



ref BM/CRS

date 18th June 1986

Technical Data

NOTES ON IDENTIFYING THE AGE AND TYPE OF STAGE EQUIPMENT MANUFACTURED BY W.J. FURSE

The following leaflets when used in conjunction with the Furse pocket catalogue, cover the range of stage equipment manufactured from the 1950s up to the late 1970s.

The colours of paint used on spotlights have been changed at regular intervals during the history of the Company and therefore this is a very good aid to identifying the age of the units concerned. Since several spotlights were in production for a large number of years, and used different lenses and lamp holders during that period, the actual identification of the age, as well as the lantern type, is therefore important for servicing and replacement.

During the early 1950s all stage lighting was finished in a crystalline black rough surface, which changed to a smooth dark brown finish in the late 50s early 60s. This again changed to a light beige colour, which has a tendency to darken to a middle beige due to heat. This was introduced during the middle 60s. A medium blue followed in the late 60s and with the introduction of tungsten halogen lamps, a dark blue was then introduced. Finally the units resorted to a smooth black finish which is the current paint in use today.

The only units which do not fit this pattern are several items of Strand Electric manufacture which were marketed by ourselves during the 60s. These would carry our own labels, either cast into the rear of the spotlights, or as an additional add-on label. The finish for these would be pale silver grey. The type of luminaire can therefore be identified from the information on Strand lanterns attached.

Floodlights

Identification of these units should be easily made from the information available.

Spotlights

SS15 and SS13 spotlights used a variety of lamps during their lifetime. In order to identify the exact situation regarding these spotlights, the type of cap of the lamp, either pre-focus (2 flanges) or screw-cap, would be required.

The actual paint finish of the lantern, however, would give a good clue as to the age of these units. Black finish spotlights or dark brown finish would probably be fitted with screw-cap lamps. Beige units would be fitted with pre-focus.

The MPR spotlights take two basic forms; the one shown in the pocket catalogue would have been finished in light or dark blue and use a T11 lamp. Early versions of this unit used a T15 lamp and had a small additional section on the lamp holder tray underneath the lantern as shown on the separate leaflet, (listed as Page 3.) These spotlights would probably have been beige in colour. Some very early spotlights were fitted with fans in the base of the units. We would therefore need to know which of these versions were employed.

A smaller version of the MPR was originally manufactured under the JPR name, using a T10 lamp. This was basically an MPR without a fan and would again have been finished in beige.

The SPR spotlight carried three basic lamps during its life. The first a T1 pre-focus lamp, 500w, the lantern being finished beige and having a cast trunnion arm. The colour then changed to light blue and a T13 650w lamp was employed. Towards the end of its life a dark blue finish was employed and the T12 lamp with two pins on the base was employed with a bent metal trunnion arm, this was finished in black.

The SFR spotlight, originally known as the SS25, always carried pre-focus cap lamp holders using T1 or T17 lamps. A version using a plano-convex lens called the SS26 was also supplied and initially these units were provided without reflectors, so some units in the field may still be without reflectors, although latterly supplied equipment was fitted with reflectors as standard. Finishes again varied from dark brown to beige, to both shades of blue, since this unit was in production for very many years. As a consequence, a large number of these spotlights are still in existence and when serviced are now fitted with T18 lamps by the replacement of lamp holders, using the special LHCK1 Conversion Kits.

The MPR unit initially was provided with a T6 pre-focus cap lamp and holder. These units would have been finished light beige in colour. With the introduction of the T11 lamp, these were modified and subsequent units fitted with new lamps and lamp holders, and finished in either pale or dark blue. Conversion kits for the older lantern are also now available.

Several different cables have been used over a period of years for wiring spotlights, from a simple asbestos covered cable to three single strands of glass fibre cable, through butyl to the present silicone cable. Therefore if any of the spotlights are fitted with cables other than silicone rubber, these should be rewired as the cable will have been in use for more than seven years.

Several follow spots of the LPR type shown in the pocket catalogue, were manufactured and these spotlights were provided in two versions, the tungsten halogen and the CSI version. Identification of the two different types can be made by the fact that the CSI version has a separate ballast unit, as shown in the photograph in the pocket catalogue, whereas the tungsten halogen version has no ballast unit.

Colour Wheels

Electrically operated colour wheels have been available for some years. Early versions had non-slipping clutches which tended to strip the gearing if the colour wheel was force rotated by hand. If colour wheels therefore are in existence on what appear to be old installations, i.e. beige finished lanterns and wheels, it is possible that the gearing has been damaged by mis-use and the gear and motor unit may need replacement.

Lighting Battens

Lighting battens were manufactured for a large number of years following the principle of a continuous run of lighting batten over the full width of the stage. Towards the latter end of their life, these were manufactured in separate units of 6ft each with nine compartments; unlike most of our competitors whose were of eight compartments. The basic construction was simpler towards the latter end of their life, as shown by the two leaflets attached, and the paint finish changed from beige to blue at this point. The last units produced were finished black.

A twelve compartment cylo lighting trough was also manufactured, again for a large number of years, but this can be identified by the wrap-round colour filter arrangement.

Control Systems

The ED1 dimmer units originally provided for mounting on stands, shown on page 17 of the pocket catalogue, were fitted with single socket outlets and 1kw dimmers. On later versions, 1½kw dimmers were fitted with two socket outlets as shown. Any units using 1kw versions, would automatically be up-rated to 1.5kw during servicing.

This fact is also true of the Delta 8 switchboards which would be finished middle or light grey, should they be of 1kw rating. The pale blue with dark blue screen printing or black with white printing being the later versions fitted with 1.5kw dimmers.

The EDRC lighting control system has also been in production for a large number of years, and various different printed circuit cards and control panel arrangements have been in force. In order to service this equipment, therefore, it would be difficult to assess without the equipment being in our possession, however, a few points to age as follows, may assist.

Early systems had a brushed aluminium desk which later changed to pale grey and then to pale blue with dark blue printing. The arrangement of the fuse carriers on the dimmer racks will also aid age identification, since the blue fuse carriers will be all collected close together in the early versions and equally spread over the face plate in the later versions. The type of connector used on the control leads should be 'D' shaped, if any other type of connector is employed, this would suggest a very early version of this system.

A self contained dimmer strip was manufactured in the middle 60s to early 70s. This was initially called the ED1336 and later the ED2. Various control boards were designed to incorporate these units and several illustrations are included within the information. The difference between these two strips can be seen by studying the Travelling ET8 leaflet which shows the ED1336 strip (which was quite long), and the Furse Club type switchboard leaflet which shows the ED2 strip, which was a relatively short item. These latter strips were also often fitted with push buttons to flash the lights to full. A version of the dimmer strip employing switch selection, called the EDP, was also employed.

A large range of boards were employed under the EDA title covering systems 21, 23, 25 and 27. These were multiple preset systems using quadrant faders, usually with a separate master desk and some form of switch group selection, faders were individual plug in units and sometimes illuminated.

It would be difficult to identify the actual system in use without an engineer viewing the interior of the control panel and it would therefore require a visit from one of our service engineers to assess servicing possibilities.

The EDA control systems were also manufactured in a more modern form using rows of coloured push buttons to select the channels to the group masters. Desks of this type were usually finished black with a separate master panel on the right-hand side, shown on page 19 of the pocket catalogue.

Reactor type switchboards were only supplied in small numbers and it is unlikely therefore that you will come across this system. However, should this be the case, they can be identified by the large rotary master controls on the control panel and the dimmers consisting of large chokes mounted on a bed frame. See attached leaflets.

Electronic dimmers of the ED range, either manual ED1475 or automatic ED1006, can usually be identified by the pale blue or grey box with a single identification neon on the surface. Controls were usually brushed aluminium plates with four push buttons or a single rotary knob. The letters ED1006 or an occasional ED1475 are usually to be found on the inside cover of these units.

A large range of resistance dimmer units covering all type of configurations have been supplied over many years. You should therefore be able to identify the actual unit from the information attached, however, spare parts for these units are no longer available and besides general service work replacing occasional switches, etc., they are usually obsolete.

The patch panel units in conjunction with control boards have changed over the years. Initially these used round Bulgin plugs with two connection points and at present use rectangular plugs with three connection points. The round Bulgin plugs are no longer available and these panels were usually finished in light blue or beige paint.

Curtain Tracks

The predecessor of our present curtain track was the Type A of a very similar construction but usually finished in light grey. These used two types of runners, roller runners and wooden slider bobbins, these being shown in detail on one of the leaflets attached. The predecessor to this track was again of similar construction, but the arrangement of the spring back wheels, fixings and the type of saddles used to support the base tube to the top tube was different. This top tube was either 1", 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " track tube and if old tracks are to be re-used we would require the size of this tube. Reference to the two leaflets attached should enable identification of this unit. Tracks of the older type usually being finished in a darker blue/grey colour. Smaller type track sections such as the Ultralite and Type B can again be identified from the leaflets.