

There are two motives for remotely controlling a spotlight:

- * **Lighting Management** – rapid re-setting, without access, between scenes.
- * **Lighting Design** – visual effectiveness during a scene.

Until recently most developments were in the management category. However the needs of the popular music industry have brought a demand for a lighting style where movement is incessant. Indeed (and I say this seriously although it may well be interpreted as cynicism) movement is the norm with stillness being reserved for an occasional dramatic effect. Microprocessing of the electrical supply to the lamp has provided flashes, flickers and chasers of a complexity limited only by filament heat delays. And developments like Charlie Paton's Pancan have put movement into the beams.

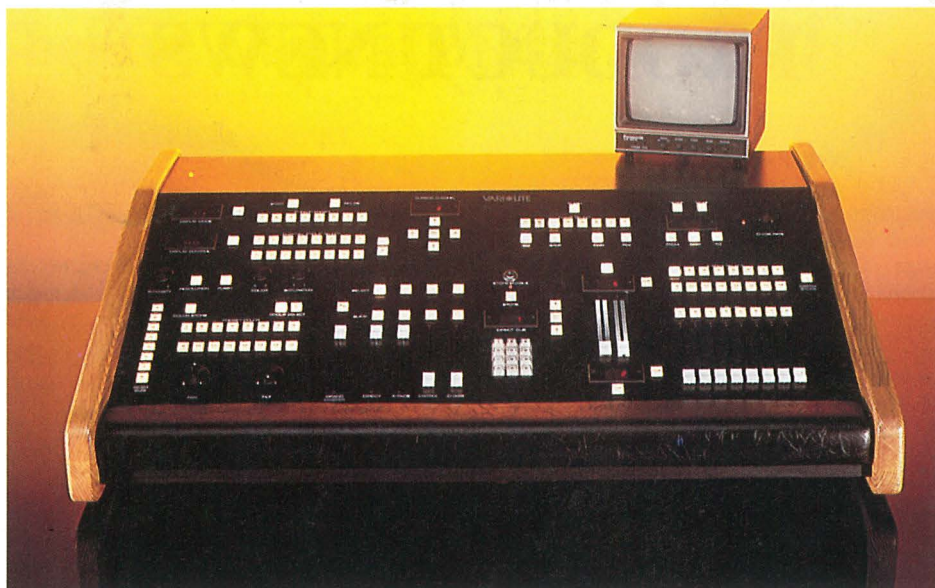
Now something of a quantum leap in lighting technology has been taken by Vari-Lite, produced to meet the requirements of the music industry who have financed its development and can afford to use it in their productions.

The light source is a 300watt (110 volt) compact source HMI discharge lamp delivering 600 foot candles at 20 feet. Being a discharge lamp it cannot be faded electrically, but mechanised shutter fading is no problem in a unit where so many functions are remotely operated. Full-off to on can be faster than half a second and blackouts are instantaneous without filament time-lag. It is a highly efficient light source and has high colour temperature which is maintained throughout a fade.

Focussing provides five hard-edged beam angles, ranging from two to ten feet diameter at twenty feet throw. And one, described as semi-soft, giving a twelve feet diameter at twenty feet. There are two standard gobo patterns: break-up and slot. Colour selection as already mentioned is by a secret dichroic filter recipe. Panning range is through 359° and tilting through 270°. Rotation time for 180° in either pan or tilt is three seconds. After being knocked by scenery, a Vari-Lite instantly resets itself. Each Vari-Lite unit weighs 45 pounds and has six mounting positions to allow for variations within standard bar and truss rigging methods. The units may be hung at a minimum of 19 inch centres. The manufacturers report that the equipment has proved that it stands up well to the rigours of the road – as indeed it has to, given the short-stand schedules of band tours.

Small truss mounted boxes provide both signal and mains distribution (for 240 volt operation, a power transformer is also required). Multiplexed control data for all instruments within a system is transmitted by a single two-wire shielded microphone cable.

Vari-Lite's microprocessor operating desk, for up to 96 channels, has manual controls for plotting the positioning of the



Vari-Lite's microprocessor control desk for up to 96 channels and 255 memories

lamps and their colours, intensities and beam sizes. There is storage capacity for 255 cues and the memory can be transferred to micro-disc for library storage. There are four playback modes:

- * **Direct Cue** giving immediate access to any cue state and allowing rapid stepping between sequential scenes.
- * **Cross fade** providing intensity cross-fades between instruments, and movement crossfades of instruments from one position to another.
- * **Chase** allowing timed or manual stepping through programmable sequences of cue states.
- * **Matrix** permitting instruments to be grouped for intensity control into sixteen matrix scenes with eight faders per scene.

So you would like to try Vari-Lite on your next production? Well, the minimum rental period is a week and you have to take a minimum of 15 lamps at £245(+ vat) each. (This reduces to £195 weekly for two or more weeks). The price includes the control desk, spare lamps and all maintenance. But not technicians: they come at £600 per week and are mandatory at the rate of one for every twenty lights. So your experimental minimum is a week of 15 lamps, their control and their technician for £4275 (+ vat).

Expensive? No, not really, if you consider Vari-Lite's development capital and its unique market position of nil competition. And the cost-effectiveness of its use in the high pressure touring of a megastar band where the box office potential is huge and the expectation of the audience is as high as the rigging time is minimal. The cost is certainly above the budgets that conventional theatres consider normal for lighting. However I, for one, would be prepared to have a go at many styles of west end musical with 15 to 20 Vari-Lites plus a bit of conventional fill from the foh (and perhaps a flood bar if the set required it).

But the real significance for Vari-Lite in

the theatre industry lies in future developments. The next generation is promised for 1986 but economics will presumably restrict this to an update for those areas of popular music and television which can provide an immediate viable market. However the history of stage lighting demonstrates that time and labour saving techniques get absorbed: there is an enormous potential cost-effectiveness from being able to abolish focussing calls.

Theatre lighting designers, particularly those in the playhouses, will be looking for refinements in areas like beam edge softening and perhaps operational noise. And there will be major concern about accuracy – there are situations where a one degree error in the pan or tilt of a lamp on a bar at a dead of 20feet can mean a displacement of nearly one foot when the beam reaches an upstage actor. But let not any thought for the future take the edge off acknowledging what has been achieved now. I have been in the habit of saying, in Cue and elsewhere, that the only truly breakthrough luminaire developments in my thirty years of theatre have been the par can and the directional diffuser. I am now happy to add the Vari-Lite to that list.

VARI*RITE™

was developed in Dallas by
SHOWCO

and is available in Europe through
SAMUELSON COMMUNICATIONS LTD
120 Cricklewood Lane, London NW2 2DP
Contact: Bruce Williams or Jimmy Barnet
on 01 208 0011