

The lamp source was originally chosen because it had a very high light output. An oval beam which was pre-focused in the lamps own lens, from either very narrow ($6^\circ \times 12^\circ$ beam angle) to wide flood ($24^\circ \times 48^\circ$ beam angle). It was also very easy and cheap to build a housing for it. In fact until 2 to 3 years ago most of these lanterns were made by freelance metal workers. More recently the major manufacturers have tended to take over the production, due to the need to comply with more stringent electrical regulations, being applied by the G.L.C. and the inherent benefits of controlled volume production.

Suspension Systems

The next part of the hardware to be standardised was the suspension system. Two principal standards have emerged, the Genie Tower and the Truss system. The first is a free standing tower, capable of supporting up to 16 lanterns. These tend to be used in the smaller rigs, or for cross lighting on the bigger sets to supplement the main lighting from the overhead truss system. The Genie Towers are usually telescopic and can be extended up to a height of approximately 15 feet, either by a ratchet pulley system or more commonly by hydraulic systems or pressurised bottled gas. Each tower has four or more cross bars to support the luminaires.

The Truss system is a space frame construction in 10' lengths that houses all the cabling for the luminaires, together with 6 1kW lanterns. These Truss sections can be very quickly assembled at stage level into various formations, the most common being a box set. Once assembled they are flown into position using electric chain hoists.

All the wiring is run in standardised 6 lamp multicores back to the dimmer rack. Where it is easily plugged into the appropriate section.

Dimmers

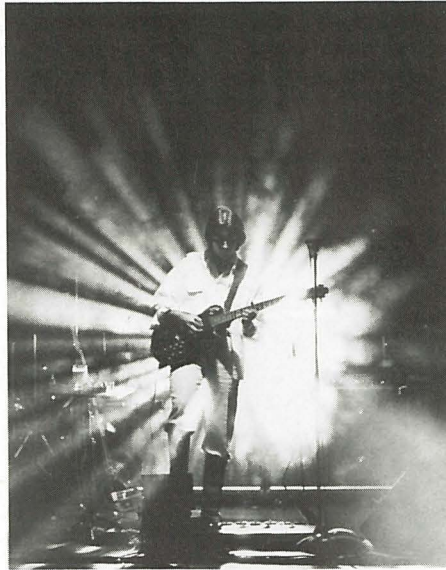
The first major *standard* produced in 1974, was *Portapak* — a 6×2.5 kW portable dimmer rack, to which all connections were by means of plugs and sockets. As these had to suffer being thrown into the backs of trucks at 4 a.m. by very tired "roadies" they were built accordingly and theatre hire companies and touring groups quickly latched on to using these robust little dreadnoughts.

With the trend to larger systems and increasing freight costs, a reduction in the size and weight of dimmer racks became necessary. *Flatpak* followed at a third the size and half the weight.

Now even more compact units have been developed by specialist contractors. These consist of an integrated dimmer rack for 80 dimmers with mains output patching and control input patching in one portable road box $4\text{ft} \times 3\text{ft} \times 2\text{ft}$.

Control Desks

Without doubt this is the most difficult part of the hardware to standardise. No computer memory board has yet proved suitable for the industry, probably due to



Steve Hackett — on tour.

the difficulty in providing the special effects from a memory and at the same time making it flexible enough. Also the question of reliability arises. In a touring situation if they do go wrong it is most unlikely that the crew on the tour would have the expertise to repair them.

The last two special touring control boards

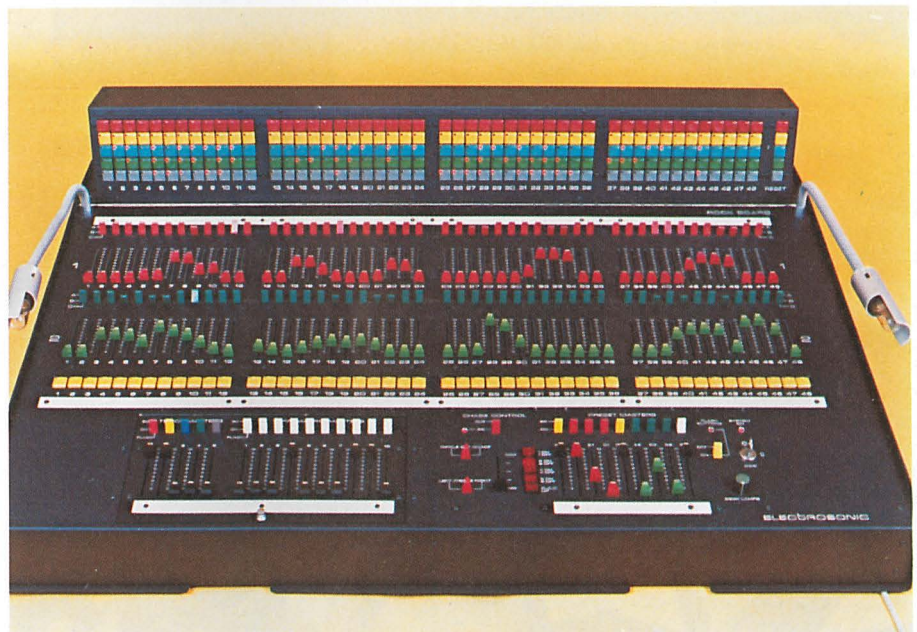
Pink Floyd had similar facilities to *Miranda*, with the addition of built-in intercom unit, programmable digital clock, real time clock, voltage metering and programmable colour cycle unit.

These control desks were a lot of fun to build, and looked impressive. But because they were one-off specials they were expensive to construct and incidentally difficult to service.

In 1976 a number of rental companies and lighting designers were approached to ascertain their requirements regarding features and facilities for a standard range of boards for the touring Rock'n Roll industry. James Moody, President of the Sundance Corporation, in the USA, was probably the most influential advisor for this new "standard" product.

This led to the birth of a range of standard boards aptly named *Rockboard*.

The *Rockboard* was first used by Zenith Lighting and after a few modifications to the original prototype, was launched as a standard product at the Wyndhams Theatre in London in 1977. At the time Francis Reid predicted that the *Rockboard* would be used by multipurpose halls in a permanent installation due to the frequency and variations of acts which need to be lit in those venues. In the event that prediction came true for the Civic Centre Peckham has a 36



Rockboard 60-way 2 preset 3 group 10 × 60 Pin matrix, 5 × 60 Touch matrix, 10 programme pattern chase, Flash buttons, Mimic display.

manufactured by Electrosonic were *Miranda*, designed and built for Theatre Projects Services to their specification and *Pink Floyd*. The brief for *Miranda* required the desk to be capable of working on a conventional theatre set, and on the most demanding of touring Rock'n Roll shows. It is a 40 way 3 preset 3 group board, with a 10 × 40 diode pin matrix for 10 groups of lighting together with routing for sound to light facilities. Also fitted was a 10 programme pattern chaser, with two 40 × 40 output routing matrix, together with a host of other facilities including a cigar lighter.

way *Rockboard* and the New Regis Centre, Bognor Regis is having one installed later this year. To date some sixty *Rockboards* are in use in Japan, Los Angeles, New York, Hamburg, London, Helsinki and many other cities throughout the world.

Perhaps the theatre had something to learn from the long-haired hippies of the 60s after all.

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