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# UNITRONICS M90 PLC

## Application Note

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This document describes how to configure a Paradigm operator interface terminal to allow communications with a Unitronics M90 PLC. The communications protocol supports access to pertinent parameters. Please read this document carefully before attempting to configure communications with these devices.

## Introduction

The EDICT-97 configuration software has been designed to allow the user to enter commands in a manner that should be familiar to the user of the M90 PLC.

## Communications Mode

The default configuration for Edict97 is:

Port 2 - RS232

9600 baud

7 bits

Even Parity

1 Stop Bit

Device Address - 1

## Accessing Data

The programmer selects the desired parameter, either via the drop down list, or by typing in the prefix, followed by the address in decimal. Note that an address can be selected that might not be within the limits of the PLC model being programmed. It is up to the programmer to verify the requested address exists.

By default, Inputs, Outputs, and Memory Bits are of Data Type "Individual Bits". In Comms Blocks it is possible to select the Data Type as 16-Bit Unsigned, or 32-Bit Unsigned, which will compact up to 16 bits, or 32 bits, into one word in the terminal. The starting bit address will be the least significant bit of the resulting word.

Similarly, Memory Integers and System Integers are, by default, "16-Bit Signed". In Comms Blocks, the Data Type can be selected as a Signed or Unsigned, 16 or 32 bit value. If 32-Bit is selected then the addressed register will contain the lower 16 bits, as an unsigned value, and the next higher register will contain the upper 16 bits.

Note that "Inputs" and "System Integers" are Read-Only. Attempts to write values to these items will return with no action taken.

## Knowledge of Unit Operation Is Assumed

In all cases, the simple principle of 'pass-through' is maintained: there is no attempt to validate a value in terms of the end use of the unit: both familiarity with the Drive functions and knowledge of system operation are assumed.

### RS232 Connection

Paradigm RS232 Port	M-90 RS232 Cable
Terminal 1	3
Terminal 2	2
Terminal 5	5

In addition, connect a jumper between 3 and 4 of the Paradigm.

### RS232 - Direct Connection to RJ-11

Looking into the port on the M 90:



Paradigm RS232 Port	M-90 RJ11
Terminal 1	3
Terminal 2	2
Terminal 5	1,4

In addition, connect a jumper between 3 and 4 of the Paradigm.