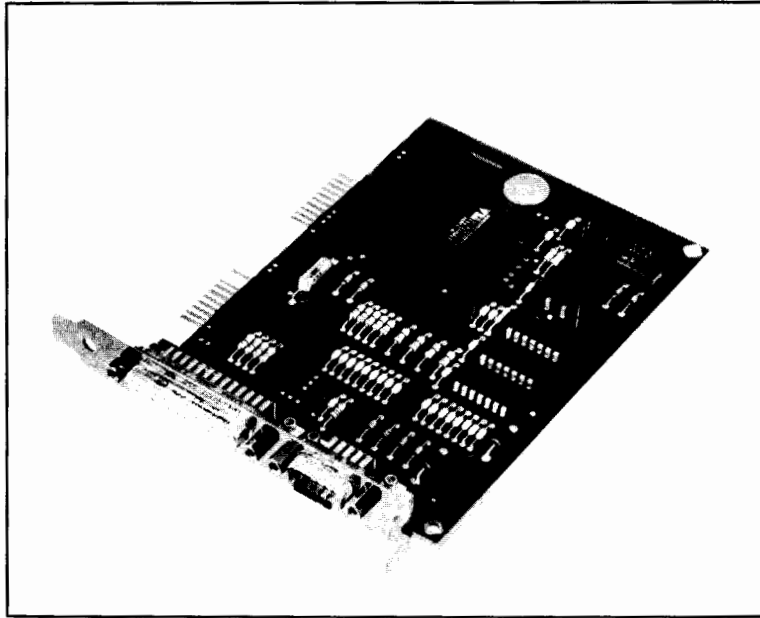


HEWLETT-PACKARD



HP 24540B & HP 24541B



**Installation Guide
Installationsanleitung
Guía de Instalación
Manuale d'installazione
Manuel d'installation**

HP Computer Museum
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RFI

Radio Frequency Interference (RFI) Statements

For the United States

Federal Communications Commission (FCC)

The US Federal Communications Commission (in 47 CFR 15.818) has specified that the following notice be brought to the attention of the users of this product.

Warning

This equipment generates and uses radio frequency energy and if not installed and used in accordance with the instruction manual may cause interference to radio and television reception. It has been tested and found to comply with the limits of a Class B computing device in accordance with Subpart J of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference in a residential area. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna.
- Re-locate the equipment with respect to the receiver.
- Move the equipment away from the receiver.
- Plug the equipment into a different power outlet so the equipment and receiver are on a different branch circuit.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20042, USA. Stock No. 004-000-00345-4

FCC Certification tests were performed using shielded cables. Cables available from Hewlett-Packard meet these shielding requirements.

Hersteller- bescheinigung

Hiermit wird bescheinigt, daß das Gerät/system 24540B/24541B in Übereinstimmung mit den Bestimmungen von Postverfügung 1046/84 funkentstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes/Systems angezeigt und die Berechtigung zur Überprüfung der serie auf Einhaltung der Bestimmungen eingeräumt.

Zusatzinformation für Meß- und Testgeräte

Werden Meß- und Testgeräte mit ungeschirmten Kabeln und/oder in offenen Meßaufbauten verwendet, so ist vom Betreiber sicherzustellen, daß die Funk- Entstörbestimmungen unter Betriebsbedingungen an seiner Grundstücksgrenze eingehalten werden.

Manufacturer's Declaration

This is to certify that the equipment 24540B/24541B is in accordance with the Radio Interference Requirements of Directive FTZ 1046/84. The German Bundespost was notified that the equipment was put into circulation, the right to check the series for compliance with the requirements was granted.

Additional Information for Test and Measurement Equipment.

If Test and Measurement Equipment is operated with unshielded cables and/or used for measurements on open set-ups, the user has to assure that under operating conditions the Radio Interference Limits are still met at the border of his premises.

ENGLISH **Installation Guide**

GERMAN **Installationsanleitung**

SPANISH **Guía de Instalación**

ITALIAN **Manuale d'installazione**

FRENCH **Manuel d'installation**

HP 24540B & HP 24541B

**Serial/Parallel Interface
Card & Dual Serial
RS-232/422 Interface Card
Installation Guide**

Part Number:
24540-90030

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Installation

Introduction

The HP24540B (Serial/Parallel Interface Card) and the HP24541B (Dual Serial Interface Card) can be installed in any of the accessory slots in a Hewlett-Packard Vectra personal computer or IBM-PC or IBM-AT or IBM-XT.

Install the card in your HP Vectra PC as described below. For a different computer, refer to its documentation.

Required tools. Medium Phillips screwdriver (for an IBM PC, a medium flat-blade screwdriver).

Caution

The card must be handled with care:

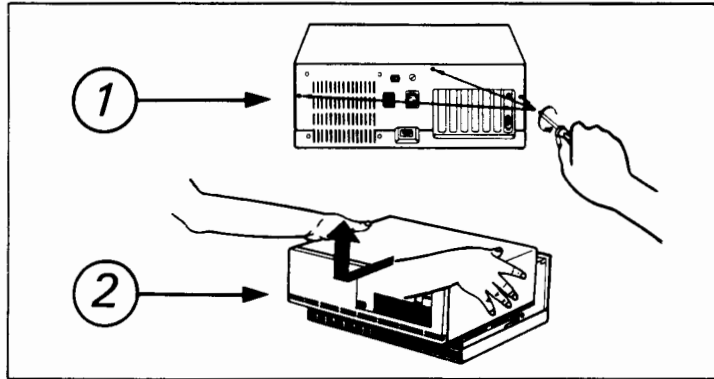
- **Handle gently.** Do not drop the card or handle it roughly. Do not let it come into contact with dirt or liquids.
- **Hold only by the edges.** Never touch any part of the card except the edges.
- **Protect from static electricity.** The card is packed in an anti-static bag for protection. Leave it in the bag until you are ready to install it. (Otherwise the card could be damaged by static electrical charges that occur naturally in your work environment.)

Preliminary Steps

1. Exit from any application you are using.
2. Turn OFF the computer and all connected equipment.
3. Disconnect all the power cords from the wall outlets.
4. Disconnect all the cables from the computer.
5. Remove the monitor from the computer.

Open the Computer

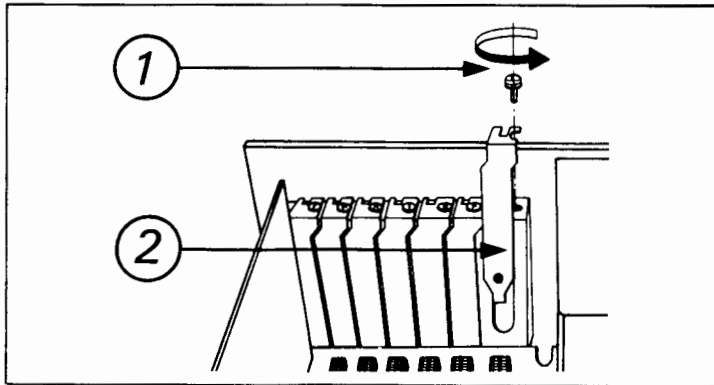
1. At the back of the computer, unscrew and remove the screws holding the cover in place. (Save the screws.)
2. Slide the cover forwards. Lift it up and set it aside.



Prepare the Card Slot

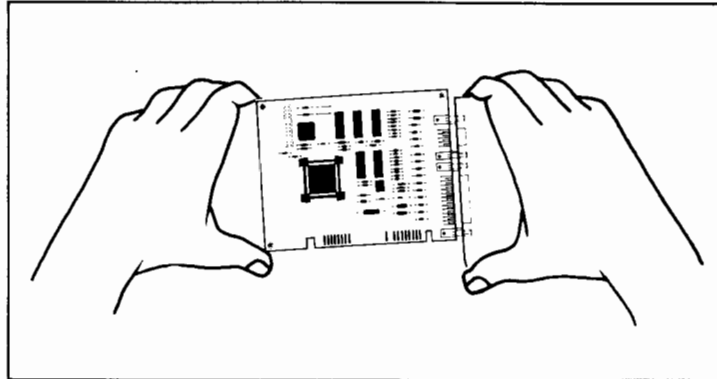
The card can go in any accessory slot in the computer. Choose a slot: a short slot to use the card as Serial Port 1 or 2; a long slot to use the card as Serial Port 1, 2, 3 or 4.

1. Unscrew and remove the screw holding the slot cover in place. (Save the screw.)
2. Remove the slot cover.



Prepare the Card

1. Discharge any static electricity from the card as follows: Hold the card in its anti-static bag in one hand and, with your other hand, touch any metal part on the back of the computer.
2. Remove the card from the anti-static bag - hold the card by the edge only.



Configure the Card

The card is equipped with two data communications ports (connectors). You must configure (set) the address of the ports according to your needs. In addition, you must set the card for the type of computer (Vectra/IBM PC/AT or IBM XT).

Note

If you have several communications accessory cards, ensure each port has a unique address.

Configuring the HP 24540B

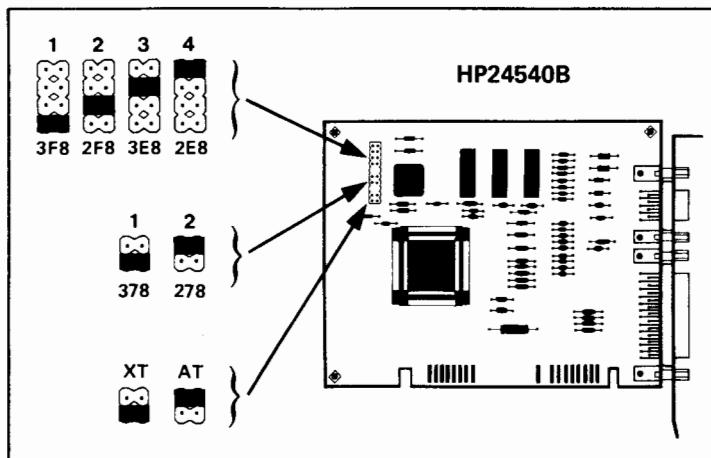
The HP 24540B has one 25-pin parallel port and one 9-pin serial port. When the card is delivered, the configuration is:

- 9-pin serial port as Serial Port 1 (hexadecimal address 3F8, Interrupt Request 4).

- 25-pin parallel port as Parallel Port 1 (hexadecimal address 378, Interrupt Request 7).
- For use in an HP Vectra PC or IBM PC or AT.

You change the configuration by moving the jumpers shown on the drawing below.

1. If supported by your applications, you can configure the 9-pin serial port as either:
 - a. Serial Port 2 (hexadecimal address 2F8, Interrupt Request 3).
 - b. Serial Port 3 (hexadecimal address 3E8, Interrupt Request 10).
 - c. Serial Port 4 (hexadecimal address 2E8, Interrupt Request 11).
2. If required by your applications, you can configure the 25-pin parallel port as Parallel Port 2 (hexadecimal address 278, Interrupt Request 5).
3. If you have an IBM XT, you must configure the card to work in an XT.



Configuring the HP 24541B

The HP 24541B has one 9-pin serial port (A) and one 25-pin serial port (B). The 25-pin port also provides for an HP-422 connection. When the card is delivered the configuration is:

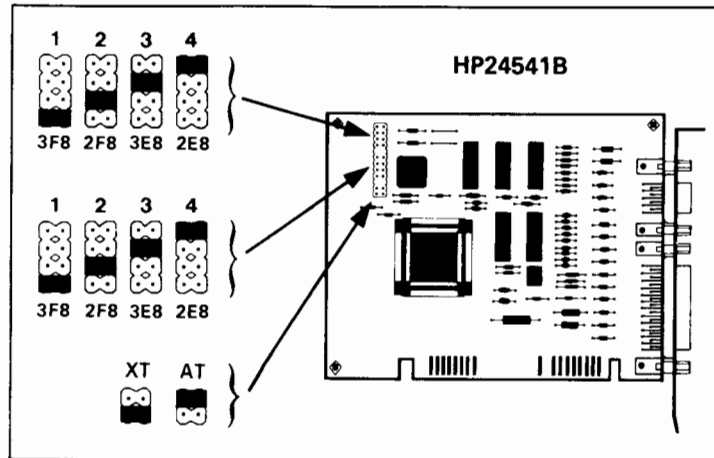
- 9-pin serial port (A) as Serial Port 2 (hexadecimal address 2F8, Interrupt Request 3).
- 25-pin serial port (B) as Serial Port 1 (hexadecimal address 3F8, Interrupt Request 4).
- For use in an HP Vectra PC or IBM PC or AT.

You can change the configuration by moving the jumpers as shown on the drawing below.

1. If required and supported by your application, you can configure the 9-pin serial port (A) as either:
 - a. Serial Port 1 (hex address 3F8, Interrupt Request 4).
 - b. Serial Port 2 (hex address 2F8, Interrupt Request 3).
 - c. Serial Port 3 (hex address 3E8, Interrupt Request 10).
 - d. Serial Port 4 (hex address 2E8, Interrupt Request 11).
2. You can also configure the 25-pin serial port (B) as Serial Port 1 to 4.

Ensure port A and port B have different port numbers. (If you configure port A and B with the same serial port number, port B will be disabled.)

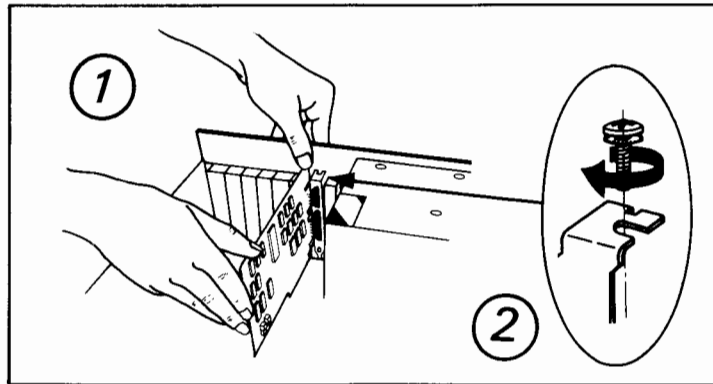
3. If you have an IBM XT, you must configure the card to work in an XT.



Install the Card

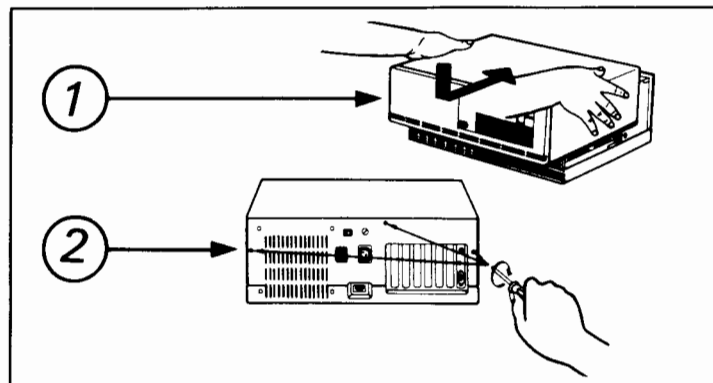
Note the card's configuration for future reference. Then:

1. Hold the card by its top edge. Press it firmly down into the connector block of the chosen slot.
2. Secure the card in place by replacing the screw that you removed when removing the slot cover.



Replace Everything You Removed

Replace the computer's cover (in the reverse order to how you removed it) and tighten the screws. Replace the monitor. Reconnect the cables - ensure all screws are tightened.





Connect Your Devices

Connect the card to your device using the appropriate cable listed below.

1. Plug the cable into the card's port and then into the device/host port. Tighten all screws.
2. Set up the device as described in its documentation. Configure your personal computer as described in its documentation - ensure the configuration matches that used in the device.

HP 24540B

Port	Cable	Device
9-pin Serial	HP 24542M	Modem/host computer (HP 3000)
	HP 24542H	HP 7550A, HP 7510A
	HP 24542G:	Printers: HP 2225D ThinkJet HP 2227A QuietJet-PLUS HP 2228A QuietJet HP 2686A LaserJet HP 2686A opt 200 LaserJet-PLUS HP 2686A opt 300 LaserJet-PLUS HP 2686D LaserJet 500-PLUS HP 2603A HP 2932A/HP 2934A Plotters: HP 7440A opt 001 ColorPro HP 7475A opt 001 HP 7580B/HP 7585B/HP 7586B
25-pin Parallel	HP 24542D:	HP 2225C ThinkJet HP 2227A QuietJet-PLUS HP 2228A QuietJet HP 2686A opt 210 LaserJet-PLUS HP 2686A opt 300 LaserJet-PLUS HP 2686D LaserJet 500-PLUS HP 2932A/HP 2934A opt 042

HP 24541B

Port	Cable	Device
9-pin Serial	HP 24542M	Modem/host computer (HP 3000)
	HP 24542H	HP 7550A, HP 7510A
	HP 24542G:	Printers: HP 2225D ThinkJet HP 2227A QuietJet-PLUS HP 2228A QuietJet HP 2686A LaserJet-PLUS HP 2686A opt 200 LaserJet-PLUS HP 2686A opt 300 LaserJet-PLUS HP 2686D LaserJet 500-PLUS HP 2603A HP 2932A/HP 2934A Plotters: HP 7440A opt 001 ColorPro HP 7475A opt 001 HP 7580B/HP 7585B/HP 7586B
25-pin Serial	HP 13242M/ HP 13242N	Modem/host computer (HP 3000)
	HP 13242P	HP 422 ↔ HP 3000
	HP 13242X	HP 232 ↔ HP 3000
	HP 13242G :	Printers: HP 2225D ThinkJet HP 2227A QuietJet-PLUS HP 2228A QuietJet HP 2686A opt 200 LaserJet-PLUS HP 2686A opt 300 LaserJet-PLUS HP 2686D LaserJet-PLUS HP 2603A HP 2932A/HP 2934A opt 042 Plotters: HP 7440A opt 001 ColorPro HP 7575A opt 001 HP 7580B/HP 7585B/HP 7586B
	HP 17255D	HP 7750A, HP 7510A