MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GE 90-30 SERIES PLC

IC693CMM321

ETHERNET INTERFACE MODULE

Used with the applicable Series 90-30 communications configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: GE official manufacturer documentation

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Chapter 1 Introduction

This manual describes how to access and use the *Station Manager* software, which resides in the firmware of the PLC Ethernet Interface products listed below:

- Series 90™–30 PLC Ethernet Interface (IC693CMM321), both types.
- Series 90–30 PLC CPU364 with embedded Ethernet Interface (IC693CPU364)
- Series 90-30 PLC CPU374 with embedded Ethernet Interface (IC693CPU374)
- Series 90–70 PLC Ethernet Interface (Type 2) (IC697CMM742)

The term, *Ethernet Interface*, will generally be used in this manual to describe these products.

The Ethernet Interface enables Series 90 PLCs to communicate with other Series 90 PLCs, with GE Fanuc programming software, and with computer applications developed using GE Fanuc Ethernet protocols, such as CIMPLICITY® HMI. Refer to GFK–1541, *TCP/IP Ethernet Communications for the Series 90 PLC User's Manual* for information on installing and programming the Ethernet Interface.

The Station Manager is a part of the communications software built into the Ethernet Interface. The Station Manager executes as a background function to provide interactive supervisory access to the Ethernet Interface.

The Station Manager is available when the Ethernet Interface is in the Operational or Maintenance state. It is not available when running Power–Up Diagnostics or the Software Loader.

Station Manager Styles

This manual will refer to two different styles of Station Managers. The two styles have a similar interface, but details of the commands and output are different between the two styles.

Station Manager Styles	
Style	**Products Supported**
Style A	IC693CMM321, IC693CPU364, IC697CMM742
Style B	IC693CPU374

Station Manager Services

The Station Manager provides the following services:

- An interactive set of commands for an operator to interrogate and control the Ethernet Interface.
- Access to observe and modify internal statistics, an exception log, and advanced user parameters.
- Password security for commands that change the Ethernet Interface parameters or states.

The Station Manager allows you to monitor the operation of the local station (node) and the network. If a problem occurs at the local station or on the network, the Station Manager may be used to pinpoint the source of the problem through the various commands.

Quick Guide to the Manual

The table below provides a quick pointer into the manual for Station Manager operations. Be sure to reference the Table of Contents and Index for more specific questions.

Questions	Where to go in the Manual
How do I connect my PC or terminal to the Station Manager software on the Ethernet Interface?	Chapter 2. "Accessing the Station Manager"
How to I figure out what went wrong?	Chapter 3. "Troubleshooting"
How do I use the Station Manager in general?	Chapter 4. "How to Use the Station Manager"
How can I use the Station Manager to test the Ethernet Interfaces and verify operation of the physical network?	Chapter 5. "Testing Ethernet Interfaces on the Network"
Where do I find descriptions of each Station Manager Command?	Chapter 6. "Style A Command Descriptions" -or- Chapter 7. "Style B Command Descriptions" See especially the following commands: LOG command TALLY command STAT command

States of the Ethernet Interface

The states of the Ethernet Interface are described below.

Note on LED Names

The IC693CMM321 Series 90–30 Ethernet Interfaces and the IC697CMM742 Series 90–70 Ethernet Interface (Type 2) each have 4 LEDs. The CPU364 and CPU374 Ethernet Interfaces have 3 LEDs. Many of the functions being indicated are the same from module-to-module, with the exception of the third LED from the top (FDX, SER, SERIAL ACTIVE, N/A) in the following table.

LED Indicators for Ethernet Interface Products			
10Base-T Type IC693CMM321 Ethernet Interface	**AAUI-Only Type IC693CMM321 Ethernet Interface**	**IC697CMM742 Ethernet Interface (Type 2)**	**IC693CPU364/374 CPUs with Ethernet Interface**
OK	OK	MODULE OK	EOK
LAN	LAN	LAN ONLINE	LAN
FDX	SER	SERIAL ACTIVE	(N/A)
STAT	STAT	STATUS	STAT

Hardware Failure State

When power is cycled on the Series 90 PLC, or whenever the Ethernet Interface is restarted, power–up diagnostics run. Diagnostics running is indicated by the OK LED fast blinking, while the other LEDs remain OFF.

Note

If all LEDs turn OFF and stay OFF during power–up diagnostics, or if on the CPU374, the EOK LED blinks in a repeated sequence, then power–up diagnostics have failed. Refer to the PLC Fault Table for more information.

The PLC Fault Table can be especially helpful in detailing faults that are detected during power–up because the Station Manager is not operational during power-up. If the Ethernet Interface has a problem, it may not be able to report fault details. In the case of the CPU374 only, the EOK LED blinks a two-digit failure code that can also help determine the nature of the failure. Refer to the topic, *"Troubleshooting Using the PLC Fault Table"* in this chapter for more information.

Upon successful completion of diagnostic testing, the Ethernet Interface waits for configuration data from the PLC CPU. This may take several seconds, depending upon the PLC configuration. If configuration data is not received, the Ethernet Interface will use a backup copy of the most recent valid configuration data. (Each Ethernet Interface is shipped from the factory with a valid set of default backup configuration data.)

Refer to GFK–1541, *TCP/IP Ethernet Communications for the Series 90 PLC User's Manual* for details on the power–up process.

The Restart pushbutton is not operable during the Ethernet Interface diagnostic phase nor is the Station Manager active.