

LP control desk showing the simple arrangement of master controls and hinged panels for installation and servicing.

separate grouping push buttons, switches or indicator lamps being necessary. Indication and selection is at the dimmer levers themselves with consequent reduction both in space required and in uncertainty in observation.

Master controls are kept as simple as possible and are concerned with grouping on to the two master faders (the white and the red) per preset. To do this there are five master push buttons to each preset -All White, Individual White, All Black, Individual Black, and Individual Red. The Individual White and Individual Red pushes are used to set up groups on the White and Red faders. Any dimmer scales touched while either push is held will be routed to the appropriate fader and light up in White or Red. In addition dimmer channels can be selected as common to both faders and display both red and white. Thus, a preset can in effect be formed into three groups and a cross-fade be carried out with some channels, for example the sky, remaining static, without resort to another preset. Channels are removed from a master fader by using the 'Individual Black push' in the same way.

The 'All White' or 'All Black' pushes operate without the need to select individually at the dimmer scales. This can be very useful when simple non-group presetting is required since at a touch all channels can be set on the white. These 'All' pushes are also helpful when setting either nearly full or almost empty combinations. Thus, if a lot of channels are concerned they can all be set 'on' at one touch and those not required then removed using 'Individual Black' and/or 'Red'. In the same way using 'All Black' the preset can immediately be cleared to off and the few required picked out in white or red or both as appropriate.

It is important to realise that the groups formed on system LP are quite independent on each preset. Thus six independent groups or blocks of light, or nine if the commons are included, can be set at any one time. It is not difficult to imagine, for example, using these in the manner of the Broadway temporary 'piano' boards and their master boards; raising first this block of light and then that. All the lighting instruments of the groups are then still under individual control for balance and change if necessary.

In other control systems this practice of separate grouping to each preset is not advisable due to the extra work entailed in matching groups when cross-fading group by group from preset to preset, but on Strand system LP such matching, when required, is quite automatic. All that is needed is to press either of the two amber matching pushes associated with each preset. These can either couple down the group of

another preset as an addition to, or if 'All Black' is pressed first, as a substitute for what is already selected.

These then are the controls of the Strand Luminous Preset; streamlined simplicity easily grasped after but ten minutes instruction, yet capable of an infinite number of operational variations. For example, the red lamps need not necessarily be used together as the master group they may form, but can act as 'markers' to identify a series of scattered dimmers to be brought in sequentially one after the other by hand. Likewise in a part of a show with several group switching changes in rapid succession one or two of the presets can be used for setting these in advance merely to be copied onto the active preset when required. Since the inactive preset master faders could be kept off, such use of the touch contact facilities need not prevent the actual dimmer levers on these presets from being already set at a series of levels ready for later use.

All switching and routing to carry out these actions is solid state involving no moving parts and carried on a small printed circuit board forming part of the dimmer lever assembly itself. In the event of a defect this can be withdrawn from the front and a spare substituted. Mail provides a quick replacement.

LP 80 3 Preset 9 Group 80 Channel

Desk with three rows of 80 luminous dimmer levers to select and display red and white groups and a non-change common independently on each preset. Automatic matching of groups from preset to preset. Six linear masters plus two fast/slow motion grand masters. Front of house master.

Size 57 in. wide \times 26 in. deep \times 36 in. high. Weight 250 lb. (Requires four JTM/20 or TM/20 thyristor racks)

LP 60 3 Preset 9 Group 60 Channel

As LP 80 above, but for 60 channels. Size 44 in. wide \times 26 in. deep \times 36 in. high. Weight 210 lb. (Requires *three* JTM/20 or TM/20 thyristor racks)

LP 40 3 Preset 9 Group 40 Channel

Exactly as LP 60 above, but 40 channels only and left hand panel free of levers. (Requires two JTM/20 or TM/20 racks)

LP 100 and LP 120. 100 or 120 channels

The System LP can be applied to larger installations than are covered above, but it becomes convenient to consider an ergonomic shape of wing unit housing channel controls in conjunction with a console containing the master controls, plotting desk, and any accessory switching.

Centre console with masters 36 in. wide \times 20 in. deep \times 37 in. high. Weight (including power pack 150 lb.) Wing Unit for channel controls 30 in. wide \times 28 in. deep \times 50 in. high. Weight 475 lb.



System LP is typical of a standard Strand Electric control; deceptively few controls housed in an unusually compact space, yet nothing cramped or miniaturised, and because of the clarity of purpose behind the design capable of a versatility unapproached by a much more elaborate system.