

## Master/Satellite System Installation Instructions

### General Fixing

Using the base unit as a template, drill 4, 3mm pilot holes to fix the unit to the bench. Drill 2, 20mm holes through the bench to accommodate the mains and inter unit wiring. Screw the unit to the bench using 4, no 8 wood screws. Feed the cables from underneath the bench through the holes. Please note that each unit requires a mains feed of 240 volts, 2A. Each unit is individually fused at 2A.

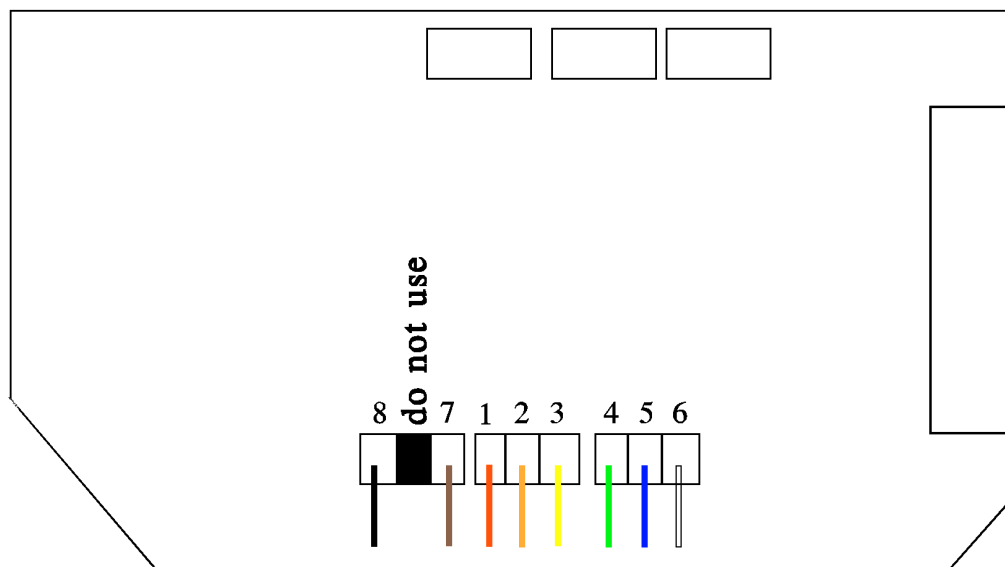
### Satellite Unit

Connect the mains supply to the three way floating connector block.  
The printed circuit board is shown below.

All connections are made to the three blocks at the front of the board. A total of eight wires is needed to connect back to the master unit. The wire colours should be annotated with a number as shown and the numbers should be used when wiring to the master unit.

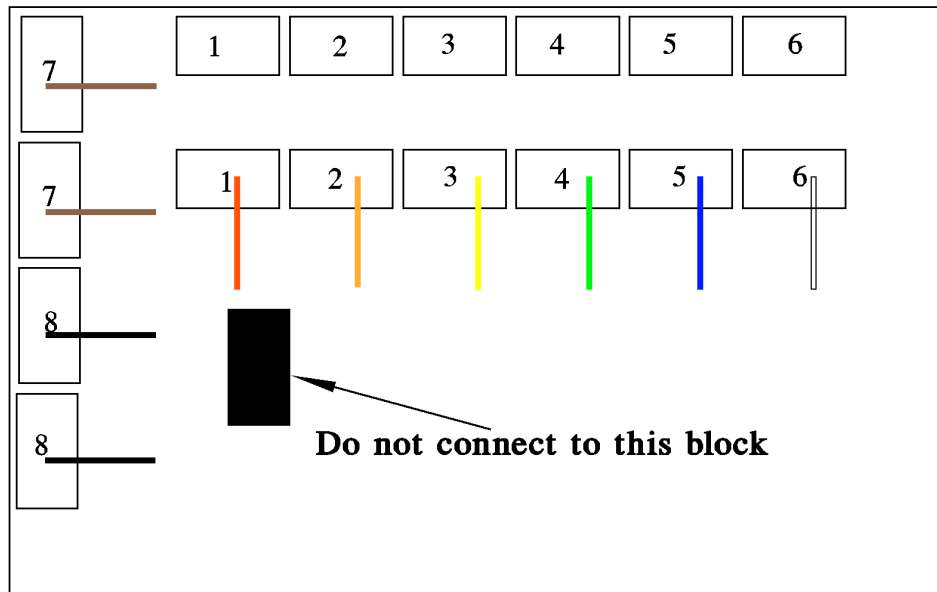
Alternatively the wire colours are shown for the multicore cable we supply.

Up to eight satellite units may be daisy chained if this makes interconnection easier.



**Satellite Unit Circuit Board**

## Master Unit



**Master Unit Circuit Board**

Connect the mains supply to the floating connector block.

Connect the coloured wires, according to their number or colour, to the appropriate terminal block. Each number has six inlets which should be sufficient if daisy chaining is not employed.

When wiring is complete, switch on the units and check that each of the satellites and the master are showing the same colour light (red or green). If not check the interwiring, particularly on terminal 7.

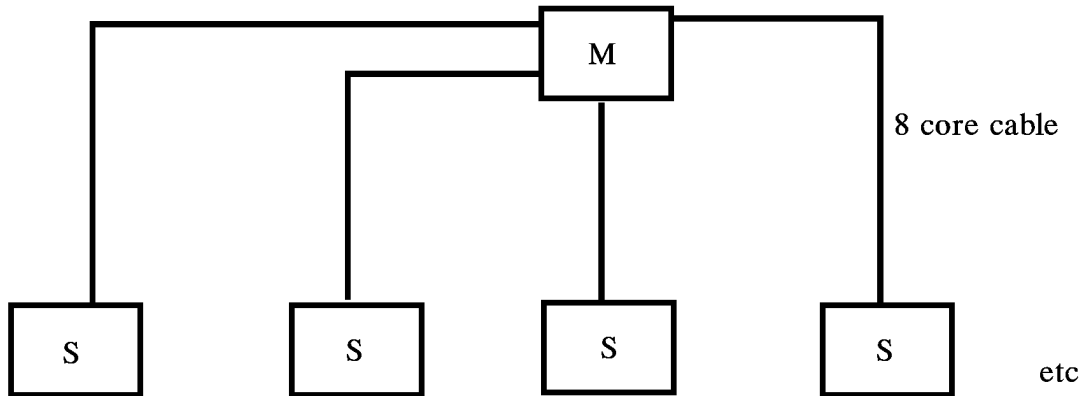
Switch the master unit to INDEPENDENT and check that all the satellites are showing a green light. Switch to MASTER and check that all the units show a red light. Select 2 volts using the master keyswitch and check the satellite unit voltages using a multimeter. The dc voltage should be just over 2 volts. Repeat for all the other voltage settings.

If one or more satellite units shows a different voltage then the interwiring has become mixed i.e. terminal 4 of the master unit is connected to terminal 3 on the satellite unit. Correct the fault and retest.

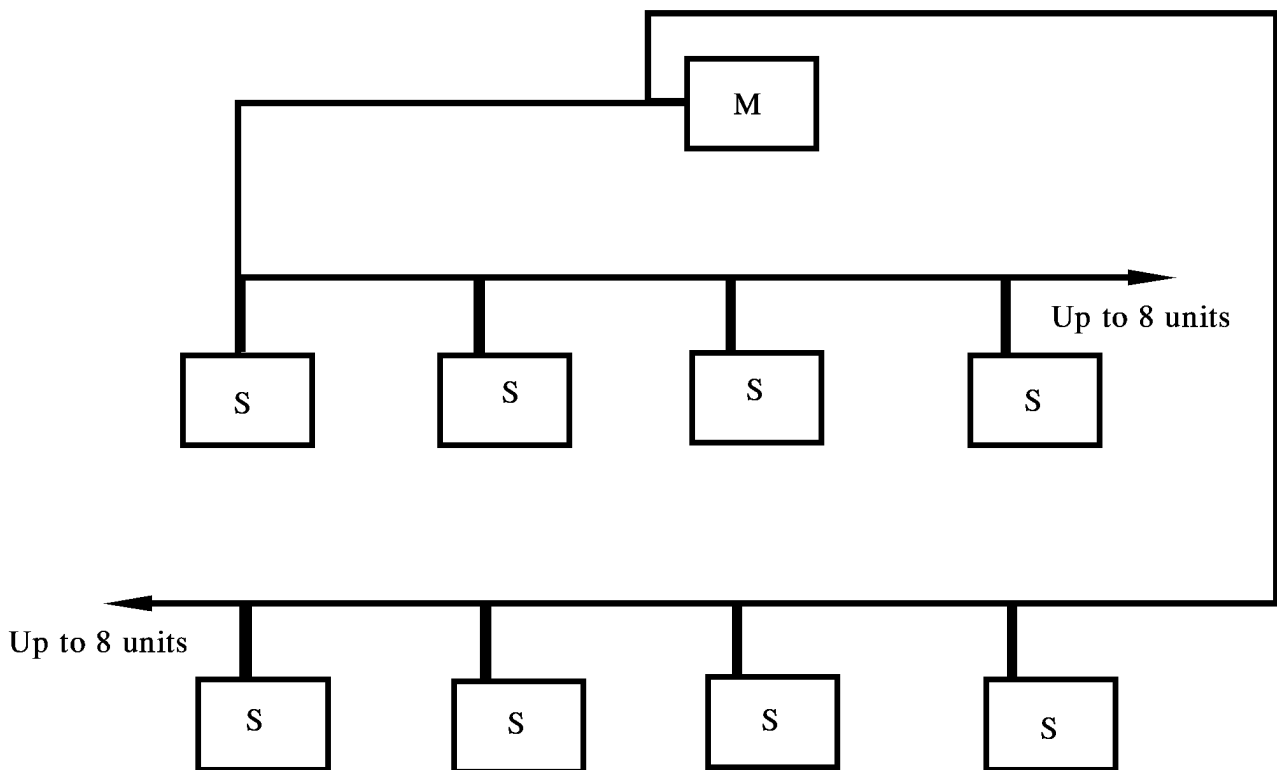
## Interwiring Possibilities

There are three possibilities for the interwiring.

1. Connect the master unit to each satellite unit independently by the eight core cable



2. An alternative method is to employ daisy chaining. Please note that for a class of 16 stations two separate daisy chains will be required.



3. A combination of the above two methods may be employed

**Please Note.** The maximum length of 8 core cable that may be used in a single run is 50m. This is also true for daisy chained connections. i.e. the total wiring length for a daisy chain is limited to 50m, no matter how many satellites are connected.