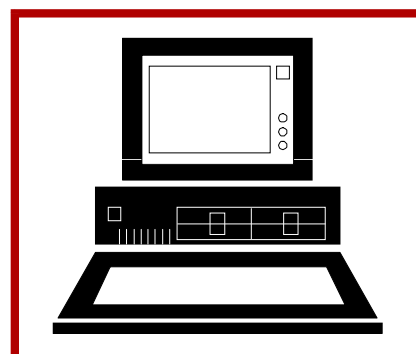
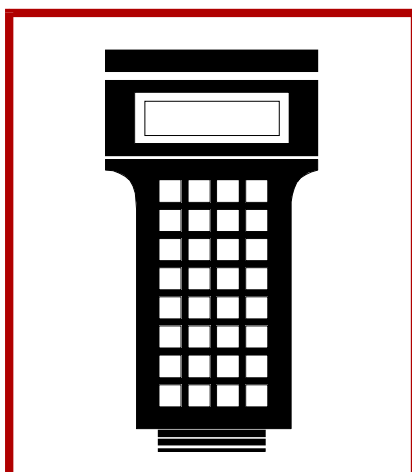
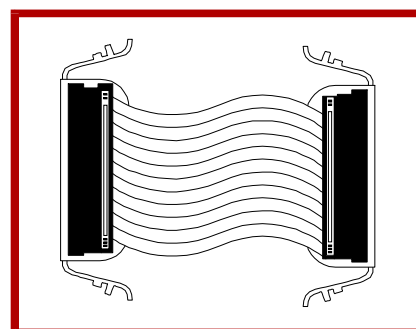
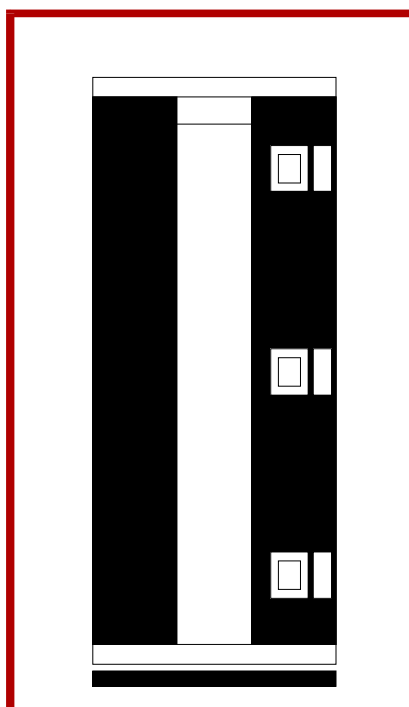
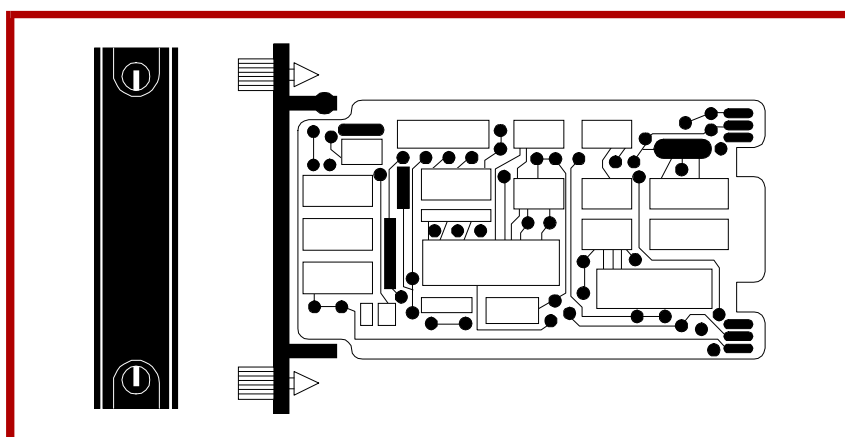
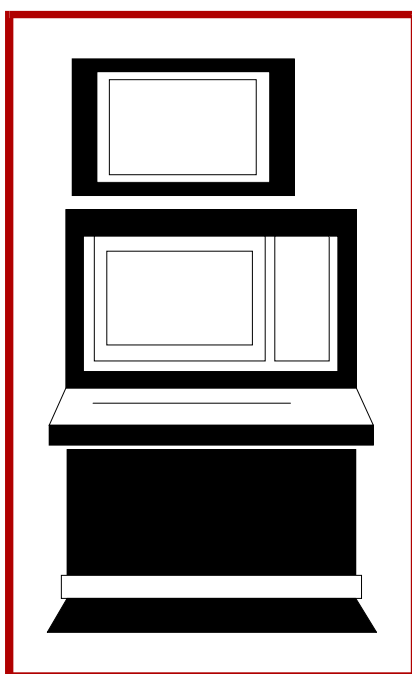


E96-605

Bailey®
infi 90

Instruction

Bus Interface Module/ Loop Interface Module (INBIM02/INLIM03)



Preface

The Loop and Bus Interface Modules (LIM/BIM) provide the principal communication interface between INFI 90 Process Control Units and Plant Loop. Plant Loop is a high speed (500 kbaud) serial communication highway that all INFI 90 modules share. A maximum of 63 nodes, in any combination, can be on the Loop.

This product instruction provides you with features, specifications, installation, operation and troubleshooting information.

SECTION 1 - INTRODUCTION

OVERVIEW

The Loop and Bus Interface Modules (LIM/BIM) provide the principal communication interface between INFI 90 Process Control Units (PCU) and Plant Loop. Plant Loop is a high speed (500 kbaud) serial communication highway that all INFI 90 modules share. A maximum of 63 nodes, in any combination, can be on the loop. The INLIM03 and INBIM02 are directly upward compatible with Network 90 NLIM02 and NBIM02.

The basic function of the BIM is to gather data from modules and transfer it to the LIM. The basic function of the LIM is to examine the data and transmit it to the assigned destination on the loop. Detailed theory of LIM/BIM operation is covered in [Section 2](#).

This instruction manual is intended to assist personnel with installation and operation of the Loop Interface/Bus Interface Modules.

INTENDED USER

System engineers and technicians should read this manual before installing and operating the Loop and Bus Interface Modules (LIM/BIM). The modules **SHOULD NOT** be put into operation until this instruction is read and understood. Refer to the **Table of Contents** to find specific information after the module is operating.

MODULE DESCRIPTION

The LIM and BIM each occupy one slot in the Module Mounting Unit (MMU). They are joined together with a ribbon cable. Two captive screws on each module secure them to the MMU. Eight LEDs on the LIM faceplate display messages and error information.

FEATURES

The modular design of the LIM and BIM modules, as with all INFI 90 modules, allows for flexibility when creating a process management system strategy. An optional second LIM/BIM pair can be added to provide a redundancy feature to the system. One pair performs the primary interface function, while the other LIM/BIM pair is on standby. Should a primary failure occur, the secondary pair comes on-line without interrupting the process. Other features include selectable poll rates (the time between module output block checks), on-board

SPECIFICATIONS

Memory	LIM: 2 kbytes RAM, 4 kbytes ROM BIM: 32 kbytes RAM, 16 kbytes ROM
Power Requirements	LIM: +5 VDC @ 2.0 amps; 10 watts nominal ±15 VDC @ 80 mA; 1.2 watts nominal BIM: +5 VDC @ 1.0 amps; 5 watts nominal +15 VDC @ 150 mA; 2.25 watts nominal -15 VDC @ 120 mA; 1.80 watts nominal
System Capability	Maximum of 63 nodes in the system. Any combination of PCU, OIS or NIU.
Communication Rates	500 kbaud. 800 messages/second maximum.
Synchronization Time	100 milliseconds maximum.
Cable Specifications	
Plant Loop (node - node)	LIM: 2000 meters (6561 feet) maximum
Loop Interface (LIM - TPL/IPL)	LIM: 61 meters (200 feet) maximum
Certification	CSA certified for use as process control equipment in an ordinary (non-hazardous) environment.
Environmental	
Ambient Temperature	0° to 70°C (32° to 158°F)
Relative Humidity	0 to 95% up to 55°C (131°F) (non-condensing) 0 to 45% up to 70°C (158°F) (non-condensing)
Atmospheric Pressure	Sea level to 3 km (1.86 miles)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE