

Mainframe  
Features

HP Internet Advisor

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# Mainframe Features

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## **HP Internet Advisor**

**J2300C, J3446C, J3754C**

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## Contents

### Mainframe Features Overview

|  |     |
|--|-----|
| Introduction to HP Internet Advisor. . . . . | 1-2 |
| Introduction to this User's Guide. . . . .   | 1-3 |
| Product Matrix . . . . .                     | 1-4 |

### Hardware & Operating System Features

|   |      |
|---|------|
| Mainframe Specifications. . . . .                               | 2-2  |
| Apply Power to the Advisor. . . . .                             | 2-3  |
| Starting Applications from Windows 95 . . . . .                 | 2-4  |
| Starting Applications with the Alternate Boot Process . . . . . | 2-5  |
| Setting the Time and Date . . . . .                             | 2-7  |
| The Keyboard and Button Mouse. . . . .                          | 2-8  |
| Keyboard Operation LEDs . . . . .                               | 2-10 |
| The Display . . . . .   | 2-11 |
| Connecting an External Display Monitor . . . . .                | 2-11 |
| Set VGA Display Mode . . . . .                                  | 2-12 |
| Modem Selection . . . . .                                       | 2-13 |
| HP Demo Icons. . . . .  | 2-14 |
| Connecting a Printer. . . . .                                   | 2-15 |
| Selecting a Printer for Windows 95 applications . . . . .       | 2-16 |

### HP J2300C

|                              |     |
|------------------------------|-----|
| Hardware Features . . . . .  | 3-2 |
| Standard Connectors. . . . . | 3-4 |

### HP J3446C

|                              |     |
|------------------------------|-----|
| Hardware Features . . . . .  | 4-2 |
| Top Panel Label . . . . .    | 4-4 |
| Standard Connectors. . . . . | 4-5 |

### HP J3754C

|                             |     |
|-----------------------------|-----|
| Hardware Features . . . . . | 5-2 |
| Top Panel Label . . . . .   | 5-4 |

## **Interface Modules**

|   |     |
|---|-----|
| Interface Modules and Filler Panel . . . . .    | 6-2 |
| Install into a Mainframe . . . . .              | 6-2 |
| Remove from a Mainframe . . . . .               | 6-3 |
| Install or Remove from an Undercradle . . . . . | 6-5 |

## **Undercradles**

|   |      |
|---|------|
| Miscellaneous Bag of Parts . . . . .            | 7-2  |
| Attaching the Undercradle . . . . .             | 7-3  |
| Removing the Undercradle . . . . .              | 7-6  |
| The Empty Undercradle HP J2295A . . . . .       | 7-7  |
| Left Side of Undercradle . . . . .              | 7-7  |
| Right Side of Undercradle . . . . .             | 7-7  |
| Right Side Endcap Expander . . . . .            | 7-8  |
| Right Side Flat Endcap . . . . .                | 7-8  |
| Undercradle Bottom . . . . .                    | 7-9  |
| Undercradle Top . . . . .                       | 7-9  |
| Connector Board . . . . .                       | 7-10 |
| Silver Tabs . . . . .                           | 7-10 |
| Taking the Undercradle Apart . . . . .          | 7-11 |
| Installing printed circuit cards . . . . .      | 7-11 |
| Putting the Undercradle Back Together . . . . . | 7-12 |

## **Modem & Ethernet PC Cards**

|   |      |
|---|------|
| Introduction . . . . .                                      | 8-2  |
| Compatibility . . . . .                                     | 8-2  |
| PC Card General Tips . . . . .                              | 8-3  |
| Insertion and removal of the PC Card . . . . .              | 8-4  |
| Installing a PC Card . . . . .                              | 8-4  |
| Process to remove a PC Card . . . . .                       | 8-5  |
| System Identification of PC Card . . . . .                  | 8-5  |
| Properties of a PC Card operating with Windows 95 . . . . . | 8-6  |
| Installing Modem or Ethernet PC Card Drivers . . . . .      | 8-6  |
| Software Configuration . . . . .                            | 8-8  |
| Modem PC Cards . . . . .                                    | 8-12 |
| Modem PC Card setup in HP Toolkit . . . . .                 | 8-13 |
| 10/100 Ethernet PC Card Adapter . . . . .                   | 8-15 |
| 10/100 Ethernet PC Card Documentation . . . . .             | 8-16 |
| TDKModem PC Card Documentation . . . . .                    | 8-17 |

## Software

|   |     |
|---|-----|
| HP Internet Advisor Family of Products Software . . . . . | A-2 |
|---|-----|

## Specifications

|                                    |     |
|------------------------------------|-----|
| Physical Characteristics . . . . . | B-2 |
| Operating Conditions . . . . .     | B-4 |
| Safety Conditions . . . . .        | B-5 |
| Additional Help . . . . .          | B-5 |

## Windows 95 Operating System

|  |     |
|--|-----|
| Operating System . . . . .                     | C-2 |
| HP Toolkit (HP Internet Advisor WAN) . . . . . | C-2 |
| HP Internet Advisor LAN . . . . .              | C-2 |
| Installing Windows 95 Applications . . . . .   | C-3 |

## PC Card Modem

|  |     |
|--|-----|
| Overview of the Modem AT Command Set . . . . .       | D-2 |
| PC Card Modem AT Commands and Descriptions . . . . . | D-3 |

## Breakout Box, LEDs & Connectors

|  |      |
|--|------|
| RS-232/V.24 Breakout Box and System LEDs . . . . . | E-2  |
| Mark/Space Indicator . . . . .                     | E-3  |
| Source Voltage . . . . .                           | E-4  |
| Active Interface LEDs . . . . .                    | E-4  |
| Lead Status LEDs . . . . .                         | E-5  |
| V-Series Interfaces . . . . .                      | E-6  |
| RS-232C/V.24 . . . . .                             | E-7  |
| RS-449 . . . . .                                   | E-8  |
| V.35 . . . . .                                     | E-9  |
| Interface Pin-Out Comparison . . . . .             | E-10 |
| AUI - 100Base-T . . . . .                          | E-12 |
| MII - 100Base-T . . . . .                          | E-13 |
| MDI - 100Base-TX . . . . .                         | E-14 |

## Declarations of Conformity

|  |     |
|--|-----|
| J2294C CEPT-E1 DB9 & RJ45 . . . . .                                      | F-2 |
| J2300C Internet Advisor WAN . . . . .                                    | F-3 |
| J2306B/J2309B Ether/Ether/TR Interface<br>for Internet Advisor . . . . . | F-4 |

|   |      |
|---|------|
| J2307A LAN Token Ring Undercradle .....                                 | F-5  |
| J2524A FDDI Interface for LAN   |      |
| Internet Advisor .....  | F-6  |
| J2527A TIMS Undercradle for Internet Advisor .....                      | F-7  |
| J2900A High Speed Acquisition System .....                              | F-8  |
| J2904A ISDN BRI Module. ....  | F-9  |
| J2904B,J2293,94,96,97,98,99B ISDN Modules. ....                         | F-10 |
| J2905B ISDN BRI U Interface Module .....                                | F-11 |
| J2908A DDS 4-Wire Interface Module .....                                | F-12 |
| J2909A ATM Advisor Series .....   | F-13 |
| J2912A Internet Advisor ATM Series .....                                | F-14 |
| J2913A Internet Advisor ATM 155-UTP Module .....                        | F-15 |
| J3444A Fast Ethernet LAN Analyzer .....                                 | F-16 |
| J3445A 100 Base-FX Interface Module .....                               | F-17 |
| J3446C and J3447A Internet Advisor WAN .....                            | F-18 |
| J3754C Internet Advisor - pcAdvisor .....                               | F-19 |
| J3759A DS3/E3 Cells and Frames Module for<br>Internet Advisor ATM ..... | F-20 |
| J3762A HSSI Module for Internet Advisor ATM .....                       | F-21 |

## **Hewlett-Packard Sales Offices**

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## Safety Information

Before you use this instrument, be sure to pay special attention to the "Safety" and "Warning" sections in this Manual. Failure to comply with the precautions or with specific warnings in this book violates safety standards of design, manufacture, and intended use of this instrument. Hewlett-Packard Company assumes no liability for the customer's failure to comply with these requirements.

**Electric Shock Hazard.** Do not remove the system covers. To avoid electric shock, use only the supplied power cords and connect only to properly grounded (3-pin) wall outlets.

**Explosion Hazard.** Do not operate in the presence of flammable gases.

**Fire Hazard.** For continued protection against fire hazard replace only with fuse of same type and rating.

**Hazardous Material.** Should the LCD be damaged the liquid crystal material can leak. Avoid all contact with this material, especially swallowing. Use soap and water to thoroughly wash all skin and clothing contaminated with the liquid crystal material.

**Cleaning.** To clean the instrument, use a damp cloth moistened with a mild solution of soap and water. *Do not* use harsh chemicals. *Do not* let water get into the instrument.

**Product Damage.** Do not use this product when:

- the product shows visible damage,
- fails to perform,
- has been stored in unfavorable conditions, or
- has been subject to severe transport stresses.

Make the product inoperative and secure it against any unintended operation. Contact your nearest Hewlett-Packard Sales office for assistance.



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## Warning Symbols Used in This Book



Instruction book symbol - the product will be marked with this symbol when it is necessary for the user to refer to the instruction book in order to protect against damage.



A product marked with this symbol indicates it is a laser product. When necessary, this symbol will be included in the instruction book for the user to refer to in order to protect against personal injury and/or correct product handling.



Indicates potential for electrical shock.

---

### **WARNING**

---

An operating procedure, practice, etc. that, if not correctly followed could result in personal injury or loss of life.

---

### **CAUTION**

---

An operating procedure, practice, etc., that if not strictly observed, could result in damage to, or destruction of, equipment or software.

---

## Product Information

This is an Installation Category II product.

This is a Pollution degree 2 product.

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## Conventions Used in this Book

This manual uses the following conventions:

- Keys on the keyboard such as **PgDn**, **↑** **↓** , **Enter** or **F1** (function key #1) are printed in the bold as you see here.
- Text that should be typed is printed in characters such as:  
a:\install

---

### NOTE

---

An operating procedure, practice, or information of importance, separated from normal text.

---

## Operating Restrictions

The following warnings and operating information are shown in French (on the left side) with the English translation (on the right side).

---

### MISE EN GARDE

Cet appareil répond aux normes de la «Classe de sécurité I» et est muni d'un fil de mise à la terre pour votre protection.

---

### WARNING

This product is a Safety Class I instrument with a protective earth terminal.

---

### MISE EN GARDE

Pour prévenir les risques de choc électrique, la broche de mise à la terre du cordon d'alimentation ne doit pas être désactivée.

---

### WARNING

For protection from electric shock hazard, power cord ground must not be defeated.

---

### Restrictions d'utilisation

L'utilisateur se doit d'observer les mesures de précaution énumérées ci-dessous pour toutes les phases d'utilisation, de service et de réparation de cet appareil. Le fait de ne pas s'y conformer équivaut à ne pas respecter les mises en gardes spécifiques contenues dans ce manuel et constitue une violation des normes de sécurité relatives à la conception, la fabrication et l'utilisation prévue de cet appareil. La société Hewlett-Packard n'assume aucune responsabilité envers un client qui manquerait de se conformer à ces exigences.

### Mise à la terre

Afin de minimiser les risques de choc électrique, le châssis et le cabinet de l'appareil doivent être mis à la terre. L'appareil est équipé d'un cordon d'alimentation muni d'une fiche homologuée à trois lames, compatible c.a. La prise murale et la prise femelle de la rallonge électrique doivent respecter les normes de sécurité de la «Commission électrotechnique internationale» (IEC).

---

### Operating Restrictions

The following general safety precautions must be observed during all phases of operation, service, and repair of this instrument. Failure to comply with these precautions with specific warnings in this manual violate safety standards of design, manufacture, and intended use of this instrument.

### Grounding

To minimize shock hazard, the instrument chassis and cabinet must be connected to an electrical ground. The instrument is equipped with a three-conductor AC power cable compatible with an approved three-contact electrical outlet. The power jack and mating plug of the power cord must meet International Electrotechnical Commission (IEC) safety standards.

**Environnement**

Ne faites pas fonctionner cet appareil en présence de gaz inflammables ou de vapeurs dangereuses. L'utilisation de n'importe quel appareil électrique dans ces conditions constitue un risque élevé pour votre sécurité.

**Service et ajustement**

Des «tensions dangereuses» résident dans cet appareil. Par conséquent, le service et l'ajustement doivent être effectués uniquement par une personne qualifiée.

Ne remplacez pas de composants lorsque le cordon d'alimentation est sous tension. Il pourrait y avoir présence de «tensions dangereuses» même lorsque l'appareil est déconnecté.

Ne faites pas de service interne ou d'ajustement sauf en présence d'une autre personne, capable de prodiguer les premiers soins et de pratiquer la réanimation.

**Matière dangereuse**

Si l'affichage LCD est endommagé, la matière constituant les cristaux liquides peut se répandre. Éviter tout contact avec cette matière, et en particulier ne pas l'avaler. Utiliser de l'eau et du savon pour nettoyer soigneusement la peau et les vêtements qui auraient été contaminés par la matière constituant les cristaux liquides.

**Service non autorisé**

L'installation de pièces étrangères, ou toute modification apportée à l'appareil sans le consentement de Hewlett-Packard est formellement interdit. Le fait de procéder à de tels modifications sans autorisation pourrait entraîner l'annulation de la garantie de l'appareil ou de tout contrat de service.

Pour un service et des réparations autorisées, retournez l'appareil à un point de vente et service Hewlett-Packard.

**Environment**

Do not operate the instrument in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

**Service and Adjustment**

Dangerous voltages exist within this instrument. Service and adjustment of this instrument is to be performed only by trained service personnel.

Do not replace components with the power cable connected. Dangerous voltages may be present even when the power cable is disconnected.

Do not perform internal servicing or adjustment unless another person, capable of rendering first aid and resuscitation is present.

**Hazardous Material**

Should the LCD be damaged the liquid crystal material can leak. Avoid all contact with this material, especially swallowing. Use soap and water to thoroughly wash all skin and clothing contaminated with the liquid crystal material.

**Unauthorized Service**

The installation of substitute parts or the installation of any instrument modification not authorized by Hewlett-Packard is specifically forbidden. The performance of such unauthorized service can negate the instrument warranty or any maintenance agreements.

Return the instrument to a Hewlett-Packard Sales and Service Office for authorized service and repair.

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## Printing History

New editions are complete revisions of this book. Update packages may contain new or additional material and be released between editions. See the date of the current edition on the back cover of this book.

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**Mainframe Features Overview**

## Introduction to HP Internet Advisor

The HP J2300C, J3446C, and J3754C Internet Advisor Family of Products is designed for testing your network needs in combination with available WAN, LAN, ISDN, and ATM Interface Modules or Undercradles. Features are integrated through software.

The Advisor Family of Products lets you look at decoded protocol information as it is traveling across a network which lets you identify network problems quickly.

The HP Internet Advisor systems consist of various combinations of Mainframes, Interface Modules, Undercradles, and Software to help you:

- Connect
- Capture
- Comprehend.

---

## Introduction to this User's Guide

This manual provides information about hardware and operating system software features of the J2300C, J3446C, and J3754C HP Internet Advisor Family of Products. This guide was created so you can look in one place to find information about these features. Your literature package will include at least one "technology related" User's Guide for information relating to LAN, WAN or ATM applications.

If you have specific Microsoft® Windows®95 questions, refer to *Introducing Microsoft Windows 95*, which is included with your HP Internet Advisor literature package.



Mainframe Features Overview  
Product Matrix

Product Matrix

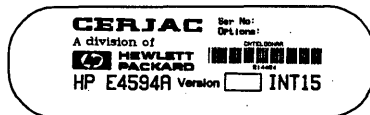
Table 1-1: HP J2300C, J3446C, and J3754C Mainframes and supported Undercradles

| Mainframes<br>→                   | J2300C | J3446C            | J3754C    |
|-----------------------------------|--------|-------------------|-----------|
| ↓ Undercradles                    | WAN    | Fast Ethernet LAN | pcAdvisor |
| J2295A                            | X      | X                 |           |
| J2306A<br>Eth LAN                 | X      | X                 | X         |
| J2306B<br>Eth LAN                 | X      | X                 | X         |
| J2307A<br>Token Ring LAN          | X      | X                 | X         |
| J2309A<br>Eth/TR LAN              | X      | X                 | X         |
| J2309B<br>Eth/TR LAN              | X      | X                 | X         |
| J2524A<br>FDDI                    | X      | X                 | X         |
| J2527A<br>TIMS                    | X      |                   |           |
| *J2900A<br>High Speed Acquisition | X      | X                 | X         |
| J3444A<br>Fast Eth                | X      |                   | X         |
| E4594A<br>TELCO                   | X      |                   |           |
| E6323A<br>E1 TELCO                | X      |                   |           |

X = Supported Now  
NOTE: \* A J2900A High Speed Acquisition Undercradle will accept any ATM Interface Module. See Table 1-3.

**NOTE**

Any HP E4594A Telco Undercradle without a E4594A Serial number label that includes the phrase "INT 15," must be modified at your nearest HP Service Center in order to operate correctly with the HP J2300C Internet Advisor.



**Table 1-2: HP J2300C Mainframe and supported Interface Modules**

| Mainframe<br>→   | J2300C<br>WAN |
|--|---------------|
| ↓<br>Interface<br>Modules  |               |
| J2293B<br>PRI-E1   | X             |
| J2294B<br>PRI-E1   | X             |
| J2294C<br>PRI-E1   | X             |
| J2296B<br>PRI-E1   | X             |
| J2297B<br>PRI-E1   | X             |
| J2298B<br>PRI-T1   | X             |
| J2299B<br>PRI-T1   | X             |
| J2904A<br>ISDN<br>BRI S/T  | X             |
| J2904B<br>ISDN<br>BRI S/T  | X             |
| J2905B<br>ISDN<br>BRI S/T & U  | X             |
| J2908A<br>DDS 4-Wire   | X             |
| J2909A<br>ATM DS-3   | X             |
| J2911A<br>ATM J2   | X             |
| J2912A<br>ATM OC-3   | X             |
| J2913A<br>ATM-UTP  | X             |
| J3759A<br>ATM DS3/E3   | X             |
| J3762A<br>ATM HSSI   | X             |
| <b>X =Supported Now</b>  |               |
| NOTE:<br>* Original T1 and E1 Interface Modules can also be used with the J2300C.<br>** Test Advisor Series Interface Modules are not compatible with HP Internet Advisor. |               |

**Mainframe Features Overview  
Product Matrix**

**Table 1-3: HP J3446C Mainframe and supported Interface Modules**

|                                      |                                    |
|--------------------------------------|------------------------------------|
| <b>Mainframe</b><br>→                | <b>J3446C</b><br>Fast Ethernet LAN |
| ↓<br><b>Interface Module</b>         |                                    |
| <b>HP J3447A</b><br><b>100BaseFX</b> | <b>X</b>                           |
| <b>X =Supported Now</b>              |                                    |

**Table 1-4: Interface Modules for use with a HP J2900A High Speed Acquisition Undercradle**

| Mainframes<br>→  | J2300C<br>WAN           | J3446C<br>Fast Ethernet LAN | J3754C<br>pcAdvisor     |
|--|-------------------------|-----------------------------|-------------------------|
|  | With J2900A Undercradle | With J2900A Undercradle     | With J2900A Undercradle |
| Interface Modules<br>↓   |                         |                             |                         |
| *J2293B<br>PRI-E1  | X                       | X                           | X                       |
| *J2294B<br>PRI-E1  | X                       | X                           | X                       |
| *J2294C<br>PRI-E1  | X                       | X                           | X                       |
| *J2296B<br>E1  | X                       | X                           | X                       |
| *J2297B<br>E1  | X                       | X                           | X                       |
| *J2298B<br>T1  | X                       | X                           | X                       |
| *J2299B<br>T1  | X                       | X                           | X                       |
| J2909A<br>ATM DS-3   | X                       | X                           | X                       |
| J2911A<br>ATM J2   | X                       | X                           | X                       |
| J2912A<br>ATM OC-3   | X                       | X                           | X                       |
| J2913A<br>ATM-UTP  | X                       | X                           | X                       |
| J3759A<br>ATM DS3/E3   |                         |                             |                         |
| J3762A<br>ATM HSSI   |                         |                             |                         |
| <b>X =Supported Now</b>  |                         |                             |                         |
| NOTE:<br>*You can use these T1 or E1 Interface Modules in the undercradle for ATM measurements only (these Interface Modules are not presently supported in the undercradle for other testing applications). |                         |                             |                         |
| ** Test Advisor Series Interface Modules are not compatible with HP Internet Advisor.  |                         |                             |                         |

**Mainframe Features Overview  
Product Matrix**

**Table 1-5: Interface Modules for use with a HP J3444A Undercradle**

|                                |                      |
|--------------------------------|----------------------|
| Mainframe<br>→                 | <b>J2300C</b><br>WAN |
| ↓<br>Interface<br>Modules      |                      |
| Media Independent<br>Interface | X                    |
| J3445A<br>Fiber Interface      | X                    |
| X =Supported Now               |                      |

**Table 1-6: External Pod for use with a HP J2300C Mainframes**

|                           |                      |
|---------------------------|----------------------|
| Mainframes<br>→           | <b>J2300C</b><br>WAN |
| ↓<br>External Pod         |                      |
| HP 18294A<br>X.21 I/F Pod | X                    |
| X =Supported Now          |                      |



---

## Mainframe Specifications

The HP J2300C, J3446C, and J3754C Internet Advisor Family of Products have an Intel Pentium P5 Chip, a 133 MHz processor, 32 Mbytes of PC memory, a 1.44 MB flexible disk drive, and a 3 gigabyte hard drive. In addition, each Mainframe has a PC Card Type III slot, serial port, parallel port, external monitor port, microphone input jack, and an external audio output jack. The Mainframes have available options of: a 33.6 Kbps Modem PC Card and/or a 10/100 Mbps Ethernet PC Card.

There are two speakers in the Mainframes for sound output. Volume control is included in the software. External speakers or a headset may be plugged into the jack labeled, "PHONES".

The following table shows additional features available with the various Mainframes.

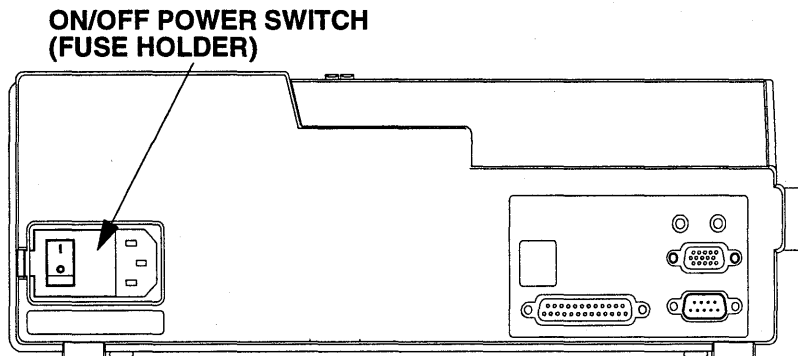
**Table 2-1: Additional Features**

| Feature   | J2300C | J3446C |
|---|--------|--------|
| Telephone handset                                 | X      |        |
| RS-232  | X      |        |
| RS-449  | X      |        |
| V.35  | X      |        |
| Ethernet AUI                                      |        | X      |
| Fast Ethernet MII                                 |        | X      |
| 100Base-TX/<br>10Base-T<br>Ethernet<br>connectors |        | X      |

---

## Apply Power to the Advisor

Connect the AC power cable (either 115V or 230V) as shown below. The mainframe automatically determines whether the power connection is 115V or 230V. To start the mainframe, turn the power on. The ON-OFF power switch is located on the left side adjacent the power cable connector.



**Figure 2-1: Mainframe AC Power Connection**

If the Mainframe will not power-up, check the following:

- Power cable connections are good
- AC power is available at the outlet
- Examine the fuse

---

### **CAUTION**

The Mainframe comes with a three-conductor power cable that grounds the Advisor when it is connected to an appropriate power outlet. Do not operate without ground protection.

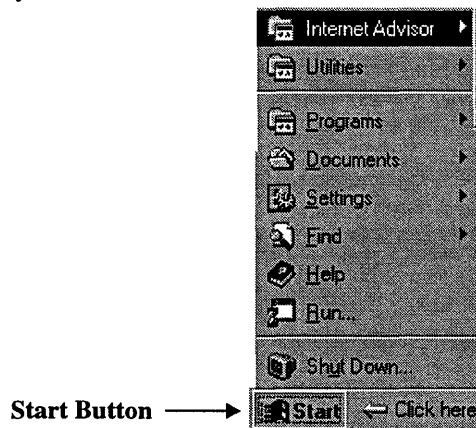
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## Starting Applications from Windows 95

The first time you start the Mainframe with software installed, Microsoft Corporation requires you provide some information to complete the configuration of your instrument. There are dialog boxes which prompt you for information. You can accept the default selection by pressing **ENTER**.

All of your applications can be started from Windows 95. Windows 95 offers a convenient and centralized access point for the HP Internet Advisor software, as well as other applications you may want to install. To start an application, select the Start button to display the Start menu or press either of the Microsoft “flag” keyboard keys.



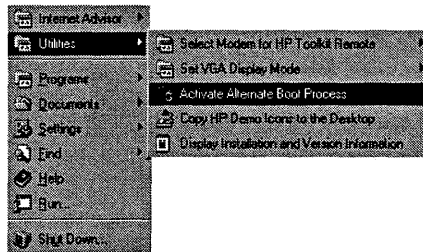
**Figure 2-2: Location of Start button**

---

## Starting Applications with the Alternate Boot Process

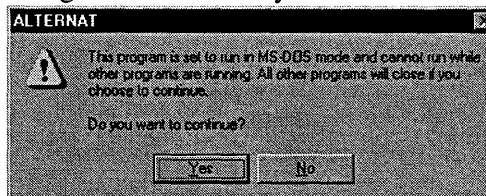
The HP Internet Advisor Family of Products let you use an alternate boot process from Windows 95 MS-DOS Compatibility Mode (MS-DOS mode). If you mainly use the HP Internet Advisor LAN or the WAN High Speed Toolkit and you don't use Windows 95 frequently, you can activate this option to set MS-DOS mode as your default operating system. The MS-DOS mode Startup Menu gives you direct access to these applications.

To start the Alternate Boot Process select:  
| Start | Utilities | Activate Alternate Boot Process |.



**Figure 2-3: Alternate Boot Process**

The next dialog screen confirms you want to continue with the alternate boot.



**Figure 2-4: Re-boot dialog box**

Hardware & Operating System Features  
**Starting Applications with the Alternate Boot Process**

**MS-DOS mode Startup Menu**

Your choices from this point are:

Internet Advisor WAN (This takes you to a WAN sub-menu)

Internet Advisor LAN (This takes you to a LAN sub-menu.)

Windows 95 (This reboots the computer to Windows 95 and makes it your default operating system.)

Command Prompt

Set Menu Default(s) (A feature intended for LAN remote users but may be used for starting specific LAN applications.)

You are prompted to make a numeric choice then press **ENTER**.

When you cycle the power, the HP Internet Advisor will boot to the MS-DOS mode Startup Menu. To return to the Windows 95 Start menu, select Windows 95 in this menu.

If you choose Command Prompt, you will be at the prompt for MS-DOS mode. To return to the MS-DOS mode Startup Menu, press **CTRL, ALT, DELETE** (to reboot computer) or cycle power to your HP Internet Advisor.

---

**NOTE**

Remote users please refer to the *HP Internet Advisor LAN - PC Remote User's Guide* for the process of rebooting from the master machine while still maintaining your remote connections. For users exiting from a LAN Application (other than Remote), you may be at the prompt for MS-DOS mode. To return to the MS-DOS mode Startup Menu, press **CTRL, ALT, DELETE** (to reboot computer) or cycle power to your HP Internet Advisor.

---

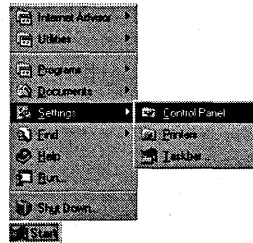
## Setting the Time and Date

The time and date features are used for many of the applications and reports generated by the HP Internet Advisor Family of Products. It is important to set your local time and date when you receive your HP Internet Advisor. Setting the time and date also updates system configuration files. The time and date are maintained even when power to the HP Internet Advisor is off.

There are several methods for setting the time and date using Microsoft® Windows® 95.

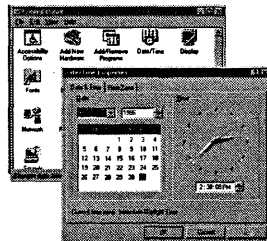
To set the time and date

select: | Start | Settings | Control Panel |.



**Figure 2-5: Control Panel**

From the Control Panel, double-click on the Date/Time icon. This brings up the Date/Time Properties. From this screen, you can change the date and time as needed.



**Figure 2-6: Date/Time Properties**

---

## The Keyboard and Button Mouse

The keyboard includes 88 keys with the integrated Button Mouse Joystick. See the following figure. The left and right mouse keys are located below the space bar on the chassis of the Internet Advisor Family of Products. The Button Mouse responds quickly to pressure and the cursor will move in the direction and with the desired speed equal to pressure applied to the Button Mouse.

The keyboard has three extra keys - two Windows 95 keys and one application key. The two Windows 95 keys will automatically bring up the Start Menu and the application key responds the same as pressing the right mouse key on any selected area of focus. There are 12 function keys.

The HP Internet Advisor Family of Products ship with a Microsoft Serial Mouse (part number 1150-1894) that may be used instead of the Button Mouse.

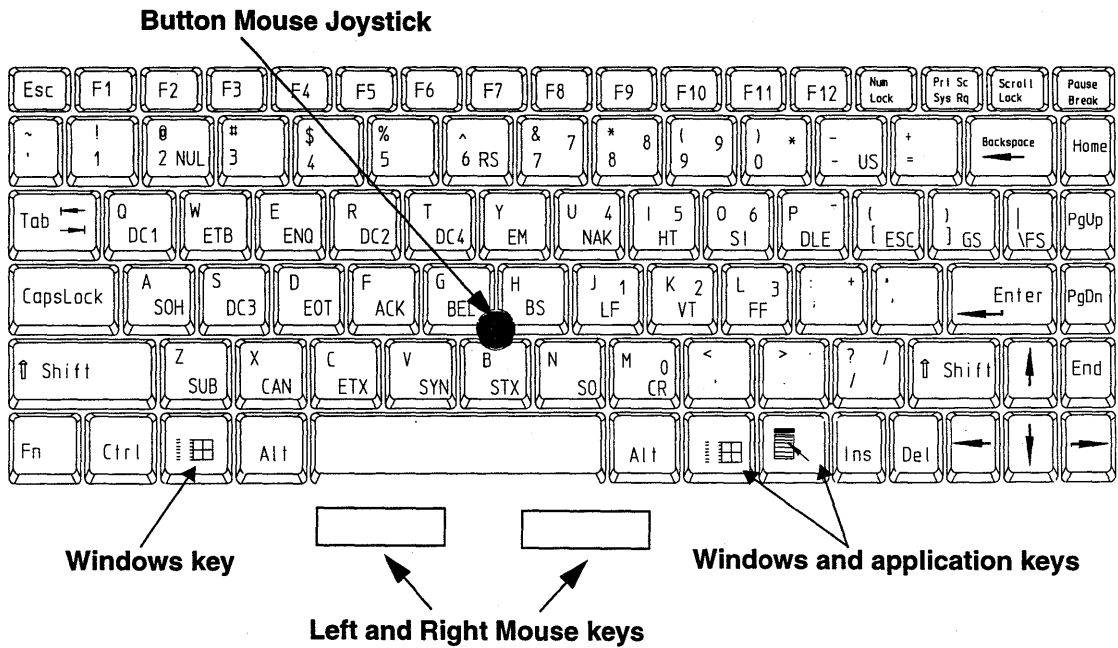
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### **NOTE**

If you need to replace the Keyboard-Button Cover (the Button Mouse cover) of your keyboard, please call the U.S.A. Technical Response Center at 1-800-698-0061. The replacement part number is 4320-0445.

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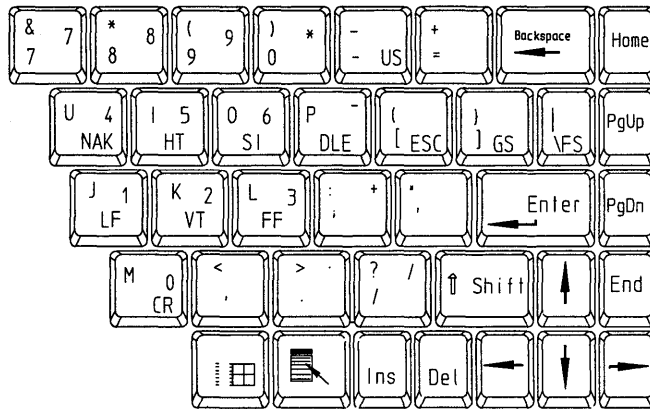
Control characters are available. To use the control characters, hold down the **CTRL** key and press the control character you want. The control characters and their corresponding keys are shown in the following figure.



**Figure 2-7: HP Internet Advisor Family of Products Keyboard**

## Hardware & Operating System Features The Keyboard and Button Mouse

By pressing the **Num Lock** key, you can use the numeric keypad. The following figure shows the numeric keypad locations and numeric equivalents.



**Figure 2-8: Numeric Keypad**

### Keyboard Operation LEDs

Located above the keyboard is a group of five LEDs that show keyboard functions when they are active. These are:

- Power On
- Caps Lock
- Num Lock
- Scroll Lock
- Hard Disk

---

## The Display

The standard display for the HP J2300C Mainframe is a 26.5 cm diagonal (10.4 inch) passive DSTN color LCD VGA. Also available is Option 221 for J2300C which is a 26.5 cm diagonal (10.4 inch) active matrix TFT color SVGA display.

The standard display for the HP J3446C and J3754C Mainframes is a 26.5 cm diagonal (10.4 inch) active matrix TFT color SVGA display.

There is a contrast control thumb-wheel adjustment located on the left side of the passive color LCD VGA display.

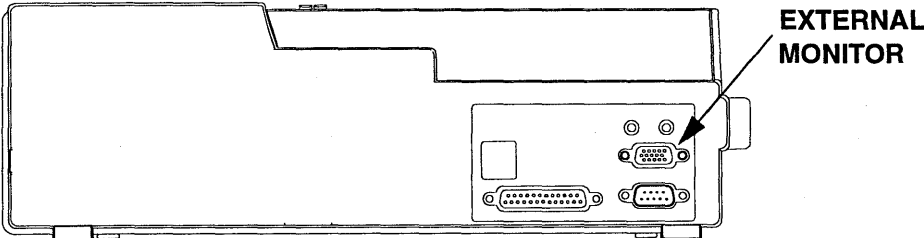
If you have an Active SVGA display, then the external monitor display is SVGA resolution 800x600.

If you have a passive VGA color display, then the external monitor display is VGA resolution 640x480.

---

## Connecting an External Display Monitor

You can connect an external display monitor to the HP Internet Advisor Family of Products. Several external display monitors are available from Hewlett-Packard.



**Figure 2-9: External Monitor Port**



## Hardware & Operating System Features

### The Display

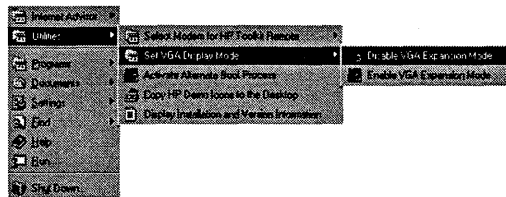
#### To connect an External Monitor Display:

1. Set the HP Internet Advisor power switch to OFF.
2. Connect the monitor cable to the EXT MONITOR connector on the Mainframe. When you power-on the Mainframe it automatically detects if an external display is attached.

---

### Set VGA Display Mode

You can select the MS-DOS VGA display mode of your Advisor. The choices are: Disable VGA Expansion Mode or Enable VGA Expansion Mode.

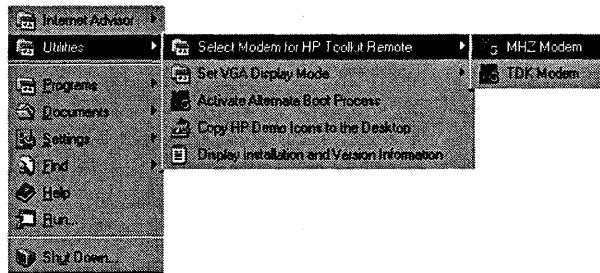


**Figure 2-10: Select VGA Display Mode**

---

## Modem Selection

You may select either the MHZ Modem or the TDK Modem for HP Toolkit applications by selecting: | Utilities | Select Modem for HP Toolkit Remote |.



**Figure 2-11: Modem Selection**

The default modem is the TDK Modem.

---

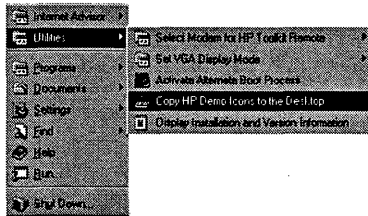
## HP Demo Icons

When you make the selection of “Copy HP Demo Icons to the Desktop,” the program will copy the HP Demo Icons to your Desktop. These icons offer you quick access to some specific tests.

You may also create your own “Shortcut” icons for any object, including files, folders, disk drives, other computers, or printers. Please refer to *Introducing Microsoft Windows 95*, (included with your HP Internet Advisor literature package) for more information on “Shortcut” icons.

To activate the HP Demo Icons select:

| Start | Utilities | Copy HP Demo Icons to the Desktop |.



**Figure 2-12: HP Demo Icons**

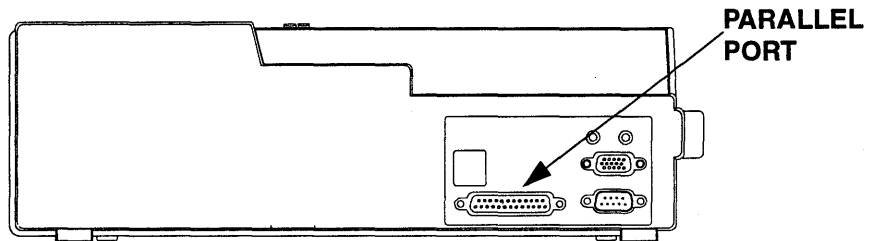
If you want to remove the demo icons from your desktop, highlight them either one by one or all of them and press the **DEL** key.

---

## Connecting a Printer

The mainframe is shipped with printer output routed to the PARALLEL PORT connector on the side panel. See Figure 2-13.

A printer can be connected to the mainframe so that you can print files, help topics, and measurements results.



**Figure 2-13: Printer Connection**

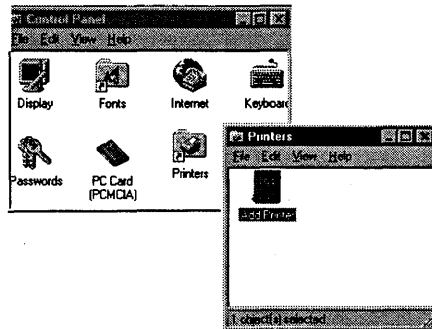
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## Selecting a Printer for Windows 95 applications

The Advisor's default printer selection is No Printer. If you want to use a printer with your Advisor, you must select the printer driver and output port.

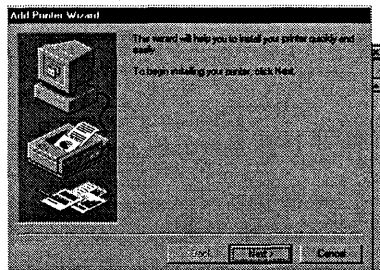
### To select a printer:

From the Windows 95 desktop, select: | Start | Settings | Control Panel | then double-click the Printers icon.



**Figure 2-14: Printers icon**

Double-click on the Add Printer icon. Use the Add Printer Wizard window to select the printer driver and port you want to use.



**Figure 2-15: Add Printer Wizard**

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3

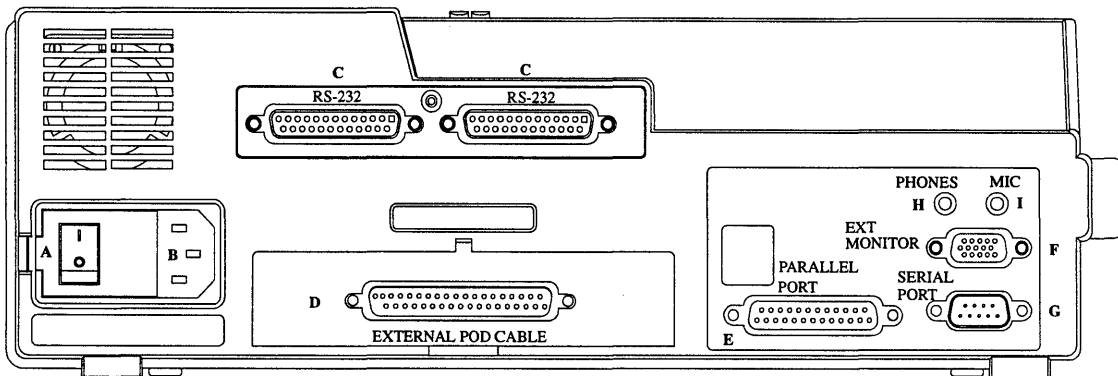
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**HP J2300C**

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## Hardware Features

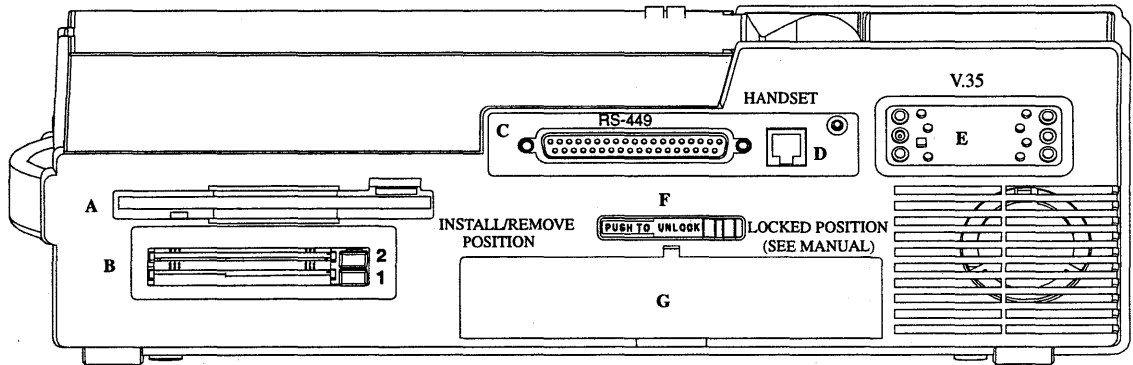
Figures 3-1 and 3-2 show the locations of the various connectors and plug-in features of the HP J2300C Internet Advisor.



**Figure 3-1: Left side of HP J2300C Internet Advisor**

The left side of the HP Internet Advisor contains the following:

- A. On-Off Switch
- B. Power cable receptacle
- C. Two RS-232/V.24 connectors
- D. External Interface connector
- E. Parallel Port
- F. External Monitor
- G. Serial Port
- H. Headphones
- I. Microphone



**Figure 3-2: Right side of the HP J2300C Internet Advisor**

The right side of the HP Internet Advisor contains the following:

- A. 3-1/2 inch high density flexible disk drive
- B. Dual PC Card slots
- C. RS-449 connector
- D. Handset connector
- E. V.35 connector
- F. Module Release Latch for Interface Modules
- G. Interface Module slot



---

## Standard Connectors

The HP J2300C Internet Advisor comes with standard connectors for:

- RS-232C/V.24
- RS-449
- V.35

For pin assignments please see Appendix E.

---

4

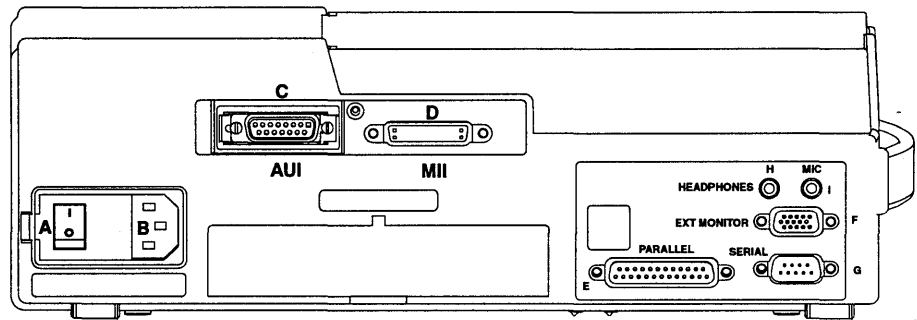
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**HP J3446C**

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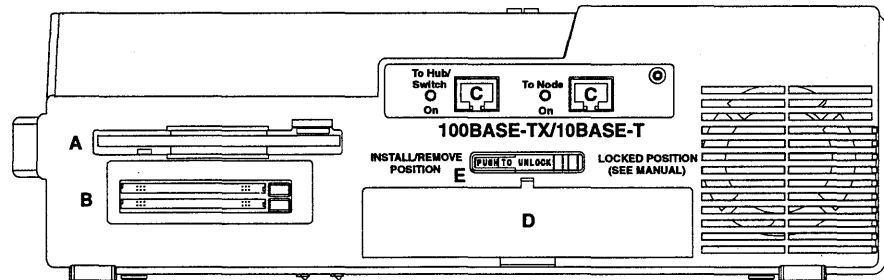
## Hardware Features

Figure 4-1 and Figure 4-2 show the locations of the various connectors and plug-in features of the HP J3446C Internet Advisor.



**Figure 4-1: Left side of the HP J3446C Internet Advisor**

- A. On-Off Switch
- B. Power Cord receptacle
- C. Ethernet (AUI)
- D. Fast Ethernet (MII)
- E. Parallel Port
- F. External Monitor
- G. Serial Port
- H. Headphones
- I. Microphone



**Figure 4-2: Right Side of the HP J3446C Internet Advisor**

The right side of the HP Internet Advisor J3446C contains the following:

- A. 3 1/2 inch high density flexible disk drive
- B. PC Card Slot
- C. 100Base-TX/10Base-T Ethernet connector
- C. 100Base-TX/10Base-T Ethernet connector
- D. Interface Module slot
- E. Module Release Latch for Interface Modules

There are Interface Modules available for use with the HP Internet Advisor J3446C. See Chapter 1, page 1-5 to 1-10 for Interface Module configurations with Mainframes and Undercradles.

---

## Top Panel Label

Shown below is the Top Panel Label and removable LED Label for the J3446C.

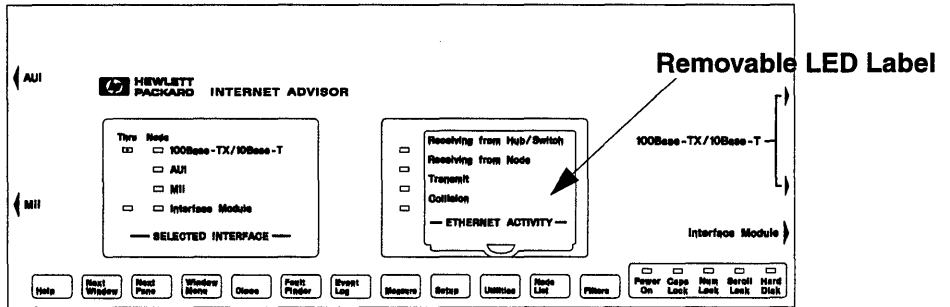


Figure 4-3: J3446C Top Panel Label

---

## Standard Connectors

The HP J3446C Internet Advisor comes with standard connectors for:

- AUI - 100Base-T
- MII - 100Base-T
- MDI - 100Base-TX/10 BASE-T

For pin assignments please see Appendix E.

HP J3446C  
**Standard Connectors**

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5

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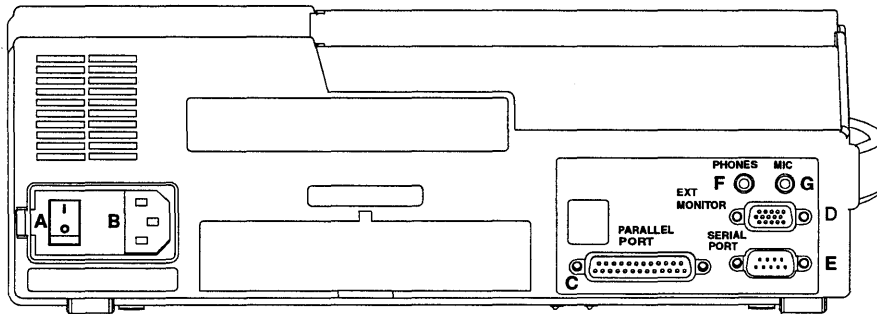
**HP J3754C**



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## Hardware Features

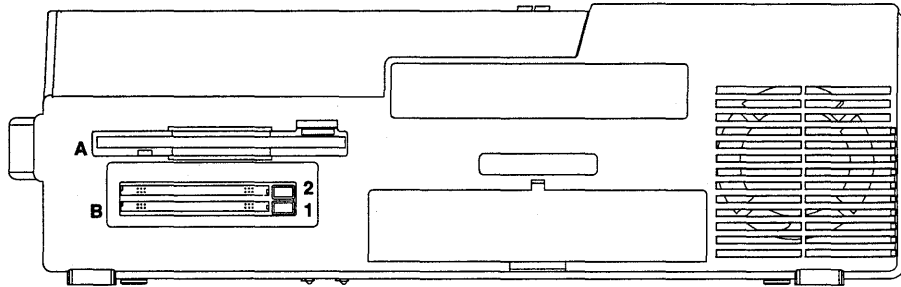
Figures 5-1 and 5-2 show the locations of the various connectors and plug-in features of the HP J3754C pcAdvisor.



**Figure 5-1: Left side of HP J3754C pcAdvisor**

The left side of the HP pcAdvisor contains the following:

- A. On-Off Switch
- B. Power cable receptacle
- C. Parallel Port
- D. External Monitor
- E. Serial Port
- F. Headphones
- G. Microphone



**Figure 5-2: Right side of the HP J3754C pcAdvisor**

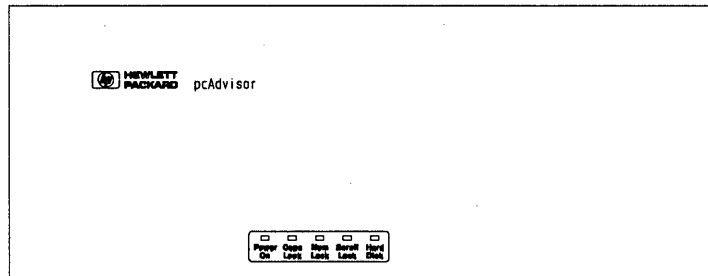
The right side of the HP pcAdvisor contains the following:

- A. 3-1/2 inch high density flexible disk drive
- B. Dual PC Card slots

---

## Top Panel Label

Shown below is the Top Panel Label for the J3754C.



**Figure 5-3: J3754C Top Panel Label**

---

**Interface Modules**

---

## Interface Modules and Filler Panel

There are several Interface Modules and one Filler Panel available for use with the HP Internet Advisor. The Filler Panel acts as a cover for the Interface Module slot when no Interface Module is installed.

See Chapter 1, page 1-5 to 1-10 for Interface Module configurations with the Internet Advisor and Undercradles.

---

### Install into a Mainframe

---

#### **CAUTION**

The HP Internet Advisor must have the power turned off whenever you are installing or removing any HP Interface Module.

#### **To install an Interface Module or Filler Panel:**

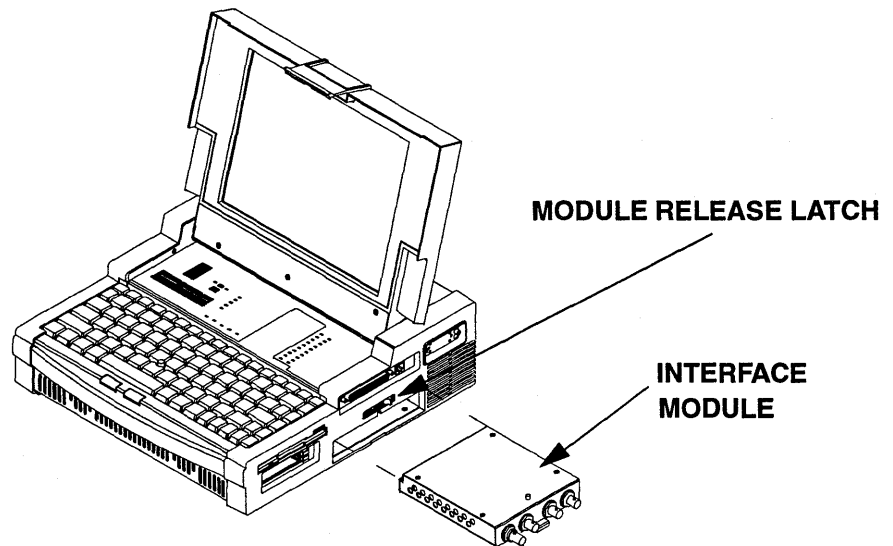
1. Make sure the Module Release Latch is in the Install/Remove Position.
2. Slide the Interface Module or Filler Panel into the opening of the HP Internet Advisor.
3. Push it firmly into place until it is seated and the Module Release Latch moves to the Locked Position (however, the Module Release Latch doesn't move when you install a Filler Panel). You will need to push the Module Release Latch with your thumb to get the latch into its locked position.

---

## Remove from a Mainframe

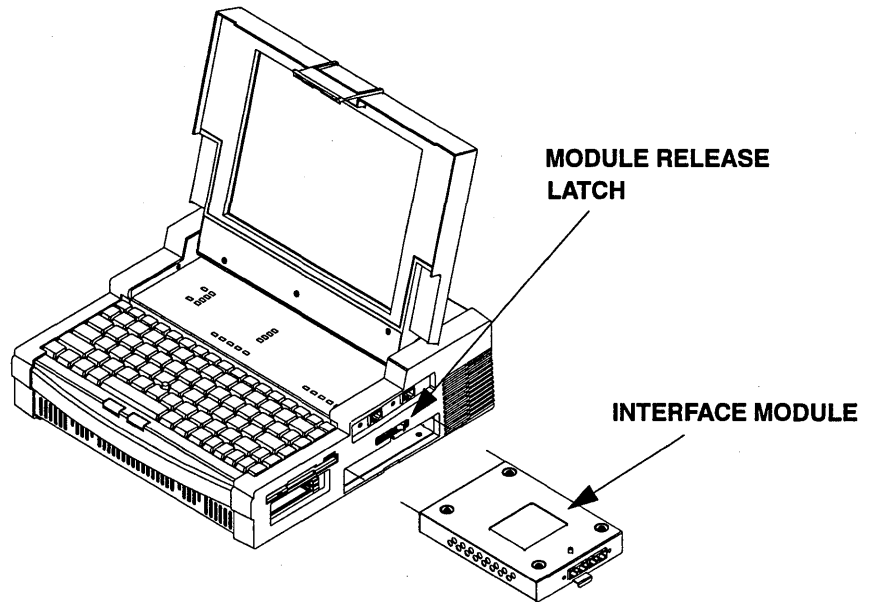
### To remove an Interface Module or Filler Panel:

1. Depress the left end of the Module Release Latch (labeled “PUSH TO UNLOCK,”) then slide the latch toward the left (Install/Remove Position).
2. Pull the Interface Module or Filler Panel out of the HP Internet Advisor.

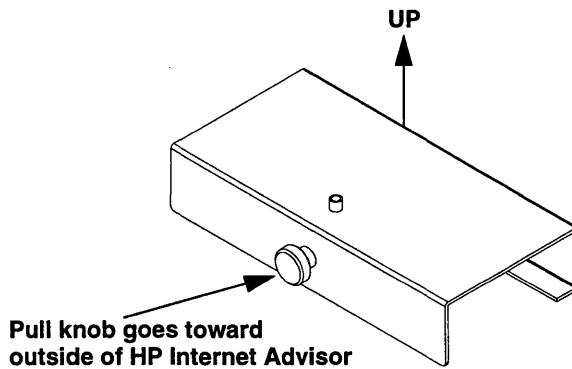


**Figure 6-1: Install or Remove an Interface Module from J2300C**

**Interface Modules**  
**Interface Modules and Filler Panel**



**Figure 6-2: Install or Remove an Interface Module from J3446C**



**Figure 6-3: Install or Remove Filler Panel**

---

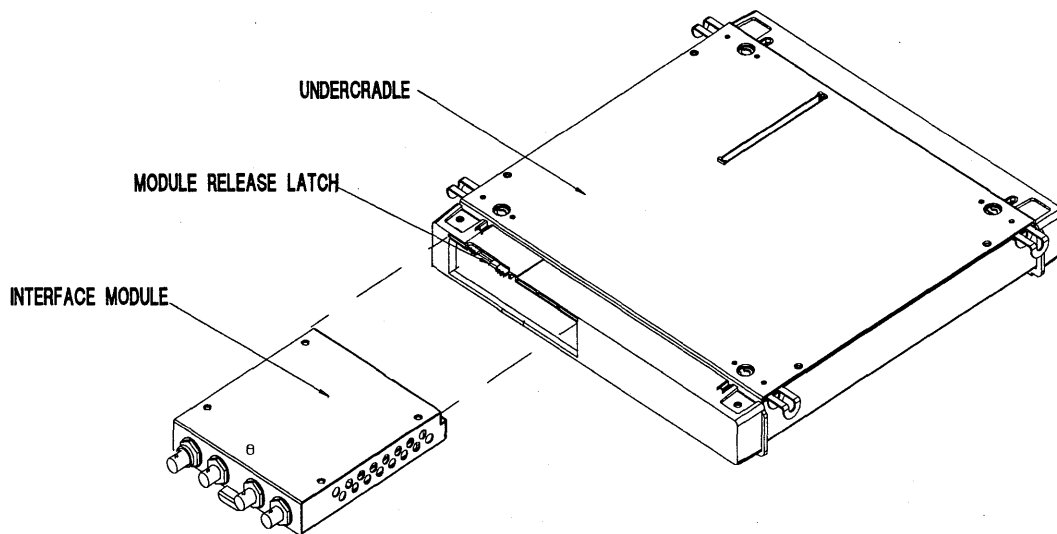
## Install or Remove from an Undercradle

### To install an Interface Module into an undercradle:

1. Slide the module into the opening of the undercradle.
2. Push it into place until it is seated. See the following figure for more details.

### To remove an Interface Module from an undercradle:

1. Slide the Module Release Latch towards the left.
2. Pull the Interface Module out of the undercradle.



**Figure 6-4: Install or Remove Interface Module - Undercradle**



Interface Modules  
**Interface Modules and Filler Panel**

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7

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**Undercradles**

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## Miscellaneous Bag of Parts

Included with each HP Internet Advisor and Undercradle order is a small plastic bag which includes the following:

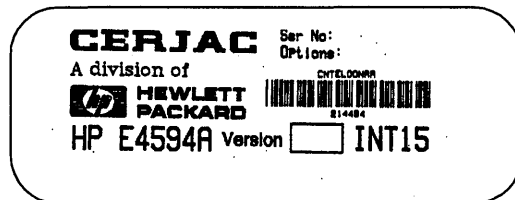
- 4 rubber feet
- 4 Torx screws (for the Undercradle)
- 2 Torx screws (not needed for HP J2300C and J3446C)
- 1 Right side endcap expander
- 1 Torx wrench
- 1 Small flat endcap
- 1 connector board
- 2 Grounding Strips (not needed for HP J2300C and J3446C)

Installation instructions for these parts are explained throughout this chapter. Some of these parts may or may not be included with your order depending on your particular configuration. Also, some of these parts may not be used with your instrument.

---

### NOTE

Any HP E4594A Telco Undercradle without the new E4594A Serial number label that includes the phrase "INT 15," must be modified at your nearest HP Service Center in order to operate correctly with the HP J2300C and J3446C Internet Advisor.



---

## Attaching the Undercradle

You can add an Undercradle to your HP Internet Advisor that lets you perform various functions including LAN, TMS, FDDI, or ATM testing.

### **To attach an Undercradle to your HP Internet Advisor:**

---

#### **CAUTION**

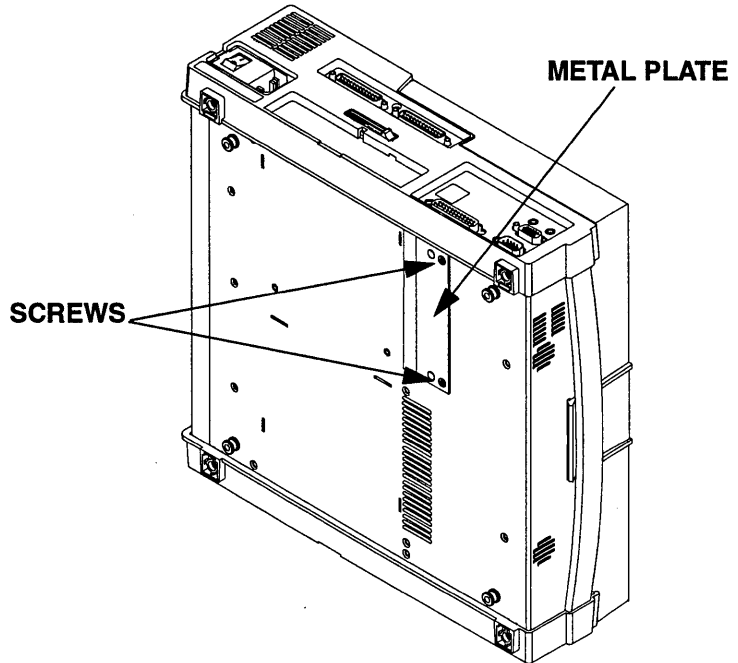
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Turn off and disconnect the HP Internet Advisor from the power source.

1. If the metal plate (on the bottom of the Internet Advisor) is covering the opening for the Undercradle to attach to, then remove the two screws from the metal plate. Use the wrench provided in the miscellaneous parts kit (or a T10 Torx screwdriver) to remove the screws.

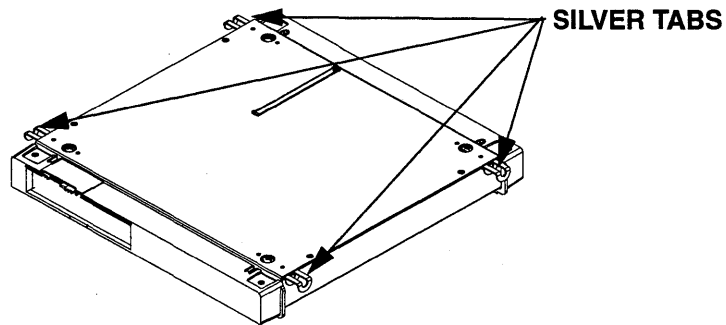
**Undercradles**  
**Attaching the Undercradle**

2. Slide the metal plate over to the next set of drilled holes in the metal plate and reattach it (with the same screws you removed in the previous step). This will leave an opening for your connector board to be installed into. After installing the screws, they should be flush with the metal plate. See the following figure.



**Figure 7-1: Location of metal plate and screws**

3. Insert the connector board into the slot uncovered by the metal plate.
4. Make sure all four silver tabs on the top of the Undercradle are pulled out.
5. Place the HP Internet Advisor on top of the Undercradle, matching the connector on the bottom of the HP Internet Advisor to the connector on the top of the Undercradle.
6. Push in the four silver tabs, locking the Undercradle to the HP Internet Advisor.



**Figure 7-2: Location of silver tabs**

---

## Removing the Undercradle

1. Turn off power and unplug the HP Internet Advisor.
2. Pull out the four silver tabs on the front and the back of the Undercradle.
3. Lift the HP Internet Advisor away from the Undercradle.

---

### **CAUTION**

---

The HP Internet Advisor must have the power turned off whenever you are installing or removing any HP Undercradle.

---

## The Empty Undercradle HP J2295A

The empty Undercradle (J2295A) is available which lets you add one or two of your own ISA compatible printed circuit cards to customize your HP Internet Advisor.

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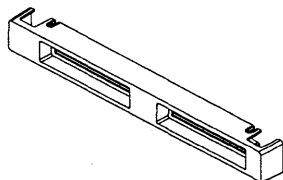
### **WARNING**

---

Be sure the HP Internet Advisor is turned off and disconnected from any power source before you begin any assembly or disassembly procedures.

### **Left Side of Undercradle**

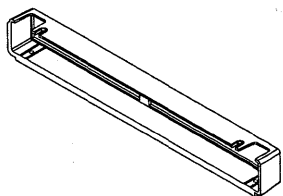
The Undercradle left side is the plastic piece with indented slots. Note the top of the left side has open slots, and the bottom has rubber foot indentations.



**Figure 7-3: Left Side of Undercradle**

### **Right Side of Undercradle**

The Undercradle right side is the plastic piece with two large cutouts. Note the top of the left side has open slots, and the bottom has rubber foot indentations.

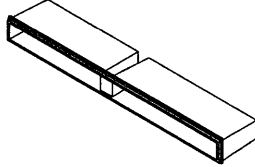


**Figure 7-4: Right Side of Undercradle**



## Right Side Endcap Expander

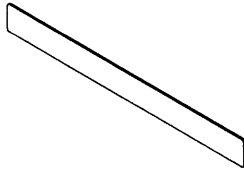
The Undercradle right side endcap expander is the plastic insert that goes into the right side if you are using full-length printed circuit cards.



**Figure 7-5: Right Side Endcap Expander**

## Right Side Flat Endcap

The Undercradle right side flat endcap is the flat piece of metal that goes into the right side if you are using smaller size printed circuit cards.



**Figure 7-6: Right Side Flat Endcap**

### Undercradle Bottom

The Undercradle bottom is the metal part with four metal standoffs that hold the connector board. Note the front of the Undercradle bottom is the curved edge nearest to the standoffs.

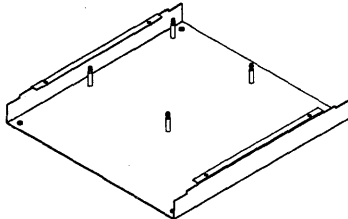


Figure 7-7: Undercradle Bottom

### Undercradle Top

The Undercradle top is the metal part with a slot and four silver tabs. Note this slot goes over the connector board which attaches to the HP Internet Advisor.

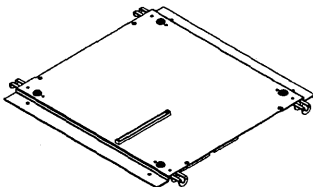
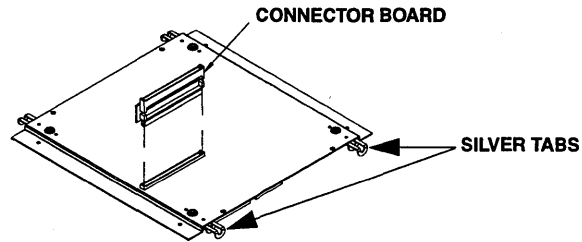


Figure 7-8: Undercradle Top

Undercradles  
**The Empty Undercradle HP J2295A**

## Connector Board

The connector board is where the printed circuit cards connect. It pushes on and off the standoffs in the Undercradle bottom.



**Figure 7-9: Connector Board**

## Silver Tabs

The four silver tabs connect the Undercradle to the HP Internet Advisor.

---

## Taking the Undercradle Apart

---

### WARNING

---

Be sure the HP Internet Advisor is turned off and disconnected from any power source before you begin any assembly or disassembly procedures.

1. Remove the Undercradle from the HP Internet Advisor if it is attached. (See previous sections.)
2. Turn the Undercradle upside down, with the four black feet facing up.
3. Carefully remove the four black rubber feet using a small flat screwdriver or some implement to pull them out of their seating.
4. Remove the four screws using a #10 Torx driver.
5. Turn the Undercradle over.
6. Remove the eight screws (four flat-head and four pan-head) from the top of the Undercradle.
7. Slide the two plastic endcaps off both sides, and lift off the top of the Undercradle.

---

## Installing printed circuit cards

You can install up to two printed circuit cards in the Undercradle. They can be full-length or smaller. If you are using full-length cards, you will need to use the endcap expander. If you are installing smaller cards or only one card, you can use the flat endcap.

---

### CAUTION

---

Be sure to follow Electro-Static Discharge (ESD) procedures when handling any cards.

## Undercradles The Empty Undercradle HP J2295A

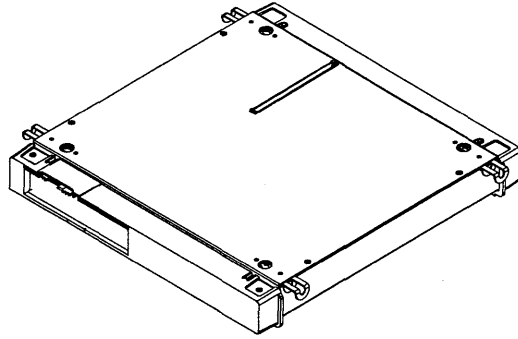
With the Undercradle disassembled:

1. Gently lift each corner of the connector board to disconnect it from the standoffs.
2. Turn the connector board over and fasten the card(s) in the slots provided.
3. Press the connector board onto the standoffs. The cards should be underneath the connector board as you secure it.

---

### Putting the Undercradle Back Together

1. Place the top back on the Undercradle, aligning the slot in the top with the HP Internet Advisor connector. Fasten with the four flat-head screws.
2. On the side nearest to the HP Internet Advisor connector, slide the left side piece into place and secure it with four pan-head screws (two on the top and two on the bottom). If you are only installing one printed circuit card, you need to insert the small flat endcap in the left side piece before you put it on the Undercradle.
3. If you are installing full-length printed circuit cards in the Undercradle, you need to insert the endcap expander into the right side before you place it on the Undercradle. If you are installing smaller printed circuit cards, you will need to insert the flat metal endcap in the right side before you place it on the Undercradle.
4. Slide the Undercradle right side piece into place and secure it with four pan-head screws (two on the top and two on the bottom).
5. Turn the Undercradle over and replace the four black rubber feet into the foot indentions.



**Figure 7-10: The Assembled Undercradle**

Undercradles  
**The Empty Undercradle HP J2295A**





---

## Introduction

The Personal Computer Memory Card International Association (PCMCIA) has created a standard for credit card size devices with memory, mass storage, and I/O functionality. The standard makes compatibility possible by defining mechanical, electrical, and software requirements.

The purpose of the PC Card slots are to increase the flexibility in the Personal Computer section of the instrument. The primary use of this flexibility is for enhanced I/O capability with the HP Internet Advisor's software. This includes functions such as a modem, a LAN interface, and a CD-ROM Drive.

While integrated I/O is the primary focus for the PC Card slot, it can also serve other purposes. Other PC Card solutions include removable mass storage, speech, paging, encryption, global positioning, and even additional protocol testing.

---

## Compatibility

The HP Internet Advisor conforms to PC Card specification 2.10. Each slot is capable of receiving one Type I or Type II card. A single Type III or larger card may be inserted into the bottom slot only. The following kinds of cards are compatible with the HP Internet Advisor:

- ATA Drive
- Audio
- Ethernet/Modem Combo
- Fax/Modem
- Network Interface
- SCSI Host Adapter
- CD ROM

---

## PC Card General Tips

- Make sure the PC Card slot is active by selecting: | Start | Settings | Control Panel | and then double-click on the PC Card (PCMCIA) Wizard. If the slots are active you'll see the PC Card (PCMCIA) Properties window. If the slot is not active, you'll see the PCMCIA Welcome window. At the welcome window, press **ENTER** to continue, press **ENTER** to accept default PC Card drivers, then press **ENTER** to close the PC Card Wizard.
- Make sure the PC Card is plugged in all the way by listening for a beep. If you do not hear a beep, the card may be upside down.
- Do not load the card vendor's socket or card services software into HP Internet Advisor LAN or HP ToolKit WAN.

---

### NOTE

The configuration will be different in some ways for the HP Internet Advisor WAN software versus the HP Internet Advisor LAN software. Refer to your *HP Internet Advisor WAN - High Speed Toolkit User's Guide* (under *Configuring a Slave*) for configuring HP Internet Advisor software for WAN PC Card Operation.

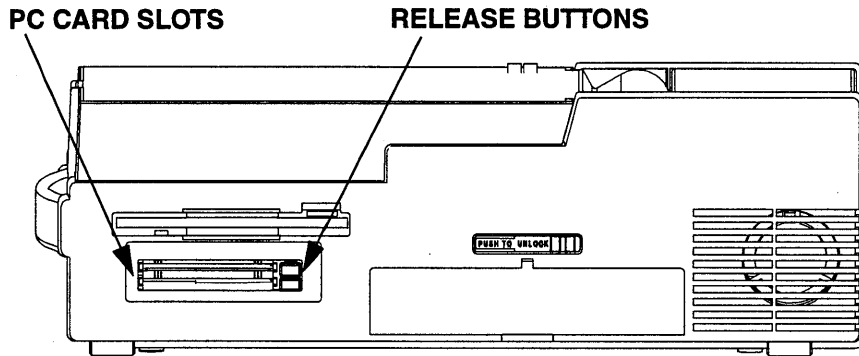
Refer to either the *HP Internet Advisor LAN - PC Remote User's Guide* or *HP Internet Advisor - Remote for Unix®*, for configuring LAN Remote PC Card operations.

---

---

## Insertion and removal of the PC Card

The PC Card slots are located on the right side of the HP Internet Advisor, below the flexible disc drive as shown in the following figure.



**Figure 8-1: Location of PC Card Slots**

---

## Installing a PC Card

All PC Cards are keyed for correct installation. The card's label will typically face up or will explain which side is up. Slide the PC Card in the PC Card slot until you feel some resistance. Then push firmly, but gently, to ensure a good connection. Never attempt to force the card into position. When using Windows 95, you should hear an audible double-beep tone within five seconds, confirming that the system recognizes a PC Card has been inserted.

---

### NOTE

When using the alternate boot selection, which operates in MS-DOS mode, install your PC Card before you apply power to the HP Internet Advisor.

---

## Process to remove a PC Card

In Windows 95, select the PCMCIA icon (located in the Notification area near the clock), then highlight and click the Stop PCMCIA card description. This brings up a message box telling you that you may now safely remove the PCMCIA device.



**Figure 8-2: Remove PC Card**

Another method to remove the PC Card is to exit your current applications, shut down Windows 95, and then remove the PC Card.

The PC Card is removed from the slot by simply pushing in the release button and pulling the card out.

---

### NOTE

When using the alternate boot selection, which operates in MS-DOS mode, turn the power off to the HP Internet Advisor before removing your PC Card.

---

## System Identification of PC Card

Besides hearing an audible beep, indicating insertion and removal of cards, you can verify that the PC system has properly identified the card in Windows 95 by checking the system properties of the PC Card.

## Properties of a PC Card operating with Windows 95

From Windows 95, the system properties of PC Cards can be verified. Select: | Start | Settings | Control Panel | System |. From the Systems Properties window, select: | Device Manager |, select your PC Card device category and then double-click on PC Card description. This process brings up the PC Card Properties screen. From this screen, you may check General or Resources for your PC Card.

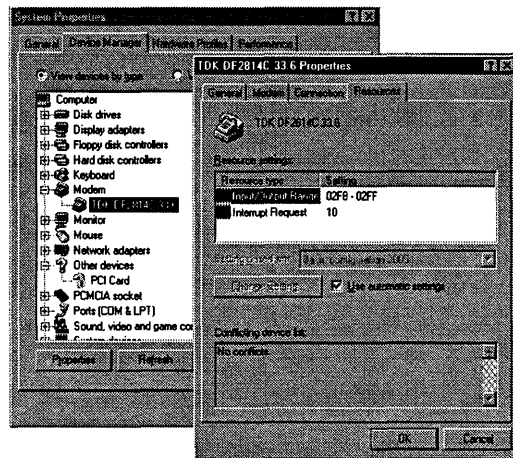


Figure 8-3: System Properties

---

## Installing Modem or Ethernet PC Card Drivers

If you are using a supported Modem or NIC PC Card, the drivers for these devices are installed on your Internet Advisor. If you are using an “unsupported” device, the following describes the process to install any necessary drivers.

1. The first time Windows 95 locates your “unsupported” PC Card, it must install the drivers for that card. Follow the instructions as directed from the following screens.

Examples of the following screens will be shown. Select OK to continue.

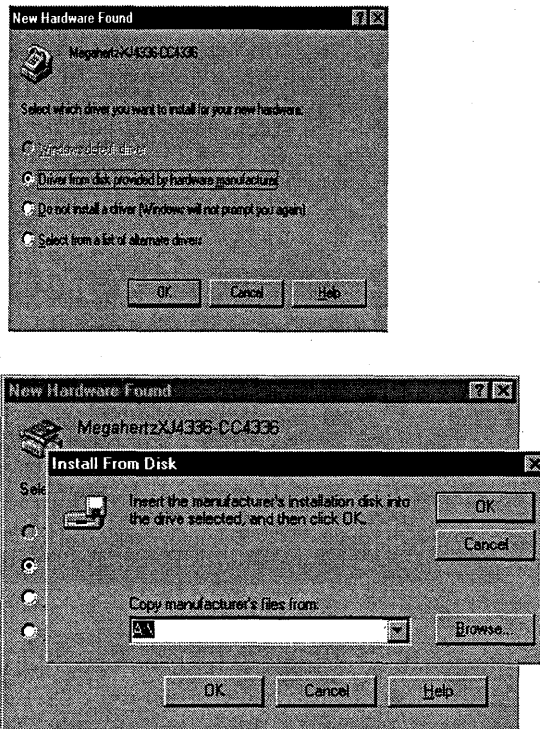


Figure 8-4: New Hardware Found

## Software Configuration

### Windows 95 with a PC Card

- If a PC Card uses an interrupt, Windows 95 will assign interrupt 11 to the card if it is available. If this interrupt is not available, Windows 95 will assign the next available interrupt.
- If a PC Card uses I/O Addresses, Windows 95 will dynamically allocate the next free range to the card. If the PC Card is a modem card, Windows 95 must select an I/O Addresses range of COM 1, COM 2, COM 3, or COM 4. Generally, Windows 95 will use COM 2. A Network PC Card will normally default to 130-13F.
- In Windows 95 environment, PC Card Modems are generally located at I/O address 02F8-02FF(COM2), with interrupt=11.
- ATA disks use available I/O space and reserve no interrupt.

### **Windows 95 MS-DOS Compatibility Mode with a PC Card**

The only PC Cards supported in HP Toolkit are: U.S. Robotics Megahertz PC Card Modem (model XJ4336) and TDK Systems PC Card Modem (model DF2814CX).

The default modem for Mainframes is the TDK Modem. If you want to change the default modem for HP Toolkit, select from the Start Menu: | Utilities | Select Modem for HP Toolkit Remote l.

A point enabler is used to activate each modem for use with the HP Toolkit Remote package. Both modems are set for I/O space COM4, Interrupt 11, and memory region CC000-CCFFF.

The only PC Card supported for the HP Internet Advisor LAN is Xircom CE3 10/100 Ethernet PC Card. To use this PC Card, a separate LAN Remote package must be properly installed.



**Modem & Ethernet PC Cards  
Introduction**

In Windows 95 MS-DOS Compatibility Mode, you may need to reference the following tables, which list the interrupt structure and I/O space of the HP Internet Advisor:

**Table 8-1: Interrupts**

| <b>PC Functions</b>                              | <b>Interrupt</b> | <b>Analyzer Functions</b>          | <b>Interrupt</b> |
|--|------------------|------------------------------------|------------------|
| Keyboard Controller                              | 1                | LAN Advisor Undercradle            | 10               |
| Programmable Interrupt Controller                | 2                | FDDI Advisor Undercradle           | plug & play      |
| COM 1  | 4                | High Speed Acquisition Undercradle | none             |
| Sound Hardware                                   | 5                | TIMS Undercradle                   | 15               |
| Flexible Disk Controller                         | 6                | T1 Telco Undercradle               | 15               |
| LPT1/Parallel                                    | 7                | E1 Telco Undercradles              | 15               |
| Real Time Clock                                  | 8                |                                    |                  |
| Button Mouse                                     | 12               |                                    |                  |
| Numeric Data Processor                           | 13               |                                    |                  |
| Hard Disk Controller                             | 14               |                                    |                  |
| Available to PC Card in Internet Advisor WAN     | 9,10,11          |                                    |                  |
| Available to Undercradle in Internet Advisor WAN | 9,10,11,15       |                                    |                  |

**Table 8-2: I/O Address Space**

| I/O Address | System/Analyzer Function    | I/O Address | System/Analyzer Function          |
|-------------|-----------------------------|-------------|-----------------------------------|
| 000-00F     | DMA Controller Register     | 300-301     | Sound H/W                         |
| 020-021     | PIC #1                      | 320-32F     | WAN Low Speed Hardware            |
| 040-043     | Prog. Interval Timer Reg    | 330-331     | T1 Telco Undercradle              |
| 060-        | Keyboard Controller         | 330-33F     | TIMS Undercradle                  |
| 061-        | System Speakers             | 376-377     | IDE                               |
| 064-        | Keyboard Controller         | 378-37F     | LPT1/Parallel                     |
| 070-        | RTC Index & NMI Mask        | 388-38B     | Sound H/W                         |
| 071         | RTC Data Port               | 3B0-3BB     | Video Registers                   |
| 080-09F     | DMA Page Register           | 3C0-3DF     | Video Registers                   |
| 0A0-0A1     | PIC #2                      | 3E0-3E1     | PC Card Controller                |
| 0C0-0DF     | DMA Controller Register     | 3E8-3EF     | COM3                              |
| 0F0-0FF     | Numeric Data Processor      | 3F0-3F7     | Flexible Disk Controller, Primary |
| 110-12F     | ATM Analyzer in Undercradle | 3F8-3FF     | COM1                              |
| 150-16F     | WAN/ATM Analyzer Hardware   | B2-B3       | Power Management                  |
| 170-177     | IDE                         | CF8-CFF     | Chipset Configuration             |
| 1F0-1F      | IDE                         | C2F0        | LAN Hardware                      |
| 200         | Sound H/W                   | D2F0        | LAN Hardware                      |
| 220-22F     | Sound H/W                   | E2F0        | LAN Hardware                      |
| 2E8-2EF     | COM4                        |             |                                   |
| 2F0-2F1     | LAN Analyzer Hardware       |             |                                   |
| 2F8-2FF     | COM2                        |             |                                   |

---

## Modem PC Cards

### **Initializing the modem for Internet Advisors with factory installed software:**

If your HP Internet Advisor software was installed at the factory, you do not need to setup the modem in Windows 95. However, you will need to set your Dialing Preferences for your modem to operate properly.

- Set these preferences from the Start menu by selecting: | Settings | Control Panel | Modems |.
- Under General Modems Properties, select Dialing Properties. This opens another folder called, My Locations. The default area code from the factory is set at area code 719 and country USA. Change these and any other settings to meet your requirements.

---

### **NOTE**

The modem requires an analog phone line and is not compatible with typical digital PBX systems.

The modem can be connected to a standard telephone line through an RJ-11 phone jack.

Transmission rates for the modem are up to 33.6 kbps (14.4 kbps for fax). The modem and fax operate with standard AT commands.

The modem is compatible with many commercially available software applications. Check the vendor's specifications to see if a particular application is compatible with the modem's capabilities.

---

### **NOTE**

Be sure to choose a country using the country selection with your international TDK Modem, the same selection will apply for any MS-DOS mode program that uses a modem. See the following section titled, "TDKModem PC Card Documentation" for more details.

---

## Modem PC Card setup in HP Toolkit

You can use the PC Card Modem for remote control of the HP Toolkit WAN. To do so, you must configure the HP Internet Advisor software for COM port 4 and Interrupt 11. The master controller configuration menu (shown in Figure 8-5) is reached by selecting the Remote Control option in the Toolkit Main Group.

The slave configuration menu (shown in Figure 8-6) is reached by pressing **F4** (Slave Setup) softkey from within the Toolkit Main Group. Changing one configuration automatically changes the other. The exact settings should be as shown in the following figures.

The screenshot shows a terminal window titled "Remote Configuration" with the following settings:

|                      |            |
|----------------------|------------|
| Modem Command Set    | Hayes      |
| Emulation            | On         |
| Phone Type           | Touch Tone |
| Baud Rate            | 9600bps    |
| Com Port             | OTHER      |
| Hardware Handshaking | Off        |
| Com Base             | 744        |
| IRQ (2-15)           | 11         |

At the bottom of the screen, there is a navigation bar with the following options:

|              |   |               |   |   |   |   |   |   |         |
|--------------|---|---------------|---|---|---|---|---|---|---------|
| 1 Phone Book | 2 | 3 Call Remote | 4 | 5 | 6 | 7 | 8 | 9 | 10 Exit |
|--------------|---|---------------|---|---|---|---|---|---|---------|

**Figure 8-5: Remote Configuration screen**

The COMM 4 I/O Base address of 2E8 Hex has a decimal equivalent of 744.

Modem & Ethernet PC Cards  
Modem PC Cards

|                      |          |                          |       |                          |   |   |   |   |              |
|----------------------|----------|--------------------------|-------|--------------------------|---|---|---|---|--------------|
| Hewlett-Packard      |          | Toolkit Revision A.07.00 |       | Wed May 21 15:31:24 1997 |   |   |   |   |              |
| Slave Setup          |          |                          |       |                          |   |   |   |   |              |
| Modem Command Set    | Hayes    | [a]                      | COM1  |                          |   |   |   |   |              |
| Auto Answer          | On       | [b]                      | COM2  |                          |   |   |   |   |              |
| Hardware Handshaking | Off      | [c]                      | COM3  |                          |   |   |   |   |              |
| Baud Rate            | 9600 bps | [d]                      | Other |                          |   |   |   |   |              |
| Com Port:            | Other    |                          |       |                          |   |   |   |   |              |
| Com Base             | 744      |                          |       |                          |   |   |   |   |              |
| IRQ (2-15)           | 11       |                          |       |                          |   |   |   |   |              |
| 1 Com Window         | 2        | 3                        | 4     | 5                        | 6 | 7 | 8 | 9 | 1 Exit Setup |

Figure 8-6: Slave setup

The other settings in the menus depend on the type of modem. However, it is recommended that you leave AutoAnswer ON when modifying the slave setup. This lets the instrument be remotely captured in an unattended setting.

---

## 10/100 Ethernet PC Card Adapter

The HP Internet Advisor LAN can function as a station on the network using the 10/100-Ready Ethernet PC Card Adapter for 10Base-T or 100Base-TX networks. This card is primarily used as the network connection when operating the analyzer remotely. It can also be used as a standard network interface for any other operation using the DOS platform such as file transfer and electronic mail.

Refer to either the *HP Internet Advisor LAN - PC Remote User's Guide* or *HP Internet Advisor - Remote for Unix®*, for more information on configuring LAN Remote PC Card operations.

---

### **NOTE**

When performing a warm boot (Ctrl-Alt-Delete) of the system with the Xircom CE3 10/100 Ready CreditCard Ethernet Adapter inserted into the PC Card slot, the system may "lock up" Windows 95. We recommend a power-down of the system to restore functionality. From a cold boot (i.e.: from a powered-down status), the presence of the Xircom adapter in either of the PC Card slots will have no adverse effect and the system will power up and perform normally.

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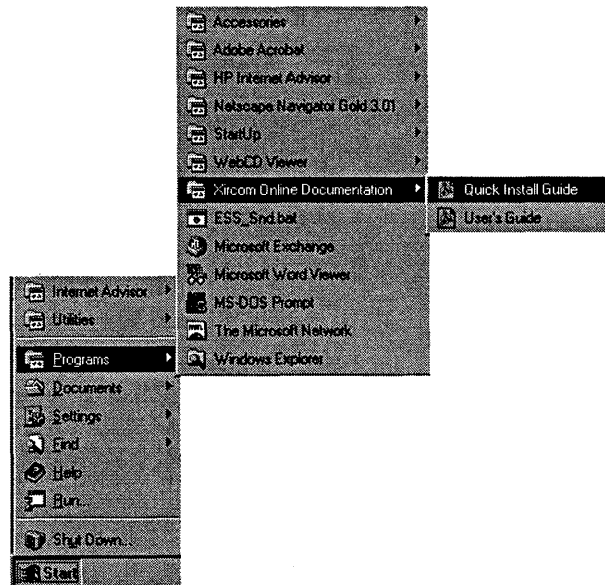
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## 10/100 Ethernet PC Card Documentation

The 10/100 Ethernet PC Card documentation files can be located by selecting:

| Start | Programs | Xircom Online Documentation |

From this point, you can select either the Quick Install Guide or the User's Guide.



**Figure 8-7: The 10/100 Ethernet PC Card documentation files**

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### NOTE

Activate the w.e.t. support which installs Adobe Acrobat. This enables you to view the 10/100 Ethernet PC Card documentation files using Adobe Acrobat Reader.

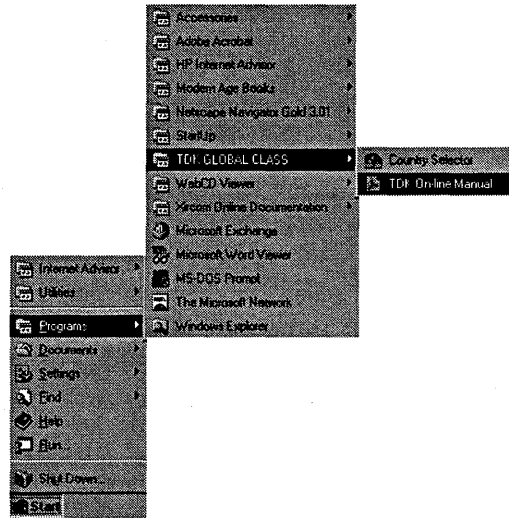
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## TDKModem PC Card Documentation

The TDKModem PC Card documentation files can be located by selecting:

| Start | Programs | TDK GLOBAL CLASS | TDK On-line Manual

From this point, you can select either the Country Selector or the On-line Manual.



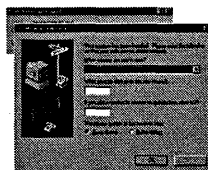
**Figure 8-8: The TDKModem PC Card documentation files**

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### NOTE

Activate the w.e.t. support which installs Adobe Acrobat. This enables you to view the the TDKModem PC Card documentation files using Adobe Acrobat Reader.

Refer to the TeleAdapt, Inc. selection card for information concerning available international telephone adaptors. When you have made a country selection with your TDK Modem, the same selection will apply for any MS-DOS mode program that uses a modem. See the following figure.





**Modem & Ethernet PC Cards**  
**10/100 Ethernet PC Card Adapter**

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A

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**Software**

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## HP Internet Advisor Family of Products Software

The HP Internet Advisor Family of Products are shipped software installed on the hard drive. Also included with each order is the HP Internet Advisor Literature package which includes backup software and Windows 95 software.

- The HP Internet Advisor Family of Products are not compatible with any disk compression packages. Likewise, do not use disk compression on flexible disks in any unit.
- If you run the Windows 95 program Scantest, it will give you an error message stating there are file names longer than 66 characters. Ignore the error message and continue with the Scandisk program.
- Please see the HP Software License Agreement.

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**B**

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**Specifications**

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## Physical Characteristics

### Weight:

|                    |                    |
|--------------------|--------------------|
| J2300C Mainframe   | 6.45 kg (14.2 lbs) |
| J3446C Mainframe   | 6.81 kg (15 lbs)   |
| J3754C Mainframe   | 5.90 kg (13 lbs)   |
| J2295A Undercradle | 1.04 kg (2.3 lbs)  |
| J2306B Undercradle | 1.40 kg (3.1 lbs)  |
| J2307A Undercradle | 1.40 kg (3.1 lbs)  |
| J2309B Undercradle | 1.40 kg (3.1 lbs)  |
| J2524A Undercradle | 2.0 kg (4.4 lbs)   |
| J2527A Undercradle | 1.49 kg (3.3 lbs)  |
| J2900A Undercradle | 2.0 kg (4.4 lbs)   |
| J3444A Undercradle | 2.08 kg (4.6 lbs)  |
| E4594A Undercradle | 1.97 kg (4.35 lbs) |

### Dimensions:

|   |  |
|---|--|
| J2300C, J3446C, J3754C<br>Mainframe           | 10.16H x 31.43W x 31.75D cm<br>(4.0H x 12.375W x 12.5D inches) |
| Undercradles<br>(exceptions noted)            | 3.7 cm (1.5 inches) height<br>for undercradle                  |
| J3444A Undercradle<br>J2527A TIMS Undercradle | 4.76 cm (1.875 inches) height<br>for undercradle               |
| E4594A TELCO<br>Undercradle                   | 5.72 cm (2.25 inches) height<br>for undercradle                |

**Display:**

The standard display for the HP J2300C Internet Advisor is a 26.5 cm diagonal (10.4 inch) passive DSTN color LCD VGA. Also available is Option 221 for J2300C which is a 26.5 cm diagonal (10.4 inch) active matrix TFT color SVGA display.

The standard display for the HP J3446C and J3754C Advisor is a 26.5 cm diagonal (10.4 inch) active matrix TFT color SVGA display.

---

## Operating Conditions

### **Temperature:**

|               |                                  |
|---------------|----------------------------------|
| Operating     | +5°C to +40°C (+41°F to +104°F)  |
| Non-operating | -25°C to +60°C (-13°F to +140°F) |

### **Humidity:**

|           |   |
|-----------|---|
| Operating | 20% to 80% relative humidity non-condensing to 40°C |
| Storage   | 10% to 90% relative humidity to 60°C                |

### **Altitude:**

|           |               |               |
|-----------|---------------|---------------|
| Operation | 4,575 meters  | (15,000 feet) |
| Storage   | 15,250 meters | (50,000 feet) |

### **Power Requirements:**

|           |                             |
|-----------|-----------------------------|
| External: | 100 to 240 VAC              |
|           | 50 to 60 Hz, 110 Watts max. |

---

## Safety Conditions

This instrument is designed for indoor use.

### Safety Class I

For continued protection from electrical shock, power cord ground must not be defeated.

**Product Damage.** Do not use this product when the product:

- shows visible damage,
- fails to perform,
- has been stored in unfavorable conditions, or
- has been subject to severe transport stresses.

If any of the above statements are met, make the product inoperative and secure it against any unintended operation. Please contact the U.S.A. Technical Response Center at 1-800-698-0061 for assistance.

---

## Additional Help

If you have questions, concerns or need more information, call or contact us:

In the U.S.A.:  
U.S.A. Technical Response Center - 1-800-698-0061  
by FAX - 303-754-4802

Internationally:  
by calling your local HP Sales Office

On the Web:  
<http://www.hp.com/go/internetadvisor>



**Specifications**  
**Additional Help**

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C

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**Windows 95 Operating System**

## Operating System

The HP Internet Advisor Family of Products use the Microsoft® Windows® 95 operating system. Windows 95 can operate in either Graphical User Interface (GUI) mode or Windows 95 MS-DOS Compatibility Mode (MS-DOS mode).

The HP Internet Advisor uses GUI mode to run all of its applications except HP Toolkit and HP Internet Advisor LAN which run in MS-DOS mode.

---

### HP Toolkit (HP Internet Advisor WAN)

HP Toolkit (HP Internet Advisor WAN) operates in MS-DOS mode, but can be started from the Windows 95 Start menu. When a HP Toolkit application is selected from the Start menu, you are warned that the system will be switched to MS-DOS mode. After you acknowledge this, the system unloads the GUI portion of Windows 95, enters MS-DOS mode and starts HP Toolkit. When you exit the Toolkit (**F10**) the system reloads the GUI portion of Windows 95. While in Toolkit, you can go to the command prompt using the **F1** key.

---

### HP Internet Advisor LAN

The HP Internet Advisor LAN operates in MS-DOS mode. The HP Internet Advisor LAN cannot be run in Enhanced Mode; therefore, a different set of system files must be used to start the HP Internet Advisor LAN application.

When a HP Internet Advisor LAN application is selected from the Start menu, you are warned the system will be switched to MS-DOS mode. After you acknowledge this, the system goes to the Windows 95 command line prompt. The system files needed to run HP Internet Advisor LAN under MS-DOS mode are copied over the existing system files and then the system is restarted. This sequence take you to MS-DOS mode, restores the system files used to start Windows 95, and then starts the HP Internet Advisor LAN. When you exit HP Internet Advisor LAN, the system is restarted and returns to Windows 95.

---

## Installing Windows 95 Applications

There are two copies of the Config.sys and Autoexec.bat files which are used to start Windows 95. One copy of each file is located in the root directory of drive C: and the other copies are located in C:\Boot\_src\Default.

In the process of installing other Windows 95 applications or software, if you need to make changes to either the Autoexec.bat or Config.sys files of Windows 95, you will need to make the same changes to the copies of these files in the Default directory for your Internet Advisor to operate properly.

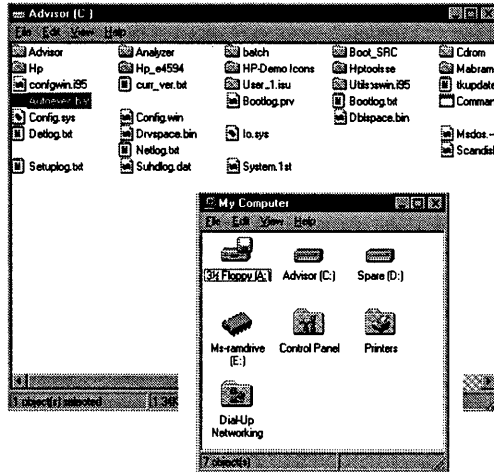
If you need to edit either of these files, follow this process to keep the two sets of files in synch. If the file sets get out of synch, prior changes may be lost when you run a MS-DOS mode application and then return to Windows 95.

The following process will guide you through the necessary steps to update the Autoexec.bat, Config.sys and Default directory files.

## Windows 95 Operating System Operating System

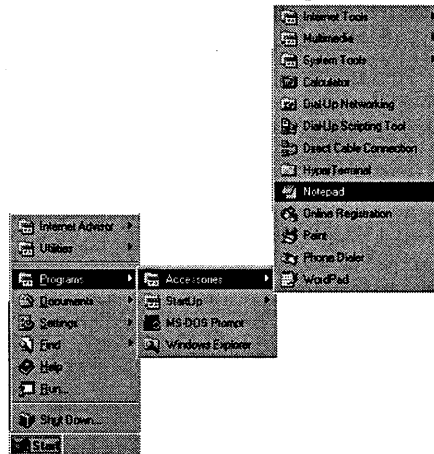
Select the My Computer icon which opens to this window.

Double-click on Advisor (C:). This opens up a view of your C: drive.



**Figure C-1: View of C: drive**

To edit either your Autoexec.bat or Config.sys for Windows 95, select:  
| Start | Programs | Accessories | Notepad |.



**Figure C-2: Opening Notepad**

Drag and Copy (using the left mouse button) either your Autoexec.bat or Config.sys to the Notepad. Make your edits, save the edited file and exit Notepad.

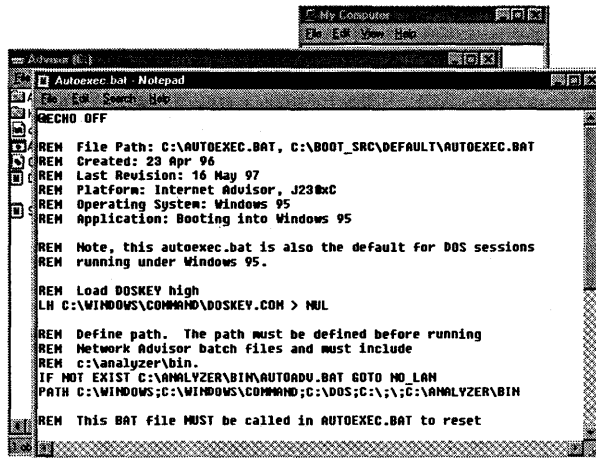


Figure C-3: Making edits in Notepad

From Advisor (C:), double-click on Boot\_src and double-click on Default to open window.

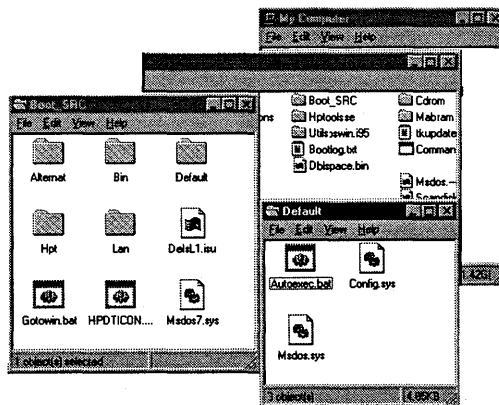
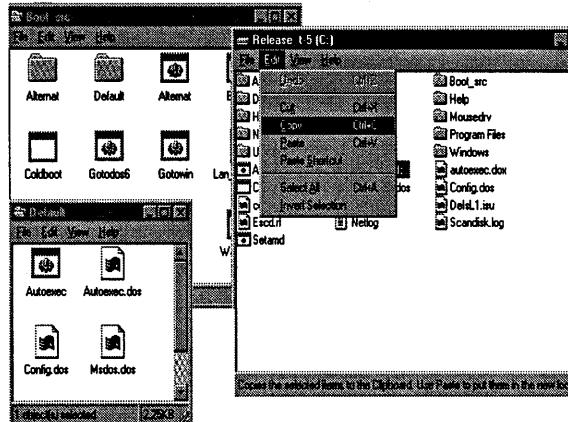


Figure C-4: Opening Boot\_src and Default

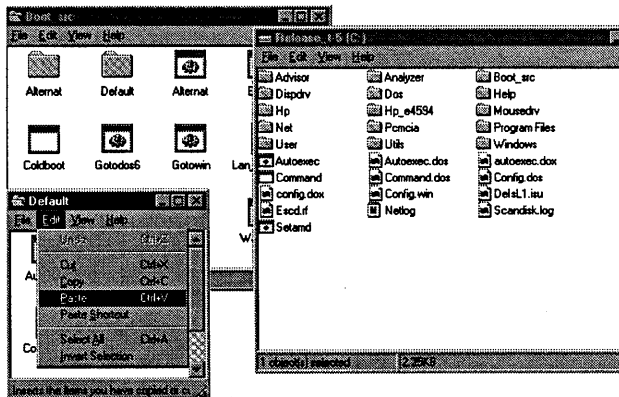
## Windows 95 Operating System Operating System

From Advisor (C:) copy the edited Autoexec.bat or Config.sys to C:\Boot\_src\Default by selecting the file you want to copy. Use File menu and select Copy (to copy the file) to the clipboard.



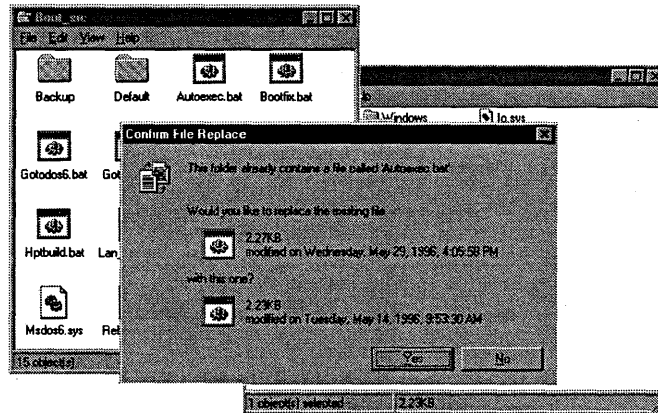
**Figure C-5: Copy file to clipboard**

To make your backup copy of the edited file, highlight C:\Boot\_src\Default, highlight the file you want to replace (Autoexec.bat or Config.sys), then select Paste. This places the edited Autoexec.bat or Config.sys file in the default file.



**Figure C-6: Paste file in Default**

This last step brings up a Confirm File Replace screen. If this is the file you want to replace, click Yes. You have now edited either your Autoexec.bat or Config.sys for Windows 95 and saved a backup copy of the file into C:\Boot\_src\Default. To activate these changes, you need to Shut Down Windows 95 and cycle the power off and then back on.



**Figure C-7: Confirm File Replace**



**Windows 95 Operating System**  
**Operating System**

---

D

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**PC Card Modem**

---

## Overview of the Modem AT Command Set

The standard AT Command Set is used by DTE's to communicate with modems. A typical command string begins with the ASCII "A" and "T" or "a" and "t." The modem uses these first two characters to determine the data rate, number of bits, and type of parity which the DTE is employing in its communication. The modem then buffers the commands string in its RAM (memory) until a carriage return, [CR], is transmitted. Once the [CR] is received, the modem begins to execute, in order, all of the commands in the string. The number of characters in this string should not exceed 40. If the modem encounters an illegal command, a command that cannot be executed, or more than 40 characters, it immediately aborts the execution of the command string and issues an ERROR message to the DTE. If the command string is correct, the modem executes all commands and sends an OK message to the DTE.

Many of the commands require a numeric parameter. If this parameter is missing, the modem automatically assumes that the parameter is 0, if appropriate. If the parameter exceeds the expected values, the modem either aborts and issues an ERROR or it extracts the modulus from the parameter based on the greatest expected value. (For example; if n is expected to be 0,1,2,3, then n=5 will be treated as  $n=5\text{Mod}4=1$ .) This response varies from modem to modem.

Modems are always in one of two modes of operation. The modem enters into Data Mode once a connection has been established with a remote modem. In Data Mode, any data transmitted from the DTE to the modem is modulated and transmitted to the remote modem; and, similarly, any data that the modem transmits to the DTE has been received from the remote modem and demodulated. The modem can be in Data Mode only when the modem has established a communications link with a remote modem. The only exception to this is during diagnostic tests. At all other times, the modem is in Command Mode. When in Command Mode, the modem responds to AT commands issued from the DTE.

While in Data Mode, if it is necessary to issue commands to the modem without severing the communications link to the remote modem, an escape sequence may be issued from the DTE to the modem. The escape sequence consists of three escape characters followed by an AT command. If the modem uses a Hayes command set, the escape sequence must have a guard time before and after the

three escape characters. The escape character is defined by register S2 (default is +, ASCII 043) and the guard time is defined by register S12 (default is 1 second, 50 x 0.02s). The default escape sequence is:

(1s) +++ (1s) AT...

Once the modem has been shifted into Command Mode during a data link, the modem can be returned to Data Mode with the O command.

---

## **PC Card Modem AT Commands and Descriptions**

**The modem AT commands and descriptions are located in directory:**

**c:/mhz**

**The modem AT commands/descriptions text file is located at:**

**c:/mhz\rck-336.txt**

Use the Notepad program to view or print this file.

## PC Card Modem

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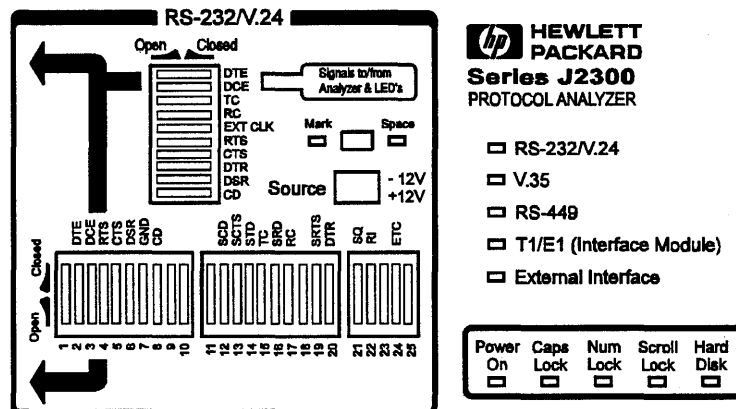
E

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**Breakout Box, LEDs & Connectors**

## RS-232/V.24 Breakout Box and System LEDs

The Internet Advisor gives you breakout box and jumpering capabilities for RS-232/V.24 circuits. Figure E-1 shows the breakout box and its associated connections. Note that the large black arrows point to the RS-232/V.24 test connectors on the side of the Internet Advisor. The rearward connector is the preferred test input for most tests. The forward connector should only be used when signals need to be isolated by the rocker switches or cross-connected by way of the switch jacks and jumper leads.



**Figure E-1: RS-232/V.24 Breakout Box and System LEDs**

All 25 leads are accessible for jumpering on either side of the breakout switches (the lateral switch bank numbered 1 through 25.) If you want to monitor or simulate on auxiliary data channels or to observe control signals other than RTS, CTS, DTR, DSR and CD, you can perform the appropriate transpositions by opening the corresponding switches and jumpering between the appropriate leads. To do so, connect the circuit under test to the Internet Advisor through the forward RS-232 test connector and perform the necessary transpositions over the lateral switch bank.

The vertical switch bank provides hardware isolation of incoming or outgoing data and control signals for special purpose testing. An example would be using the Internet Advisor to supply terminal generated control signals without conflicting with existing data signals. In this case, you would want to open the DTE switch to isolate the circuit being tested from the internal data transmitter.

---

**NOTE**

Pin 1 of the RS-232 test port is Frame Ground or Protective Ground. It is connected to the case of the Internet Advisor and, through the third wire of the power cable, to Ground. If you have a data circuit that requires isolation of Frame Ground, use the forward RS-232 test port and open switch 1 on the lateral switch bank.

Pin 7 of the rearward RS-232 test port is Signal Ground, and it is isolated from Frame Ground by 100 KOhms to minimize ground-loop problems.

---

In monitor mode, the inputs to all V-Series signal receivers represent only 1/5 of a standard load, minimizing circuit loading effects. In Simulating and BERT testing modes, the transmitters are configured with normal source impedance.

---

**Mark/Space Indicator**

You can use the Mark/Space Indicator to test the state of any circuit on an RS-232/V.24 interface. The Mark/Space Indicator has two test jacks, which are connected together electrically. To do this, simply jumper from any test jack on either of the lateral or vertical switch banks to either of the Mark/Space Indicator jacks and observe the results. If the incoming signal is more positive than +3.0 volts, the Space LED lights. If the incoming signal is more negative than -3.0 volts, the Mark LED lights. If the Mark and the Space LEDs both light up, the incoming signal is actively changing states. This is normal for data and clock signals, but indicates a problem for control signals.

---

**NOTE**

EIA-232D (Formerly RS-232C) specifications consider interface signals in the range of -3.0 to +3.0 volts to be indeterminate (or not valid) Consistent with this recommendation, the Mark/Space Indicator treats signals in this range as “not present” and gives no indication.



---

## Source Voltage

You can hard-wire any signal or control line as On or Off by jumpering it to the Source jacks. The rearward three jacks are connected together electrically and supply -12 volts through a 1 KOhm resistor. The forward three jacks are connected together electrically and supply +12 volts through a 1 KOhm resistor. If you connect a signal or control line to the -12 volts supply it creates a Mark or Off state and if you connect it to the +12 volts supply it creates a Space or On state.

---

## Active Interface LEDs

The following is a list of the five LEDs that indicate which interface is currently configured:

- RS-232/V.24
- V.35
- RS-449
- Interface Module
- External Interface

---

### CAUTION

Do not connect more than one Internet Advisor port at a time. The V.35, RS-449, RS-232, and External ports are not independent of one another. Connecting more than one port at a time can cause unreliable results.

---

## Lead Status LEDs

On the right side, rearward of the keyboard, are ten pairs of LEDs that show a real-time indication of lead status for all of the interfaces. These LEDs also indicate data, clock and control information for the V-Series interfaces. The following list provides information on the meaning of the lighted LEDs:

- Left column, Red      Mark State for Data, Off State for Control Signals.
- Right column, Green      Space State for Data, On State for Control Signals.
- Both LEDs lighted      Active signal toggling.
- Neither LED lighted      No signal present.

When the selected interface is RS-232/V.24, the left column LEDs light when the signal level is more negative than -3.6 volts and the right column LEDs light when the signal level is more positive than +3.6 volts. This is a safety margin of 20% above EIA-232D minimum signal requirements of -3.0 and -3.6 volts. If the circuit under test is lighting the proper Internet Advisor LEDs, then there is enough signal present to allow any EIA-232D/RS-232 conforming device to receive the data and control signals. If the circuit under test cannot light these LEDs, the signal levels are too low for reliable reception.

For the Interface Modules, the left column shows the state of the Equipment (or user) signal and the right column shows the state of the Line (or central office) signal. Alarm and Error indications cause their respective red LEDs to light. The green Signal LEDs light if a signal is present. If there is no signal present, the topmost red LED lights to indicate a loss of signal.

These LEDs can provide a visual indication as to whether a V-Series device is physically DTE or DCE. First connect the Internet Advisor to the device under test and configure it for the Monitor mode. If either the DTE/SD Mark or Space LED lights, the device under test is DTE. If the DCE/RD Mark or Space LED lights, the device under test is DCE. If the Internet Advisor is to Simulate a device under test, it must complement the device's physical characteristic. If the device is DTE, the Internet Advisor must be DCE and vice versa.

---

## V-Series Interfaces

The V-Series Interfaces are the RS-232, RS-449, and V.35 interfaces. The following signals are analyzed on the V-Series Interfaces:

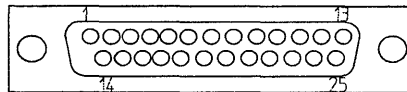
**Table E-1: V-Series Functions**

| Function                  | RS-232 | V.35 | RS-449 |
|---------------------------|--------|------|--------|
| Send Data                 | DTE    | SD   | SD     |
| Receive Data              | DCE    | RD   | RD     |
| DTE/Send Timing (DCE)     | TC     | SCT  | ST     |
| DCE/Receive Timing (DCE)  | RC     | SCR  | RT     |
| DTE/Send Timing (DTE)     | ETC    | SCE  | TT     |
| Request to Send           | RTS    | RS   | RS     |
| Clear to Send             | CTS    | CS   | CS     |
| Data Terminal Ready       | DTR    | DTR  | TR     |
| Data Set/Mode Ready       | DSR    | DSR  | DM     |
| Carrier Detect/Rec. Ready | CD     | CD   | RR     |

**Table E-2: V-Series Functions for High Speed External Pods Only**

| Function              | RS-232 | V.35 | RS-449 |
|-----------------------|--------|------|--------|
| Local Loopback (Drv)  |        | LLB  | LLB    |
| Remote Loopback (Drv) |        | RLB  | RLB    |
| Test Mode (Mon)       |        | TM   | TM     |

**RS-232C/V.24**



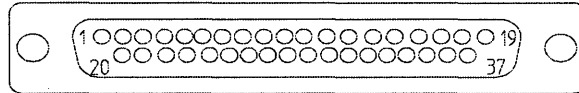
**Figure E-2: RS-232C Interface Connector Pins Assignment**

**Table E-3: RS-232C Interface Connector Pins Assignment**

| PIN | CCITT<br>CIRCUIT | CIRCUIT FUNCTION                        | PIN | CCITT<br>CIRCUIT | CIRCUIT<br>FUNCTION                             |
|-----|------------------|---|-----|------------------|---|
| 1   | 101              | Protective Ground                       | 14  | 118              | Secondary Transmitted Data                      |
| 2   | 103              | Transmitted Data                        | 15  | 114              | Transmission Signal Element Timing (DCE Source) |
| 3   | 104              | Received Data                           | 16  | 119              | Secondary Received Data                         |
| 4   | 105              | Request to Send                         | 17  | 115              | Receiver Signal Element Timing (DCE Source)     |
| 5   | 106              | Clear to Send                           | 18  |                  | Unassigned                                      |
| 6   | 107              | Data Set Ready                          | 19  | 120              | Secondary Request to Send                       |
| 7   | 102              | Signal Ground (common return)           | 20  | 108.2            | Data Terminal Ready                             |
| 8   | 109              | Received Line Signal Detector           | 21  | 110              | Signal Quality Detector                         |
| 9   |                  | (Reserved for Data Set Testing)         | 22  | 125              | Ring Indicator                                  |
| 10  |                  | (Reserved for Data Set Testing)         | 23  | 111/112          | Data Signal Rate Selector (DTE Source)          |
| 11  |                  | Unassigned                              | 24  | 113              | Transmit Signal Element Timing (DTE Source)     |
| 12  | 122              | Secondary Received Line Signal Detector | 25  |                  | Unassigned                                      |
| 13  | 121              | Secondary Clear to Send                 |     |                  |   |

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**RS-449**

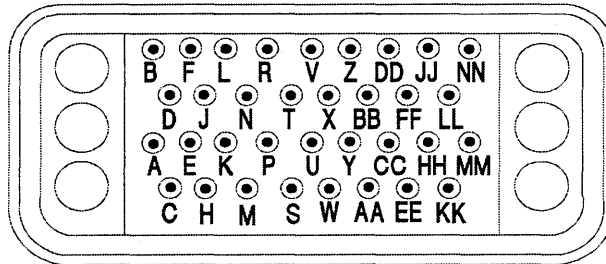


**Figure E-3: RS-449 Interface Connector Pins Assignment**

**Table E-4: RS-449 Interface Connector Pins Assignment**

| PIN | CIRCUIT NAME                          | PIN | CIRCUIT NAME        |
|-----|---------------------------------------|-----|---------------------|
| 1   | Shield                                | 20  | Receive Common      |
| 2   | Send Timing                           | 21  | Spare               |
| 3   | Spare                                 | 22  | Send Data           |
| 4   | Send Data                             | 23  | Send Timing         |
| 5   | Send Timing                           | 24  | Receive Data        |
| 6   | Receive Data                          | 25  | Request to Send     |
| 7   | Request to Send                       | 26  | Receive Timing      |
| 8   | Receive Timing                        | 27  | Clear to Send       |
| 9   | Clear to Send                         | 28  | Terminal in Service |
| 10  | Local Loopback                        | 29  | Data Mode           |
| 11  | Data Mode                             | 30  | Terminal Ready      |
| 12  | Terminal Ready                        | 31  | Receiver Ready      |
| 13  | Receiver Ready                        | 32  | Select Standby      |
| 14  | Remote Loopback                       | 33  | Signal Quality      |
| 15  | Incoming Call                         | 34  | New Signal          |
| 16  | Select Frequency/Signal Rate Selector | 35  | Terminal Timing     |
| 17  | Terminal Timing                       | 36  | Standby Indicator   |
| 18  | Test Mode                             | 37  | Send Common         |
| 19  | Signal Ground                         |     |                     |

**V.35**



**Figure E-4: V.35 Interface Connector Pins Assignment**

**Table E-5: V.35 Interface Connector Pins Assignment**

| PIN | CIRCUIT NAME               |
|-----|----------------------------|
| A   | Chassis Ground             |
| B   | Signal Ground              |
| C   | Request to Send            |
| D   | Clear to Send              |
| E   | Data Set Ready             |
| F   | Receive Line Signal Detect |
| P   | Transmit Data (A)          |
| R   | Received Data (A)          |
| S   | Transmit Data (B)          |
| T   | Received Data (B)          |
| U   | Terminal Timing (A)        |
| V   | Receive Timing (A)         |
| W   | Terminal Timing (B)        |
| X   | Receive Timing (A)         |
| Y   | Transmit Timing (A)        |
| AA  | Transmit Timing (B)        |

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## Interface Pin-Out Comparison

**Table E-6: Interface Pin-Out Comparison**

| <b>RS-232C/CCITT V.24</b>         | <b>CCITT V.35</b>  | <b>RS-449</b>   |
|-----------------------------------|--|---|
| <b>25 Pin</b>                     | <b>34 Pin</b>  | <b>37 Pin</b>   |
| 1-Protective Ground               | A-Protective Ground  | 1-Shield<br>37-Send Common  |
| 2-Transmitted Data                | P-Transmit Data (A)<br>S-Transmit Data (B)                     | 4-Send Data (A)<br>22-Send Data (B)                                 |
| 3-Received Data                   | R-Received Data (A)<br>T-Received Data (B)                     | 6-Received Data(A)<br>24-Received Data (B)                          |
| 4-Request to Send                 | C-Request to Send  | 7-Request to Send (A)<br>25-Request to Send (B)                     |
| 5-Clear to Send                   | D-Clear to Send  | 9-Clear to Send (A)<br>27-Clear to Send (B)                         |
| 6-Data Set Ready                  | E-Data Set Ready   | 11-Data Mode (A)<br>29-Data Mode (B)                                |
| 7-Signal Ground                   | B-Signal Ground  | 19-Signal Ground  |
| 8-Carrier Detect                  | F-Receive Line<br>Signal Detect                                | 13-Receiver Ready (A)<br>31-Receiver Ready (B)                      |
| 9-Reserved for Testing            | m-Reserved for<br>DSU Testing                                  |   |
|                                   |  | 20-Receive Common   |
| 10-Reserved for<br>Testing        |  | 10-Local Loop (A)<br>14-Remote Loop (B)                             |
| 11-Unassigned                     |  | 3-SPARE<br>21-SPARE   |
| 12-Sec. Carrier Detect            |  | 32-Select Standby   |
| 13-Sec. Clear to Send             |  |   |
| 14-Sec. Transmitted<br>Data       |  |   |
| 15-Transmit Clock<br>(DCE Source) | Y-TX Signal<br>Element Timing<br>o-TX Signal Element<br>Timing | 5-Send Timing (A)<br>DCE Source<br>23-Send Timing (B)<br>DCE Source |

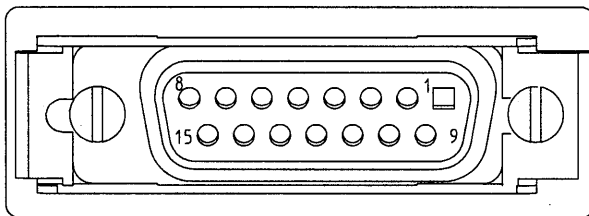
Breakout Box, LEDs & Connectors  
**V-Series Interfaces**

| <b>RS-232C/CCITT V.24</b>      | <b>CCITT V.35</b>                          | <b>RS-449</b>   |
|--------------------------------|--|---|
| <b>25 Pin</b>                  | <b>34 Pin</b>                              | <b>37 Pin</b>   |
| 16–Sec. Received Data          |  |   |
| 17–Receive Clock               | V–RX Signal Element<br>X–RX Signal Element | 8–Receive Timing (A)<br>26–Receive Timing (B)               |
| 18–Unassigned                  |  | 18–Test Mode (A)<br>28–Term in Service (A)<br>34–New Signal |
| 19–Sec. Request to Send        |  |   |
| 20–Data Terminal Ready         |  | 12–Terminal Ready (A)<br>30–Terminal Ready (B)              |
| 21–Signal Quality Detector     |  | 33–Signal Quality (A)                                       |
| 22–Ring Indicator              |  | 15–Incoming Call (A)  |
| 23–Data Signal Rate Selector   |  | 2–Signaling Rate Indicator (A)                              |
|                                |  | 16–Signaling Rate Selector (A)                              |
| 24–Transmit Clock (DTE Source) |  | 17–Terminal Timing (A)<br>35–Terminal Timing (B)            |
| 25–Busy                        |  | 36–Stand by Indicator                                       |



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## AUI - 100Base-T

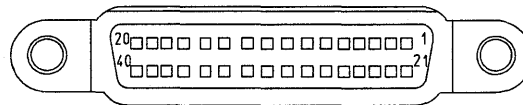


**Figure E-5: AUI - 100Base-T Connector**

**Table E-7: AUI -100Base-T Pins Assignment**

| PIN   | CIRCUIT NAME | USE                                     |
|-------|--------------|---|
| 3     | DO-A         | Data Out circuit A                      |
| 10    | DO-B         | Data Out circuit B                      |
| 11    | DO-S         | Data Out circuit Shield                 |
| 5     | DI-A         | Data In circuit A                       |
| 12    | DI-B         | Data in circuit B                       |
| 4     | DI-S         | Data In circuit Shield                  |
| 7     | CO-A         | Control Out circuit A                   |
| 15    | CO-B         | Control Out circuit B                   |
| 8     | CO-S         | Control Out circuit Shield              |
| 2     | CI-A         | Control in circuit A                    |
| 9     | CI-B         | Control in circuit B                    |
| 1     | CI-S         | Control In circuit Shield               |
| 6     | VC           | Voltage Common                          |
| 13    | VP           | Voltage Plus                            |
| 14    | VS           | Voltage Shield                          |
| SHELL | PG           | Protection Ground<br>(Conductive Shell) |

## MII - 100Base-T



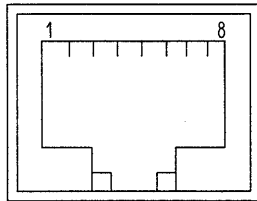
**Figure 8-9: MII - 100Base-T Connector Pin Assignment**

**Table E-8: MII - 100Base-T Connector Pin Assignment**

| PIN | CIRCUIT NAME | PIN | CIRCUIT NAME |
|-----|--------------|-----|--------------|
| 1   | +5 V         | 21  | +5 V         |
| 2   | MDIO         | 22  | COMMON       |
| 3   | MDC          | 23  | COMMON       |
| 4   | RXD<3>       | 24  | COMMON       |
| 5   | RXD<2>       | 25  | COMMON       |
| 6   | RXD<1>       | 26  | COMMON       |
| 7   | RXD<0>       | 27  | COMMON       |
| 8   | RX_DV        | 28  | COMMON       |
| 9   | RX_CLK       | 29  | COMMON       |
| 10  | RX_ER        | 30  | COMMON       |
| 11  | TX_ER        | 31  | COMMON       |
| 12  | TX_CLK       | 32  | COMMON       |
| 13  | TX_EN        | 33  | COMMON       |
| 14  | TXD<0>       | 34  | COMMON       |
| 15  | TXD<1>       | 35  | COMMON       |
| 16  | TXD<2>       | 36  | COMMON       |
| 17  | TXD<3>       | 37  | COMMON       |
| 18  | COL          | 38  | COMMON       |
| 19  | CRS          | 39  | COMMON       |
| 20  | +5 V         | 40  | +5 V         |

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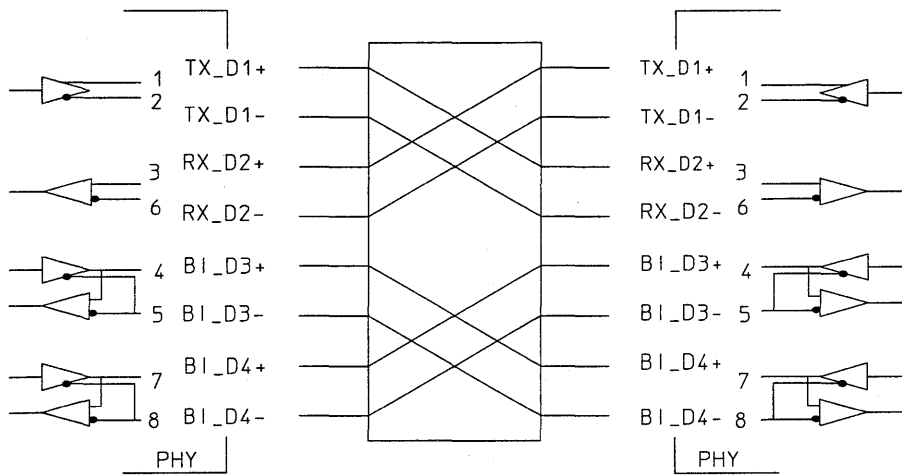
## MDI - 100Base-TX



**Figure E-6: MDI - 100Base-TX Connector**

**Table E-9: MDI - 100Base-TX Pin Assignment**

| PIN | CIRCUIT NAME |
|-----|--------------|
| 1   | TX_D1+       |
| 2   | TX_D1-       |
| 3   | RX_D2+       |
| 4   | BI_D3+       |
| 5   | BI_D3-       |
| 6   | RX_D2-       |
| 7   | BI_D4+       |
| 8   | BI_D4-       |



**Figure E-7: MDI - 100Base-TX Crossover function**

**Breakout Box, LEDs & Connectors**  
**MDI - 100Base-TX**

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F

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**Declarations of Conformity**

Declarations of Conformity  
J2294C CEPT-E1 DB9 & RJ45

J2294C CEPT-E1 DB9 & RJ45


| <b>DECLARATION OF CONFORMITY</b><br><small>according to ISO/IEC Guide 22 and EN 45014</small>  |  |
|--|--|
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.  |
| <b>Manufacturer's Address:</b>   | Network Systems Test Division<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919   |
| declares that the product  |  |
| <b>Product Name:</b>   | Internet Advisor - CEPT-E1 DB9 & RJ45<br>120 Ohm Balanced Module   |
| <b>Model Number(s):</b>  | J2294C   |
| <b>Product Option(s):</b>  | 1A3, 8ZE   |
| conforms to the following Product Specifications:  |  |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1   |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines<br>EN 61000-3-2:1995 / IEC 1000-3-2:1995 + A1<br>EN 61000-3-3:1995 / IEC 1000-3-3:1994 |
| <b>Supplementary Information:</b>  |  |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |  |
| <sup>1</sup> The product was tested in a typical configuration.  |  |
| Colorado Springs, CO   | 4 December 1997  |
|  | <br>Greg Schiffman, Quality Manager<br>(acting)   |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |  |

Figure F-1: J2294C CEPT-E1 DB9 & RJ45

## J2300C Internet Advisor WAN

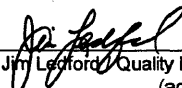
| <b>DECLARATION OF CONFORMITY</b><br><small>according to ISO/IEC Guide 22 and EN 45014</small>  |  |
|--|--|
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.  |
| <b>Manufacturer's Address:</b>   | Network Systems Test Division<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919   |
| declares that the product  |  |
| <b>Product Name:</b>   | Internet Advisor WAN   |
| <b>Model Number(s):</b>  | J2300C   |
| <b>Product Option(s):</b>  | 001, 002, 005, 1A3, 220, 221   |
| conforms to the following Product Specifications:  |  |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1   |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines<br>EN 61000-3-2:1995 / IEC 1000-3-2:1995 + A1<br>EN 61000-3-3:1995 / IEC 1000-3-3:1994 |
| <b>Supplementary Information:</b>  |  |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |  |
| <sup>1</sup> The product was tested in a typical configuration.  |  |
| Colorado Springs, CO 12 December 1997  | <br>Jim Lefford, Quality Manager<br>(acting)  |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |  |

Figure F-2: J2300C Internet Advisor WAN



Declarations of Conformity  
J2306B/J2309B Ether/Ether/TR Interface for Internet Advisor

J2306B/J2309B Ether/Ether/TR Interface  
for Internet Advisor

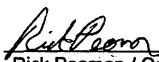
| DECLARATION OF CONFORMITY   |   |
|---|---|
| according to ISO/IEC Guide 22 and EN 45014  |   |
| <b>Manufacturer's Name:</b>   | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>  | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product   |   |
| <b>Product Name:</b>  | Ethernet and Ethernet/Token Ring<br>Undercradles for WAN Internet Advisors  |
| <b>Model Number(s):</b>   | J2306B, J2309B  |
| <b>Product Option(s):</b>   | None  |
| conforms to the following Product Specifications:   |   |
| <b>Safety:</b>  | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>   | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>   |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.   |   |
| <sup>1</sup> The product was tested in a typical configuration.   |   |
| Colorado Springs, CO 12 November 1996   | <br>Rick Pearson / Quality Manager<br>(acting)   |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143) |   |

Figure F-3: J2306B/J2309B Ether/Ether/TR Interface for Internet Advisor

## J2307A LAN Token Ring Undercradle


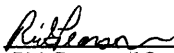
| DECLARATION OF CONFORMITY   |  |
|---|--|
| according to ISO/IEC Guide 22 and EN 45014  |  |
| <b>Manufacturer's Name:</b>   | Hewlett-Packard Co.  |
| <b>Manufacturer's Address:</b>  | Network Systems Test Division<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919   |
| declares that the product   |  |
| <b>Product Name:</b>  | Internet Advisor LAN -<br>Token Ring undercradle   |
| <b>Model Number(s):</b>   | J2307A   |
| <b>Product Option(s):</b>   | 1A3, 8ZE   |
| conforms to the following Product Specifications:   |  |
| <b>Safety:</b>  | EN 61010-1:1993 / IEC 1010-1:1990 + A1   |
| <b>EMC:</b>   | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines<br>EN 61000-3-2:1995 / IEC 1000-3-2:1995 + A1<br>EN 61000-3-3:1995 / IEC 1000-3-3:1994 |
| <b>Supplementary Information:</b>   |  |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.   |  |
| <sup>1</sup> The product was tested in a typical configuration.   |  |
| Colorado Springs, CO 22 December 1997   | <br>Greg Schiffman / Quality Manager<br>(acting)   |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143) |  |

Figure F-4: J2307A LAN Token Ring Undercradle

Declarations of Conformity  
J2524A FDDI Interface for LAN Internet Advisor

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## J2524A FDDI Interface for LAN Internet Advisor

| <b>DECLARATION OF CONFORMITY</b><br><small>according to ISO/IEC Guide 22 and EN 45014</small>  |   |
|--|---|
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>   | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product  |   |
| <b>Product Name:</b>   | FDDI Interface undercradle for<br>WAN and LAN Internet Advisors   |
| <b>Model Number(s):</b>  | J2524A  |
| <b>Product Option(s):</b>  | None  |
| conforms to the following Product Specifications:  |   |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1986 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>  |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |   |
| <sup>1</sup> The product was tested in a typical configuration.  |   |
| Colorado Springs, CO 12 November 1996  | <br>Rick Pearson / Quality Manager<br>(acting)   |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |   |

**Figure F-5: J2524A FDDI Interface for LAN Internet Advisor**

## J2527A TIMS Undercradle for Internet Advisor


| DECLARATION OF CONFORMITY  |   |
|--|---|
| according to ISO/IEC Guide 22 and EN 45014   |   |
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>   | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product  |   |
| <b>Product Name:</b>   | TIMS undercradle for<br>WAN and LAN Internet Advisors   |
| <b>Model Number(s):</b>  | J2527A  |
| <b>Product Option(s):</b>  | Opt. 001  |
| conforms to the following Product Specifications:  |   |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>  |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |   |
| <sup>1</sup> The product was tested in a typical configuration.  |   |
| Colorado Springs, CO 12 November 1996  | <br>Rick Pearson / Quality Manager<br>(acting)   |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-143143) |   |

Figure F-6: J2527A TIMS Undercradle for Internet Advisor

Declarations of Conformity  
J2900A High Speed Acquisition System

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## J2900A High Speed Acquisition System

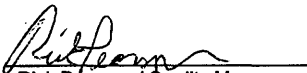
| <b>DECLARATION OF CONFORMITY</b>  |   |
|---|---|
| according to ISO/IEC Guide 22 and EN 45014  |   |
| <b>Manufacturer's Name:</b>   | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>  | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product   |   |
| <b>Product Name:</b>  | High Speed Acquisition System<br>Undercradle for Internet Advisor   |
| <b>Model Number(s):</b>   | J2900A  |
| <b>Product Option(s):</b>   | None  |
| conforms to the following Product Specifications:   |   |
| <b>Safety:</b>  | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>   | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>   |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.   |   |
| <sup>1</sup> The product was tested in typical configurations.  |   |
| Colorado Springs, CO 28 October 1996  | <br>Rick Pearson / Quality Manager<br>(acting)  |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143) |   |

Figure F-7: J2900A High Speed Acquisition System

## J2904A ISDN BRI Module

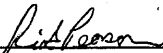
| DECLARATION OF CONFORMITY  |   |
|--|---|
| according to ISO/IEC Guide 22 and EN 45014   |   |
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>   | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product  |   |
| <b>Product Name:</b>   | ISDN Basic Rate Interface module for<br>Internet Advisor series   |
| <b>Model Number(s):</b>  | J2904A  |
| <b>Product Option(s):</b>  | None  |
| conforms to the following Product Specifications:  |   |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>  |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |   |
| <sup>1</sup> The product was tested in a typical configuration.  |   |
| Colorado Springs, CO 12 November 1996  | <br>Rick Pearson / Quality Manager<br>(acting)   |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |   |

Figure F-8: J2904A ISDN BRI Module

Declarations of Conformity  
J2904B, J2293, 94, 96, 97, 98, 99B ISDN Modules

J2904B, J2293, 94, 96, 97, 98, 99B ISDN Modules

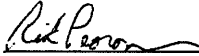
| <b>DECLARATION OF CONFORMITY</b>  |   |
|---|---|
| according to ISO/IEC Guide 22 and EN 45014  |   |
| <b>Manufacturer's Name:</b>   | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>  | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product   |   |
| <b>Product Name:</b>  | ISDN analyzer modules<br>for Internet Advisor   |
| <b>Model Number(s):</b>   | J2904B, J2293B, J2294B,<br>J2296B, J2297B, J2298B, J2299B   |
| <b>Product Option(s):</b>   | All   |
| conforms to the following Product Specifications:   |   |
| <b>Safety:</b>  | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>   | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>   |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.   |   |
| <sup>1</sup> The product was tested in a typical configuration.   |   |
| Colorado Springs, CO 16 September 1996  | <br>Rick Pearson / Quality Manager<br>(acting)   |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143) |   |

Figure F-9: J2904B, J2293, 94, 96, 97, 98, 99B ISDN Modules

## J2905B ISDN BRI U Interface Module

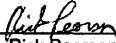
| DECLARATION OF CONFORMITY   |   |
|---|---|
| according to ISO/IEC Guide 22 and EN 45014  |   |
| <b>Manufacturer's Name:</b>   | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>  | Communications Meas Division - Colorado<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product   |   |
| <b>Product Name:</b>  | Dual U-Interface (2B1Q) Module<br>for Internet Advisor ISDN analyzer  |
| <b>Model Number(s):</b>   | J2905B  |
| <b>Product Option(s):</b>   | None  |
| conforms to the following Product Specifications:   |   |
| <b>Safety:</b>  | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>   | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>   |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.   |   |
| <sup>1</sup> The product was tested in a typical configuration.   |   |
| Colorado Springs, CO 20 December 1996   | <br>Rick Pearson / Quality Manager<br>(acting)   |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143) |   |

Figure F-10: J2905B ISDN BRI U Interface Module



Declarations of Conformity  
J2908A DDS 4-Wire Interface Module

J2908A DDS 4-Wire Interface Module


| DECLARATION OF CONFORMITY   |   |
|---|---|
| according to ISO/IEC Guide 22 and EN 45014  |   |
| <b>Manufacturer's Name:</b>   | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>  | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product   |   |
| <b>Product Name:</b>  | DDS 4-Wire Interface module for<br>Internet Advisor series  |
| <b>Model Number(s):</b>   | J2908A  |
| <b>Product Option(s):</b>   | None  |
| conforms to the following Product Specifications:   |   |
| <b>Safety:</b>  | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>   | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary information:</b>   |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.   |   |
| <sup>1</sup> The product was tested in a typical configuration.   |   |
| Colorado Springs, CO 12 November 1996   | <br>Rick Pearson / Quality Manager<br>(acting)   |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143) |   |

Figure F-11: J2908A DDS 4-Wire Interface Module

## J2909A ATM Advisor Series

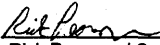
| DECLARATION OF CONFORMITY   |   |
|---|---|
| according to ISO/IEC Guide 22 and EN 45014  |   |
| <b>Manufacturer's Name:</b>   | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>  | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product   |   |
| <b>Product Name:</b>  | DS-3/E3 interface module for<br>Internet Advisor ATM series   |
| <b>Model Number(s):</b>   | J2909A  |
| <b>Product Option(s):</b>   | None  |
| conforms to the following Product Specifications:   |   |
| <b>Safety:</b>  | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>   | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>   |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.   |   |
| <sup>1</sup> The product was tested in a typical configuration.   |   |
| Colorado Springs, CO 12 November 1996   | <br>Rick Pearson / Quality Manager<br>(acting)   |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143) |   |

Figure F-12: J2909A ATM Advisor Series

Declarations of Conformity  
J2912A Internet Advisor ATM Series

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## J2912A Internet Advisor ATM Series

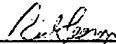
| DECLARATION OF CONFORMITY  |   |
|--|---|
| according to ISO/IEC Guide 22 and EN 45014   |   |
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>   | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product  |   |
| <b>Product Name:</b>   | OC-3c/STM-1 analyzer module<br>for Internet Advisor ATM   |
| <b>Model Number(s):</b>  | J2912A  |
| <b>Product Option(s):</b>  | All   |
| conforms to the following Product Specifications:  |   |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>  |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |   |
| <sup>1</sup> The product was tested in a typical configuration.  |   |
| Colorado Springs, CO 18 September 1996   | <br>Rick Pearson / Quality Manager<br>(acting)   |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |   |

Figure F-13: J2912A ATM Advisor Series

## J2913A Internet Advisor ATM 155-UTP Module

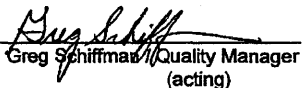

| <b>DECLARATION OF CONFORMITY</b>   |   |
|--|---|
| <small>according to ISO/IEC Guide 22 and EN 45014</small>  |   |
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>   | Communications Meas Division - Colorado<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product  |   |
| <b>Product Name:</b>   | Internet Advisor ATM 155-UTP Module   |
| <b>Model Number(s):</b>  | J2913A  |
| <b>Product Option(s):</b>  | None  |
| conforms to the following Product Specifications:  |   |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>  |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |   |
| <sup>1</sup> The product was tested in a typical configuration.  |   |
| Colorado Springs, CO 8 September 1997  | <br>Greg Schiffman, Quality Manager<br>(acting)   |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZG / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |   |

Figure F-14: J2913A ATM 155-UTP Module

Declarations of Conformity  
J3444A Fast Ethernet LAN Analyzer


---

## J3444A Fast Ethernet LAN Analyzer

| <b>DECLARATION OF CONFORMITY</b>   |   |
|--|---|
| <small>according to ISO/IEC Guide 22 and EN 45014</small>  |   |
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>   | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product  |   |
| <b>Product Name:</b>   | Fast Ethernet LAN analyzer<br>for Internet Advisor  |
| <b>Model Number(s):</b>  | J3444A  |
| <b>Product Option(s):</b>  | None  |
| conforms to the following Product Specifications:  |   |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>  |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |   |
| <sup>1</sup> The product was tested in a typical configuration.  |   |
| Colorado Springs, CO 15 August 1996  | <br>Andy Ouder Kirk / Quality Manager  |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |   |

**Figure F-15: J3444A Fast Ethernet LAN Analyzer  
for HP Internet Advisor**

## J3445A 100 Base-FX Interface Module

| DECLARATION OF CONFORMITY   |   |
|---|---|
| according to ISO/IEC Guide 22 and EN 45014  |   |
| <b>Manufacturer's Name:</b>   | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>  | Colorado Communications Operation<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product   |   |
| <b>Product Name:</b>  | 100Base-FX Interface Module<br>for Internet Advisor LAN analyzer  |
| <b>Model Number(s):</b>   | J3445A  |
| <b>Product Option(s):</b>   | None  |
| conforms to the following Product Specifications:   |   |
| <b>Safety:</b>  | EN 61010-1:1993 / IEC 1010-1:1990 + A1  |
| <b>EMC:</b>   | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>   |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.   |   |
| <sup>1</sup> The product was tested in a typical configuration.   |   |
| Colorado Springs, CO  | 16 October 1996   |
|   | <br>Greg Schiffman, Quality Manager<br>(acting)   |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143) |   |

**Figure F-16: J3445A 100 Base-FX Interface Module for HP Internet Advisor**

Declarations of Conformity  
J3446C and J3447A Internet Advisor WAN

J3446C and J3447A Internet Advisor WAN

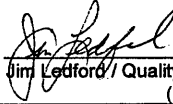
| <b>DECLARATION OF CONFORMITY</b><br><small>according to ISO/IEC Guide 22 and EN 45014</small>  |  |
|--|--|
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.  |
| <b>Manufacturer's Address:</b>   | Network Systems Test Division<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919   |
| declares that the product  |  |
| <b>Product Name:</b>   | Internet Advisor LAN - Fast Ethernet   |
| <b>Model Number(s):</b>  | J3446C, J3447A   |
| <b>Product Option(s):</b>  | 001, 005 (these affect J3446C only)  |
| conforms to the following Product Specifications:  |  |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1   |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines<br>EN 61000-3-2:1995 / IEC 1000-3-2:1995 + A1<br>EN 61000-3-3:1995 / IEC 1000-3-3:1994 |
| <b>Supplementary Information:</b>  |  |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |  |
| <sup>1</sup> The product was tested in a typical configuration.  |  |
| Colorado Springs, CO 12 December 1997  | <br>Jim Letford / Quality Manager<br>(acting)   |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |  |

Figure F-17: J3446C and J3447A Internet Advisor WAN

## J3754C Internet Advisor - pcAdvisor


| DECLARATION OF CONFORMITY   |  |
|---|--|
| according to ISO/IEC Guide 22 and EN 45014  |  |
| <b>Manufacturer's Name:</b>   | Hewlett-Packard Co.  |
| <b>Manufacturer's Address:</b>  | Network Systems Test Division<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919   |
| declares that the product   |  |
| <b>Product Name:</b>  | Internet Advisor - pc Advisor  |
| <b>Model Number(s):</b>   | J3754C   |
| <b>Product Option(s):</b>   | 001, 005, 1A3, 506, 516, 8ZE   |
| conforms to the following Product Specifications:   |  |
| <b>Safety:</b>  | EN 61010-1:1993 / IEC 1010-1:1990 + A1   |
| <b>EMC:</b>   | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines<br>EN 61000-3-2:1995 / IEC 1000-3-2:1995 + A1<br>EN 61000-3-3:1995 / IEC 1000-3-3:1994 |
| <b>Supplementary Information:</b>   |  |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.   |  |
| <sup>1</sup> The product was tested in a typical configuration.   |  |
| Colorado Springs, CO 5 December 1997  | <br>Greg Schiffman / Quality Manager<br>(acting)   |
| European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143) |  |


Figure F-18: J3754C Internet Advisor - pcAdvisor



Declarations of Conformity  
J3759A DS3/E3 Cells and Frames Module for Internet Advisor ATM

---

## J3759A DS3/E3 Cells and Frames Module for Internet Advisor ATM

| <b>DECLARATION OF CONFORMITY</b><br><small>according to ISO/IEC Guide 22 and EN 45014</small>  |   |
|--|---|
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>   | Network Systems Test Division<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product  |   |
| <b>Product Name:</b>   | DS3 / E3 Cells and Frames Module for<br>Internet Advisor ATM  |
| <b>Model Number(s):</b>  | HP J3759A   |
| <b>Product Option(s):</b>  | All   |
| conforms to the following Product Specifications:  |   |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1+ A2  |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>  |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |   |
| <sup>1</sup> The product was tested in a typical configuration.  |   |
| Colorado Springs, CO 02 July 1998  | <br>_____<br>Stephen Hale / Quality Manager  |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |   |

**Figure F-19: J3759A DS3/E3 Cells and Frames Module for  
Internet Advisor ATM**

## J3762A HSSI Module for Internet Advisor ATM


| <b>DECLARATION OF CONFORMITY</b>   |   |
|--|---|
| <small>according to ISO/IEC Guide 22 and EN 45014</small>  |   |
| <b>Manufacturer's Name:</b>  | Hewlett-Packard Co.   |
| <b>Manufacturer's Address:</b>   | Network Systems Test Division<br>5070 Centennial Boulevard<br>Colorado Springs, Colorado 80919  |
| declares that the product  |   |
| <b>Product Name:</b>   | HSSI Module for Internet Advisor ATM  |
| <b>Model Number(s):</b>  | HP J3762A   |
| <b>Product Option(s):</b>  | All   |
| conforms to the following Product Specifications:  |   |
| <b>Safety:</b>   | EN 61010-1:1993 / IEC 1010-1:1990 + A1+ A2  |
| <b>EMC:</b>  | EN 55011:1991 / CISPR 11:1990 (Group 1, Class A) <sup>1</sup><br>EN 50082-1:1992<br>IEC 801-2:1991 4 kV CD, 8 kV AD<br>IEC 801-3:1984 3 V/m<br>IEC 801-4:1988 0.5 kV Signal Lines, 1 kV Power Lines |
| <b>Supplementary Information:</b>  |   |
| The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly.  |   |
| <sup>1</sup> The product was tested in a typical configuration.  |   |
| Colorado Springs, CO 02 July 1998  | <br>Stephen Hale / Quality Manager   |
| <small>European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ / Standards Europe, Herrenberger Strasse 130, D-71034 Boeblingen, Germany (FAX +49-7031-14-3143)</small> |   |

Figure F-20: J3762A HSSI Module for Internet Advisor ATM

**Declarations of Conformity**  
**J3762A HSSI Module for Internet Advisor ATM**

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G

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# Index

## Numerics

- 10/100 Ethernet
  - Documentation 8-16
  - PC Card 8-15
  - PC Card Drivers 8-16
- 100Base-TX/10Base-T Ethernet connector 4-3

## A

- additional help B-5
- alternate boot process 2-5
- application key 2-8
- AT Command Set D-2
- AUI 4-2
- Autoexec.bat C-3

## B

- bag of parts 7-2
- breakout box
  - connections E-2
  - RS232/V.24 E-2
  - switches E-2
- Button Mouse 2-8
  - Keyboard-Button Cover 2-8

## C

- cable
  - power E-3
- CD control signals E-2
- circuits
  - RS-232/V.24

circuits jumpering E-2

Config.sys C-3

connections

breakout box E-2

RS-232 test connector E-2

RS-232/V.24

test connectors E-2

connector board 7-2

connector card 7-5

connector pinouts

RS-232/V.24 E-7

RS-449 E-8

V.35 E-9

contrast control 2-11

control characters 2-9

country selection 8-12

CTS control signals E-2

## D

data transmitter, internal E-3

date 2-7

Declaration of Conformity

J2293B,J2294B,J2296B,J2297B F-10

J2294C F-2

J2298B,J2299B F-10

J2300C F-3

J2306B/J2309B F-4

J2307A F-5

J2524A F-6

J2527A F-7

J2900A F-8

J2904A F-9



- J2904B F-10
- J2905B F-11
- J2908A F-12
- J2909A F-13
- J2912A F-14, F-15
- J2913A F-15
- J3444A F-16
- J3445A F-17
- J3446C and J3447A F-18
- J3754C F-19, F-20, F-21
- disk compression A-2
- display 2-11
  - connecting an external 2-11
  - external 2-11
- DSR control signals E-2
- DTE switch E-3
- DTR control signals E-2

## E

- E4594A Serial number label 1-4
- Edit Windows 95 Autoexec.bat or Config.sys C-2
- EIA-232D (Formerly RS-232C) specifications E-3
- empty Undercradle 7-7
- endcap expander 7-2
- ERROR message D-2
- escape sequence - AT D-2
- external
  - interface connector 3-2
  - monitor 3-2
  - monitor port 2-11
  - port E-4
- External Monitor 5-2

## F

- FAX ii

- filler panel 6-2
- flat endcap 7-2
- frame ground E-3
- functions
  - V-Series
  - interfaces E-6

## G

- Graphical User Interface C-2
- grounding E-3
  - ground-loop problems E-3
  - power cable E-3
  - protective ground E-3
- Grounding Strips 7-2
- GUI C-2

## H

- Hayes Command Set D-2
- HP Demo Icons 2-14
  - remove 2-14
- HP Internet Advisor
  - LAN C-2
  - WAN C-2

## I

- I/O address space 8-11
- impedance, source E-3
- Indicators
  - Mark/Space Indicator E-3
- initializing the modem 8-12
- install
  - remove Interface Modules 6-5
  - Windows 95 applications C-3
- Intel Pentium P5 Chip 2-2
- Interface Module 6-2

Filler Panel 6-2

Install 6-2

Remove 6-3

## Interfaces

Pin-out comparison

CCITT V.35 E-10

RS-232C/CCITT V.24 E-10

RS-449 E-10

internal data transmitter E-3

international telephone adaptors 8-17

interrupts 8-10

## J

J2295A empty Undercradle 7-7

J2300C

Dual PC Card slots 3-3, 5-3

External Interface connector 3-2

External Monitor 3-2

flexible disk drive 3-3, 5-3

handset connector 3-3

headphones 3-2, 5-2

Interface Module 3-3

microphone 3-2

module release latch 3-3

parallel port 3-2, 5-2

Power cable receptacle 3-2, 5-2

RS-232/V.24 connectors 3-2

RS-449 connector 3-3

serial port 3-2

V.35 connector 3-3

J3446C

100Base-TX/10Base-T Ethernet connector 4-3

Ethernet 4-2

external

monitor 4-2

Fast Ethernet 4-2

flexible disk drive 4-3

Headphones 4-2

Interface Module slot 4-3

Microphone 4-2

Module Release Latch 4-3

on-off switch 4-2

parallel port 4-2

PC Card Slot 4-3

power cord

receptacle 4-2

removable LED Label 4-4

serial port 4-2

Top Panel Label 4-4, 5-4

jacks

source E-4

jumpering capabilities, RS-232/V.24

circuits E-2

## K

keyboard 2-8

keypad 2-10

LED 2-10

Keyboard-Button Cover 2-8

## L

LAN Internet Advisor

electronic mail 8-15

file transfer 8-15

right side 4-3

lateral switch bank E-2

LCD VGA display 2-11, B-3

LED lights

active interface LEDs

E-4

RS-232/V.24

LED E-4

- RS-449 LED E-4
- T1/E1 LED E-4
- V.35
  - LED E-4
- Lead status LEDs E-5
- Mark LEDs E-3
- Space LEDs E-3
- System LEDs E-2
- LEDs 2-10

## M

- Mainframe Specifications 2-2
- Mark LEDs E-3
- Mark/Space Indicator E-3
- metal plate 7-3
- Microphone 5-2
- Microsoft ®Windows ® 95 1-3, C-2
- MII 4-2
- Modem 2-13
- modem
  - AT Commands D-3
  - AT commands D-3
  - AT commands/descriptions text file D-3
  - initializing 8-12
  - PC Card setup 8-13
  - PC Cards 8-12
  - transmission rates 8-12
- module release latch 6-2
- monitor, connecting an external 2-11
- MS-DOS Compatibility Mode C-2
- MS-DOS mode 2-5, C-2

## N

- Num Lock key 2-10
- numeric
  - keypad 2-10

- parameter, modem commands D-2

## O

- on-off switch 2-3, 3-2, 5-2
- operating
  - conditions B-4
  - restrictions x
  - systems C-2

## P

- Parallel Port connector 2-15
- parameter, numeric, modem commands D-2
- PC Card 8-2
  - AT Commands and descriptions D-3
  - compatibility 8-2
  - configurations 8-3
  - Ethernet 8-15
  - general tips 8-3
  - I/O address space 8-11
  - insertion 8-4
  - install 8-4
  - interrupts 8-10
  - Modem 8-12
  - properties in Windows 95 8-6
  - removal 8-5
  - slot 4-3, 8-2
  - System Identification 8-5
- PC Specifications 2-3
- physical characteristics B-2
- ports
  - external port E-4
  - RS-449 port E-4
  - V.35 E-4
- power cable E-3
  - receptacle 3-2, 5-2
- power cord 2-3

printer  
    connecting 2-15  
    selecting 2-16  
Product Information viii  
Product Matrix 1-4  
protective ground E-3

## R

receivers  
    V-Series  
        signal receivers E-3  
remote control 8-13  
RS-232 test connector E-2  
RS-232/V.24  
    circuits, jumpering E-2  
    connector pinouts E-7  
    LED E-4  
    test connectors E-2  
RS-449  
    connector pinouts E-8  
    LED E-4  
    port E-4  
RTS control signals E-2  
rubber feet 7-2

## S

safety  
    conditions B-5  
    information vii  
Scandisk A-2  
selection card 8-17  
Serial Port 5-2  
setting  
    printer selection 2-16  
    time and date 2-7  
Shortcut icons 2-14

signal ground E-3  
signals  
    CD control signals E-2  
    CTS control signals E-2  
    DSR control signals E-2  
    DTR control signals E-2  
    RTS control signals E-2  
    terminal generated control signals E-3  
    V-Series  
        signal receivers E-3

silver tabs 7-9  
slave setup 8-14  
software A-2  
source  
    impedance E-3  
    jacks E-4  
    voltage E-4  
Space LEDs E-3  
speakers 2-2  
Specifications  
    EIA-232D (Formerly RS-232C) E-3  
standard connectors 3-4, 4-5  
Start button 2-4  
supported configurations 1-4, 1-5  
SVGA display 2-11, B-3  
switches  
    breakout box switches E-2  
    DTE switch E-3  
    lateral switch bank E-2  
    vertical switch bank E-3  
System LEDs E-2

## T

T1/E1 LED E-4  
TDKModem  
    Documentation 8-17  
TDKModem PC Card 8-17

terminal generated control signals E-3

tests

RS-232 test connector E-2

RS-232/V.24

test connectors E-2

time 2-7

Torx wrench 7-2

transmitters

internal data transmitter E-3

## U

U.S.A. Technical Response Center ii

undercradle

add 7-3

assembly 7-12

attaching 7-3

bottom 7-9

connector board 7-5, 7-10

disassembly 7-11

empty 7-7

install PC Cards 7-11

J2295A 7-7

left side 7-7

metal plate 7-3

remove 7-6

right side 7-7

right side endcap expander 7-8

right side flat endcap 7-8

silver tabs 7-10

top 7-9

## V

V.35

connector pinouts E-9

LED E-4

port E-4

vertical switch bank E-3

V-Series

functions E-6

interfaces

RS-232 E-6

RS-449 E-6

V.35 E-6

signal receivers E-3

## W

WAN Internet Advisor

Interface Modules 4-3

Warning Symbols viii

Web ii

Windows 95 2-4

keys 2-8

Windows 95 MS-DOS Compatibility Mode 2-5,

C-2



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