasonic Screens at Colonial Stadium

Sports fans who love the atmosphere of being at the ground but miss the close-ups and replays of television coverage can now have the best of both worlds. Panasonic Australia have installed 955 in-seat video screens in the Medallion Club at Melbourne's new state-of-the-art sporting and entertainment venue, Colonial Stadium. The in-seat video screens are just one aspect of the \$12 million Panasonic project at the stadium - the largest single installation undertaken by Panasonic in Australia.

Danny Choo, General Manager of Panasonic's System Products Division described the installation as an "overall solution" to the stadium's audio visual needs.

"Our approach to these large projects is to create an integrated technology solution for the client, so that it is a true turn key, one-stop-shop. If the customer says they require complete audio and video systems for a large venue they can come to us and we can provide the lot - everything from large video screens, to in-seat screens, to monitors, to security cameras. That way the customer can reduce the number of vendors they have to work with, thereby reducing the risks and the project management costs."

Development of the in-seat video screens began two years ago when key members of the stadium management and resident broadcast company Channel 7 were invited to Japan to have a first hand look at the Panasonic in-seat screens at Osaka Dome, the first in-seat video system of its type in the world. Impressed by what they saw the team decided Colonial Stadium would be the ideal venue for the first in-seat video system in Australia, and the largest of its type in the world.

The in-seat screens are part of a 'video arm' fitted between the stadium seats and use the same technology as similar units installed in business and first class seats on commercial airlines. The unit features a 165mm high-contrast LCD screen with an aspect ratio of 4:3 and an in-built Personal Control Unit (PCU) which allows for channel selection, volume and brightness control. Contrast, colour and tint adjustments are made by technical operators via infrared control.

The in-seat video system delivers eight channels of stereo audio and video from broadcast feeds provided by Channel 7 including the live broadcast of matches and instant replays as well as different views of

the ground allowing the viewer to customise the screen to their preferred view. The PCU includes an input for standard 3mm stereo headphones.

The video system is controlled by a PC in the Event Management Centre from where all aspects of the Stadium's technical operation are controlled. The control software developed by Panasonic also features a monitoring system so through remote diagnostics any faults can be isolated and diagnosed.

"If one screen goes down for whatever reason we can actually identify which screen on which row of seats that the fault is occurring. If it's during a game we can send a technician up there to fix it on the spot."

The PCU's also feature two interactive control buttons which can be developed as a refreshment purchasing function. Danny said the next generation of in-seat video screens will feature a more advanced interactive element to allow for extended menu choice and other interactive functions.

Of major consideration was the construction of the seat and video arm by the seat manufacturers Camatic to ensure the units could withstand the wear and tear associated with sports stadiums.

"We had some interesting sessions with Camatic in terms of how solid the seat arm had to be. We also had to make sure the screens were waterproof as cleaning of the seats is done by pressure hoses. So we had to work with Camatic to build a waterproof outer enclosure for the video screens and the control unit so that it was a complete water seal in terms of protection of the equipment."

Panasonic supplied two Astrovision screens for use during concerts and sporting events at the Stadium. Using Fluorescent Discharge Tube (FDT) technology each Astrovision screen contains over 230,000 high intensity fluorescent discharge tubes and has a brightness of 5000 candelas.

"It's certainly one of the brightest types of technology you can get for large video screens, and we have had literally hundreds of these screens put all around the world so we're very certain about the quality and viability of these screens."

Each Astrovision lamp has twelve tubes

comprising four each of red, green and blue. Each group of RGB represents one pixel and the display density of 1,111 pixels per square metre ensures brilliant image quality.

The screens include a fully integrated 10-bit video processing system and through non-interlaced processing technology image flickering is minimised.

"With this approach, image signals are processed using a non-interlaced method with high-speed elements that permit consecutive scanning, rather than the reduced quality skipped scanning of other systems."

Measuring 6.24 metres high and 11.04 metres wide, and with a total display area of 68.9 square metres the screens have a viewing distance of 240 metres.

Australian sports fans will already be accustomed with Astrovision screens as they have been used in several sporting venues around the country for a number of years including Football Park in Adelaide, Stadium Australia and for the Victorian Racing Club.

Danny explained the screens are fully waterproof and windproof having been developed for weather conditions in Japan where typhoons are common.

Other aspects of the Panasonic installation at Colonial Stadium include the fit-out of the Event Management Centre with professional audio visual and broadcast equipment, a 4.48m x 7.68m LED screen for the Stadium's exterior, plasma screens and over 400 TV monitors.

• *Mandy Jones*



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INSTALLED

Melbourne Aquarium -

There's more to the new Melbourne Aquarium than just fish. The \$33 million facility was recently opened to the public after two years of construction and its fair share of controversy. Spread over four floors, the wave shaped building on the banks of the Yarra features around 16 different display tanks including the main oceanarium which holds 2.2 million litres of water. Designed to double as a function centre, the Aquarium can cater for parties and corporate events of up to 1000 people.

Melbourne company AAV were chosen as multimedia consultants and started work 12 months ago developing the 'visitor experience'. Subcontractors Brian Laurence Sound and Premier Lighting were brought in to specialise in the design, specification and installation of audio and lighting systems throughout the complex.

Audio

Brian Laurence is a veteran of transforming visitors centres into memorable experiences having supplied his audio design and installation services to a number of tourist attractions around the country. His involvement in the Aquarium went far beyond his initial brief and resulted in innovative and unique systems in both audio and lighting.

The starting point for the audio was the

soundtracks. Brian supplied soundscapes and audio systems for seven main areas in the Aquarium.

"I was not only involved with the production of the soundtracks but with the specification and installation of the equipment because I found it's the only way I can get them to sound the way I want them to sound. If the specification gets taken out of your hands you can often end up with not what you intended. And in doing so I've actually had people build fairly specialised bits of equipment for me that aren't generally available."

Each tank is unique displaying a different aspect of Australian marine life, from inland and coastal waterways, to the depths of the Southern Ocean. Brian recorded soundscapes for each display area which in some cases required travelling to actual sites, in particular the Mangrove Swamp tank and the Bilabong tank. Each of these displays feature wading pool type tanks with real vegetation and of course all the typical inhabitants of the habitat.

To record 'the sound of mangroves' for the authentic soundscape Brian went to Western Port Bay, Australia's most southerly mangrove.

"There is a sound believe it or not, apart from the sea gulls and water lapping there's this little peeee sound of the little crabs and things. So it's quite the genuine soundscape."

Due to the demands of running up to sixteen hours a day, non-stop everyday, Brian chose soundstore devices which are Eprom or MP3 flashcard based audio players to play the looped soundscapes. Brian has used soundstores extensively in his other projects and says they are ideally suited to this kind of application because they don't have moving parts, making them extremely reliable. Specially designed and built to Brian's specification by Melbourne company Building and Engineering, these soundstores feature built-in amplifiers. And because they require microprocessors to operate, Brian has found a way to make the microprocessors do other things such as opening and closing relays, making them a mini control system. In fact, Brian has turned the soundstore in the Mangrove Swamp into a tiny show control system. Not only does it play the soundscape, but it also has three relays which operate two lighting dimmers and a sprinkler system to create rain.

"So at the correct time the lights dim as it goes from a sunny day to a cloudy day, the rain starts and a backlight comes up on the rain so people can see the rainbow. And then the opposite happens after a minute. It's programmed to happen every ten minutes."

In addition to the realistic soundscapes, Brian also provided other tracks including 'loungue music' to pick up on the party



mood of the residents of the 360° Coral Tank, and bubble sounds mixed with new age music at the entrance to the Aquarium.

For the Oceanarium, the major exhibit at the Aquarium. Brian chose a classical ballet soundtrack, again run off an MP3 flashcard player which is on continuous loop. The Oceanarium is also called The Fishbowl because it is a large room entered via acrylic tunnels and lined with acrylic sheets allowing the visitors to see the wide range of sea life doing their clock-

wise circuits of the tank.

Mipro and Chiayo radio mics are installed in the Oceanarium and also at the Amphitheatre which is an enormous acrylic window looking into the deepest part of the tank, allowing the attendants to talk to the crowds. Brian is currently in the process of installing an interface so that the divers can talk to the crowds from inside the tank and the crowds will be able to ask questions via a lectern and microphone set up.

One of the biggest challenges for Brian

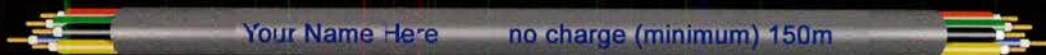
was in convincing the 'powers that be' to spend money on as much acoustic treatment of the space as possible. Carpet and acoustic absorption panels above ceilings greatly helped in reducing the reverberation.

"It's a very live acoustic environment with all the acrylic so that was a real priority in order to get any sort of sound in there, especially when you start filling it with people."

To allow for the changes in crowd traffic throughout the day Brian installed Bi-amp Ambient Level Compensators in four

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of the main audio areas so that the sound levels automatically adjust according to the ambient noise level.

"With 7000 people through a day at the moment, they've been running flat out to keep the soundtracks above the noise of the crowd, but once it settles down to around 3000 a day they'll do their job".

Brian specified waterproof speakers throughout the Aquarium installation given that it is a damp and in some areas, wet environment. Rutledge Engineering did all the cabling to Brian's specification so that it was all conduited and waterproofed.

"I used Audio Telex Misco waterproof ceiling speakers, and ARX Climate Series. The ARX Climate 2's and 6's are terrific - they're a bookshelvy-type speaker which I hadn't used before but they sound terrific, and I believe you can dump them in baths of water and they keep running."

Throughout the building television monitors show brief DVD animations of 'Hook' a talking fish who acts as a host to the different areas and exhibits. While the character is popular with the children there were problems with the volume level being loud enough for the people to hear it without being so loud that it could be heard in surrounding areas.

"To solve it I suggested something that I have developed - my Soundzone speakers which are an acrylic dish with a speaker set in them that fire out a beam of sound, particularly in the mid and high frequencies. The concept is a bit like the reverse of a microphone reflector and it works a treat. You get a beam of mid and high frequencies of around about 10° out of it so you can literally direct the mid high

frequency sound exactly where you want it. They are very new and this is only their second installation so I'm in the process of putting them in as they come off the production line. They literally focus the voice to where the audience are lined up, so two metres away the ticket box people can hardly hear it."

Lighting

Lighting the Aquarium required three different approaches - firstly the basic architectural lighting throughout the building designed by the architects Peddle Thorp; the tank lighting; and then the theatrical lighting designed to complete the visitor experience.

Curator of the Aquarium, Craig Thorburn specified the lighting for the tanks insisting that unlike other Aquariums this one would not be dim and dark. 2000 watt xenon globes similar to those used at the MCG are used as the basis of the tank illumination, and are referred to as 'Godrays' because of the amazing shafts of light they cast through the water.

The theatrical lighting design was done by Ian Gilmour and Kevin Beacham from AAV. The design called for the illumination of seven main areas as well as all the 'extra bits' such as backlighting for pull-out panels in the educational section of the facility. Overall the brief was to make the lighting unobtrusive but effective.

Premier Lighting supplied and installed a fairly straightforward rig - predominantly Par 56's, and Prolite profiles, fresnels and cyc floods. For specials, Optikinetics K300s with rotating effects cartridges are used to illuminate wire fish sculptures suspended above the main

staircase leading to the Oceanarium. Kevin Beacham explained the lighting design is an ongoing process as improvements continue to be made.

"We probably would have chosen more 'theatrical' fixtures if the budget had allowed but in a lot of cases we're using general 'fill' lighting to achieve the effects. But we are in the process of revising that because the clients have recognised that we do need theatrical fittings, mainly for the purposes of focusing. It's always pretty difficult because you always envisage theatrical lighting in a lightproof room but because we're dealing with a space that has a lot of windows we're already needing to upgrade some of the lighting in those areas just to compete with the daylight."

Control is achieved by a Dyalite dimming system alleviating the need for a lighting console, however Kevin believes eventually a console will be brought in to allow for more complex lighting effects.

"It would be nice to introduce some sort of movement into the lighting design which would then require control via a console but at the moment all the levels are preset, there isn't a need for slow fades or anything like that."

AAV also provided audio visual systems for 'Fishworks' - the hands-on interactive educational section of the facility which uses computer terminals, DVD and graphic panels to capture the interest of younger visitors to the Aquarium.

And for older visitors there's always the simulator rides which use DVD technology and moving platforms to simulate an underwater rollercoaster ride.

• **Mandy Jones**



Are Tom Cruise and Lachlan coming over?

...call Tony Assness

by Madeleine Murray

Never mind that he hadn't heard of Presentech, Tony Assness hadn't even heard of Connectors. This from a putative events producer suggested by David Grant. Plus, I had never heard of Assness (his name is Latvian, where Assness has no rude meanings). He didn't seem to have a CV, or brochure. But after lunch with Tony at the waterfront window table of Jackie's restaurant in Bondi I realised that he is the Rolls Royce of the industry; elite, exclusive, and multi-talented.

Assness is the designer's designer, with clients like Baz Luhrmann and Catherine Martin, Akira Isogawa, Collette Dinnigan, *Marie Claire*, and *Elle*. His company, cinch, also did the Fox Studio opening, Lachlan Murdoch's bucks party, and the New Year's eve party of Tom Cruise and 400 friends. Assness conceives, produces, designs and even organises security for all cinch jobs.

Lachlan Murdoch's bucks night

The party for 40 friends, probably rich and

famous too, was set on the last wild beach on Sydney harbour. Store beach, near North Head, is only accessible by water, and is backed by dense bush. At four in the morning, cinch barged everything past the Heads, and onto the beach. "It was like a scene out of the piano," Assness laughed.

The party took place on the beach, and in three teepees, brought down from Byron Bay—one teepee for the chiefs, one for tech, and the third for catering. "We were going for a *Boy's Own Story* kind of feeling. I didn't want it to be high tech. We lit the bush, we trucked in every bit of equipment, I chose the menu, I dressed the waitresses on Pocahontas' chic. It had a very warm feel. We had fires on the beach. Essentially I was trying to create magic, so that when the boat of guests arrived, and came into the beach, it was almost like a movie set. It was very evocative, it was beautifully lit."

The 40 guests were picked up by a luxury yacht, so no one, especially Murdoch, expected to be brought to a deserted beach. As

they arrived, a musician standing in the water blew a conch shell. The sound was a live DJ. "I would much rather spend money on great audio, than the dressing of a space. Sound is so important. I tend to use Kevin Davidson. From the first job that Kevin and I worked on, which was Antonia Kidman's wedding, he taught me what good sound was."

The party, like most bucks' night, was organised as a surprise for the groom. Assness brought in two generators, in case one failed. "There was literally an *army* of people, who were barged in with a *mound* of stuff. We had to move boards along the beach to get the generators which were huge, in place. It was very primal, very primitive."

Assness used to be a set and lighting designer for the theatre, before he started producing events eight years ago. "I don't get too tricked up with lighting. I like very big, high powered lights with strong gels. I'm a bit of a joke when it comes to certain lighting people, because I have a very restricted

What they say...

Doug Jack, Choreographer for opening of Fox studio.

Tony's one of the most colourful people I know. He has a flair for the dramatic, and making life a little more extraordinary. We had a love-hate relationship when we worked together on the Fox opening. He brought points of view that I never had in my work. Some were good and some were *not*, when I had to complete something. I had to teach him how to let go of things—concession and creation get muddled. The artist has ideas, the director has ideas, you have to learn to collaborate more. I think Tony really learned now to collaborate a bit more, which is nice. It's a hard lesson to learn, a humbling lesson to learn. And he took it with great poise.

Wendy Shaw (his mother)

He's wonderful, I'd be his biggest fan. He's got a wonderful nature, he's very caring, beautiful sense of humour. He and I have got on so well all his life. He can get his message across, he can tell you how he feels, and why he wants to do things his way.

Julia Leith, Publicist, Scout Media

He's a magnificent visionary. [no superlatives spared here!] During the genesis of an event, I've marvelled at how much importance he gives to the countenance and life of an event. Like most creatives, he has a short fuse, and can be an absolute tyrant, but he's fun.

palette. We essentially lit the bush that surrounded the teepees with two Congo Blue geled Arena Visions. We had two little smoke machines in the bush on a timer so that the smoke just drifted through the bush. The Arena Visions were lighting the air, not the plants, so that when the smoke passed over the light, there was a blue haze everywhere. The giant fire in the middle of the beach gave off natural light."

To ward off paparazzi, they set up a row of Parcans facing out to sea. "At times, I find the pressure those sort of jobs unbearable—because of the exposed nature of the beach, and the guests that were there. I have to employ the security company, and essentially guarantee, against all odds that everything is going to be fine. When the scale of the event and



the profile of the client is very high, the pressure to deliver it, and hit the mark, becomes incredibly hard." (Tom Cruise was one of the guests.)

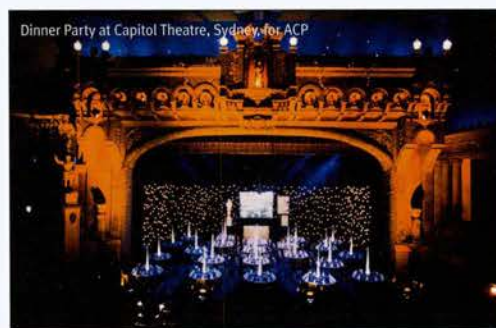
"A lot of my work is very moody, lighting-wise. Whether it's a dinner, cocktail party, dance party, whatever it is, I want to push people into a fantasy world, through the looking glass. Leave the computers and the deadlines, and relax, or have fun! Even if it's a hardcore corporate launch, they want to associate it with fantasy. So my lighting tends to be very evocative, moody and very sensual."

Assness likes congo blue, chocolate, peach, lavender—all the warm, subtle colours of the spectrum. "I don't go for raw colours, like cherry red, or green. I use a bit of green because it's very contemporary. On New Year's Eve, I played with it as a new string to the bow. For years, I banished it as being only for pantomimes. I used carnations once recently, which we think of as being naff as all getout. But I like to reinvent old stuff—make it modern and slick. When people see things in a different context, they have to interact with it. It elicits interest and joy, they have to react to it. I always try to push those kind of things."

New Years Eve for Lachlan, Sarah, Baz, Catherine, Collette, Tom and Nicole

"My brief was to create a cool party." Assness did everything, including security, which would have been tricky on New Year's Eve. "It was like pincer movements. We had boats ferrying people everywhere, like performers who had another gig that night." Assness looked at a lot of potential houses, then asked an assistant to bring in a map of Sydney. "It was obvious that the best place was Garden Island. We had to figure out the problems of getting into Garden Island, which is a very secure Naval base."

They bought space by the wharf, and docked a boat there. "Basically you can go two ways on New Year's Eve—nouveau riche, Ari Onassis style, or you



can go tall ship. I wanted to cut across all of that." So Assness got a big, rusted 1950's ship up from Launceston. "It was like the Thomas the Tank Engine of ships, little portholes, little funnel, little rivets. It had a lot of atmosphere."

When Assness takes on a job, he writes a concept for the client. "Most of my clients want to read the concept, sign the cheque, turn up and be blown away."

His career started with Antonia Kidman's wedding, followed by the launch of Water Rats. Brian Walsh, head of PR at Foxtel, heard about the Water Rats launch, and called Assness. Over 50 jobs later, they are still working together. Assness does many Foxtel launches, including the National Geographic channel launch at night in the Botanic Gardens, where he projected pictures of animals in the trees.

Assness is only 38, and is feeling slightly burnt out. In July, he is taking some time off, and then he wants to "pursue an international career overseas." He closed down his office last year, works from home, and hires people on a freelance basis. "The last five years have been relentless. Some months, I did nothing but work. I don't think I deal with pressure very

well. I tend to get very short and direct with people when I'm under pressure.

"I reached a stage where I felt I could pump the success of the the past four years, expand and employ more people. Pump the PR, expand my client base, and turn over millions of dollars a year. Or I could work less, and be more selective.

"When you do too many jobs, you're at risk of recycling yourself. You're working off an ABC formula. You can have the space theme, the beach theme, or the Australiana theme. I've never worked like that. There is no formula to what I do."

The Opening of Fox

"I was called into an office, and told they wanted



to create an incredible spectacle. That was the brief! Having done a lot for Foxtel, and those companies, you know that it is basically a big ad for Fox. That's ultimately what it is. But you have to present it in a way that pulls emotional strings, with spectacle, and art.

"I sat down and wrote a broad brushstroke concept, which was then flown to LA with one of the heads of Fox, and presented to the board. They liked it, and I was asked to put a budget figure to the concept. When they picked themselves up off the floor, and stopped laughing, I wrote 14 different drafts of the concept."

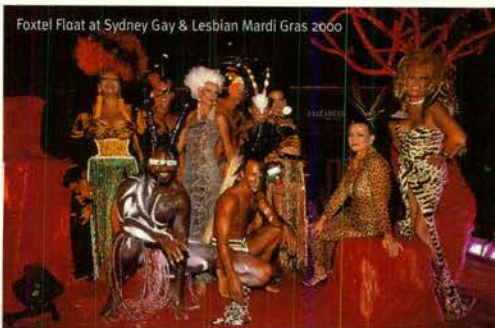
The final 70 minute show was a homage to the great Fox eras—from Rodgers and Hammerstein, Marilyn to *Star Wars*.

Assness designed 250 costumes, as well as a minimal set, which could hold performers, a huge digital rear projection screen, and pyrotechnics. A full-scale model of Star Wars X-wing landed, and R2D2 and C3PO came out. A 45 piece orchestra played behind a scrim. Kylie sang *Diamonds are a girl's best friend*. "It was equally as spectacular as my initial concept, but it didn't have the intergalactic battle happening over

people's heads, 2000 Storm Troopers crashing to their death, and lasers shooting out of Jumbotron screens."

All through the preparations, Assness was terrified of being exposed and fired. "I'd never produced a show like that in my life. It was an incredible experience, because I not only produced it and wrote the overall feel of it, I also designed the costumes and the sets.

"On the production side, there was so much politics and back biting. They all saw this as a big opportunity to climb up the scale of their career. A few years ago, I would have been threatened by it, but I found it amusing—even with the incredible pressure to deliver. It taught me a lot about listening and not reacting. I was amazed at my tunnel vision."



As well as being broadcast to 36 countries, the show was put on in front of 5000 film industry types, including Tom Cruise, Baz Luhrmann, and George Miller." It touched people, for whatever reason—it was one of my finest hours!" he laughed.

At the end of a highly entertaining lunch, Assness suddenly burst out, "I like you! You're real! You must be very embracing!" and then laughed loudly. Yes, I thought, I must be...

What they ate

- Quesadilla goat tart with roasted tomatoes, basil and rocket
- 2 glasses of Hill Smith Sauvignon Blanc
- Chicken and mushroom risotto
- Black sticky rice pudding with mango and coconut cream
- Passionfruit creme brûlée
- Flat white coffee
- Café latté

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d movie is coming to e cinema



The hype meter is punching off the scale this month in our cyber cottage. Everyone, everywhere, is talking about d-movie, or e-cinema. The equipment manufacturers are justifiably excited. How does it stack up? PRESENTECH brings you the facts, up to the minute.

Special report by Julius Grafton, John Grimshaw and agencies.

The (new) Camera:

George Lucas has announced that Star Wars II will be filmed using a Panavision modified Sony HDW-F900 digital video camera (above). Capable of 24 frames per second at 1920 x 1080 HD sampling, this camera is a giant step towards the complete digitalisation of the film process.

The camera's viewing system has been modified by Panavision, and a special Primo Digital lens has been developed. Other modifications allow the use of the many film accessories used traditional cinematography.

Lucas himself was sold on the new technology after a test screening at the Skywalker Ranch Stag Theater that "side by side" compared the new format to traditional 35mm film in numerous conditions. Star Wars web site - www.starwars.com

HOW IT IS TODAY

An example of how current film technology meets e-cinema can be seen with a test screening of Bicentennial Man from Walt Disney Pictures -presented using Texas Instruments DLP Cinema technology.

Source:

The movie was transferred from an inter-positive film element using a Philips Spirit DataCine film scanner by VidFilm Services. Colour timing was modified using a DaVinci 2K color corrector. The transfer was supervised by Disney Studio Operations Technical Services and Entertainment Technology Consultants.

Resolution:

The DLP Cinema prototype projector uses three TI Digital Micromirror Devices (DMD), each with an array of 1280 x 1024 microscopic aluminium mirrors for a total of nearly 4 million mirrors. Each mirror is 16 microns square with a 1 micron space between each. For comparison, the imaging mirror array is within 1 mm of the size of a Cinemascope film print image. The movie is projected through a custom 1.5:1 anamorphic projection lens to create the 1.85:1 image on screen.

The anamorphic lens was manufactured by ISCO-Optic of Germany.

Contrast:

The DLP Cinema prototype projector produces a sequential contrast ratio of 1000:1.

Storage:

The picture information was compressed and stored using a QuBit compression system produced by QuVis of Topeka, KS. The QuBit uses proprietary wavelet compression technology with a user selectable SNR. This unit compressed the movie to an average data rate of 43 Mbits/sec for a total of 42 Gbytes of data for the entire presentation. The compressed data is stored on four computer HD drives with a total capacity of 72 Gbytes. As an entire digital cinema production, distribution, and exhibition infrastructure develops, other technologies will likely be tested.

Distribution:

The compressed movie data was recorded onto DVD-ROMs, transported to each theatre location and loaded into the QuBit systems prior to release.

Pixel Data:

The image data is stored at 10 bits/component (Y/Cb/Cr) in 4:2:2 format. Since the DMD is a linear display device (i.e., no gamma characteristic as does a CRT), the data is gamma corrected and converted to linear RGB data. Each DMD displays 14 bits/color, linear data.

Frame Rate:

The TI DLP Cinema prototype projector displays at the standard film rate of 24 frames/sec. Since the DMD is not scanned like a CRT but is a virtually continuous

display device, the display can be driven at 24 fps with no objectionable flicker.

Shutter Rate:

Unlike a film projector, DLP Cinema technology does not involve the use of a shutter. Since there is no film being mechanically pulled through a film gate, there is no need to douse the light. This results in a continuous flicker-free display and a more efficient use of the lamp output.

Lamp:

The prototype DLP Cinema projectors use a standard film projector lamp housing provided by either Christie Inc. or Strong International with a TI designed custom lamp reflector. Standard 4.5 to 6 KW Xenon lamps are being used, depending on screen size, producing approximately 10,000 to 12,000 lumens. This yields a typical screen luminance of approximately 12 ftL, which is roughly equivalent to the current Society of Motion Picture and Television Engineers (SMPTE) specification for nominal screen luminance. Greater than 80% brightness uniformity is achieved on screen.

Audio:

The audio information is stored as six channel, 24-bit uncompressed PCM data on the QuBit system along with the picture information. The audio sample rate is 48 KHz.

HOW IT LOOKS!

Digital Cinema at ShowWest, by Pete Putman, CTS
(As published in KNews)

All of the companies had continuous demos of HDTV and film source material in their suites, but these used large-venue projectors - not cinema-grade models. That demonstration was reserved for Texas Instruments, who filled Bally's Jubilee Theatre three times on Thursday morning to show a mix of 35mm film clips and digital transfers on a "black engine" DLP cinema prototype.

The digital screenings resulted in mixed reviews. A side-by-side screening of "Phantom

Menace" on film and as a digital image showed only a slight reduction in color saturation on the DLP version. However, the side-by-side screening of "Snow Falling On Cedars" definitely favoured the 35mm print - the digital transfer (done on a Cintel C-Reality telecine) was about 1 f-stop darker and suffered from loss of shadow detail.

The next four clips were all digital. "The Insider" showed good sharpness and colouring with a clip that takes place in the shadows of a hotel room.

Some low-level image detail was lost here, but not as much as in "Cedars". "American Beauty" followed with a scene in a darkened room, again showing some loss of shadow detail and acceptable color rendering and saturation.

The next clip - "Sleepy Hollow" - was less

than satisfying, and seemed to have a compressed grayscale at both ends, crushing both low gray and high white information. "Sixth Sense" was much more pleasing in digital form, with good sharpness and a nice range of tones from black to white.

The demo wrapped up with a side-by-side screening of "Toy Story"; the only clip that looked substantially better in the digital format. And why not?

The original digital files were created at a screen resolution close to 1280x1024.

All in all, this wasn't the "digital is as good as film" screening many DLP aficionados were expecting. The noticeable exposure difference in the "Snow Falling On Cedars" comparison was originally attributed to the film's director of photography wanting a darker

HARDWARE

Previewing at ENTECH 2000 was Sony's VDP-LE100. It is not your standard data projector - it is one of the most impressive high end projectors that this writer has seen. Using Sony's Digital Micromirror Device (DMD) system, light from the xenon lamp is reflected by one of three SXGA resolution DMD panels - one each for red, green and blue.

This light is then recombined via prisms and projected from a single lens. The superb optics in the projector have resulted in very precise image projection - right to the corners of the screen. To test this, a still data image was projected onto the large screen and viewed from an extremely close distance. There was absolutely no identifiable "spill" or "bleed" from any of the RGB colours right down to individual pixel size.

Three of the main criteria used to compare data projectors include colour density/clarity, the ability to handle fast movement, and resolution. The VDP-LE100 handled each of these outstandingly well. The picture clarity was precise, crisp and even with the colours that were reproduced being rich and true. Fast movement had a "film" look that easily deceived the viewer into forgetting that it was a data projector being viewed. The resolution of the projector is true SXGA (1280x1024), and the list of compatible input formats is very comprehensive.

Another critical component to a good projector is how much light it can push out the lens. With the combination of the DMD imaging system and the Xenon lamp, the light output is an amazing 10,000 ANSI lumens - making this projector still very watchable in conditions containing a great deal of ambient light.

Expect to see this projector in installations where precision pictures are essential - University lecture theatres, military training institutions etc. Other potential markets for the projector include cinema advertising projection and high end corporate installations.

Sony expects the projector to be shipping around July or August this year.

-John Grimshaw

Websites:
http://www.screen Digest.com/rep_ecinema.htm
<http://www.ti.com/clp/>
<http://www.millimeter.com/welcome.html>
<http://www.qualcomm.com/ProdTech/digitalcinema/>
<http://www.highdef.org/>
<http://freespace.virgin.net/s.napleton/>
<http://www.kermis.com/etc/ecinema.html>
<http://www.tech-head.com/cinema.htm>



DMD FOR REAL BLACK:

Using the DMD system allows for true blacks to be reproduced on the screen. This is a difficult proposition for any very bright LCD device as black is produced by masking out unwanted light and LCD panels cannot completely "black" out the light.

The DMD system only reflects the light that is required to be projected so blacks become true.

print, but I'm not sure that was the whole story. For the average viewer, DLP came up short in this case.

Overall, TI couldn't come out of these screenings claiming victory. Even so, the consensus seemed to be: "Look at how close electronic cinema is coming to film!"; not "Hey - digital cinema can replace film!" For the exhibitors who offered comments after the screening, their mood could be summed up this way: (1) Hey - digital cinema looks great! I like it! (2) What's it going to cost? (3) Who's gonna pay for it?

The "buzz" at ShoWest was enhanced by two announcements (neither unexpected) that Christie Digital Systems and Barco had been chosen by Texas Instruments to be OEM (original equipment manufacturer) suppliers of digital cinema projection systems. TI had planned to name three OEMs and it is expected that Digital Projection will be announced as the third winner in short order.

As expected, there was jockeying for position in this new market. Kodak stole a bit of a march by announcing a partnership with Qualcomm (yep, those cell phone guys) to develop an electronic cinema projection system, using Qualcomm's encryption, compression, and watermarking technologies.

Supposedly JVC's D-ILA technology figured into this partnership, but no mention was made of JVC in either Kodak's or Qualcomm's releases - only in remarks made by Bob Mayson, the general manager of cinema operations for Kodak, which also has an ongoing program to certify theatres

Not to be outdone, Lucasfilm announced their version of an electronic cinema theatre program, which includes digital transfers, quality control of storage and servers, set-up and calibration of electronic cinema projection systems, and theatre design and certification.

Panasonic showed their brand-new 12,000 lumen PT-D9600U large-venue projector on the main trade show floor, demonstrating both a selection of 720p clips and D5 transfers of "Notting Hill" and "The Mummy", while Christie showcased the Prodigy X4 and S6 (these are the cinema market names for the 'Roadster' series).

And what of JVC? After last year's largely successful and well-received demos of "Phantom Menace" and "Ideal Husband", the ILA-12K has essentially been retired as an active product.

JVC is rolling their dice on the next release of the D-ILA imaging chip, which will have a native resolution of 2048 x 1536 pixels.



HOW IT AFFECTS THE TRADE

INTERVIEW WITH RUSSELL SCOTT, GENERAL MANAGER, GREAT UNION ENTERTAINMENT TECHNOLOGY.

GUET are the leading outfitters of cinemas in Asia Pacific and are now aggressively (and successfully) pursuing screen installations in Europe.

What's happening now?

Already we have seen a number of viewings. There will not be a grand debut as the roll-out will be a gradual one.

What are the issues?

There are many. the main one is getting people within the cinema-food-chain to agree. The Studios have not made a commitment to release in digital cinema, even though their production costs will be greatly reduced.

The Distributors have no real interest as they could well be bypassed in the process, with Studios going straight to the Cinema owner. The Distributors are the ones who would benefit the most financially, with reduced distribution costs.

The Cinema Owners, the most fragmented in this line-up, need a single voice to lobby on their behalf as they are the ones who will have to pay for the equipment, which is quite expensive. A 35mm projector, with film transport, lamp house, rectifier, etc, costs approx. \$50,000, compared to a video projector and playback unit costing approx.. \$200,000, but in addition, equipment is required to store the movie, including retrieval, decoding, etc, (depending on the means of distribution) which could cost as much as a further \$200,000.

When will it happen?

All the Australian majors are waiting to see what happens overseas, before they commit. When digital cinema is introduced, it will also be a

parallel introduction, with 35mm projectors used side-by-side with video projectors, as film will not be replaced over night. It could therefore be 10 to 15 years away before film is replaced, with the speed of replacement dictated by the agendas of the players within the industry.

Will it be a bonanza for GUET?

Yes, once it all starts. But it will be over time.

Conclusion?

I believe that d-cinema will roll-out through cinema firstly being introduced to video projectors through cinema advertising. I believe that this will commence over the next year, with the un-exciting 35mm slide projector being replaced in cinemas. From here, cinemas will have the opportunity to be introduced to a concept of being able to use their cinema auditoriums for other audio-visual facilities. This will be a first introduction to the concept of video. We will then see more experimentation with video in the making of movies. Plus we may see some experimentation in the distribution of movies, say in hard-disk or centrally distributed.

Large Scale Video Distribution Systems

Presentech examines the options and looks at three systems. By John Grimshaw

Any organisation that has the need for distributing video and audio via some kind of network will need to invest a considerable amount of money in that system. The difficulty has always been deciding which system will be the best combination of features for the least amount of cost. There is a great deal to consider when purchasing a system like this - and once the decision has been made, it would be extremely costly to change to a new one.

Recently, Presentech asked three of the major suppliers of media distribution systems to design a system based on three different installation scenarios so that these complex systems could be compared. Each of the three organisations received exactly the same information and was asked to provide a design and cost for the three different scenarios.

The three companies that were approached were:

- **Command Systems Pty Ltd** - manufacturer and supplier of the **Video Commander** distribution system.
- **AV Technologies Pty Ltd** - the Australian distributor of **AMX** and **Synergy** (by AMX) control systems.
- **Soundcorp Pty Ltd** - the Australian distributor of **Crestron** control systems.

Each company was asked to supply a detailed description of the following for the three installations:

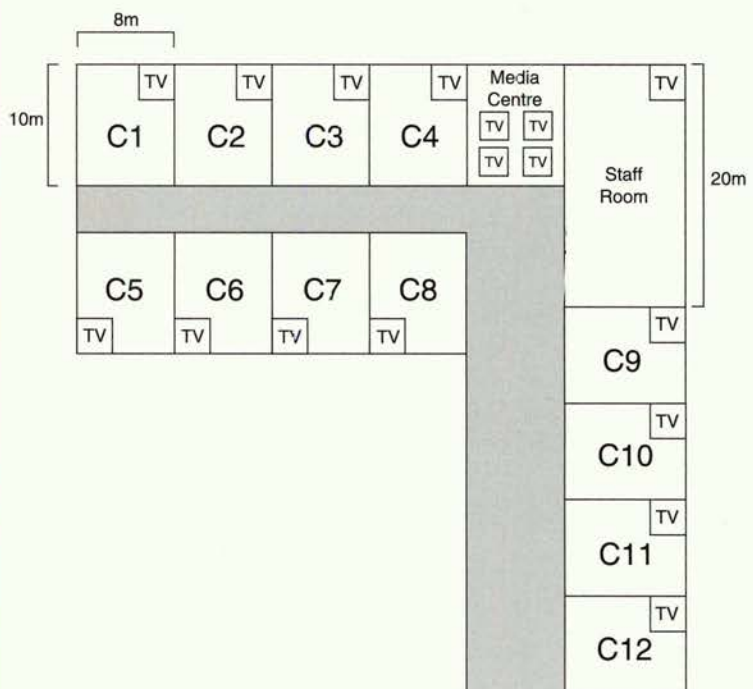
- The equipment to be used in the installation
- A description of how the system will be controlled by the end users
- The installation time frame required
- Cost of equipment and installation (ex tax)

THE INSTALLATION SCENARIOS

Hypothetical Primary School

This school requires simple distribution of 8x VCRs to 12 classrooms, and there are 4 local viewing stations in the Media Centre.

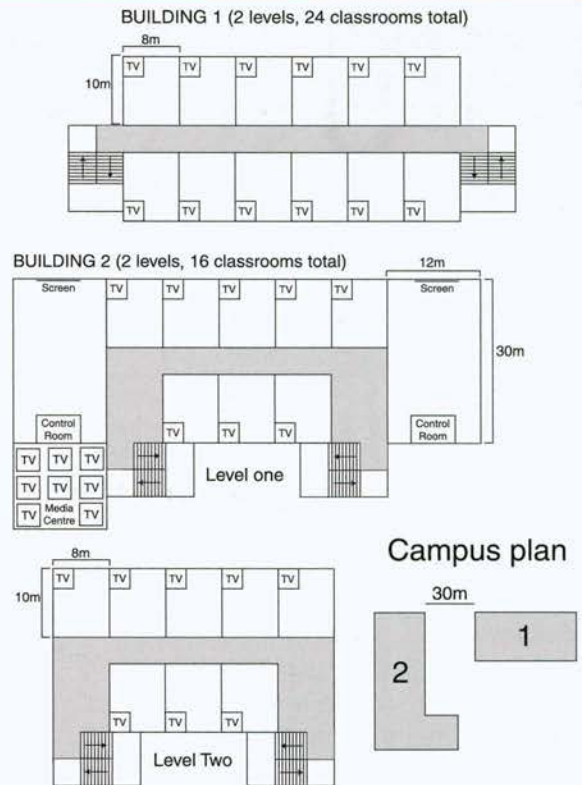
- The staff is happy to manually connect a video source to a classroom prior to its use.
- Remote transport control of the VCRs from the classroom is required
- Logging of use of videos is required for copyright purposes, and the school currently has no system in place for this.



St Fictitious Grammar School

A private high school that requires a complex distribution system from a central library to all 40 classrooms located in two buildings, with multiple media sources used including 16x VCRs, 2x DVDs and 1x 16mm film projector. Two major lecture theatres each require local computer playback on a big screen, single microphone control, ambient light control, and surround sound capabilities. There are 8 local viewing stations in the Media Centre.

- There will be a full time staff member to manage the library and look after the system.
- There is no pre-existing ethernet system in place.
- The system needs to be able to connect and disconnect video sources to classrooms at specific times matching the periods in each day.
- The school wants to create and manage a database of its 1000+ videos.
- Remote transport control of the video sources from the classroom is essential (with the exception of the film projector).
- Logging of use of video sources is required for copyright purposes, and the school is currently making paper records of any video use.

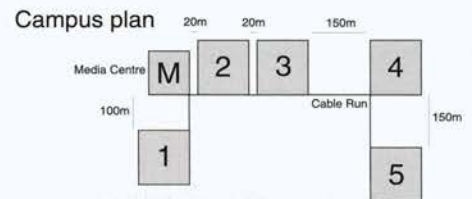
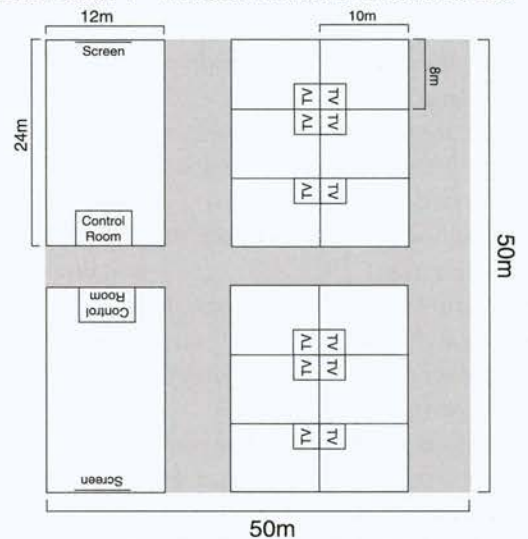


Metro University

This university has five major buildings, each of which has two lecture theatres and twelve classrooms. All source material is to be sent from the central media centre from 24x VCRs, 8x DVDs, 2x U-Matic and 2x DV machines. Each lecture theatre requires local computer playback on a big screen, microphone control of up to four microphones and ambient light control. Video and audio return feeds from each lecture theatre are required for archival purposes. There are 8 local viewing stations in the Media Centre.

- There will be a full time staff member to manage the library and look after the system.
- There is a pre-existing ethernet system in place for the university's computer network.
- The system needs to be able to connect and disconnect video sources to rooms at any time.
- The university already has an extensive database of its 5000+ video sources.
- Remote transport control of the video sources from the rooms is essential.
- Logging of use of video sources is required for copyright purposes, and the university is keen to keep using the database they already have in place

UNIVERSITY - LAYOUT FOR ALL 5 BUILDINGS



AMX SYSTEM

From AV Technologies Pty Ltd

In its simplest form, the AMX control system is made up of two major parts - (1) A central control unit called the Master Card Frame (AXF-M/S) into which are placed infrared control cards that allow the unit to control how the VCR operates, and (2) set top television control units (AXB-TCR) that send the control signals back to the AXF-M/S, as well as to the television it is controlling.

The AMX system itself does not handle the video and audio signals. The design of this system calls for a separate installation of a UHF modulation distribution network. This network (often installed by companies like Hills Antenna) is referred to by AV Technologies as a "broadband reticulation system". It combines the outputs of all of the VCRs onto different UHF channels, and sends this down a single coaxial cable that is installed throughout the buildings as required. With this system, theoretically any television can "browse" what channels are being sent into the system.

A single control cable is required to be run from each room back to a master unit. This master unit may be in the control area for smaller systems, or it can be remotely located in another building with a single connection back to the control area's master unit. This system can be configured for small systems to use a numbered remote that can control only the VCR it is associated with.

For more complex installations, the Synergy control software can operate the system, allowing bookings, database facilities and numerous other features. Used in conjunction with slightly different AMX hardware, the Synergy system allows the use of any of the system's remote controls to be used in any room for which a booking has been made. The software can use an existing ethernet network to send control signals over long distances to remote master control boxes, and can even allow multiple control points.

Primary School

In this installation, AV Technologies have specified simple and flexible system. The system utilises a central control system with "Television Managers" for each classroom's TV. Remote controllers are numbered to match each VCR.

To begin an event the teacher inserts his/her videotape into the first available VCR & picks up the remote for that machine. In the classroom the teacher simply presses the POWER button on the remote which switches on the TV and selects the correct channel for the VCR. No additional switching is required. Pressing PLAY starts the tape; full transport control of the VCR plus volume control and off-air channel selection on the TV is then available from the remote.

The AXB-TCR television controller provides complete control of the television with an IR output for control and a sensor which detects the EMF created when the CRT is on, allowing accurate tracking of the TV's power state. An integral IR receiver picks up IR commands and either re-transmits them to the TV (eg volume) or passes them back to the AMX system to operate head end system for control of other devices (eg VCR transport).

Broadband reticulation system and tape logging facility is not included and would be supplied as part of the package by the installing dealer.

AMX Control System Costing Primary School

Part No	Description	Qty	Unit Price	Total
AXF-M/S	Master Cardframe c/w AXC-EM master	1	\$2,350	\$2,350
AXC-IR/S	Infrared interface card	7	\$350	\$2,450
TXC-16	16 button IR transmitter/remote controller	7	\$450	\$3,150
AXB-TCR	Television controller	17	\$450	\$7,650
			Total Ex. Tax	\$15,600

High School

Synergy by AMX is a software/hardware solution for media retrieval in education applications, which utilises standard AMX components. This solution is a fairly typical Synergy application and incorporates many of the basic components utilised in the primary school solution with the addition of the Synergy software and dedicated AMX control systems in the lecture theatres.

The Synergy software allows the creation of a database of all media titles available. The operator accepts bookings from teachers and schedules a particular title for a particular classroom at a particular time (or period) into the Synergy software.

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Prior to the scheduled event an alarm instructs the operator to load the media into a particular player. At the scheduled time the TV in the appropriate classroom switches on and selects the correct channel. Any of the 18 CT5 remotes can then operate the playback device from that room.

Media scheduling as described above as this is just a part of the functionality Synergy can provide. Reporting such as use of titles is standard. Broadband reticulation system is not included and would be supplied as part of the package by the installing dealer.

University

This application is basically identical to the High School above with the obvious differences in scale and use of the Ethernet LAN rather than AXlink for transport of control information. Use of the LAN is transparent to the users and network overhead is extremely low.

A client pack is included to allow up to 10 networked PC's in buildings 1 to 5 to run Client versions of Synergy allowing scheduling & database access to be performed remotely. Remote access can additionally be provided via modems or the Internet with additional hardware & software components.

This solution combines recently released AMX Master-to-Master technology for communication between the Media Centre system and the Lecture Theatres. This allows the Lecture Theatres to operate stand-alone but still access resources from the Media Centre systems as required. The TV's however are operating on a Client/Server basis whereby the Media Centre provides processing, eliminating the need for individual control systems in each building.

Interfacing to an existing database could be achieved via an RS232 link from the AMX system however we would recommend the use of Synergy for this propose to avoid duplication of databases. Broadband reticulation system is not included and would be supplied as part of the package by the installing dealer.

AMX Control System Costing High School

Part No	Description	Qty	Unit Price	Total
AXB-MPE	MasterPort Expander	1	\$2,250	\$2,250
AXF-S	Slave Cardframe	2	\$1,850	\$3,700
AXC-IR/S	Infrared interface card	18	\$350	\$6,300
AXC-232	RS232 interface card	1	\$400	\$400
TXC-CT5	Classroom Transmitter - 33 function	18	\$800	\$14,400
AXB-TCR	Television controller	48	\$450	\$21,600
AXB-VTI6	Video titling interface (option - not shown on drawing)	3	\$2,600	\$7,800
WCS-300	Synergy Electronic Classroom server software	1	\$12,500	\$12,500
AXCENT3	Integrated Access Controller	2	\$2,500	\$5,000
AXD-MCP	Décor panel-mount Touchpanel	2	\$2,200	\$4,400
AXB-232++	RS232 interface	2	\$900	\$1,800
			Total Ex. Tax	\$77,900

AMX Control System Costing - University Media Centre

Part No	Description	Qty	Unit Price	Total
AXF-M/S	Master Cardframe c/w AXC-EM master	1	\$2,350	\$2,350
AXF-S	Slave Cardframe	2	\$1,850	\$3,700
AXC-IR/S	Infrared interface card	36	\$350	\$12,600
AXC-232	RS232 interface card	1	\$400	\$400
TXC-CT5	Classroom Transmitter - 33 function	36	\$800	\$28,800
AXB-VTI6	Video titling interface (option - not shown on drawing)	6	\$2,600	\$15,600
WCS-300	Synergy Electronic Classroom server software	1	\$12,500	\$12,500
WCS-450	Synergy Electronic Classroom client pack	1	\$3,500	\$3,500
AXB-NET	Ethernet interface	1	\$750	\$750
			Total Ex. Tax	\$80,200

AMX Control System Costing - University Example Building

AXCENT3PRO	Integrated Access ControlFrame	2	\$3,250	\$6,500
AXD-CA10	Décor panel-mount Touchpanel - 10.4" colour	2	\$8,400	\$16,800
AXB-NET	Ethernet interface	2	\$7,501	\$15,002
AXB-TCR	Television controller	12	\$450	\$5,400
			Total Ex. Tax	\$43,702
			Total for full installation	\$298,710



CRESTRON

from Soundcorp Pty Ltd

Soundcorp is the Australian supplier of Crestron control systems. The control systems used in this installation are all interconnected via standard Ethernet. Each video destination and the control area would have an ethernet connection. This system has the advantage of being able to be used in conjunction with standard computer requirements for networking.

For the purposes of the quote, it has been assumed in each case that a broadband reticulation system will be installed by a third party (as for the AV Technologies quote).

In each of the three installations, the head end CNMSX-AV control system and the CENI-TVAV controllers in each of the classrooms are connected via a true Ethernet network. This means that the scheduling and media management can be operated from any authorised computer running a web browser that is connected to the Ethernet or Internet.

Software supplied to the end user would allow the scheduling of the use of the media and the sources, automatic connection of the source to the classroom and the logging of the media use. The Crestron database would store information on the media to be used by the Crestron schedule software. Also included is Crestron instant messaging e-mail application, which could be set up to e-mail staff to confirm or remind regarding media bookings that they have made.

Control within the classrooms of the transport of the sources is via IR hand remotes. The CENI-TVAV's receive the IR commands from the remotes and also control the TV monitors in each classroom. Push button panels in the viewing rooms allow control of the transport of the sources in these areas.

Each of the lecture theatres have a CNMSX-AV control system and a CT-3500 10.4" active matrix colour LCD touch screen to operate all of the pres-



entation equipment within the room. The lecture theatre control systems are also connected to Ethernet, which gives them the same access the media from the head-end as the classrooms do.

Hypothetical Primary School			
Item	Qty	Unit Cost	Extension
Headend			
Crestron CNMSX-AV control system	1	\$2,450.82	\$2,450.82
Crestron CNXENET ethernet card	1	\$893.45	\$893.45
Crestron CNX-EGWY/25S (gateway 25 user license, schedule, messaging, database)	1	\$3,990.00	\$8,990.00
Crestron CNXIRP IR emitter without diode	8	\$65.58	\$524.64
Classroom Control			
Crestron CENI-TVAV ethernet TV controller	12	\$1,631.15	\$19,573.74
Crestron MRHC IR hand remote	12	\$375.00	\$4,500.00
Viewing Station Control			
Crestron CNWP-32B 32 button wired control panel	4	\$1,306.47	\$5,225.88
CRESTRON CONTROL SYSTEM TOTAL			\$42,158.52
CABLING AND MATERIALS			\$400.00
CONTROL SYSTEM PROGRAMMING			\$4,480.00
INSTALLATION AND COMMISSIONING			\$1,100.00
GRAND TOTAL			\$48,138.52

St. Fictitious Grammar School			
Item	Qty	Unit Cost	Extension
Headend			
Crestron CNMSX-AV control system	1	\$2,450.82	\$2,450.82
Crestron CNXENET ethernet card	1	\$893.45	\$893.45
Crestron CNX-EGWY/50S (gateway 50 user license, schedule, messaging, database)	1	\$14,790.00	\$14,790.00
Crestron CNXCAGE CNMSX card mounting kit	1	\$483.60	\$483.60
Crestron CNXIR-8 8 IR/serial output card	1	\$893.45	\$893.45
Crestron CNXIRP IR emitter without diode	16	\$65.58	\$1,049.28
Classroom Control			
Crestron CENI-TVAV ethernet TV controller	40	\$1,631.15	\$65,245.80
Crestron MRHC IR hand remote	40	\$375.00	\$15,000.00
Viewing Station Control			
Crestron CNWP-32B 32 button wired control panel	8	\$1,306.47	\$10,451.76
Lecture Theatres x 2			
Crestron CNMSX-AV control system	2	\$2,450.82	\$4,901.64
Crestron CNXENET ethernet card	2	\$893.45	\$1,786.89
Crestron CT-3500 10.4" active matrix colour touch panel	2	\$7,368.86	\$14,737.71
Crestron STI-VC 3 channel volume control unit	2	\$975.41	\$1,950.81
Crestron CNXIRP IR emitter without diode	2	\$65.58	\$131.16
CRESTRON CONTROL SYSTEM TOTAL			\$134,766.36
CABLING AND MATERIALS			\$1,360.00
CONTROL SYSTEM PROGRAMMING			\$9,800.00
INSTALLATION AND COMMISSIONING			\$3,500.00
GRAND TOTAL			\$149,426.36

Metro University

The existing University media database can be utilised as long as it is in a format that the Crestron schedule software can use. Alternatively some software would need to be written to adapt the Crestron scheduler to the existing University database.

Metro University			
Item	Qty	Unit Cost	Extension
Headend			
Crestron CNMSX-AV control system	1	\$2,450.82	\$2,450.82
Crestron CNXENET ethernet card	1	\$893.45	\$893.45
Crestron CNX-EGWY/50S (gateway 50 user license, schedule, messaging, database)	1	\$14,790.00	\$14,790.00
Crestron CNXCAGE CNMSX card mounting kit	1	\$483.60	\$483.60
Crestron CNXCOM-2 RS232/422/485 interface card (2 ports)	1	\$647.54	\$647.54
Crestron CNXIR-8 IR/serial output card	2	\$893.45	\$1,786.89
Crestron CNXIRP IR emitter without diode	24	\$65.58	\$1,573.92
Crestron STI-COM RS232/422 interface unit (2 ports)	2	\$893.45	\$1,786.89
Classroom Control			
Crestron CENI-TVAV ethernet TV controller	60	\$1,631.15	\$97,868.70
Crestron MRHC IR hand remote	60	\$375.00	\$22,500.00
Viewing Station Control			
Crestron CNWP-32B 32 button wired control panel	8	\$1,306.47	\$10,451.76
Lecture Theatres x 10			
Crestron CNMSX-AV control system	10	\$2,450.82	\$24,508.20
Crestron CNXENET ethernet card	10	\$893.45	\$8,934.45
Crestron CT-3500 10.4" active matrix colour touch panel	10	\$7,368.86	\$73,688.55
Crestron STI-VC 3 channel volume control unit	10	\$975.41	\$9,754.05
CRESTRON CONTROL SYSTEM TOTAL			\$272,118.81
CABLING AND MATERIALS			\$3,080.00
CONTROL SYSTEM PROGRAMMING			\$13,580.00
INSTALLATION AND COMMISSIONING			\$6,750.00
GRAND TOTAL			\$295,528.81

COMMAND SYSTEMS

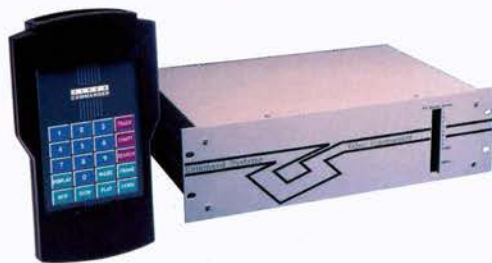
from Command Systems Pty Ltd

The Video Commander solution is the only one to incorporate all aspects of the supply and installation of the system from the one company. This gives the unique advantage of a "one stop shop" supplier that can give support on

all aspects of the system.

The Video Commander system is custom built for each application. Input, output and intercom cards are installed into an "MCU" or stack of MCU's, depending on the size of the installation. The input cards allow for input of video and audio sources into the system and provide infrared or serial control of the source device. Output cards distribute the video and audio as required. The intercom cards allow for simple communication between the remote room and the control area. Once loaded, an MCU is configured by Command Systems to be controlled by a normal PC running Windows. MCUs can also be controlled in remote locations, making it possible to have central control of a system installed in multiple buildings.

The Video Commander v3 software (VC3) allows for making connections as required, as well as numerous booking and recording keeping options. The software has been developed in consultation with numerous schools and universities over the last few years. The software comes with its own customisable title database, automatically cataloguing titles as they are used in the system. For those wishing to use existing databases, VC3 is an ODBC client - which means it can be linked to any ODBC compliant database using Windows ODBC. An industry-standard database engine allows VC3's capabilities to



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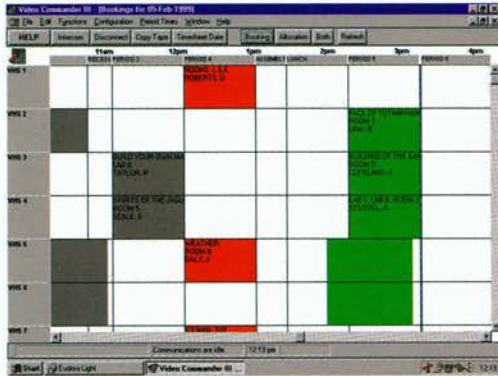
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be extended with products like Microsoft Access. A simple report generator, Statistics, allows a wide range of reports to be extracted in graphical and text formats. Another important aspect to the software is that the complex class/period time cycles



that are often used by schools can be coped with.

Connections between the remote rooms and the control centre are now installed entirely on standard Category 5 structured cabling - no coaxial cable, modulators, amplifiers, splitters etc. Remote control of the video source is possible using the set top adaptors and Command System's remote controls. Simple on-screen prompts help to allow any user to easily control the equipment in question.

Another item that is mentioned in two of the quotes listed here is the Theatre Commander. As well as providing all of the services of a standard set top unit, it can provide control of room lighting (switched or dimmable fluorescent and/or switched incandescent loads and/or an existing dimmer system), motorised screens, projectors etc. and can integrate all facilities for program and mic audio. It is also capable of controlling other items, such as air conditioning, local source equipment, video conferencing codec, cameras etc. The Theatre Commander also includes audio amplifiers, mic mixer and AV switcher. So, for a complete installation in each theatre you would need to add only a video projector, speakers, microphone(s) and possibly a lectern.

Primary school installation requirements

8 VCRs, 12 classrooms and 4 media centre outlets are specified, but the diagram shows an extra TV point in the staffroom, so this amounts to 17 outlets.

Video Commander equipment - 8 in, 17 out.

Item	Qty	Description	Total
1	1	MCU3 cardframe	\$ 1350
2	8	Input cards	\$ 3040
3	4	Output cards (includes full VCR - VCR copy capabilities)	\$ 2600
4	3	LTMU Line Termination modules	\$ 2400
5	17	RLMU set-top adaptors	\$ 5610
6	17	VCNHC handsets (4 configured for fixed wired operation)	\$ 2006
7	1	VC3 software	\$ 1000
Optional intercom system			
Item	Qty	Description	Total
8	1	Intercom master card (fits into Item 1) & master phone	\$ 995
9	13	Intercom phones	\$ 1157
Total for full installation			\$20,158

Cabling

Since in the case of the primary school all classrooms are within 90 metres of the Media Centre, it is quite simple to install a cable system that would serve all communication functions, including intranet/internet services, to all rooms in addition to the video. This consists of a single hub in the media centre with Cat.5 cable radiating directly to dual outlets in the rooms. It is worth noting that the incremental cost of an additional Cat.5 cable installed for computer network capabilities is negligible.

Many schools have existing intercom cabling that can be adapted for use in this system. Video Commander would provide quality vision and sound on ordinary voice-grade cable - even on cable runs exceeding 500 metres.

Secondary school installation requirements

16 VCRs, 2 DVD players, 40 classrooms, 2 theatres and 8 media centre outlets are specified. Although it is not requested, On/Off remote control of the film projector / telecine is available at very low incremental cost.

We have assumed that each building is to have a centrally-located comms rack to which all rooms are connected, with at least 2 outlets in each room so as to provide for network access to be installed at the same time as the video. While it would be possible to install a separate node in Building 1, with only 24 rooms it's more economical to install a 50 pair cable, of which 36 will be used to patch rooms in Building 1 directly to the comms rack in Building 2. This would be the only extra cabling cost if a cable system was already being installed for network purposes.

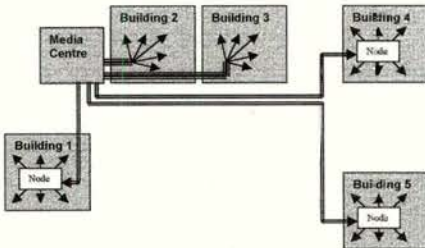
Video Commander equipment - 19 in, 50 out

Item	Qty	Description	Total
1	3	MCU3 cardframe	\$ 4050
2	19	Input cards	\$ 7220
3	24	Output cards (includes full copy capabilities)	\$15600
4	7	LTMU Line Termination modules	\$ 5600
5	48	RLMU set-top adaptors	\$15840
6	48	VCNHC handsets (8 configured for fixed wired operation)	\$ 5664
7	1	VC3 software	\$ 1000
Optional intercom system			
8	1	Intercom master card (fits into Item 1) & master phone	\$ 995
9	42	Intercom phones	\$ 3738
Theatres (equipment for 2)			
Item	Qty	Description	Total
10	2	Theatre Commander	\$11170
11	2	Peripheral Interface Unit	\$ 1960
12	2	LCD SoftKey control panel	\$ 3400
Total for full installation			\$76,237

University installation requirements

System architecture

We will assume that, due to the short distances involved, buildings 2 and 3 will be supplied directly from the media centre headend with buildings 1, 4 and 5 served by 8 in, 14 out nodes, as shown in the following diagram:



Video Commander's use of nodes for the more remote buildings is similar to the use of hubs or routers for campus-wide intranets. They reduce the amount of cabling needed to each building and make expansion and addition of more buildings to the system easier.

The Media Centre system will have 24 VCRs, 8 DVD players, 2 Umatics and 2 DV machines. Outputs will be 36 direct feeds plus 24 trunks for a total of 60. It's assumed that, due to traffic requirements, no copying will be done on this system. For the purposes of this quote, lecture recording is assumed to be an independent function with its own VCRs in the media centre. These will not used

for replay purposes.

Since the distances fall within Video Commander's UTP (Unshielded Twisted Pair) trunkage limits, this option is quoted in lieu of optical fibre trunkage, which will be more expensive due to higher hardware costs. It is assumed that the necessary 25 pairs exist between the Media Centre and buildings 1, 4 and 5. Hence, no allowance has been made for cabling as this will be a "patch to existing" exercise. Where further buildings are added at a greater distance, the optical fibre solution becomes more attractive.

Video Commander equipment - Media Centre, Buildings 2 & 3 - 36 in, 60 out.

Item	Qty	Description	Total
1	5	MCU3 cardframe	\$ 6750
8	36	Input cards	\$13680
9	40	Output cards	\$26000
10	10	LTMU Line Termination modules (2 are "receive" type)	\$ 8000
11	32	RLMU set-top adaptors	\$10560
12	32	VCNHC handsets (3 configured for fixed wired operation)	\$ 3776
13	1	VC3 software	\$ 1000
Optional intercom system			
Item	Qty	Description	
8	1	Intercom master card (fits into Item 1) & master phone	\$ 995
9	28	Intercom phones (buildings 2 and 3 only)	\$ 2492
Buildings 1, 4 & 5 - each 8 in, 14 out nodes (PER BUILDING).			
Item	Qty	Description	
10	1	MCU3 cardframe	\$ 1350
11	2	Output cards	\$ 1300
13	3	Termination modules (1 is "receive" type)	\$ 2400
14	12	RLMU set-top adaptors	\$ 3960
Optional intercom system (for buildings 1, 4 & 5. Item 8 must be fitted.)			
15	1	Intercom master card (fits into Item 10) & master phone	\$ 995
16	14	Intercom phones	\$ 1246
Theatres (each)			
Item	Qty	Description	Total
17	1	Theatre Commander	\$ 5585
18	1	Peripheral Interface Unit	\$ 980
19	1	LCD SoftKey control panel	\$ 1700
20	1	Mini Mixer	\$ 320
Total for full installation			\$195,841

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Conclusion

	Primary	High	Uni
Command Sys.	\$20,158	\$76,237	\$195,841
AV Tech.	\$15,600	\$77,900	\$298,710
Soundcorp	\$48,138	\$149,426	\$295,528

*All excluding tax.

While the end result of sending video to remotes rooms was achieved by each of the companies that took part in the comparison, the technology used by each of them differed a great deal. The AMX and Crestron systems both used the same concept of controlling an existing reticulated broadband system.

However, the Crestron system sits entirely on an Ethernet network, whereas the AMX system uses its own control data stream for the remote boxes to talk to the master unit. This may seem a small point, but this difference allows a considerable

amount of flexibility in the Crestron design.

On the other hand, it would be debatable as to how flexibility and how much more equipment anyone would want to control, thus giving the AMX option considerable price advantage against Crestron on small to mid-sized installations.

Both AMX and Crestron are out priced by the Video Commander, largely because the actual video distribution has been incorporated into the control and intercom distribution. In addition, the cost savings on cable installation would also work in Video Commander's favour.

The technology and software used by Command Systems in designing this system have been in development over many years, and is specifically targeted at the needs of video distribution in education. However,


Command Systems has not really delved too far into other control aspects that AMX and Crestron are well know for. Command System's "all-in-one" box called *Theatre Commander* is a comprehensive box that has numerous useful control options, but it is not suitable for every installation.

AMX and Crestron would need numerous devices working together to do the same functions as the *Theatre Commander* - but then AMX/Crestron have the advantage of the user being able to specify exactly what is required, rather than getting a whole lot of features that may never be used.

As always, the cheapest option is most likely to be installed in any situation, and Video Commander wins this position. It is good system, but it is well worth investigating what AMX and Crestron have to offer.

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DID YOU KNOW?

*Some of these are really bizarre!
And, in true Presentech fashion,
we can't verify all of them. But read on:*

TRAVELLER

Regular readers were either

- impressed
- depressed
- angry
- appreciative
- nonplussed

..... at our reviews of Business Class air travel in the past four issues. Some of the airlines were decidedly unimpressed, but being smart media operatives they declined to give us anything to publish.

Instead, the nosey, pushy and assertive PR types insisted on flight numbers, crew names, and generally had us think they doubted we were actually on their aircraft - let alone having purchased the ticket!

Well thankfully for us, we haven't travelled anywhere long haul since last issue, and when we go to InfoComm International in June, it will be on Air New Zealand - who we have already reviewed.

Air safety note:

While Qantas have had some bad press lately, they did point out that in 10 years their fleet has expanded from 26 to 100+ aircraft, and yearly flights from 20,000+ to 200,000+ - via the merger of Australian Airlines.

The biggest problem at QF is the age of their fleet, which currently averages 10+ years. New aircraft are required, and soon, to replace the oldest.

YOU PROBABLY DIDN'T KNOW THAT.....

Debra Winger was the voice of E.T.

Pearls melt in vinegar.

It takes 3,000 cows to supply the NFL with enough leather for a year's supply of footballs.

Thirty-five percent of the people who use personal ads for dating are already married.

The 3 most valuable brand names on earth: Marlboro, Coca-Cola, and Budweiser, in that order.

It's possible to lead a cow upstairs...but not downstairs.

Humans are the only primates that don't have pigment in the palms of their hands.

Ten percent of the Russian government's income comes from the sale of vodka.

The sentence "The quick brown fox jumps over the lazy dog," uses every letter in the alphabet. (Developed by Western Union to Test telex/two communications)

Average life span of a major league baseball: 7 pitches.

A duck's quack doesn't echo, and no one knows why.

The reason fire houses have circular stairways is from the days of yore when the engines were pulled by horses. The horses were stabled on the ground floor and figured out how to walk up straight staircases.

The airplane Buddy Holly died in was the "American Pie." (Thus the name of the Don McLean song.)

Each king in a deck of playing cards represents a great king from history. Spades - King David; Clubs - Alexander the Great; Hearts - Charlemagne; and Diamonds - Julius Caesar.

$111,111,111 \times 111,111,111 = \rightarrow 12,345,678,987,654,321$

Clans of long ago that wanted to get rid of their unwanted people without killing them used to burn their houses down-hence the expression "to get fired."

Hershey's Kisses are called that because the machine that makes them looks like it's kissing the conveyor belt. What is a Hershey's Kiss anyway?

The name Jeep came from the abbreviation used in the army for the "General Purpose" vehicle, G.P.

The highest point in Pennsylvania is lower than the lowest point in Colorado. Useful info in Australia.....

The only two days of the year in which there are no professional sports games (MLB, NBA, NHL, or NFL) are the day before and the day after the Major League All-Star Game. What is an All-Star.....

Only one person in two billion will live to be 116 or older.

The mask used by Michael Myers in the original "Halloween" was actually a Captain Kirk mask painted white.

If you put a raisin in a glass of champagne, it will keep floating to the top and sinking to the bottom.

Snails can sleep for 3 years without eating

Actor Tommy Lee Jones and Vice-President Al Gore were freshman roommates at Harvard

The fingerprints of koala bears are virtually indistinguishable from those of humans, so much so that they could be confused at a crime scene.

Months that begin on a Sunday will always have a "Friday the 13th."

The man, who plays Lt. Commander Montgomery Scott on Star Trek, is missing the entire middle finger of his right hand.

The Eisenhower interstate system requires that one mile in every five must be straight. These straight sections are useable as airstrips in times of war or other emergencies.

There are 293 ways to make change for a dollar.

All of the clocks in the movie "Pulp Fiction" are stuck on 4:20.

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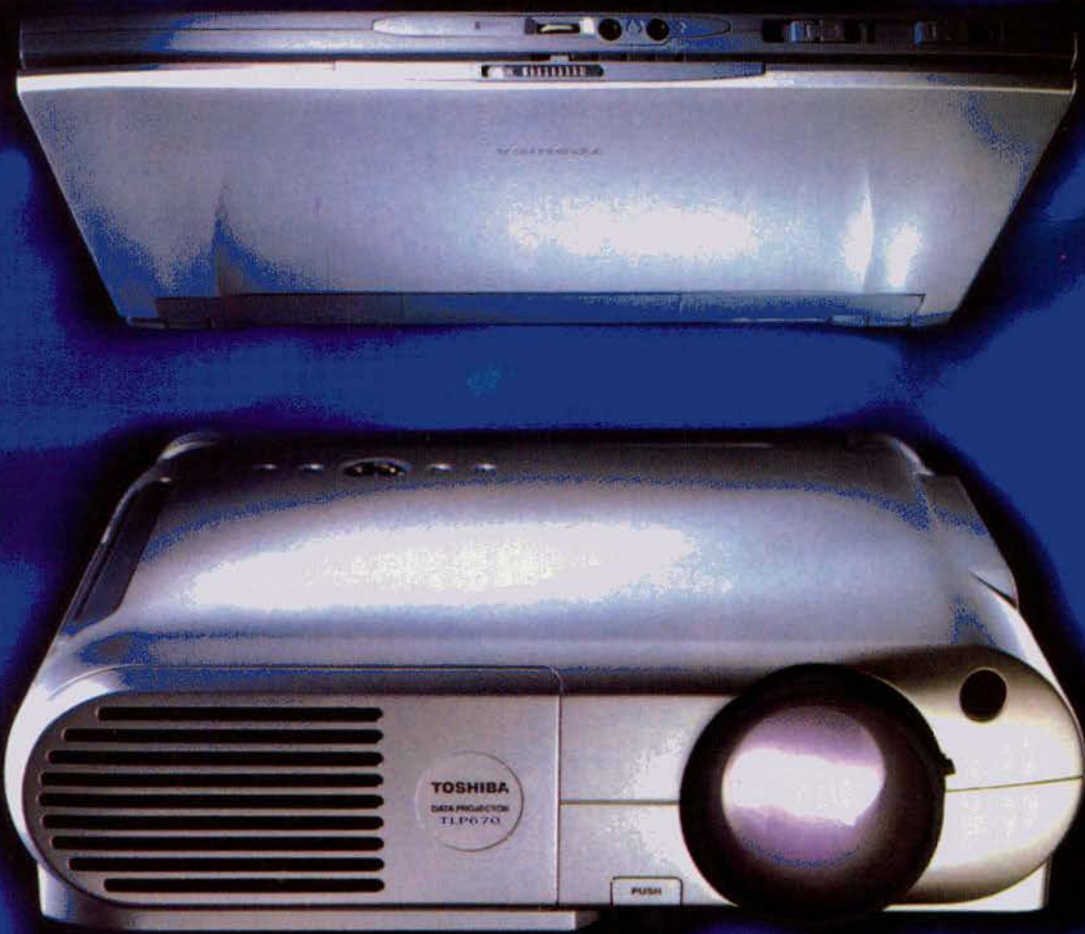
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- Medical
- Military
- Museum
- University/Education/Training Facility
- Other Government Organisation
- Religious Organisation
- Film/video production/post production
- Broadcast
- Media / Advertising
- Freelance
- Other.....

Which of the following best describes your job function?

- AV/IT Manager
- AV Technician
- Event Production Manager
- Event Organiser
- Designer (Multimedia, Graphic, Product)
- Professional Presenter/Lecturer
- AV Consultant/Contractor
- AV Reseller
- Film/Video Producer/Editor/Developer
- Marketing/Sales
- Other

Are you a key decision maker in the purchasing of AV and/or related products? Yes No

What is your average budget range for purchasing AV or presentation technology products/services?

- Less than \$10k
- \$10k to \$50k
- \$50k to \$100k
- \$100k to \$200k
- \$200k to \$500k
- Over \$500k

Which of the following AV or Presentation Technology Products/Services does your company use?

TICK ALL RELEVANT

- Projectors/Screens
- LED Screens/Plasma
- Audio equipment, PA's, mixing, editing
- Video equipment, cameras, editing, lighting
- Computer Hardware, PC, Windows, NT based
- Computer Hardware, Mac based
- Computer Hardware, OTHER
- Media storage, transfer, removable
- Video/Audio Conferencing, distance learning
- AV services, rental, productions
- Presentation equipment
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