
MiniNotebook Computer User's Manual

MiniNotebook Computer

Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning:

A shielded power cord is required in order to meet FCC emission limits and also to prevent interference with nearby radio and television reception. It is essential that only the supplied power cord be used.

Use only shielded cables to connect I/O devices to this equipment.

The use of shielded cables for the connection of a monitor to the graphics adapter is required to assure compliance with FCC regulations.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

MiniNotebook Computer

Version 1.2

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About This Manual

This manual is organized in four chapters:

Chapter 1: Unpacking & Setting Up

Covers getting started using the computer for the first time. There is a Quick Start section at the end for experienced users.

Chapter 2: Using The MiniNotebook

This section explains the controls and operational features of the MiniNotebook and the Port Module.

Chapter 3: System Accessories & Upgrades

Covers connection, configuration and use of the optional floppy disk and CD-ROM drives and the other accessory and upgrade options.

Chapter 4: Technical Information

This section provides detailed information on the BIOS CMOS Setup utility and support software as well as information on troubleshooting, warnings, care and specifications.

The information in this manual is organized to make it convenient to use for both experienced users and people less familiar with some aspects of computer hardware. We have assumed that the MiniNotebook is not your first computer and that you have some basic familiarity with computer use and terms.

The manual has numerous illustrations to make it easier to locate and use the computer's features and change hardware and software configurations as needed.

In This Chapter:

The MiniNotebook Package

System Hardware Features

System Software

First-Time Setup

Quick Start

Unpacking & Setting Up

This section covers unpacking your MiniNotebook system, explains where everything is and how to start using the computer for the first time.

It notes what you should find in your MiniNotebook package and explains the system hardware features .

System Software is a review of the software that comes with the computer.

The First-Time Setup section explains what you need to do to get your computer up and running the first time you use it.

There is a Quick Start section at the end of this chapter for experienced Users who want to get up and running as quickly as possible and don't need extra support or explanation.

The MiniNotebook Package

When you review the package contents, please check that everything listed here is in the box and undamaged. If you find that something is missing or damaged, please contact your vendor before proceeding. It is better to resolve any problems before you start using the computer.

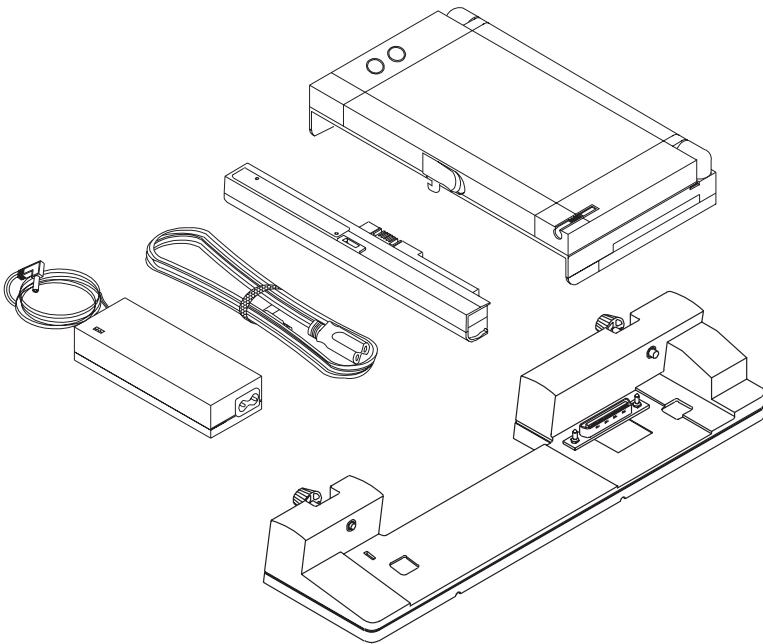
1: Unpacking & Setting Up

The MiniNotebook package includes the following items:

- The MiniNotebook
- Lithium Ion Battery
- AC Adapter & Power Cord
- Port Module
- User Manual
- Support Software Package

Optional Accessories:

- External Floppy Disk Drive
- External IDE ATAPI CD-ROM Drive
- Extended Lithium Ion Battery

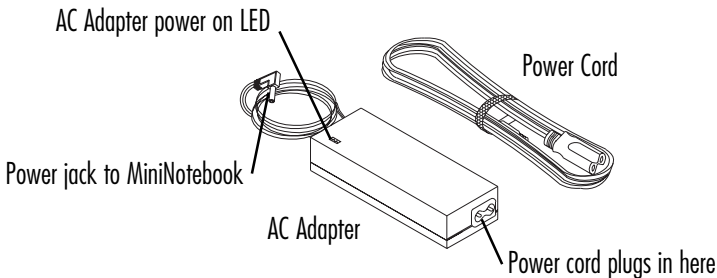
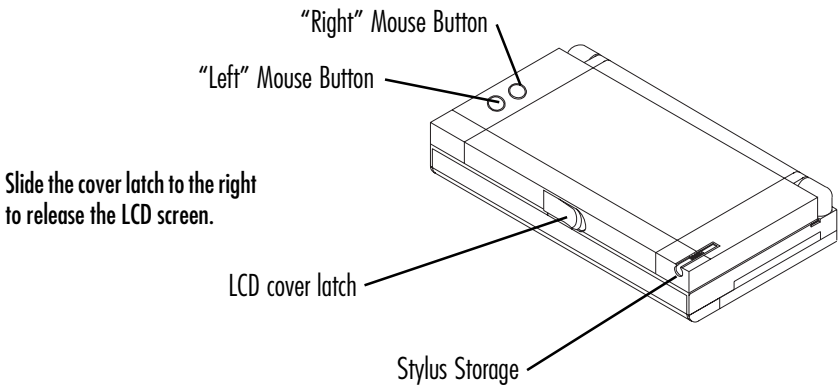


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System Hardware Features

The MiniNotebook's important hardware features are pointed out in the following figures. In particular please note that the pointing device for this computer is a touchscreen and stylus system with "mouse" buttons located on the back of the LCD screen along with the stylus receptacle. The battery forms part of the computer's lower housing. You must install and charge it the first time you use the computer.

MiniNotebook Hardware Features

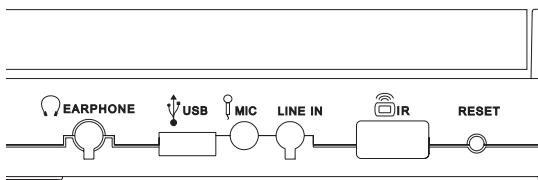
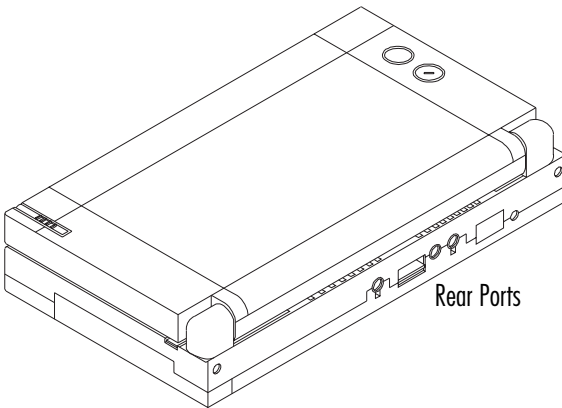


1: Unpacking & Setting Up

External Connectors

The MiniNotebook has several external connectors including audio and USB ports. Serial, parallel and external VGA ports are on the Port Module along with a connector for the optional external CD-ROM drive and two PS/2 ports for an external PS/2 keyboard and PS/2 mouse or other pointing device. The parallel port auto-switches to also function as the floppy disk drive connector.

MiniNotebook Hardware Features – Rear Ports

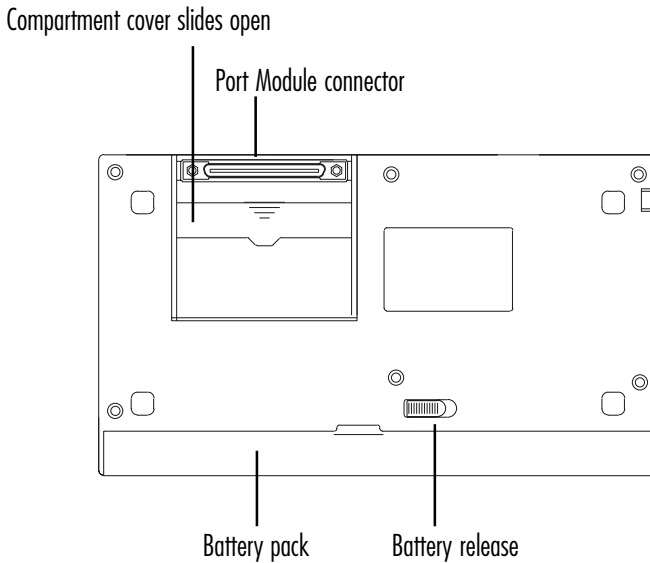


Headphone	USB	External	Audio	Infrared	Reset
Jack	Port	Microphone	Line-In	Port	Button

MiniNotebook Computer

The computer connects to the Port Module via a connector on the underside. The connector is recessed in a compartment that is covered with a sliding access panel. Keep the access panel closed when you aren't using the Port Module. The battery pack forms part of the computer's lower housing. The latch release for the battery is also located on the underside of the computer.

MiniNotebook Hardware Features – Bottom View



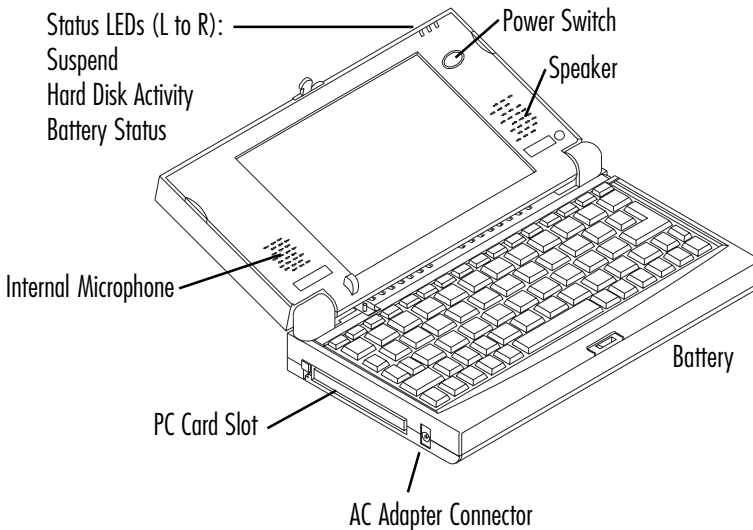
1: Unpacking & Setting Up

System Features

The MiniNotebook uses a standard clamshell design with the LCD screen mounted in the top half. The system speaker, internal microphone, power switch and pointing device controls are also mounted in the upper housing. The System Status LEDs are also mounted in the forward edge.

The lower half contains the computer's main circuit boards, external ports, PC Card slot, keyboard and battery pack. The hard disk drive is also mounted inside the lower half of the computer. The latch receptacle for the upper half is built into the battery pack housing, which forms part of the lower housing.

MiniNotebook Hardware Features — Open View

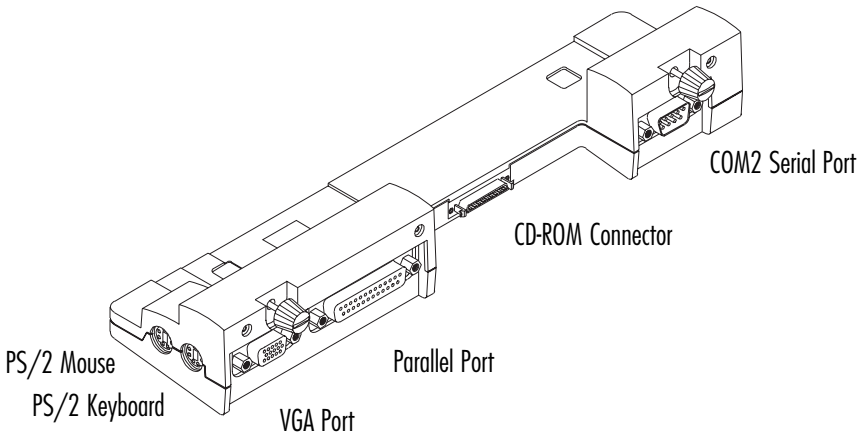


MiniNotebook Computer

Port Module Features

The Port Module connects to the connector on the underside of the computer. The module has external Mouse and Keyboard PS/2 ports, an VGA connector for an external monitor, a Parallel port, a Serial port and a connector for the optional external CD-ROM drive. The optional external floppy disk drive connects to the Parallel port.

MiniNotebook Port Module



1: Unpacking & Setting Up

System Software

When you receive the MiniNotebook it will already have the system software installed on the hard disk drive. The system software includes two parts, the Operating System and the Support Software that is specific to this computer.

The Operating System

This computer uses the Microsoft Windows Operating System. Either Windows 95 or Windows 98 will already be installed on the computer's hard disk when you get it. You also get a CD for the version of Windows installed as part of the Support Software package.

You will need the optional external CD-ROM drive to access the Windows CD should you want to install additional software components or if you ever need to re-install part or all of the Operating System.

Support Software

The MiniNotebook also comes with some software that is specific to the computer's hardware. This includes the Cyrix MediaGx display drivers, touchscreen driver and support software for the computer's touchscreen/stylus pointing device, driver software for the PC Card slot and the Award BIOS updating utility.

All this software will already be installed when you get the computer. In addition, copies of the software are stored in the Support Software directory folder on the hard disk drive in case you ever need to reinstall the software.

Display Drivers

The display driver software is for the Cyrix MediaGx display circuitry that is built into the computer. This software is required to support the display features of the Cyrix chip. You can customize the display settings from the Display Properties Control Panel as explained in Chapter 4.

Touchscreen Software

This computer uses a special pointing device that is comprised of the touch sensitive LCD screen and the pointing stylus that comes with the computer. Additional software other than Windows' built-in mouse support is required to run the touchscreen.

In addition to the driver software, a Touch Screen Control Program which allows you detailed control of the touchscreen features comes pre-installed. The control program is discussed later in the manual.

PC Card Drivers

Driver software for the PC Card slot is installed on the computer when you get it. This software is required for the computer's PC Card slot to work correctly. If you ever need to reinstall the system software, make sure to also install this driver software.

The BIOS Updater Utility

The Flash Memory Writer utility is a utility from Award Software, the maker of the computer's BIOS. You can use this utility to update the system BIOS installed in the computer in the event that later versions are released.

Backing Up The Support Software

As noted, backup copies of the support software are stored on the computer's hard disk drive. If you have the optional external floppy disk drive you should also back the software up onto floppy disk. This ensures you always have it available in the event the hard disk ever has a problem that results in the loss of the software stored on it. Alternatively, you can use the Windows direct cable connection feature to copy the software to another computer such as your main desktop computer. Use the parallel port on the Port Module to connect a direct-connect cable.

1: Unpacking & Setting Up

First-Time Setup

The MiniNotebook comes almost ready to use, so there are only a few things you will need to do to get up and running under normal conditions. After you have unpacked the system and made sure nothing is missing or damaged, you'll need to charge the battery and we recommend checking the pen calibration.

Charging the Battery

You have to install the battery pack in the computer when you first set it up. You will need to charge the battery before you use the computer on battery power for the first time. You can use the computer right away by connecting it to the AC power adapter, and the battery will charge slowly while you use the computer. However, we recommend that you charge the battery with the computer turned off first to ensure it gets a full charge to start with. To charge the battery pack for the first time do as follows:

1. Install the battery.

Raise the LCD slightly and slide the battery into the lower housing of the computer with the latch receptacle facing up. The battery should snap into place and latch securely.

2. Connect the power cord to the AC adapter.
3. With the computer turned off, plug the power connector from the AC adapter into the power jack on the computer.
4. Plug the AC adapter power cord in to a power outlet, preferably using a surge protector outlet strip.

When the AC adapter is plugged in the LED on the adapter will light to indicate the adapter is functioning properly. If the LED does not come on, don't use the adapter.

5. Charge the battery for 2 hours to ensure a full charge.

You can tell if the battery is fully charged by checking the Battery Status LED when you turn on the computer. The Battery Status LED should be orange when you first run the computer on battery power.

Checking Touchscreen Calibration

Your vendor may have already calibrated the touchscreen for use with the computer's stylus when you get the computer. We recommend going through the brief calibration routine just to make sure the system is properly set up. To calibrate the touchscreen please follow the instructions in Section 9: Calibration on page 25 of Attachment 1, the Handwriting User's Manual.

Quick Start

This section is for experienced User's who want to get started as quickly as possible and don't need additional explanation. All OS and system specific software should already be installed when you get the computer. To start using the your MiniNotebook system do as follows:

1. Check the package contents to confirm all items are present and undamaged. Contact your vendor if there's a problem.
2. Install and charge the battery with the computer turned off for 2 hours. The Battery Status LED should be orange to indicate a full charge when you first run the computer on battery power.
3. Double check touchscreen calibration using the Touch Screen Control Program's Calibrate command. The program is in the Touch folder under the Start menu. Use the stylus to tap menu commands.
4. Copies of the system Support Software are stored on the hard disk drive. If you have the optional external floppy disk drive, with the power turned off, connect it to the computer via the Port Module and back up the Support Software to floppy disk. Double check the BIOS Setup Utility to make sure the system is configured for the floppy disk drive.

A Windows CD comes with the system in the event you want to install additional or reinstall OS components. You will need either the Port Module and optional external CD-ROM drive or a direct cable connection from another computer with a CD-ROM drive to the module's parallel port to do this.

1: Unpacking & Setting Up

In This Chapter:

The Power System

The Controls & Indicators

Input Devices

The Display System

External Connections

Using The Port Module

Using The MiniNotebook

This chapter covers things you need to know about using your MiniNotebook computer. It includes explanations of how to use the power system and conserve battery power, using the system controls and status indicators. It also explains how to use the computer's display options and other features including PC Cards, USB devices and the Infrared port. The last section covers the Port Module that comes with the computer.

The Power System

The computer's power system includes the AC adapter and the battery pack. This section explains important points about using them and how to conserve power to allow more use from one battery charge.

The power switch is located beside the LCD screen. Pressing it once turns the system on. Under Windows, when you shut down the system the computer turns off. If you press the power button for more than 4 seconds when the computer is turned on the system will turn off without warning.

The AC Adapter

The AC adapter has two components, the power cord and the adapter and is easy to use. There are two main concerns you should be aware of when using them, the LED status and what you plug the adapter into.

When you use the adapter the LED on the top should light. This indicates that the adapter is working properly. If the LED doesn't light, the first thing you should check is that the power cord is fully plugged into the adapter and that the adapter is properly plugged into an electrical outlet.

2: Using Your Notebook

The AC adapter can use AC power from 100 to 240 volts and converts this to 16 volt DC power for the computer. The AC adapter is a universal adapter that you can use with any AC power system. The power cord you get should be correct for the electrical system where you live. You can use the cord with other AC systems when you travel by using a plug adapter for the local system.

Battery Operation

This computer uses a Lithium Ion battery pack that forms part of the computer's lower housing. The battery pack will provide between 1.5 and 2 hours of use. The AC adapter provides power to the computer and charges the battery in about 2 hours when the computer is turned off.

When using the computer on battery power the Battery Status LED will light. The Battery Status LED has three modes which indicate the battery's charge status. The modes are:

Orange	Battery charge is 95% to 100%
Green	Battery charge is 6% to 94%
Red	Battery charge is 0% to 5%

When the battery charge reaches 5%, the system will rapidly beep four times to indicate low battery status and the Battery Status LED will turn red. You should charge the battery at this point. If you don't charge the battery and it reaches the 1% charge level, the system will rapidly beep four times twice a minute. If you do not turn the system off or connect the AC adapter within 1 minute, the system will enter Suspend mode automatically. Connecting the AC adapter interrupts the warning beeps.

Charging The Battery

To charge the battery, connect the AC adapter. To charge the computer quickly, turn it off while the battery is charging. Alternatively, you can leave the computer on, but the battery will take substantially longer to charge. If you charge the battery with the computer turned on the Battery Status LED will change color as the battery charges to reflect the charge status. The color changes as noted in the Battery Operation section above.

Warning:

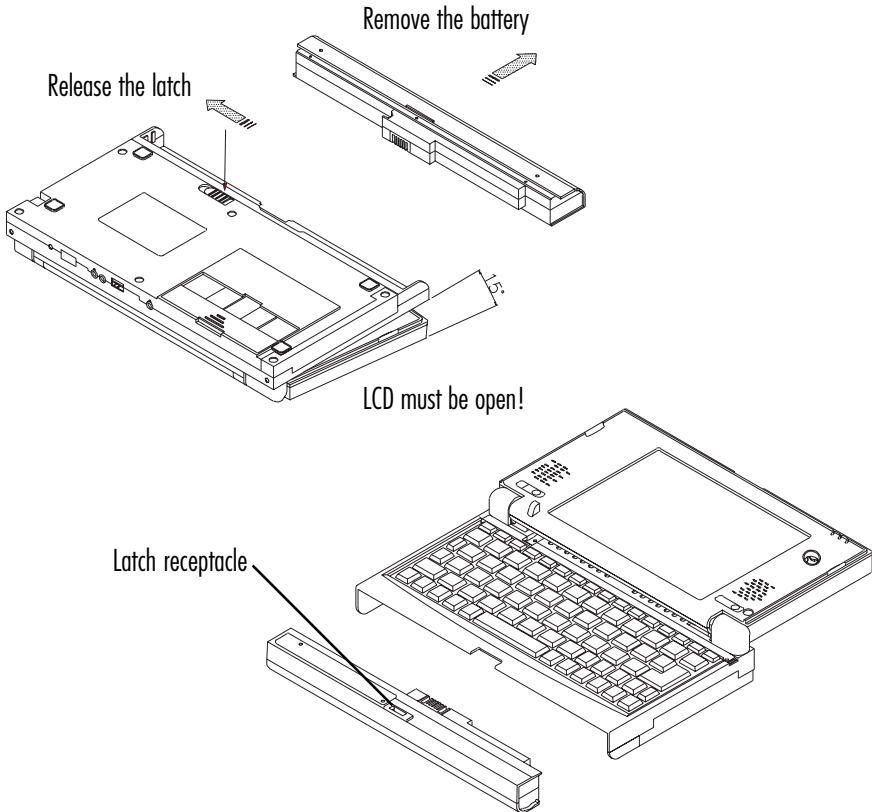
You must charge the battery at least once every 6 months even if you aren't using the computer. Not doing so may damage the battery and shorten its usable life and can even render the battery unusable. See the Battery Warning in Chapter 4 for more information.

Changing The Battery

If you purchase an extra battery pack you have the option of extending how long you can use the computer before having to recharge. The battery pack is easily replaceable. You just need to follow two guidelines:

1. Turn of the computer and disconnect the AC adapter if necessary before you switch batteries.
2. Make sure the LCD screen is unlatched and slightly open before you try to remove the battery pack. The battery housing also has the latch receptacle fro the LCD built into its upper side. If you try to remove the battery with the LCD latched it won't come out and you could damage something.

Removing The Battery



2: Using Your Notebook

Power Conservation

Power conservation extends the useful duration of a battery charge by reducing the amount of power the system is using and thereby increasing the amount of time you can use the computer without having to recharge the battery.

The MiniNotebook supports power conservation via both the Award BIOS Setup Utility and Windows. You can configure power saving settings in either the BIOS Setup Utility or you can do it under Windows. We recommend using Windows power management.

Award BIOS Power Management

The system BIOS includes a Setup utility that is permanently stored in the BIOS chip. The utility has several sections and is explained in Chapter 4. One of the sections is called Power management Setup. From this section you can choose a BIOS-managed power scheme of Min or Max savings or use the User option to configure the settings manually.

To access the BIOS Setup utility, as the computer is starting up press the Del key during the Power On Self Test. Select the Power Management Setup item in the main menu and press Enter to bring up that section.

Windows Power Management

Since the MiniNotebook comes with Windows 95 or 98 installed, we suggest you use the Windows power management scheme rather than using BIOS power management. Windows power management overrides BIOS control when it is enabled. This computer is compatible with both the APM and ACPI power management schemes. To configure power management under Windows open the Power section of the Control Panel to configure the settings.

Suspend Mode

The maximum power saving mode the computer has is Suspend mode. The power management controls noted above ultimately will put the system into Suspend mode and you can also do it manually by either closing the LCD screen so that it is latched or by using the Fn + F5 key command described later in this chapter.

You should normally use this command to suspend the system since it resumes much faster than Suspend To Disk. To resume the system state, press the command a second time.

Suspend To Disk

You can also use the Suspend To Disk feature to suspend the entire system state to the hard disk drive by using the Fn + F2 command. This writes the system state to the hard disk drive so that you can turn the computer off and still return to the same system state when you next turn on the computer. You don't have to turn the computer off when you use this command. You can also resume the system state by pressing the key command a second time. The time needed to resume is longer because the system must read the system state data stored on the hard disk drive.

Suspend Guidelines

Using the Suspend features is an active way you can maximize the use of one battery charge. If you stop using the computer even briefly you can put the system into Suspend mode to maximize power saving. If you develop the habit of doing this you may be surprised at how much additional time you can get out of one charge.

2: Using Your Notebook

System Controls & Indicators

This MiniNotebook's control and input devices that include the power switch, the Reset button, the cover Suspend switch, the keyboard and the touchscreen with stylus. There are three LED system status indicators.

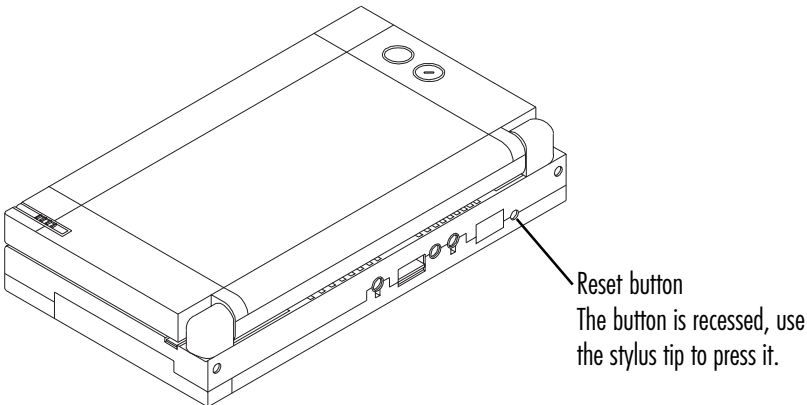
System Switches

The power switch is located beside the LCD screen. Pressing it once turns the system on. Under Windows, when you shut down the system the computer turns off. If you press the power button for more than 4 seconds when the computer is turned on the system will turn off without warning.

In addition to the standard Control-Alt-Del command you can force a hard system reboot by pressing the recessed Reset button on the rear of the computer with the tip of the stylus.

The cover Suspend switch is a recessed switch that actuates when you close the LCD cover. A protrusion on the lower face of the LCD screen presses the switch when the cover is closed, putting the system into Suspend Mode. When you raise the screen the switch is released and the system resumes.

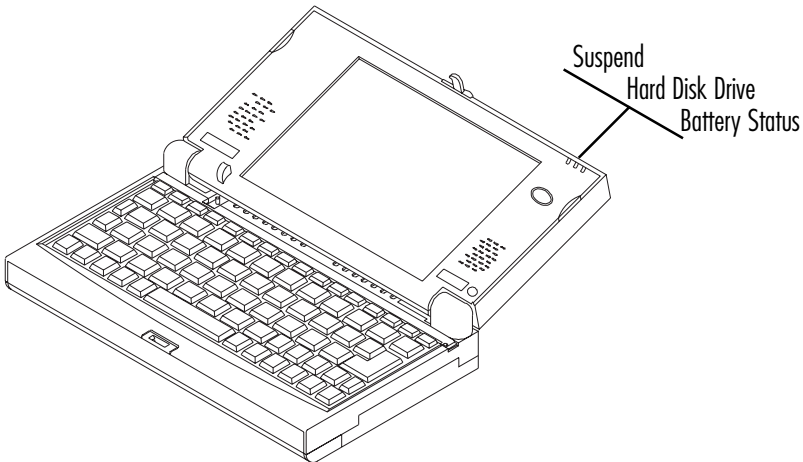
MiniNotebook Reset Switch



System Status LEDs

There are three system status LEDs mounted on the upper edge of the LCD housing. From left to right they are the Suspend indicator, the Hard Disk Activity indicator and the battery Status indicator.

MiniNotebook System Status LEDs



The Suspend LED

The Suspend LED lights when the system is in Suspend mode. It does not light when you put the system into Suspend To Disk mode and turn off the computer. When you resume the suspended system state the LED turns off.

The Hard Disk Activity LED

The Hard Disk Activity LED flashes while the system is accessing the hard disk drive. When the drive is not being accessed the light is off.

The Battery Status LED

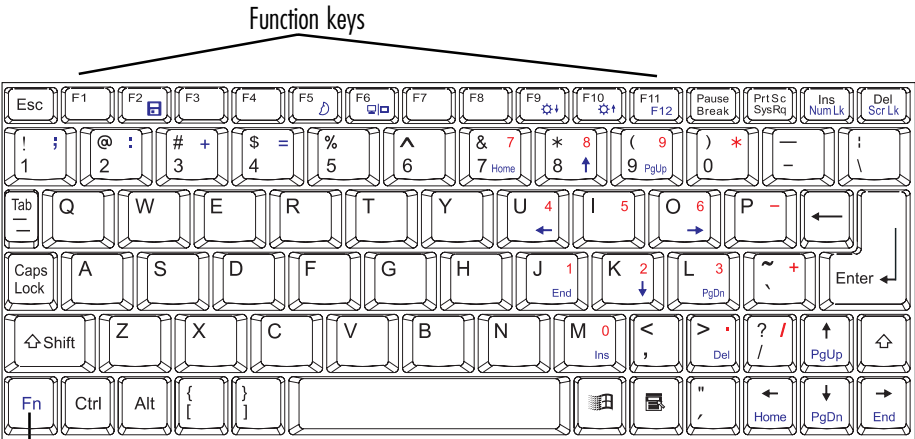
The Battery Status LED will lights when the computer is using battery power. The Battery Status LED has three modes which indicate the battery's charge status. The modes are explained in the Battery Operation section earlier in this chapter.

2: Using Your Notebook

The Keyboard

The keyboard functions like a standard computer keyboard with the exception that some functions are embedded and are activated by the special Fn key. The keyboard supports the special Windows 95 or later operating keys. The key layout is adapted to fit the space available.

MiniNotebook Keyboard

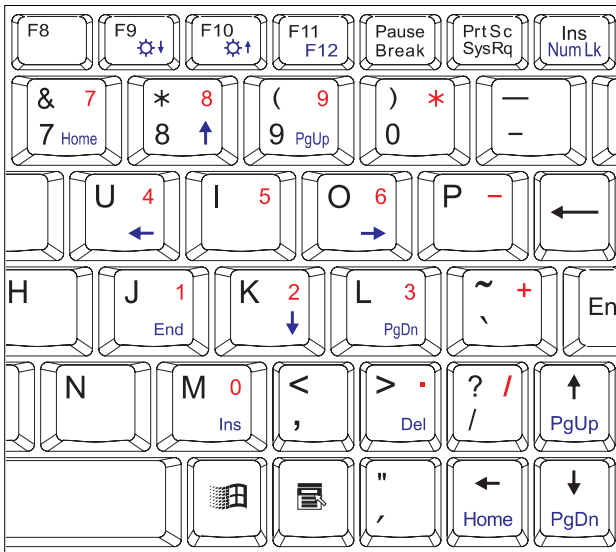


Fn special function key

The Embedded Keypad

The numeric keypad present on most extended desktop keyboards is embedded in the main keyboard. The embedded key assignments are printed on the key caps. The alternate assignments are printed below them. You turn on the embedded keypad by activating the Num Lock feature (Fn + Ins). To turn it off, press the key command again. Although the alternate assignments are available by pressing the Fn key and typing the key, it is more convenient to use the main keys with the same function.

MiniNotebook Embedded Keypad



2: Using Your Notebook

Fn Key Commands

A number of system function are controlled by using key command combinations. The combinations all use the special Fn key in combination with another key. You invoke the command by pressing the Fn key and typing the second command key. The Fn command assignments are as follows:

Fn+F2: Suspend To Disk

Puts the system into the Suspend to Disk mode.

Fn+F5: Suspend Mode

Puts the system into standard Suspend mode.

Fn+F6: Select Display

Toggles the active display between the LCD, an external monitor (connected to the Port Module) and simultaneous display on both. Press the key repeatedly to switch modes.

Fn+F9: Decrease Brightness

Decreases LCD screen brightness incrementally. Press the key until you reach the desired level.

Fn+F10: Increase Brightness

Increases LCD screen brightness incrementally. Press the key until you reach the desired level.

Fn+Ins: Num Lock

This key combination toggles between Num Lock or unlock.

Fn+Del: Scroll Lock

This key combination toggles between Scroll Lock or unlock.

Fn+F11: Function key F12

Invokes a command programmed for Function key F12. Depends on software function assignment. If no function is assigned this has no effect.

Some other key commands are activated by the Fn key. Any function on the keyboard that is the same color as the Fn key label is active when you press the Fn key. These include the secondary key assignments of the embedded keypad and the Num Lock, Scroll Lock, semicolon, colon, plus and equal signs.

The Touchscreen System

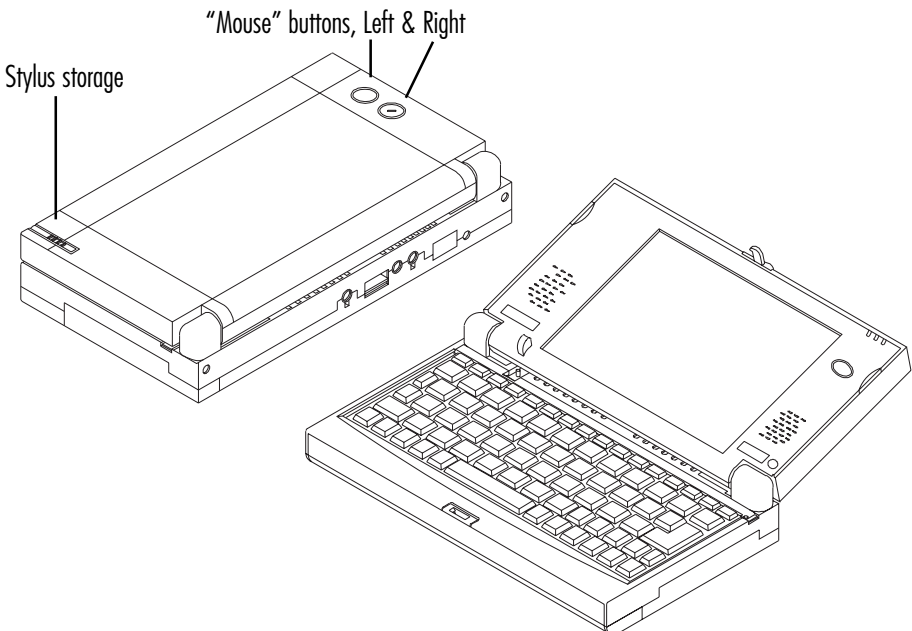
The MiniNotebook uses a touch screen and stylus as its pointing device. The stylus is stored in the LCD housing when not in use. You can use a finger instead of the stylus, but this is not recommended as it is likely to soil the LCD screen with finger oils and may result in excess pressure and wear.

The stylus moves the pointer around on the screen. The two buttons on the back of the LCD panel function as the left and right “mouse” buttons. The upper button is the “left” button and the lower button, which is marked with a raised bar is the “right” button.

When you are not using the stylus you should put it back in its receptacle so that it doesn't get lost. DO not use anything other than the stylus to operate the touchscreen.

The stylus and touch screen only work in Normal mode under Windows. They will not work if Windows is running in Safe mode. They also do not work in DOS mode.

MiniNotebook Touchscreen Pointing Device



2: Using Your Notebook

Using The Stylus

Using the stylus and touchscreen as a pointing device is quite different from conventional pointing devices like a mouse or trackball. The system works more like a touchpad, a pointing device common to many notebook computers. The difference is that instead of there being a separate touchpad, the entire LCD screen functions as a direct touchscreen. For accuracy and keep the screen clean and reduce wear you use the provided stylus instead of your finger to move the cursor around on the screen.

The “Mouse” Buttons

The two buttons mounted on the outside of the LCD housing function as the left and right mouse buttons. The upper button is the Left Button and the lower one is the Right Button. You can use these to click and double click after positioning the cursor with the stylus.

Stylus Tapping

Like many touchpads, you can also tap on the touchscreen to click and double click instead of using the buttons to do this. The touchscreen’s default configuration supports this feature. You will still need to use the Right Button to bring up the context sensitive menus that Windows supports, but you can then tap on the menu command you want to use.

Touchscreen Calibration

The touchscreen must be calibrated under Windows in order to work properly. Normally it will be calibrated when you get the computer. If it isn’t or is not working properly, calibrate the screen.

To calibrate the touchscreen please follow the instructions in Section 9: Calibration on page 25 of Attachment 1, the Handwriting User’s Manual.

System Resources Used by the Touchscreen

The touchscreen pointing device uses some system resources. The default configuration, which should already be set up when you get the computer, uses the COM1 serial port and uses IRQ4 and an I/O port address of 3F8. The serial port on the Port Module functions as COM2.

The Display System

The MiniNotebook's display system has four parts. The built-in LCD screen, its ability to use an external monitor connected to the VGA port on the Port Module, the display driver software that controls the Cyrix display circuitry and the display memory, which is adjustable in the BIOS Setup utility.

The LCD Screen

The built-in LCD screen can display a screen image of 640 x 480 pixels and 256 colors. All the LCD screen options display this resolution. You can adjust the screen brightness using the Fn+ F9 and Fn + F10 key commands explained earlier in this chapter. These controls also affect a connected external monitor.

External Display Options

You can connect the computer to the Port Module and connect an external monitor to the VGA port on it. The port is a standard 15-pin VGA port and you can use any multifrequency color monitor. See the section on External Connections later in this Chapter for instructions on connecting an external monitor.

The display driver supports higher resolutions on an external monitor and also more colors. Setting the display memory to its maximum configuration enables the maximum resolution and color depth the system supports.

If you set the screen resolution and number of colors to more than 640 x 480 and 256 colors, the configuration will display accurately on an external monitor and will still display at 640 x 480 and 256 colors on the LCD screen.

The Display Driver

The Cyrix MediaGx display driver for Windows will be installed and configured when you get the computer. You can change the display configuration in the Display Properties Control Panel. You probably will not want to do this unless you will connect an external monitor to the system. There is more information about configuring the display driver in Chapter 4.

The Display Memory

The display memory default setting is 1.5MB. This computer uses part of the system DRAM memory for display memory. You can change the display memory configuration in the Integrated Peripherals section of the BIOS CMOS Setup utility. See Chapter 4. The maximum display memory is 2.125MB.

2: Using Your Notebook

External Connections

The MiniNotebook has two features that extend the capabilities of the computer including the PC Card slot and the infrared (IR) communications port. The PC Card slot allows you to use a wide variety of expansion cards such as a modem, Local Area Network or even video conferencing PC Card. The IR port provides the wireless capability to transfer data or print to other IR-capable devices.

The computer also has some built-in audio and USB ports. The Port Module which comes with the computer has a full complement of standard computer ports which the MiniNotebook connects to via the port module connector on its underside.

Using The PC Card Slot

The computer has one built-in CardBus -compliant PC Card slot. You can use Type I or Type II cards in it. You must insert cards **face down** in the slot.

The card eject button is recessed in the computer housing and does not pop out when you insert a card. To eject a card, press the eject button in once to release it so that it extends out of the housing (the button is spring-loaded). Press the button in so that the card pops out and the button latches in place in the recessed position.

PC Card Software

The computer comes with driver software for the PC Card slot already installed so you should not need to do anything before you use start using it. An extra copy of the driver software is stored on the hard disk drive as a back up and so that you can copy it to another media if you have the optional Port Module and external floppy disk drive.

Using The IR Feature

The IR port on the computer is not enabled by default. To use the IR port you must set up IR use. To do this you must configure the COM2 serial port for IR in the BIOS CMOS Setup utility and then have Windows recognize and configure the port.

BIOS IR Configuration

To configure the IR port in the BIOS, run the BIOS CMOS Setup utility by pressing the Del key during the POST. Open the Integrated Peripherals section by highlighting the entry in the main menu and pressing the Enter key. Set the “UART2 Mode” and “FIR Mode Use DMA” lines as follows:

UART2 Mode: IrDA FIR

FIR Mode Use DMA: 3

Press the Esc key once to return to the main screen, select Save & Exit Setup and press the Enter key to confirm. The system will restart and load Windows. See below.

Windows IR Configuration

After configuring the IR port in the BIOS Setup Utility the system will restart and load Windows. Windows will detect a “Generic Serial Port” and configure the system for it. You must then Open the Windows Control Panel and run the Add New Hardware Wizard.

When you run the Wizard, do not have Windows search for the new hardware device. Manually select an Infrared device, press the Next button and then press it again. Select the standard infrared driver, use the default Generic IR Serial Port (COM 2) setting and the default port emulations. Windows will then search for the files it needs to install the IR device. It will find the files on the computer’s hard disk drive (they are placed there for this purpose when Windows is installed). You will not need the Windows CD.

Windows will create a new Control panel called Infrared Monitor. Open this, click on the Identification tab and enter identification information for the computer. Press the Okay button to confirm the entries and you’re done.

This process configures the computer for SIR operation. The computer hardware also supports FIR operation, but requires additional driver support to do so.

2: Using Your Notebook

Connecting External Devices

The MiniNotebook has three external audio connectors and a USB port. This section covers connecting external devices directly to the MiniNotebook. You can also connect a variety of external devices to the Port Module.

External Audio Connectors

The computer has Headphone, Mic and Line-In audio jacks which allow you to use the computer's audio function in privacy and record.

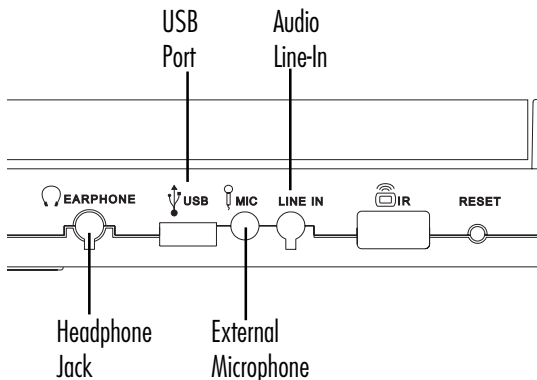
When you plug headphones into the headphone jack the built-in speaker is disabled. Use the Windows control to adjust the volume.

You can record notes or other audio material using the Windows Sound Recorder and either a mono microphone connected to the Mic jack or another audio source connected to the Line-In jack.

The USB Port

The computer has one built-in USB port. The USB port provides a wide range of expansion options from one port, since USB devices can be strung together in a chain. You can use this port for several purposes including connecting an external USB keyboard, USB pointing device, USB speakers or USB modem.

You can connect USB devices while the computer is turned on. To connect a device to the computer just plug it into the USB port. Make sure to check the manual that come with the device for any other installation instructions specific to the device.



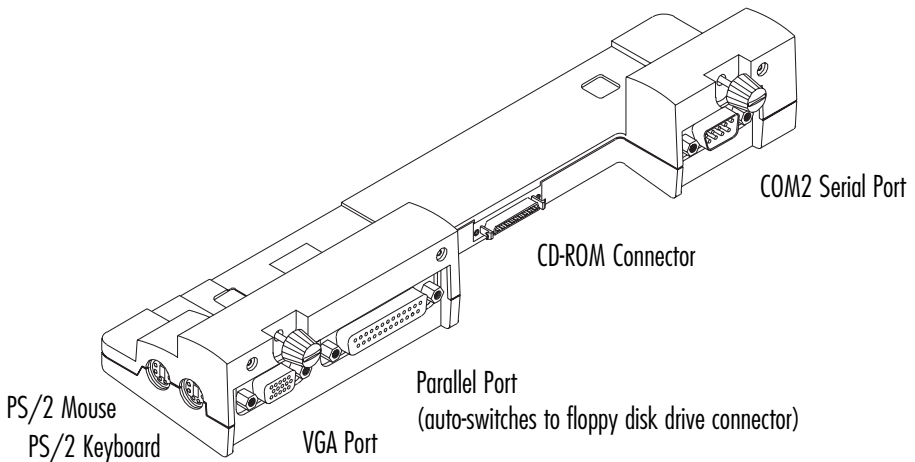
The Port Module

The Port Module that comes with the computer has all the standard ports that normally appear on desktop and full-sized notebook computers. It has the following ports on it:

- PS/2 Mouse – For PS/2 pointing devices
- PS/2 Keyboard – For PS/2 full-size keyboard
- VGA Display – 15-pin VGA port for external monitor
- Parallel – Printer port and connector for the optional floppy disk drive
- Serial Port – COM2 9-pin serial port

The Port Module also has a proprietary connector for the optional external CD-ROM drive. The cable that comes with the drive fits this connector. The space in the middle of the module allows access to the ports and connectors on the MiniNotebook.

MiniNotebook Port Module



2: Using Your Notebook

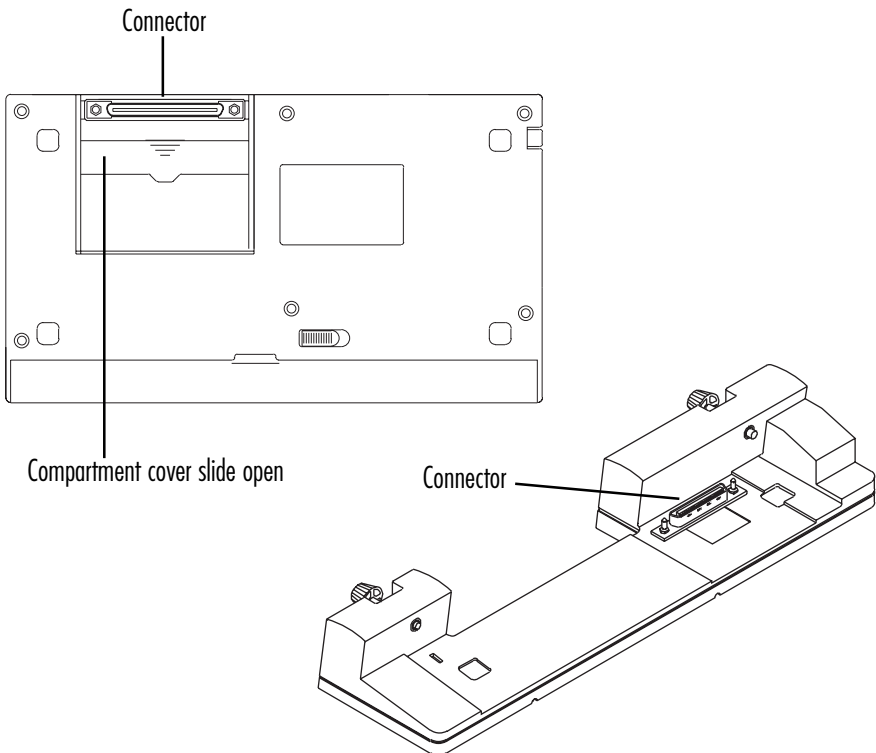
Attaching the Port Module

The Port Module connector is located on the underside of the computer. To attach the Port Module to the computer do as follows:

1. Slide the compartment cover back to expose the connector.
2. Position the computer over the Port Module so that the connectors match up and press the computer onto the module's connector.
3. Secure the computer to the Port Module by pushing the retaining screw thumbwheels into the module housing and tightening the screws.

You can now attach devices, including the optional floppy disk and CD-ROM drives and turn the computer on. The computer will recognize the optional drives if the BIOS is properly configured. If not, run the BIOS CMOS Setup utility to configure the floppy disk drive as explained in Chapter 3.

Attaching The Port Module



External Connections

If you want to connect various common peripherals to the computer you have to use the Port Module. This section covers how to do it. We've assumed here that you've already attached the Port module to the computer as covered in the previous section.

Connecting Common Peripherals

You may want to take advantage of the option to use common desktop peripherals with the MiniNotebook. Doing this has two advantages. You may find that a desktop keyboard, mouse and monitor are more comfortable for extended use. Additionally, using peripherals and the AC adapter will prolong the life of the some components built into your computer.

Connecting Peripherals – The Generic Procedure

To connect any peripheral device to the computer via the Port Module, you should always follow this procedure:

1. Make sure everything is turned off and unplugged.
2. Set up the peripheral device according to the instructions in the manual that comes with it.
3. Connect the device to the computer either with the cable that comes with it or the appropriate generic cable.
4. Plug in the peripheral device and the computer.
5. Turn everything on.
6. Install and configure any software the device requires.

Don't connect or disconnect anything other than a PC Card from your computer if anything is turned on. Turn off the power to both the computer and any peripheral devices before you connect them.

2: Using Your Notebook

Connecting An External Keyboard

You can connect a full-size keyboard to the PS/2 Keyboard port. The port requires a PS/2 keyboard or a standard AT keyboard used with a PS/2 adapter. Just plug the keyboard into the port when the system is turned off and it will work when you turn the computer back on. The internal keyboard is still active when you connect and external keyboard.

Connecting An External Pointing Device

You can connect an external PS/2-compatible pointing device such as a mouse or a trackball to the MiniNotebook. Both will work under Windows and will work in a DOS session with a driver installed.

To connect a PS/2 pointing device such as a mouse or trackball, plug the device into the PS/2 Mouse port while the computer is turned off. When you turn it on again the computer will detect an external PS/2 pointing device is connected and activate it automatically. When an external pointing device is connected both the device and the TrackPoint pointing stick are active.

Connecting A Computer Monitor

The MiniNotebook supports an external CRT monitor via the VGA port on the Port Module. You can connect most standard multifrequency desktop monitors to the 15-pin VGA port. The computer's built-in video display circuitry can produce resolutions up to 1280 x 1024 and colors up to 16-bit High Color. At the maximum resolution the maximum color setting is 256 colors. In practice this means you can use any multi-frequency monitor up to 21" inches at a standard resolution, as long as the monitor supports the resolutions the display controller produces. Most standard multifrequency monitors do.

To connect an external monitor do as follows:

1. Turn off the computer.
2. Plug the monitor cable into the VGA port.
3. Plug the monitor power cord into a power source.
4. Turn on both the monitor and the computer, and configure the monitor for your Operating System if needed. Many monitor manufacturers provide a configuration disk for use with Windows 95 or later.

Display Switching

You can switch active displays modes by using the display Fn key command.

Pressing the Fn+F6 key command selects between the LCD screen, an external monitor and displaying the same screen simultaneously on both screens. Press the key command repeatedly until you set the mode you want.

An external monitor will work in standard 640 x 480 16-color VGA mode in DOS mode without using a video driver and will also display the LCD's 640 x 480 256-color mode without changing the display settings in the Windows Display Properties control panel. Refer to the Display Driver section in Chapter 4 for more information about the video display driver.

Connecting A Printer

Whatever kind of printer you want to use with the MiniNotebook, it is almost certainly going to connect to the parallel port. You'll need a parallel cable to connect the printer. If your printer supports a bidirectional parallel port or other enhanced parallel port features make sure to get an appropriate cable.

With the computer turned off, connect the end of the cable that matches the parallel port to the Port Module – it's a 25-pin male connector. Secure the cable to the module by tightening the retaining screws attached to the cable connector. Connect the other end of the cable to your printer.

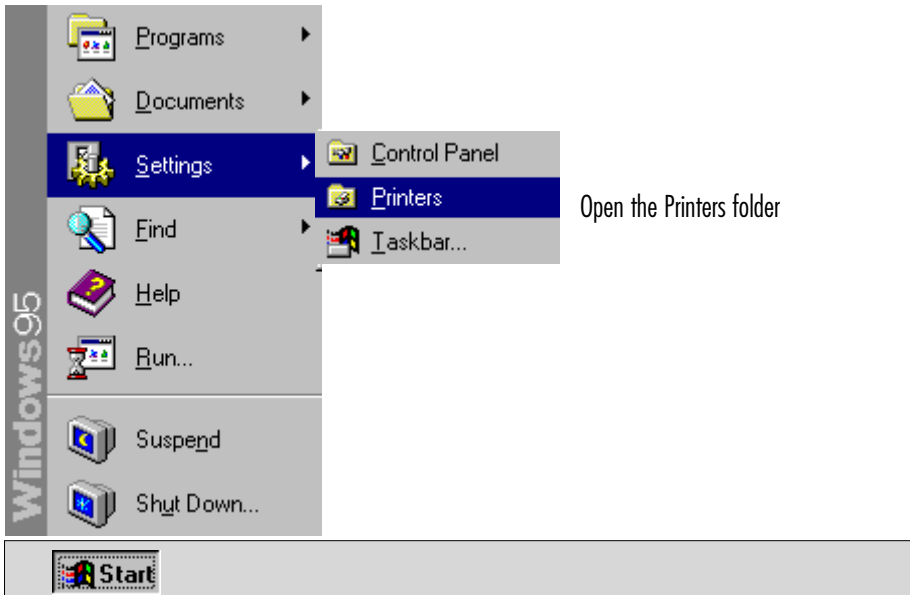
Follow the instructions that come with your printer to install any software it uses. You will at least need to install a printer driver.

To use a printer under Windows, you must configure a printer driver by using the Add Printer Wizard. To do this, tap on the Windows Start button and then point to Settings and tap on Printers to bring up the Printers window. Double-click on the Add Printer icon and follow the Add Printer Wizard instructions. This process is illustrated on the next page.

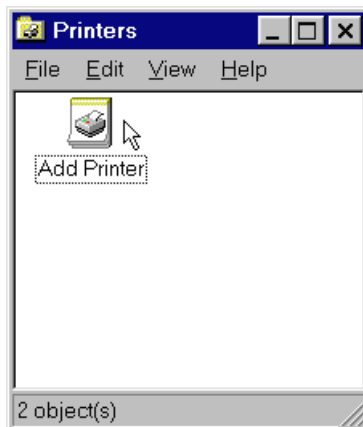
Printer drivers are located on the Windows CD or on a disk that came with the printer. If you have the optional external CD-ROM drive and floppy disk drive you can use them. Otherwise, use the Windows Direct Cable Connection feature to install the software from another computer equipped with CD-ROM and floppy disk drives. Print a test page to test the connection.

2: Using Your Notebook

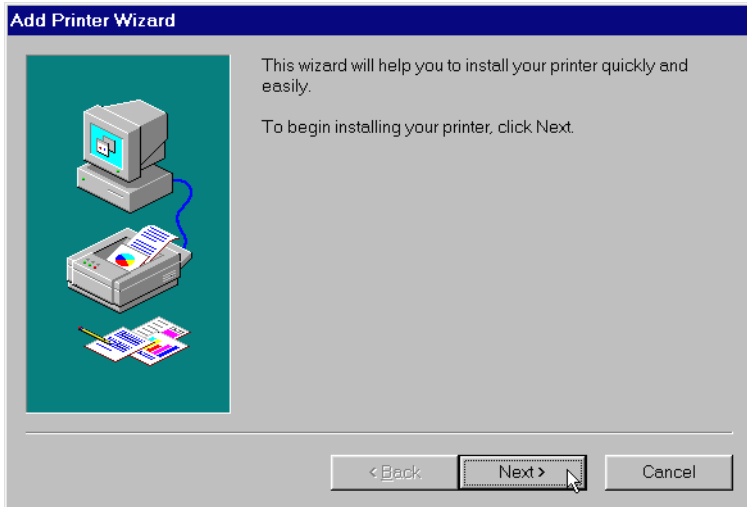
Installing a Printer Under Windows



Run the Add Printer Wizard



Follow the Wizard instructions



2: Using Your Notebook

In This Chapter:

Accessories

- External Floppy Disk drive

- External CD-ROM drive

- Extended Battery

System Upgrades

- Upgrading System Memory

- Upgrading The Hard Disk Drive

System Accessories & Upgrades

This section covers the optional accessories you can purchase for the MiniNotebook and the available vendor-installed upgrades.

MiniNotebook Accessories

The computer has two optional disk drives you can purchase, an external floppy disk drive and an external CD-ROM drive. Both drives connect to the supplied Port Module.

The Floppy Disk Drive

The optional floppy disk drive is a standard drive that uses 3.5-inch floppy disks formatted for 1.44MB capacity. The drive connects to the parallel port on the Port Module with the supplied cable. The drive draws electrical power from the computer, so it does not need an external power source. To use the floppy disk drive you must first configure the system to recognize it and then connect it to the computer.

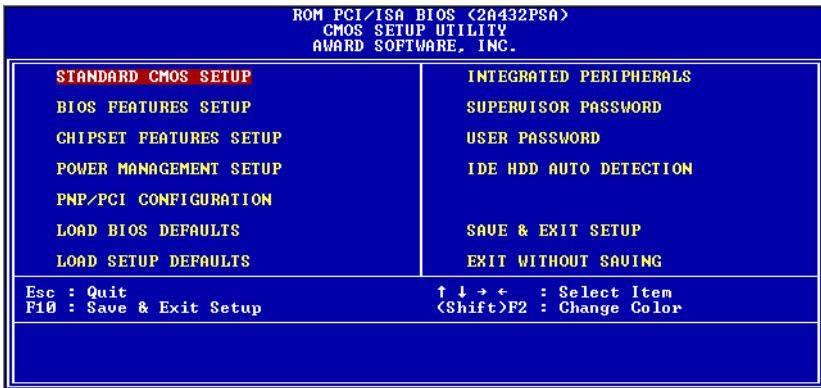
3: System Accessories & Upgrades

Setting Up And Connecting the Floppy Disk Drive

To use the floppy disk drive you must first configure the system to recognize it. You do this through the BIOS CMOS Setup utility, which is explained in detail in Chapter 4. To configure and connect the floppy disk drive do as follows:

1. Run the BIOS CMOS Setup utility.

Restart the computer and enter the BIOS Setup utility by pressing the Del key during the Power On Self Test (POST). The system runs the POST each time you turn the computer on. When you press the Del key the BIOS Setup utility's main screen will appear.



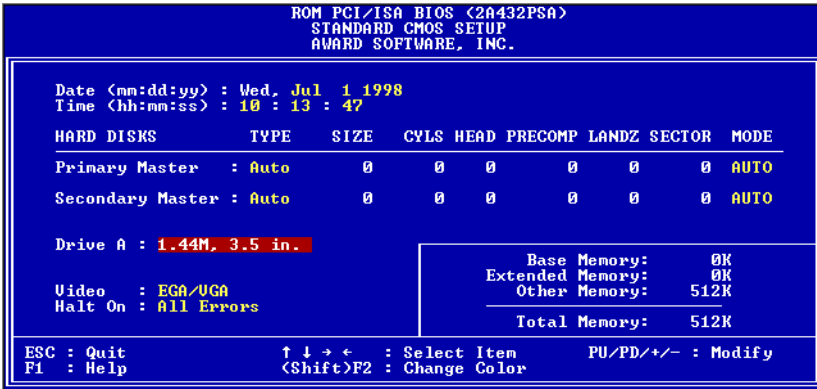
2. Open Standard CMOS Setup

The Standard CMOS item is highlighted when the Main menu appears. Press the Enter key to open it.

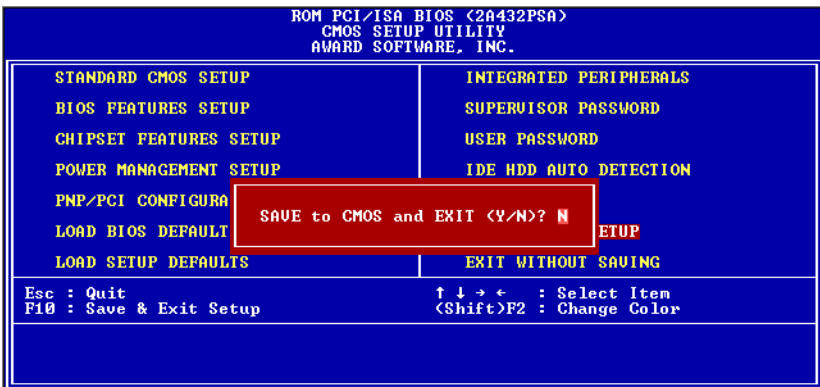
MiniNotebook Computer

- Set the Drive A: item to the “1.44M, 3.5 in.” setting.

Use the Fn + Ins key command to turn on the Num Lock feature. This allows you to use the plus and minus keys to scroll through the configuration options for each item. Use the arrow keys to highlight the Drive A: item on the Standard CMOS Setup screen and use the plus or minus key to change the setting from None to the setting noted above.



- Exit Standard CMOS Setup and the CMOS Setup utility, saving the changes.
To exit, press the Esc key to exit Standard CMOS Setup. Highlight Save & Exit Setup in the main menu and press Enter. Confirm you want to exit by typing the letter Y and the system will restart with the new configuration.



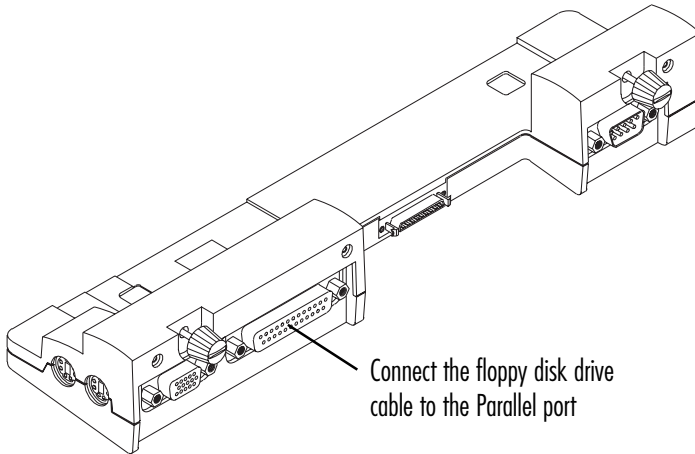
3: System Accessories & Upgrades

5. Turn the computer off and attach the Port Module if necessary and connect the external floppy disk drive to the parallel port on the Port Module.

You must turn the computer off before you connect the external floppy disk drive. Attach the Port Module to the computer if isn't already, as described in Chapter 2.

Use the cable that comes with the floppy disk drive to connect it to the parallel port on the Port Module. Secure the cable to the module by tightening the retaining screw thumbwheels. The other end of the cable clips onto the connector on the floppy disk drive. Press the cable connector onto the connector on the drive and the retaining clips should snap into place.

MiniNotebook External Floppy Disk Drive Connection



6. Turn on computer and confirm the setup is successful.
Position the floppy disk drive in a convenient location and turn on the computer. The system should recognize that the floppy disk drive is installed and you can then use the drive.

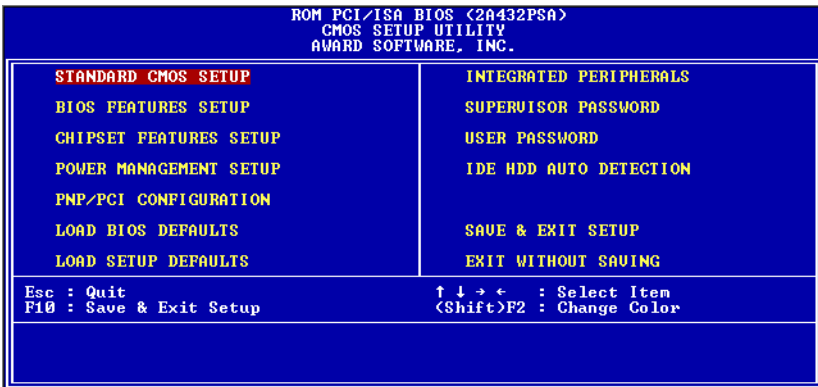
Disconnecting the Floppy Disk Drive

To disconnect the optional external floppy disk drive, turn off the computer and disconnect the cable from the Port Module. When you turn the computer on again the system will not find the floppy disk drive, but you do not need to change the BIOS CMOS Setup utility setting for Drive A: back to None. You can leave the setting as is. The next time you connect the floppy disk drive the system will automatically recognize it.

Booting From A Floppy Disk

If for some reason you want to have the system boot from a floppy disk, you must change the Boot Sequence setting in the BIOS CMOS Setup utility. The entry is in the BIOS Features Setup section. The default setting sets the hard disk drive (Drive C:) as the initial boot device. Do as follows:

1. Run the CMOS Setup Utility, highlight the BIOS Features Setup item in the Main menu and pres the Enter key to bring up the BIOS Features Setup screen.



3: System Accessories & Upgrades

- Highlight the Boot Sequence option filed and use the plus or minus key to change the option from the default “C, A, SCSI” to “A, C, SCSI”.

```
ROM PCI/ISA BIOS <2A432PSA>
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

Virus Warning           : Disabled
CPU Internal Cache     : Enabled
Quick Power On Self Test : Disabled
Boot Sequence          : C,A,SCSI
Swap Floppy Drive      : Disabled
Boot Up Floppy Seek    : Enabled
Boot Up NumLock Status : Off
Boot Up System Speed   : High
Gate A20 Option        : Fast
Memory Parity Check    : Enabled
Typematic Rate Setting : Disabled
Typematic Rate <Chars/Sec> : 6
Typematic Delay <Msec> : 250
Security Option        : Setup
PCI/UGA Palette Snoop : Disabled
OS Select For DRAM > 64MB : Non-OS2
Report No FDD For WIN 95 : Yes

Video BIOS Shadow      : Enabled

ESC : Quit           ↑↓+* : Select Item
F1  : Help           PU/PD/+/- : Modify
F5  : Old Values    <Shift>F2 : Color
F6  : Load BIOS Defaults
F7  : Load Setup Defaults
```

```
ROM PCI/ISA BIOS <2A432PSA>
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

Virus Warning           : Disabled
CPU Internal Cache     : Enabled
Quick Power On Self Test : Disabled
Boot Sequence          : A,C,SCSI
Swap Floppy Drive      : Disabled
Boot Up Floppy Seek    : Enabled
Boot Up NumLock Status : Off
Boot Up System Speed   : High
Gate A20 Option        : Fast
Memory Parity Check    : Enabled
Typematic Rate Setting : Disabled
Typematic Rate <Chars/Sec> : 6
Typematic Delay <Msec> : 250
Security Option        : Setup
PCI/UGA Palette Snoop : Disabled
OS Select For DRAM > 64MB : Non-OS2
Report No FDD For WIN 95 : Yes

Video BIOS Shadow      : Enabled

ESC : Quit           ↑↓+* : Select Item
F1  : Help           PU/PD/+/- : Modify
F5  : Old Values    <Shift>F2 : Color
F6  : Load BIOS Defaults
F7  : Load Setup Defaults
```

- Press the Esc key to exit to the Main menu.
- Exit Standard CMOS Setup and the CMOS Setup utility, saving the changes. To exit, press the Esc key to exit Standard CMOS Setup. Highlight Save & Exit Setup in the main menu and press Enter. Confirm you want to exit by typing the letter Y and the system will restart with the new configuration.

Once you have set up the system this way it will look at the floppy disk drive for a boot disk first. If it doesn't find one, it will then boot from the hard disk drive.

Using The Floppy Disk Drive

The external floppy disk drive works the same way as a standard desktop computer floppy disk drive. The points to remember about it are:

- Insert disks face up.
- The LED on the drive lights up when the drive is being accessed.
- Don't eject a disk while the light is on.
- The Eject button on top of the drive pops out when you insert a disk. Push it in to eject a disk.

The floppy disk drive uses a substantial amount of power when in use. For this reason, we recommend that you normally run the computer on AC power when you use the drive.

The floppy disk drive has a spring loaded door that covers the drive mechanism and keeps dirt and dust from getting in and contaminating the drive. If you take the floppy disk drive along when you use the MiniNotebook in a mobile setting, it is a good idea to store it in the plastic packing bag it comes in or some other protective case. This will make it less likely that the drive will get dirty and suffer degraded performance.

It will also prevent dirt and dust from contaminating the cable connector on the back of the drive. If the connector gets dirty a connection problem could result that may cause the drive to malfunction.

3: System Accessories & Upgrades

The CD-ROM Drive

The optional CD-ROM drive is a multispeed drive that supports a variety of CD formats including computer data, audio CDs and VCDs. The drive connects to the proprietary CD-ROM port on the Port Module with the supplied cable. The drive requires an external power source and comes supplied with the necessary AC adapter block.

Setting Up And Connecting the CD-ROM Drive

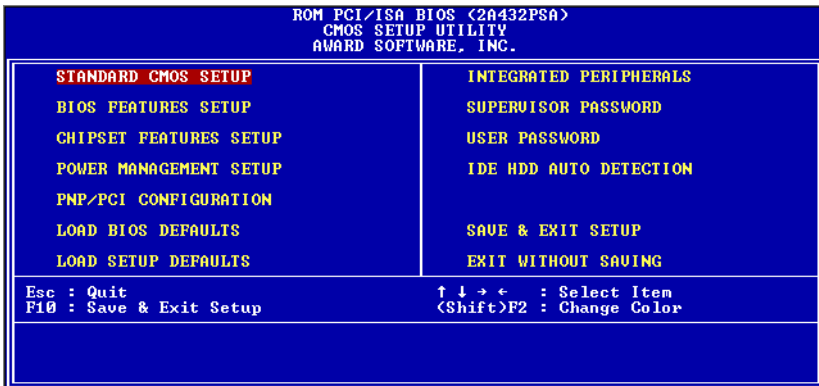
To use the CD-ROM drive you need to first configure the system to recognize it. You do this through the BIOS CMOS Setup utility, which is explained in detail in Chapter 4. To configure and connect the drive do as follows:

1. Run the BIOS CMOS Setup utility.

Restart the computer and enter the BIOS Setup utility by pressing the Del key during the Power On Self Test (POST). The system runs the POST each time you turn the computer on. When you press the the Del key the BIOS Setup utility's main screen will appear.

2. Open Standard CMOS Setup

The Standard CMOS item is highlighted when the Main menu appears. Press the Enter key to open it.



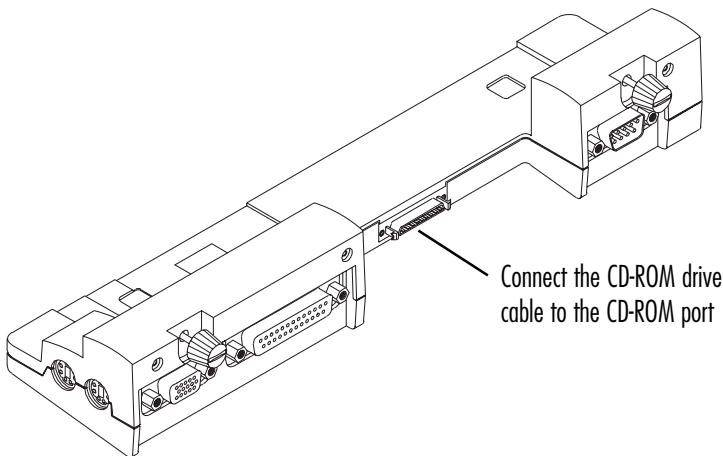
3: System Accessories & Upgrades

5. Turn the computer off and connect the external CD-ROM drive to the CD-ROM port on the Port Module.

You must turn the computer off before you connect the drive. Attach the Port Module to the computer if it isn't already, as described in Chapter 2.

Use the cable that comes with the CD-ROM drive to connect it to the CD-ROM on the Port Module. The cable clips onto the connectors on the CD-ROM drive and the Port Module.

MiniNotebook CD-ROM Drive Connection



6. Connect the AC adapter to the CD-ROM drive and plug it in.

The AC adapter that comes with the external CD-ROM drive specifically matches the drive's electrical specifications. Don't use any other AC adapter block with the CD-ROM drive. Plug the connector from the AC adapter into the power jack on the rear of the CD-ROM drive. Next, plug the AC adapter block into an AC power source. It is better to use a surge suppressor outlet strip or similar protected device to insulate the CD-ROM from the threat of electrical damage from power fluctuations.

The drive's LED power indicator light should light when you plug in the adapter. The LED is at the lower right-hand corner on the front of the drive.

7. Turn on computer and confirm the setup is successful.

Position the CD-ROM drive in a convenient location and turn on the computer. The system should recognize that the drive is installed and you can then use the drive.

If there is any problem, make sure the cable is securely connected to the drive and the Port Module. Also double check that the Secondary Master line in the BIOS CMOS Setup utility's Standard CMOS Setup section is set to Auto. No drive-specific driver software is required to use the drive under Windows.

Disconnecting the CD-ROM Drive

To disconnect the optional external CD-ROM drive, turn off the computer and disconnect the cable from the Port Module. When you turn the computer on again the system will not find the CD-ROM drive, but you do not need to change the BIOS CMOS Setup utility setting Secondary Master setting. You can leave it set to Auto. The next time you connect the CD-ROM drive the system will automatically recognize it.

Booting From A CD-ROM Disk

If for some reason you want to have the system boot from a CD-ROM disk, you must change the Boot Sequence setting in the BIOS CMOS Setup utility. The entry is in the BIOS Features Setup section. The default setting sets the hard disk drive (Drive C:) as the initial boot device. Do as follows:

1. Run the CMOS Setup Utility, highlight the BIOS Features Setup item in the Main menu and press the Enter key to bring up the BIOS Features Setup screen.
2. Highlight the Boot Sequence option field and use the plus or minus key to change the option from the default "C, A, SCSI" to "CDROM, C, A".

3: System Accessories & Upgrades

```

ROM PCI/ISA BIOS (2A432PSA)
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

Virus Warning           : Disabled
CPU Internal Cache     : Enabled
Quick Power On Self Test : Disabled
Boot Sequence          : C.A,SCSI
Swap Floppy Drive      : Disabled
Boot Up Floppy Seek    : Enabled
Boot Up NumLock Status : Off
Boot Up System Speed   : High
Gate A20 Option        : Fast
Memory Parity Check    : Enabled
Typematic Rate Setting : Disabled
Typematic Rate (Chars/Sec) : 6
Typematic Delay (Msec) : 250
Security Option        : Setup
PCI/UGA Palette Snoop : Disabled
OS Select For DRAM > 64MB : Non-OS2
Report No FDD For WIN 95 : Yes

Video BIOS Shadow : Enabled

ESC : Quit           F10 : Select Item
F1  : Help           PU/PD/+/- : Modify
F5  : Old Values    <Shift>F2 : Color
F6  : Load BIOS Defaults
F7  : Load Setup Defaults
    
```

```

ROM PCI/ISA BIOS (2A432PSA)
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

Virus Warning           : Disabled
CPU Internal Cache     : Enabled
Quick Power On Self Test : Disabled
Boot Sequence          : CDROM,C.A
Swap Floppy Drive      : Disabled
Boot Up Floppy Seek    : Enabled
Boot Up NumLock Status : Off
Boot Up System Speed   : High
Gate A20 Option        : Fast
Memory Parity Check    : Enabled
Typematic Rate Setting : Disabled
Typematic Rate (Chars/Sec) : 6
Typematic Delay (Msec) : 250
Security Option        : Setup
PCI/UGA Palette Snoop : Disabled
OS Select For DRAM > 64MB : Non-OS2
Report No FDD For WIN 95 : Yes

Video BIOS Shadow : Enabled

ESC : Quit           F10 : Select Item
F1  : Help           PU/PD/+/- : Modify
F5  : Old Values    <Shift>F2 : Color
F6  : Load BIOS Defaults
F7  : Load Setup Defaults
    
```

3. Press the Esc key to exit to the Main menu.
4. Exit Standard CMOS Setup and the CMOS Setup utility, saving the changes.

To exit, press the Esc key to exit Standard CMOS Setup. Highlight Save & Exit Setup in the main menu and press Enter. Confirm you want to exit by typing the letter Y and the system will restart with the new configuration.

Once you have set up the system this way it will look at the floppy disk drive for a boot disk first. If it doesn't find one, it will then boot from the hard disk drive.

Using The CD-ROM Drive

The external CD-ROM drive works the same way as a standard desktop computer CD-ROM drive. Please note the following:

- The drive accepts computer, audio and video CDs
- The power LED on the front lower right-hand corner lights when the drive is connected to an AC power source.
- The activity LED on the drive tray faceplate flashes when the drive is being accessed by the system.
- The Eject button is on the faceplate of the drive tray. Push it in to eject a disk.
- Don't eject a disk while the activity light is on.

Since the CD-ROM drive requires AC power to operate, you should also run the computer on AC power when you are using the CD-ROM drive. The drive does not have a power switch, so it does not turn off when you shut down the computer. Unplug the AC adapter when you are done using the CD-ROM drive to turn it off. Avoid leaving the drive on for extended periods of time.

There is a Line-out jack on the rear of the CD-ROM drive. You can connect the drive to external self-powered speakers or plug in headphones to listen to audio CDs played on the drive.

If you take the CD-ROM drive along when you use the MiniNotebook in a mobile setting, it is a good idea to store it in the plastic packing bag it comes in or some other protective case. This will make it less likely that the drive will get dirty. It will also prevent dirt and dust from contaminating the cable connector on the back of the drive. If the connector gets dirty a connection problem could result that may cause the drive to malfunction.

Loading & Ejecting CDs

To load or eject a CD, press the eject button on the disk tray faceplate. The disk tray will pop open. Pull it outward to the fully extended position to load or remove a disk.

To remove a CD from the drive you can either eject it manually or use the Eject command under Windows, which is accessible by right-clicking on the drive icon in either My Computer or the Windows Explorer window.

3: System Accessories & Upgrades

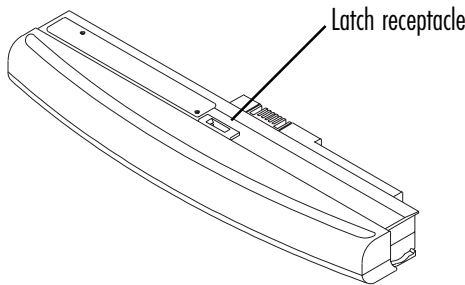
The Extended Battery

An extended use battery pack is available for the MiniNotebook as an option. The Extended Battery has approximately double the capacity of the standard battery that comes with the computer.

The Extended Battery installs and removes the same way as the standard battery, but since it is about twice as wide as the standard battery, it extends beyond the front edge of the LCD screen housing. The LCD housing still latches into the battery pack in the same way as the standard battery.

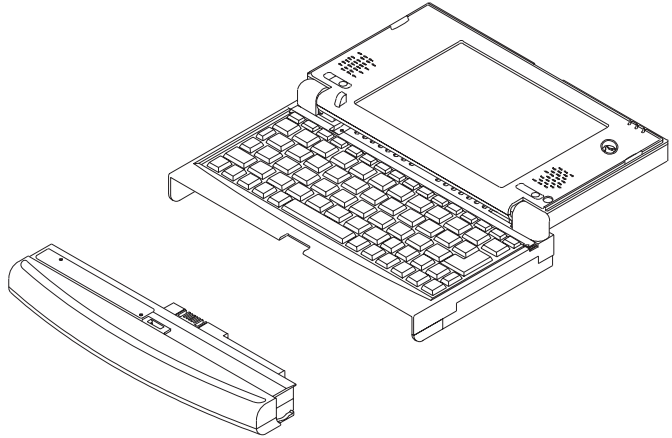
Due to its added capacity, you can expect the Extended battery to take about twice as long to charge and have a charge last about twice as long as the standard battery. The use guidelines and warnings that apply to the standard battery also apply to the Extended Battery. The first time you use the Extended Battery you should fully charge it with the computer turned off.

MiniNotebook Extended Battery

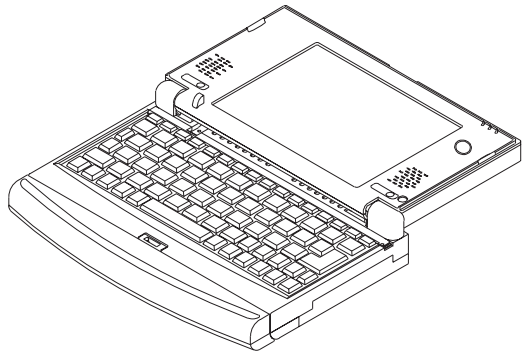


MiniNotebook Computer

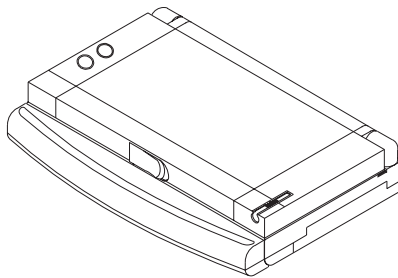
Insert the Extended battery
with LCD raised



The battery snaps in place
and forms a mini palm rest



The Extended Battery
extends beyond the edge of
the LCD housing when it is
latched. Be careful not to
exert force on the protruding
portion of the battery.



3: System Accessories & Upgrades

System Upgrades

There are two system upgrades you can get for your MiniNotebook computer, increased system memory and a larger hard disk drive. Both upgrades are vendor-installed options. They are not user installable. Consult your vendor for more information.

Upgrading System Memory

The MiniNotebook has three system memory options, 16MB, 32MB and 64MB. If after you purchase the computer you later want to upgrade the system memory, your vendor can install a memory upgrade for you. System memory upgrades are not user installable.

Upgrading The Hard Disk Drive

The MiniNotebook comes with a 1.6GB internal hard disk drive. Larger capacity hard disk drives are available as an upgrade from your vendor. The hard disk drive upgrade is not user installable.

If you get an hard disk drive upgrade, the default setting in the CMOS Setup utility will still work to automatically detect the new drive.

In This Chapter:

BIOS Setup Utility

Support Software

Troubleshooting

System Specifications

Technical Information

This section explains the software that is part of or comes with the MiniNotebook in more detail. It covers things you need to know about the Award BIOS CMOS Setup utility and the support software that comes with the computer.

The BIOS CMOS Setup Utility

This section explains the Award BIOS CMOS Setup Utility program. This utility is permanently stored in the computer's BIOS chip. The utility creates a record of system configuration information and stores it in battery-supported memory in the computer. This record must be intact and accurate in order for the computer to operate properly.

After a brief explanation of how to operate the utility there is a summary of the utility's several sections with particular reference to information you will need to change certain system configuration settings. Under normal conditions you should have little or no need to use this utility.

Using the CMOS Setup Utility

This section explains how to run the CMOS Setup utility and the utility's interface. The utility does not require an Operating System to run. No pointing device can operate when the utility is running, so you use keyboard commands to navigate the program and make selections.

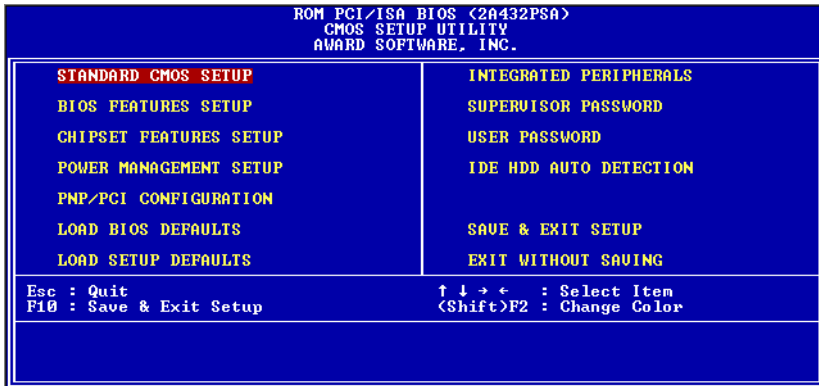
Accessing The CMOS Setup Utility

When you turn on your computer, a message appears on the screen indicating you can run the Setup program by pressing the Del key. The message appears during the POST (Power On Self Test).

If you want to run Setup but you don't respond in time before the message disappears, you can reset the system by pressing the Ctrl + Alt + Delete keys at the same time, or by pushing the system Reset button. The system will restart and the message will reappear.

4: Technical Information

After you press the Del or Delete key the initial utility screen will appear, displaying the main menu with the various sections of the utility listed and some command instructions.



Menu Commands

If you look at the lower portion of the screen illustration you'll see a section that lists the control commands for this level of the program. You execute a command by pressing the key for that command. The program commands are :

- Quit
This command will close the Setup program when you press the ESC key.
- Save & Exit Setup
This will save the current settings and close the Setup program when you press the F10 key.
- Select Item
You can use the arrow keys on the keyboard to move around the screen and select a menu item. An item is selected when it is highlighted .
- Change Color
Change the program color scheme by pressing Shift + F2.

The section at the bottom of the screen displays a brief explanation of a highlighted menu item's function.

The CMOS Setup utility has six main sections:

- Standard CMOS Setup
Date, time, disk drive, video display and error handling settings
- BIOS Features Setup
System features customization
- Chipset Features Setup
System chipset settings
- Power Management Setup
Configures the power management features
- PNP/PCI Configuration
System resource settings
- Load BIOS Defaults
Loads minimum settings from the BIOS ROM.
- Load Setup Defaults
Loads optimized default settings from the BIOS ROM.
- Integrated Peripherals
Settings for the IDE channels and onboard ports

The other main menu items interact with these main sections:

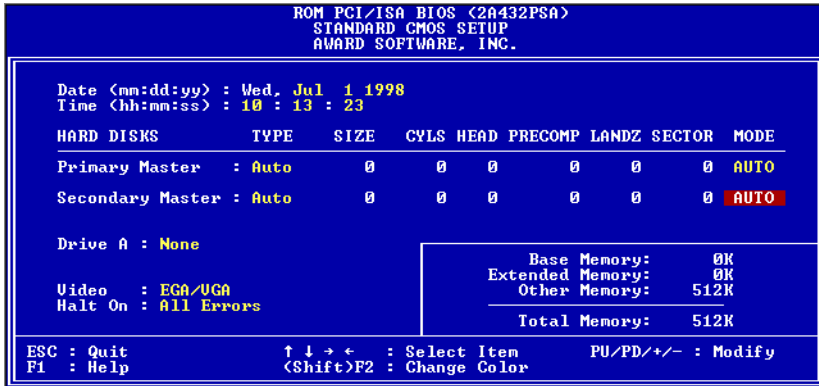
- Supervisor Password & User Password
Sets a system password which is configured by the Security Option item in BIOS Features Setup.
- IDE HDD Auto Detection
Automatically detects the drive parameters of any installed IDE hard disk drives and enters them automatically in the Standard CMOS Setup .
- Save & Exit Setup
Saves the current settings and exits the program.
- Exit Without Saving
Discards any changes made during the current session and exits the program.

To bring up one of the CMOS Setup utility's main sections, highlight the menu item and press the Enter key.

4: Technical Information

Standard CMOS Setup

To enter this section, highlight this menu item in the main menu and press the Enter key. The screen below will appear.



Menu Commands

If you look at the lower portion of the screen illustration you'll see a section that lists the control commands for this level of the program. You execute a command by pressing the key for that command. The program commands are :

Quit

This command will close the Setup program when you press the ESC key.

Help

This displays information about a highlighted item when you press F1.

Select Item

You can use the arrow keys on your keyboard to move around the screen and select a menu item. An item is highlighted when it is selected.

Change Color

You can change the program color scheme by pressing Shift + F2.

Modify

To change the setting of a highlighted selection you can press either the Page Up (PU) and Page Down (PD) keys or the Plus (+) and Minus (-) keys. Pressing a key once will switch to the next setting option for the selected item.

Key Points For This Section

The proper entries should already be entered on this screen when you get the computer. You shouldn't change them except for adjusting the Date and Time entries if necessary. If you have the external floppy disk drive, to use it you must set the Drive A: line to 1.44MB, 3.5in. After you save and restart the system will detect the connected drive.

Section Item Summary

The following explanations cover the menu items for this section.

Date & Time

The first two lines on the screen are the date and time settings for the system clock. Correct the entries if they are wrong.

Hard Disk Type & Parameters

For an IDE hard drive, you should set the entry to "Auto" and the BIOS will automatically detect all drive information needed.

Large Hard Disk Modes

The last of the drive parameter entries – Mode – has four options, Normal, LBA, Large and Auto. The Mode settings are for IDE hard disks only. The default AUTO setting automatically detects the correct mode for both drives.

Floppy Disk Drives

This sets the drive type for Drive A :. You must enter it manually if you want to use the external floppy disk drive. The required setting is "1.44MB, 3.5 in.".

Video Display Types

The required setting is EGA/VGA.

Error Handling

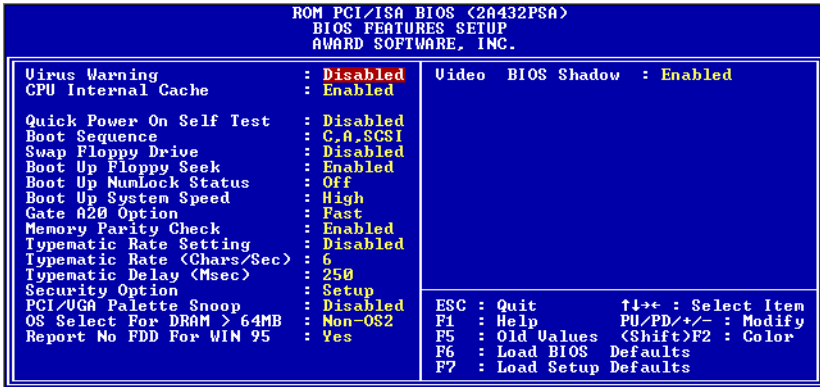
The last line – Halt On – sets when the system stops if an error occurs. The default and recommended setting is All Errors.

When you are finished in this section, exit to the main menu screen by pressing the Esc key.

4: Technical Information

BIOS Features Setup

To enter this section of the Setup program, highlight this menu item in the main menu and press the Enter key. The following screen will appear.



Menu Commands

If you look at the lower portion of the screen illustration you'll see a section that lists the control commands for this level of the program. You execute a command by pressing the key for that command. The program commands are :

Quit

This command will close the Setup program when you press the ESC key.

Help

This displays information about the highlighted item when you press the F1 key.

Select Item

You can use the arrow keys on your keyboard to move around the screen and select a menu item. An item is highlighted when it is selected.

Modify

To change the setting of a highlighted selection you can press either the Page Up (PU) and Page Down (PD) keys or the Plus (+) and Minus (-) keys. Pressing a key once will switch to the next option for the selected item.

Change Color

Change the program color scheme by pressing Shift + F2.

Old Values

If you make changes during the current session and you don't want to keep them you can recall the last set of saved values for this page by pressing the F5 key.

Load BIOS Defaults

Pressing F6 loads the BIOS Default settings for this page.

Load Setup Defaults

Pressing F7 loads the Setup Default settings for this page.

Key Points For This Section

The proper entries should already be entered on this screen when you get the computer. You can leave all the settings as they are. If you want to boot from the external floppy disk drive, you need to change the Boot Sequence so that the "A" drive is first in the sequence.

Section Item Summary

The following explanations cover the menu items for this section.

Virus Warning

This protects the primary hard disk's boot sector and partition table from infection. Any attempt to write to them will halt the system and produce a warning message. If this happens, you can either allow the system to continue or stop it and boot from a virus-free bootable floppy disk. Use an anti-virus utility installed on the floppy disk to check the hard disk. The default setting is Disabled.

CPU Internal Cache

This enables CPU's Level 1 built-in cache. Leave it enabled to maintain system performance. The default setting is Enabled.

Quick Power On Self Test

This feature speeds up the Power On Self Test (POST) by skipping some parts of the POST. If your system is functioning normally, you can enable this feature to speed the boot process. The default setting is Disabled.

4: Technical Information

Boot Sequence

This determines the order in which the computer checks drives for an operating system. In addition to the drive A: floppy disk drive and the drive C: boot hard disk, you can configure the order to include another IDE hard disk drive or CD-ROM drive or a SCSI device. There are numerous options.

Swap Floppy Drive

This switches the floppy drive assignments so that drive A is treated as drive B: and drive B: as drive A: under DOS. The default setting is Disabled.

Boot Up NumLock Status

This sets the initial numeric keypad mode when the computer boots up. The options are On (Numeric keypad mode) and Off (default).

Security Option

This sets when password protection is active. The options are System (Password required at boot up) and Setup (Password for access to CMOS Setup utility). The System setting uses the User password. The Setup setting uses the Supervisor password. Set passwords from the main menu using the appropriate type. If no password is set, the system ignores this item.

PCI/VGA Palette Snoop

If you use an MPEG card, the display may invert to black on white while booting. If this happens, set this line to Enabled to correct the problem. The default setting is Disabled.

OS Select For DRAM >64MB

The default setting, Non-OS2, is required for this computer.

Video BIOS Shadow

This copies the video display card BIOS into system DRAM to increase display speed and is required for system performance. The default setting is Enabled.

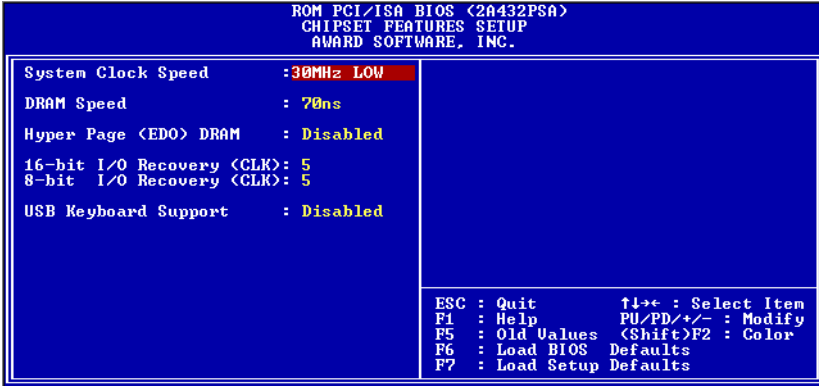
Report No FDD For WIN 95

The default setting is Yes. You don't need to change this.

When you are done in this section press the Esc key to return to the main menu.

Chipset Features Setup

To enter this section of the Setup program, highlight this menu item in the main menu and press the Enter key. The following screen will appear.



Menu Commands

The menu commands for this screen are the same as for the BIOS Features Setup screen.

Key Points For This Section

The proper entries should already be entered on this screen when you get the computer. All the settings are required for this computer except for the USB Keyboard support. If you connect a USB keyboard to the computer you need to enable this setting.

Section Item Summary

The following explanations cover the menu items for this section. The first five lines are required settings for this computer.

USB Keyboard Support

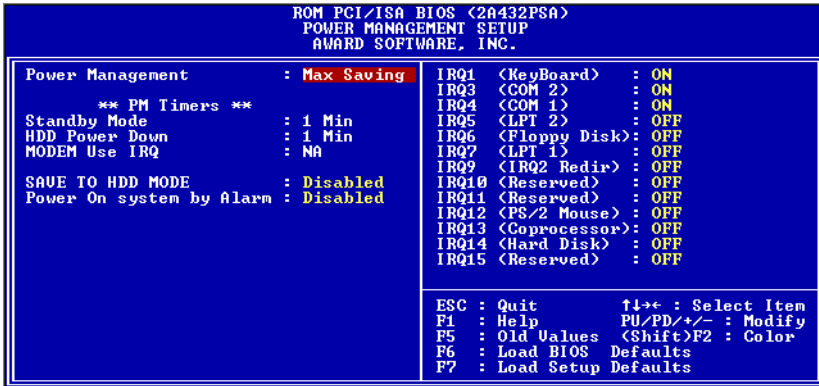
The default setting is Disabled. If you connect a USB keyboard to the computer set this line to the Enabled setting.

To return to the main menu press the Esc key.

4: Technical Information

Power Management Setup

To enter this section of the Setup program, highlight this menu item in the main menu and press the Enter key. The following screen will appear.



Menu Commands

The menu commands for this screen are the same as for the BIOS Features Setup screen.

Key Points For This Section

This section configures the BIOS power management control. If you use Windows power management the OS ignores these settings. There are two pre-defined power saving configurations, Min and Max Saving. They set the PM Timers settings. You can also use the User Defined setting to manually configure the PM Timers. We recommend that you use Windows power management (APM or ACPI) rather than these controls.

What Power Management Does

Power management lets you set up your computer to save electricity when it is not actively in use by putting the system into progressively greater power saving modes.

Section Item Summary

The following explanations cover the menu items for this section.

Standby Mode

This sets the period of system inactivity after which the system goes into Standby mode. The settings are from 1 minute to 1 hour.

HDD Power Down

This shuts down IDE hard disks that support a power saving mode after a specified time period. The settings range from 1 to 15 minutes.

Modem Use IRQ

This line is set to NA in the predefined power saving configurations. If you set it to the IRQ number a modem you have connected to the computer is using, the system will wake up if the modem receives an incoming call.

Save To HDD Mode

If you set this to the Enabled setting, the system can use the Suspend-To-Disk mode. The default is Disabled.

Power On System By Alarm

You can set the system to turn on at a certain date and time by setting this line to Enabled. When enabled, two more lines appear to allow you to set the wake-up date and time. The date is a day within the current calendar month. The default setting is Disabled.

The IRQ List

The list of IRQs sets what happens if there is activity involving individual IRQs. If set to ON, activity will wake up the system. If set to OFF, the activity is ignored and the system will not wake up. IRQs 1 and 4 are for the keyboard and pointing devices respectively and are set ON by default this lets you wake up the system by typing a key or tapping the screen.

When you are finished in this section, press the Esc key to return to the main menu.

4: Technical Information

PNP/PCI Configuration

To enter this section of the Setup program, highlight this menu item in the main menu and press the Enter key. The following screen will appear.

```
ROM PCI/ISA BIOS (20432PSA)
PNP/PCI CONFIGURATION
AWARD SOFTWARE, INC.

Resources Controlled By : Auto
Reset Configuration Data : Disabled

PCI IRQ Activated By : Level

ESC : Quit          ↑↓←→ : Select Item
F1  : Help          PU/PD/+- : Modify
F5  : Old Values   <Shift>F2 : Color
F6  : Load BIOS Defaults
F7  : Load Setup Defaults
```

Menu Commands

The menu commands for this screen are the same as for the BIOS Features Setup screen.

Key Points For This Section

This section controls the Plug and Play (PnP) and PCI configuration. You don't need to change the default settings to

Section Item Summary

The following explanations cover the menu items for this section.

Resources Controlled By

When this line is set to Auto the BIOS will automatically configure IRQ and DMA resources. This is the recommended setting. If you set this line to Manual, a manual configuration list appears. Don't use it for this computer.


```
ROM PCI/ISA BIOS (2A432PSA)
PNP/PCI CONFIGURATION
AWARD SOFTWARE, INC.

Resources Controlled By : Manual
Reset Configuration Data : Disabled

IRQ-3 assigned to : PCI/ISA PnP
IRQ-4 assigned to : PCI/ISA PnP
IRQ-5 assigned to : PCI/ISA PnP
IRQ-7 assigned to : PCI/ISA PnP
IRQ-9 assigned to : PCI/ISA PnP
IRQ-10 assigned to : PCI/ISA PnP
IRQ-11 assigned to : PCI/ISA PnP
IRQ-12 assigned to : PCI/ISA PnP
IRQ-14 assigned to : PCI/ISA PnP
IRQ-15 assigned to : PCI/ISA PnP
DMA-0 assigned to : PCI/ISA PnP
DMA-1 assigned to : PCI/ISA PnP
DMA-3 assigned to : PCI/ISA PnP
DMA-5 assigned to : PCI/ISA PnP
DMA-6 assigned to : PCI/ISA PnP
DMA-7 assigned to : PCI/ISA PnP

PCI IRQ Activated By : Level
Used MEM base addr : N/A

ESC : Quit          ↑↓←→ : Select Item
F1  : Help          PU/PD/+- : Modify
F5  : Old Values    (Shift)F2 : Color
F6  : Load BIOS Defaults
F7  : Load Setup Defaults
```

Reset Configuration Data

The default setting is Disabled. If you need to clear the ESCD data, set this to Enabled. The data will clear automatically and the BIOS will reset this line to the Disabled setting.

PCI IRQ Activated By

The Level setting is required for this computer.

When you are finished you can press the Esc key to return to the main menu.

4: Technical Information

Load BIOS Defaults

To use this command highlight it in the main menu and press Enter. A message will appear asking if you want to load the BIOS Defaults. Press the Y key and then the Enter key. The BIOS default settings will load. Press the N key if you want to cancel.

This loads a set of troubleshooting default values permanently stored in the BIOS ROM. The settings are not optimal and turn off all the performance features. Standard CMOS Setup is not affected by this command.

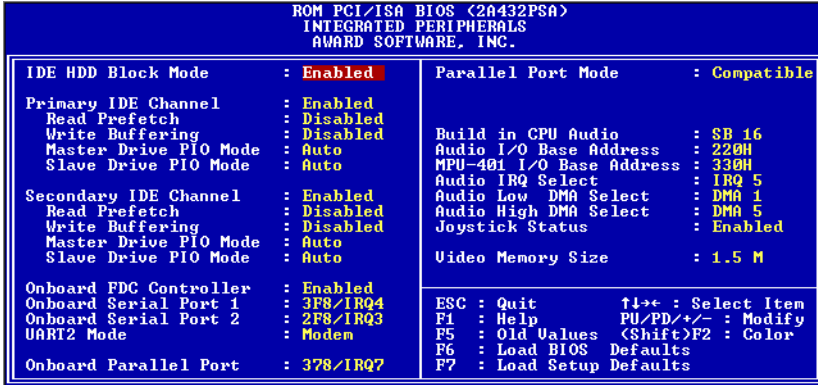
Load Default Settings

To use this command highlight it in the main menu and press Enter. A message will appear asking if you want to load the Default Settings. Press the Y key and then the Enter key. The optimized default settings will load. Press the N key if you want to cancel.

This loads a set of optimized default values permanently stored in the BIOS ROM. Use this command to load default settings for normal system operation. Standard CMOS Setup is not affected by this command.

Integrated Peripherals

This section sets the IDE transfer mode for all IDE channels. It also configures the other onboard ports.



Menu Commands

The menu commands for this screen are the same as for the BIOS Features Setup screen.

Key Points For This Section

Most of the settings in this section are required. The three settings you might need to change are the UART2 Mode (to enable the Infrared feature), the Parallel Port Mode (if you want to configure a different mode) and the Video Memory Size (to reduce or increase the system memory allotted for display memory).

4: Technical Information

Section Item Summary

The following explanations cover the menu items for this section.

IDE HDD Block Mode

Enables hard disk drive block transfer mode . The setting options are Enabled (default) and Disabled.

Primary/Secondary IDE Channels

Enables or Disables the Primary or Secondary PCI IDE controllers. The settings are required for this computer. The hard disk drive uses the Primary Master channel and the optional CD-ROM drive uses the Secondary Master channel. Selecting “Disabled” releases IRQ14.

IDE Primary/Secondary Master/ Slave PIO

These four lines set the hard disk PIO transfer mode, which affects the hard disk data transfer rate. The system will auto-detect the PIO mode of a device in any of these positions when they are set to ‘Auto’, the recommended setting. Alternatively, you can set the mode manually. Modes 0 to 4 are supported.

Onboard FDD Controller

Enables or Disables the onboard Floppy Drive controller.

Onboard Serial Port 1/2

These two lines set the I/O address for serial ports 1 & 2. Serial Port 1 is COM1 and is used by the internal touchscreen pointing device. Serial Port 2 is COM2 and is the 9-pin serial port on the Port Module. You should not change the default settings.

UART 2 Mode

UART2 refers to Serial Port 2. This line sets the mode, as opposed to the address, for the port UART. To use the IR feature you have to change the default setting, Modem, which supports the COM2 serial port on the Port Module. If you select an IR mode, the COM2 serial port will not work. You can set this line back to support COM2 when you aren’t using the IR feature. The setting options are:

Modem – Supports COM2

Sharp IR – Not used by this computer

IrDA SIR – Standard mode supported by Windows

IrDA FIR – Fast IR mode requires an additional software driver for Windows

Leave this set to Modem unless you want to use the IR feature. The setup procedure for using the IR feature under Windows is described in Chapter 2.

Onboard Parallel Port

Sets the I/O address for the parallel port on the Port Module. Use the default setting, 378H/IRO7. If you set this option to Disabled, the Onboard Parallel Mode line that follows will not appear on the screen.

Onboard Parallel Mode

Selects the parallel port mode. The default Compatible mode supports both standard parallel port use and the external floppy disk drive that connect to the port. The two enhanced modes are for printers that support enhanced parallel port features.

If you select the EPP setting an EPP Version line appears. The default is version 1.9, the alternate setting is for version 1.7.

If you set the mode to ECP, the ECP Mode Use DMA line appears. The default setting, 1, is for DMA 1. The alternate setting, 3, is for DMA 3.

Audio Settings

All the default settings in the audio configuration lines are required for this computer and are stored in the Setup Defaults. If you ever have a problem with them, reload the default settings for this page.

Video Memory Size

Display memory for the computer is drawn from the system memory. The default video display memory size is 1.5MB. The minimum is 1.25MB and the maximum is 2.125MB. More display memory allows the system to display more colors at higher resolutions. If you have more than 16MB of system memory installed you may want to set this to the maximum setting.

4: Technical Information

Password Settings

There are two password setting options, Supervisor Password and User Password. The Supervisor password controls access to the CMOS Setup utility. The User password controls access to the system and requires the User to enter the password when the system starts up. The User password is unrelated to any Windows password you might set.

When you set a password, the Security Option line in BIOS Features Setup controls when a password is required. You can set the option to require the password when the system boots up or when calling up the CMOS Setup utility. The computer ships with no passwords set.

Setting Passwords

To use either password command, highlight it in the main menu and press Enter. A message will appear prompting you to enter a password.

Type in a password. The password is case sensitive, and can be up to 8 alphanumeric characters. Press Enter when you finish typing in the password.

If you typed in a password, the message “Confirm Password” will appear. Confirm the password by typing it again and pressing the Enter key. The message box will close.

If you don't want to set a password after you activate this command, or you want to erase an existing password, press Enter without typing anything else. The message “Password Disabled” will appear and the message box will close.

IDE HDD Auto Detection

This feature automatically detects IDE hard disk drive parameters and enters them in the appropriate section of Standard CMOS Setup. However, since the Auto settings in Standard CMOS Setup perform the same function, you do not need to configure IDE hard disk drives from here.

Save And Exit Setup

When you select this and press Enter the values entered during the current session are recorded in CMOS memory.

Exit Without Saving

When you select this and press Enter the Setup Utility closes without recording any changes made during the current session.

Support Software

The MiniNotebook support software includes four components, all of which come pre-installed on the computer when you get it. These include the video and audio driver software for the Cyrix GXi chip, the driver software for the touch screen pointing device, the CardBus driver for the PC Card slot and the Award Flash utility for updating the system BIOS.

Backup copies of the software are also stored on the system hard disk drive. As mentioned earlier, you should back these up when you get the computer so that in the event you ever need to re-install them you have them available even if something has happened to the copies on the hard disk drive.

Backing Up Support Software

If you have the optional external floppy disk drive you can back up the software on to floppy disks. If you do not have the floppy disk drive you can still back up the software to another computer by using the Windows Direct Cable Connection feature. This feature allows you to connect the MiniNotebook to another computer via the parallel port on the Port Module.

If you are not familiar with the Direct Cable Connection feature you can use the Windows Help system to get more information. The process is simple and there are directions each step of the way, so you should not have any trouble using this method. Remember that both computers have to be set up the same way to use the cable connection feature.

Re-Installing Support Software

It is possible for various reasons that you might at some point need to re-install the Cyrix, touchscreen or CardBus software. The following sections explain the procedure for each. The Award Flash utility does not need to be installed. It is a utility program that runs in MS-DOS mode (not a DOS session under Windows). You can re-install from the installable copies on the hard disk drive or, if necessary from the backup copies of them that you made, as suggested above.

4: Technical Information

Cyrix Driver Software

The Cyrix support software has two components, the video display driver and the audio driver. Both drivers are combined in one self-executing file. To install the software do as follows:

1. The self executing installation file is named "Cyrix_gx.exe". Find the file either on the hard disk drive Drive C: or, if you have the optional floppy disk drive connected, insert the backup floppy disk you made into the disk and find the file on Drive A:.
2. Double-click on the file icon. The file will automatically decompress into the Temp directory on the hard disk drive and run the driver Setup program.
3. Follow the instructions that appear and agree to the license agreement.
4. Choose the Typical install option.
5. A window will pop up and ask you to insert the 'Cyrix XpressGRAPHICS(TM) Windows 95 Display Driver' disk. Click the OK button.
6. The Copying Files window will pop and notify you the necessary file can't be located. Click the Browse... button and locate the gx95.drv file in the Cyrix Corporation folder in the Program Files folder on DriveC:.
7. The file name will appear highlighted in the left-hand panel if you are in the right location. Click the OK button to confirm and click the Copying Files OK button to copy the files.
8. After the files are copied, a window pops up instructing you to restart the computer so that changes can take effect. Click the Finish button and the computer will restart.

If you don't want to restart yet, click the restart later line before clicking Finish. This exits the install program without automatically restarting the computer.

After the computer restarts you can configure the display driver in the Windows Display Properties Control Panel. The audio driver is automatically installed in the process described above and uses the Windows audio applet software.

The Touchscreen Software

For information on the touchscreen software please see Attachment 1, the Handwriting User's Manual. This attachment contains a full explanation of the touchscreen software's installation procedure and use.

You can find information on calibrating the touchscreen and stylus in Section 9: Calibration on page 25 of the Handwriting User's Manual.

The CardBus Software

The CardBus driver software provides 32-bit support for PC Cards you use in the computer's PC Card slot.

The CardBus driver software comes compressed in a Zip archive. You will need either PKUNZIP, WinZip or some other utility that can expand ZIP archives to access the files in the archive. You may want to unzip the archive when you back up the software so that it is available when you need it. To install the software do as follows:

1. Unzip the file archive into a directory on the computer's hard disk drive if you haven't already. If you unzipped the files when you backed them up to floppy disk, you don't need to do this.
2. Open the Windows Control Panel and double-click on the Add New Hardware icon. This runs the Add New Hardware Wizard. Click the next button to start the process.
3. Click the No option to prevent Windows from searching for new hardware and then click the Next button.
4. In the next window, find the PCMCIA socket item in the hardware list and click on it to highlight it. Click the Next button.
5. In the next window click the Have Disk button to bring up the Install From Disk window. Click the Browse button and find the pcmcia.inf file in the directory you put the CardBus support files in.

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6. The file name will appear highlighted in the left-hand panel if you are in the right location. Click the OK button to confirm and click the Install From Disk window's OK button.
7. Click on 'Texas Instruments' in the Manufacturers list and then click on 'Texas Instruments PCI-1220 CardBus Controller' in the Models list. Click the Next button to proceed. Also click the Next button in the following window.
8. The Copying Files window will pop and notify you the necessary file can't be located. Click the Browse button and locate the carddrv.exe file in the win95 folder on DriveC:. The file is in win95_15.cab file. The system will see the file you're looking for is in the .cab file.
The .cab file name will appear highlighted in the left-hand panel if you are in the right location. Click the OK button to confirm and click the Copying Files OK button to copy the files. After the files are copied, click the Finish button in the last window.
9. Wait a few moments and check to see if the PC Card (PCMCIA) icon appears in the Control Panel window. If it doesn't restart Windows and confirm that the icon has appeared.

Once the CardBus support software is installed you can configure the PC Card control panel settings as you please and you can use both the 16-bit and 32-bit PC Cards in the MiniNotebook's PC Card slot.

This support software provided with the computer is the basic software needed to support PC Card use. PC Cards may also come with software that supports a card's specific functions. For example, a PC Card modem will normally come with a configuration file specific to that modem. Follow any instructions that come with the card for installing and configuring its companion software.

The Award Flash Utility

In the event that a BIOS update becomes available after you purchase the computer you can use the Award Flash Memory Writer utility to update the system BIOS file that is stored in the computer. The Flash Memory Writer is a DOS utility that runs only in an MS-DOS session. You can not run it in an MS-DOS window while Windows is running. To use the Flash Memory Writer to install a new BIOS do as follows:

1. Copy the awdfash.exe and the BIOS update file to a directory on the hard disk drive.
2. Restart the computer in MS-DOS mode. Make sure no memory manager software loads at boot if you have any configured in DOS config.sys or autoexec.bat start-up configuration files.
3. Switch to the directory you created in Step 1 above. Type awdfash.exe and press the Enter key to run the utility.
4. Type the exact name of the BIOS update file that you copied into the directory with the flash utility in the name field of the flash utility . The file name will have a .bin extension after it.
5. The utility will ask if you want to save the current BIOS file. This is highly recommended. Doing this saves a copy of the current BIOS to a file in case there is a problem and you need to re-install the existing BIOS.

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6. The utility will ask you to confirm that you really want to load the new BIOS. Confirm that you do and the program will install the new BIOS file.

Very Important:

Do not turn off the computer while the BIOS is being installed. If the computer loses power during this operation your computer may become unusable and have to be sent in for service.

7. Press the F10 key when the BIOS download is finished and restart the computer. The computer will run the Power On Self Test and you should be able to see the new BIOS version listed on the screen.

When you install a new BIOS, it will use the existing configuration from the previous BIOS, so you don't need to reconfigure the BIOS settings.

Troubleshooting

This section contains suggestions on things to check if you run into problems using your MiniNotebook computer. There also some cautions and warnings on things to look out for or avoid.

AC Power

If the system won't turn on, check the following:

- The power cord is plugged in.
- The battery is properly installed and charged.
- Press power button, check if the power LED indicator comes on. If it doesn't and the computer doesn't start the computer may need service or the battery may have a problem. See the Battery Warning later in this section.

Battery Power

If the system won't turn on under battery power, check the following:

- The battery pack is properly installed and charged.
- See the Battery Warning if you haven't used the computer in over six months.

Touchscreen

If the touchscreen doesn't work properly, check the following:

- Run the Calibration routine in the Touchscreen Control program as described in Chapter 1.
- If you still have a problem, confirm the screen configuration settings. If there's still a problem, try re-installing the touchscreen software as described earlier in this chapter.

Port Module

If you have problems using the Port Module, check the following:

- Make sure the module is securely attached to the computer.
- Serial Port – make sure that the UART2 mode in the CMOS Setup utility is set to the Modem setting. COM2 doesn't work if the UART is set to IR mode.

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Hard Disk Drive Problems

If the system won't boot from the hard disk drive, check the following:

- Check that the drive is correctly configured in BIOS CMOS Setup utility. The Primary Master line should be set to 'Auto'.
- Make sure the hard disk boot sector is not damaged. Boot from a floppy disk to check. If the system boots, the hard disk drive may have a problem.

Optional Floppy Disk Drive

If the floppy disk drive doesn't work properly, check the following:

- The drive cable is properly connected to the drive and the Port Module.
- Make sure the Port Module is correctly attached to the computer.
- Confirm the drive is correctly configured in the CMOS Setup utility
- Confirm the drive's LED activity indicator is on while accessing a disk. If it isn't and you've checked everything else, the drive may have a problem.

Optional CD-ROM Drive

If the system can't access the CD-ROM drive, check the following:

- The drive cable is properly connected to the drive and the Port Module.
- Make sure the Port Module is correctly attached to the computer.
- The CD-ROM drive is detected by the system at boot.
- Confirm the drive is correctly configured in the CMOS Setup utility
- Confirm the drive's power LED is on and the LED activity indicator flashes while accessing a disk. If it isn't and you've checked everything else, the drive may have a problem.

Peripheral Devices

If a peripheral device doesn't work properly, check the following:

- The device cable is securely connected to the Port Module.
- The peripheral device is plugged in and turned on.
- Any required driver software is installed and configured.

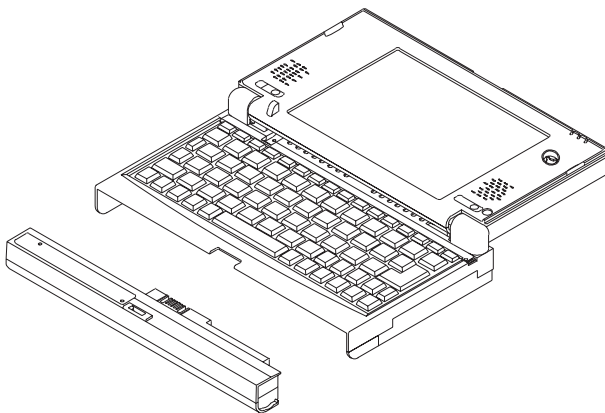
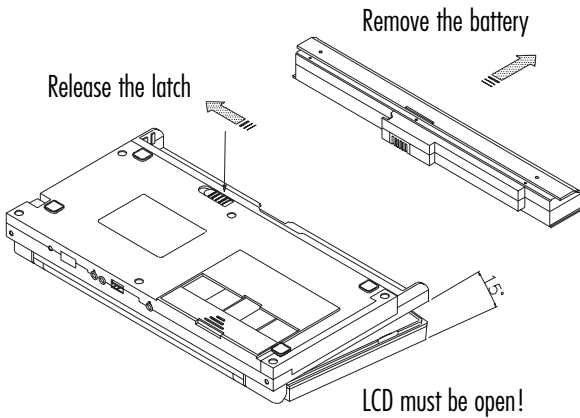
Warnings

Please note the following important information.

Battery Removal

The computer ships with one battery, so you shouldn't need to remove it unless there is a problem or you have a second battery. **You must have the LCD screen open to remove the battery because the cover latch inserts in the battery housing.** The release latch is on the underside of the computer.

Removing The Battery



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Battery Warning

There are two important issues you need to be aware of regarding the battery.

Complete Discharge

If the battery becomes completely discharged, you must recharge it within 2 days. If you don't the battery may be damaged and its usable life reduced.

Recharging the battery when it completely discharged requires the following procedure:

1. Remove the battery from the computer.
2. Connect the AC adapter.
3. Install the battery with the power on.
4. Charge the battery fully.

After you use this procedure you can go back to recharging the battery in the normal fashion.

Storage Limitation

If you don't turn the computer on for more than 6 months the battery will discharge entirely and may become unusable. If this happens you may need to send the battery in for maintenance. If you store the battery for more than 8 months without recharging the battery may no longer be usable at all.

"Hot" Connections

Do not connect the Port Module to the computer while the computer is turned on. You can connect the optional floppy disk and CD-ROM drives to the module while it is connected to the computer and the computer is turned on, but the system will not recognize the drives until you restart.

Insert PC Cards Face Down

The PC Card slot on the MiniNotebook is oriented face down. You must insert cards face down. Do not try to force a card into the slot. If you meet resistance, double-check that you have the card facing the correct direction.

General Precautions

There are a number of things you can do to protect your computer from damage and extend its usable life.

Avoid Mishandling

The computer is sturdily constructed, it isn't designed to travel unprotected. A range of carrying case options are available for notebook computers. It is a good idea get one and always transport your computer in a protective case. If you don't use a case, make sure to put the computer in a safe transport container — which might or might not be a briefcase, depending on its design and contents. The most important thing to remember is, don't drop the computer! This may seem silly and obvious but many people tend to treat a notebook computer as if it can take a lot more punishment than should reasonably be expected. This simple precaution can save a lot of trouble.

Always carry-on your computer when you fly. Don't put it in other luggage. Commercial baggage handling equipment, and often bag handlers, are not gentle on luggage. You can avoid possible loss or damage and protect your investment at the same time. If you ever need to ship the computer, use the original packing materials if possible.

Electricity Precautions

Other than PC Cards, headphones and the AC adapter, don't connect or disconnect anything from your computer while it is turned on, including while it is in Suspend mode.

Whenever possible you should always plug the AC adapter into a surge protected outlet strip rather than directly into an electrical outlet. A surge suppressor intercepts electricity problems that might otherwise damage the computer.

Environmental Precautions

Some computer problems can be traced to sources outside the computer.

Protect your computer from liquids. If you work with a beverage nearby, keep it well away from the computer. If you spill liquid in the MiniNotebook while it's turned on, you will may either damage it beyond repair or incur an expensive repair bill.

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Don't let dirt or dust build up on or in the computer. There are a number of places that will allow dirt and dust into the computer including the keyboard, the PC Card compartment, and the audio jacks. Try to keep the computer in a case or at least closed when you aren't using it and keep your work space clean.

Don't use your MiniNotebook in high heat and humidity if you can avoid it. Avoid putting the computer anyplace where it will be subjected to extreme conditions.

Cleaning The Computer

If your MiniNotebook gets dirty, you use a compressed air spray to blow away dust and dirt, particularly if any accumulates in the keyboard. You can also use a clean, lint-free, nonabrasive cloth to wipe the computer clean. If you use a damp cloth make sure it isn't so wet that liquid can get into the computer. Be particularly careful not to scratch the LCD screen.

Over time the LCD screen may get dirty or grimy, especially if you are in the habit of touching the screen with your finger instead of using the stylus. You can clean the screen surface with a damp lint-free cloth. Dry the screen with a dry lint-free cloth. Don't use soap as it may leave a deposit on the screen. You can also use a commercial product designed to clean LCD screens if one is available.

System Specifications

The MiniNotebook hardware specifications are as follows:

Processor	Cyrix Gxi86 120Mhz or 166MHz (option)
Cache	16K Internal
Memory	16MB, 32MB, 64MB options
Chipset	Cyrix Cx5520
System ROM	256KB Flash ROM
Display	6.1" TFT 640 x 480; external VGA on Port Replicator
Hard Disk	Removable HDD 1.6GB
Floppy Disk	Optional external 1.44MB 3.5 "
CD-ROM	Optional external CD-ROM
Pointing Device	Analog Touch Screen with Stylus
Keyboard	77-key
PC Card	One CardBus-compliant slot for Type I or II card
Audio	SoundBlaster-compatible, internal microphone
Onboard ports	Headphone, USB, Mono Mic, Line-In, IrDA FIR
Battery	Lithium Ion battery pack
AC Adapter	100 -- 240V input; 16.5V, 2A output
Dimensions	8.4" x 4.8" x 1.4" (214mm x 124mm x 37mm)

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