First Edition (February 1999)

IBM ThinkPad i Series 1400 User's Reference Supplement

This booklet provides additional information not found in the IBM
ThinkPad i Series 1400 User's Reference and other publications
which came with your IBM ThinkPad i Series 1400 computer.

Contents

Chapter 1. Identifying the Hardware Features

Front View of the Computer

The figure below shows the IBM ThinkPad i Series 1400 computer with a 14.1-inch color LCD screen.
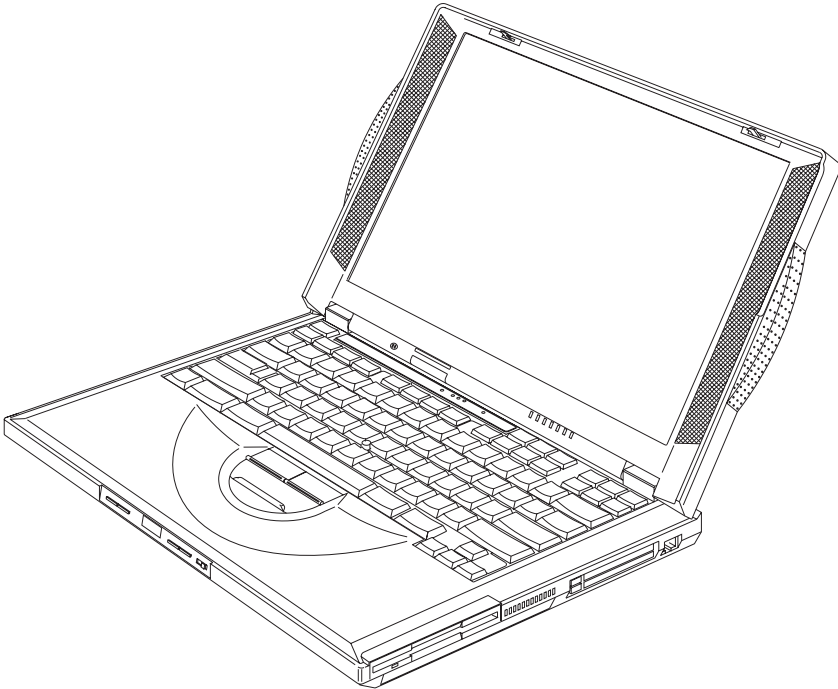
Rear View of the Computer

The figure below updates the location of connectors on the rear and right of the IBM ThinkPad i Series 1400 computer.
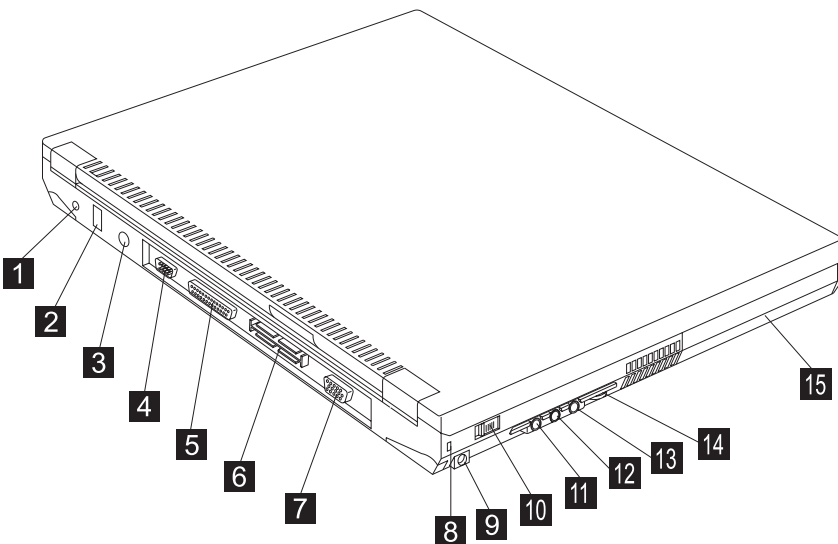
(1)   ⊖€⊕ The **power jack** is where the AC Adapter cable is connected.

(2)   •⟷ The **universal serial bus (USB)** allows you to connect any device that conforms to the USB standard.

(3)   The **external-input-device connector** is used to attach a mouse, external keyboard, or external numeric keypad to the computer.

(4)   The **serial connector** is where you connect a 9–pin, serial-device cable.

(5)   The **parallel connector** is where you connect a parallel-printer signal cable.

(6)   The **system-expansion connector** allows you to connect the port replicator.

(7)   The **external-monitor connector** is where you attach the external monitor.

Rear View of the Computer

(8)   The **security keyhole** is used with a mechanical lock.

(9)   The **TV-out jack** is where you connect a television or external display devices with an S-video in-out cable.

(10)   The **power switch** turns the computer on and off.

(11)   The **headphone jack**, a ⅛inch (3.5mm) diameter jack, is where you connect stereo headphones or external speakers.

(12)   The **line-in jack**, a ⅛inch (3.5mm) diameter jack, is where you connect an external audio device.

(13)   The **microphone jack**, a ⅛inch (3.5mm) diameter jack, is where you connect a self-powered stereo microphone.

> **Note:** Do not plug any device into the microphone jack except a microphone.

(14)   The **audio volume control** adjusts the volume of the speakers.

(15)   The **battery pack** is a built-in power source for the computer.

Chapter 2. Distinctive Functions of the Computer

ThinkPad i Series 1400 DVD

Some models of the ThinkPad i Series 1400 computer come with a built-in DVD-ROM drive.

Enjoying DVD Movies

DVD Movie Regions

DVD movies are divided into the following regions.

Country or Region	Movie Region
U.S.A., Canada	1
Europe, Middle East, South Africa, Japan	2
Southeast Asia, Taiwan, Korea (South)	3
Latin America, Australia, New Zealand	4
Former U.S.S.R., parts of Africa, India	5
People's Republic of China	6

The ThinkPad i Series 1400 DVD allows you to play DVD movies of a selected region. Make sure the DVD movie you are using is of that region. You will not be able to play DVD movies of other regions.

CAUTION:
The first time you run the Mediamatics DVD Player, you need to set the region code. Make sure you insert a DVD that corresponds to the region code that you will set. Otherwise, you will not be able to view DVD movies of any region.

To start playing a DVD movie, do as follows:

1. Push the DVD-ROM eject button on the side of the computer; then pull out the DVD-ROM tray.

2. Fit your DVD on the center pivot. Firmly press the DVD down until you hear it click into place.

3. Push the tray into the computer until it fully closes.

4. Click on **Start**.

5. Move the cursor to **Programs**, **Mediamatics DVDExpress**; then click on **Mediamatics DVD Player**.

Help

Open

Eject

Options

Previous

Rewind

Stop   Play   Pause

Fast forward

Next

Controls

Volume

Mute
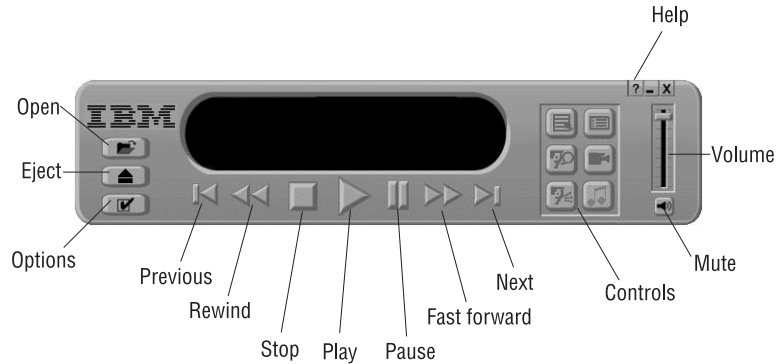
Note: Click on the **Help** button for more information on how to use the DVD movie playback software.

Hints, Tips and Limitations

* Refer to the table below when troubleshooting problems related to your ThinkPad i Series 1400 DVD:

Problem	Action
No sound is coming from the speakers.	Check the following: • Try adjusting the audio volume control. • Check if the sound is muted in the DVD movie playback software. • Check if the sound is muted in the operating system.
The control buttons on the DVD movie playback software do not work.	The DVD movie playback software is reading the DVD-ROM. Wait for a few seconds before trying the buttons again.

* The computer plays region 1 DVD movies. Make sure the DVD movie you are using is a region 1 DVD. You will not be able to play DVD movies of other regions.

ThinkPad i Series 1400 DVD

- The computer plays back DVD movies at 256 colors.

- If the computer enters standby mode during DVD movie play-back, the DVD movie will start playing from the beginning again when you resume from standby mode.

- Do not change the screen resolution during DVD movie play-back.

- DVD movie playback requires Microsoft DirectXX** version 2 or higher.

Using the Audio Features

The ThinkPad i Series 1400 computer allows you to play music CDs without turning on the computer by using the audio CD control panel located on the front of the computer. When the computer is on, you can also use the audio CD control panel to control the playback of music CDs.

Note: Using the audio CD control panel to control music CD playback with the computer on requires the ESS AudioRack and ShortCut Keys Utility programs to be installed.

The ThinkPad i Series 1400 comes with the ESS** AudioRack audio support software. This software allows you to play music CDs, MIDI files, as well as play and record wave files.

To run the ESS AudioRack, do as follows:

1. Click on **Start**.

2. Move the cursor to **Programs**, **AudioRack 32**, then click on **AudioRack 32**.

Using the Audio Features

Display Modes

The ThinkPad i Series 1400 computer has an LCD that supports an XGA (1024x768 resolution) video mode or an SVGA (800x600 resolution) video mode. The following table shows the various display modes (resolution and color depth) available with your computer or external monitor. Use this table to set the display output (**LCD Panel Only**, **External monitor** or **Both**).

Note: When installing an operating system, you must install the display driver supplied with the computer to use SVGA mode.

- Display output on the LCD, or both on the LCD and external monitor (**LCD Panel Only** or **Both**).

Resolution	Supported Color Depth
640x480 (VGA)	16, 256, 65,536, and 16,777,216
800x600 (SVGA)	256, 65,536, and 16,777,216
1024x768 (XGA) (available only for 14.1-inch and 13.3–inch models)	256, 65,536, and 16,777,216

- Display output only on the external monitor (**External monitor**).

Resolution	Supported Color Depth	Frame Rate
640x480 (VGA)	256	60 Hz, 75 Hz, or 85 Hz
	65,536	
	16,777,216	
800x600 (SVGA)	256	60 Hz, 75 Hz, or 85 Hz
	65,536	
	16,777,216	
1024x768 (XGA)	256	60 Hz, 75 Hz, or 85Hz
	65,536	
	16,777,216	

Display Modes

Resolution	Supported Color Depth	Frame Rate
1280x1024	256	60 Hz

Note: If you are using an old external monitor, the resolution and color depth might be limited.

Notebook Manager

Updated sections in the Notebook Manager include the following:

POST Page

In the POST page, you can define how you want your computer to behave at startup.
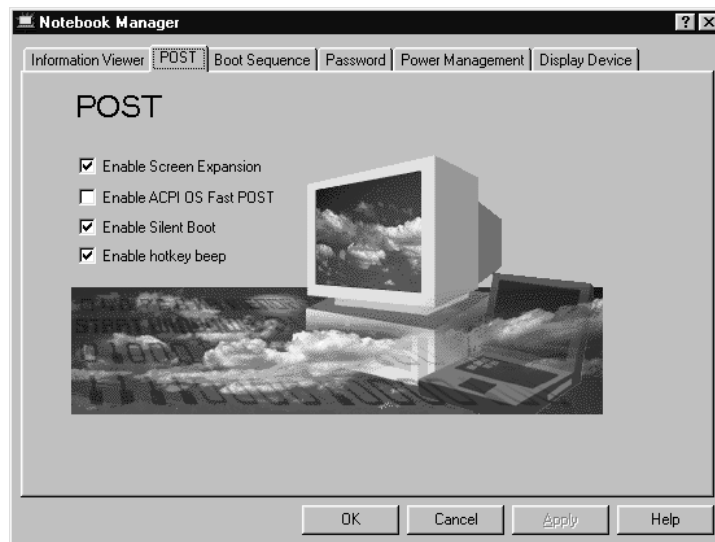
The POST page displays the following items:

- *Enable Screen Expansion.* When enabled, the computer expands the screen on your computer. For more information, see the User's Reference.

- *Enable ACPI OS Fast POST.* enables or disables Fast POST when ACPI is active on your computer.

  Fast POST allows your computer to start up and resume from hibernation mode faster. When enabled, the BIOS communicates with the Windows 98 operating system with ACPI about Plug-and-Play resources settings and information about previous start ups.

- *Enable Silent Boot.* When enabled, the computer hides the startup messages.

- *Enable hotkey beep.* When enabled, the computer gives off beeps when an Fn key function is pressed.

Boot Sequence Page

In the Boot Sequence page, you can specify the startup sequence of the drives in your computer.
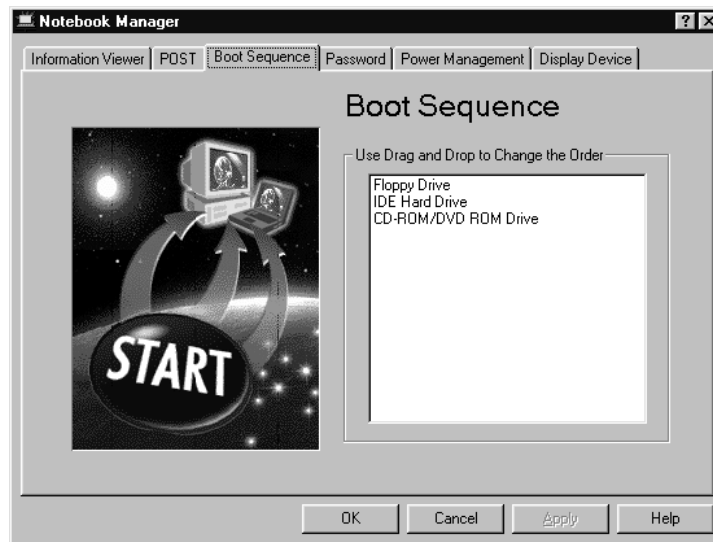
The Boot Sequence page allows you to set the startup sequence of the drives in your computer by simply dragging and dropping the drives in the list window.Click on the **Help** button to learn more about these startup sequence settings.

Power Management Page

In the Power Management page, you can set various options related to power management.
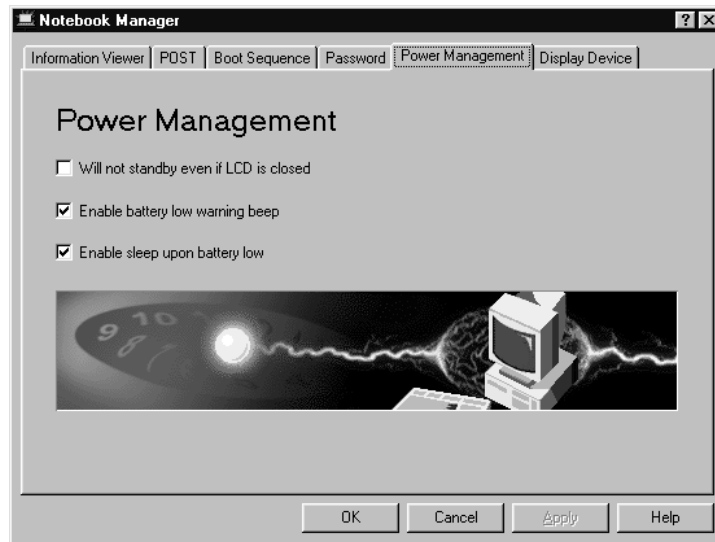
The Power Management page displays the following items:

- *Will not standby even if LCD is closed.* When enabled, the computer will continue operation even if the LCD is closed. You may want to enable this option when you attach an external monitor and other external devices to the computer.

- *Enable battery low warning beep.* When enabled, the computer gives off warning beeps when the computer is running low on battery.

- *Enable sleep upon battery low.* When enabled, the computer enters hibernation mode when the computer is running low on battery.

   Note: In a battery-low condition, the computer enters hibernation mode if the hibernation file created by Sleep Manager is present and valid. For more information, see the User's Reference.

BIOS Utility

Your computer provides a BIOS Utility which allows you to select various setup parameters:

- **System Information:** View information about the computer.

- **Basic System Settings:** Set date and time.

- **Startup Configuration:** Set startup options.

- **Onboard Devices Configuration:** Set device resource settings.

- **System Security:** Set a password.

- **Power Management:** Set power management settings.

- **Load Default Settings:** Load the default settings for all parameters.

To start the BIOS Setup Utility, do as follows:

1. Remove any diskette from the diskette drive, and remove any CD from the CD-ROM drive; then turn off the computer.

2. Turn on the computer.

3. As the ThinkPad logo is being displayed, a message appears "Press F1 for IBM BIOS Setup Utility"; press **F1**.

   The BIOS Utility menu appears:

```
┌──────────────────────────────────────────────────────────────┐
│                         BIOS Utility                           │
├──────────────────────────────────────────────────────────────┤
│                                                                │
│                      System Information                        │
│                     Basic System Settings                     │
│                      Startup Configuration                     │
│                Onboard Devices Configuration                   │
│                        System Security                         │
│                       Power Management                         │
│                     Load Default Settings                      │
│                                                                │
│                                                                │
│                                                                │
│                                                                │
│                                                                │
│                                                                │
│                                                                │
│                                                                │
│                                                                │
├──────────────────────────────────────────────────────────────┤
│  ↑↓ = Move highlight bar, ↵ = Select, Esc = Exit               │
└──────────────────────────────────────────────────────────────┘
```
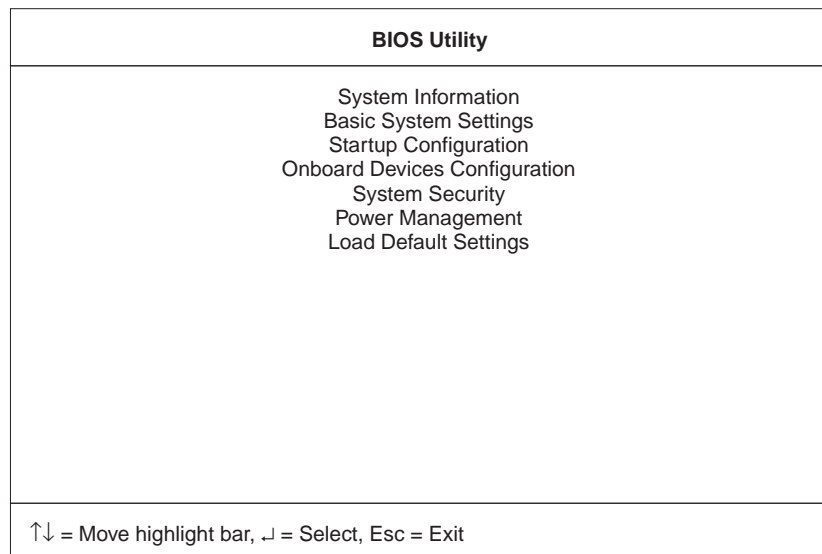
4. Move to an item you want to change using the up/down arrow keys, and press **Enter**.

   A submenu is displayed.

5. Change the items you wish to change.

   To change the value of an item, use the left/right arrow keys.

6. Press **Esc** to exit from the submenu.

7. Press **Esc** from the main menu and press **Enter** to save your changes and exit from the BIOS Setup Utility menu.

   Your computer restarts.

   Note: If you would like to discard your changes, select **No** and press **Enter**.

System Information

Selecting the **System Information** item and pressing **Enter** displays the following "System Information" submenu.

```
┌─────────────────────────────────────────────────────────────────────┐
│                      System Information              Page 1/1         │
├─────────────────────────────────────────────────────────────────────┤
│  CPU Type & Speed ------------------ Pentium II 366 Mhz               │
│  Diskette Drive A ---------------------- 1.44MB 3.5-inch              │
│  System with --------------------------- CD-ROM                       │
│  Hard Disk Drive ---------------------- 6194 MB                       │
│  HDD Serial Number ----------------- ZC2ZCFC7037                      │
│  System BIOS Version --------------- V3.0 R01-A0f                     │
│  VGA BIOS Version ------------------- V01.10.0000                     │
│                                                                       │
│                                                                       │
│                                                                       │
│                                                                       │
│                                                                       │
│                                                                       │
│                                                                       │
├─────────────────────────────────────────────────────────────────────┤
│  PgUp PgDn = Move screen, Esc = Exit                                  │
└─────────────────────────────────────────────────────────────────────┘
```

The "Basic System Settings" submenu includes the following:

- **CPU Type and Speed** shows the type and speed (in Megahertz) of the processor.

- **Diskette Drive A** shows information on the diskette drive.

- **System with** shows information on the internal high-capacity media drive.

- **Hard Disk Drive** shows the capacity of the hard disk drive.

- **HDD Serial Number** shows the serial number of the hard disk drive.

- **System BIOS Version** shows the BIOS version of the computer.

- **VGA BIOS Version** shows the BIOS version of the computer's video.

Basic System Settings

Selecting the **Basic System Settings** item and pressing **Enter** displays the following "Basic System Settings" submenu.

```
                      Basic System Settings              Page 1/1

Date -------------------------------------- [Fri Jan 08, 1999]
Time --------------------------------------[16:19:10]







↑↓ = Move highlight bar, ←→ = Change setting, F1 = Help
```

The "Basic System Settings" submenu includes the following:

- **Date** sets the system date.

- **Time** sets the system time.

Note: You can also set the current date and time in Windows 98.

Startup Configuration

Selecting the **Startup Configuration** item and pressing **Enter** displays the following "Startup Configuration" submenu.

```
┌─────────────────────────────────────────────────────────────────┐
│              Startup Configuration              Page 1/1          │
├─────────────────────────────────────────────────────────────────┤
│ Boot Display ------------------------------------ [Auto]          │
│ Screen Expansion ----------------------------- [Enabled ]         │
│ USB Function Support ----------------------- [Disabled]           │
│ Hotkey Beep ------------------------------------ [Enabled ]       │
│                                                                   │
│ ACPI OS Fast POST ------------------------- [Disabled]            │
│        Silent Boot ------------------------------ [Enabled ]      │
│        PnP OS ------------------------------------ [Enabled ]     │
│                                                                   │
│ Boot Drive Sequence:                                              │
│      1st. -------------------------------------- [Floppy Disk]    │
│      2nd. -------------------------------------- [CD-ROM]         │
│      3rd. -------------------------------------- [Hard Disk]      │
│                                                                   │
│                                                                   │
│                                                                   │
├─────────────────────────────────────────────────────────────────┤
│ ↑↓ = Move highlight bar, ←→ = Change setting, F1 = Help           │
└─────────────────────────────────────────────────────────────────┘
```

This submenu is used to set startup options and change the startup sequence of the drives in your computer. It includes the following:

- **Boot Display** sets the display output device on start up.

- **Screen Expansion** expands or shrinks the screen on your computer.

- **USB Function Support** enables or disables the USB function on your computer.

- **Hotkey Beep** enables or disables beeps when an Fn key function is pressed.

- **ACPI OS Fast POST** enables or disables Fast POST when ACPI is active on your computer.

  Fast POST allows your computer to start up and resume from hibernation mode faster. When enabled, the BIOS communicates with the Windows 98 operating system with ACPI about Plug-and-Play resources settings and information about previous start ups.

  – **Silent Boot** enables or disables the startup screen.

  – **PnP OS** enables or disables PCMCIA card support on your computer.

- **Boot Drive Sequence (1st, 2nd and 3rd)** specifies the start up sequence of local drives.

Onboard Devices Configuration

Selecting the **Onboard Devices Configuration** item and pressing **Enter** displays the following "Onboard Devices Configuration" submenu.

```
                      Onboard Devices Configuration        Page 1/1

 Serial Port ---------------------------------------- [Enabled ]
       Base Address ----------------------------------- [3F8h]
       IRQ --------------------------------------------- [4 ]

 Parallel Port ----------------------------------------[Enabled ]
       Base Address --------------------------------------[3BCh]
       IRQ --------------------------------------------- [7 ]
       Operation Mode ------------------------------------[    ECP    ]
       ECP DMA Channel --------------------------------[1]




 ↑↓ = Move highlight bar, ←→ = Change setting, F1 = Help
```

Note: You do not need to change the settings in the screen because the default settings are already optimized for you. Changing the values may cause device conflicts.

The "Onboard Devices Configuration" submenu includes the following:

- **Serial Port section** enables and sets the resources values for the serial port.

- **Parallel Port section** enables and sets the resource values for the parallel port.

System Security

Selecting the **System Security** item and pressing **Enter** displays the following "System Security" submenu.

```
┌──────────────────────────────────────────────────────────────────┐
│                        System Security              Page 1/1       │
├──────────────────────────────────────────────────────────────────┤
│  Setup Password ------------------------------------ [ None  ]     │
│  Power-on Password --------------------------------- [ None  ]     │
│  Hard Disk Password -------------------------------- [ None  ]     │
│                                                                    │
│                                                                    │
│                                                                    │
│                                                                    │
│                                                                    │
│                                                                    │
│                                                                    │
│                                                                    │
├──────────────────────────────────────────────────────────────────┤
│  ↑↓ = Move highlight bar, ←→ = Change setting, F1 = Help           │
└──────────────────────────────────────────────────────────────────┘
```

This submenu is used to set the power-on password, setup password, and hard disk password. Refer to Chapter 3, "Using Passwords" on page 27 for details.

Power Management

Selecting the **Power Management** item and pressing **Enter** displays the following "Power Management" submenu.

```
                      Power Management                Page 1/1

Will not Enter Standby even if the LCD is closed ------- [Disabled]

Battery-low Warning Beep -----------------------------------[Enabled ]
Sleep Upon Battery-low -------------------------------------[Enabled ]











↑↓ = Move highlight bar, ←→ = Change setting, F1 = Help
```

The "Power Management" submenu includes the following:

- **Will not Enter Standby even if the LCD is closed** enables or disables the computer to continue operation even if the LCD is closed.

- **Battery-low Warning Beep** enables or disables beeps when the computer is running low on battery.

- **Sleep Upon Battery-low** enables or disables the computer to enter hibernation mode if the computer is running low on battery.

  Note: In a battery-low condition, the computer enters hibernation mode if the hibernation file created by Sleep Manager is present and valid. See the User's Reference for more information.

Load Default Settings

Selecting this item displays the following dialog box.

```
Do you want to load default settings?

        [Yes]              [No]
```

BIOS Utility

To load factory-default settings for all the parameters in the BIOS Utility, select **Yes** and press **Enter**. Otherwise, select **No** and press **Enter**.

CAUTION:

Selecting Yes will erase all your changes.

Starting System Programs

Your ThinkPad computer has a collection of system or utility pro-
grams for easy configuration. The following procedures show how to
start system programs.

- Sleep Manager

  To start the Sleep Manager, do as follows:

  1. Click on **Start**.

  2. Move the cursor to **Programs**, **Sleep Manager**, then click on
     Sleep Manager.

- ShortCut Keys Utility

  To start the ShortCut Keys Utility, do as follows:

  1. Click on **Start**.

  2. Move the cursor to **Programs**, then click on **ShortCut Keys
     Utility**.

- Online User's Guide

  To start the Online User's Guide, do as follows:

  1. Click on **Start**.

  2. Move the cursor to **Programs**, **ThinkPad i Series 1400**,
     then click on **ThinkPad i Series 1400 User's Guide**.

Chapter 3. Using Passwords

The password-setting feature helps to prevent your computer from being used by others. Once you set a password, a prompt appears on the screen each time you turn on the computer. You must enter your password at the prompt. You cannot use the computer unless you type the correct password. You can set the following passwords on your computer:

- Power-on password

  Set the power-on password to protect your computer from use by another person. It provides the following security features:

  - You need to type the power-on password at startup. Therefore, unauthorized users cannot use your computer.

  - You need to type the power-on password when resuming from hibernation mode. Therefore, unauthorized users cannot use your computer.

- Setup password

  Set the setup password to prevent unauthorized changes to your computer's configuration. It provides the following security features:

  - You need to type the setup password to access the BIOS Utility. Therefore, unauthorized users cannot make changes to your computer's configuration.

  - You need to type the setup password to access the Note-book Manager in Windows 98. Therefore, unauthorized users cannot make changes to your computer's configuration.

- Hard disk password

  The hard disk password provides an extra measure of security. Even if you set a power-on password, another user can remove the hard disk drive in your computer and put it in a different computer to access your data. If you set a hard disk password, however, another person cannot access the data on your hard

disk without knowing the password. It provides the following features:

– You need to type the hard disk password at startup.

– If the hard disk drive is moved to another computer, the hard disk password must be typed at startup. Therefore, unauthorized users cannot access your hard disk even if the drive is removed from the computer.

– The hard disk password is required when the computer resumes from suspend mode.

- Other password

  Some Microsoft operating systems provide special Windows passwords. Refer to that system's user's guide for information on how to set, change, and use these passwords.

  Do Not Forget Your Password

  If you forget your hard disk or setup password, you have to take your computer to an IBM reseller or IBM marketing representative to have the password reset. Proof or purchase is required, and an additional charge might be required for the service.

Setting a Password

To set a password, do the following:

1. Restart the computer.

2. As the ThinkPad logo is being displayed, a message appears "Press F1 for IBM BIOS Setup Utility"; press **F1**.

   The BIOS Utility menu appears.

3. Select **System Security** and press **Enter**. The "System Security" submenu appears:

System Security	Page 1/1

   Setup Password -------------------------------------- [None   ]
   Power-on Password ---------------------------------- [None   ]
   Hard Disk Password -------------------------------- [None   ]

   ↑↓ = Move highlight bar, ←→ = Change setting, F1 = Help

   - **Setup Password** Selecting this displays a window for setting the setup password.

   - **Power-On Password** Selecting this displays a window for setting the power-on password.

   - **Hard Disk Password** Selecting this displays a window for setting the hard disk password.

4. Select the type of password you want to set, and press the left/right arrow key. The set password box appears.

Setting a Password

```
o━╥
```

5. Type your desired password and press **Enter**.

   Note: You can type a maximum of seven random characters using a combination of letters (*A* to *Z*) and numbers (*0* to *9*). Uppercase and lowercase letters (for example, *A* and *a*) are treated as the same character.

   If you type a wrong character, use the **Backspace** key to erase it and then type the correct one.

6. Type your password again and press **Enter** to verify it.

   Note: Write down the password and keep it in a safe place.

   ┌─ **Do Not Forget Your Password** ──────────────────┐

   If you forget your hard disk or setup password, you have to take your computer to an IBM reseller or IBM marketing representative to have the password reset. Proof or purchase is required, and an additional charge might be required for the service.

Chapter 4. Additional Information

- Your ThinkPad i Series 1400 computer has an Intel® mobile Pentium® II processor with on-die external cache or an Intel® mobile Celeron® processor.

- If you are using a ZV PC Card, insert it into the upper slot.

- Your ThinkPad i Series 1400 computer has a TV-out (S-Video output) jack that allows you to connect your computer to external display devices.

Attaching a Television to Your Computer

You can attach a television (NTSC or PAL) to your computer and display the computer screen on it. To display the computer screen on television, do the following:

1. Turn off the computer and television.

2. Connect an S-video in-out cable (1) to the video-out port (2); then connect your television.
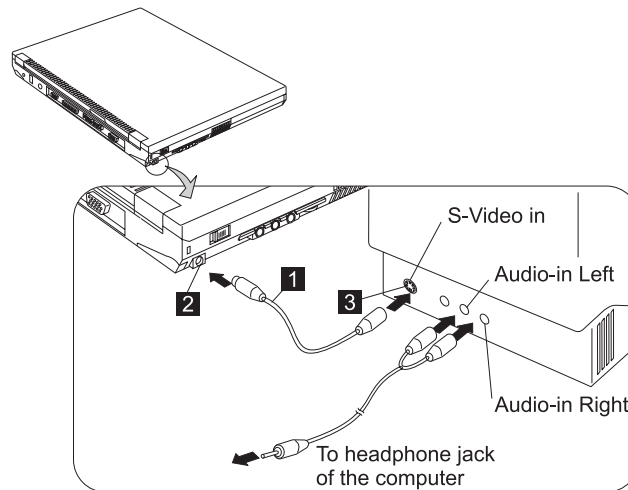
3. Set the external display device.

   a. Click on **Start**.

   b. Move the cursor to **Settings**; then click on **Control Panel**.

   c. Double-click on **Display**.

   d. Click on the **Settings** tab.

   e. Click on the **Advanced...** button.

   f. Click on the **NeoMagic** tab.

   g. Set the external display device. You can also set advanced settings by click on **Advanced Settings**.

Attaching a Television to Your Computer

Notes:

1. The S-video in-out cable (1) and audio in-out cable are not supplied with your computer; you must purchase them.

2. If your video equipment has only one audio-input connector, use the left-audio connector of the audio cable.

Chapter 5. Additional Notices

Year 2000 Readiness and Instructions

This is a Year 2000 Readiness Disclosure.

A product is Year 2000 Ready if the product, when used in accordance with its associated documentation, is capable of correctly processing, providing and/or receiving date data within and between the 20th and 21st centuries, provided all other products (for example, software, hardware, and firmware) used with the product properly exchange date data with it.

This IBM PC hardware product has been designed to process four-digit date information correctly within and between the 20th and 21st centuries. If your IBM computer is on when the century changes, you should turn it off and then back on again once, or restart the operating system, to ensure that the internal clock resets itself for the new century.

This IBM PC product cannot prevent errors that might occur if software you use or exchange data with is not ready for the Year 2000. IBM software that comes with this product is Year 2000 Ready. However, software from other companies might come with this IBM PC product. IBM cannot take responsibility for the readiness of that software. You should contact the software developers directly if you wish to verify readiness, understand limitations, or look for any software updates.

To learn more about IBM PC products and the Year 2000, visit our Web site at http://www.pc.ibm.com/year2000. The information and tools there can help you with your Year 2000 transition plan, especially if you have multiple IBM PCs. IBM encourages you to check periodically for updated information.

Macrovision Copyright Protection Statement

This device is protected by U.S. patent numbers 4631603, 4577216, 4819098, 4907093, and other intellectual property rights. The use of Macrovision's copy protection technology in the device must be authorized by Macrovision and is intended for home and other limited pay-per-view use only, unless otherwise authorized in writing by Macrovision. Reverse engineering or disassembly is prohibited.

Notice to European Users of the IBM ThinkPad Modem

This equipment has been approved to Council Decision 98/ 482/EC - "CTR 21" for pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN termination point. In the event of problems, you should contact your equipment supplier in the first instance.

Warning Notice to New Zealand Users of the IBM ThinkPad Modem

- The grant of a Telepermit for a device in no way indicates Telecom acceptance of responsibility for the correct operation of that device under all operating conditions.

  In particular the higher speeds at which this modem is capable of operating depend on a specific network implementation which is only one of many ways of delivering high quality voice telephony to customers. Failure to operate should not be reported as a fault to Telecom.

  In addition to satisfactory line conditions a modem can only work properly if:

  1. it is compatible with the modem at the other end of the call and

  2. the application using the modem is compatible with the application at the other end of the call - e.g. accessing the Internet requires suitable software in addition to a modem.

- Some parameters required for compliance with Telecom's Telepermit requirements are dependent on the equipment (PC) associated with this device. The associated equipment shall be set to operate within the following limits for compliance with Telecom's Specifications:

  1. There shall be no more than 10 call attempts to the same number within any 30 minute period for any single manual call initiation.

  2. The equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next attempt.

  3. Where automatic calls are made to different numbers, the equipment shall go on-hook for a period of not less than 5 seconds between the end of one attempt and the beginning of the next attempt.

Warning Notice to New Zealand Users of the IBM ThinkPad Modem

4. The equipment shall be set to ensure that calls are answered between 3 and 30 seconds of receipt of ringing (S0 set between 2 and 10). This ensures:

   a. a person calling your modem will hear a short burst of ringing before the modem answers. This confirms that the call has been successfully switched through the network.

   b. caller identification information (which occurs between the first and second ring cadences) is not destroyed.

- The preferred method of dialling is to use DTMF tones (ATDT...) as this is faster and more reliable than pulse (decadic) dialling. If for some reason you must use decadic dialling, your communications program must be set up to record numbers using the following translation table as this modem does not implement the New Zealand "Reverse Dialling" standard.

Number to be dialled:	0	1	2	3	4	5	6	7	8	9
Number to program into computer:	0	9	8	7	6	5	4	3	2	1

Note that where DTMF dialling is used, the numbers should be entered normally.

NOTE THAT FAULT CALLOUTS CAUSED BY ANY OF THE ABOVE CAUSES MAY INCUR A CHARGE FROM TELECOM.