
GE Fanuc 90 Series via SNP PLC

Application Note

This document describes how to configure a Paradigm operator interface terminal to allow communications with a GE Fanuc 90 Series 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 GE Fanuc 90 Series PLC.

Communications Mode

The default configuration for Edict97 is:

Port 3 - RS485

19200 baud

8 bits

Odd Parity

1 Stop Bit

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.

Version 2.01+ Enhancements

Digital Inputs, Digital Outputs, Memory Bits, and Temporary Coils may be accessed as a Data Type of "Individual Bits", as well as "Individual Bytes", 16-Bit Signed or Unsigned and 32-Bit Signed or Unsigned. Note: When accessing these bits as a Data Type other than "Individual Bits", it is the programmers responsibility to maintain proper address alignment. Please refer to the chart below.

Data Type	Starting Address
Byte	1, 9, 17, ...
16-Bit	1, 17, 33, ...
32-Bit	1, 33, 65, ...

If proper address alignment is not maintained, unexpected results will occur.

Analog Inputs, Analog Outputs and Data Registers 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.

Version 2.10 Enhancements

Discrete Status Bits SA, SB, SC, and S, have been added. S is Read Only, the others are Read/Write.

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.

Red Lion Cable # P895015Z**RS485 Connection**

Paradigm RS485 Port	GE Fanuc 90 Series Serial Interface
Terminal 6	11
Terminal 7	10
Terminal 8	13
Terminal 9	12
Terminal 10	7

In addition, connect a 1K resistor between 9 and 10 of the Paradigm. A link must also be fitted between Pin 8 and Pin 14, as well as between Pin 6 and Pin 15 on the GE Fanuc.