

4500 Series Monitoring System

General Overview

The 4500 series monitoring system is based upon a 19 inch 3U high rack assembly which can contain a mixture of different modules to achieve particular monitoring functions. The system is powered by a 4508 power supply module fed by either 110 or 240v AC.

The 4508 power supply is a single card construction with a 96 way multiple connector. This mates with a similar socket on the backplane PCB assembly which is mounted across the rear of the rack system. Various connection options are available to use with the basic rack system and they are explained more fully in the section dealing with the model 4524 rack assembly. The connections from the 4500 Series system to the outside world are via ribbon cable connectors mounted on the rack assembly backplane PCB.

Module Fitting

When manufactured systems are to be supplied with monitors dedicated to particular slot position in the rack assembly, this is achieved by using a red keyed connector which ensures that a module cannot be placed in the wrong slot. In the general case, any type of module except for a power supply or a serial interface module can be inserted into position 1-13. Slot 14 is reserved for a 4506 serial interface module (if required) and the 4508 power supply will always occupy the extreme right hand position, slot 15.

System Configuration

In normal circumstances a 4500 series system will be assembled to suit a particular customer's requirement and will have the appropriate modules fitted prior to shipment. Of the various modules available. All are separately described within this instruction manual. Each is described as though it were a standalone product, but of course it cannot be used on its own without the connection capability of the module 4524 rack assembly.

Selection of Filter Components

Some of the 4500 series of monitors have internal filters which restrict their measurement band width to frequencies are of interest.

Scaling

Modules are scaled to suit the customer's specific requirements.

Linking Table

Modules in the 4501, 4502,4509,4510,4515 ranges have links fitted to the boards which are specific to the type of the module.

Module Address Codes (where fitted)

When assembled as a system, modules are assigned address of 1 to 13. numbering from left to right when viewed from the front. Users may set internal switches to other addresses, but must take care to ensure that no two modules are set to the same address. Where no serial interface module is specified for the system, the address code switches and associated components may not be fitted.

4500 Series Monitoring System **Model 4508 Power Supply**

General Overview

This unit provides all the DC power necessary for the various module positions in the 4524 rack assembly and accepts either 110V or 240V AC mains input. Note that link selection is required to configure this module for the appropriate input voltage. The 4508 provides both positive and negative supplies of 5V, 15V, 24 V and connects these supplies to the backplane PCB assembly of the rack assembly.

There are no adjustments to be made in the 4508 power supply and in the event of failure it should preferably be returned to CML for servicing. It must never be serviced by personal unfamiliar with this type of unit as significant damage can occur to both it and other modules in the rack if it is handled incorrectly.