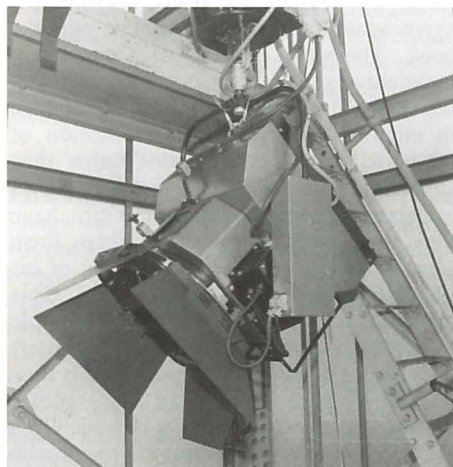


solidly crafted 'transportable' pulpit to disguise its 20th century form (and, could it be, as back-up for the eighth commandment?). Memorised balances have been devised to suit the various services and the many other uses of the building including dance and drama events. Even the automatic fades play a part, being used to great effect during processions. Have the ALD noticed this new opportunity for employment?

### More High-Tech from LEE COLORTRAN

Continuing evidence of a policy of confident investment in new technology comes from Lee Colortran Ltd. The first announcement is for a fully motorised television studio luminaire based on their industry standard Dual Source luminaire. Their second announcement is for an intelligent dimmer system.

Motorised remote control for theatre and studio lighting has long been a dream thwarted by excessive cost. The technology



*Motorised Dual Source Luminaire from Lee Colortran*

has been available for many years and there was a spate of prototype demonstrations centred on Pinewood and the Ianiro factory in Rome in the early '70s. The problem is complicated by the accuracy necessary to position the beam precisely where it is wanted and by the number of adjustments required. Lee Colortran have taken the bit between their teeth and motorised one of the most complex of all lighting devices—the television dual source luminaire. This is really two lanterns in one. At one end a 5kW fresnel spotlight requires adjustment for focus and for four barn-doors and barn-door rotation. Six movements so far. At the other end a 5kW soft-light requires no adjustment but the luminaire as a whole requires a remotely operated switch to determine whether spotlight or soft-light is operative and powerful pan and tilt drives. Finally, to extend the range of brightness within the limits of colour temperature still important for both film and television, the lamps can be switched to half power, again remotely. A total of ten adjustments. Lee Colortran have used DC motors and a digital multiplex system to transmit the adjustment com-



*Lee Colortran Intelligent Dimming System*

mands and some status monitoring from and to the central control desk.

It will be interesting to see who buys these devices. Rumour has it that some 80 are already being installed in a television studio in Dublin and, of course, the BBC, the pioneers and exponents of the dual-source method of lighting, are bound to be interested. It will also be interesting to see how the system is controlled, surely not from the control room unless memorised readjustment proves to be useful, but perhaps there are hand-held infra red linked devices like the modern television set 'magic wand' for use in the studio itself. Whatever the method, it will have to be good to beat the speed and simplicity of the standard television pole. I hope to report again about this subject after a bit more research.

The other new product from Lee Colortran is an intelligent dimming system. This unlikely concept was fashionable in the USA a few years ago and, of course, means less than you might expect. The idea results from the inevitable decision to put a microchip into the dimmer control card which immediately gives the circuit designer the chance to throw in all sorts of other circuits in the hope that they will be of use to someone. First, the best reason for the microchip, dimmer triggering can be made much more stable and reliable and entirely free from the need for external adjustment. No more need to crawl around the dimmer room with a small screwdriver and test meter or oscilloscope. Also, since the dimmer adjusts itself, it can cope with a very wide range of input voltage; Lee Colortran claim that output is held within 2.5 volts of the required value for an input range from 190 volts to 280 volts. The choice of dimmer law is also simplified since the chip can store several look-up tables selectable by software. All this was possible with analogue feedback circuits but now digital techniques make the design simpler and cheaper. Dimmer signals from the control desk now come as multiplexed digital information so the need to change to analogue and then back to digital to fire the thyristor is eliminated. The bonuses, if you want to use them, are that the dimmer can send back information to the control desk about faults such as dimmer circuit-breaker

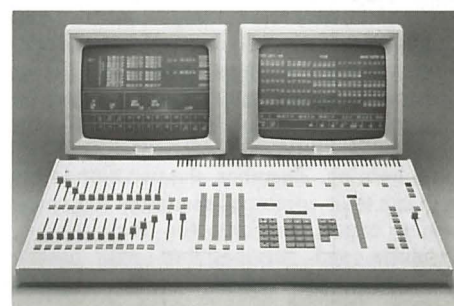
trip or firing circuit failure. Channel output voltage can be sent back digitally for mimic-diagrams and channel and bus bar load current can be measured and reported for display on digital ammeters or to trip overload alarms.

Lee Colortran package up to 108 5kW dimmers in one rack and offer 2.5kW and 10kW dimmers as options. The full range of facilities will probably be affordable only to television customers for the present and, like all products of this type, all the clever new offerings will mean nothing unless the dimmer itself proves to be exceptionally safe and reliable.

### Tim Burnham ARRIVES

Followers of the TBA saga will be pleased to hear the latest chapter and the happy ending.

CUE readers will remember 'Magic Lantern', the purple-and-pace range of small spotlights with built-in dimmers



*Imagination control system from the Arri Lighting Control Division.*

and low voltage lamps introduced in 1985, and also the Imagination series of dimmer control panels. Unfortunately, financial problems prevented marketing by the original company, but after a brief period Tim Burnham, the driving force behind these products, found encouragement and financial backing at Arri (GB) Ltd. Together they set up Imagination Technology Ltd. to continue development and marketing of the control system. Now, after six months of "outstanding success", Arri (GB) have decided to integrate Imagination Technology fully into the parent company as the ARRI Lighting Control Division. They promise that some very exciting new products will be introduced at the ABTT Trade Show. (5th-7th March at Riverside Studios.)

ARRI, for those who don't know, is the trade name of the powerful Arnold & Richter company of Munich who sell top quality 35mm and 16mm cine equipment worldwide and also high quality film and television lighting. The UK company based at Heston, Middlesex is run by Derrick Ross and Paul Wild who once had top jobs at Rank Strand and who, naturally, can be expected to show great interest in the possibility of expanding their range of products to include dimmers and lighting control so that they can offer television and, perhaps one day, theatres complete lighting packages as they once did very successfully from Brentford.