Chapter

Introduction

General

A 1770-KF2 Series B module is a communication interface that links intelligent RS-232-C or RS-422-A (asynchronous) devices to an Allen-Bradley local area network. By setting switches on the KF2, and changing cables, you can direct communications over a Data Highway or a Peer Communication Link (**PCL**). With a 1770-KF2 module, a computer on a PCL can communicate with any PLC-5 node on the network. Other current Allen-Bradley products that communicate over a PCL are the 1784-T50 Industrial Terminal System and the 1785-KA Communication Adapter Module.

The KF2 is designed to operate in a control-room environment on a tabletop. It takes its power from an AC wall outlet, and it gives you a choice of **full-duplex** or **half-duplex** protocol on its asynchronous link. The module has Data Highway compatibility, and it supports all PCL facilities except internetworking.

(Internetworking would indicate that a computer on a PCL could talk to a node on another PCL, or to a station on a Data Highway link. That may be possible in the future, but it isn't right now. A computer on a Data Highway, though, using a 1770-KF2 and a 1785-KA can communicate with PLC-5s on a PCL.)

About This Manual

This manual describes installation, operation, and communication protocols of a 1770-KF2 module; and it assumes that you are already thoroughly familiar with how to program your computer or other intelligent asynchronous device. It does not assume prior knowledge of the Allen-Bradley Data Highway or a Peer Communication Link.

Table 1.A lists related documentation that might be helpful in conjunction with this manual. For more details about the programming and operation of specific Allen-Bradley programmable controllers, refer to the appropriate user's manual for that controller.

Table 1.A Related Documentation

Publication Number	Old Publication Number	Title
1770-6.2.1	1770-810	Data Highway Cable Assembly and Installation Manual
1771-6.5.1	1771-801	Communication Adapter Module (Cat. No. 1771-KA2) User's Manual
1771-6.5.15	1771-822	Communication Controller Module (Cat. Nos. 1771-KE, -KF) User's Manual
1771-6.5.8	1771-811	PLC-2 Family/RS-232-C Interface Module (Cat. No. 1771-KG) User's Manual
1775-6.5.1	1775-802	PLC-3 Communication Adapter Module (Cat. No. 1775-KA) User's Manual
1773-6.5.2	1773-801	PLC-4 Communication Interface Module (Cat. No. 1773-KA) User's Guide
1785-6.8.1		PLC-5/15 Processor Manual
1785-6.6.1		PLC-5/15 Assembly & Installation Manual
6226-6.5.1		Industrial Terminal Support Software System Manual
1784-6.5.1		Industrial Terminal (1784-T50) User's Manual
1785-6.5.1		PCL-to-Data Highway Communication Adapter Module (1785-KA) User's Manual

This manual is organized as follows:

- Chapter 2 Explains basic communication concepts.
- Chapter 3 Tells how to install a KF2 module.
- Chapters 4, 5, and 6 Describe the communication protocol used by a KF2 module.
- Chapter 7 Summarizes error reporting.