

IPX Peripherals Specifications

Introduction

This appendix provides details on the IPX peripherals specifications.

Network Management Terminal

StrataView Plus Terminal

A StrataView Plus workstation is required for managing an IPX network. Refer to the *StrataView Plus Reference Manual* for setup instructions and specifications for the StrataCom Network Management Terminal, one of which is required to provide network alarm, control, and statistics monitoring for an IPX operating system.

Control Terminal

The information in Table B-1 on Control Terminals applies to earlier IPX systems. It also applies to Release 8.1 or later systems for local control as long as at least one StrataView Plus workstation is attached to a node to provide network management and statistics collection capabilities.

Table B-1 Control Terminal Interface Requirements

Parameter	Requirement
IPX Port Used:	CONTROL terminal port on the SCC card is used to interface with a local control terminal.
Code:	Standard 7 or 8-bit ASCII; 1 or 2 stop-bits; even, odd or no parity.
Interface:	RS-232 DCE.
Data Rate:	All standard asynchronous data rates from 300 to 19200 bps, independently software-selectable.
Supported Terminals:	VT-100, or equivalent, recommended.
Cable Required:	Straight-through RS-232 cable.

Printer

The maintenance printer that is currently being shipped with the IPX (since April 1992) is the Okidata Model 184. This printer replaces the Okidata Model 182 that has been discontinued by the manufacturer. Refer to Table B-2 for interface requirements.

Table B-2 Printer Interface Requirements

IPX Port Used:	AUX port on the SCC card is used to interface with the maintenance printer.
Code:	Standard 8-bit ASCII; 8 data bits, 1 stop-bit, odd parity.
Interface:	RS-232 DCE.
Data Rate:	9600 baud.
Supported Printers:	Okidata 184.
Cable Required:	Straight-through RS-232 cable.

Note See the Release 6.2 IPX User's Guide for information on the Okidata 182 printer.

DIP Switch Settings for Okidata 184

DIP Switch A is an 8-section DIP switch located on the printer's main circuit board. Access to the configuration switches is made by sliding back the switch cover at the top, rear of the printer case. Set Switch A as indicated in Table B-3.

Table B-3 Switch A Settings—Okidata 184 Printer

Switch A	Setting	Description
1	Off	ASCII with
2	Off	non-slashed
3	Off	zero.
4	Off	11-inch
5	On	paper.
6	Off	No Auto Line Feed.
7	On	8- bit data.
8	Off	Enables front panel.

The High Speed Serial Interface DIP Switch consists of two DIP switches, SW1 and SW2, located on a serial-board that is attached to the printer's main board. Set switches 1 and 2 as indicated in Table B-4 and Table B-5.

Table B-4 Switch 1 Settings—Okidata 184 Printer

Switch 1	Setting	Description
1	On	Odd parity.
2	On	No parity.
3	On	8 data bits.
4	On	Ready/busy protocol.
5	On	Test select circuit.
6	On	Print mode.
7	On	Busy line selection.
8	On	DTR pin 2 enabled.

Table B-5 Switch 2 Settings—Okidata 184 Printer

Switch 2	Setting	Description
1	Off	Transmission
2	On	speed =
3	On	9600 baud.
4	On	DSR active.
5	On	Buffer = 32 bytes.
6	On	Timing = 200 ms.
7	On	Space after power on.
8	Don't care	Not used.

Modems

In general, a dial-out connection to a modem uses the AUX port of the IPX. A dial-in connection from a modem uses the CONTROL port of the IPX. Refer to Table B-6 for interface requirements.

Table B-6 Modem Interface Requirements

Parameter	Requirement
IPX Port Used:	CONTROL port on SCC card is used for auto-answer modem. AUX PORT on SCC card is used for auto-dial modem.
Code:	Standard 8-bit ASCII, 1 stop-bit, no parity.
Interface:	RS-232 DCE.
Cable:	Null modem cable.
Phone Lines:	Dedicated, dial-up business telephone line for ISC-to-IPX modem and auto-dial-to-ISC modem.
Data Rate:	All standard asynchronous data rates from 300 to 19200 bps, independently software-selectable.
Supported Modems:	Motorola V.34R modem.

Motorola V.34R IPX Dial-In/Out Configuration

IPX Auto-Answer

This is a setup for StrataCom ISC to dial up the customer's IPX. Using the **cnfterm** command, set the IPX CONTROL port speed to 9600 bps. Using the **cnftermfunc** command, set the terminal type to VT100/StrataView. To program the modem, temporarily attach a terminal to the modem using a null modem cable. The modem EIA port will automatically match the 9600 bps setting of the terminal. Enter the commands listed in Table B-7 to set up the modem for proper operation.

Connect the modem to the IPX CONTROL PORT. Ask StrataCom ISC to assist in testing the operation of the modem setup.

Table B-7 Setting Up the Motorola Modem for Auto-Answer mode

Step	Command	Function
1.	AT&F&W	Reset to factory default and save.
2.	ATS0=1	Enables Auto-Answer Mode (answer on first ring).
3.	ATL1	Modem speaker at low volume.
4.	AT*SM3	Enables automatic MNP error correction.
5.	AT*DC0	Disables data compression.
6.	AT*FL0	Disables XON/XOFF flow control.
7.	AT&S1	Sets DSR to "normal".
8.	ATE0	Disables local character echo.
9.	ATQ1	Disables result codes. (Modem will appear "dead.")
10.	AT&W	Saves current configuration settings in non-volatile memory.

IPX Auto-Dial to ISC

This is a setup for the customer's IPX to dial StrataCom ISC. Using the **cnfterm** command, set the IPX Auxiliary port (AUX PORT) speed to 9600 bps and enable XON/XOFF flow control. Using the **cnftermfunc** command, select option 7, "Autodial Modem", enter the ISC-designated Network ID, and the ISC modem phone number. Attach a 9600 bps terminal to the modem using a cross-over cable and enter the following commands (Table B-8)

Connect the modem to the IPX AUX PORT. Ask StrataCom ISC to assist in testing the operation of the modem setup.

Table B-8 **Setting Up the Motorola Modem for Auto-Dial mode**

Step	Command	Function
1.	AT&F	Initializes factory defaults.
2.	ATL1	Modem speaker at minimum volume.
3.	AT*SM3	Enables automatic MNP error correction.
4.	AT*DC0	Disables data compression.
5.	AT*SC1	Enables DTE speed conversion
6.	AT*FL1	Enables XON/XOFF flow control.
7.	AT*SI1	Enables 5-minute inactivity disconnect.
8.	AT&C1	DCD controlled by modem.
9.	AT&D2	Modem disconnects when IPX toggles DTR.
10.	AT&V	Verify entries.
11.	AT&W	Saves current settings to non-volatile memory.

Modem Cables

The IPX Auto-Answer (call *from* StrataCom ISC) and the IPX Auto-Dial to ISC application (also called “call home”) use different modem cables.

Note Call StrataCom ISC for latest modem information.
