

# NOTEBOOK COMPUTER PC-MM1 Series OPERATION MANUAL



# Notice for Users in the USA

## **FCC Statement**

WARNING - FCC Regulations state that any unauthorized changes or modifications to these equipments not expressly approved by the manufacturer could void the user's authority to operate these equipments.

Note: These equipments have 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. These equipments generate, use and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If these equipments do cause harmful interference to radio or television reception, which can be determined by turning the equipments off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment into 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.

A shielded I/F cable is required to insure compliance with FCC regulation for Class B computing equipment.

\* As an ENERGY STAR<sup>®</sup> Partner, SHARP has determined that this product meets the ENERGY STAR<sup>®</sup> guidelines for energy efficiency.

### **Declaration of Conformity**

SHARP PERSONAL COMPUTER, PC-MM Series

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party: SHARP ELECTRONICS CORPORATION Sharp Plaza, Mahwah, New Jersey 07430-2135 TEL: 1-800-BE-SHARP

### For Wireless LAN Bundled Model

Wireless LAN Model Name: T60H42400 FCC ID: MCLT60H42400

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Warning

This product utilizes tin-lead solder, and fluorescent lamp containing a small amount of mercury.

Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance: www.eiae.org

### Copyright

It is the intent of Sharp that this product be used in full compliance with the copyright laws of the United States and that prior permission be obtained from copyright owners whenever necessary.

#### **Product Information and Customer Assistance**

For Product Information and Customer Assistance:

Call: 1-800-BE-SHARP (237-4277) Sharp Systems of America 5901 Bolsa Avenue, Huntington Beach, CA 92647 Home Page: http://www.sharpsystems.com E-mail address: support@sharpsystems.com

# CAUTION:

TO PREVENT ELECTRICAL SHOCK, DISCONNECT THE AC CORD AND THE BATTERY BEFORE SERVICING.

### CAUTION:

FOR A COMPLETE ELECTRICAL DISCONNECTION, PULL OUT THE MAIN PLUG AND THE BATTERY.

### **VORSICHT:**

UM DIE STROMZUFUHR VOLLSTÄNDIG ZU UNTERBRECHEN, DEN NETZSTECKER HERAUSZIEHEN UND DIE BATTERIE ÈNTFERNEN.

### **ATTENTION:**

POUR UN ARRET TOTAL DU SYSTEME, DECONNECTEZ LA PRISE DE COURANT SECTEUR ET LA BATTERIE.

### VARNING:

FÖR TOTAL ELEKTRISK URKOPPLING, KOPPLA UR KONTAKTEN OCH TA UR BATTERIET.

### PRECAUCION:

PARA UNA COMPLETA DESCONEXION ELECTRICA DESENCHUFE LA CLAVIJA DE LA RED Y LA BATERIA.

# **Safety Precautions**

### General

- Follow all cautions and instructions, which may be marked, on the computer.
- Except as described elsewhere in this manual, refer all servicing to qualified personnel. Immediately shut off the computer and seek servicing under the following conditions:
  - when the power cord or plug is damaged or frayed
  - when liquid has been spilled on the computer
  - when the computer has been dropped or the cabinet has been damaged

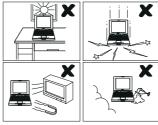
### Location

- Do not expose the computer to direct sunlight.
- Try to avoid dusty environments.
- Keep the computer away from any magnetic devices and TVs.
- Keep the computer away from excessive humidity or fluids such as rain, snow, water spray, juice, coffee, steam, etc.
- Do not move the computer from an extremely cold place to an extremely warm place. A temperature difference of more than 10°C (18°F) will cause condensation inside the unit, which may cause damage.
- Do not block or cover slots or openings on the cabinet. These protect the computer from overheating.
- Do not place the computer on unstable or uneven work surfaces.
- Do not use the computer on your lap or any part of your body for an extended period during operation or charging to avoid injury from heat exposure.

### Usage

- Never push any objects of any kind into cabinet openings. They may touch dangerous voltage points or short parts that could result in fire or electrical shock.
- Turn off the computer before installing or removing peripheral devices (except when connecting USB devices and PC cards, etc.).
- Check the AC power cord and power connectors periodically for damage. Replace the power cord immediately if damage is found.
- Never subject your computer to sudden shocks or extreme vibration.

- Do not drop the computer nor hit it with other equipment.
- Do not scratch the surface of the LCD screen.
- Turn off the computer and disconnect the AC power cord before cleaning.



### **Battery Precautions**

### CAUTION

DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

## Handling

- Never put the battery pack in a fire, as it could explode and cause injury.
- Do not attempt to open or alter the battery pack.
- Do not place the battery where it might get hotter than 60°C (140°F).
- Do not allow metal objects such as jewelry to short across the battery terminals, as it could heat up and explode.
- Do not allow liquids to come in contact with the battery pack.
- Avoid dropping the pack or other violent shock.
- Do not solder anything to the battery terminals.

### Charging

• Charge the battery pack only with the AC adapter included with your computer.

### Discharging

• Do not use the battery pack for any purpose other than powering your computer.

### Storage

- Store the battery pack in a cool and dry place. Never allow the temperature to exceed 60°C (140°F) during storage.
- Recharge the stored battery pack after storage, before use.

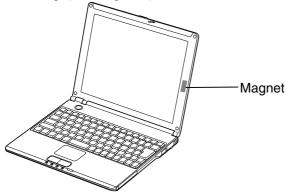
## **Wireless LAN Precautions**

- Disable the integrated antenna and do not communicate with wireless LAN in specific environment where radio-susceptible equipment is nearby such as on airplanes, in hospitals, etc.
- Do not communicate with wireless LAN in the following environment:
  - where radio-frequency generating devices are nearby such as microwaves, wireless applications, etc.
  - where metallic materials are nearby such as steel cabinets, etc.

### Caution

Your computer is integrated with a magnet on the right side of the display. Be sure to keep the magnetic cards or floppy disks away from the right side of your computer. Otherwise the data on the cards or floppy disks may be erased. This computer has a sensor on the right side of the keyboard which responses to the

magnet. If you bring the magnet near the right side of the keyboard, the backlight is turned off, and the system may enter the standby or the hibernate mode depending on the setting. (See Chapter 3.)



# **About This Manual**

### Notice

Information in this manual is subject to change without notice and does not represent a commitment on the part of SHARP Corporation and its sales subsidiaries.

SHARP Corporation and its sales subsidiaries shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from the furnishing, performance, or use of this material.

SHARP strongly recommends that separate permanent written records be kept of all important data. Data may be lost or altered in virtually any electronic memory product under certain circumstances. Therefore, SHARP assumes no responsibility for data lost or otherwise rendered unusable whether as a result of improper use, repairs, defects, battery replacement, use after the specified battery life has expired, or any other causes.

SHARP assumes no responsibility directly or indirectly, for financial losses or claims from third persons resulting from the use of this product and any of its functions, such as stolen credit card numbers, the loss of or alteration of stored data, etc.

### Edition

1st Edition, March 2003.

## Copyright

© 2003 SHARP Corporation

This document contains or refers to proprietary information which is protected by copyright. All rights are reserved. Copying or other reproduction of this document is prohibited without the prior written permission of SHARP Corporation.

### Trademarks

Crusoe is a trademark of Transmeta Corporation.

IBM is a trademark of International Business Machines Corporation.

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and other countries.

Power Quest is a registered trademark and EasyRestore is a trademark of PowerQuest Corporation.

BAPCo is a registered trademark of the Business Applications Performance Corporation. MobileMark is a trademark of the Business Applications Performance Corporation.

All other brand and product names are trademarks or registered trademarks of their respective holders.

# **Recording Important Information**

For future reference, please record the following information in the spaces provided below.

Model Number:	
Serial Number:	
Date of purchase:	
Dealer's Name:	
Place of purchase:	
Password:	

The serial number is printed on a sticker located on the bottom of the computer.

# **Manual Conventions**

This manual uses a set of style conventions described below.

Notes and Cautions are italicized with icons:



A note icon informs you of a special technique or information that may help you perform a task or better understand a process.



A caution icon alerts you to something that may cause problems or damage to hardware, software or data.

**Key Labels on the Keyboard**, when referred to in the instructions, are shown in boldface:

Press Enter to continue.

When two or more keys are pressed simultaneously, the key labels are separated by a plus (+) sign:

Run Task Manager by pressing Ctrl+Alt+Delete.

Sample Entries are shown in lower cases of different typeface.

c:\windows\system

**Words/Texts on Screen**, such as window titles or possible parameters, are italicized: Double-click this icon to display the *Power Options Properties* dialog box. Set the item to *Enabled*.

**Screens** reproduced in this manual may differ slightly from the screens you see on your computer.

Section Titles in other parts of this manual are italicized: Refer to *Installing Battery Pack* section of Chapter 1.

# **Table of Contents**

Notice for Users in the USA	i
Safety Precautions	iv
About This Manual	
Recording Important Information	
Manual Conventions	
Table of Contents	xi
Overview of Computer	xiv

## **Quick Setup**

Installing Battery Pack	1-1
Connecting to AC Power Source	1-4
Setting Up Windows	1-6
Turning Off Your Computer	1-8

### **Basic Operations**

Choosing Power Source	2-1
Resetting System	
Using Glide Pad	
Using Keyboard	
Controlling Volume	
Adjusting Display	
Sharing Your Computer	

## **Battery and Power Management**

Battery Pack	3-	1
Power Management	3-	7

## Peripherals

Using Peripherals	
Optional External Floppy Disk Drive Unit	
Optional External CD-ROM Drive Unit	
Display	4-11
Audio System	4-14
USB Device	
PC Card	4-17
Printer	

## **Communication Functions**

LAN Unit	
Wireless LAN	
Network Setup Utility	
Modem Card (may not be available in some countries)	

## Setup Utility

Running Setup Utility	6-1
Main Menu	
Advanced Menu	6-4
Security Menu	6-4
Boot Menu	6-6
Exit Menu	6-6
Security Menu Boot Menu	6-4 6-6

## **Connection Cradle**

7-3
7-4
7-6
7-7
7-11
7-12
7-13

Appendixes	
Maintenance and Care	A-1

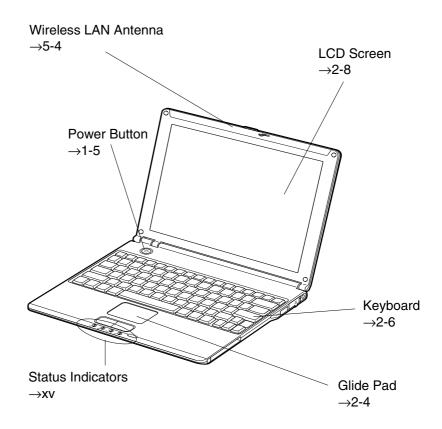
## Troubleshooting

Index

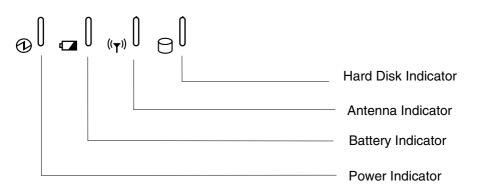
# **Overview of Computer**

Each number after an arrow indicates the page referring to the part. Actual appearance of your computer may be slightly different depending on the model.

## Front



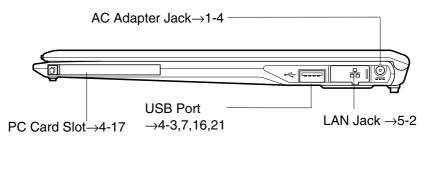
## **Status Indicators**



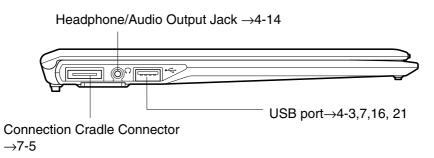


Never turn off the computer when the hard disk indicator is on. This may damage the data on the hard disk.

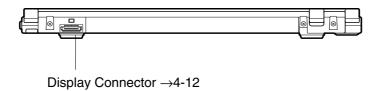
Right

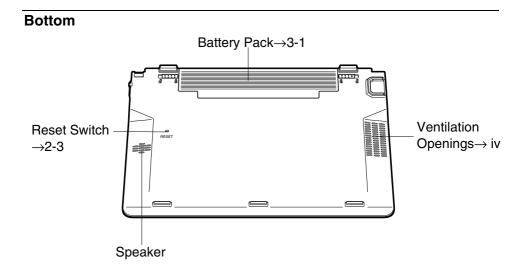


## Left



### Rear





# CHAPTER 1

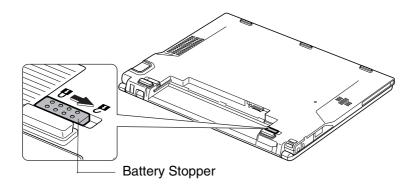
# Quick Setup

Your computer is designed and pre-configured for easy setup and use. This chapter describes the steps to set up your computer and operate it as quickly as possible. Read this chapter first.

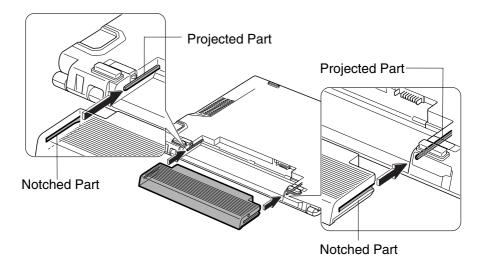
# **Installing Battery Pack**

Your computer is powered with either the battery pack or AC power source. See the next chapter for more information on the power sources. Before using your computer for the first time:

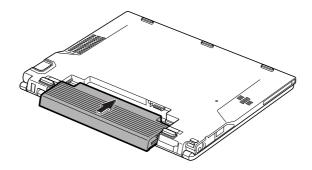
- 1. Place your computer upside down.
- 2. Slide the battery stopper on the battery pack to the unlocked position(a).



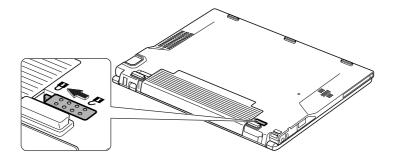
3. Insert the battery pack into your computer by matching the notched parts of the battery to the projected parts on your computer.



4. Push the battery pack all the way until you hear the clicking sound.



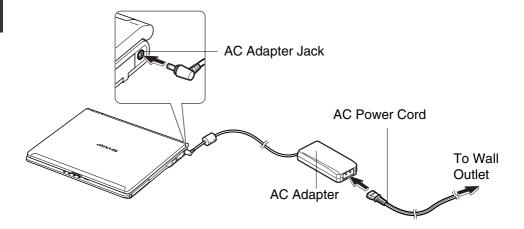
5. Slide the battery stopper to the locked position (a).



6. Turn over your computer and go to the next section.

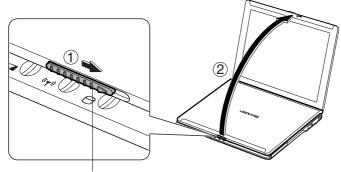
# **Connecting to AC Power Source**

- 1. Plug the AC adapter cable into the AC adapter jack on the right side of your computer.
- 2. Plug the AC power cord into the AC adapter.
- 3. Plug the AC power cord into a wall outlet.



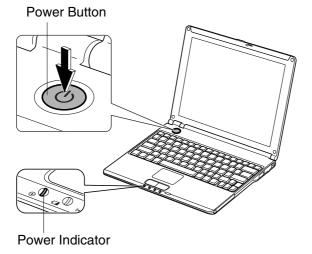
- Always use the AC adapter and the AC power cord included with your computer or the optional one (may not be available in some countries). Using other AC adapters and AC power cords may damage your computer.
- Always hold the AC power cord by its plug when removing it from the wall outlet. Never pull on the cord.
- When using your computer for the first time, be sure to operate it on AC power. If on battery power instead, you may not be able to complete the Windows setup if the battery does not have enough power.

4. Slide the display cover lock lever to the right until the display cover releases, and raise the cover.



**Display Cover Lock Lever** 

5. Press the power button to turn on your computer.



When you turn on your computer, the power indicator ( O ) turns green, your computer goes through a self test to detect any problems, and Windows setup process starts. See the next page.

# **Setting Up Windows**

The steps in the setup process are as follows:

- Configuring your location, language and keyboard type
- Configuring your time zone
- Accepting license agreement
- Naming your computer
- Creating an account
- Completing configuration

To setup Windows, follow the instructions on the screen. See also the Windows manual. It takes approximately 10-15 minutes to complete the entire setup process.

- Do not turn off your computer until completing Windows setup. If you turn it off, you cannot set up Windows later.
  - Be sure to connect your computer to AC power source. An undercharged battery may not be able to complete the Windows XP setup.
  - Do not connect any peripheral devices to your computer until Windows setup completes. Otherwise your computer may malfunction.



- If the display turns off, some power management may function. In this case, press any key to resume your computer from the power management.
- If you cannot operate the keyboard or the touch pad, press the power button for more than four seconds to turn off your computer. Be sure that the power indicator turns off; then, after more than 10 seconds, press the power button to turn it on again.

After completing Windows setup:

- Confirm *Time Zone* is correctly selected and set the date and time by doubleclicking the time appearing on the right of the taskbar to open *Date and Time Properties* dialog box
- Press Fn + F1 () keys to activate the integrated antenna for Wireless LAN communication.

### **Properties Dialog Box in Windows**

In this manual, you will often see the expression "XXX Properties dialog box." A dialog box is a window containing text boxes, check boxes, buttons, etc., with which you can send commands to Windows or other application programs. To open the properties dialog boxes, click *start - Control Panel*. The *Control Panel* has two types of views: Category view and Classic view. The Category view allows you to choose the category that may be related to what you want to do, then, choose the task by clicking it. The Classic view gives you the icons representing their components or features. Double-click one of the icons to open their dialog box or windows. Some of the dialog boxes you will use often are:

- Display
- Phone and Modem Options
- Mouse
- Power Options
- System



*Clicking* Switch to XXX View *string appearing at the upper left of the* Control Panel *window allows you to toggle between the two views.* 

# **Turning Off Your Computer**

When you've finished using your computer, turn it off with one of the following ways:

- From the *start* menu
  - 1. Click start Turn Off Computer.
  - 2. In the Turn off computer dialog box, click Turn Off.
- With the power button

Before using this step, confirm that *Shut down* is selected in *When I press the power button on my computer* in *Advanced* tab of *Power Options Properties* dialog box.

Close the cover to keep the screen and keyboard clean and protected.



If you have not saved a file, a dialog box will appear asking whether you want to save it.

- Do not turn off or reset your computer while the hard disk indicator or the indicator on the optional external floppy disk drive unit or the external CD-ROM drive unit is lit. Doing so may damage or even wipe out the data.
  - Before turning it back on, wait at least ten seconds after turning off your computer. Turning the power off and on in rapid succession can damage your computer's electrical circuitry.

# CHAPTER 2

# **Basic Operations**

This chapter describes the basic operations of your computer.

# **Choosing Power Source**

You can use your computer with one of the following power sources:

- AC power from a wall outlet Use AC power whenever possible; rely on the battery only when AC power is not available.
- Rechargeable battery Your computer is equipped with a standard battery pack. You can also use an optional high capacity battery. See Chapter 3 for the battery information.

### **About Power Indicators**

The following indicators show the power status of your computer.

Indicator	Light		Meaning
Power	On (green)		Operating
ⓓ	Blinking (green)		In System Standby
	Off		Powered off or in System Hibernate
Battery	Connected to AC	On (green)	Fully charged
	Power Source	On (orange)	Being charged
		Blinking	In abnormal state (Remove the
		(orange)	battery pack and install it again.)
	Powered by	Off	Has power
	Battery	Blinking (red)	Almost completely discharged
			(The warning beep sounds.)

The battery indicator is always off when your computer is turned off and not connected to AC power source.



- When the battery is hot, the battery indicator may turn off and stay off until the battery becomes cool.
- For more information on System standby/hibernate, see Chapter 3.

## Using AC Adapter

When connected to a wall outlet, the AC adapter provides power for operation and charges the battery. The AC input voltage can range from 100 to 240 volts so that you can use your computer with the appropriate plug adapter.



The AC power cord included with your computer is appropriate for the voltage used in the area in which you purchased your computer. If you attempt to connect your computer to a wall outlet other than in this area, check the voltage of the outlet and use an AC power cord appropriate for the outlet. Consult local service staff if you are not sure.

## 2-3

# **Resetting System**

You may need to restart the system if your computer hangs up or a new hardware or software is installed. When a message appears after the installation, click *OK*, *Yes*, etc. to restart Windows.

You can also restart Windows by clicking start - Turn Off Computer; then, Restart.

### Warm Boot (Software Reset)

If the system is locked up because of a software problem, you can reset or reboot the system by pressing the **Ctrl+Alt+Del** keys simultaneously and select *Applications* tab of *Windows Task Manager* dialog box. Click the program name which hangs up, then, *End Task.* If this does not solve the problem, click *Disconnect* or *Logoff* of *Windows Task Manager* dialog box, then *Yes.* 

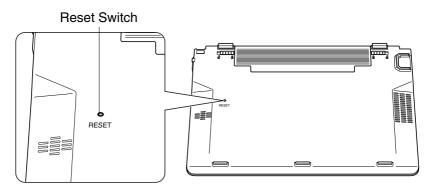
Resetting may cause data loss. Use the resetting process only if the normal Windows Shut Down does not work because of software malfunction. Although resetting will not damage the system, you may lose the data you are processing.

### **Power Switch**

You can turn off your computer with the power button if you encounter hardware or software problems which lock up the system. In this case, press the power button for more than four seconds.

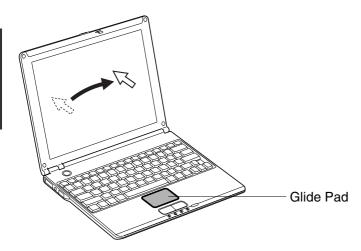
### **Reset Switch**

If you cannot turn off your computer by pressing the power button, you can use the reset switch on the bottom of your computer. To reset the system, insert a narrow object into the small hole to press the switch.



# **Using Glide Pad**

Your computer is equipped with an integrated pointing device called a glide pad. Using the glide pad, you can move the pointer, select an item from a menu, and perform other tasks in the same way you would with a mouse.



- Do not hit or scratch the surface of the glide pad with pointed objects (such as a ballpoint pen).
- Do not operate the glide pad with a moist finger. This may cause the glide pad to operate incorrectly.

## **Using Glide Pad**

Take a moment to become familiar with how the glide pad works.

## **Place Your Fingertip**

Place your left or right hand next to the glide pad, resting your wrist naturally in a relaxed manner. Place your thumb or finger on the glide pad.

## **Move Your Fingertip**

The rectangular pad of the glide pad is used to move the pointer around the display. As you slide your fingertip across the pad, the pointer on the screen moves in the same direction across the screen. The glide pad is very sensitive, so you do not have to exert much pressure on the pad. The glide pad will respond to a light touch from your fingertip.

### Click, Double-click, and Right-click

To click or double-click, you can use the left button just like that of a mouse. Instead of clicking the left button, you can also just tap gently anywhere on the rectangular pad. For right-clicking, you must use the right button.



*If the interval between clicks is too long, the double-click will not function.* 

### **Drag and Drop**

You can move the items by using "drag and drop" below:

- 1. Position the pointer over the item you wish to move.
- 2. Press the left button; do not release it.
- 3. Move the pointer while holding the left button. The item moves together with the pointer.
- 4. Release the button when the item reaches its destination.

Or you can tap the pad twice and hold it instead of pressing the left button in the step 2.

### Scroll

You can scroll through information in a list or in a document by using the glide pad. To view information vertically, place your finger on the most right part of the glide pad and slide your finger up and down. To view horizontally, place your finger on the bottom part of the glide pad and slide your finger to the left or the right. This procedure works only in limited applications.

### **Changing Configuration**

In the *Mouse Properties* dialog box, you can change the configuration of the glide pad, such as swapping left and right buttons, changing the pointer size, etc. Double-click **I** icon on the taskbar.

# **Using Keyboard**

Your computer, equipped with the Windows Enhanced Keyboard, provides all the functionality of a full-sized desktop keyboard.

### **Special Keys**

Windows Key	Opens the Windows start menu. This key functions the same as the <i>start</i> button on the screen.
Application Key	Opens short-cut menus for the specific items. This key functions the same as the right mouse button.

### **System Function Keys**

Your keyboard contains the function keys labeled **F1** through **F12** for special actions. Use them in conjunction with **Fn** key.

Fn + F1	Turns the wireless LAN antenna on and off
Fn + F3 ▼ (∲))	Decreases the audio volume
Fn + F4 ▲ໜ	Increases the audio volume
Fn + F5	Rotates display mode between LCD only, an external monitor only, and both (when connecting an external monitor).
Fn + F6 ▼☆	Decreases the LCD screen brightness.
Fn + F7 ▲☆	Increases the LCD screen brightness.
Fn + F11	Turns the LCD screen on and off.
Fn + F12	Forces your computer into System standby, hibernate, or powered off. See <i>Power Management</i> of Chapter 3 for more information.

# **Controlling Volume**

You can adjust the output volume of your computer with the following volume controls which interact with each other.

### With Keyboard

Press **Fn** and **F3** ( $\P$  ( $\P$ ) keys simultaneously to decrease the output volume. Press **Fn** and **F4** ( $\P$ ) keys simultaneously to increase the output volume.



These functions do not work in the MS-DOS mode.

#### **On Windows**

- 1. Click start Control Panel.
- 2. Click Sounds, Speech, and Audio Devices; then, Sounds and Audio Devices. If Classic view is selected, double-click Sounds and Audio Devices icon.
- 3. In *Sounds and Audio Devices Properties* dialog box, slide the lever to control the output volume.
- 4. Click *OK* and close the dialog box; then the *Control Panel* window.



You can also easily adjust the volume in the window that will open when clicking the speaker symbol on the taskbar. When the symbol is not on the taskbar, check the box of Place volume icon in the taskbar in the step 3.

If you want to adjust the output volume of each source individually:

- 1. Click start Control Panel.
- 2. Click *Sounds, Speech, and Audio Devices*; then, *Sounds and Audio Devices*. If Classic view is selected, double-click *Sounds and Audio Devices* icon.
- 3. In *Sounds and Audio Devices Properties* dialog box, click *Advanced*... button of *Device volume* section.
- 4. Slide the lever of the source that you want to control.

5. Close the dialog box, then; click *OK* and close the *Control Panel* window.

If you control:

Wave	$\rightarrow$	Controlling the volume of CD or WAVE file
SW Synth	$\rightarrow$	Controlling the volume of MIDI file

2



Any software containing audio function may also have its own volume control. Note that the volume controls discussed on the previous page and the software volume control will interact with each other.

# **Adjusting Display**

You can adjust the brightness, resolution, and number of colors of the internal LCD display for more comfortable viewing.

## **Changing Brightness of Display**

Press **Fn** and **F6** ( $\mathbf{\nabla}$ ) keys simultaneously to decrease the brightness of the internal LCD display.

Press **Fn** and **F7** ( $\blacksquare$ ) keys simultaneously to increase the brightness of the internal LCD display.

## **Changing Resolution and Number of Colors**

When shipped, your computer is set to the default resolution and color. The default resolution is 1024 x 768 at 64K colors. To change the resolution and the number of colors, follow the instructions below:

- 1. In the Display Properties dialog box, select Settings tab.
- 2. Select the number of the colors in the *Color quality*, and select the resolution in the *Screen resolution*. Refer to the table on the next page.
- 3. Click OK; then, Yes.

### **Available Resolutions and Colors**

Resolution	Number of Colors
800 x 600	64K 16M <sup>(*2)</sup>
1024 x 768	64K 16M <sup>(*2)</sup>
1280 x 1024 <sup>(*1)</sup>	64K 16M
2048 x 768 <sup>(*1)</sup>	64K 16M

- (\*1) Only 1024 x 768 dots appear even on the internal LCD screen of 1280 x 1024, or 2048 x 768 resolution. To see the hidden parts, move the mouse pointer to the parts and scroll it. To set 1280 x 1024, and 2048 x 768 resolution mode selectable, open the *Display Properties* dialog box, click *Settings* tab, then, *Advanced* button and uncheck *Hide modes that this monitor cannot display* of *Monitor* tab. (Only a member of the Computer administrators group can set the resolutions selectable.)
- <sup>(\*2)</sup> On the internal LCD screen, the number of colors in this mode is made using a Dithering algorithm.

- You cannot switch to display resolutions and number of colors that are not available.
- In the Color quality, Medium (16 bit) means 65,536 (64K) colors, and High (24 bit) means about 16,770,000 (16M) colors.
- If you select High;
  - Drawing speed may be delayed.
  - When playing animation, the screen may be distorted.
  - You cannot display images upside down (see the next section).

## **Displaying on Screen Upside Down**

This feature allows you to show the images on the LCD screen upside down. Use this feature when showing the images on your computer to someone on your opposite side.

Press Ctrl + Shift + F4 ( $\square$ ) to display the image upside down.

Press Ctrl + Shift + F3 ( $\mathbf{V}$ ) to display the image in its original position.



- When displaying images upside down, you see the pointer on the screen move in the opposite direction. Moving your finger or the mouse to the right on the glide pad, for example, will make the mouse pointer move to the left.
- When displaying images upside down, drawing speed may be delayed.
- Do not display upside down when playing animation.
- You cannot display the 24-bit images upside down.

### **Changing Wallpaper and Setting Screen Saver**

You can enjoy various desktop patterns or screen savers.

#### **Changing Wallpaper**

- 1. In the Display Properties dialog box, select Desktop tab.
- 2. Select appropriate wallpaper in Background.
- 3. Click OK.

#### Setting Screen Saver

- 1. In the Display Properties dialog box, select Screen Saver tab.
- 2. Select an appropriate screen saver in *Screen saver* and set time when screen saver starts.
- 3. Click OK.



To disable the screen saver, select [None] from the Screen saver pulldown menu.

# **Sharing Your Computer**

If you are sharing your computer with your colleagues or family members, set a user account for each person. Every user can choose their favorite desktop setting, web site lists, or make their own *My Documents* folder etc., and save them to their user accounts. When you turn on your computer, select your user account.

#### **Setting New User Account**

- 1. Click start Control Panel.
- 2. Click *User Accounts*. If Classic view is selected, double-click *User Accounts* icon.
- 3. Click Create a new account string.
- 4. Type a name for the new account and click Next.
- 5. Select the account type; then, click *Create Account*. If you have selected a *Limited* account, then that user account has limits for using your computer. See *Help and Support Center* in *start* menu for more details.
- 6. Close User Accounts dialog box; then, the Control Panel.

If more than one user accounts are set to your computer, you must select which user account you will log in when you turn on your computer.

## Log Off Your Computer

"Log off" is useful because you do not have to turn off your computer when you finish your task and pass your computer to another person. There are two ways to log off your computer, *Switch User* or *Log Off*.

If you select *Switch User*, you can pass your computer to another person without closing your current applications. For example, if you are viewing a Web site, and your colleague needs to open a program on your computer, use *Switch User*. You can then view the same Web site by just switching users after your colleague finishes with your computer.

If you select *Log Off*, the system will close all your session and you need to save your files before logging off your computer.

- 1. Click start Log Off.
- 2. Select *Switch User* or *Log Off.* If you select *Log Off*, the dialog box, which asks you to save your data may appear.

3. Select a new account to start Windows XP again.



*If you cannot see* Switch User *in* Log Off Windows *dialog box, click* Change the way users log on or off *string in* User Accounts *dialog box, and check* Use Fast User Switching *and click* Apply Options.

### Setting Password to User Account

You can set a password to each user account to avoid unauthorized use of your computer. Once you set the password, you need to enter it when you log on to its account. You cannot start your computer with the user account if its password is not correct, so unnecessary password setting can cause trouble in starting the system.

#### **Setting Password**

- 1. Click start Control Panel.
- 2. Click *User Accounts*. If Classic view is selected, double-click *User Accounts* icon.
- Select the account you want to set a password to. You will only have this option
  if you log onto the computer as a member of the Computer administrators group.
  If you log on your computer with a limited user account, go to the next step.
  (You cannot set a password to another user account.)
- 4. Select *Create a password* string.



- *If the password has been already set,* Create a password *will not appear.*
- Only the members of the Computer administrators group can set a password to another user account.
- 5. Type a new password.
- 6. Type the new password again to confirm it.
- 7. If necessary, type a password hints word to remember the password you set.
- 8. Click Create Password.
- 9. Close the User Accounts dialog box; then, the Control Panel window.

# 2

#### **Changing Password**

- 1. Follow the steps 1-2 on the previous section.
- 2. Select the account you want to change, if you log on to your computer as a member of the Computer administrators group. If you log on your computer with a limited account, go to the next step. (You cannot change the password of another user account.)
- 3. Select *Change the password* string or *Change my password* string.



- *If the password has not been set yet,* Change the password *or* Change my password *will not appear.*
- Only the members of the Computer administrators group can change the password of another user account.
- 4. Type the current password. If you are changing another user's password, skip this step.
- 5. Type a new password.
- 6. Type the new password again to confirm it.
- 7. If necessary, type a password hints word to remember the password you set.
- 8. Click Change Password.
- 9. Close the User Accounts dialog box; then, the Control Panel window.

#### **Deleting Password**

- 1. Follow the steps 1-2 on Setting Password.
- 2. Select the account you want to delete its password, if you log on to your computer as a member of the Computer administrators group. If you log on your computer with a limited account, go to the next step. (You cannot delete the password of another user account.)
- 3. Select Remove the password string or Remove my password string.



- *If the password has not been set yet,* Remove the password *or* Remove my password *will not appear.*
- Only the members of the Computer administrators group can delete the password of another user account.
- 4. Type your password and click *Remove Password*. If you log on to your computer as a member of the Computer administrators group and want to delete the password of another user account, just click *Remove Password*.
- 5. Close the User Accounts dialog box; then, the Control Panel window.

# CHAPTER 3

# Battery and Power Management

This chapter explains how to manage your computer's power effectively and use the battery pack.



*In this section, you often see the expression* "Power Options Properties *dialog box*". *To open the dialog box*:

- 1. Click start Control Panel.
- 2. Click Performance and Maintenance Power Options in Category view or double-click Power Options icon in Classic view.

# **Battery Pack**

When not connected to an external power source, your computer operates with the rechargeable battery pack. The duration of the battery life may be longer if your computer's power management is active. See the next section for power management.

To keep the battery life longer:

- Condition the battery pack if the actual remaining power in your battery is less than what Windows *Power Meter* indicates. (See *Conditioning Battery Pack* section in this chapter.)
- Turn off your computer when you are not using it.



- The duration of the battery depends on your computer usage. Using applications, which heavily use external peripherals, will result in shorter battery life.
- When using your computer for several hours with battery power, enable power management and set System hibernate. Refer to the Power Management section in this chapter.
- When the battery has not been charged, your computer may not operate properly. Connect the AC power source to charge the battery.

#### **Charging Battery Pack**

- 1. Connect the AC adapter to your computer. While the battery is being charged, the battery indicator lights orange.
- 2. When the battery is fully charged, the battery indicator turns green. Charging time may vary according to the status of your computer.
- The battery indicator may turn off even while the battery is being charged. This is because the battery pack is hot, and the charging stops temporarily. When the battery becomes cool, the charging will start and the battery indicator will turn on again.
- The battery pack may not be installed correctly if the battery indicator blinks orange. In this case, turn off your computer, remove the AC adapter and the battery pack; then, install the battery pack and connect the AC adapter again. If the battery indicator still blinks orange, ask your local dealer for assistance.
- When the battery pack is hot (for example, after a long usage), it may take longer to be fully charged.

## **Charging Battery Pack Using Connection Cradle**

You can also charge the battery pack using the connection cradle. Insert the battery pack in your computer and set your computer in the connection cradle and connect it to the AC power. For details on connection cradle, see Chapter 7.

#### **Checking Battery Level**

#### **On Windows**

You can check the battery level by placing the pointer on the battery icon (: powered on battery) or AC plug icon (: powered on AC power and charging the battery pack) on the taskbar, or double-clicking one of these icons (, or  $\Huge{}$ : powered on AC power) to open the *Power Meter* dialog box. If the battery is fully charged, remaining capacity level will not appear even if you point to the icon.

If you cannot see the battery or AC plug icon, follow these instructions:

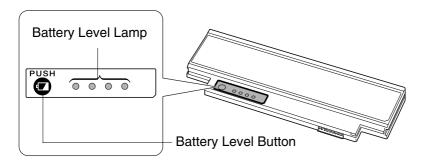
- 1. In the Power Options Properties dialog box, select Advanced tab.
- 2. Check the box of *Always show icon on the taskbar* and click *OK*.
- 3. Close the *Control Panel* window.



- The remaining operating time depends on the amount of the power you are consuming. If you are using the audio system, PC card slot, hard disk drive, or peripheral devices with your computer, it may consume more battery life.
  - If the actual remaining power in your battery is less than what Power Meter indicates, you should condition the battery pack as per the procedure on Conditioning Battery Pack section in this chapter.

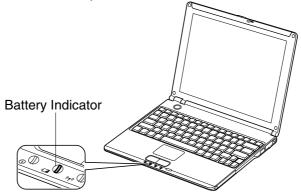
#### With Battery Level Lamp

You can also check the battery level by the battery lamp on the battery pack. Remove the battery pack from your computer and push the battery level button on the battery pack.



#### Low Battery Indication

When the battery power level becomes significantly low, the battery indicator ( $\square$ ) blinks red, the warning beep sounds. Save your data and turn off your computer, or connect the AC power source immediately. Otherwise, your computer will be shut down and the unsaved data may be lost.



On Windows, you can set the battery level for sounding an alarm and letting your computer go on System standby, System hibernate or shut down afterward.

- 1. In the Power Options Properties dialog box, select Alarms tab.
- 2. Set the battery level at which the alarms are activated. We recommend you set *Critical battery alarm* to 5 % or more and *Low battery alarm* to more than the value of Critical battery alarm.
- 3. Set the *Alarm Action*... to the appropriate settings.
- 4. Click *OK* twice.
- 5. Close the *Control Panel* window.
- 3

# **Conditioning Battery Pack**

When the actual remaining power in your battery is less than what Windows Power Meter indicates, you need to condition the battery pack or buy a new one.

- 1. Make sure the computer is turned off. Connect the computer to AC power source and wait until the battery is fully charged. The battery indicator turns orange first, then, turns to green when the battery pack is fully charged.
- 2. Turn on the computer.
- 3. When the message *Press* <*F2*> *to enter SETUP* appears, press **F2** to open the Setup Utility.
- 4. Disconnect the AC adapter, and leave the computer on until the battery is completely discharged and the system shuts down automatically.
- 5. Connect the computer to AC power source and let the battery fully charged again
  - Do not turn on your computer while charging the battery pack.
  - Do not connect your computer to a wall outlet while discharging the battery. The conditioning will be cancelled.



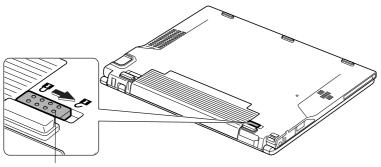
Repeated charging and discharging or long-term storage of the battery pack cause battery deterioration. In this case, replace the battery pack with a high capacity battery pack.

# Changing Battery Pack to Optional High Capacity Battery Pack

The capacity of a battery pack gradually decreases when used repeatedly (the deterioration rate depends on the operating environment). If the battery life becomes extremely short even after the conditioning, you should buy an optional high capacity battery pack (CE-BL25).

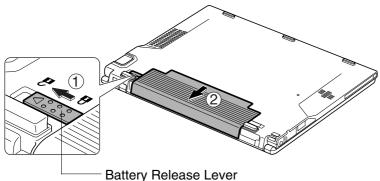
When you replace the battery pack with the optional one:

- 1. Turn off your computer and disconnect the AC adapter from your computer.
- 2. Close the display cover and turn over your computer on a flat place.
- 3. Slide the battery stopper to the unlocked position (a).

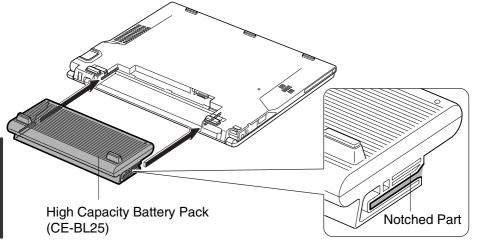


Battery Stopper

4. Slide the battery release lever to the unlocked position (a) and hold it (1); then, pull out the battery pack (2).



5. Insert the high capacity battery pack into the computer by matching the notched parts of the battery to the projected parts of the computer.



# Checking Battery Level of High Capacity Battery Pack

Follow the steps in Checking Battery Level in this chapter.

### **Conditioning High Capacity Battery Pack**

Follow the steps in Conditioning Battery Pack in this chapter.

# 3-7

Power management saves electricity and extends battery life by controlling power supply to built-in devices. You can set the following power management properties on Windows.

- Stopping power supply to the hard disk
- Stopping power supply to the display
- Using System standby/hibernate

To open *Power Options Properties* dialog box, click *start – Control Panel*, and click *Performance and Maintenance*; then, *Power Options*. If Classic view is selected, double-click *Power Options* icon.



Note that the power management may not seem to function when you are using an application program that accesses the hard disk periodically.

### **Stopping Power Supply to Hard Disk**

- 1. In the Power Options Properties dialog box, select Power Schemes tab.
- 2. Set *Turn off hard disks* to an appropriate value, and click *OK*.
- 3. Close the *Control Panel* window.

#### Stopping Power Supply to the Display



This procedure is also effective for an attached external monitor complying with power management.

- 1. In the Power Options Properties dialog box, select Power Schemes tab.
- 2. Set *Turn off monitor* to an appropriate value, and click *OK*.
- 3. Close the *Control Panel* window.

### Using System Standby/Hibernate

*System standby/hibernate* is a very useful power management tool. For example, after your computer has entered *System standby* mode, you can restart your computer more quickly when compared to a restart, after a normal shutdown operation. When your computer resumes from *System standby/hibernate*, the system restores the exact last state of your computer. In Windows, you can define *System standby* or *System hibernate* the system enters under what conditions.

- System standby stores the current condition of your computer in RAM and stops power supply to all but a few essential components. Your system enters and resumes from System standby per the conditions mentioned later. In System standby, the power indicator blinks green. To resume from System standby, operate your computer again.
- System hibernate saves the current condition of your computer in part of the hard disk and turns off your computer. Your system enters and resumes from System hibernate per the conditions mentioned later. In System hibernate, the power indicator is off. To resume from System hibernate, press the power button.



*When entering/resuming from* System standby/hibernate, *follow these instructions:* 

- *Finish communications, printing, and playing music or video before entering* System standby/hibernate.
- Do not operate your computer or peripheral devices, or connect/disconnect peripheral devices, while entering/resuming from System standby/hibernate.
- While operating with a battery, your computer may not resume from System standby/hibernate if the battery capacity is not enough. In this case, connect the AC adapter to your computer.
- Save your data before your computer enters System standby. If the power supply to your computer is stopped, the RAM contents will be lost.
- Select your user account if Windows requires when your computer resumes from System standby/hibernate.



If your battery becomes completely discharged during System standby, you will lose unsaved data and will need to reboot your computer. Therefore, if you are planning to leave your computer powered by battery for long periods of time, we recommend System hibernate.

Confirm that System hibernate is supported with the following steps below.

- 1. In the *Power Options Properties* dialog box, select *Hibernate* tab.
- 2. Confirm *Enable hibernation* is checked.
- 3. Click OK.
- 4. Close the *Control Panel* window.

## Set Timer to Enter System Standby/Hibernate Automatically

Your computer will enter System standby/hibernate automatically when the specified time has passed without any operation. To set the time:

- 1. In the Power Options Properties dialog box, select Power Schemes tab.
- 2. From the pull-down menu of *System standby* or/and *System hibernates*, select the elapsed time before your computer automatically enter System standby/hibernate.
- 3. Click OK.
- 4. Close the *Control Panel* window.

#### **Entering System Standby/Hibernate**

Your computer enters System standby/hibernate in each of the following cases:

- You select *Stand By* or *Hibernate* (which will replace *Stand By* if you press **Shift** key) in the *Turn off computer* dialog box. To open the dialog box, click *start Turn Off Computer*.
- The specified time in *System standby* or *System hibernates* in *Power Schemes* tab of *Power Options Properties* dialog box has passed without any operation (See the previous section).
- The screen cover is closed. The above functions if you perform the following:
  - 1. In the Power Options Properties dialog box, select Advanced tab.
  - 2. Select *Hibernate* or *Stand by* in *When I close the lid of my portable computer* field.
  - 3. Click OK.

- 4. Close the *Control Panel* window.
- You press the power button.

The above functions if you perform the following:

- 1. In the Power Options Properties dialog box, select Advanced tab.
- 2. Select *Hibernate* or *Stand by* in *When I press the power button on my computer* field.
- 3. Click OK.
- 4. Close the Control Panel window.
- You press Fn+F12(U).

The above functions if you perform the following:

- 1. In the Power Options Properties dialog box, select Advanced tab.
- 2. Select *Hibernate* or *Stand by* in *When I press the sleep button on my computer* field.
- 3. Click OK.
- 4. Close the Control Panel window.



If Ask me what to do is selected in the step 2 of You press the power button or You press  $Fn+F12(\square)$ , the Turn off computer dialog box will appear when you press the power button or  $Fn+F12(\square)$  key combination. You can select System standby or System hibernate at that timing.

• The battery level is low.

The above functions if you set the alarm in Windows. See *Low Battery Indication* in this chapter.

# **Disabling Power Management**

- 1. In the Power Options Properties dialog box, select Power Schemes tab.
- 2. Set *Turn off monitor, Turn off hard disks, System standby*, and *System hibernates* to *Never*; then, click *OK*.
- 3. Close the *Control Panel* window.

# CHAPTER 4

# Peripherals

This chapter describes how to use peripheral devices with your computer. You can connect an optional floppy disk drive unit, an optional CD-ROM drive unit, a printer, an external monitor, a PC card, or other devices to your computer. To ensure proper use, be sure to read the instructions for each peripheral device before connecting it to your computer.

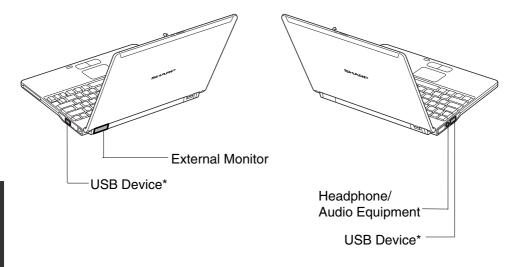
# **Using Peripherals**

You can use the peripheral devices shown on the next page. For the details, refer to the section explaining each device, or contact your dealer.



- Be sure to turn off your computer and the peripheral devices before connecting them (except when inserting a PC card or connecting USB devices, etc.).
- Confirm the peripheral device you will connect is Windows XP compatible.
- Some devices have to be turned on after your computer is turned on.
- Some devices require that you install their drivers before use (You may need to connect the optional external floppy disk drive unit or the optional external CD-ROM drive unit to install some of the drivers.)

# **Peripheral Connection Overview**



\*Including the optional external floppy disk drive unit (CE-FD05) and the optional external CD-ROM drive unit (CE-CD05).

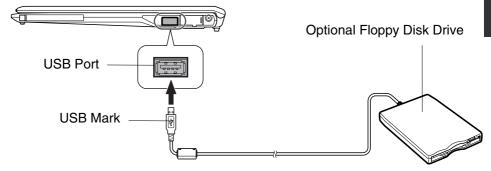
# **Optional External Floppy Disk Drive Unit**

You can use double-density (2DD) 720KB or high-density (2HD) 1.44MB floppy disks with the optional external floppy disk drive unit (CE-FD05).

# **Connecting Optional External Floppy Disk Drive Unit**

- Do not place the floppy disk drive unit on its side or upside down.
- Do not press on the floppy disk drive unit. It may damage the drive or cause malfunction.
- Do not place the AC adapter on the floppy disk drive unit. It may cause the drive to malfunction.

Connect the floppy disk drive unit cable to either of the USB ports on your computer. Be sure to let the USB mark side up when connecting the cable to your computer.



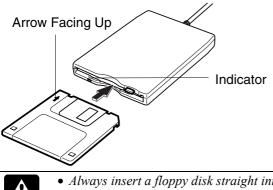
# Handling Floppy Disk

- Do not open the shutter and touch the disk inside; otherwise, you will not be able to read or write data to the disk.
- Do not place floppy disks near magnets or heat source, in direct sunlight or in a dusty place, etc.
- Never subject a disk to sudden shocks or extreme vibration. Do not drop, bend, or place heavy objects on a disk.
- Do not spill liquid onto a disk.

4

## **Inserting Floppy Disk**

Hold the floppy disk with the arrow facing up, toward the drive. Slide the disk into the drive until it locks into place.



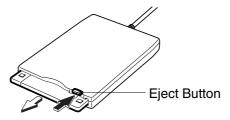
- Always insert a floppy disk straight into the floppy disk drive.
- When inserting the disk, make sure it is not upside down.
  - Do not use excessive force when inserting the floppy disk. If you have difficulty inserting or removing disks, seek the assistance of an authorized service technician.
  - Do not touch the disk while reading/writing data. It may cause malfunction of your computer and the drive.

# **Ejecting Floppy Disk**



Before ejecting the floppy disk, make sure the indicator of the floppy disk drive unit is not lit.

Press the eject button firmly. The disk pops out slightly. Eject it and store it properly.



# Formatting Floppy Disk

- 1. Make sure the floppy disk is not write-protected, and insert it into the floppy disk drive.
- 2. Click start My Computer.
- 3. Right-click 3 ½ *Floppy (A:)* icon; then, click *Format*... from the pop-up menu.
- 4. Select the appropriate formatting options.
- 5. Click *Start* to start formatting.



- When you format a floppy disk that already contains data, all of the data stored on the disk will be lost.
- You cannot format a double-density (2DD) 720KB floppy disk.

## **Removing Optional External Floppy Disk Drive Unit**

To remove the unit, you need to perform the following steps before you remove it:

- 1. Click *Safely Remove Hardware* icon (<sup>See</sup>) on the taskbar.
- 2. Click Safely remove Mitsumi USB Floppy Drive(A:); then, Safe To Remove Hardware dialog appears.
- 3. Remove the unit from your computer.

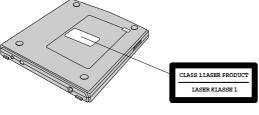
# **Optional External CD-ROM Drive Unit**

A compact disc (CD) is a storage medium, with which you can read data, play music, install and run programs, etc. The optional external CD-ROM drive unit (CE-CD05) can be connected to either of the USB ports on your computer.



#### **CAUTION FOR LASER**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Maximum output and wavelength of the laser: 903µW, 785nm

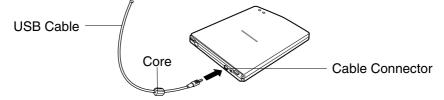


## Precautions

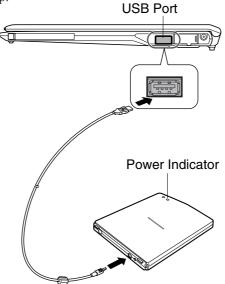
- Do not disassemble the CD-ROM drive unit and do not repair it by yourself. Doing so may cause electrical shock hazard, or a laser may damage your eyes.
- Do not store or use the CD-ROM drive unit in a dusty, humid, oily environment, or under damp or moist conditions.
- Do not turn up the volume too high, when using the headphones.
- Do not leave the CD-ROM drive unit in direct sunlight, near a heat source or especially in a hot automobile.
- Do not drop or jar the CD-ROM drive unit.
- Do not touch the pins/terminals of the USB cable.
- When the CD-ROM drive unit has been moved from a cold place to warm place, it may damp or moist. Leave it for about 1 hour before using.
- Keep magnetic objects away from the CD-ROM drive unit.
- Do not insert any foreign metal object inside the CD-ROM drive unit.
- Do not touch the lens.
- If noise is heard from radio or TV, move the CD-ROM drive unit 2 m (about 6 ft.) away from the radio or TV.

# Connecting Optional External CD-ROM Drive Unit (CE-CD05)

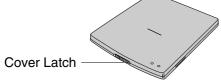
- Do not place the CD-ROM drive unit on its side or upside down.
- Do not press on the CD-ROM drive unit. It may damage the drive or cause malfunction.
- Do not place the AC adapter on the CD-ROM drive unit. It may cause the drive to malfunction.
- 1. Connect the core side connector of the USB cable included in the optional external CD-ROM drive unit to the cable connector of the drive unit.



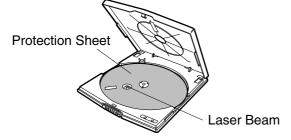
2. Insert the USB connector of the cable into one of the USB ports of your computer. The CD-ROM drive unit automatically turns on and the power indicator lights up.



3. Slide the cover latch to the right and open the cover.



4. Remove the protection sheet before you use the drive for the first time.



4

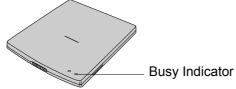
# Handling CD

- Do not write on either side of the disk, particularly the non-label side. Data is read from the non-label side. Do not mark this surface.
- Keep your disks away from direct sunlight, heat and excessive moisture.
- Always hold the CDs by the edges. Fingerprints, dirt or water on the CDs cause noise or improper tracking. If a CD is dirty or does not play properly, clean it with a soft, dry cloth, wiping straight out from the center, along the radius.

# **Inserting CD**

You can operate the external CD-ROM drive unit only when the computer is on.

1. Make sure the busy indicator light is not on.



2. Slide the cover latch to the right to open the cover and raise it.

3. Place your CD onto the disk spindle and press on the center of your CD with label side up, until it locks onto the disk spindle.



4. Close the disk cover.



- Insert a CD firmly until it is locked onto the spindle; then, close the disk cover, or the disk may fall off the spindle and get damaged.
- Do not leave the tray open. Also, avoid touching the lens in the tray. If the lens becomes dirty, the CD-ROM may malfunction.
- Do not wipe the lens with materials with rough surface (such as paper towels). Instead, use a cotton swab to gently wipe the lens.

### **Removing CD**

- 1. Make sure the busy indicator is not lit.
- 2. Slide the cover latch to the right and open the cover.
- 3. Press down the disk spindle and remove the CD from the tray holding its edge.



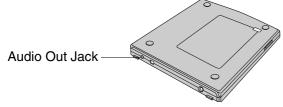


- *Make sure the busy indicator is not lit or blinking before opening the disk cover.*
- When opening the cover, if the CD is still spinning, wait until it has stopped, then remove it.

4

# **Playing CD**

With some CD-ROMs, you can hear the sound of them through the audio out jack of the CD-ROM drive unit. Connect headphones or speaker system with an amplifier to the audio out jack.



# **Disconnecting Optional External CD-ROM Drive Unit**

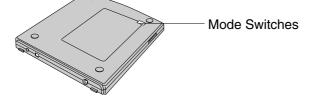
To remove the unit, you need to perform the following steps before you remove it.

- 1. Click Safely Remove Hardware icon (<sup>So</sup>) on the taskbar.
- 2. Click *Safely remove USB Mass Storage Device*; then, *Safe To Remove Hardware* dialog appears.
- 3. Remove the USB cable from the computer.

### **Mode Switches**

There are the mode switches on the bottom of the CD-ROM unit.

These switches are for technical services. Keep them as a default setting, OFF.



# **Cleaning Optional External CD-ROM Drive Unit**

- Do not use solvents such as benzine, thinner, alcohol, record cleaner or anti-static spray.
- Clean the outside of the drive with a soft, dried cloth.
- Clean the lens with a commercial lens blower if the lens is dirty.

# Display

You can use an external monitor with your computer. To display the images on both displays simultaneously, use the 1024x768 resolution.

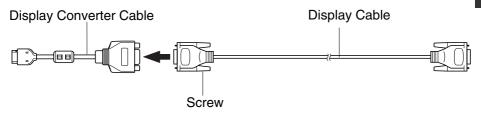


- Some monitors, which are not compatible with your computer, may not display correctly.
- In this section, you often see the expression "Display Properties dialog box." To open the dialog box, right-click somewhere on the Windows desktop and select Properties from the pop-up menu.

## **Connecting External Monitor**

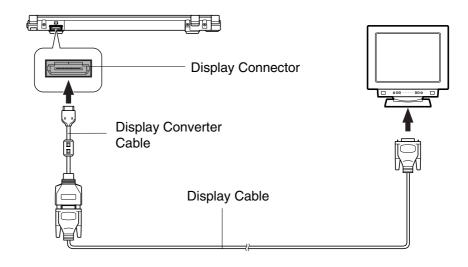
Use the provided display converter cable to connect an external monitor with your computer.

- 1. Turn off your computer and the external monitor.
- 2. Connect the provided display converter cable with the display cable as shown below. If the display cable has screws, make sure to tighten them.



4

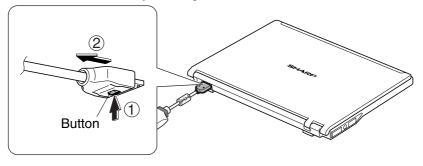
3. Connect the display converter cable to the display connector, then, the other end of the display cable to your external monitor. If the display cable has screws, be sure to tighten them.



4. Turn on the external monitor; then, your computer.

### **Disconnecting External Monitor**

- 1. Turn off your computer and the external monitor.
- 2. Press the button on the connector of the display converter cable, and hold it; then, remove it from your computer.



#### **Switching Display**

1. In the *Display Properties* dialog box, select *Settings* tab; then, click *Advanced* button.

4

- 2. Select Lynx3DM+ tab; then, click the button before the output display you desire and click OK.
- 3. Click *OK* to close the *Control Panel* window.



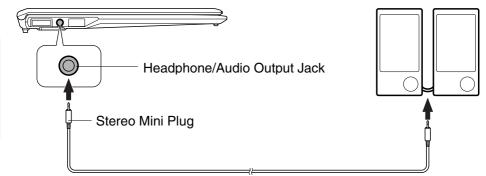
- You can also switch the display with Fn+F5 ( $\square$ ).
- When you log on your computer as a member of the Limited group, you cannot switch the display with the dialog box. Use Fn+F5(<sup>[]</sup>) keys.
- When displaying in the Resolution Expansion mode(see 6-4), you cannot switch the display using Fn+F5 ((=)) keys
- *While playing video or animation, you may not be able to switch the display.*

# **Audio System**

You can output sound to speakers, audio equipment or headphones.

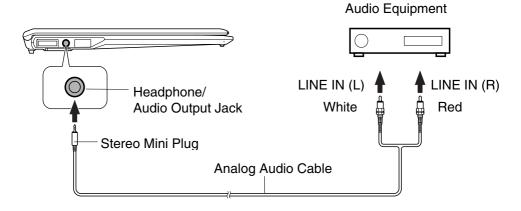
#### **Connecting Speaker**

You can connect stereo speakers with an amplifier to the audio output jack on the left side of your computer.



#### **Connecting Audio Equipment**

You can connect analog audio equipment to the audio output jack on the left side of your computer.



Speakers with an Amplifier

#### 4-14

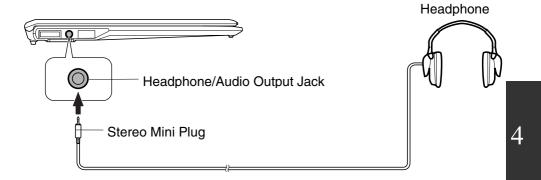
4



You can adjust the output volume on Windows by clicking the speaker symbol on the taskbar or use Fn + F3 () or F4 () keys combination.

## **Connecting Headphone**

Use the headphone with an impedance of  $8\Omega$  or more ( $32\Omega$  is recommended.)

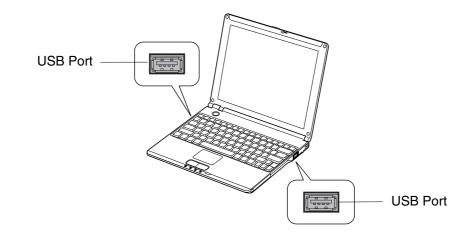


# **USB** Device

Your computer has an interface called Universal Serial Bus (USB) and its two USB ports support USB1.1 and USB2.0. With a USB connection, you can connect/disconnect peripherals without turning off your computer. Generally, when you connect a device to your computer, the necessary driver will be installed automatically. See also the manuals of peripheral devices supporting USB.



When a new device is correctly connected to your computer, the appropriate driver is automatically installed. If the driver is not installed correctly, you will see the message on the screen. In this case, install the driver with the instructions on the screen.



To remove USB devices, you may need to perform the following instructions before you remove them:

- 2. Click *Safely remove xxxx* (xxxxx is the name of your USB device); then, *Safe To Remove Hardware* dialog appears.
- 3. Remove the device from your computer.

# PC Card

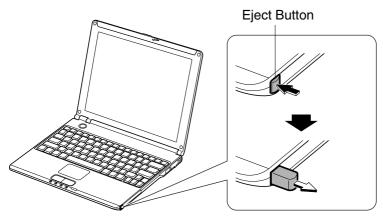
Your computer is equipped with a PC card (PCMCIA) slot, which can accommodate a Type II card or a CardBus compliant card. You can insert/eject the card without turning off your computer.

# **Inserting PC Card**

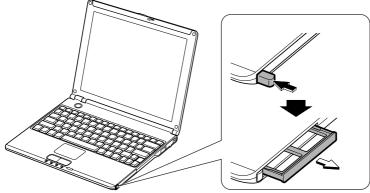


When a new card is correctly inserted, the appropriate driver is automatically installed. If the driver is not installed correctly, you will see the message on the screen. In this case, install the PC card driver by following the instructions on the screen.

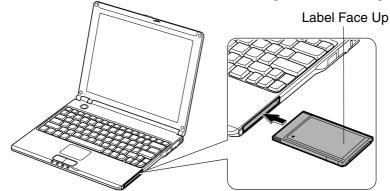
1. Push the PC card eject button so that it will pop out from the side of your computer.



2. Push the PC card eject button again until the protection card pops out, then remove it.



- 3. Push the PC card eject button all the way inside the cabinet for safekeeping.
- 4. Insert a PC card into the slot with the label face up until it locks into place.

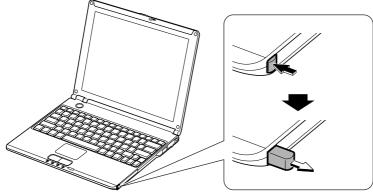


If the dialog box asking you *What do you want Windows to do?* appears, select the task you want.

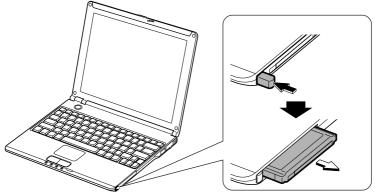
# **Ejecting PC Card**

- Some PC cards may become hot after long use.
- Be sure to use the procedure below when ejecting a PC card. Otherwise, the system may not work properly.
- 1. Click *Safely Remove Hardware* icon () on the taskbar. If you cannot find the icon, click () to show all kinds of icons.
- 2. Click *Safely remove xxxx* (xxxxx is the name of your PC card); then, *Safe To Remove Hardware* dialog appears.

3. Push the PC card eject button so that it will pop out from the side of your computer.

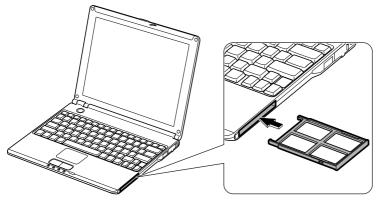


4. Push the eject button until the inserted PC card pops out; then, remove it.



5. Push the PC card eject button all the way inside the cabinet for safekeeping.

#### 6. Insert the protection card.





Be sure to insert the protection card after you finish using the PC card slot to protect the PC card slot from being damaged.

# Printer

You can connect a printer to either of the USB ports on your computer.



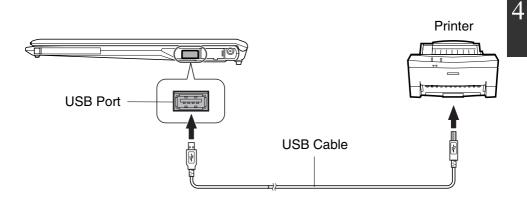
*Before using a printer, read the printer manual and install the printer driver.* 

# **Connecting Printer**



Be sure to read the printer manual before connecting the USB printer to your computer. Some printers may not use Found New Hardware wizard to install the printer driver.

You can connect the USB printer to your computer without turning off your computer.



# CHAPTER 5

# Communication Functions

This chapter explains how to use the wired LAN unit, the wireless LAN function and the modem card.



- When you use communication software:
  - Connect your computer to the AC power source.
  - *Disable power management. (Refer to Disabling Power Management of Chapter 3.)*
  - See also the manual or online help of the software you are using.
- The communication speed may vary depending on the traffic, local telecommunications infrastructure, and ISP (Internet Service Provider) infrastructure.

# LAN Unit

You can connect to a LAN (Local Area Network) with the 100 Base-TX/10 Base-T LAN units on your computer. To activate the LAN unit, perform the following steps.

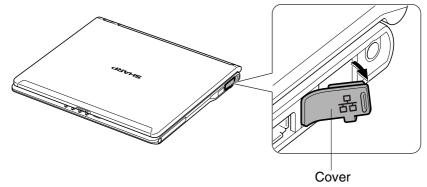


Never insert any cables, but a LAN cable, which have different electric characteristics from those of the LAN cable. Otherwise, the LAN unit and the cables may be damaged.

Use a category 3 or a category 5 LAN cable when connecting to 10 BASE-T LAN, and the category 5 only when connecting to 100 BASE-TX LAN.

## **Connecting Your Computer To LAN**

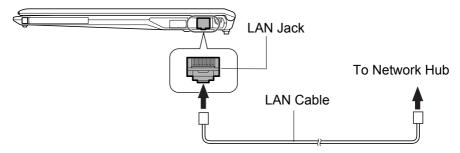
- 1. Turn off your computer.
- 2. Open the cover for the LAN jack on the right side of your computer.





To avoid damaging the LAN unit, close the cover after you finish using the LAN unit.

3. Connect one end of the LAN cable to the LAN jack and the other end to the network hub.



4. Turn on your computer.

# **Configuring LAN Unit**

- 1. Click start Control Panel.
- 2. Click *Network and Internet Connections*; then, *Network Connections*. If Classic view is selected, double-click *Network Connections* icon.
- 3. Right-click Local Area Connection.
- 4. From the pop-up menu, click Properties.
- 5. In the *Local Area Connection Properties* dialog box, set the network setting according to the instruction of your network administrator.



Make sure to log on your computer as a member of the Computer administrators group. Otherwise, you cannot set or change some settings for the LAN unit.

If you cannot access the network,

- 1. Click start Control Panel.
- 2. Click *Performance and Maintenance*; then, *System*. If Classic view is selected, double-click *System* icon.
- 3. Click Hardware tab; then, Device Manager button.
- 4. Double-click *Network adapters*, then, *Realtek RTL8139/810x Family Fast Ethernet NIC*.
- 5. Click *Advanced* tab, and select *Link Speed/Duplex Mode* in *Property* list and select an appropriate value in *Value* pull-down menu.
- 6. Click OK and close the Device Manager window.
- 7. Click *OK* and close the *Control Panel* window.

# **Network Setup Utility**

With the Network Setup Utility, you can set up your specific network settings adjusted for your environments such as work, home, etc. and select the appropriate one to the environment. You can also change the network settings.



- Not every setting item can be stored.
- The Network Setup Utility may not compliant with all network environments.

# Loading Network Settings

To set your specific network settings, confirm that your computer is connected into the network and has the proper settings for your current environment and follow the instructions below.

- 1. Click *start All Programs SHARP Network Setup Utility SHARP Network Setup Utility.*
- 2. Click OK.
- 3. Click Set, select SHARP icon or Windows icon, then, click Select icon button.
- 4. Select an icon and click *OK*. Type a network name, then, click *OK*. The selected icon appears in the *Network Setup Utility* window.



It takes a moment to load the network settings.

## **Switching Network**

To switch the network set above, confirm your computer is ready to connect into the network and follow the instructions below.

- 1. Click *start All Programs SHARP Network Setup Utility SHARP Network Setup Utility.*
- 2. Click OK.
- 3. Select the appropriate network icon in the *Network Setup Utility* window.
- 4. Click OK.



- Make sure your computer is connected to the proper environment.
- If your hardware or software configuration has been changed, you may not be able to switch to the network properly. In this case, you may need to reconfigure the settings.

### **Changing Network Settings**

To change the loaded network settings, right-click on the icon you want to change the settings in the *Network Setup Utility* window and click *Edit settings* in the pop-up menu. Then, edit the settings.

#### **Deleting Network**

To delete the loaded network settings, right-click on the icon you want to delete in the *Network Setup Utility* window and click *Delete setting* in the pop-up menu. Then, click *OK*.

# Modem Card (may not be available in some countries)

Your computer may come with the modem card. In order to use the modem on your computer, install the supplied modem card in your computer.



5

- The modem in your computer is designed only for regular analog telephone lines. The modem may be damaged when connected to a digital ISDN terminal or a digital PBX.
- Use TA (terminal adapter) to connect the built-in modem to a digital telephone line.
- If an unusual device is attached to the line you are connecting to, the modem may not function properly. Remove the device or contact the dealer of the device.
- Before connecting to a PBX, consult the PBX maintenance staff or its service company. If the electric characteristics of your PBX are different from those of a regular analog line, the modem will not function properly. If you connect the modem to a digital PBX, both the modem and the PBX may be damaged.

# Installing Modem Card

Gently insert the modem card into the PC card slot. Make sure the card is firmly seated in the slot and you are ready to setup and install your communication software.

### Setting Up for Windows XP

- 1. This card is ready for Windows XP so you just turn on your computer and insert the modem card. Follow the instruction shown on the screen to install the Windows built-in driver for this card.
- 2. When the installation instruction is finished, this modem card is ready to use.

## **Connecting Modem To Telephone Line**

- 1. Turn off your computer.
- 2. Connect PC card connector end of the included modem cable to the connector of the inserted modem card.
- 3. Connect the modular jack end of the modem cable to the telephone line.
- 4. Turn on your computer.



*Connect the modem to the telephone line directly. Do not use a distributor or allotter.* 

# **Configuring Modem**

Configure your modem making the necessary adjustments as shown below.

### **Modem Configuration**

When you use the modem first time, you must type your location's information.

- 1. Click *start Control Panel Printers and Other Hardware*; then, *Phone and Modem Options*. If Classic view is selected, double-click *Phone and Modem Options* icon.
- 2. In *Location Information* dialog box, select your country, type your area code, etc., and select your dial type; then, click *OK*.

After the configuration, click or double-click *Phone and Modem Options* (icon) to open *Phone and Modem Options* dialog box and double-click the location name of *Locations* in *Dialing Rules* tab for the information you set above.

You can change the settings or make a new location by clicking Edit... or New ....

#### **Power Management**

To use communication software, you may have to disable power management. See *Disabling Power Management* of Chapter 3.



- See also the manual or online help of the software you are using.
- Within the communications software you are using, set the COM port of the built-in modem to COM3.
- *Do not enter* System standby/hibernate *while using communication software.*
- Before commencing with fax communication, it is recommended that you exit other application programs.

# CHAPTER 6

# Setup Utility

This chapter describes how to run the Setup Utility to change settings on your computer.

# **Running Setup Utility**

With the Setup Utility, you can customize the system configuration information, such as time and date, port assignments, or passwords. The information you have specified is saved in a special area called CMOS RAM, which the system reads every time you turn on your computer. Your computer is shipped from the factory with the appropriate setting of the Setup Utility. Leave it as default in normal use.

### **Contents of Setup Utility**

The Setup Utility consists of five menu pages, as follows:

- Main: Configures basic setting
- Advanced: Configures device interface
- Security: Sets Passwords
- Boot: Sets where the system boots from
- Exit: Exits the Setup Utility or returns to the default values

6

# **Entering and Exiting Setup Utility**

- 1. Turn on your computer.
- 2. When *Press*  $\langle F2 \rangle$  *to enter SETUP* appears, press **F2**.
- 3. Change to the desired settings. Refer to the next section.
- 4. Select *Exit* menu; then, press **Enter**.
- 5. Select one of the exit methods, and press **Enter**.
- 6. Confirm the message and press **Enter** again. The system restarts.



When the Setup Utility is opened, power management does not work. Do not close the display cover.

# Changing Setting of Setup Utility

To change the settings:

- 1. Use  $\rightarrow$  or  $\leftarrow$  key to select the menu.
- 2. Use  $\uparrow$  or  $\downarrow$  key to select the item.

Minus or Space key : Changes the value.

In the item with  $\blacktriangleright$  mark, press **Enter** to open a sub menu. Press **Esc** to close the sub menu and return to the previous menu.

For date and time, press **Enter** on the item to select the value you want to change; then, use minus key or space bar to change the value.

3. Close the Setup Utility by following the steps above.

# Main Menu

**System Time** defines the system time, using the format *hour:minute:second* (24-hour format). Use **Tab** key to move the cursor, and minus key or space bar to change numerals.

**System Date** defines the system date, using the format *month/day/year*. Use **Tab** key to move the cursor, and minus key or space bar to change numerals.

Hard Disk Type shows the type of the hard disk of your computer. Press Enter key to show the details.

**Internal NumLock** defines whether the numlock keys of the built-in keyboard are always disabled or not. (Num lock indicator will turn when **Fn+NumLk** are pressed regardless of this setting. An external keyboard will be numlocked if connected.)

**Quick Boot** defines whether the system skips the check of the internal memory while booting, to shorten the boot time

Quiet Boot defines whether the SHARP logo appears on the screen while booting.

CPU Information shows the information on the CPU.

System Memory shows the volume of the conventional memory used in MS-DOS.

Extended Memory shows the volume of the extended memory more than 1MB.

BIOS Version shows the BIOS version of the system.

EC/KBC Version shows the EC or keyboard controller version of the system.

# **Advanced Menu**

Internal Pointing Device enables or disables the built-in glide pad.

**Resolution Expansion** defines whether the Setup Utility screen is expanded when the resolution is 640x480 or 800x600. *Enabled* means that the screen is expanded.

**Plug&Play O/S** enables or disables plug & play function.

PCI Configuration normally has to be as default

# Security Menu

**Set Supervisor Password** defines the supervisor password (up to eight characters). See the next section about the supervisor password.

Set User Password defines the user password (up to eight characters). See the next section about the user password. This password is used on the connection cradle.



If you lose your password, you will be unable to access your computer or change the configuration. Make sure to select a password you will never forget, or write it down and protect it in a secure place. Otherwise, you will have to contact your dealer for assistance.

**Password on boot** defines whether you have to type the password for booting your computer.

Hard Disk boot Sector defines whether the boot sector of the hard disk is writeprotected. When formatting the hard disk or reinstalling software, set to Normal.

# Supervisor and User Password

Setting a password will protect your computer against unauthorized access. Once a password is set, the system requires the password when entering to the Setup Utility. And if *Password on boot* is enabled, the system will require a password when your computer is turned on.



If you enter a wrong password three times, the message System Disabled appears. Press the power button to shut down your computer, and after 10 seconds, press the power button to turn it on again.

Your computer supports two different levels of password security: Supervisor password and User password. You cannot set a user password unless you have set a supervisor password. If you share your computer with others, we recommend that you set both the supervisor and the user password, and let others know the user password only.

If you type the user password when you enter the Setup Utility, you can change *System Time* and *System Date* of the *Main* menu, *Resolution Expansion* of the *Advanced* menu and *Set User Password* of the *Security* menu only.

### **Setting Password**

- 1. In the *Security* menu of the Setup Utility, select *Set Supervisor Password* or *Set User Password* and press **Enter**.
- 2. Type your password (up to eight characters), and press Enter.
- 3. Type the same password again, and press Enter twice.
- 4. Select *Exit* menu and confirm *Exit Saving Changes* is highlighted; then press **Enter**.
- 5. Confirm Yes is highlighted and press Enter. The system restarts.

### **Changing Password**

- 1. In the *Security* menu of the Setup Utility, select *Set Supervisor Password* or *Set User Password* and press **Enter**.
- 2. Type your current password, and press Enter.
- 3. Type your new password, and press Enter.
- 4. Type your new password again, and press Enter twice.
- 5. Select *Exit* menu and confirm *Exit Saving Changes* is highlighted; then press **Enter**.
- 6. Confirm Yes is highlighted and press Enter. The system restarts.

### **Deleting Password**

- 1. In the *Security* menu of the Setup Utility, select *Set Supervisor Password* or *Set User Password* and press **Enter**.
- 2. Type your current password, and press Enter.
- 3. Without typing any characters, press Enter.
- 4. Press Enter twice.

6

- 5. Select *Exit* menu and confirm *Exit Saving Changes* is highlighted; then press **Enter**
- 6. Confirm *Yes* is highlighted and press **Enter**. The system restarts.

# **Boot Menu**

**Boot Sequence** specifies where the system boots from. Press **Enter** to open the sub menu. The system boots from the drive at the top of the list. If the system cannot find the drive, it will boot from the second one; then, third one; then forth one. Use arrow keys to select the drive you want to move; then, use minus key or space bar to move it up and down.

**USB Boot** enables or disables the boot from the USB floppy disk drive or the USB CD drive.

**LAN Boot** defines whether the system boots from other server via the LAN unit of your computer.

# Exit Menu

Exit Saving Changes saves the settings you have changed and exits the Setup Utility.

**Exit Discarding Changes** exits the Setup Utility without saving the settings you have changed.

**Load Setup Defaults** returns the values of all items to the default. To exit, select one of the above items.

**Discard Changes** returns the values of all items to the values you last saved. To exit, select one of the above two items.

**Save Changes** saves the settings you have changed. To exit, select one of the above two items.

# CHAPTER 7

# Connection Cradle

This chapter describes how to use the connection cradle with your computer (hereafter called MM series). Using the connection cradle, you can connect MM series to another computer (hereafter called Host computer).



- *Never insert anything but the MM series inside the cradle.*
- Be sure to keep the inside of the connection cradle free from dust or any foreign objects. This may cause malfunction and bad connection. Especially keep the connector clean.
- Place the connection cradle on a stable and even work surface.
- When the connection cradle is connected to the host computer, do not give a shock or vibration to the connection cradle.
- During data communication to the host computer, set the time of the MM series and the host computer synchronized. When you modify the file, the time you modify the file is stored in the Properties of the file. If the time in the host computer is not the same as the time in the MM series, you will not be able to properly manage the files by the modification date.

### Precautions When Backing Up And Restoring Data

In order to secure the proper backup and restore, follow the instructions below during data backup and restore:

- Always connect the AC adapter to the connection cradle.
- Do not remove the MM series from the connection cradle.
- Do not disconnect the USB cable connecting the connection cradle and the host computer.
- Do not slide the connection switch.

### **Installing Application Program**

You cannot install an application program to the MM series from the host computer when the MM series is inserted in the cradle. In order to install an application program into the MM series, do either of the following performance:

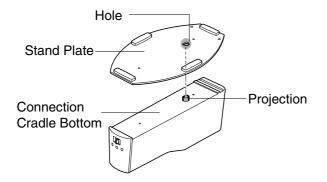
- Connect the external CD drive unit to the MM series
- Connect the MM series to the host computer via LAN and share the CD drive of the host computer with the MM series.



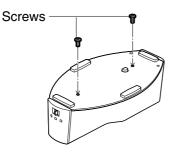
Before installing an application program, carefully read its license agreement.

# **Setting Up Connection Cradle**

1. Attach the stand plate to the connection cradle matching the projection on the bottom panel of the connection cradle with the hole of the stand plate.

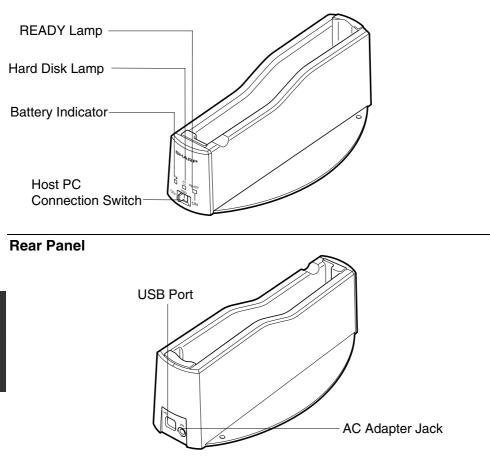


2. Tighten two screws to fasten the stand plate to the connection cradle.



# **Overview of Connection Cradle**

# **Front Panel**



# **Charging Battery Pack Using Connection Cradle**

1. Set the connection cradle on a stable and even work surface.



*Be sure to attach the stand plate to the connection cradle before inserting the MM series into the connection cradle. Otherwise they may fall down.* 

2. Connect the AC power cord to the AC adapter.

- 3. Plug the AC adapter cable to the AC adapter jack on the rear side of the connection cradle.
- 4. Plug the AC power cord to the wall outlet.



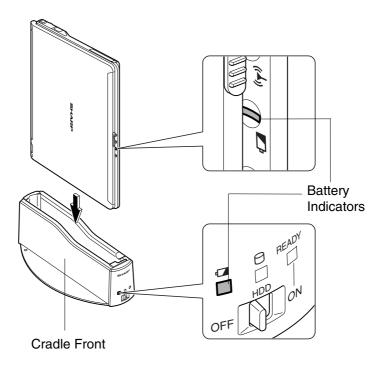
Always use the AC adapter and the AC power cord included with your computer or the optional one. Using others may damage to the connection cradle.

5. Make sure that foreign materials such as dust are inside the connection cradle.



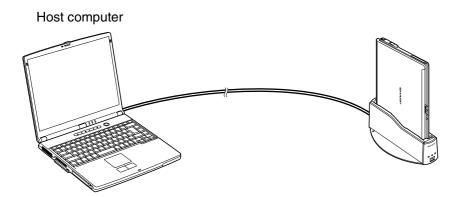
Do not install the MM series in the connection cradle with foreign body, such as dust, inside. This may damage both the MM series and the connection cradle and result in bad connection.

6. Insert the MM series into the connection cradle with its left side downward so that the connection cradle connector on the left side of the MM series firmly secured to the connector inside the connection cradle. When properly connected, the battery indicators on both the MM series and the connection cradle will turn on and charging will be started.



# **Using MM Series as External Hard Disk**

Using the connection cradle, you can use MM series as an external hard disk of your host computer. Ordinarily, you can utilize the data between the mobile PC and the host PC via LAN or using the medium such as a memory card. By using the connection cradle, however, you can read /modify/save data stored in MM series without powered on.



#### **Back Up Important Data Periodically**

In order to prepare for accidents, we recommend to back up important data periodically.

# **Connecting to Host Computer**

MM series can be used as an external hard disk of the computer with one of the following operation systems installed:

- Microsoft Windows XP Home Edition/ Microsoft Windows XP Professional (hereafter called Windows XP)
- Microsoft Windows 2000 Professional (hereafter called Windows 2000)
- Microsoft Windows Millennium Edition (hereafter called Windows Me)

Before connecting the MM series to the host computer for the first time, be sure to install the connection cradle program (described later).

# Limitation

You cannot use MM series as an external hard disk when it is powered on/ in the system standby or hibernate state.

### When the Host Computer is Windows XP

Log on to the computer as a member of the Computer administrators group. You might not install application programs when you log on to the computer with a limited account.

### When the Host Computer is Windows 2000 or Windows Me

Install an application program when you log on to the computer as a member of the Computer administrators group. And Use the installed program when you log on to the computer as a member of the Computer administrators group.

## Installing Connection Cradle Program

The following shows how to install the connection cradle program to the host computer.

- 1. Insert the product recovery CD-ROM disk2 in the CD drive of the host computer.
- 2. Double-Click My Computer, then double-click the CD drive icon.
- 3. Double-Click the *SOFT* folder, then double-click the *MCX* folder. The *Connection Cradle Setup Wizard* starts up. Follow the message on the screen and install the Connection Cradle program.
- 4. Install the program according to the instructions on the screen.

7

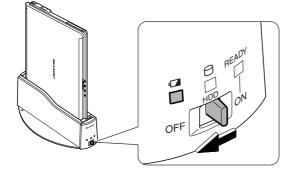
# **Connecting MM Series To Host Computer**

The following shows how to connect the MM series to the host computer for the first time using the connection cradle.

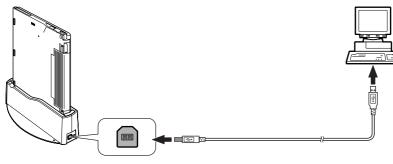


Do not connect the USB cable until instructed to do so (in Step5 below).

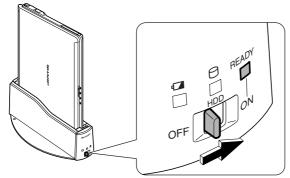
- 1. Install the Connection Cradle program to the host computer (shown on the previous page).
- Turn off the MM series. You cannot connect the MM series to the host computer when the MM series is powered on or in the standby/hibernate mode.
- 3. Connect the AC adapter to the connection cradle and insert the MM series into the connection cradle. (Refer to *Charging battery pack using the connection cradle* on 7-6.)
- 4. Make sure the battery indicator on the connection cradle is powered on and slide the host PC connection switch on the connection cradle to *OFF*.



5. Connect the connection cradle with the host computer using the supplied USB cable.



 Slide the host PC connection switch on the connection cradle to the ON position. The READY indicator on the connection cradle turned green. When you connect the connection cradle to the host computer for the first time, necessary drivers are automatically installed. Wait until installation process completes.





When the host computer runs on Windows XP, you might get the screen asking you what you want Windows to do. In this case, click Cancel.

### **Connecting MM series with Host Computer Second Time**

From the second time on, you can connect the connection cradle to the host computer in any order. When the connection cradle is connected to the host computer and the connection switch is ON, the host computer can recognize the MM series as its external hard disk only by inserting it into the connection cradle.



When connected to the host computer, the connection cradle must be powered by the AC adapter. Using the connection cradle without the AC adapter connected may cause the data loss if the battery of your computer is completely discharged and if you have not saved the data at that time. If the battery of your computer is completely discharged when connected to the host computer, the connection is suddenly cancelled and an error message will be displayed on the host computer's screen.

### **Displaying on Host Computer**

Once MM series is recognized as an external hard disk of the host computer, it is shown as  $SHP_V1800$  (E;) or as  $MM1 D_DRIVE$  (F;) with icon representing the MM series inserted in the connection cradle in the *Hard Disk Drives* section when in Windows XP or in the *My Computer* window, in the other operating systems.



The drive names such as (E:) and (F:) differs depending on the environment of the host computer.

If you set a user password to MM series in the Setup Utility, MM series is shown not as hard disk drive, but as removable disk drive with the icon representing the MM series inserted in the connection cradle with the key mark. In order to access to the hard disk of your computer, delete the password temporarily. See Canceling Password in Password section later in this chapter.



While communicating to the host computer;

- *Keep the AC adapter connected to the connection cradle.*
- Do not remove, MM series from the connection cradle.
- Do not move the connection cradle with, MM series installed. It may result in disconnecting the cable between the host computer and the connection cradle.
- Do not operate the host PC connection switch.

# **Stopping Connection from Host Computer**

You can stop the connection from the host computer while keeping MM series inserted in the connection cradle, by first stopping the device on the host computer then sliding the host PC connection switch of the connection cradle to *OFF*.



*Be sure to stop the device before sliding the switch on the connection cradle to* OFF. *Otherwise the data may be lost or to the MM series may be damaged.* 

### **Stopping Device**

Here we explain assuming that the hard disk drives C and F of the MM series is assigned to drives F and G of the host computer. If not, please replace the drive names with the appropriate ones.

#### In case of Windows XP

- 1. Click Safely Remove Hardware icon ( ) on the taskbar.
- 2. Click Safely remove USB Mass Storage Device Drives (G:,F:); then, Safe To Remove Hardware dialog appears.

#### In case of Windows 2000

- 1. Click Safely Remove Hardware icon (🍏 ) on the taskbar.
- 2. Click Safely remove USB Mass Storage Device Drives (G:,F:); then, click OK.

#### In case of Windows Me

- 1. Click Safely *Remove Hardware* icon (🅉) on the taskbar.
- 2. Click Safely remove USB Disk Drive(G:,F:); then, click OK.

## Sliding Host PC Connection Switch to OFF

- 1. Stop the device.
- 2. Slide the connection switch on the connection cradle to the *OFF* position. The *READY* indicator turns off.

### **Connecting to Host Computer Again**

While you keep MM series inserted in the connection cradle, slide the connection switch back to *ON* to connect to the host computer again.



When you do not remove MM series from the connection cradle after stopping the device, the connection is stopped, although the READY indicator is on. To regain the connection, slide the host PC connection switch to OFF, then back ON again.

#### **Disconnecting USB Cable**

When disconnecting the USB cable from the host computer and the connection cradle, be sure to stop the device before disconnecting the cable.

# **Removing from Connection Cradle**

To remove the MM series from the connection cradle, follow the steps below:

1. Stop the device first.



*Be sure to stop the device before removing MM series from the connection cradle. Otherwise the data may be lost and the MM series may be damaged.* 

2. Hold the stand plate of the connection cradle by your hand, and pull up the MM series out of the connection cradle. The *READY* indicator on the connection cradle turns off.



# Setting Password

You can set a "user password" to your computer to avoid unauthorized use of the hard disk of the MM series when connected to the host computer using the connection cradle.



Set the Supervisor password and User Password in the SetupUtility.

#### **Setting Password**

Set a user password of the MM series in the Setup Utility. For setting the password, see Chapter 6.

### **Canceling Password**

Cancel the password temporarily when you want to use the MM series as an external hard disk of your host computer.

- 1. Connect the MM series with the host computer.
- 2. Click *start* –*All Programs* –*Connection Cradle* –*Password Utility*. *Password Utility* Window appears.
- 3. Type the current user password in the *Password* box and click *OK*.
- 4. When you see the message *Releases the Security*, click *OK*.
- 5. The password is cancelled and the hard disk drives of the MM series are recognized as external hard disk drives of the host computer.



In some cases, an alert box may appear. This is because once the password is cancelled, the device is stopped and then, the connection cradle is connected. This causes no matters.

### **Deleting Password**

#### In case of Windows XP or Windows 2000

When the host computer is Windows XP or Windows 2000, delete the password in the MM series Setup Utility. For details see Chapter 6.

#### In case of Windows Me

When the host computer is Windows Me, cancel the password on the host computer, before deleting the user password in the Setup Utility of the MM series.

- 1. Cancel the password.
- 2. Stop the device.
- 3. Remove your computer from the connection cradle.

Run the Setup Utility on MM series and delete the user password. For details on deleting the password, see Chapter 6.



Be sure to cancel the password using Password Utility (see the previous page) before deleting the password. Otherwise, the MM series will be recognized as a removable disk, when you connect the MM series to the host computer second time

In order to make MM series recognized as an external hard disk again, do the following:

- 1. Connect MM series to the host computer.
- 2. Open the Password Utility and type the user password.
- *3. Click* Cancel.
- *4. Stop the device.*
- 5. Turn off the connection switch on the connection cradle.
- 6. *Turn on the connection switch on the connection cradle.*

# Appendixes

The appendixes contain additional information on the use and care of your computer.

# **Maintenance and Care**

This appendix provides you with information on how to maintain your computer in excellent working condition.

# **Cleaning Your Computer**

#### Cabinet

Apply a small amount of mild cleaning solution to a dry, lint-free cloth and wipe the cabinet with the cloth.

- Never clean your computer while it is powered on.
- Do not use alcohol, benzene, thinner or other strong chemical agents that may damage the cabinet.

#### Screen

The surface of the screen may become smeared and accumulate dust during use. Avoid touching the screen with your fingers when using the system. Gently wipe the surface of the screen with a soft cloth that has been dipped in a mild detergent solution and squeezed dry.

### Glide Pad

Wipe the glide pad with a soft, dry cloth.

### **Ventilation Openings**

Dust on the ventilation openings may cause overheating of your computer. Wipe the ventilation openings with a soft, dry cloth.

# **Traveling With Your Computer**

This computer is designed for portability. For safety and convenience when traveling, please follow these guidelines.

- Before traveling, back up your data on floppy disks or other external media.
- Do not travel with any peripheral devices connected such as an optional external floppy disk drive unit or the external CD-ROM drive connected.

- Do not carry your computer powered on. This may result in loss of data and/or damage to the hard disk drive.
- Make sure the display cover is closed before traveling. Otherwise, the cover may be opened unawares, and the display or the keyboard will be damaged.
- If you carry your computer in a bag, try to avoid unnecessary pressure, caused by the stuff of the bag, to your computer.
- Disconnect the AC adapter from your computer.
- Fully charge the standard battery pack and bring the AC adapter and the AC power cord.
- Avoid sudden shocks or extreme vibration.

# Troubleshooting

This chapter describes how to troubleshoot computer problems.

# **Common Problems**

Problems with your computer can be caused by something as minor as an unplugged power cord or as major as a damaged hard disk drive. The information in this troubleshooting section is designed to help you find and solve minor problems. If you still have a problem after trying all the suggested remedies in this chapter, contact your dealer.

The problems that you might encounter can be divided into two basic categories: hardware and software. Hardware problems can be further divided into being of an electrical or a mechanical nature. You will know you have a hardware problem if, for example, the screen is blank, or your computer cannot recognize the disk drives.

Software problems can occur at several levels. Both your operating system and your software application programs are capable of generating errors and error messages. If you encounter a software error, try to determine if the error message is from your operating system or from an application program, and refer to the appropriate manual for possible remedies.

You can also refer to the Windows manual or Windows help program to solve the problem. To access the help program, click *start* –*Help and Support*. It also gives you troubleshooting tips and an index.

Successful troubleshooting is the result of careful observation, deductive reasoning, and an organized approach to solving the problem. If you encounter a problem, begin by performing a careful visual inspection. Check the exterior of your computer first. If no lights are lit, check the battery charge or power outlet, the plug and power cord, and any power switches that may affect your computer. If your computer has been connected to any peripheral devices, look for loose or disconnected cables. You may also need to check the fuses and breakers in your electric box. A few common problems and suggested solutions are presented in the examples that follow.

# **Trouble when Starting**

# Question: Why doesn't the power indicator or the battery indicator turn on?

- Make sure the AC adapter is correctly connected to the AC adapter jack of your computer.
- Make sure the AC power cable is correctly connected to a live wall outlet. Connect another electric equipment to the wall outlet and check whether it is live or not.
- Make sure the battery pack is correctly installed and charged.
- If the battery pack is discharged, connect the AC adapter.

#### Question: Why do I get the message Invalid system disk?

• You may have inserted a non-bootable disk (either a defective disk or one without an operating system) in the optional external floppy disk drive unit. Remove the disk and press any key.

### Question: Why can't I boot from the floppy disk?

- Make sure that the optional external floppy disk drive unit is correctly connected to your computer.
- Check whether the floppy disk set to the optional external floppy disk drive unit contains a system disk.
- Check whether *Floppy Disk Drive* is set to the first in *Boot Sequence* and *USB Boot* is set to *Enabled* in *Boot* menu of the Setup Utility.

### Question: Why do I get the message *Press*<*F1*> to resume, <*F2*> to setup?

• The setting of the Setup Utility is deleted. Run the Setup Utility and get default value of the Setup Utility. Be sure to set the date and time correctly.

#### Question: Why do I get the message Operating system not found?

• Run the Setup Utility and get default value of the Setup Utility. Be sure to set the date and time correctly.

## **Trouble with Display**

See the Display section in Chapter 2 and 4.

#### Question: Why is the screen blank?

- Press any key to see if any power management feature has turned off the screen to save power.
- See the power indicator to check whether your computer is turned on.
- If you are using a battery pack, make sure it is correctly installed and has a charge remaining.
- Make sure the LCD screen is selected as the display by pressing Fn+F5.
- Check whether the display is on by pressing **Fn+F11**.
- If you still have the problem after trying the above, follow the steps in *Why doesn't the keyboard or the glide pad function*?

# Question: Why does the external monitor display nothing or the image on it distorted?

- Confirm the monitor is turned on.
- Confirm the monitor is connected correctly.
- Make sure an external monitor is selected as the output display by pressing Fn+F5.
- If you use **Fn+F5** to change the display, the image may be distorted. Press **Fn+F5** again to return the previous display and use *Display Properties* dialog box to change it again. (Refer to Chapter 4.)
- Make sure the value of the *Screen resolution* in the *Settings* tab of the *Display Properties* is lower than the resolution of the external monitor.
- Make sure the external monitor is not near any electric devices having strong magnetic fields such as a TV set or radio.
- Do not share an outlet with a TV set or radio.

### Question: Why can't I change the display with Fn+F5 keys?

- When playing the animation or game, **Fn+F5** key combination may not work. Close the current running application.
- Use *Display Properties* dialog box to change it. (Refer to Chapter 4.)

• When you select *Extended Desktop* mode, **Fn+F5** key combination does not work.

# Trouble with Keyboard/Glide Pad

### Question: Why doesn't the keyboard or the glide pad function?

- Try the following in this order:
- 1. Press **Ctrl+Alt+Delete** and select *Users* tab of *Windows Task Manager* dialog box. Click *Disconnect* or *Logoff*; then, *Yes*.
- 2. If the step 1 fails to work, press the power switch for more than four seconds to turn off the system. Ten seconds later, turn on your computer.
- 3. If you still cannot turn off the system with the power switch, confirm the hard disk indicator is not lit and press the reset switch on the bottom of your computer to turn off the system (refer to *Resetting the System* section of Chapter 2). Ten seconds later, turn on your computer by pressing the power switch.

## Question: Why does the glide pad malfunction?

• The surface of the glide pad or your palm may be moist or dirty and grease. Wipe the glide pad with a soft, dry cloth.

# **Trouble with Floppy Disks**

## Question: Why can't I use a floppy disk?

- Confirm the optional external floppy disk drive unit is correctly connected.
- Confirm the floppy disk is inserted correctly.
- Confirm the drive or file name is correct.
- The floppy disk may not be formatted or could be corrupted. Format the disk or use another disk.
- If you cannot write to a floppy disk, the disk may be write-protected. Eject the disk and ensure that the write-protect tab covers the small hole.
- If you cannot write to a floppy disk, the disk may be full. Use another disk.

# Question: Why can't I read or write data to/from the hard disk?

- Confirm the drive and file names are correct.
- Confirm the hard disk has sufficient free space.

# **Trouble with CD**

# Question: Why can't I read data from a compact disc or play files?

- Confirm the external CD-ROM drive unit is correctly connected to your computer.
- Confirm the CD is inserted correctly.
- Confirm the drive and file names are correct.
- Confirm the CD is not stained or scratched.
- Confirm the CD or files are supported.

# **Trouble with Communication**

# Question: Why can't I communicate through the modem?

- Confirm the modem card is properly inserted in your computer.
- Confirm the dial setting (pulse or tone) of Windows or communication software is matched with the telephone line.
- Confirm the country/region setting is appropriate.
- Confirm the network configuration is appropriate.
- Confirm the user name or password is correct.
- Confirm the COM port in the communication software is set appropriately.
- Turn off the power management in the Windows.
- If an unusual device is attached to the line you are connecting to, the modem may not function properly. Remove the device or contact a dealer of the device.
- If connected to a PBX, consult the PBX maintenance staff or its service company. If the electric characteristics of your PBX are different from those of a regular analog line, the modem will not function properly. If you connect the modem to a digital PBX, both the modem and the PBX may be damaged.

## Question: Why can't I access the LAN?

- Confirm the cable is properly connected to the LAN jack and the network hub.
- Confirm the network configuration is appropriate.
- Confirm the LAN driver is enabled in *System Properties* dialog box. Click *Hardware* tab, then, *Device Manager*. Double-click *Network adapters*, then, *Realltek RTL8139xxxx*, and confirm *Use this device (enable)* is selected in *Device Usage* field of *General* tab.
- Confirm the user name or password is correct.

# Question: How can I detect the MAC address?

- Follow the instructions below:
- 1. Click start All Programs Accessories Command Prompt.
- 2. Type ipconfig/all; then, press Enter. The IP information appears.
- 3. For the LAN, see the numbers of *Physical Address* in *Ethernet adapter Local Area Connection* section. For the Wireless LAN, see the numbers of *Physical Address* in *Ethernet adapter Wireless Network Connection* section.
- 4. Type exit; then, press Enter.

# Question: Why can't I detect the access point on my computer? (for wireless LAN communication)

- Confirm the access point is powered on.
- Confirm the antenna indicator is lit.
- Restart your computer.
- Confirm your computer is enabled for the wireless LAN.
- Detect the access point by following the steps below
- 1. Click *start My Computer*.
- 2. Select *My Network Places* in *Other Places* field; then, *View network connections* in *Network Tasks* field. *Network Connections* dialog box appears.
- 3. Right-click Wireless Network Connection; then, click Disable.
- 4. Right-click Wireless Network Connection; then, click Enable.

- When you have more than one available access points, your computer may be connected to the access point other than the one you want to access:
- 1. Right-click *Wireless Network Connection* icon ( ) on the taskbar; then, click *View Available Wireless Networks*.
- 2. Select the desired network in the *Available wireless networks* list; then, connect to the network. (Refer to *Confirming the Status of the Wireless Connection* section in Chapter 5.)

# Question: Why can't I connect to the network via an access point? (for wireless LAN communication)

- Confirm the wireless LAN antennas are enabled. When the antenna indicator lights green, the antennas are enabled. If not, press **Fn+F1** keys.
- Confirm *Any available network (access point preferred)* is selected in *Networks to access* of *Advanced* dialog box. (To open *Advanced* dialog box, refer to *Communicating with Other Computers* section of *Wireless LAN* in Chapter 5.)
- Confirm the ESSID of your computer matches the ESSID of the access point you want communicate with.
- Confirm the *Network key* is correctly entered if the WEP security of the access point is enabled.
- You may accidentally enable IEEE802.1x authentication. Uncheck the box of *Enable IEEE802.1x authentication for this network* when you connect the network in *Wireless Network Connection* dialog box. (Refer to *Connecting the WEP configured network* in Chapter 5.)

# Question: Why can't I communicate with other computers through a wireless LAN?

- Confirm the wireless LAN antennas are enabled. When the antenna indicator lights green, the antennas are enabled. If not, press **Fn+F1** keys.
- Confirm each computer is enabled for wireless LAN.
- Confirm *Computer-to-computer (ad hoc) networks only* is selected in *Networks to Access* of *Advanced* dialog box of each computer. (To open *Advanced* dialog box, refer to *Communicating with Other Computers* section of *Wireless LAN* in Chapter 5.)
- Adjust the distance between your computers by bringing your computer closer to others and remove any obstructions that may impede the communication; then, try

to connect again. (The distance between computers or access points should be less than approximately 190 ft. (60 m) in the direct line-of-sight.)

- Confirm the IP address and the subnet mask of each computer are set correctly.
- Confirm the WEP key is correctly entered if the WEP security of other devices, which you want to communicate with, is enabled.

### **Trouble with Peripherals**

### Question: Why don't peripheral devices function correctly?

- Confirm they are correctly connected to your computer.
- Confirm they are Windows XP compliant.
- Confirm drivers necessary for the devices are installed.
- Set *System standby* and *System hibernates* to *Never* in *Power Options Properties* dialog box. If this does not work, set *Turn off hard disks* to *Never*.

### Question: Why can't I print?

- Make sure the printer is turned on.
- Check whether your computer and the printer are connected correctly.
- Check whether the printer is ready to print.
- Check whether the printer has enough paper.
- Check whether the printer driver is installed.
- From the *start* menu, select *Control Panel Printers and Other Hardware -Printers and Faxes.* If Classic view is selected, double-click *Printers and Faxes* icon. Confirm your printer is installed there. If not, click *Add a printer* of *Printer Tasks* to install your printer.
- See also the Windows help program by clicking *start Help and Support*.

## **Other Troubles**

### Question: Why is the battery pack discharged so quickly?

• Condition the battery pack. (Refer to *Conditioning the Battery Pack* section of Chapter 3.)

### Question: Why is the date and/or time incorrect?

• Correct the date and time in Windows. Double-click the time appearing on the taskbar and set them in *Date and Time Properties* dialog box.

### Question: Why can't I use a hardware device?

- Make sure the hardware device is not crossed out with an X mark using the following procedure.
- 1. Click start-Control Panel.
- 2. Click *Performance and Maintenance*; then, *System*. If Classic view is selected, double-click *System* icon.
- 3. Click Hardware tab; then, Device Manager.
- 4. Double-click the device you cannot use.
- 5. Confirm Use this device (enable) string is selected in Device usage field.

## Question: Why can't I produce sound?

- Press **Fn** + **F4** to increase the output volume.
- Double-click the speaker symbol on the taskbar and check the Windows volume.

## Question: Why can't I turn off my computer?

• Follow the instructions on *Why doesn't the keyboard or the glide pad function*? section.

### Question: Why my computer is so hot?

• When charging the battery pack, its surrounding area or the front of the keyboard may become hot, but this is not a problem.

### Question: Why can't find the drivers and applications?

• You may accidentally remove them. They are stored on the last recovery disk. (i.e. when two recovery CDs are provided, they are stored on the "Disk 2".) When you are not sure how to install them or the CD does not have the drivers or applications, consult local service staff.

# **Trouble with Connection Cradle**

# Question: Why doesn't the battery indicator on the MM series inserted in the connection cradle turn on?

- Make sure the AC adapter is correctly connected to the AC adapter jack of the connection cradle.
- Make sure the AC power cable is correctly connected to a live wall outlet. Connect another electric equipment to the wall outlet and check whether it is live or not.
- Make sure the battery pack is correctly installed in the MM series.
- Make sure the MM series is correctly inserted in the connection cradle.

#### Question: Why do I get the message Invalid system disk?

• You may have inserted a non-bootable disk (either a defective disk or one without an operating system) in the optional external floppy disk drive unit. Remove the disk and press any key.

### Question: Why can't I insert the MM series into the connection cradle?

- Make sure that you insert the MM series into the connection cradle properly.
- Make sure that the host PC connection switch on the connection cradle is in the *ON* position .

# Question: Why isn't the MM series recognized as an external hard disk of the host computer?

- Make sure you insert the MM series into the connection cradle properly.
- Make sure that the USB cable is correctly connected to the connection cradle and the host computer.
- Make sure that the MM series in the connection cradle is powered off. The MM series is not recognized when it is powered on, in the system standby or system

hibernate mode. Be sure to turn off the MM series before setting it into the connection cradle.

- Once you stop the device on the host computer with the MM series in the connection cradle, it is not recognized as an external hard disk. Slide the host PC connection switch once to *OFF*, then back again to *ON*.
- Make sure that the operating system of the host computer is Windows XP, Windows 2000, or Windows Me.

# Question: Why is the MM series recognized as removable disk, or why can't I access to the MM series from the host PC?

- You cannot access to the MM series from the host PC when you set a user password in the Setup Utility of the MM series. Cancel the password using the *Password Utility*. (Refer to *Canceling Password* section in Chapter 7.)
- If you remove the MM series from the connection cradle without canceling the password and then delete the password using the Setup Utility, the MM series may be recognized as removable disks of the host computer when connected once again. In this case, run the *Password Utility* on the host computer and restart the host computer.

# Question: Why is the data transfer from the MM series to the host PC so slowly? Or why can't I use the data transfer speed of USB2.0?

- Make sure that the host PC supports USB 2.0.
- Make sure that the host computer and the connection cradle is connected using the supplied USB cable.

### Question: Why can't I cancel the password?

- Make sure that the MM series is correctly inserted in the connection cradle.
- Make sure not to connect more than one MM series to the host computer.

# Index

### A

AC adapter connecting, 1-4 using, 2-2 Account creating, 2-11 switching, 2-11 Antenna, 5-4 Audio controlling output volume, 2-7

#### B

Battery pack changing, 3-5 charging, 3-2 checking level, 3-2 conditioning, 3-4 indicator, 2-1 3-3 low battery indication, 3-3

# С

Cleaning computer, A-1 CD handling, 4-8 inserting. 4-8 removing, 4-9 troubleshooting, T-5 CD-ROM drive (external) connecting, 4-7 mode switch, 4-10 removing, 4-9 Connection Cradle charging battery, 7-4 connecting to hostcomputer, 7-8 overview, 7-4 password, 7-13 precautions, 7-1 removing, 7-12

setting up,7-3 stopping connection,7-11 using as external hard disk,7-6

#### D

Display changing brightness, 2-8 changing resolution, 2-8 changing number of colors, 2-8 switching the display, 2-6 troubleshooting, T-3 turning off, 2-6

# E

External monitor connecting,4-11 disconnecting,4-12 switching the display, 2-6, 4-12

## F

Floppy disk ejecting,4-4 handling, 4-3 inserting, 4-4 removing, 4-5 formatting, 4-4 troubleshooting, T-4 Floppy disk drive (external) connecting,4-7 removing,4-5 troubleshooting, T-4

# G

Glide pad changing configuration, 2-5 clicking and double-clicking, 2-5 drag and drop, 2-5 scroll, 2-5 troubleshooting, T-4

#### Η

Hard disk drive troubleshooting, T-5

# I

Indicators antenna,5-4 power,1-5, 2-1 battery status, 2-1,3-3 status, xv

# K

Keyboard function keys, 2-6 special keys, 2-6 troubleshooting, T-4 windows key, 2-6

#### L

LAN configuring, 5-3 connecting to wired network, 5-2 troubleshooting, T-6

## N

Network Setup Utility changing, 5-5 deleting, 5-5 loading, 5-4 switching, 5-4

#### Index-2

**P** , 6-5 6-5

Passwords

changing, 2-13, 6-5 deleting, 2-13, 6-5 setting, 2-12, 6-5 PC cards ejecting, 4-18 inserting, 4-17 Peripherals audio equipment, 4-14 connecting guidelines, 4-1 external monitor, 4-11 headphones, 4-15 PC cards, 4-17 printer, 4-21 troubleshooting, T-8 USB device, 4-16 Power choosing AC or battery, 2-1 indicator, 1-5,2-1 Power management disabling, 3-10 stopping power supply to display, 3-7 stopping power supply to hard disk, 3-7 system hibernate, 3-8 system standby, 3-8 Printer, 4-21

### R

Resetting power switch, 2-3 reset switch, 2-3

### S

Screen Saver, 2-10 Setup utility advanced menu, 6-4 boot menu, 6-6 Changing setting, 6-2 entering and exiting, 6-2 exit menu, 6-6 main menu, 6-3 running, 6-1 security menu, 6-4 System standby about, 3-8 generating conditions, 3-9 resuming from, 3-8 System hibernate about, 3-8 generating conditions, 3-9 resuming from, 3-8 supporting, 3-9 Status indicators, xv

# Т

Troubleshooting common problems, T-1 communications, T-5 CD, T-5 Connection Cradle, T-10 display, T-3 floppy disk drive, T-4 hard disk drive, T-5 keyboard or glide pad, T-4 peripherals, T-8 wired LAN, T-6

### U

USB device, 4-16

#### W

Wallpaper, 2-10

©2003 SHARP CORPORATION PRINTED IN JAPAN TINSE3551ACZZ(

