# 24 v 50 Hz SEMAPHORE 4-COLOUR CHANGE

These motor driven, random-access semaphore colour change units operate at 24v extra-low voltage for safety and to avoid phase differences between the unit and the luminaire. Each unit has four semaphore frames any one, or more, of which can be remotely selected at the associated control box to travel in front of the lens of a spotlight; subsequently any frame in front of the lens but now no longer selected will travel out – this lap change eliminates short periods of open white.

There are two sizes of semaphore colour change units, one for Strand models 803, 813, 814, 823, 833, T/64, T/84 with 150mm (6-in.) diameter lenses and the other, larger, for models 743, 774, 808 and 828 with 205mm (8-in.) lenses. The semaphore units bolt securely to the nut-inserts provided in the luminaires except for models 743, 774, 813, 814 where the backplate slides into the existing colour frame runners.

Standard control boxes are available for 6 semaphore colour change units, and slave control boxes for additional multiples of 6 units. These all include a mechanically isolated 220/240v 50Hz to 24v transformer. A vertical column of five latching push buttons are provided for each unit to allow preselection of any one, or more, of the four semaphore colour frames or open white. Control wiring requires 6 conductors (plus earth if required) connected between likelabelled terminals at the control box and semaphore unit. Strand 8 core, 0.5mm conductor control cable is convenient.





**Order Codes** 

(unit quantity is 1 metre)

Small Semaphore 4-colour Change Unit (for Models 803, 813, 814, 823, T/64, T/84)	23 781 00	
Large Semaphore 4-colour Change Unit (for Models 743, 774, 808, 828)	23 881 05	
6-unit Semaphore Control Box, 240/24v	23 888 03	
6-unit Semaphore Slave Control Box	23 888 11	
8-core Control Cable, 0.5mm <sup>2</sup> conductors, PVC colour coded insulated and PVC sheathed	35 600 24	



## Weights

Small Semaphore 4-colour Change Unit, 3kg Carton size 375 x 230 x 230mm Packed weight 3.4kg.

Large Semaphore 4-colour Change Unit, 3.25kg Carton size 455 x 295 x 230mm Packed weight 3.75kg.

6-unit 240/24v Semaphore Control Box, 4.85kg 6-unit 240/24v Semaphore Slave Control Box, 4.85kg.

The Company reserves the right to make any variation in design or construction to the equipment described.

# strand

# **Specification**

### Semaphore Colour Change Units

#### Construction

Aluminium alloy pressings including enclosed base and vertically enclosed geared motor drive for each of the four, sandwich construction, frames for 'Cinemoid' sheet or 'Chromoid' thin-film colour filter.

#### **Motor Drive**

Uni-directional 24v 50Hz extra-low voltage geared motor unit operating each semaphore frame through a specially shaped cam. Microswitch operates on completion of frame-in or frame-out cycle. All interconnections to pressure-pad terminals, with adjacent cable clamp, for the external connections.

#### **Back Plate**

Smaller unit fitted with 165mm wide backplate casting and also clear fixing holes at 150mm horizontal and vertical centres to coincide with nut-inserts provided on Strand models 803, 814, 833, T/64 and T/84.

Larger unit fitted with 215mm square backplate which, if removed, reveals clear fixing holes at 75mm horizontal and 215mm vertical centres to coincide with nut-inserts provided on Strand models 808 and 828.

Backplates can be reversed, on site, to allow motor drive extension to be at left-hand side when facing, instead of as standard at right-hand side.

#### Finish

High temperature stoved black.

# **Standard Control Boxes**

#### Enclosure

Sheet metal enclosure requiring front access only with knockouts for conduit/cable entry at top or bottom. Internal construction to ensure mechanical separation between 220/240v 50Hz input section and 24v extra-low voltage output section.

#### **Input Section**

Right-hand section fitted with On/Off switch with integral neon indicator and 500mA 20 x 5mm cartridge fuse for external 220/240v 50Hz suply to built-in double-wound transformer with earthed screen. Pressure-pad terminals provided for supply and also for switched supply to Slave Control Box, which is identical except that On/Off switch is replaced by a neon indicator.

#### **Output Section**

Left-hand section fitted with escutcheon plate over three 2-unit sub-assemblies containing two vertical columns of 5 heavy duty, latching push button switches, each column corresponding to the four semaphore frames and open white. Each sub-assembly wired to labelled, pressure-pad terminals for the external control connections to semaphore colour change units.

#### Finish

High temperature stoved black, with bold coloured push buttons for broad identification.



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