to modern times, as has been said earlier, with the electronic control, but it is something that this theatre had cause to be thankful for. This was a really modern installation with variable-load dimmers, presetting and a 144-channel control desk compact enough to take over the Royal Box position "centre out front". Think of it, no more skulking round the corner backstage, but a room with a view—a view fit for the King!

The schedule of dimmer circuits as taken from L. G. Applebee's estimate, and specification for the job appears opposite. There were 133 dimmers and space for a further 11 which were later fitted. There were other small revisions, and of course the removal of the cyclorama in 1964 freed further dimmers. The electronic reconciled Applebee—and indeed the rest of the theatre world—to remote control. Unlike my own outlandish organ consoles it looked like a Grand Master control. It was smaller, of course, with levers at one inch instead of 4½-inch centres and completely twinned as a left-hand preset and a right-hand preset with the crossfader between.

The Grand Master simile went further because the rows were broken up into groups of 12 each with its own group master. Dimmer levers could have circuits allocated to them in an order which suited operation, but the 12-way permanent groups formed too rigid a framework. A 12-way spot bar soon became a thing of the past, along with most of the three or four colour circuits, so these groups of 12 were not perpetuated in later Strand systems. Indeed, the organ console and the two-preset desk were to interbreed, and system CD—as at the Aldwych Theatre—and the like were born. Instant memory selection was adopted for the groups which could then be of any number and composition according to the demands of that particular moment. However, at Stratford, the Royal Shakespeare staff got very attached to their Wood's dozens and the genuine authentic Electronic desk went on to survive until December of last year.

From the lighting and control point of view the Electronic was a great success, but electrically we had to wait for the thyristor dimmer for a real breakthrough. The two forms of dimmer are in principle very similar since both operate by chopping the AC cycle. At full light the full sine wave is passed. To dim conduction is progressively delayed until in the off position nothing flows. So it is that the dimmer that turns up beside the Avon twenty-one years on contains no surprises. It is more efficient since that bugbear of the thyratron valve the filament heater has vanished—and with it some 10kW of heat in the dimmer room that was doing nothing except keep the valves at the ready to conduct. The Electronic employed 36-way racks—double sided and with three short rows of three dimmers (nine valves) on all sides of a centre power distribution section. Three valves, one per phase, were supposed to balance out each 2 kW dimmer—but didn't. There were four racks for 1951 and there are 12 20-way for 1972. On these there are 40 5kW and 200 2kW dimmers, yet the dimmer room will be cool.

All this is by the way, for it is the control that we should examine. Another first for this particular theatre, System DDM is the first completely computer based lighting control in any theatre in Europe. In fact, as far as I know, in the world.

The diagram of the 240 dimmers as at the switchboard appears on page 29. The new stage lighting installation has been devised by John Bradley the "Stage Lighting Engineer" to give him his official RSC title. He joined this theatre in 1949 and therefore just remembers the old Grand Master. By then it had gone through some minor changes and had moreover been supplemented by the addition of a 12-way and a 6-way portable board.

John Bradley has been able to take advantage of the fact that the dimmer channels can be arranged in any order at the controls and that there are eight rows of 30 for the purpose. Actual grouping is no problem; that can all be left to the computer and the instant memory system. Of presets he has 250 so to speak, and within three minutes by tape cassette Dump store the unlimited credit of a Monte Cristo.