



JUNIOR INTERLOCK

DIMMERBOARD

I N S T A L L A T I O N

The Junior Interlock should be sited where the operator will get a tolerable view of the acting area. Rear access of 18 - in. is necessary for dimmer maintenance but some authorities may permit mounting against a wall with flexible electrical connections to allow the board to be moved forward for maintenance. All connections for the incoming supply and the outgoing circuits are at the top rear. An isolator switch should be provided in the supply. This should be a silent A.C. type and should be mounted to the right-hand side of the board at a convenient height for operation where it can be used as a Dead Blackout Switch.

A useful addition to increase the flexibility of the installation is the provision of a simple patch panel mounted to the left-hand side with 3-pin socket outlets as terminations for the control channels and the lighting circuits terminating in flexible cables with plugtops. This arrangement allows lighting circuits to be grouped to the control channels to suit the operational needs of each production and allows lighting circuit substitution of 'specials'. However, in the interest of safety for amateur labour and among school children, we strongly believe that this should only be done on a single phase supply, or on one phase only of a three-phase supply. All lighting circuits should be terminated in 3-pin socket outlets at the lantern end where adequate phase separation is possible.

O P E R A T I O N

These instructions for various operations should be tried on the board. Some quiet practice is advised so that in the uproar and excitement of rehearsals at least the board and its layout are familiar. The Junior Interlock is potentially no more dangerous than the usual range of domestic electrical equipment and its use requires the same common sense. A stage, however, employs much temporary flexible wiring and knowledgeable supervision is advisable.

USE OF DIMMERS First it should be noted that all, or the majority of the dimmer are shared between two adjacent numbered channels. These pairs are emphasised by the sharing of a label. Since there is only one dimmer to which any particular channel can belong, it is only necessary, when plotting, to identify whether a channel is "on dimmer" or "full". E.G. 2/D7 = Channel 2 "on dimmer" at mark 7; 1/F = Channel 1 switched to "full"; 1/D10 = Channel 1 "on dimmer" at mark 10.

DIMMER WATTAGE RATING With the exception of dimmers with green lever knobs all dimmers are for 500/1000 watt and will control any load between 500 and 1000 watts. Thus two 500 watt spotlights on channels 1 and 2, for example, could be dimmed either separately or together, but if these spotlights were each 1000 watt only one could be connected to the dimmer though the other could be switched to "full". Dimmers fitted with green lever knobs are for 1000/2000 watt but where these share two channels the load on each channel must not exceed 1000 watts.

Loads in excess of 1000 watts, but not exceeding 2000 watts, can only be controlled on 1000/2000 watt dimmers with a single switch.

There is no restriction at all in respect of underloading; the sole result being that the dimmer becomes somewhat ineffective - switching from an intermediate position to out when the dimmer knob reaches '0' on the scale, instead of fading gently to cut.

TO BEGIN. All switches should be centred, the dimmer put to the full-on position '10' and their handles released from the master shafts by a half-turn anti-clockwise. The isolator switch adjacent to the board should be closed and the master blackout switch on the right hand end of the board put down.

TO SWITCH CHANNELS ON AND OFF INDIVIDUALLY. Switch knob to be moved up (away from the dimmers) for "full" and moved back to centre for "off".

TO SWITCH CHANNELS ON OR OFF IN A GROUP LEAVING SOME ON INDEPENDENT. Move switch knobs of channels which are to remain on independent down (towards the dimmers). Any others switched on "full", i.e. the switch knobs up, are subject to the master blackout switch situated on the right-hand end. This switch is open (off) in the up position. It will be noted that the dimmers are connected to be free of the master blackout switch. This is to permit the cut of bright lighting levels to lighting at low intensity as may be necessary when a character has to switch off the lights in a box set.

FADE-OUT OR FADE-IN CHANNELS INDIVIDUALLY. To fade-out, first make sure that the dimmer lever is at full (10) and then move the knob of the channel switch from the "full" position smartly down towards the dimmer. To fade-in, first make sure that the dimmer lever is at zero and then move the switch knob from centre 'off' towards the dimmer. If the dimmer lever were then taken to full (10) that channel could be switched to "full" and the dimmer then released to fade-out the other channel of the pair, or providing the dimmer lever was first taken to zero, to fade-in the other channel. Provided the total load of the pair of channels does not exceed the dimmer rating both can be faded-in or faded-out together.

If required a switch-cut to any intermediate intensity can be made by setting the dimmer to that level before switching.

TO FADE-OUT OR FADE-IN ALL DIMMERS SIMULTANEOUSLY.

Move switch knobs towards the dimmer making sure that all the dimmer levers are either all up or all down and that no dimmer will be overloaded. Turn dimmer levers clockwise so that they grip the master shafts and, on cue, use the master hand wheels to move the dimmers collectively.

With some help, in the shape of an assistant, some dimmer levers can be unlocked from the master shaft at intermediate intensities and cross-fades achieved by using the shaft mastering for the largest group of dimmers while operating others in opposite direction directly by hand.

TO REPLACE A FUSE. There are a pair of fuses to each dimmer. One of these feeds the dimmer and the other one the corresponding live main. It must be emphasised that a fuse is a safety device. In the case of serious overload as in certain fault conditions the current rises and some part of the wiring would suffer were it not for the melting of the fuse. To replace fuse pull fuseholder right out and unscrew centre screw of cover to expose fuse cartridges. These can be prised out of their clips using the end of a screwdriver. Replacement fuse cartridges should be to BS 1362 i.e. common domestic ring main fuses.

IMPORTANT. The fuseholder must be reassembled with the cover screwed in position before replacing on the panel.



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