## Frederick Bentham

## A Tale of Three Switchboards

Originally, when I wrote the article on "Stratford Revisited" I did not intend to separate the development of the lighting control systems from the architecture and the rest, but as I delved among the archives the great contrast between the original system of but 56 dimmers and that of today with 240 was not the only thing that surfaced. The sheer inconvenience of the 1932 arrangement when examined in detail was what surprised me. It should not have done. After all I knew and worked among such things in those days. The Stratfordupon-Avon switchboard had many descendants and there are still lots of them around. They are indestructible and in any case direct-operated dimmer boards have continued to be made and installed by Strand Electric and others until quite recent times.

In a sense all that was made and installed before 1964 belongs to history. It was in that year that the first two great thyristordimmer installations went into service in Europe. They were the 120-channel for the Glyndebourne Opera and the 240-channel for the Royal Opera Covent Garden. Only such theatres could afford them then. In but a couple of years later the price came right down and now the remote control and presetting they made so easy are commonplace.

In the de-luxe market, presetting and remote control had been common long before 1964, but the means were electrically and mechanically difficult. Nevertheless, as TABS readers will know, we in Strand Electric were able to exploit those means to the full. What we had to do was to move the dimmers electro-mechanical by servos-that is connect the dimmers by electro-magnetic reversing clutches to a motor-driven shaft. By means of a feedback circuit remote positioning became possible. The addition of this polarised-relay servo

to the type of dimmer bank used by my Light Console received a fillip in 1955 when another promising method of presetting which used thyratron valves was found wanting. This, "the Wood Electronic", as we in Strand knew it, went into a number of theatres round about 1950. That put into Stratford-upon-Avon for the 1951 season was the most notable and has only just been replaced this winter. Here in this part of my article we can compare a 56-way Grand Master board (1932), a 144-way Preset Electronic (1951) and a 240-way System DDM (1972). Each of these was and is "the last word" for this famous theatre. In fact, in 1932 at the age of 21 and about to join Strand Electric, I thought that new switchboard out of date and obsolete, and said so. And so it was! The Germans could have put in a splendid control albeit for much more money, and of course it was that kind of thing that John Christie was to import for his new Glyndebourne Opera house when it opened two years later. Indeed, in the same year Strand had perforce to resort to remote control for the 108 dimmers in the Covent Garden Opera House, but they lapsed from grace (my grace!) thereafter. The truth is that L. G. Applebee, who was in charge of Strand's Theatre Lighting Department, did not understand remote control. One would have thought that the Shakespeare Memorial Theatre's consultants, Ridge and Aldred, would have known better.

Anyway, in 1932 Strand were able to claim in a special six-page pamphlet

"The apparatus is entirely BRITISH throughout, and has been designed and manufactured by British craftsmen, who have for many years been associated with the English stage."

That was true enough but what followed