## Direct Operated Dimmer Boards

Direct operated dimmers take two forms, the Slider type in which the resistance is housed in a sheet metal casing and which is used mounted on the front of the switchboard and the Sunset Former or Element types, which are mounted on the back of the board and operated by a handle and control link. These latter are to be preferred, as they allow dimmer handles to be grouped to a master wheel.
Sunset Former or Element type resistance dimmers cannot be supplied other than as part of a dimmer board assembly. Where, however, an inexpensive dimmer is required which does not have to be mounted as an integral part of the dimmer board or even mounted as part of a dimmer board at all, the slider dimmer can be used.

To ensure that every stage, however restricted the funds available, should have a switchboard capable of carrying out basic lighting cues, Strand Electric introduced in 1950 the Junior HA switchboard which has sold in thousands and which is still listed. However, Strand now offer an entirely new solution, the Junior 8. This is an extraordinary compact, lightweight control which can without alteration be used fixed or as a portable. Both the HA and the Junior 8 ensure that dimmers are not wasted for channels that are full-on or off. Thus 8 channels can be controlled from 4 dimmers which, as the dimmer is the most expensive component, effects a real economy. In the case of the Junior 8 the circuitry allows all eight channels to be switched to the dimmers for simultaneous fade-out or fade-in. Furthermore, all board channels terminate in socket outlets which allow lighting circuits to be "patched" in any order and permit circuit substitution at the control.


Both forms of Junior slider controls are made up of standard units and permit a number of standard variants. Special requirements should be avoided.

For those who prefer a back of board dimmer with mechanical interlocking, the Junior 8 circuit is available as the Junior Interlock. In this case, the dimmers are grouped on two shafts each with their master wheel and they can be locked down by a simple twist of their handles. Boards can be used with 5 -amp plug boxes to allow "patching" of circuits on the dimmers. Where a complete set of dimmers is preferred, a range of standard sizes is listed in two forms - Junior Sunset or heavy duty Senior Sunset.

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New Type Slider Dimmers (A.C.Only)

Lightweight composition formers with off and full-on contacts. Graded resistance windings to dim-out any load between and including the wattages stated. The operating knob to the copper-carbon brush is carried on an external square rod which forms the plotting scale and masks the operating slot. Internal terminals and conduit entry at base. Finish : Hard hammer blue and grey.

| Watts | 200-250V Ref | 100-120V Ref |
| :---: | :---: | :---: |
| 250/500 | 545 | 575 |
| 500/1000 | 546 | 576 |
| 600/1200 | 547 | 577 |
| 1000/2000 | 548 | - |
| 1200/2400* | 537 | - |
| 2600/3000* | 538 | - |

Add suffix /B for sheet metal back to Ref 545, 548, 575, 576.
*Ref 537 and 538 have slate formers and external block at top.


## Junior 8

The Junior 8 has eight channels each of 1 kW maximum and four cordless dimmers as an integral part.
The 500/1000 Watt variable load dimmers are of the new design shown above. The single switch to each control channel (silent AC flush type) connects each channel to be "full on", "on dimmer" or "off" so that dimmers need not be wasted, yet all eight channels can be faded in or out simultaneously from the four dimmers. All eight channels terminated in 5-amp 3-pin B.S. socket outlets complete with plug tops (white for labelling) which allow light circuits to be "patched" in any order and permit circuit substitution at the control, i.e. more than eight circuits can be used from a single Junior 8. Channels can be grouped via, or independent of, the silent master blackout switch which has ample capacity to control three Junior 8 units.
Slave units can be added at any time to make up sixteen or twentyfour channels. Each slave unit is complete with alternative number labels, linking terminals and connector bushes.
 Junior 8 controls can be used without modification either as permanent fixtures or as portable boards. They are light in weight and readily transportable without taking apart.

```
Ref 616 Standard Junior 8 model (Domestic type cartridge fuses to BS1362)
Ref 617 Slave unit to make up 16 or 24 channels
Ref 614 Master 8: This unit is similar to the Junior 8 except
    that it is 8 inches taller to allow the provision of
    larger wattage slider dimmers. The unit provides blackout
switch and two master dimmers intended to feed two Ref 617
Junior 8's and in addition two 1000/2000 watt dimmers with four
normal Junior 5-amp channels. All three units would be mounted
in line with the Ref 614 on the left.
```

```
Ref. 619 Master 3 - Three 400 watt max. short-rated master dimmers with
        fuse and master switch, for series coneection to three Slave 8 units.
Ref 615 Senior 8: eight 5-amp channels and four 1000/2000 watt dimmers.
Ref 618 Spare 5-amp 3-pin white plugs for further circuits.
Note : Unless otherwise specified 500/1000 watt dimmers are always supplied.
    Each individual Junior 8 single phase 200/250 volt A.C.only.
    Supplied boxed with printed instruction book.
```


## Junior HA Slider Dimmerboards

500/1000 Watt new type slider dimmers are fitted with cords and plugs to allow them to be shared among double the number of channels. Onoff switch, 2-way switch (B.O./Indep.), and cartridge type fuses to each channel. Terminals for load connections. Silent master blackout switch at right-hand end. A.C. Single phase 2 -wire 220-250 volt, circuits not to exceed 1000 watts each.


```
Type Description
HA.8 8 channels and 4 dimmers fitted Frame JA...
HA.12 }12\mathrm{ channels and 6 dimmers fitted Frame JB
HA.16 16 channels and 8 dimmers fitted Frame JA+JA
HA.20 20 channels and 10 dimmers fitted Frame JA+JB
HA.24 24 channels and 12 dimmers fitted Frame JB+JB
Omission of a Ref.556 500/1000 watt or Ref.555 250/500 watt dimmer.
Channel name engraved instead of channel number as standard.
Sheet metal back to switch panel. Specify JA or JB frame.
```


## "Junior Interlock" Dimmerboard (J1 Type)

With 500/1000 watt "Sunset" Former type dimmers, or 1000/2000 watt "Sunset" Element type, with plotting scale, interlocking to a pair of master wheels. A cordless circuit allows these dimmers to be shared among a greater number of control channels which can all be switched to the dimmers for a simultaneous fade-out or fade-in. Each channel has a 2-way-and-off switch (on dimmer/full on), a B.S. 1362 cartridge fuse and terminals for load connections. Totally enclosed with master blackout switch on right hand side.

"Junior Interlock" dimmerboard

| Type | Description | $\begin{aligned} & \text { Width } \\ & \text { (ft./in) } \end{aligned}$ | $\begin{aligned} & \text { Depth } \\ & (\mathrm{ft} . / \mathrm{in}) \end{aligned}$ | $\begin{aligned} & \text { Height } \\ & \text { (ft./in) } \end{aligned}$ | Weight (cwt.) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JI/24 | 24 channels 1 kW max. <br> sharing 12-500/1000 watt dimmers | 3'2" | 2'0" | 5'0' | 3 |
| JI/30 | 30 channels; 281 kW max. <br> sharing 14 x 500/1000 watt dimmers <br> plus $2 \mathrm{x} 1000 / 2000$ watt single <br> dimmer channels | 4'0" | 2'0" | 5'0" | 4 |
| Variations | Each dimmer increased to 1000 Each 1000/2000 watt single dim 5-amp plug boxes to enable cir | 2000 wat ner chann cuits to | sharing el to repl be patch | two 1 kW lace two d can be | hannels 1kW cha fitted. |

## "Junior Sunset" Dimmerboard (JS Type)

Each channel has a 500/1000 watt "Sunset" Former type dimmer with plotting scale and bracket handle interlocking to a pair of master wheels except in models with suffix -/A where
there is a separate master to each row of dimmers. 2-way-and-off switch (B.O./Indep.) and a cartridge type fuse to each channel. Master Blackout switch. $220 / 250$ volt A.C.only single or 3 phase.

"Junior Sunset" with side and back removed


## "Senior Sunset" Dimmerboard (SS Type)

Heavy duty boards with Type A Element "Sunset" Dimmers to each circuit. Can be wound for loads up to 2500 watt fixed or $1000 / 2000$ watt variable. Dimmer handles interlock to a pair of master wheels as standard or to separate wheels at the end of each row if specified. Cartridge fuse and 15 amp .2 -way-and-off switch (B.O./Indep.) to each way. Master blackout switch (A.C.only. 220-250 volt).

| Type | Description | Width | Depth | Height | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (ft./in) | (ft./in) | (ft./in) | (cwt.) |
| SS/21 | 21 dimmers in 3 rows | 4'0" | 3'4" | 6'7" | 9 |

```
SS/27
SS/36
27 dimmers in 3 rows
5'1" 3'4" 6'9"
1 2
36 dimmers in 4 rows 5'1" 3'4" 8'0" 14
```


## Portable Interlocking Dimmerboards

Robust construction with castors and carrying handles. Each channel is provided with a 500/1000 watt "Sunset" Former or 1000/2000 watt "Sunset" Element dimmer with plotting scale, which interlocks to a master wheel. A cartridge type fuse and a 2-way-and-off switch (B.O./Indep.) to each channel and the master blackout switch are mounted on a recessed panel provided with a lid. Terminals for the incoming supply and 15 amp 3 pin B.S. plugs and sockets for load connections.

Width 45 inches Depth 24 inches Height 45 inches Weight 2.5 cwt

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