INSTALLATION GUIDE

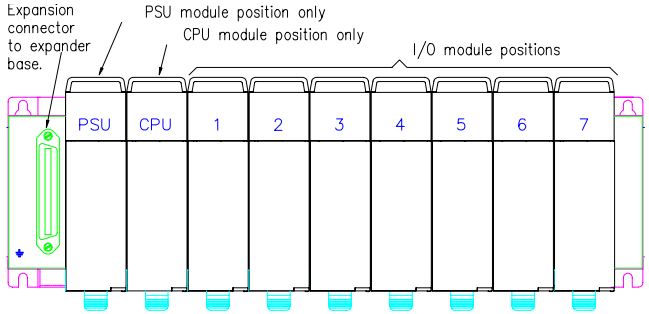
Maxiflex Serial NIM
M1592A

Introduction

This Installation Guide is intended to aid the fitment of the M1592A in the field. For operating details of this product, refer to the Users' Manual. Please read this Installation Guide ***first*** *before installing this unit.*

The M1592A NIM is a programmable device which is used for handling Network Communication off loading the Maxiflex System CPU from the task. It is always fitted to any I/O slot of the Maxiflex base. See figure 1. It has two configurable serial ports. Each port has a DIP switch for address and parameter settings. See Table 2.

Figure 1 : Module Positions



Note: The exact position of the I/O module will depend on the system configuration.

Hardware Installation Procedure

1. If the NIM is going to be programmed use Programming port cable M1831 which is available as an accessory (Model No. M1831). Connect this cable into the programming port of the Maxiflex CPU.
2. Plug the NIM into the required I/O slot (as per Figure 1).

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Figure 2: Front Panel Layout of M1592A

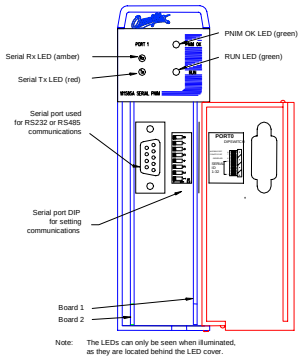

Table 1: M1592A Front Panel Diagnostics

LED Legend	LED Colour	Description
OK	Green	ON - NIM is healthy OFF or Flashing – No power applied or NIM Faulty
RUN	Green	ON – user application software is running OFF – No user application software is running Flashing – Terminal interaction with NIM
PORT0 Rx	YELLOW	ON – data is being received on serial port0 OFF – serial port0 receiver is idle
PORT0 Tx	RED	ON – serial data is being transmitted on serial port0 OFF – serial port0 transmitter is idle

Table 2: Switch 1 Set-up Serial Port

Communications Protocol

Modbus Protocol (Slave device):
Transmission Mode: ASCII
Baud rate: 9600
Data bits: 7
Parity: none
Stop bits: 1
Address: see dipswitch

Conet/s Protocol
Transmission Mode: RTU
Baud rate: 19200
Data bits: 8
Parity: none
Stop bits: 1
Address: see dipswitch

Serial Port Dipswitch setting

Switches 1-5: Modbus Slave ID
Switches 6-8: Protocol
Switch 8 ON = Modbus default

Switches 1-5: Conet/s ID
Switches 6-8: Protocol
Switch 7 ON = Conet/s default

The default operation is to use the serial port for standard communications allowing the user to get the NIM up and running quickly and easily both on the test bench and in the field. In this case the Serial Port Dipswitch alongside the male, sub-miniature DB-9 connector has the above default configurations. The serial port is also software configurable using the DITView/Omniset utility or application program, but when switch 7or 8 of the dipswitch is turned ON, then the dipswitch setting overrides the software configuration. *To restore the settings to the software configuration, simply set switch 7 or 8 of the dipswitch OFF.*

Table 3: Serial Port Pinout

The M1592A SERIAL NIM allows jumperless conversion between RS232 and RS485 communications. By simply following the appropriate pinout of the serial port connector below it is possible to connect the NIM in either RS232 or RS485 mode without making any hardware or software changes to the NIM.

Pin number	Communication Standard	
	RS232	RS485
1	Do not connect	Rx Data + (In)
2	Rx Data (In)	Rx Data – (In)
3	Tx Data (Out)	Do not connect
4	Do not connect	Tx Data+ (Out)
5	Ground	Ground
6	Do not connect	Vcc
7	RTS (Out)	Do not connect
8	CTS (In)	Do not connect
9	Do not connect	Tx Data – (Out)