
SECTION 1 - INTRODUCTION

OVERVIEW

There are two multi-function processor termination modules (IMP). The NIMPO1 Multi-Function Processor Termination Module provides a connection to the serial interface for multi-function processors¹ (MFP). The NIMPO1 termination module has two isolated RS-232-C ports. One port can be configured as a non-isolated RS-485 port. Multi-function processor modules use the ports to communicate with computers, printers and sequential events recorders. The NIMPO1 termination module also provides the connection for a station serial communication link. This link allows the MFP module to communicate with an IISAC01 Analog Control Station or NDCS03 Digital Control Station. Figure 1-1 shows a typical IMP termination module application.

The NIMPO1 termination module also interfaces with the INIIT02 INFI-NET to INFI-NET Transfer Module. The INFI-NET to INFI-NET transfer module (IIT) supports bidirectional communication through two RS-232-C ports. Port one passes system data only. Port two passes system data or can be used as a diagnostic port. The central IIT module can use a variety of means to link to the satellite IIT module such as modems, microwave and transceivers. This module communicates directly with a network interface I/O module on the local INFI-NET ring through the I/O expander bus.

The INFI-NET to computer transfer module² (ICT) provides the electronics needed to direct the operation of the INFI-NET to computer interface. It handles all communication with the host computer through the multi-function processor interface (MPI) or RS-232-C serial port. The MPI interface can act as DCE or DTE equipment.

The NIMPO2 termination module is used in addition to the NIMPO1 termination module when terminating redundant modules.

INTENDED USER

Anyone who installs, uses and maintains the NIMPO1 and NIMPO2 Multi-Function Processor Termination Modules should read and understand this manual before placing the termination module into service. Installation and troubleshooting require a technician or engineer with electrical experience and a working knowledge of the RS-232-C and RS-485 standards.

1. When using an IMMFP03 Multi-Function Processor Module, the IMP termination module interfaces with the auxiliary I/O card (IMMPI01 or IMPPI02 Multi-Function Processor Interface).

2. When using an INICT03 INFI-NET to Computer Transfer Module, the IMP termination module interfaces with the auxiliary I/O card (IMMPI01 or IMPPI02 Multi-Function Processor Interface).

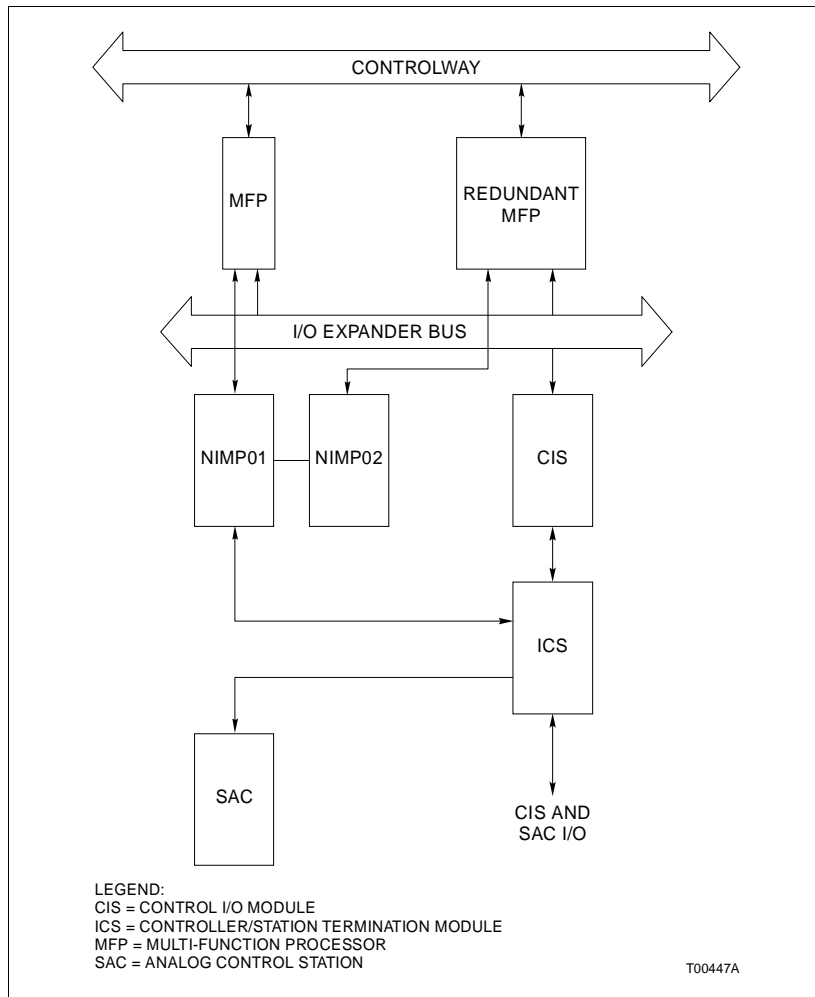


Figure 1-1. Example Redundant IMP Termination Module Application

MODULE DESCRIPTION

The NIMP01 termination module is a single printed circuit board that uses one slot in an NTMU01 or NTMU02 Termination Mounting Unit. The board contains:

- RS-232-C and RS-485 line drivers and receivers.
- Optical isolators.
- Connector sockets.
- DB-9 connectors.
- Light emitting diode (LED).
- Terminal blocks.
- Jumpers.
- Fuse.

The NIMP02 also occupies one slot in the TMU unit. It consists of:

- Two 16-pin connector sockets.
- One DB-9 connector for RS-485 link.
- Light emitting diode (LED).
- Terminal blocks.

FEATURES

The NIMP01 termination module has two jumper configurable RS-232-C ports for DCE or DTE operation, one of which can be configured as an RS-485 port. The ports allow the MFP module to talk to a variety of computers and communication equipment. An on-board LED lights when the MFP module connected to the IMP module is the primary module and is on-line. The termination module also provides two serial communication links for control stations through the NICS01 and NIDS01 termination modules. These links allow the MFP module to talk to analog and digital control stations. The NIMP02 module features a single LED that illuminates when the redundant MFP module is active.

INSTRUCTION CONTENT

This manual consists of five sections and five appendices.

Introduction	Contains an overview of the features, specifications and a description of the IMP termination module.
Installation	Describes precautions to observe when handling modules and setup procedures required before module operation. This section discusses dipswitch settings and installation procedures.
Maintenance	Provides a maintenance schedule.
Repair/Replacement Procedures	Details how to replace an IMP termination module.
Support Services	Describes the support services (spare parts, training, documentation, etc.) available from Bailey Controls Company.
Appendices	Briefly discuss the modules that use the IMP termination module and provide a cross reference of dipswitch and jumper settings for those modules.

HOW TO USE THIS MANUAL

Read this manual through in sequence. Read **Section 2** thoroughly. Do the steps in order. Complete all steps in the section before using the IMP termination module. Refer to the Table of