



Serial I/O SST8P DB Adapter  
37L1414  
Installation Guide

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**OPTIONS**  
*by IBM*

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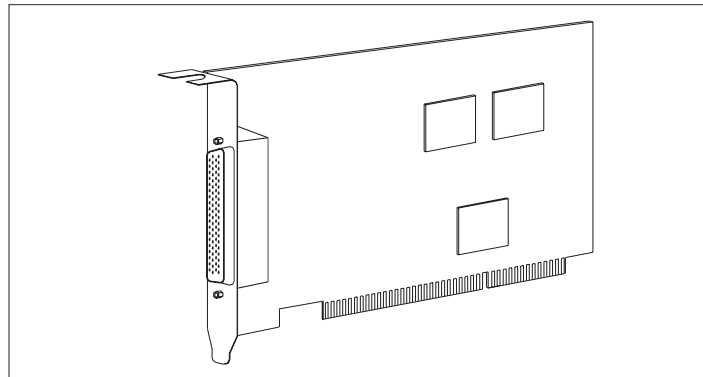
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## Overview

IBM Serial I/O Adapters are intelligent, high-speed (up to 230.4 kbps on each port) *Multiport Boards* providing high performance serial I/O solutions for PCI bus systems. All port interfaces are standard RS-232 with full modem control and voltage surge protection on every pin.

IBM Serial I/O Adapters appear to the system host processor as memory. That is, they are memory mapped devices. Each Adapter is automatically mapped into system memory at the time of device driver installation. The device driver soft-configures all adapters each time the system is initialized (booted). See the Software Reference Manuals located on the CD ROM for detailed Device Driver information.

The IBM Serial I/O Adapter (see Figure 1 below) occupies a single PCI slot in the host computer and provides the intelligent functions to "off-load" the CPU serial communications processing tasks.



*Figure 1. Serial I/O SST8P Adapter*

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## Hardware Installation

Note: Please refer to the user manual that came with your personal computer for detailed installation instructions.

Use the following procedure to install your PCI Serial I/O 8 Port Adapter.

1. Set the host computer system power switch to OFF and disconnect the power cord.
2. Locate a free PCI expansion slot.
3. Insert and secure the board firmly into the expansion slot.
4. Replace the power cord and turn the host computer system ON.

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## Software Installation

Refer to the Quick Start Card that came with the CD ROM for detailed instructions on loading the Software Driver

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## PCI System Setup

Peripheral Component Interconnect (PCI) system architecture has a design feature termed *Plug and Play*. This feature automatically detects, identifies and configures the **currently** installed devices each time the system is booted. Therefore, whenever an Adapter is installed (or removed) in a PCI system, the Adapter is recognized and configured immediately upon restart.

## Fan Out Cables

Serial Fan Out Cables (FOCs) provide eight RS-232 interfaces. The FO8 DB-25 has eight male DTE connectors (see Figure 3 below).

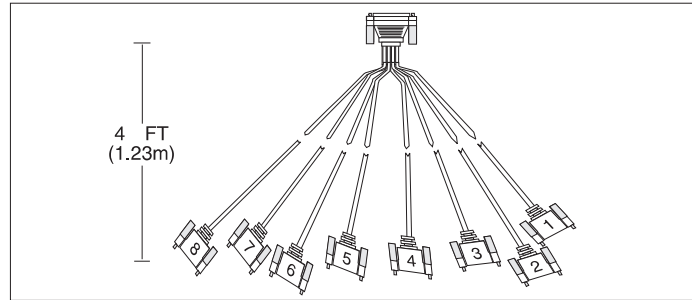


Figure 2. Fan Out Cable

	Signal Name	DB-25 Pin Functions	
22	RI Ring Indicator	Input	←
20	DTR Data Terminal Ready	Output	←
8	DCD Data Carrier Detect	Input	→
7	GND Signal Ground	Ground	
6	DSR Data Set Ready	Input	←
5	CTS Clear To Send	Input	←
4	RTS Request To Send	Output	→
3	RD Receive Data	Input	←
2	TD Transmit Data	Output	→
1	GND Chassis Ground	Ground	

Figure 3. Fan Out Cable Pin Outs

## DB-25 Fan Out Cable to Device Cabling

Figures 4 through 6 show the pin outs required to make a cable to go between the DB-25 FOC ports and your terminals, printers, modems, etc.

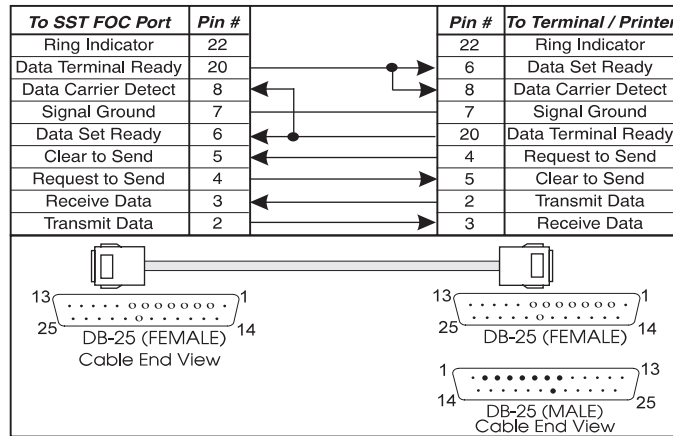


Figure 4. Cable Pin Outs for FO-8 DB-25 to Terminal/Printer DB-25

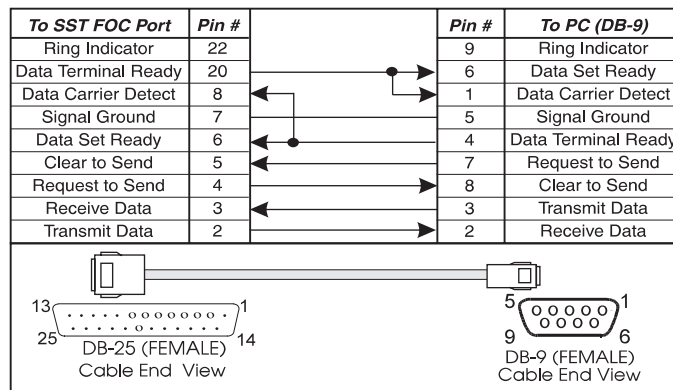


Figure 5. Cable Pin Outs for FO-8 DB-25 to PC DB-9

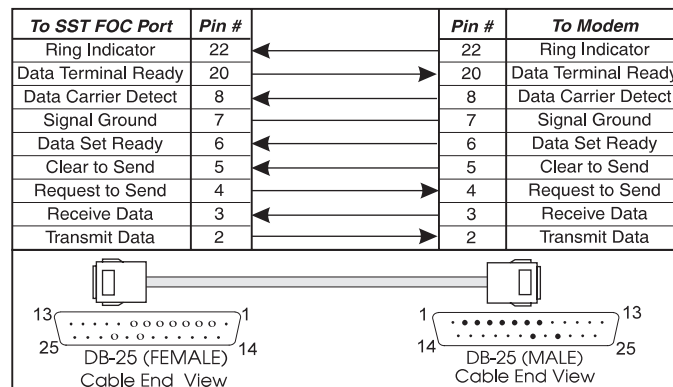


Figure 6. Cable Pin Outs for FO-8 DB-25 to Modem DB-25

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## Help and Service Information

Before calling, please prepare for your call by following these steps:

### Preparing for the Call

To assist the technical support representative, have available as much of the following information as possible:

- Computer manufacturer and computer model.
- Options part number (Table 1).
- Options part name (Table 1).
- Serial number (if available).
- Proof of purchase (including date and place).
- Exact wording of the error message (if any)
- Description of the problem
- Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

### Placing the Call to IBM

Technical support is available during the warranty period to answer any questions about your new IBM option. Support response time will vary depending on the number and nature of calls received.

Marketing, installation, and configuration support will be withdrawn from the PC Company HelpCenter 90 days after the option has been withdrawn from marketing.

If you call 90 days after the date of withdrawal or after your warranty has expired, you might be charged a fee. Additional support is available through the IBM PC Company automated Fax system, the PC Company Web Page, the PC Company Electronic Bulletin Board System and HelpWare offerings.

- The IBM web site at "<http://www.pc.ibm.com>"
- The IBM Fax system at (800) 426-3395 or (919) 517-0011
- The IBM BBS system at (919) 517-0001

For the support telephone and support hours by country, refer to the following table or to an optional enclosed technical support insert. If the number is not provided in the table or insert, contact your IBM reseller or IBM marketing representative.

Support 24 hours a day, 7 days a week	
Canada	1-800-426-7378
United States/ Puerto Rico	1-800-426-7378

<b>IBM OPTIONS</b>	
<b>IBM Part Number</b>	<b>PCI Serial I/O Adapters</b>
37L1414	Serial I/O SST8P DB Adapter
37L1415	Serial I/O SST16P RJ Adapter
37L1423	Serial I/O SST16P DB Adapter
37L1416	Serial I/O SST128 Expandable Adapter
37L1417	Serial I/O PM16RJ Port Module
37L1418	Serial I/O PM16DB Port Module
37L1421	Serial I/O PS4 Power Supply
37L1422	Serial I/O PS4 WT Power Supply
37L1419	Serial I/O 16RJ Multiplexer Set
37L1420	Serial I/O 16DB Multiplexer Set
37L1424	Serial I/O 16RJ WT Multiplexer Set
37L1425	Serial I/O 16DB WTMultiplexer Set

*Table 1. Options Parts Names and Numbers*

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## **Cable Options**

Please refer to [www.equinox.com](http://www.equinox.com) for cabling alternatives.

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The following warranty information applies to products purchased in the United States, Canada, and Puerto Rico. For warranty terms and conditions for products purchased in other countries, see the enclosed Warranty insert, or contact your IBM reseller or IBM marketing representative. International Business Machines Corporation Armonk, New York, 10504

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*Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. If you have any questions, contact IBM or your reseller.*

## Production Status

Each Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's warranty terms apply.

## The IBM Warranty for Machines

IBM warrants that each Machine

- 1) is free from defects in materials and workmanship and
- 2) conforms to IBM's Official Published Specifications.

The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your receipt is the Date of Installation, unless IBM or your reseller informs you otherwise. During the warranty period IBM or your reseller, if authorized by IBM, will provide warranty service under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine. For IBM or your reseller to provide warranty service for a feature, conversion, or upgrade, IBM or your reseller may require that the Machine on which it is installed be



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- 1) for certain Machines, the designated, serial-numbered Machine and
  - 2) at an engineering-change level compatible with the feature, conversion, or upgrade.

Many of these transactions involve the removal of parts and their return to IBM.

You represent that all removed parts are genuine and unaltered. A part that replaces a removed part will assume the warranty service status of the replaced part.

If a Machine does not function as warranted during the warranty period, IBM or your reseller will repair it or replace it with one that is at least functionally equivalent, without charge. The replacement may not be new, but will be in good working order. If IBM or your reseller is unable to repair or replace the Machine, you may return it to your place of purchase and your money will be refunded.

If you transfer a Machine to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this Statement to that user. However, for Machines which have a life-time warranty, this warranty is not transferable.

## Warranty Service

To obtain warranty service for the Machine, you should contact your reseller or call IBM.

In the United States, call IBM at	1-800-426-7378
In Canada, call IBM at	1-800-426-7378
<i>You may be required to present proof of purchase</i>	

IBM or your reseller will provide certain types of repair and exchange service, either at your location or at IBM's or your reseller's service center, to restore a Machine to good working order.

When a type of service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours.

You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item. Before IBM or your reseller exchanges a Machine or part, you agree to remove all

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You agree to:

1. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
2. where applicable, before service is provided —
  - a) follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provide,
  - b) secure all programs, data, and funds contained in a Machine, and
  - c) inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

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- 2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA;
- 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR SAVINGS), EVEN IF IBM OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU.

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**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

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### Industry Canada Class A Emission Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.

### Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

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