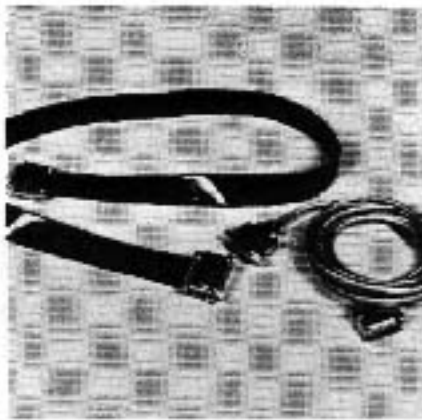




Allen-Bradley Hardware Interface Cable Information for Personal/Industrial Computer Systems

(Cat. Nos. 1784-CAK, -CAS, -CXK, -CYK, -CYS)

Product Data



Introduction

This document shows you how to install the cables needed to upload/download control programs developed with the 6200 Series Software using personal/industrial computer systems. You transfer these programs from the RS-232-C serial port (COM1 or COM2) to a PLC-2 family programmable controller through a:

- 1771-KE/KF module to a 1771-KA or 1771-KA2 in a Data Highway network
- 1771-KG module
- 1770-SB Data Cartridge Recorder
- Hayes external modem to a Data Highway network

Cable Description and Usage

Tables A, B, and C present information for connecting the above listed components to a computer. Each table:

- lists the applicable cables
- describes the connection points
- identifies the compatible programming devices (personal/industrial computers)
- refers to the applicable pinout schematic

Table A
Connection to a Data Highway Network Using a 1771-KE/KF or 1771-KG Module

Cat. No.	Cable Description	Connection Points	Programming Device Used With	Refer to in Figure:
1784-CAK	RS-232-C Null Modem Cable (10ft/3m) — for 9-pin serial port connections	RS-232-C socket on 1771-KE/KF or -KG module to serial port COM1 or COM2 on the programming device	IBM PC/AT, Allen-Bradley 6121 Series or compatible programming devices	1
1784-CXK	RS-232-C Null Modem Cable (10ft/3m) — for 25-pin serial port connections	RS-232-C socket on 1771-KE/KF or -KG module to serial port COM1 or COM2 on the programming device	IBM PC/XT or compatible programming devices ¹	2
1784-CYK	RS-232-C Null Modem Cable (10ft/3m) — for 9-pin serial port connections	RS-232-C socket on 1771-KE/KF or -KG module to serial port COM1 or COM2 on the programming device	IBM 5531, Allen-Bradley 6120 Series or compatible programming devices	3

¹ These programming devices may contain a 9-pin serial port. Verify your port connection requirements before ordering cables.

Table B
Connection to the 1770-SB Data Cartridge Recorder

Cat. No.	Cable Description	Connection Points	Programming Device Used With	Refer to Pinout in Figure:
1784-CAS	RS-232-C Interface Cable (10ft/3m) — for 9-pin serial port connections	socket on recorder to serial port COM1 or COM2 on the programming device	IBM PC/AT, Allen-Bradley 6121 Series or compatible programming devices	4
1784-CXS	RS-232-C Interface Cable (10ft/3m) — for 25-pin serial port connections	socket on recorder to serial port COM1 or COM2 on the programming device	IBM PC/XT or compatible programming devices ¹	5
1784-CYS	RS-232-C Interface Cable (10ft/3m) — for 9-pin serial port connections	socket on recorder to serial port COM1 or COM2 on the programming device	IBM 5531, Allen-Bradley 6120 Series or compatible programming devices ¹	6

¹ These programming devices may contain a 9-pin serial port. Verify your port connection requirements before ordering cables.

Table C
Connection to the Hayes External Modem

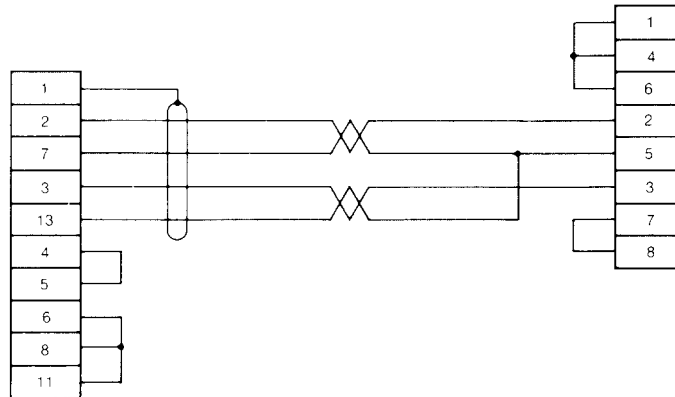
Cat.. No.	Cable Description	Connection Points	Programming Device Used With	Refer to Pinout in Figure:
1784-CAS	RS-252-C Interface Cable (10ft/3m) — for 9-pin serial port connections	socket on modem to serial port COM1 or COM2 on the programming device	IBM PC/AT, Allen-Bradley 6121 Series or compatible programming devices	4
1784-CXS	RS-232-C Interface Cable (10ft/3m) — for 25-pin serial port connections	socket on modem to serial port COM1 or COM2 on the programming device	IBM PC/XT or compatible programming devices ¹	5
1784-CYS	RS-232-C Interface Cable (10ft/3m) — for 9-pin serial port connections	socket on modem to serial port COM1 or COM2 on the programming device	IBM 5531, Allen-Bradley 6120 Series or compatible programming devices	6

¹ These programming devices may contain a 9-pin serial port. Verify your port connection requirements before ordering cables.

Figure 1
Pinout for Cat. No. 1784-CAK RS-232-C Null Modem Cable — for 9-pin Serial Port Connections to IBM PC/AT, Allen-Bradley 6121 Series or Compatible Programming Devices

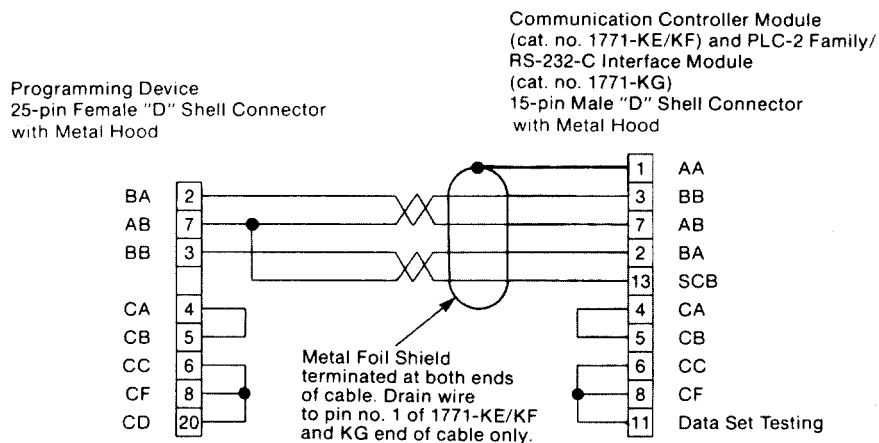
Communication Controller Module
(Cat. No. 1771-KE-KF) and PLC-2
Family RS-232-C Interface Module
(Cat. No. 1771-KG) 15-pin Male
"D" Shell connector with metal
hood

Programming Device
9-pin Female "D" Shell
Connector with metal hood



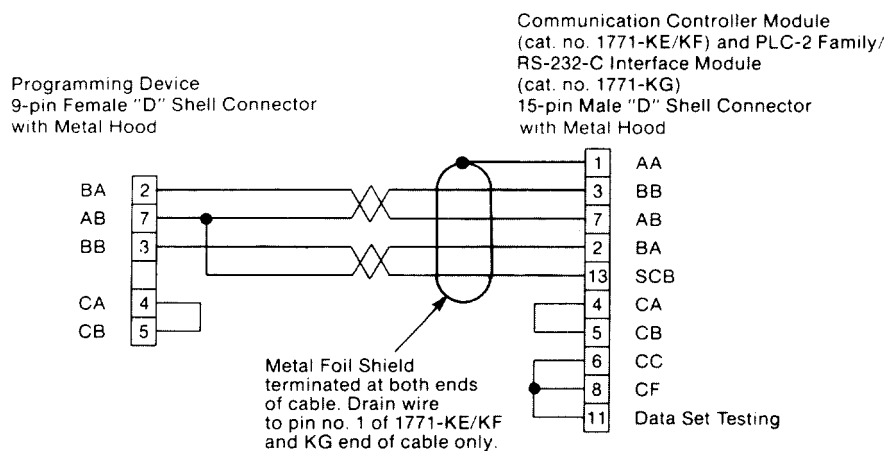
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Figure 2
Pinout for Cat. No. 1784-CXK RS-232-C Null Modem Cable — for 25-pin
Serial Port Connections to IBM PC/XT or Compatible Programming
Devices



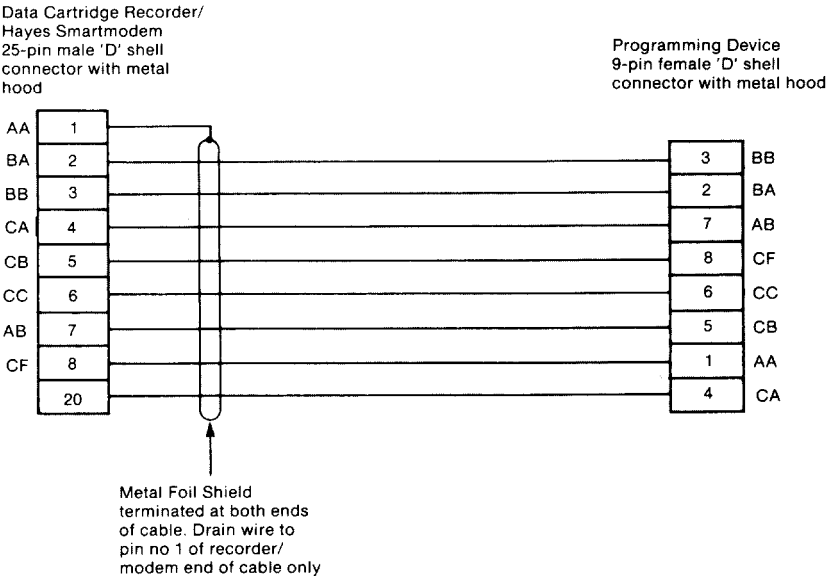
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Figure 3
Pinout for Cat. No. 1784-CYK RS-232-C Null Modem Cable — for 9-pin
Serial Port Connections to IBM 5531, Allen-Bradley 6120 Series or
Compatible Programming Devices



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Figure 4
Pinout for Cat. No. 1784-CAS RS-232-C Interface Cable — for 9-pin Serial
Port Connections to IBM PC/AT, Allen-Bradley 6121 Series or Compatible
Programming Devices

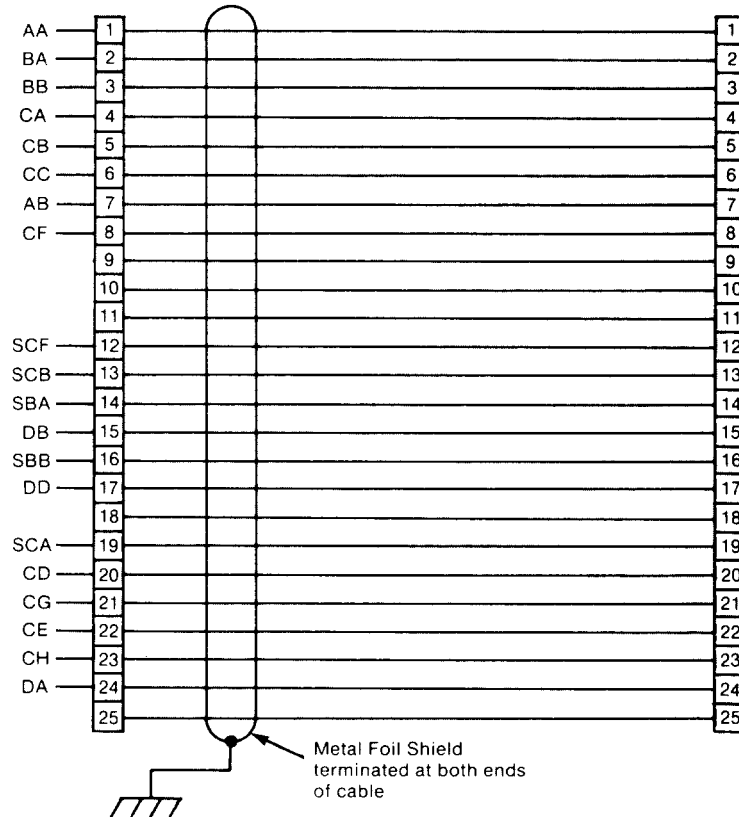


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Figure 5
Pinout for Cat. No. 1784-CXS RS-232-C Interface Cable — for 25-pin
Serial Port Connections to IBM PC/XT or Compatible Programming
Devices

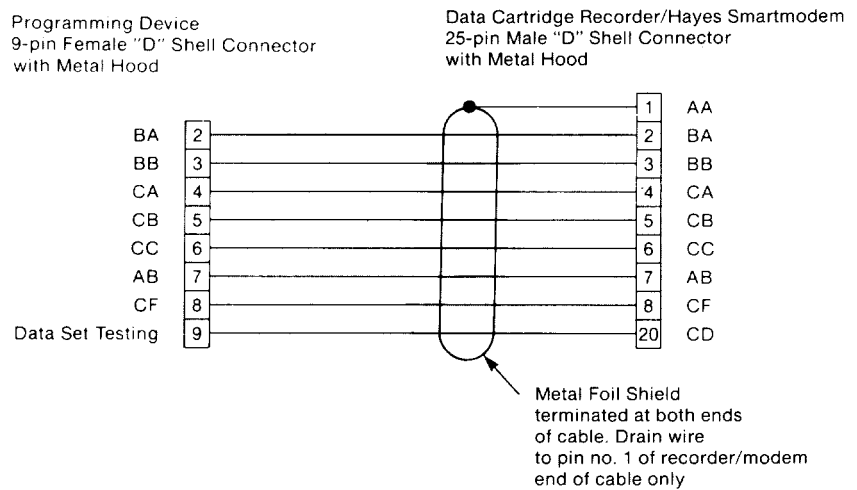
Data Cartridge Recorder/Hayes Smartmodem
25-pin Male "D" Shell Connector
with Metal Hood

Programming Device
25-pin Female "D" Shell Connector
with Metal Hood



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Figure 6
Pinout for Cat. No. 1784-CYS RS-232-C Interface Cable — for 9-pin Serial Port Connections to IBM 5531, Allen-Bradley 6120 Series or Compatible Programming Devices



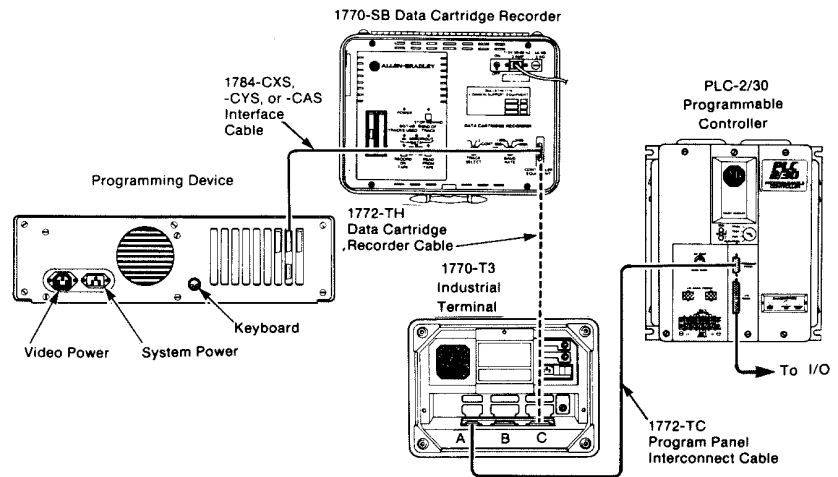
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Typical Cable Applications

The figures that follow show you how the cables are connected to various hardware products for uploading/downloading programs. If you use a:

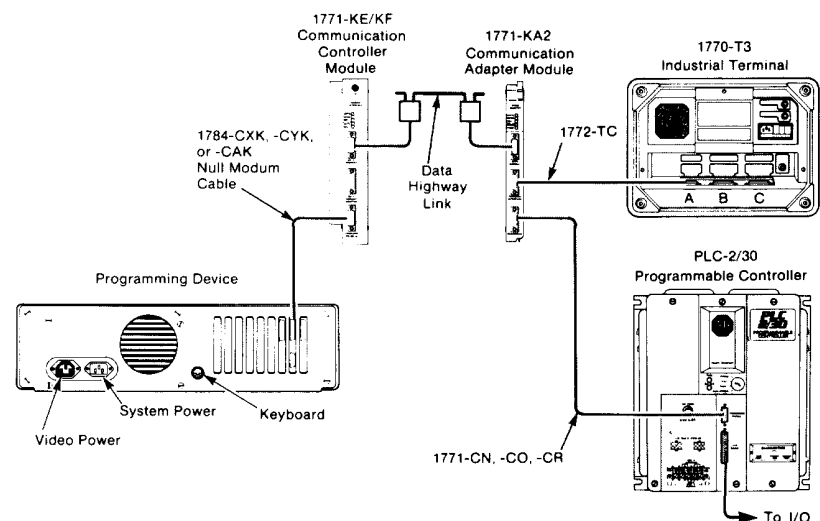
- Data Cartridge Recorder Configuration, see Figure 7
- 1771-KE/KF and 1771-KA/KA2 Data Highway Network Configuration with One Serial Port Connection, see Figure 8
- 1771-KE/KF and 1771-KA/KA2 Data Highway Network Configuration with Two Serial Port Connections, see Figure 9
- 1771-KG Configuration with One Serial Port Connection see Figure 10
- 1771-KG Configuration with Two Serial Port Connections, see Figure 11
- Hayes External Modem Used in a Data Highway Network Configuration, see Figure 12

Figure 7
Data Cartridge Recorder Configuration



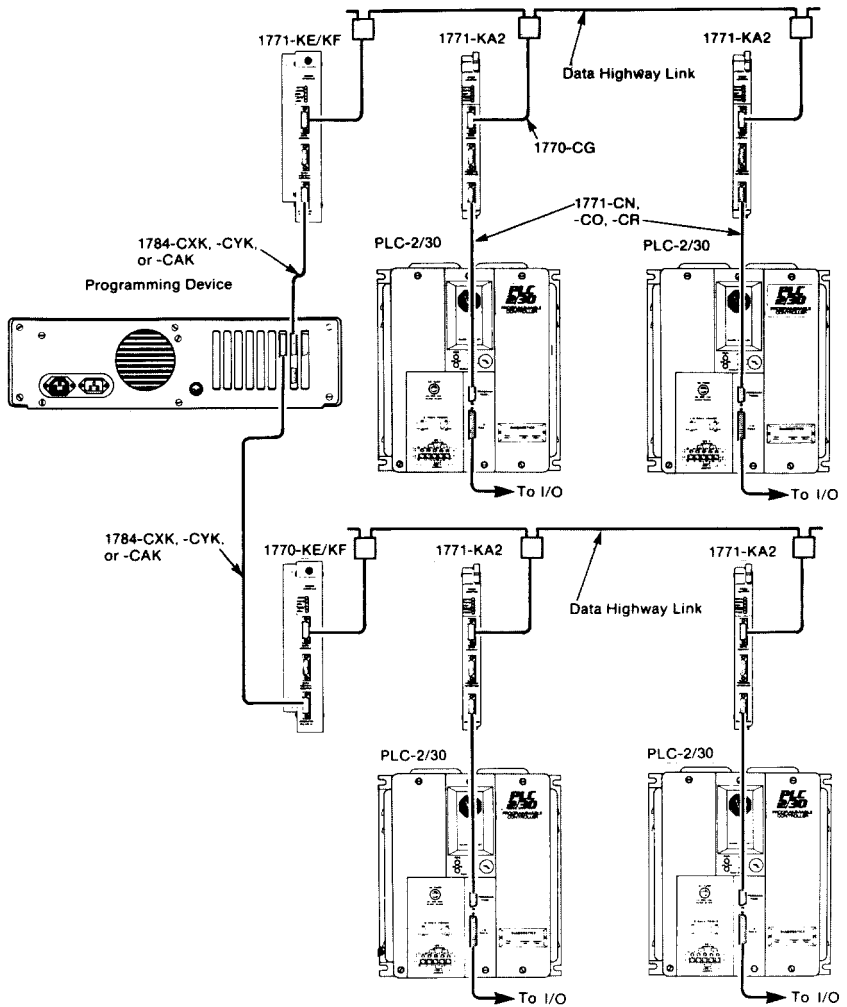
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Figure 8
1771-KE/KF and 1771-KA/KA2 Data Highway Network Configuration with One Serial Port Connection



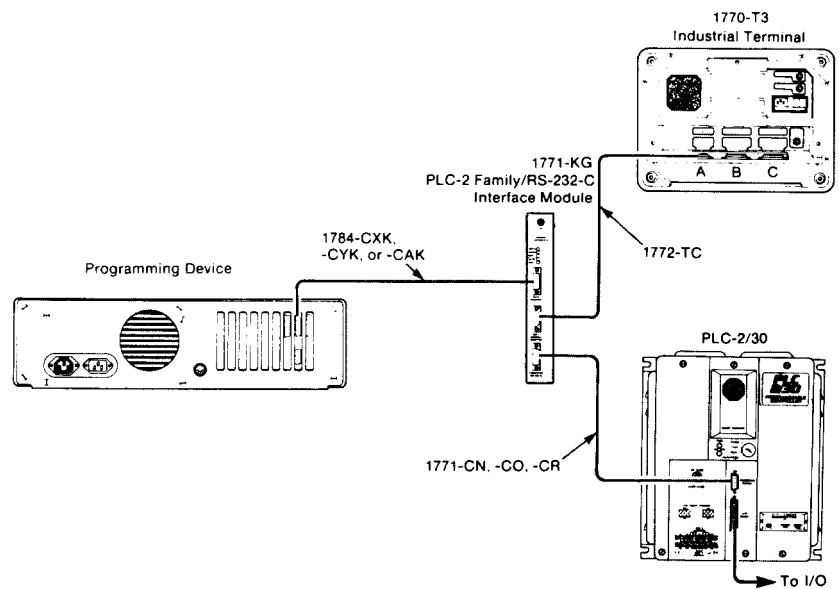
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Figure 9
1771-KE/KF and 1771-KA/KA2 Data Highway Network Configuration with
Two Serial Port Connections



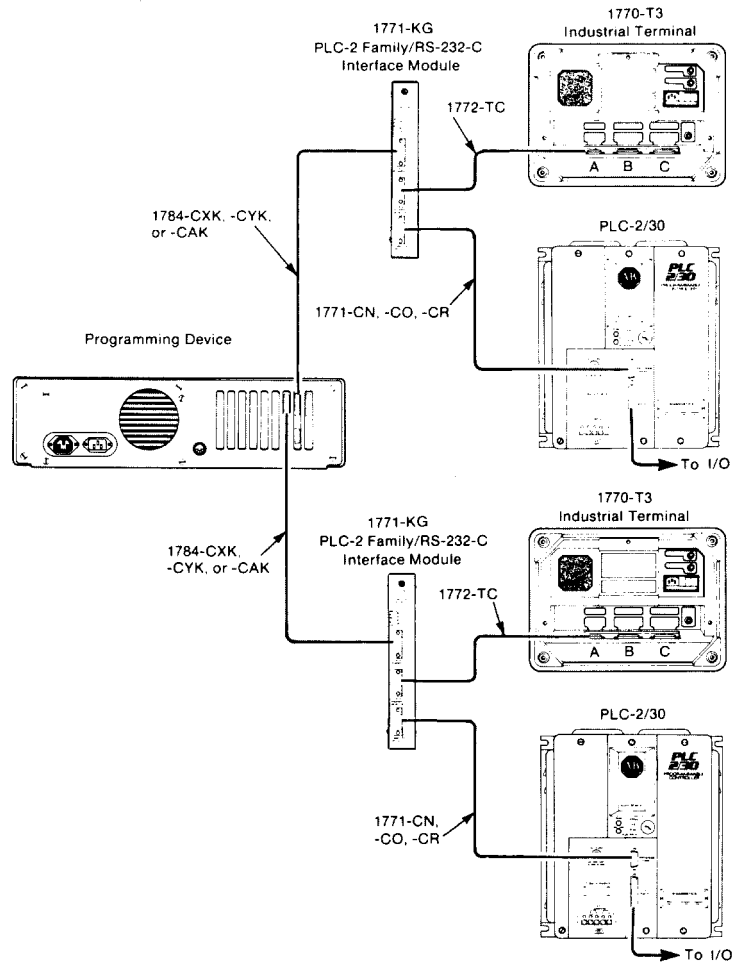
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Figure 10
1771-KG Configuration with One Serial Port Connection



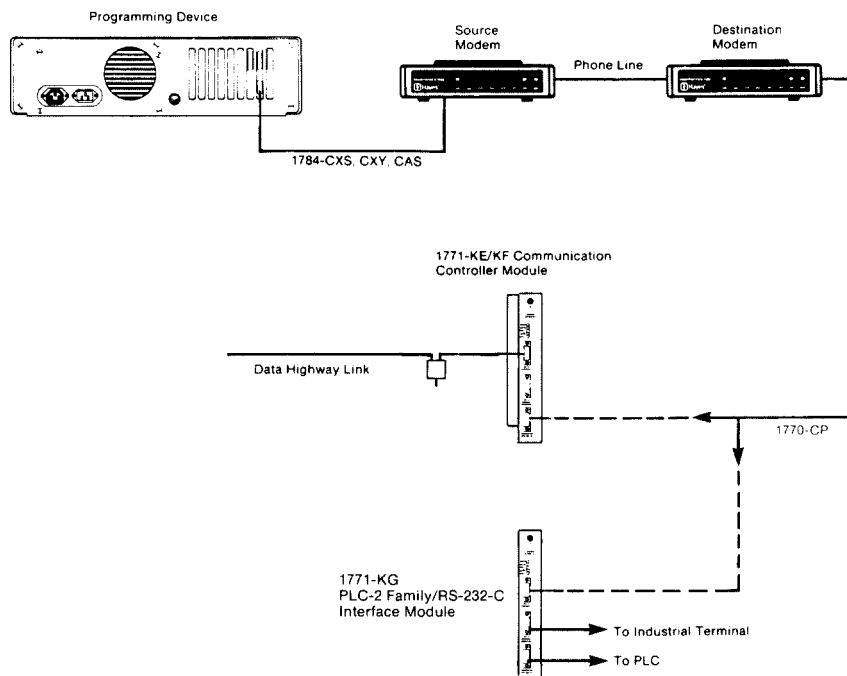
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Figure 11
1771-KG Configuration with Two Serial Port Connections



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Figure 12
Hayes External Modem Used in a Data Highway Network Configuration



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