1935

Strand Light Consol

This revolutionary lighting control, and the ubiquitous Pattern 23 spotlight became synonymous with Fred Bentha and Strand. The Light Console lasting legacy was to progress the technology of lighting control from a complex on-sta mechanical device to a remote control which could be located where the operator could actually see what was being lit

A specially-made church orga console remotely controlled banks of resistance dimmers which were connected to constant-speed, motor driven shafts via magnetic clutches.

Notes: From Fred Bentham's 1976 book "The Art of Stage Lighting"
Light Console:
Each channel was selected by a stopkey to be "played" on a master keyboard. When off, the dimmer stayed where it was last driven. Each master consisted of twelve keys, three of each colour - white, red, blue and green. The stopkeys were coloured similarly. Dimmers could be moved against their colour master by using "Reverse" and "General Move". Master keys were double-touch giving in fours from the left: Blackout/Dim, Raise/Dim, Full-on/Raise. Dimmers had both series and short-circuiting contactors.

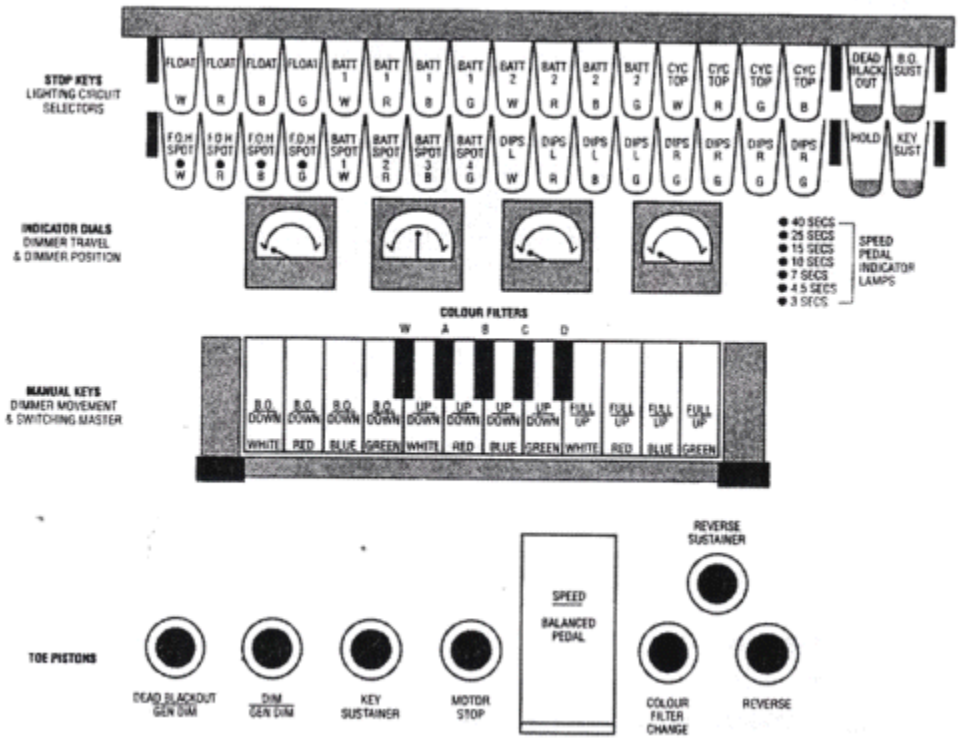


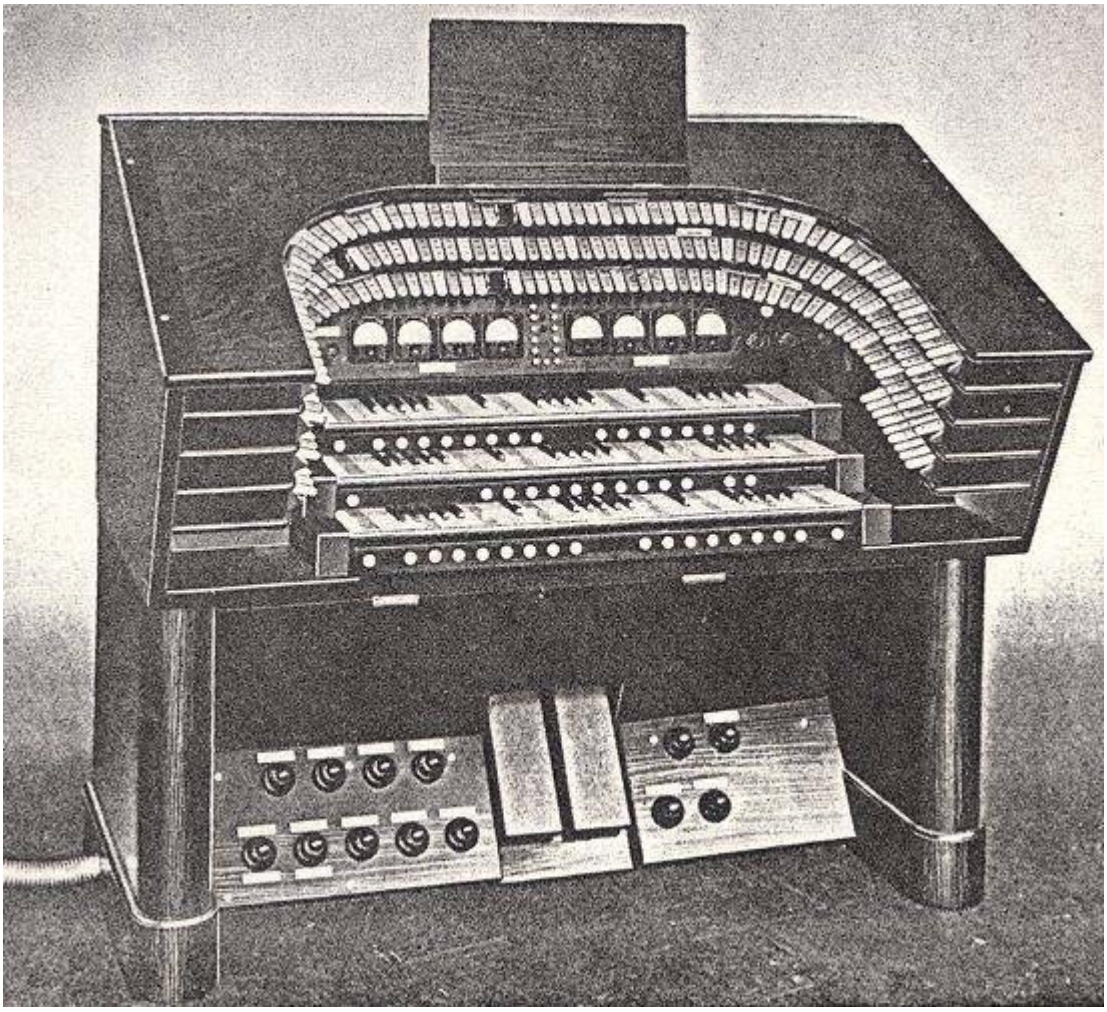
Diagram - **Basic Controls of the Light Console** - _____

From Strand Electric catalogue, 1954

STRAND REMOTE CONTROL

LIGHT CONSOLE TYPE

The Strand Light Console is designed to give an operator, seated in full view of the stage, absolute control of all the lighting circuits that make up a modern stage installation, whatever the size of the theatre.



STRAND LIGHT CONSOLE DESK AS INSTALLED AT DRURY LANE AND COLISEUM THEATRES, LONDON.
For 216 dimmers including 4 colour remote filter change for a large number of lanterns.

It is claimed that the Light Console system has special advantages over other lighting controls for ballet, opera, spectacular revue and musical productions in which many elaborate lighting changes are required. Using the console, slow or rapid changes can constantly follow one upon the other without pause, and furthermore, as the whole installation is under the fingers of one man, the usual delays for trial and co-ordination of plotting during rehearsal are not experienced. *The producer gives his instructions to one man:* a man who can be sitting by his side at the console placed, for rehearsal, in the stalls.

The Strand Light Console operator is seated within arm's reach of 100, 200 or more dimmer controls, circuit switches, colour filter change switches, etc. What is more, he can operate one lighting circuit or a group in *immediate* response to his thoughts or his instructions, written or verbal, expected or unexpected.

STRAND LIGHT CONSOLE DESK AT CARACAS UNIVERSITY, VENEZUALA,
controlling both incandescent and fluorescent lighting.

This is achieved by giving the operator a single on or off selector switch to each stage lighting circuit, the name of the circuit being clearly engraved on each switch operating lever or tablet.The dimmer levers, position indicators, full on switches, blackout switches, master locking devices and colour filter switches instead of being repeated for each lighting circuit are repeated only a few times as group and colour masters.

For every lighting change, great or small, the required lighting circuits, be they one or many, are locked to the master controls - operated and then unlocked to remain as they are until locked on for further change. The circuit selector switches are easy to put on or off - a sweep of the hand and all are on, for example. Devices are fitted to *move* preset combinations of these switches, cancel them, etc.

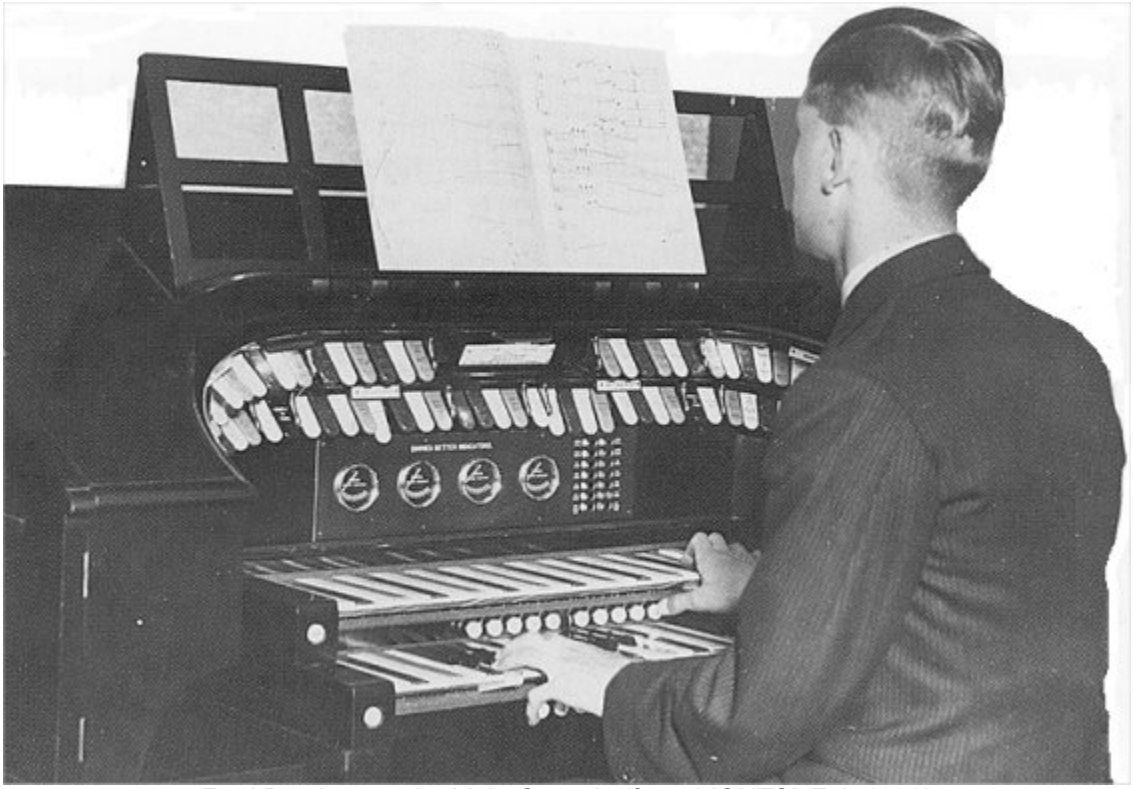
As there is only one switch (simply On or Off) per lighting circuit, plus a set of masters used all the time, the console desk is very compact and the state of the controls clearly shown to the operator. With other systems be has to take in at a glance the state of affairs by looking at a hundred or more dimmer levers, circuit switches, etc., plus the master controls which are necessary for simultaneous dimmer movement and to which the individual controls may, or may now, be locked at that time.

An experienced console operator quickly learns to think of his lighting instinctively in terms of the console controls, and consequently operation becomes second nature like driving a car. Lighting is no sooner thought of that it is translated into fact upon the stage, *and the operator can see it*.

SOME TYPICAL INSTALLATIONS

Theatre Royal, Drury Lane, 216 ways	1950	Empress Hall, Earls Court, 90 ways	1950
London Palladium, 152 ways	1949	Palace Theatre, Manchester, 108 ways.	1949

Stoll Theatre, Kingsway, 176 ways.	1950	South Shore Icedrome, Blackpool, 64 ways	1946
London Colliseum, 216 ways.	1952	Theatre Royal, Bristol, 60 ways.	1946
Royal Festival Hall, London, 84 ways.	1951	National Opera House, Ankara, 136 ways	1949
Her Majesty's Theatre, London, 152 ways	1954	National Opera House, Lisbon, 108 ways	1940
Adelphi Theatre, London, 152 ways	1954	Caracus University, Venezuala, 94 ways	1954



Fred Bentham at the Light Console (from *LIGHTS!*, Feb 1992)

Drury Lane Theatre. Strand Light Console, 216 dimmers
(Photo by courtesy "Radio Times").

Additional comments from Stephen Hancock, January 2001

Stephen Hancock posing at the Light Console from the London Palladium, which was on display at the Strand Showroom in Covent Garden, circa 1971

- Precursor to the System CD (only difference is that the organ keyboard shown above was replaced by banks of faders.)

Stephen adds:
"Fred Bentham designed the Light Console for the 1939 Ideal Home Exhibition at Olympia. It was for a light show "son et lumiere" style. Using a large translucent perspex tower, several storeys high, in the middle of an artificial lake, it was internally lit with different colours, controlled by the Light Console. The light show was accompanied by music, it might have been a live orchestra even. My Grandmother told me she saw the light show at the

exhibition. Maestro (who's real name, I now remember, was Len Jordan) got his nickname from the expert "playing" he did at that show. I know there are some B&W photos of the gig in an old edition of TABS. "

Additional comments from Adrian Buesnel, September 2001

My special interest is in the early Compton Theatrone electronic organs, as I own what is possibly the first, dating from 1938. There seems to be very little written material about these organs, less than 20 were made, and I am exploring various leads in the hope of finding out more information.

In a roundabout way, I learned that Compton had some involvement with the Ideal Home Exhibition circa 1938, and wondered if my organ could have been there. Hence I e-mailed the present-day organisers, and have been sent copies a few pages from the 1939 programme and also from a book about the exhibition over the years.

The light show described by Stephen Hancock was the centrepiece of the 1939 exhibition, in front of which Lord & Lady Harmsworth declared the exhibition open. The feature was described as the 'Kaleidakon' and it seems it was just as Stephen described. However the programme states that B. E. Bear was to operate the Light Console. The music was provided by the famous cinema organist Quentin MacLean on a Compton Theatrone (which was not my one). The organ console and the light console were symmetrically positioned facing each other, to one side of the lake. (Whether this was a later repeat of a 1932 feature would be interesting to know, in which case the newfangled electronic organ might have succeeded a live band. Pipe organs were impractical to transport!)

Your picture of the Light Console looks so uncannily like a well-equipped organ console, complete with three manuals of ivories and black notes, stop tabs, thumb and toe pistons, swell pedals and music desk (using organ terminology) that I can only imagine that the 'Kaleidakon' arose out of a collaboration between Strand and Compton (which made most components of its consoles from raw materials-there is a video available which shows the Compton factory in 1936). Indeed the Theatrone organ carries the parallel further, as unlike modern electronic organs, the sound generator is in a cabinet some distance away, containing about 200 relays, a motor and various other equipment, connected to the console by an 'umbilicus'.

I am particularly interested in the organ aspect of the installation, and how this concept was arrived at (presumably Strand had other work at the exhibition). I wonder where further information might be found, and whether there is an account (or even a film) of what the lighting effects looked like, and how they related to the music. Also, what became of the tower after the event?

The article, written by F. P. Bentham is two pages long, describing the installation in layman's terms (and frustratingly simply describes the Compton Console as 'very familiar'). There is a drawing of the Kaleidakon.