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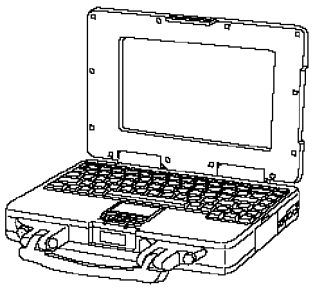
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Panasonic®



Personal Computer

OPERATING INSTRUCTIONS

CF-25 Series

CF-25 Quick Guide
(On-line manual on the hard disk)

Click 

on the screen.

-Contents-

- Key Combinations
- Indicators

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Customer's Record

Model No. _____

Serial No. _____

or

Code No. _____

Date of Purchase _____

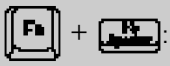
Dealer's Name _____

Dealer's Address _____

Introduction

Thank you for purchasing the Panasonic CF-25 series computer. Please read the operating instructions thoroughly for proper operation of your new computer.

Illustrations in this Manual

NOTE:	**NOTE** provides a useful fact or helpful information.
CAUTION:	**CAUTION** indicates a condition that may result in minor or moderate injury.
WARNING:	**WARNING** indicates a hazard that may result in moderate or serious injury.
[Start]-[Shut Down]:	This illustration means to click [Start], then to click [Shut Down] (For some applications, you may need to double-click.)
:	This illustration means to press the [Enter] key.
:	This illustration means to press [Fn], and while holding down on [Fn], to press [F5].

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TranXit™ is a trademark of Puma Technology, Inc.
PhoenixCard Manager™ is a trademark of Phoenix Technologies Ltd.
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For U.S.A.

Federal Communications Commission Radio Frequency Interference Statement

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

- Reorient or relocate the receiving antenna.
- Increase the separation 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 Panasonic Service Center or an experienced radio/TV technician for help.

Warning

To assure continued compliance, use only shielded interface cables when connecting to a computer or peripheral. Also, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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

For U.K.

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 3 amp fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 3 amps and that it is approved by ASTA or BSI to BS 1362.
Check for the ASTA mark or the BSI mark on the body of the fuse.
If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local Panasonic Dealer.
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

Important

The wires in this mains lead are coloured in accordance with the following code:

Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

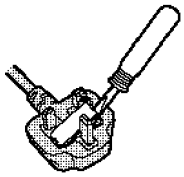
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚.

The mains plug on this equipment must be used to disconnect the mains power.
Please ensure that a socket outlet is available near the equipment and shall be easily accessible.

How to replace the fuse

Open the fuse compartment with a screwdriver and replace the fuse.



Warnings

- This equipment is not designed for connection to an IT power system.
  (An IT system is a system having no direct connections between live parts and Earth; the exposed-conducive-parts of the electrical installation are earthed.
  An IT system is not permitted where the computer is directly connected to public supply systems in the U.K.)
- Disconnect the mains plug from the supply socket when the computer is not in use.

This equipment is produced to BS800/1983.

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Lithium Battery

Lithium Battery!

This computer contains a lithium battery to enable the date, time, and other data to be stored in it.
The battery should only be exchanged by service personnel.
Warning! Risk of explosion from incorrect installation or mis-application!

Warnung bezüglich der Lithiumbatterie (Sicherungsbatterie)

Lithiumbatterie!
Dieser Computer enthält eine Lithiumbatterie zur Sicherung von Datum und Uhrzeit der eingebauten Uhr sowie anderer Systemdaten im Speicher bei einer Unterbrechung der Hauptstromversorgung. Diese Sicherungsbatterie darf nur von Kundendienstpersonal ausgewechselt werden.
Warnung! Bei falschem Gebrauch besteht Explosionsgefahr!
Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

Avertissement concernant la pile au lithium (pile de sauvegarde)

Pile au lithium!
Le micro-ordinateur renferme une pile au lithium qui permet de sauvegarder certaines données comme la date et l'heure notamment. Elle ne devra être remplacée que par un technicien qualifié.
Avertissement! Risque d'explosion en cas de non respect de cette mise en garde!

Precautions

The CF-25 was developed based on thorough research into the real-world portable computing environments. Exhaustive pursuit of usability and reliability under harsh conditions led to innovations such has the magnesium alloy exterior, vibration damped hard disk drive and floppy disk drive, flexible internal connections, sealed LCD and keyboard, dust proof hinges and the revolutionary "Shirato" ruggedized LCD screen mounting system. The CF-25's outstanding engineering has been tested using the stiff MIL-STD-810E (for vibration and shock) and IP (for dust and water) based procedures.

As with any portable computer device precautions should be taken to avoid any damage. The following usage and handling procedures are recommended.

Usage



Avoid Extreme Heat and Cold
Do not store or use the computer in locations exposed to heat, direct sunlight, or extreme cold. Avoid moving the computer between locations with large temperature differences.
Operation: 5 °C to 35 °C (41 °F to 95 °F)
Storage: -20 °C to 60 °C (-4 °F to 140 °F)

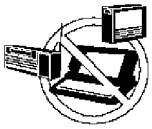
Avoid Direct Sunlight on the LCD Panel
The LCD panel should not be exposed to direct sunlight or ultraviolet light.



Avoid Humidity, Liquids and Dust
Do not store or use the computer in locations exposed to high humidity, liquids (including rain) or dust.



Prevent Shock
Avoid subjecting the computer to severe vibrations or impact. Do not place the computer inside a car trunk.



Avoid Radio Frequency Interference
Do not place the computer near a television or radio receiver.

Handling



Avoid Magnetic Fields
Keep the computer away from magnets.



Avoid Stacking
Do not place heavy objects on top of the computer.



Keep Small Objects Away
Do not insert paper clips or other small objects into the computer.



Do Not Disassemble the Computer
Do not attempt to disassemble your computer.



Avoid Excessive Force on the LCD Panel
Do not apply excessive downward force on the display when it is completely opened, especially when plugs and/or cables are connected to the rear of the computer.

Cables

Use of an interface cable longer than 3 m (9.84 feet) is not recommended.

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Read Me First

Saving Data on the Hard Disk

- **Do not expose your computer to shock.**
  Please use care when handling your computer, shock may damage your hard disk or make your software applications and data unusable.
- **Do not power down your computer while software applications are running or HDD indicator ( ) is on.**
  Properly shut Windows* down to avoid problems ([Start]-[Shut Down]).
- **Save all valuable data to floppy disks.**
  Backing up data to floppy disks will limit damage should trouble occur to your computer or should you inadvertently change or erase data.
- **Use the security function for all important data.**
  ☞ page 17 Security Measures

* This computer uses Microsoft® Windows® 95 Operating System.

Saving Data on Floppy Disks

- **Do not power down your computer or press the floppy disk drive eject button while the Multimedia Pocket indicator ( ) is on.**
  Doing so may damage the data on the floppy disk and render the disk useless.
- **Use care when handling floppy disks.**
  To protect the data on your floppy disks or to prevent a floppy disk from becoming stuck in your computer, avoid the following:
  • Sliding the shutter on the floppy disk manually.
  • Exposing the disk to a magnetic field.
  • Storing the disk in locations prone to high temperatures, low pitched noise, dampness, or dust.
  • Applying more than one label on the disk.
- **Confirm the contents of a floppy disk before formatting it.**
  Confirm that no important data is on the disk, because all data on the disk will be erased.
- **Use the write-protect tab.**
  This is a must for preserving important data. This prevents your data from being erased or overwritten.



Computer Viruses

- **Users are advised to purchase the latest versions of virus protection software and use them regularly.**

  We recommend you run the software:

  • When booting your computer.
  • After receiving data.
  We recommend that you check data received on floppy disks or from external sources, such as data downloaded from the Internet, e-mail, etc. (For compressed files, please uncompress them before running a check).

Other Precautions

For information on other important items including network-related items, please refer to the chapter on "Technical Information" (☞ page 33). We recommend a reading of the chapter.

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First-time Operation

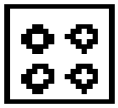
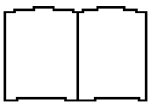
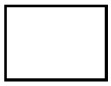
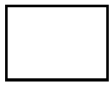
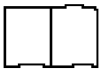
It's now time to get started. Please read the steps below to help you learn what parts are included, and to gain an understanding of some basic computer-related operations.

1 Confirm the inclusion of all parts

Make sure the parts shown in the figure have been supplied. If any of them is missing or is not working properly, please consult your nearest Panasonic dealer.

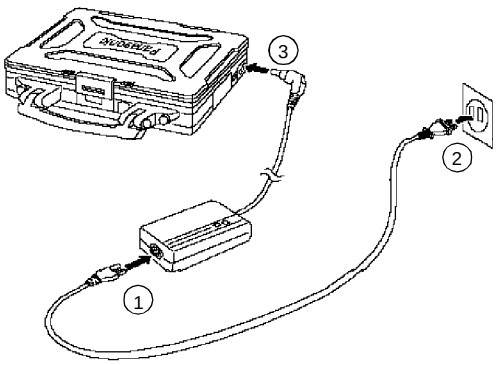
CAUTION

Please prepare nine 2HD formatted floppy disks to create backup disks of the Panasonic utilities. These backup disks are to be used when reinstallation of the Panasonic utilities becomes necessary.

AC Adapter 1	**AC Cord 1**
 CF-AA1526	
Cap Sheet 1	**Operating Instructions 1**
	
TranXit 1	**Windows 95 System Pack 1**
 Registration Card  Accessory Catalogue	 First-step Guide   Registration Card Windows 95 CD-ROM Internet Explorer CD-ROM

2 Insert the battery pack (☞page 16)

3 Connect your computer to a power outlet



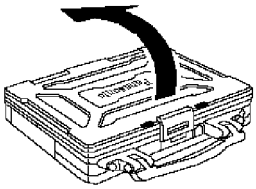
CAUTION

Be sure the AC adapter is connected until completing Step ***6*** on page 7.

Handling the AC adapter

- Do not twist or pull the AC power cord forcefully. Doing so may damage the connections.
- Use only the specified AC adapter (factory control number: CF-AA1526) with your computer. Using an AC adapter other than the one supplied might damage the battery and/or the computer.
- When the DC plug is not connected to the computer, disconnect the AC cord from your AC wall outlet as well.
- Problems such as sudden voltage drops/surges may arise during periods of thunder and lightning. Since this could adversely affect your computer, an uninterruptible power source (UPS) is highly recommended.

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Power Switch



Move the power switch toward the rear direction and hold it there for about one second until the power indicator goes on before releasing it.

4 Read the LIMITED USE LICENSE AGREEMENT (☞page 36)

Confirm that the floppy disk drive is installed.
To open the display, slide the latch located at the front and lift open the display. Before removing the seal covering the power switch, please read the LIMITED USE LICENSE AGREEMENT. Removal of this seal indicates agreement to the terms specified. After you have agreed to the terms, you may turn your computer on.

CAUTION

- Do not slide the power switch repeatedly.
- After you have turned your computer off, you must wait more than ten seconds before you can turn it back on.

5 Set Windows up

The [Windows 95 Setup] will run after the computer is turned on. Simply follow the on-screen instructions.

NOTE

- Please read the supplemental "Windows 95 Setup Procedure" for a more detailed explanation (☞page 39).
- Moving the cursor ( ) or clicking buttons can be done through the touch pad (☞page 9).
- If the display or the sound quality is not right, you can adjust the brightness and volume (☞page 42,43).

6 Close Internet Explorer 4.0

At the [Welcome - Microsoft Internet Explorer], select ☒ at the upper right portion to close the screen.

7 Double-click (Panasonic Setup icon) on Windows

Nine 2HD formatted floppy disks need to be prepared. Simply follow the instructions on the screen. The nine disks will contain the following (the check boxes are for you to confirm copy of the disks.)

- ☐ **Firstaid FD ..... 1 disk**
- ☐ **Panasonic Tools Disk ..... 1 disk**
- ☐ **TranXit Disk (1, 2) ..... 2 disks**
- ☐ **Drivers Disk (1, 2,3) ..... 3 disks**
- ☐ **PhoenixCard Manager™ 95 Disk (1, 2) ..... 2 disks**

CAUTION

- It may take several minutes to reboot the computer.
- Please store the backup disks in a safe place. They will enable you to return your computer to factory default settings should any problems occur.
- Do not remove the floppy disk while the Multimedia pocket indicator ( ) is on, power down your computer or use the suspend function (☞ page 10).

NOTE

About the Internet Explorer 4.0
Please select the item that you want to open from the menu on the [Welcome - Microsoft Internet Explorer].

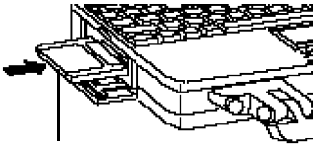
About the CF-25 Quick Guide

- This is available as an on-line guide which includes information on the key input commands, LED indicators and the "CF-25 Readme*". The "CF-25 Readme*" also contains detailed information.
- For the Quick Guide, we recommend setting the Desktop area to "800 by 600 pixels" and the Color palette to "High Color (16 bits)".

* Depending on the model, some information may not be available in the Readme file.

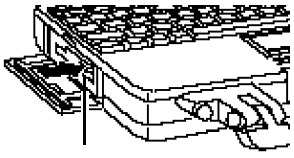
This concludes the first-time use operation guidelines.

● Inserting a floppy disk



Label-side up
Label on the top surface, and inserting the shutter-side headfirst.

● Ejecting a floppy disk

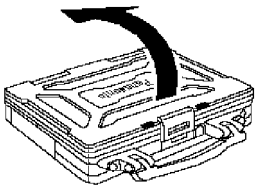


Eject Button

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Starting Up/Shutting Down

Starting Up



1 Open up the display

Lift the latch and open up the display.

NOTE

Do not turn on the computer with the LCD panel closed if an external monitor is not connected. The computer will not power on.

2 Turn your computer on

Power Switch



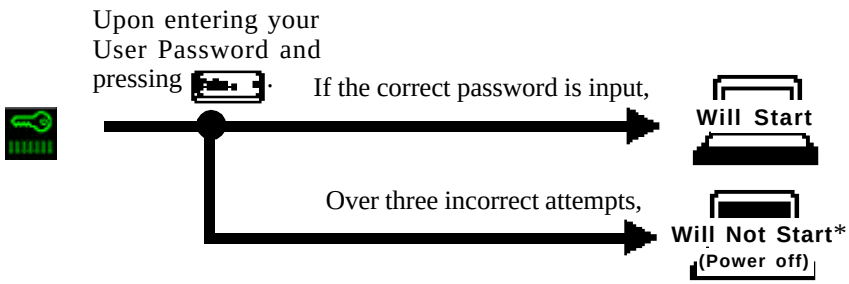
Move the power switch toward the rear direction and hold it there for about one second until the power indicator goes on before releasing it.

CAUTION

- Do not slide the power switch repeatedly.
- After you have turned your computer off, you must wait more than ten seconds before you can turn it back on.
- Do not turn the computer ON while your fingers are in contact with the touch pad. Problems may occur in the operation of the touch pad.

● **If security indicator ( ) is displayed,**

you must first enter your User Password (☞page 17).



* If you are starting from the suspend mode (☞ page 10), if after three attempts the correct password is not input, or if no password is entered for about a minute, the computer returns to the suspend mode.

NOTE

If the display on the right appears,

the network password has been set. To read and write data to other computers, the correct password must be entered.



● **When an application or file that was previously displayed appears on your screen,**

this means the suspend or hibernation mode (☞page 10) has been set.

3 Select your application

You are able to start working on your computer.

NOTE

[System Devices] in [Device Manager] contains a device bearing an exclamation mark. This does not indicate a malfunction.

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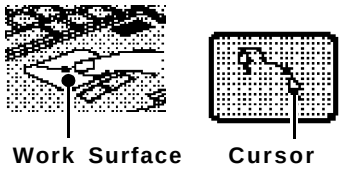
Using the Touch Pad

Use the touch pad to move the cursor on the display and perform normal computer operations. It is not necessary to apply too much pressure on the work surface.

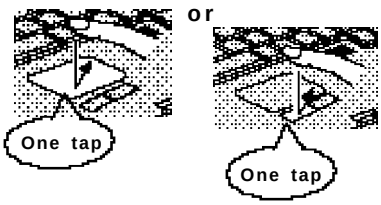
CAUTION

Do not turn the computer ON while your fingers are in contact with the touch pad. The operation of the touch pad may be affected. If operation is affected, wait at least five seconds before using the computer.

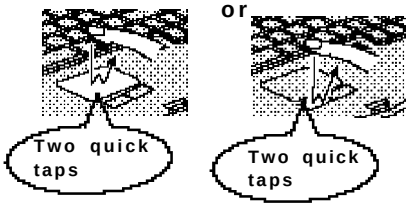
Moving the cursor



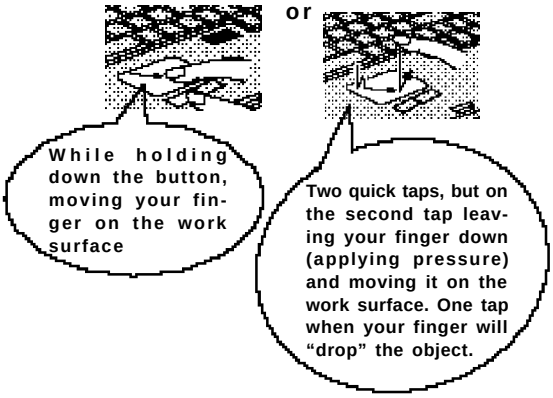
Clicking



Double-clicking



Dragging



NOTE

To change the touch pad settings, select [Mouse] in [Start] - [Settings] - [Control Panel]. Even if [Left-handed] is selected in the mouse settings, tapping the touch pad will have the same effect as clicking the left button of the touch pad.

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Shutting Down (power off your computer)



1 To shut down, save all data and select [Shut Down] from the [Start] menu

NOTE

From the keyboard,
you may choose to press down on , then select [Shut Down].

2 Confirm shutdown

Select [Shut down], then press OK. Your computer will power off automatically.
(In the OFF state, if you are not recharging your battery pack or if the pack is fully charged, your computer consumes approximately 1.1W.)

Restarting your computer (without shutting down)

Select OK after selecting [Restart].

NOTE

To quickly resume computer operation after shutting down,
the suspend and hibernation functions are available (☞below).

Restarting your computer in MS-DOS mode

Select OK after selecting [Restart in MS-DOS].

NOTE

When returning to Windows 95 from the MS-DOS mode, type "EXIT" and not "WIN". Returning to Windows 95 using the "WIN" command may result in a malfunction.

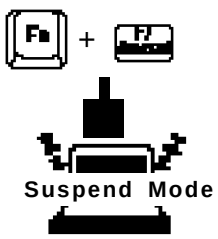
Starting Up Your Computer Quickly

If you want to immediately start up and continue an application after shutting down your computer, you can do so by using the suspend or hibernation function.

Differences between the suspend function and hibernation function

Function	Where data is saved to	Speed	Requires power supply
Suspend function	Memory	Fast	Yes (if power is cut, all data is lost)
Hibernation function	Hard disk	Somewhat slow	Power not required to maintain data

Shutting Down



Using the suspend function

NOTE

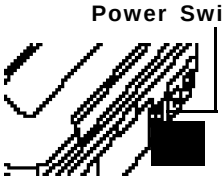
You can use the suspend function by selecting [Suspend]* from the [Start] menu.

* [Suspend] is deleted from the [Start] menu by unchecking [Allow Windows to manage power use on this computer.] in [Start] - [Settings] - [Control Panel] - [Power] or by unchecking [Show suspend command on Start menu] in [Advanced].

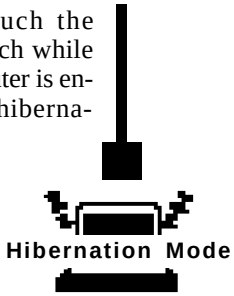
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Using the hibernation function

It is necessary to set the hibernation function using the Setup Utility.



Do not touch the power switch while your computer is entering the hibernation mode.



1 **Run the Setup Utility** (☞ page 40)

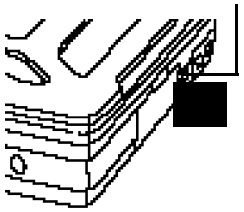
2 **Using ↑ and ↓, select [Power Management], then press Enter**

3 **Using ↑ and ↓, select [Power Switch], set [Hibernation] with →, then press Enter**

4 **Close the Setup Utility** (☞ page 40)

CAUTION

- Save all data before powering off your computer.
- When restarting from or shutting down to the suspend or hibernation mode, do not touch the touch pad or move the mouse (serial or PS/2 type) if one is connected. There are cases where these devices will fail to operate; you will have to restart your computer using the keyboard (☞page 10).
- Do not power off during the following periods (you may corrupt your data or file):
  - While the Multimedia pocket indicator (▣) or HDD indicator (▤) is on.
  - While playing/recording audio files.
  - While communications software is being used.
- Do not use the suspend or hibernation function when using an OS other than Windows 95, the diagnostics program (DIAG25), or the Setup Utility, or when experiencing static electricity or noise.
- If you hold down on the Fn, Ctrl or Alt key to enter the suspend or hibernation mode, after resuming operation, you must press the same key. For example, if you hold down on the Alt key while sliding the power switch, upon resuming, if you do not press the Alt key again, only capital letters will result from typing.
- If your computer locks up, press the reset button. All data is lost when this button is pressed.
- In the suspend mode, power is consumed. If PC cards (e.g., modem card) are inserted, more of that power is consumed. When all power has been consumed, all data at shutdown is lost since it is retained in memory. We therefore recommend plugging in the AC adapter when using the suspend function.
- When the file in the external devices such as a CD-ROM drive, external hard disk, or ATA cards is opened, the suspend or hibernation function may not work. In such cases, close the file.
- SCSI cards may not recover to work after entering the suspend or hibernation mode. If this occurs, restart the computer.



Resuming Operation

If security indicator (🔑) is displayed upon sliding the power switch, your password has been set (☞page 8).

CAUTION

- Do not install or remove peripherals while your computer is in the suspend or hibernation mode; abnormal operation may result.
- When operation resumes, serial devices such as a mouse or modem, or your PC Cards may not work. In such cases, you will need to restart your computer or reinitialize the individual devices.

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Computing On the Road

One of the main features of notebook-type computers is that you have the power of computing away from your home or office. In the following, information is provided on how to maximize use of the battery pack which is necessary for such computing.

Four Important Points

POINT 1 Be sure to charge your battery before and after use.

POINT 2 To get the maximum use of your battery, set the power management mode.

POINT 3 Check to see that you have your AC adapter with you before leaving your home or office.
Purchasing an extra battery (CF-VZS251) or the optional battery charger (CF-VCB251A) is highly recommended.

POINT 4 Always watch your battery level!

Conserving Power

Things to Remember

- **Leave your computer off when it is not in use** (☞page 10)
- **Adjust the brightness (dark) with Fn + F6, F7** (☞page 42)
- **Before stepping away from your computer, press Fn + F4 to put your computer in the standby mode**
  The standby mode helps you conserve power by cutting off power to LCD etc.. To resume, you may press any key.
- **In the power management mode, the setting of [Advanced] is recommended** (☞page 13)
  With the Setup Utility, you can set the [Advanced] mode. This mode allows you to maximize power save regardless of whether you are using only the battery pack or the AC adapter.
- **Setting the hibernation timeout** (☞page 13)
  The hibernation function (☞page 11) allows you to save power by automatically cutting off power when the computer is idle or there is no access to individual devices for 4 or 16 minutes. If [Advanced] or [Standard (Battery/AC adapter)] is selected for [Power Saving], the hibernation timeout function will go into effect for both the battery pack and the AC adapter. If, however, [Standard (Battery)] is selected for [Power Saving], it will go into effect only during operation by the battery. The standby timeout function is automatically set when [Advanced] or [Standard] is set. Note that the standby timeout precedes the hibernation timeout.
  It should be noted that for some applications, the hibernation timeout will not work properly.

NOTE

If you plan to use only the battery pack or set the power management, it is necessary to check ✔ [Allow Windows to manage power use on this computer] in [Start] - [Settings] - [Control Panel] - [Power]. If no check is added, the hibernation timeout will not occur.

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Setting Power Management

(How to set [Advanced] and the hibernation timeout)

1 **Run the Setup Utility** (☞ page 40)

2 **Using ↑ and ↓, select [Power Management], then press Enter**

3 **Using ↑ and ↓, select [Power Saving], then set [Advanced] with →**

(To avoid setting the hibernation timeout, press Enter and proceed on to step ***6***.)

4 **Using ↑ and ↓, select [Power Switch], then set [Hibernation] with →**

5 **Using ↑ and ↓, select [Hibernation Timeout], set either [4 min] or [16 min] with →, then press Enter**

6 **Close the Setup Utility** (☞ page 40)

● Power Management settings

Power Management \ Functions automatically set	CPU Speed Change Mode	HDD Motor Timeout	Standby Timeout
Advanced	Enable	1 min	1 min
Standard (Battery/AC adapter)	Enable	1 min	2 min
Standard (Battery)*	Enable	1 min	2 min
OFF	Disable	Never	Never

* Enabled only when the battery itself is being used.

- **CPU Speed Change Mode**: In this mode, the CPU is automatically stopped when there are no operations.
- **HDD Motor Timeout**: When the hard disk drive is not accessed for more than a minute, power to the motor is shut off.
- **Standby Timeout**: When the computer is idle or a device is not accessed for one or two minutes, the computer enters the standby mode.

CAUTION

When you need a network environment.

Be sure to disable the hibernation timeout settings with the Setup Utility .

After resuming operation from the hibernation mode, the network connection may be severed or the computer will not work properly.

In communications when a device like a high-speed modem or ISDN terminal adapter is connected to the serial port, etc.

There are times when high-speed communication is adversely affected if the power management function is enabled.

Key operation and music playback

When the power saving function is running, you may feel that key and mouse operations are sluggish. Furthermore, music may not be played back correctly when entering the standby mode during playback.

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Battery Status

Use the Battery Indicator to Check on the Battery Status

(☞page 15)

Battery Indicator	Battery Status
Orange*	Charging
Green*	Fully-charged
Red	Battery charge is low (the charge is less than approx. 9% capacity)
Blinking red*	Battery pack or charger may not be working properly. Check your connections. If the problem persists, consult your nearest Panasonic dealer.
Blinking orange for 5 seconds after the AC adapter is connected*	Unable to recharge due to violation of temperature limits (☞page 15)
Blinking orange**	Refreshing
Blinking green**	Refreshing required

* When the AC adapter is connected, you must wait a few seconds before the LED indicator turns on.

** Only using CF-VZS250A or CF-VZS252 (Ni-MH).

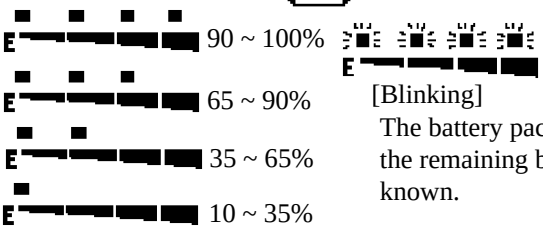
NOTE

When using the optional CD-ROM pack:

Recharging is temporarily stopped when the drive is being accessed. In the case, the battery indicator goes off temporarily. In addition, recharging is temporarily discontinued when the CD-ROM autoplay function is enabled. For more information, please read the operating instructions that is supplied with the CD-ROM pack.

Getting a detailed reading





[Blinking]

The battery pack is not installed or the remaining battery charge is not known.

NOTE

- When the battery indicator remains red (or a 99% reading is displayed) for an extended period of time, the actual remaining battery level and the displayed level may differ. Should this occur, charge the battery until the indicator is green, then completely discharge the battery.
- When the battery pack is not in the computer, is displayed.

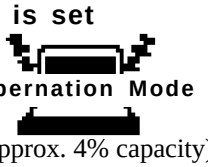
When the Remaining Battery Charge Becomes Low

Perform the following:

- Plug in the AC adapter, and fully charge your battery.
- Use a spare battery if you have one.
- If you have neither the AC adapter nor an extra battery, power the computer off or do not power on.

If the hibernation function is set

Red indicator lights
Beep sounds**
(at approx. 9% capacity)



(at approx. 4% capacity)

** When disabling the speakers with the Setup Utility (or pressing Fn + F1), the warning beep is also disabled.

If the hibernation function is not set

Red indicator lights (at approx. 9% capacity) → Beep sounds (at approx. 4% capacity) → Computer goes off (at approx. 0% capacity)

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Battery Power

Precautions

- Care should be exercised with regard to the following in order to avoid the possibility of liquid leakage, overheating, or bursting.
  - Do not throw the battery pack into a fire or expose it to heat.
  - Do not place the battery pack together with articles such as necklaces or hairpins when carrying or storing.
  - Do not insert sharp objects into the battery pack, expose it to bumps or shocks, deform, disassemble, or modify it.
  - Do not short the positive (+) and negative (-) contacts.
  - The battery pack is a rechargeable battery intended for use with the CF-25 series or the specified charger (CF-VCB251A). Do not use it with a computer other than the one for which it was designed.
  - Do not charge, use or leave the battery pack for extended periods where it will be exposed to direct sunlight, in a hot place (in an automobile on a sunny day, for example), or in a cold place.
- Do not touch the terminals on the battery pack. The battery pack may no longer function properly if the contacts are dirty or damaged.
- Do not expose the battery to water, or allow it to become wet.
- Do not put the battery into a microwave oven or a pressurized chamber.
- This computer prevents overcharging of the battery by recharging only when the remaining power is less than approx. 95% of capacity.
- Should the battery leak and some of the fluid gets into your eyes, do not rub your eyes. Immediately flush your eyes with clear water and see a doctor for medical treatment as soon as possible.
- Should the battery emit an abnormal odor, become hot to the touch, become discolored, change shape, or become in any way different from normal, remove it from the unit or charger and discontinue use.
- If the battery pack will not be used for a long period of time (a month or more), charge the battery pack until the remaining battery level becomes 30% to 50% and store it in a cool, dry place.

NOTE

- The battery pack may become warm during recharging or normal use. This is completely normal.
- Recharging will not commence outside of the allowable temperature range (0 °C to 35 °C (32°F to 95 °F)). To allow the battery to charge, adjustments have to be made to the temperature. Once the allowable range requirement is satisfied, charging begins automatically. Note that the recharging time varies based on the usage conditions. (Recharging takes longer than usual when the temperature is 10 °C (48 °F) or less.)
- If the temperature is low, the operating time is shortened. Therefore, please use the computer within the allowable temperature range.
- Although the battery has not begun to run down, the battery indicator may light up red or emit a beep. This indicates a significant rise in the temperature of the battery pack. This is typically caused by the fact that the battery pack has been delivering a high level of power because the computer has been used with the display at the brightest setting and with the power-saving function off. In order to protect the battery pack from temperature rises, connect the AC adapter, set the power-saving function, and turn down the brightness of the display. If power discharge continues for 5 minutes or more while the battery pack's temperature remains high, the computer automatically turns itself off.
- When disabling the speaker using [System Setup] in the Setup Utility, the battery low warning beep is also disabled.

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Replacing the Battery Pack

When the charge provided by your battery pack is supplied for only a short period of time, even after fully charging according to the instructions, it may be time to replace your battery pack. The battery pack is a consumable item and therefore will require replacement [CF-VZS250A (Ni-MH) or CF-VZS251 (Li-Ion)].

1 Power off your computer (☞page 10)

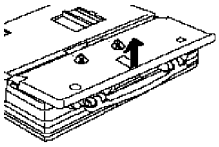
Do not shut down using the suspend mode.

CAUTION

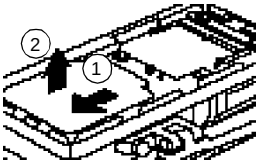
In the suspend mode, do not remove/change the battery pack. Removing the pack in the suspend mode will erase your data and may damage the computer.

2 Loosen the screw, and then take off the cover

Turn your computer over. Then, loosen the screw with a screwdriver and remove the cover.



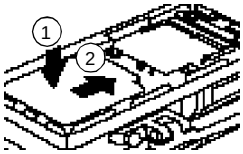
3 ● Taking out the battery pack



① Slide the battery pack toward the outside edge.

② Lift the battery pack.

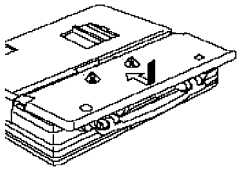
● Inserting a battery pack



① Drop a new battery pack into the computer.

② Slide the battery pack inward until it is firmly in place.

4 Put the cover back into place and then fasten the screw



NOTE

- Besides the AC adapter (CF-AA1526) an optional battery charger (CF-VCB251A) is available. This device is convenient in that it allows you to charge another battery pack while you are using the computer.



- **Using CF-VZS250A or CF-VZS252 (Ni-MH)***

Battery refreshing involves power discharging and recharging (the latter only if the AC adapter is connected.) Follow the instructions below to execute the battery refresh tool after the battery becomes fully charged. The battery refreshing time ranges between three and twelve hours, depending on the state of the battery.

① Restart the computer in the MS-DOS mode.

② Type the following at the MS-DOS prompt.

```
battref
```

③ A verification message will appear. Press Y. The computer is automatically rebooted.

④ Press any key to start discharging the battery. Leave the computer on until the power indicator goes off, even if the screen goes off.

⑤ When the power indicator goes off, battery charging commences automatically. If the AC adapter is not connected, connect it to charge the battery fully.

When charging a completely discharged battery, ensure the proper refresh effect by leaving the AC adapter plugged in until the battery indicator changes to green (which indicates a complete recharge).The battery indicator becomes orange (charging mode) quite quickly, but charging is not performed for the first one hour in order to increase the charging efficiency.

* Battery refreshing is not needed when using the Li-Ion battery pack.

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Security Measures

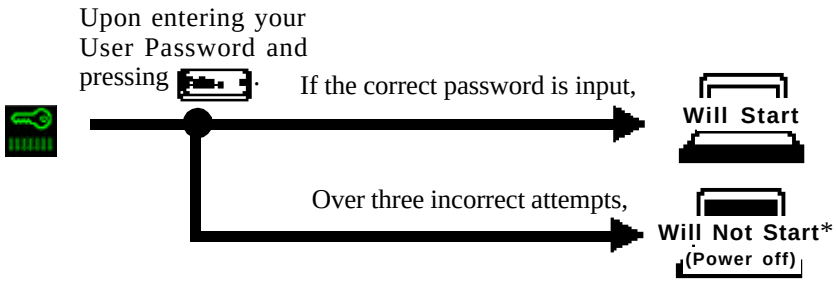
To prevent unauthorized access of your computer, the various security measures are provided below.

Situation	Function to use	Reference
You do not want your computer to be used without permission	User Password	☞below
Same as above, but while you're away temporarily	Coffee break Password	☞page 18
You want to prevent theft or damage to data by using a floppy disk	Prevent operation by using a floppy disk	☞page 19
You do not want your Supervisor Setup changed without permission	Supervisor Password	☞page 19
You want to prevent theft of your computer	Use a security lock	☞page 43

When you do not want your computer to be used without permission

Set the User Password.
Without the password, access to your computer is impossible.

● When the User Password is set



* If you are starting from the suspend mode (☞ page 10), if after three attempts the correct password is not input, or if no password is entered for about a minute, the computer returns to the suspend mode.

Setting the user password (enabling, changing, disabling)

1 **Run the Setup Utility** (☞ page 40)

2 **Using ↑ and ↓, select [System Setup], then press Enter**

3 **Using ↑ and ↓, select [User Password], then press Enter**

4 ● **To enable or change your password**

Enter your password at the [Enter User Password], then press Enter.

CAUTION

- Your password will not be displayed on the screen.
- Please limit your password to seven characters. Note that there is no distinction between upper and lower case letters.
- White colored keys can be used. Note that the space bar and function keys cannot be used.
- Do not input your password while holding down on Ctrl or Alt.
- Use only the upper horizontal row of numeric keys to input your user password. The numeric keys combined with alphabet keys on the lower keyboard cannot be used.
- Do not forget your password. If a password is forgotten you will be unable to use your computer.

● **To disable your password**

Using the ↑ and ↓ keys, select [Delete User Password], then press Enter. Go to step **7**.

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5 **Re-enter your password at the [Enter User Password Again]** (This is for confirmation purposes.)

6 **Using and , select [Set User Password], then press**

7 **At the confirmation screen, press**

8 **Press to end the password setting procedure**

9 **Close the Setup Utility** (☞ page 40)

CAUTION

To prevent the changing of your password without permission

- When running the Setup Utility program, do not leave your computer even for a short time.
- Set the User Password Protection option (☞page 20).

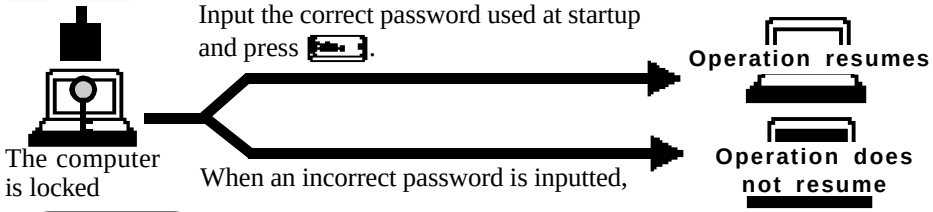
When you do not want your computer to be used without permission while away temporarily

You should set the "Coffee break Password" (Note that you must first set the User Password). When you input your selected key combination, the computer locks (key input, use of the touch pad and use of an external mouse are no longer possible).

● **When the coffee break password is set**

When leaving your desk

Alt + Ctrl + F5 (Example of a selected key combination)



CAUTION

- Do not leave your computer just after sensitive data had been shown on the screen.
- It is impossible to lock your computer from an external device, such as a mouse connected through the serial port.
- During the coffee break, is displayed on the screen. If the operations described below are performed during the coffee break, the indication may disappear. In order to quit the coffee break and again begin using the computer, input your password.
  - If the computer is returned from the standby mode.
  - If the serial mouse is moved.

Setting the Coffee break Password (enabling or disabling)

1 **Set the User Password** (☞page 17 step ***1*** to ***7***)**, if it hasn't yet**

2 ● **To enable the Coffee break Password**

Using and , select [Coffee break Password], then set [Enable] with .

● **To disable the Coffee break Password**

Using and , select [Coffee break Password], then set [Disable] with .

Go to step ***4***.

3 **Using and keys, select [Key Combination for Coffee break], then set your combination of keys with**

4 **Press to end the password setting procedure**

5 **Close the Setup Utility** (☞ page 40)

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When you want to prevent theft of or damage to data by using a floppy disk

You may choose to protect the data on your computer from being accessed illegally or overwritten accidentally by using a floppy disk. You can also set your computer to be unbootable from a floppy disk.

● Preventing the use of a floppy disk

Even when one tries to access a floppy disk,

This error message is displayed.



Procedure

1 **Run the Setup Utility** (☞ page 40)

2 **Using ↑ and ↓, select [Supervisor Setup], then press Enter**

3 **Using ↑ and ↓, select [Boot Up Drive], then set either [HDD → FDD] or [CDD → FDD → HDD] with ↓**

CAUTION

When changing to the [HDD → FDD] or [CDD → FDD → HDD] setting, to continue read/write operations from a floppy disk and to use the hard disk drive or CD-ROM to start, press Enter and go to step ***5***.

4 **Using the ↑ and ↓, select [Floppy Operation], set [Disable] with ↓, then press Enter**

5 **Close the Setup Utility** (☞ page 40)

When you do not want your Supervisor Setup changed without permission

Set the Supervisor Password. After it has been set, no changes can be made to the Supervisor settings unless the password is entered.

● When the supervisor password is set

In the Setup Utility (☞page 40), if "Enter Supervisor Password" is displayed,

Input the correct supervisor password and press Enter,

Supervisor Setup
May be Opened

When the supervisor password is incorrect or when the user password is entered, (Or, even when the correct supervisor password is entered). ☞page 32

Supervisor Setup
Can not be Opened

(There are cases in which the Supervisor Setup does not appear on the main screen). ☞page 40

NOTE

You may wish to protect the User Password (☞page 20).

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Setting the Supervisor Password

(enabling, changing, disabling)

1 **Run the Setup Utility** (☞ page 40)

2 **Using ↑ and ↓, select [Supervisor Setup], then press Enter**

3 **Using ↑ and ↓, select [Supervisor Password], then press Enter**

4 ● **To enable or change your supervisor password**

Enter your password at the [Enter Supervisor Password], then press ↑.

CAUTION

- Your password will not be displayed on the screen.
- Please limit your password to seven characters. Note that there is no distinction between upper and lower case letters.
- White colored keys can be used. Note that the space bar and function keys cannot be used.
- Do not input your password while holding down on Alt or Ctrl.
- Use only the upper horizontal row of numeric keys to input your user password. The numeric keys combined with alphabet keys on the lower keyboard cannot be used.
- Do not forget your password. If a password is forgotten you will be unable to use your computer.

● **To disable your supervisor password**

Using ↑ and ↓, select [Delete Supervisor Password], then press Enter.
Go to step **7**.

5 **Re-enter your password at the [Enter Supervisor Password Again]**

(This is for confirmation purposes.)

NOTE

When you do not want the User Password enabled, changed, or disabled without permission,

use ↑ and ↓ to select [User Password Protection], then set [Enable] with Space.

6 **Using ↑ and ↓, select [Set Supervisor Password], then press Enter**

7 **At the confirmation screen, press Enter**

8 **Press Esc to end the password setting procedure**

9 **Close the Setup Utility** (☞ page 40)

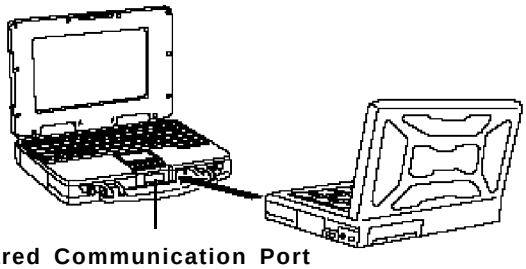
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Infrared Data Communications

Your computer is equipped with an infrared communications port enabling you to transfer data without a cable.

Preparations for Infrared Data Communications

- Set the address of your infrared communications port to enable.
- Position your computer so that the port is face-to-face with the port of another computer.
- Be sure the computers are not in direct contact with one another.
- A port-to-port distance of 20 to 50 cm (8 to 20 inches) is recommended.



Infrared Communication Port

CAUTION

In the Setup Utility, select [IrDA] in [Supervisor Setup] and set [Automatic (PnP)] or [2F8]. Setting [OFF] will make infrared data communications impossible.

Problems with infrared data communications

- An object is located between both ports.
- There are other electronic devices nearby causing interference, such as a television, VCR, wireless headphone, etc.
- Direct sunlight or white glowing light, such as fluorescent lighting; can cause interference with communications between the ports.

Running TranXit™

TranXit comes preinstalled and allows you to perform infrared data communications, such as the transfer of data or the updating of information between two computers. Note that both computers need to have TranXit installed and running.

Running the program

Select [TranXit] from [Start] - [Programs] - [TranXit].



NOTE

Online help is available on how to use TranXit. Click [TranXit Quick Reference Guide] in [Start] - [Programs] - [Panasonic]. (Installing TranXit ☞ page 35)

Setting or changing the "Computer Name"

It is necessary to assign a different "Computer Name" to each computer; select [Computer Name] in [Setup] to change the name.

CAUTION

- In [Control Panel], if [Infrared] is enabled, TranXit can not be used. For TranXit to be operable, [Infrared] must be disabled.
- Exit TranXit before entering the suspend or hibernation mode. Start TranXit again after the computer resumes.

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Hardware Expansion

Devices capable of being used by your computer are listed in the table below.

Device(s)	Where to connect	Reference
PC Cards (Modem, LAN, SCSI, etc.)	PC Card Slots	☞page 23
Serial Devices (Mouse, Modem, etc.)	Serial Port	☞page 43
CD-ROM drive (CF-VCD252)	Multimedia Pocket	☞below
Second Battery Pack (CF-VZS252)	Multimedia Pocket	☞below
Extra Memory	RAM Module Slot	☞page 24
External Display	Ext. Display Port	☞page 25
Printer	Parallel Port	☞page 26
Port Replicator (CF-VEB251)	Expansion Bus Connector	☞page 26
Keyboard, External Mouse [Type PS/2], etc.	Ext. Keyboard/Mouse Port	☞page 42
Speaker/Headphone	Headphone Jack	☞page 42

Using a multimedia pocket device

The multimedia pocket houses the floppy disk drive (FDD) that comes with this computer. The FDD can be replaced with an optional unit.[CD-ROM Pack (CF-VCD252), Second Battery Pack (CF-VZS252)].

Installing/Removing a multimedia pocket device

1 Power off your computer (☞page 10)

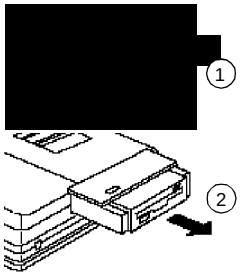
Do not shut down using the suspend mode.

CAUTION

In the suspend mode, do not remove/change the multimedia pocket device. Removing the device in the suspend mode will erase your data and may damage the device.

2 Turn your computer over and open the cover

3 ● Removing a multimedia pocket device

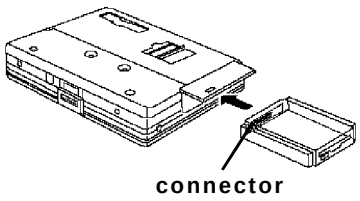


① Slide the MP release toward the MP device. The MP device should slide out.
② Pull out the device.

● Inserting a multimedia pocket device

CAUTION

- Make sure that the position of the peripheral connector is located as shown in the illustration.
- Gently install / remove any multimedia pocket device. Do not use excessive force when installing.



Push the unit in until it snaps into place. Confirm that the MP release has returned to its original position.

CAUTION

You may use the floppy disk drive as an external unit that is connected through the parallel port, by using an optional FDD cable (CF-VCF351). Some precautions are necessary, as described below, since problems may arise.

- Do not move the drive while accessing data on the floppy.
- Firmly hold both sides of the drive when removing a disk. Excessive force on top should be avoided.

NOTE

- The "Software Preparation (first time only) Windows 95 model" described in the Operating Instructions of the CD-ROM Pack has been changed. The following settings are necessary in order to prepare the CD-ROM Pack for use:

1 Select [Start] - [Settings] - [Control Panel] - [System] - [Device Manager] - [CD-ROM] - [MATSHITAUJDCD8715] - [Settings]. Set [Start drive letter] and [End drive letter] of [Reserved drive letter] to [L].

2 Clear the check mark from [Auto insert notification] under [Options]. If this setting is omitted and power saving mode is turned on (using the Setup Utility), the power saving mode is still disabled. Also, charging takes place intermittently, even during charging, so the battery indicator periodically lights and goes dark.

3 Select OK. Follow the instructions that appear on the screen to restart the computer.

- Even after installing the CD-ROM Pack or Second Battery Pack, "Removable Disk (A:)" is displayed in "My Computer", but access is not possible. When the display appears, select [Cancel].

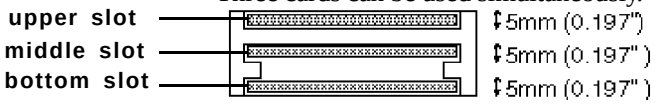
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Using PC Cards

Your computer has three PC Card slots. These slots conform to the PC Card Standard; therefore, communications and SCSI devices may be utilized. The slots allow you to use three Type I or Type II cards (or two Type I and one Type II), or one Type III card.

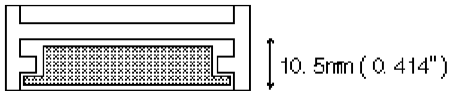
Type I or II

Three cards can be used simultaneously.



Type III

One card can be used only in the bottom slot.



CAUTION

- Please check the PC Cards' specifications. Be sure the total operating current does not exceed the specified limit. Damage may result otherwise.
  Allowable Current (total for three slots) : 3.3 V: 400 mA, 5 V: 400 mA, 12 V: 120 mA
- There are times when both a Type I card and a Type II card will not work at the same time.
- SRAM and FLASH ROM cards (except for ATA interface) are not supported.
- When using a CardBus type card, use only that card; do not insert any other PC Cards.
- **Only the bottom slot can support a Zoomed Video (ZV) card.**
- **Only the middle or bottom slot can support a CardBus.**

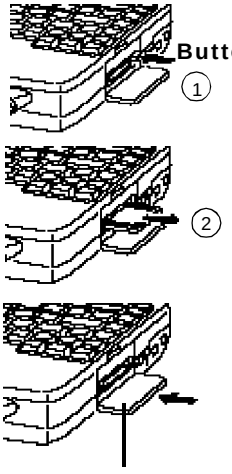
Installing/Removing a PC Card

1 Power off your computer (☞page 10)

Do not shut down using the suspend or hibernation mode.

CAUTION

- Do not install or remove peripherals while your computer is in the suspend or hibernation mode; abnormal operation may result.
- Before removing a PC Card, go to [Socket Status] (in [Start] - [Settings] - [Control Panel] - [PC Card (PCMCIA)]), select the PC Card slot and press [Stop].



Label-side up

2 Removing a PC Card

① Press the button a second time to partially eject the PC Card.

② Pull the PC Card the rest of the way out.

Installing a PC Card

Simply slide the PC Card in until it snaps into place. Please refer to the manual for each card on how to install the card (insertion is typically label-side up).

CAUTION

After you insert a PC Card, a message may appear instructing you to insert the Windows 95 CD-ROM. If this happens, press the [Browse] button, then type "c:\windows\options\cabs". If you have a floppy disk with a driver, insert the disk in the floppy disk drive, then type "a:".

3 Turn your computer on

There are some PC Cards that require a special or updated device driver be installed. Follow the instructions on the screen and read any related manuals on how to install device drivers.

NOTE

You may need to install a driver from the Windows 95 CD-ROM (included) or a PC Card's floppy disk. Simply follow the on-screen instructions and read the PC Card's operation manual on how to install the driver.

CardBus:

- You may experience noise when using a CardBus card, inserted in the PC Card slot. Also, please note that a parallel device in the ECP mode may not function. Do not use the ECP mode and disable the sound chip in the Setup Utility ([Supervisor Setup] - [Sound Chip] and [Parallel Port (Data Direction)]) when using a CardBus card.
- Use a CardBus card alone with no other card inserted.

ZV Card:

When you use a ZV Card, installation of PhoenixCard Manager95 is needed. Follow these instructions to load PhoenixCard Manager.

1. Set the items of [Sound Chip] to [Automatic (PnP)] in the Setup Utility.
2. Select [Start] - [Run] and type "c:\util\drivers\pccard\disk1\setup.exe", press [OK], then follow the on-screen instructions.

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Adding Memory

CAUTION

RAM modules are extremely sensitive to static electricity. There are cases where static electricity generated by the human body has adversely affected such modules. In addition, it is easy to damage the RAM modules or internal components of the computer. Therefore, when installing or removing a RAM module, handle the module with extreme care.

Installing/Removing the RAM Module

RAM module specifications
144 pins, 60/70 ns, 3.3 V SO-DIMM, EDO

1 Power off your computer (☞page 10)

Do not shut down using the suspend or hibernation mode.

CAUTION

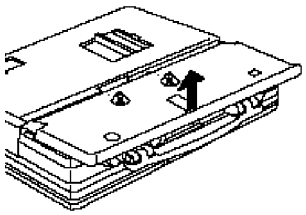
Do not install or remove peripherals while your computer is in the suspend or hibernation mode; abnormal operation may result.

2 Loosen the screw, and then take off the cover

Turn your computer over. Then, loosen the screw with a screwdriver and remove the cover.

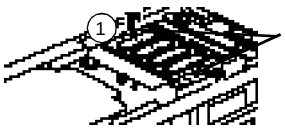
CAUTION

Do not touch the terminals or internal components, insert objects other than the module, or allow foreign particles to enter. Doing so has been known to cause damage, fire or electric shock.











3 ● Installing the RAM module

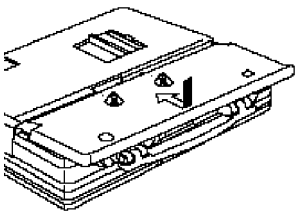
① Slide in the module at an angle.

② Snap the module into place by pushing down on it.

● Removing the RAM module

① Open the left and right hooks.

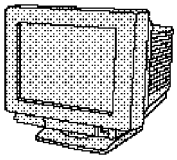
② Gently remove the RAM module from the slot.

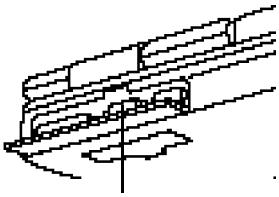


4 Put the cover back into place and then fasten the screw

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Using an External Display





Ext. Display Port

1 Power off your computer (☞page 10)

Do not shut down using the suspend or hibernation mode.

CAUTION

- Do not install or remove peripherals while your computer is in the suspend or hibernation mode; abnormal operation may result.

2 Connect the external display to your computer

NOTE

For more detailed information, please refer to the operation manual for the external display.

3 Turn on the display, then turn on your computer

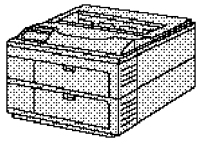
● **To display on both the LCD of your computer and the external display**

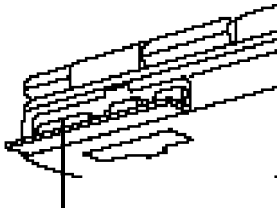
1. **Run the Setup Utility** (☞page 40).
2. **Using and , select [System Setup], then press**
3. **Using and , select [Display], set [Simultaneous] with , then press**
4. **Close the Setup Utility** (☞page 40).
5. **Select your external display**
   Set your external display for [Models] in [Start] - [Settings] - [Control Panel] - [Display] - [Settings] - [Advanced Properties] - [Monitor] - [Change] - [Show all devices], then press OK.

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Hardware Expansion

Using a Printer





Parallel Port

1 **Power off your computer** (☞page 10)

Do not shut down using the suspend or hibernation mode.

CAUTION

Do not install or remove peripherals while your computer is in the suspend or hibernation mode; abnormal operation may result.

2 **Connect the printer to your computer**

NOTE

Some printer cables may be difficult to connect, and may require removal of the rear cover. Take care not to lose the cover.

3 **Turn on the printer, then turn on your computer**

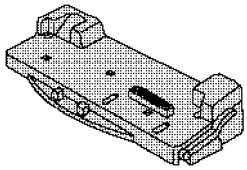
4 **Setting your printer**

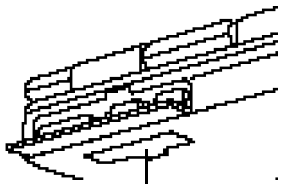
Go to [My Computer] - [Printers]. Find your printer's icon, double-click on it, and click [File] - [Set As Default]. If no icon is available, select [Add Printer] and install the driver program.

NOTE

You may need to install a driver for your printer. Simply follow the on-screen instructions and refer to the operation manual for the printer on how to install the driver.

Connecting a Port Replicator





Expansion Bus Connector

The port replicator (CF-VEB251) connects to the expansion bus connector on the bottom of your computer.

When your computer is not connected to the port replicator, be sure that the expansion bus connector on the bottom of the computer is covered.

For more detailed information, please refer to the operation instructions for the port replicator.

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To change your hard disk, consult your nearest Panasonic Dealer or authorized Service Center

CAUTION

To customers:

- To change your hard disk, consult your nearest Panasonic dealer or authorized Service Center.
- Be sure to back up all important data before the change.

To technicians (at a Panasonic dealer or authorized Service Center):

Be careful when replacing the hard disk. The hard disk is extremely sensitive to shock. In addition, static electricity could later affect some internal components.

Installing/Removing the hard disk

(For technicians at Panasonic dealer or authorized Service Center)

1 Power off your computer (☞page 10)

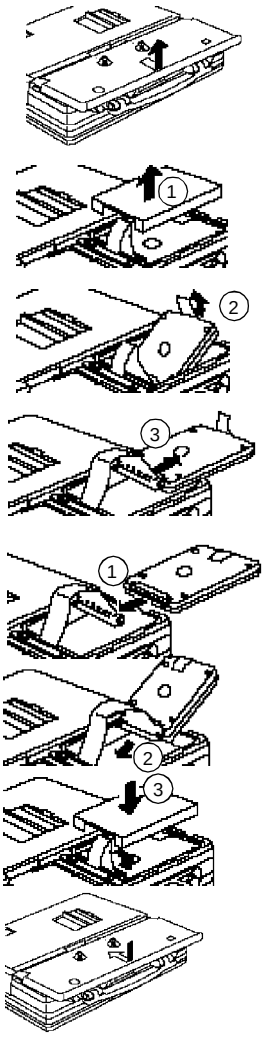
Do not shut down using the suspend or hibernation mode.

CAUTION

- Do not install or remove peripherals while your computer is in the suspend or hibernation mode; abnormal operation may result.

2 Loosen the screw, and then take off the cover

Turn your computer over. Then, loosen the screw with a screwdriver and remove the cover.



3 ● Removing the hard disk

① Remove the dampers protective cover.

② Lift out the hard disk.

③ Detach the cable connected to the hard disk.

● Installing the hard disk

① Attach a new hard disk.

② Return the hard disk into the computer. Be sure that the damper does not get entangled at the bottom of the hard disk.

③ Place the damper protective cover back onto the computer.

4 Put the cover back into place and then fasten the screw

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Usage, Carrying and Maintenance

Usage Environment

Environment

- Place the computer on a flat stable surface.
- In use: Temperature: 5 °C to 35 °C (41 °F to 95 °F)
  Humidity: 30% to 80% RH (No condensation)
- Not in use: Temperature: -20 °C to 60 °C (-4 °F to 140 °F)
  Humidity: 30% to 90% RH (No condensation)

Places not to use your computer

- Such areas may result in damage to the computer.

Areas exposed to direct sunlight



Areas with electronic equipment

These areas may interfere with your display or cause your computer to produce strange sounds.

Areas with extremely high/low temperatures

- Do not leave things near the computer that are sensitive to heat. During operation, the computer can become quite hot.

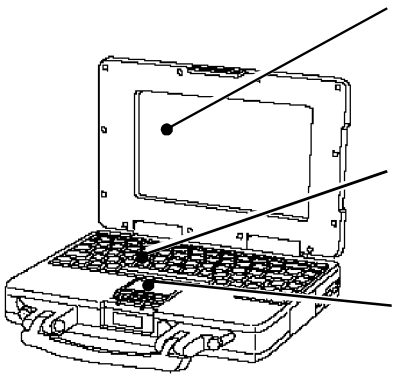
Carrying

- It is a good idea to make backup copies on floppy disks and carry them with you.
- Do not leave a floppy disk in the drive while transporting your computer.
- Do not carry your computer when it is ON.
- We recommend preparing a fully charged battery (and optional charger, if possible).
  When transporting spare batteries inside a package, briefcase, etc., it is recommended that the batteries be stored in a plastic bag.
- Do not carry the computer while the display is open, or carry it by gripping the display.
- Do not put anything (e.g., a piece of paper) between the display and keyboard.
- Do not drop or hit your computer against solid objects.
- If you have to ship your computer, make absolutely sure that it is packed with adequate protection.

When flying

Always carry your computer with you. Never check it with luggage.

Maintenance



Do not use a dry/wet (with water) cloth to wipe the display. We recommend cleaning the display with a soft cloth applied with isopropyl alcohol or ethyl alcohol. Please do not use other types of chemicals.

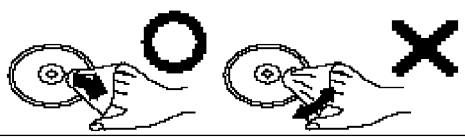
Do not use solutions such as benzene or another thinner. A soft, dry cloth is recommended.

When oil accumulates on the surface of the touch pad, use a damp cloth with dish washing liquid to wipe the surface, or a compact cassette head cleaner to remove the oil. The cursor may not move well when the surface is not clean.

CD-ROM

- Do not allow discs to become dirty or scratched.
- Do not place or store discs in locations exposed to heat, direct sunlight, humidity or dust.
- Do not write on the surface of the disc with ball-point pen or other writing instrument.
- Do not drop, bend, or place heavy objects on top of discs.
- If the disc is brought from cold into a warm environment, moisture may form on the disc. Wipe this moisture off with a soft, dry, lint-free cloth before using the disc.
- Cleaning the disc using a disc cleaner (LF-K022DC) is recommended once every 2 or 3 months.

If a disc gets dirty, after wiping the disc with a moist, soft cloth, wipe it with a dry cloth. Always wipe from the center toward the edge.



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Computer Diagnosis

List of Error Codes

If a problem occurs with your hardware, and [POST Start up Error(s)] is displayed along with the error code(s), follow the on-screen instructions.

Setup: Setup Utility (☞page 40) is started. Run [Load Default Settings (PnP)]. Next, the Setup Utility must be run again to input the appropriate operating environment settings.

Exit: Ignore the error message(s), and restart the computer.

Code		Description
062	Boot failure--default configuration used	Default configuration in use
101	System Board Failure	Interrupt controller failure
102	System Board Failure	Timer 2 test failure
106	System Board Failure	Diskette controller failure
114	Adapter ROM Error	Adapter ROM checksum error
151	System Board Failure	Real-time clock failure
161	Bad CMOS Battery	Dead battery
162	Configuration Change Has Occurred	Configuration error
162	Configuration Error	CMOS checksum error
163	Date and Time Incorrect	Real-time clock is not updating
164	Memory Size Error	Memory size error
201	Memory Size Error	Memory size/data error
301	Keyboard Error	Keyboard failure
303	Keyboard Error	Keyboard controller failure
662	Configuration Change Has Occurred	Diskette drive 0 configuration error
762	Configuration Change Has Occurred	Coprocessor configuration error
962	Configuration Change Has Occurred	Parallel port configuration error
1162	Configuration Change Has Occurred	Serial port configuration error
1762	Configuration Change Has Occurred	Fixed disk configuration error
1780	Hard Disk Error	Fixed disk 0 failure
1800	PCI Error	No more IRQs available
1801	PCI Error	No more room for optional ROM
1802	PCI Error	No more I/O space available
1803	PCI Error	No more memory (above 1 MB) available
1804	PCI Error	No more memory (below 1 MB) available
1805	PCI Error	Checksum error or 0 size optional ROM
1806	PCI Error	PCI-PCI bridge error
1962	IPL Error	An operating system could not be found
I9990301	IPL Error	Hard disk failure
I9990305	IPL Error	An operating system could not be found

Using the Self-diagnosis Program

Follow the procedure below to check whether each part of your computer is operating properly.

1 **To run the program, insert the Firstaid FD you created into the floppy disk drive, then turn your computer on**

2 **When the display below is shown, select [1. Boot]**

1. Boot
2. Restore HDD to factory default (For beginners)
3. Restore HDD to factory default (For advanced users)

3 **At the MS-DOS prompt (A:\WINDOWS\COMMAND>), input the following:**

diag25 

Follow the messages on the screen.

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Dealing with Problems

When a problem occurs, please refer to this page. If you think it has to do with the software application you are using, please read the related manual. If for some reason you still cannot figure out the problem, please consult your nearest Panasonic dealer.

Starting Up

The power indicator or battery indicator is not lit	● Check the cable connection for the AC adapter. ☞ page 6 ● Check to see if a fully charged battery is properly installed. ☞ page 14 ● Pressing the reset button will solve the problem. ☞ page 42
 **is displayed**	Please input your password. If you have forgotten it, consult your nearest Panasonic dealer.
 **is not displayed** **(Once this icon is executed, it will not be displayed later)**	If before you double-click  it disappears, select [Start]-[Run], input [c:\util\avapp\psetup.bat], and press OK.
 **is not displayed**	Select [Start]-[Run], input [c:\util\avapp\manual\seticon.bat], and press OK.
[POST Start Up Error(s)] is displayed	☞ page 29
The pre-memory count, Windows startup, or an operation is extremely slow	Run [Load Default Settings (PnP)] in the Setup Utility. This will restore the Setup Utility's settings to their default values (except the password settings). Then, the Setup Utility must be run once again for you to input the appropriate operating environment settings. (The processing speed depends on the application software used, so this operation may not cause the processing speed to increase.)
The date and time are incorrect	● You can set the date and time through [Date/Time] in [Start] - [Settings] - [Control Panel]. Another way is with the DATE and TIME commands in MS-DOS. ● If you continue to experience problems, the internal battery maintaining the clock may need to be replaced. Please consult your nearest Panasonic dealer.

Battery Indicator

The red battery indicator lights. **Repeated beeps sound while the computer is in use.**	The battery level is low. Connect the AC adapter or replace the battery pack with a fully charged one. If you have neither the adapter nor an extra battery, save your data and power off your computer.
The red battery indicator lights, a beep sounds	The battery temperature has risen due to electrical discharge caused by a large load. Connect the AC adapter, set the power-saving function, and turn down the brightness of the display to reduce the load on the battery.
The red indicator blinks	● The battery pack or recharging function may be defective. Quickly remove the battery pack and disconnect the AC adapter, then connect them again. ● If the problem persists, consult your nearest Panasonic dealer.
The red indicator lights (or a 99% reading is displayed) for an extended period of time	When the battery pack is fully charged, turn on your computer, unplug the AC adapter, then completely discharge the battery.
After the AC adapter is connected, the orange indicator blinks five times	Unable to charge because of an improper temperature range. ☞ page 15

Character Input

Unable to input anything but numerals	If **NumLk** and **Key Pad** are on, the Numeric Key Pad is ON. To switch it OFF, press  + .
Only capital letters are being input	If **CapsLock** is on, the Caps Lock is ON. To switch it OFF, press .
How to input European characters (ß, à, ç) or symbols is unclear	Select [Start] - [Run], input [c:\windows\charmap.exe] and press OK. The Character Map will be displayed. Point to the desired font name and select it.

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Display

No display after powering on	● The brightness can be adjusted with + . ● When purchasing the computer, the display setting has been preset for an external display. If you connect an external display, the screen is displayed on the external display. ● When there is no display to an external display, • Check your cable connection for the external display. • Confirm your display is on. ● If your computer is connected to an external display and the internal LCD has been set to "off", and the computer is placed in the hibernation or suspend mode, the internal LCD will remain in the "off" mode if the external display is not connected when the computer is restarted. In this case, re-connect the external display and reboot the computer.
The power has not been cut, but after a certain period of time, there is no display	● Has the computer been set to the power-saving mode? To resume operation of your computer, press any key. ● To save power, your computer may have automatically entered the hibernation mode. (☞page 11).
An afterimage appears	If an image is displayed for a prolonged period of time, an afterimage may appear. This is not a malfunction. The afterimage will disappear when a different screen is displayed.
The motion of the mouse cursor is not smooth	Select [Start]-[Settings]-[Control Panel]-[Mouse]-[Motion] and check [Show pointer trails].

Disk (Disc) Operations

Cannot read/write to a floppy disk	● Has the floppy disk been correctly inserted? ● Has the floppy disk been correctly formatted? ● Your floppy disk drive may not have been properly set in the multimedia pocket. ● Has the Setup Utility been used to set [Floppy Operation] to [Enable]?
Unable to write to a floppy disk	Is the floppy disk write-protected? ☞ page 5
How to format a floppy disk is unclear	Select [Format] in [My Computer] - [3 1/2 Floppy (A:)] - [File]. After confirming the disk volume and format type, click Start.
Unable to read/write to the hard disk	● Your drive or file may not have been properly set. ● Check to see if the hard disk is full. If it is full, delete unnecessary files. ● Your hard disk content may be corrupted. Consult your nearest Panasonic dealer.

Setup Utility

is displayed	Enter the User Password or Supervisor Password. If you have forgotten it, consult your nearest Panasonic dealer.
[Supervisor Setup] is not displayed in the menu	At the start of the computer when is displayed, you have to enter the Supervisor Password. When both the User Password and Supervisor Password have been set, if you enter the User Password, [Supervisor Setup] will not be displayed (☞ page 40). If [Supervisor Setup] is not displayed even after entering the Supervisor Password, you have to delete the User Password. Run the Setup Utility again, and input the Supervisor Password.
[User Password] cannot be selected	[User Password Protection] in [Supervisor Setup] may be enabled.
[Coffee break Password] or [Key Combination for Coffee break] cannot be selected	You need to set the User Password.
[Supervisor Password] cannot be set	If the User Password has been set first, the Supervisor Password can not be the same as the User Password. Another password needs to be entered.

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Dealing with Problems

Connecting Peripherals

Your peripheral does not work (An error occurs while installing the driver)	You need to use drivers conforming to Windows 95 Version 4.00.950B (OSR-2). Some earlier drivers will no longer work. For more information, please ask the manufacturer of the driver in question.
Unable to print	● Check the computer-printer connection. ● Make sure the printer is on. ● Make sure the printer is in the online state. ● Make sure paper is in the printer tray and there is no paper jam. ● Has the Setup Utility been used to set [Parallel Port (Address)] to [Automatic (PnP)], [378] or [3BC]?
The cursor does not move from mouse operations	● The Coffee break Password may be set; check if  is displayed. If this is the case, input the Coffee break Password. ● Check your mouse connections, then reboot the computer from the keyboard. From the keyboard, you may choose to press down on , then select [Shut Down].
The device connected to the serial port does not work	● Check the connection. ● Confirm that the device driver for the serial port works. Please refer to the reference manual for the device. ● Confirm that two mouse devices are not connected, one through the ext. keyboard/mouse port and the other through the serial port. ● Try setting [Internal Pointing Device] to disable in the Setup Utility. ● Has the Setup Utility been used to set [Serial Port] to [Automatic (PnP)] or [3F8]?
External mouse or track ball connected to the PS/2 port does not work	In some circumstances, if a PS/2 external mouse with a serial interface conversion function is connected to the port, it may not operate normally. Connect it to the serial port.
A PC Card does not work	● Make sure the card is properly inserted. ● Confirm that the card conforms to the PC Card Standard. ● A driver for Windows 95 may need to be installed. ● Note that after a driver is installed, the computer must be rebooted. ● There may be no interrupt request (IRQ) line available. Deactivate unnecessary equipment using [Supervisor Setup] in the Setup Utility. There is be no remaining IRQ when you installed an optional CD-ROM Pack and insert more than two PC Cards or when you set [Sound IRQ-B] in [Supervisor Setup] in the Setup Utility and insert more than two PC Cards. Be sure to deactivate unnecessary equipment before any PC Card. ● Read the PC Card's manual. Or, you may need to call the manufacturer of the PC Card.
You do not know the available RAM module	☞ page 24
The RAM module has not been recognized	Make sure the RAM module has been properly inserted.
The address map for IRQ, I/O port address, etc. is unclear	Check the address map by going to [View Resources] in [Start] - [Settings] - [Control Panel] - [System] - [Device Manager] - [Computer] - [Properties].
The [Version Conflict] appears	Select .

Others

You wish to initialize the settings of each driver	See "Reinstalling Software" (☞page 34) for instructions on how to make the settings for each of the various required drivers.

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Technical Information

Network

- The network connection may be severed when entering the standby and suspend (hibernation) mode. Be sure to disable the hibernation timeout settings with the Setup Utility if you require a network environment.
- When the power saving function is running, TranXit and other communications software may malfunction. For example, communications may be halted if either Fn + F3, or the suspend mode (hibernation) is activated.

About HDD DMA Transfer

Do not add the check mark ✔ to [DMA] in [Start] - [Settings] - [Control Panel] - [System] - [Device Manager] - [Disk drives] - [GENERIC IDE DISK TYPE**] - [Settings].
This may damage data on the hard disk.

FAT32

This computer uses a new, highly efficient file system called FAT32. Please note the following regarding FAT32.

- Some software will not run normally:
  Do not run disk utilities and other software not compatible with FAT32. Doing so could cause incorrect information such as hard disk capacity to be shown or could destroy hard disk data.
  Contact the dealer or other outlet for the software and obtain the latest version.
- Non-recognition from other operating systems:
  You will not be able to view the contents of your hard disk from other operating systems. (For example, you will not be able to view the contents of your hard disk even when starting up using a floppy disk created with another computer.)
  Other operating systems cannot therefore be installed. To install the operating system, please refer to the method listed below. If you are unsure about this explanation, do not proceed with installation of operating system.

  ① Back up the contents of your hard disk.
  ② Start up with the Firstaid FD.
  ③ When the [Windows 95 Startup Menu] appears, select [1. Boot].
  ④ Enter FDISK Enter.
  ⑤ Select [3. Delete partition or Logical DOS Drive].
  ⑥ Select [1. Delete Primary DOS Partition].
  ⑦ Start up again following the instructions on the screen.

  These steps will allow you to install most operating systems. The contents of the hard disk will be deleted. Always make sure to back up the hard disk beforehand.
  The following steps will normally be unnecessary, however, if installation is not possible, try performing them.

  ⑧ Start up again using the Firstaid FD to open FDISK in the same way.
  ⑨ When [Do you wish to enable large disk support (Y/N)...?] appears on the first screen, press “N”, then Enter.
  ⑩ Select [1. Create DOS partition or Logical DOS Drive].
  ⑪ Set the partition following the instructions on the screen and activate it.
  ⑫ Start up again following the instructions on the screen.

Internet Explorer 4.0

Internet Explorer 4.0 places a tremendous load on the system in order to execute the wide variety of functions that it provides. As a result, some unexpected faults may occur.
Example:
- It takes a long time to reboot or the computer locks up.
- The software cannot be upgraded.
- A system module error occurs.

If any of these faults occurs, try using the software with some Internet Explorer 4.0 functions turned off. (See Internet Explorer Help for more details.)
Example:
- Close the channel bar.
- Close the welcome message.
- Set the wallpaper to "None".
- Uninstall Internet Explorer 4.0.

Reinstallation

When Windows is started up while pressing the F8 key, the [Microsoft Windows 95 Startup Menu] is displayed. After reinstalling Windows, [Previous version of MS-DOS] also appears in this menu, however, do not select this item as MS-DOS is not installed.

Power saving function in the sound chip

The sound chip has its own power saving function. You can enable this function in the [OPL3-SAx power management] tab (select [Start] - [Settings] - [Control Panel] - [Power]).
In [Non Power Save mode], the power saving function is disabled. This is the default value.
In [Minimum level of power save], the power saving function is enabled. You may encounter problems, such as no sound from music CDs, and the keyboard’s volume control (Fn + F8, F9) will not function.
Do not select [Intermediate level of power save] or [Maximum level of power save] because noise is likely.

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Reinstalling Software

Before Reinstallation

Preparing

- You will need the backup disks (you earlier made copies of ☞ page 7), Windows 95 CD-ROM, Internet Explorer CD-ROM (only use enclosed CD-ROM) and a blank floppy disk for the startup disk.

NOTE

If you have not created the backup disks, a message will appear at startup urging you to make backup copy. If there is no message, backup copy have already been created.

- The CD-ROM pack (CF-VCD252) and FDD cable (CF-VCF351) are required for the following reinstallation procedure. Mount the CD-ROM pack in the multimedia pocket and connect the FDD cable to the floppy disk drive. (Refer to the operating instructions of the CD-ROM pack and FDD cable for details.)

Important

- Save all important data. If reinstallation is carried out, all data existing prior to the installation will be lost. The reinstallation will return the computer to factory condition.
- Be sure to remove all PC Cards and disconnect all peripherals before the reinstallation procedure.
- Be sure the AC adapter is connected until completing reinstallation.

Reinstalling

Windows 95 (HDD format)

Two options are available, one for beginners and the other for advanced users.

- **For beginners:** **Returning to factory default condition.**
- **For advanced users:** **Returning drive C to factory default condition.**

CAUTION

- The Advanced Users option should only be performed when the hard disk has been formatted into two or more partitions.
- If data on your hard disk is compressed, the data should be uncompressed.

1 Insert the Firstaid FD, and turn the computer on, then run the Setup Utility. (☞page 40)

2 Select [Load Default Settings (PnP)], then press Enter. At the confirmation message, press Enter.

3 Close the Setup Utility (☞page 40); this screen should appear.

```
Microsoft Windows 95 Startup Menu
1. Boot
2. Restore HDD to factory default (For beginners)
3. Restore HDD to factory default (For advanced users)
Enter a choice: 1
```

4 **For beginners:** select [2. Restore HDD to factory default (For beginners)].
For advanced users: select [3. Restore HDD to factory default (For advanced users)].
At the confirmation message, press Enter.
Simply follow the on-screen instructions .

5 When your computer prompts you to insert the floppy disk, please set the specified disk and press any key. When the computer reboots, the startup menu will appear, select 2 and continue to follow the on-screen instructions.
When your computer prompts you to insert the "Firstaid FD", press Enter. When the computer reboots, the startup menu will appear, select 2 and continue to follow the on-screen instructions.

6 When your computer prompts you to insert the "Windows 95 CD-ROM", please do so. Windows 95 has setup started. Follow the on-screen instructions.

NOTE

- With the exception of the instruction below, please select all default values displayed by the Setup Wizard.
  Be sure to add the check mark ✔ to [Sound, MIDI, or Video Capture Card] at the [Analyzing Your Computer].
- Have a blank disk on hand to create a "Windows 95 Startup Disk". Immediately after creating this disk, enter the Firstaid FD into the floppy disk drive and press [OK]. (Note: A system error will result if the Firstaid FD is not inserted. If this occurs, insert the Firstaid FD and press [Retry].

7 At the [Finishing Setup], remove the floppy disk and press [Finish]. Windows will restart after all the settings have automatically been made.

8 At the [Date/Time Properties], press [Close].

9 At the [Add Printer Wizard], press [Cancel].

10 When the display appears indicating the establishment of the system settings, press [OK]. The computer will reboot. (When the welcome screen appears, press [Close].)

System setup

11 In [Start] - [Run], input [c:\install.bat], then press [OK]. Rebooting will be done automatically.
It may take several minutes to reboot the computer.

12 Delete the "c:\install.bat" and "c:\install.pif" files.

13 In [Start] - [Run], input [c:\util\updates\rmm2upd.exe], then press [OK].

14 At the [Windows 95 Update], press [Yes], then press [OK].

Device Manager 1

15 In [Start] - [Settings] - [Control Panel] - [System] - [Device Manager], check [View devices by connection] and select [PCI bus] in [Plug and Play BIOS], press [Remove], then press [OK].
When the message appears to reboot your computer, press [Yes]. Rebooting will be done automatically. If the computer asks you to insert the Windows 95 CD-ROM, press [OK]. Input [c:\windows\system], then press [OK]. At the [Update Device Driver Wizard], press [Next>], then press [Finish]. At the [System Settings Change], press [Yes].

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16 In [Start] - [Settings] - [Control Panel] - [System] - [Device Manager], for each item in [Sound, Video and Game Controller], press Remove to delete it, then press OK to confirm the deletion.

17 Select [Generic Ir Serial Port (COM2)] in [Ports (COM & LPT)], press Remove, then press OK.

18 Select [PCMCIA socket] and if the [PCIC or compatible PCMCIA controller] is displayed, press Remove, then press OK.

19 Select Refresh. When your computer prompts you to insert the "Windows 95 CD", please do so and at the [New Hardware Found], input [d:\win95], then press OK. At the [Update Device Driver Wizard], press Next >. then press Finish.

20 At the [System Properties], press Close.

Sound driver

21 In [Start] - [Settings] - [Control Panel] - [System] -[Device Manager] - [Other Devices] - [Unknown Device] - [Driver] - [Update Driver], select [Yes (Recommended).], then press Next >.

If [Other Devices] is not displayed, select Refresh and at the [Update Device Driver Wizard], press Finish followed by Next >. It will be displayed.

22 Select Other Locations..., input [c:\util\drivers\sound], then press OK.

23 At the [Update Device Driver Wizard], press Finish.

24 Press Close to return to the [System Properties].

25 At the [System Properties], press OK.

Video driver

26 In [Start] - [Settings] - [Control Panel] - [System] -[Device Manager] - [Display adapters] - [Standard PCI Graphics Adapter (VGA)] - [Driver] - [Update Driver], select [Yes (Recommended).], then press Next >.

27 Select Other Locations..., input [c:\util\drivers\video], then press OK.

28 At the [Update Device Driver Wizard], press Finish. The display will ask you to restart Windows; press Yes.

Power

29 Delete the check mark ✔ for [When powered by AC power] and [When powered by batteries] in [Start] - [Settings] - [Control Panel] - [Power] - [Disk Drives].

30 Select [Non Power Save mode] in [OPL3-SAx power management], then press OK.

Device Manager 2

31 Delete the check mark ✔ for [Auto insert notification] in [Control Panel] - [System] - [Device Manager] - [CDROM] - [MATSHITA UJDCD8715] - [Settings].

32 Set [Start drive letter] in [Reserved drive letters] to [L:], then press OK. If the display asks you to restart Windows, press No.

33 Set [Mobile or docking system] in [System] - [Performance] - [File System] - [Hard Disk] - [Typical role of this machine], then press OK.

34 At the [System Properties], press Close. The display will ask you to restart Windows. Remove the floppy disk and press Yes.

Display

35 Select [Super VGA 1024 X 768] in [Start] - [Settings] - [Control Panel] - [Display] - [Settings] - [Advanced Properties] - [Monitor] - [Change], then press OK.

36 At the [Advanced Display Properties], press Close.

37 In [Start] - [Run], input [c:\instdisp.bat] and then press OK. Rebooting will be done automatically.
It may take several minutes to reboot the computer.

38 Delete "c:\instdisp.bat" file.

NOTE

- Some Windows applications differ in use from their factory-set state. To add or delete items from the menu, select [Add/Remove Programs] in [Start] - [Settings] - [Control Panel].
- At the time of purchase, the [CF-25 Quick Guide] can be found under [Favorites] in the Internet Explorer program. If reinstallation is carried out for your computer, this file will no longer be available. You may reinstall this file if necessary.

Installing TranXit

CAUTION

For TranXit to be operable, [Infrared Device] must not be set.

If necessary, install TranXit with the following step.

In [Start] - [Run], input [c:\util\tranxit\install.exe], then press OK.

NOTE

To return to factory condition:

Set [Infrared] for [Connection Type] in [Connection Setup] and press [Setup Connection]. Next, set [COM2] for [Port] and [Panasonic Notebook Computer] for [Model] in [Infrared Device]. Select default values for all other settings.

Installing PhoenixCard Manager95

When you use a ZV Card, install PhoenixCard Manager95 with the following steps.

1 In [Start] - [Run], input [c:\util\drivers\pccard\disk1\setup.exe], then press OK.

2 Follow the on-screen instructions. At the [Setup Complete], select [Yes, I want to restart my computer now], press Finish.

Installing Internet Explorer 4.0

If necessary, install Internet Explorer with the following steps.

1 Insert the Internet Explorer CD-ROM.

2 In [Start] - [Run], input [L:\setup.exe], then press OK. Follow the on-screen instructions.

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Windows 95 Setup Procedure

This procedure explains step ***5*** on page 7 in more detail.

1 **Select settings for your region, then press** Next >

2 **Select your keyboard layout, then press** Next >
(for U.S.A.: United States 101, for U.K.: British)

3 **Enter your name and your company's name, then press** Next >
The License Agreement will be displayed.

4 **After reading the agreement, select [I accept the agreement] or [I don't accept the agreement], then press** Next >
If the former is selected, the [Certificate of Authenticity] will appear. If the latter is selected, the Windows setup will be aborted.

5 **Input the Product Number written on the "Certificate of Authenticity" located in the "Introducing Microsoft Windows 95 book" that comes with this computer. After doing so, press** Next >

6 **Press** Finish

7 **If the instruction to restart appears, press** OK

8 **Insert the correct time, date and time zone and click** Close
You can also complete these settings at a later time.

9 **If you want to complete the printer settings, press** Next >
Simply follow the on-screen instructions.
If not, press Cancel
You can also complete these settings at a later time.

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Setup Utility

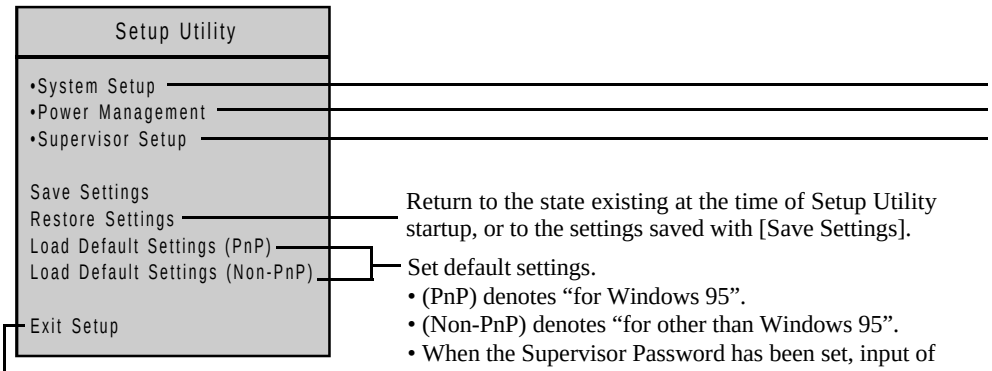
Running the Setup Utility

To run the Setup Utility, you need to restart your computer. → Upon seeing this message [Press F1 for Setup] → press F1

NOTE

- The Setup Utility will not be run if F1 is not pressed soon after the computer restarts. In this case, you need to restart your computer again.
- If a key icon is displayed, enter your password.
  If both the [User Password] and [Supervisor Password] have been set, after entering the User Password, [Supervisor Setup] and [Load Default Setting...] will not be displayed on the main screen.
  To display the [Supervisor Setup]:
  1. Use Fn + Power Switch to turn your computer off.
  2. Restart the computer and press F1 when [Press F1 for Setup] is displayed.
  3. When a key icon is displayed, enter the Supervisor Password.
- For more details, on-line help is available; press F1.

<Main Screen>



Program Completion
- Hibernation settings (☞page 11)
- Power Management settings (☞page 13)
- Security Settings (☞page 17)
- Hardware Expansion Settings (☞page 22)

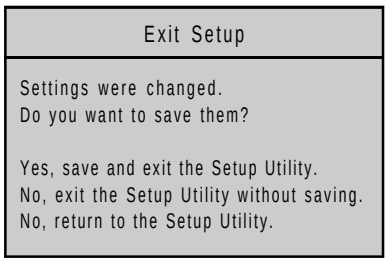
After you have completed all settings, you may exit the Setup Utility program.

NOTE

Key Operations

- F1: To display the corresponding “help” file.
- Enter: To make a selection.
- Esc: To display previous screen (To exit the program at the main screen).
- ↑↓: To move among the items.
- ←→: To move among the values of each item.
- F5: To return to the setting before a change.
- F9: To set the default values.

Closing the Program

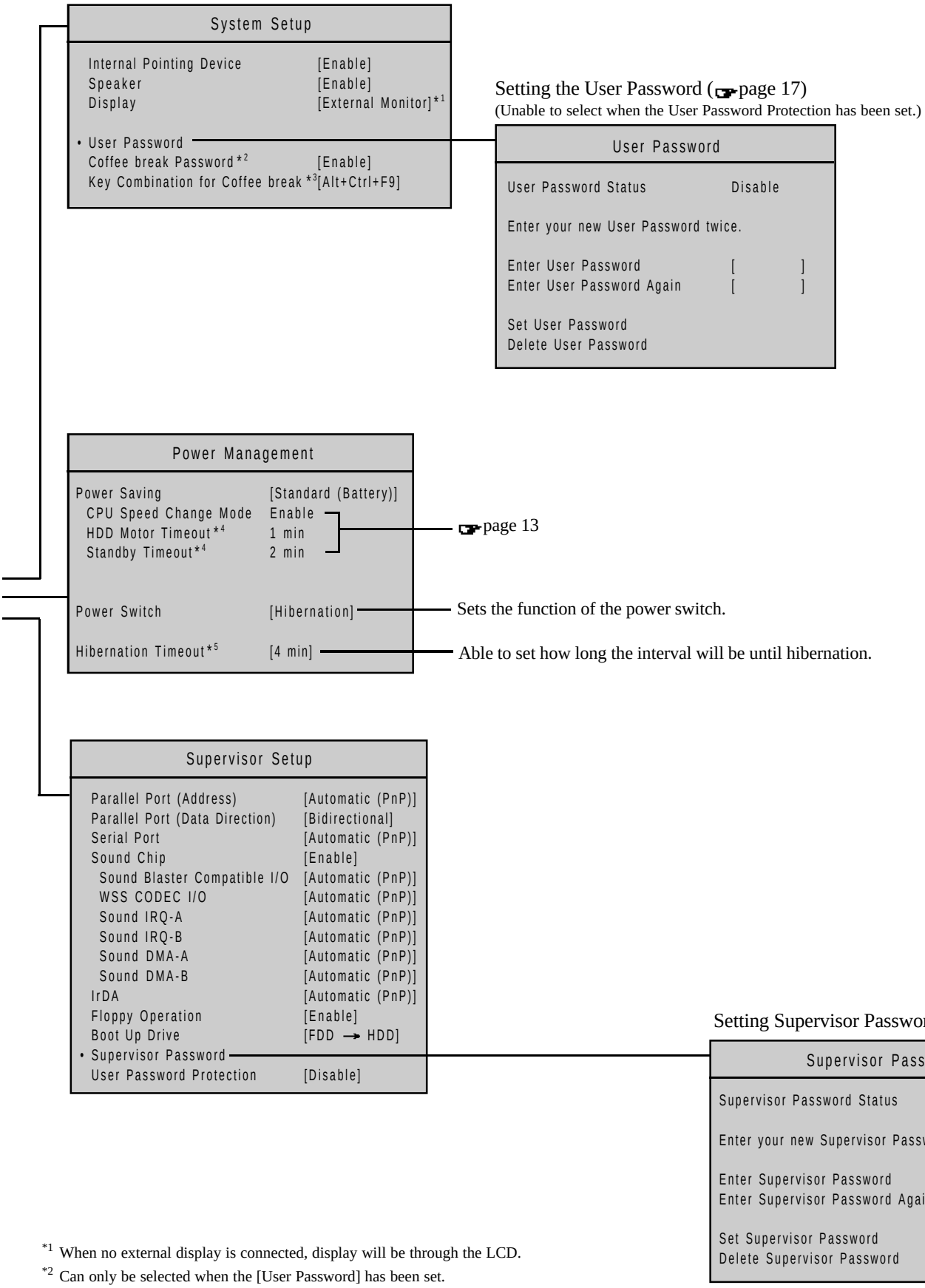


(The display may be different if no changes to the settings are made.)

NOTE

If the User Password has been set, the password must be entered before Windows can start.

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*1 When no external display is connected, display will be through the LCD.

*2 Can only be selected when the [User Password] has been set.

*3 Can only be selected when the [Coffee break Password] has been set.

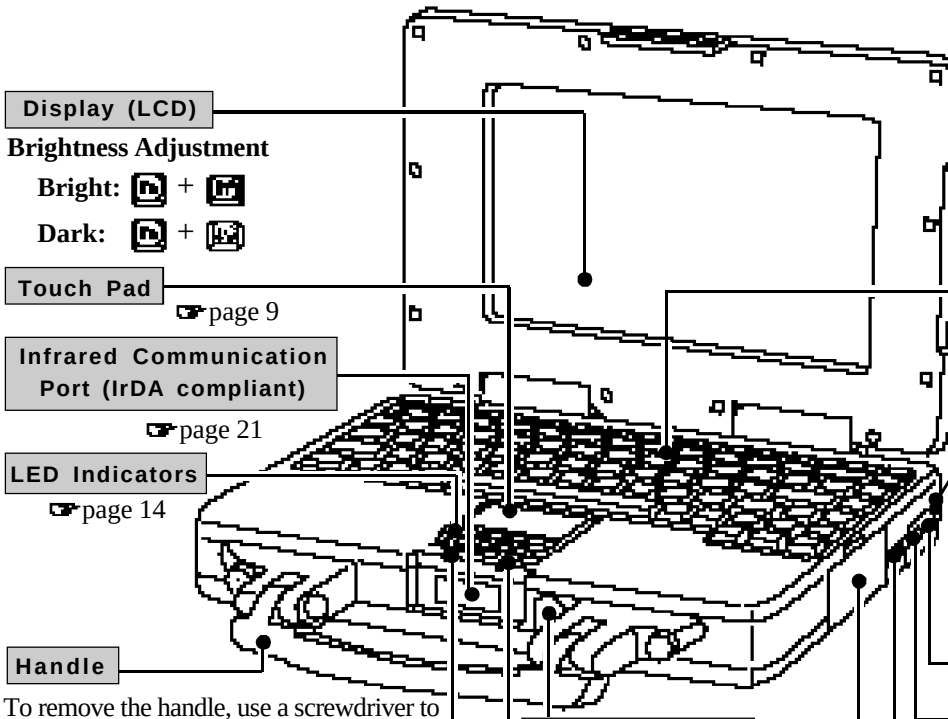
*4 As Windows 95 employs its unique power saving function, the time specified in setup utility and the actual running time may differ.

*5 Can only be selected when the [Power Switch] has been set [Hibernation].

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Names and Functions of Parts

Front



Display (LCD)

Brightness Adjustment

Bright: Fn + F7

Dark: Fn + F6

Touch Pad
☞page 9

Infrared Communication Port (IrDA compliant)
☞page 21

LED Indicators
☞page 14

Handle

To remove the handle, use a screwdriver to remove the screws. When replacing the handle make sure that the screws have been firmly fastened.
After removing the handle, please affix the two caps from the cap sheet that is supplied.

Battery Indicator
☞page 14

POWER Indicator

Green: Power on / CPU normal speed mode

Red: Power on / CPU slow speed mode (The CPU cools down)

Flashing Red: CPU temperature too hot; power remains OFF

Headphone Jack

Use this connector to connect headphones or amplifier-equipped speakers. Audio output from the internal speaker is disabled when headphones or outside speakers are connected.

Keyboard

Reset Button

When resetting your computer, use a dull pointed object like a ball point pen. Do not use a pencil. Pencil lead can break off inside the computer and damage the computer's circuit.

DC-IN Connector ☞page 6

Ext. Keyboard/Mouse Port

Power Switch ☞page 8

PC Card Slots ☞page 23

CardBus/ZV Compatible
(Confirmation with the dealer required beforehand.)

NOTE

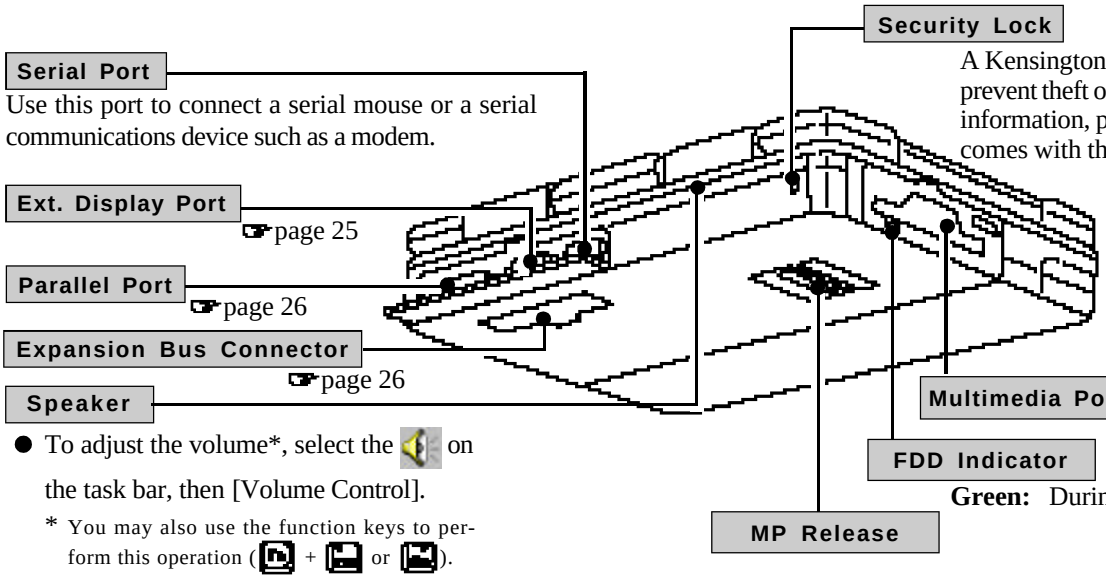
When the temperature of the CPU rises, the processing speed is automatically reduced to protect the CPU from overheating. When the temperature of the CPU drops, the normal processing speed is automatically restored.

NOTE

The characteristics of the anti-reflection coating on the LCD may cause fingerprints and smudges to appear more visible when compared to standard LCD panels. If necessary, these can be easily removed by following the LCD panel cleaning instructions found on page 28.

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Back



Serial Port
Use this port to connect a serial mouse or a serial communications device such as a modem.

Ext. Display Port
☞page 25

Parallel Port
☞page 26

Expansion Bus Connector
☞page 26

Speaker

- To adjust the volume*, select the on the task bar, then [Volume Control].

  * You may also use the function keys to perform this operation (+ or).

- **Speakers on/off :** +

Security Lock
A Kensington cable can be connected to prevent theft of your computer. For more information, please read the manual that comes with the cable.

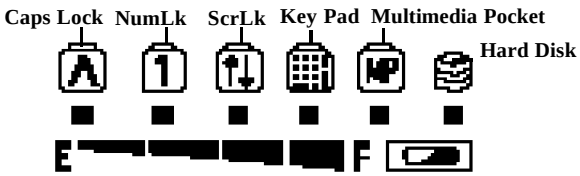
Multimedia Pocket Device (FDD)
☞page 22

FDD Indicator
Green: During operation

MP Release

NOTE

- LED Indicator



When the LED indicator goes on, do not turn the computer off or remove/insert a floppy disk.
When the LED indicator goes on, do not turn the computer off.

CAUTION

- Do not allow the ports/connectors to get wet. Always make sure they are covered. If they do happen to get wet, wipe them using a soft cloth immediately.
- If a problem occurs but your computer does not lock, we recommend not resetting the machine. Pressing the reset button will cause you to lose data if an application is open.

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Specifications

Main Specifications

Model No.		CF-25LJF8EAM/E	CF-25LGF8EAM	CF-25LGC4EAM/E
CPU		Pentium® Processor with MMX™ technology 166 MHz		
Cache Memory (second cache memory)		32 KB (256 KB)		
EDO Memory (Expandable to)		32MB (96 MB Max.)		16 MB(80 MB Max.)
Video Memory		1.1 MB		
LCD	**Type**	12.1" (TFT)	10.4" (TFT)	
	Displayed Colors	256/65536/262144 colors(640 x 480 dots) / 256/65536 colors(800 x 600 dots)*		
Hard Disk Drive (including about 110 MB used specifically by the system)		2.1GB**		1.44GB**

* 800 x 600 16-color resolution is not supported. If this resolution is selected, the message "There is an error in the display settings" will appear when you reboot. Start up again, selecting 256 colors or high color (16 bits), following the instructions on the screen. Besides this phenomenon, you might encounter some unexpected behavior. Do not select 16 color mode in any resolution.

** 1GB = 10^9 bytes

Other Specifications

Keyboard	Windows 95 keyboard (for U.S.A.: 87 keys, for U.K.: 89 keys)		
Floppy Disk Drive	720 KB/1.44 MB (two-mode)		
Slots	PC Card Slots	Three Type I or Type II, or one Type III + Type I or Type II CardBus(middle or bottom slot) / ZV Port (bottom slot) Compatible (Confirmation with the dealer required beforehand) ☞page 23	
		Allowable current (total for three slots)	3.3 V: 400 mA, 5 V: 400 mA, 12 V: 120 mA
	RAM Module Slot	144-pin, 3.3-V, SO-DIMM ☞page 24	
	Multimedia Pocket	One slot (for floppy disk drive, CD-ROM Pack, Second Battery Pack)	
Interface	Parallel Port	Dsub 25 pin female	
	Ext. Display Port	Mini Dsub 15 pin female	
	Serial Port	Dsub 9 pin male	
	Headphone Jack	Miniature jack, 3.5 DIA Impedance 32 Ω, Output Power 4 mW (Impedance 32 Ω) x 2	
	Infrared Communication Port	IrDA compliant, 115,200 bps data transmission speed	
	Ext. Keyboard/Mouse Port	Mini DIN 6-pin female	
	Expansion Bus Connector	Dedicated 80-pin female	
Speaker	Mono Speaker (built in)		
Sound	16 bits, 44.1 kHz PCM/FM sound (Sound Blaster PRO Compatible)		
Software	Operating System	Microsoft® Windows® 95 (FAT32 File System)	
	Utility Programs	Diagnostics program, TranXit program, PhoenixCard Manager95	
Battery	Battery Pack	Lithium Ion 10.8 V, 2300 mAh	
	Operating Time	Approx. 1.5- 4 hours*	
	Charging Time	Power On	Approx. 3.5 hours*
		Power Off	Approx. 2 hours*
	Clock Battery	Coin type lithium battery 3.0 V	
		Operating Time	Approx. 10 years
Pointing Device	Touch Pad (Pointing device adapting capacitance sensing method)		
AC Adapter	Input	100 -240 V AC, 50 / 60 Hz	Output 15.0 V DC, 2.6 A
Power Consumption	Approx. 38 W** (maximum when recharging in the ON state)		
Physical Dimensions (W x H x D)	299 mm X 59 mm X 237 mm (11.8" X 2.3" X 9.3")		
Weight	Approx. 3.4 kg (Approx. 7.5 lbs) (With the floppy disk drive installed)+handle 0.2 kg (0.4 lbs)		

* Varies depending on the usage conditions.

** Approx. 1.1 W when the battery pack is fully charged (or not being charged) and the computer is OFF.

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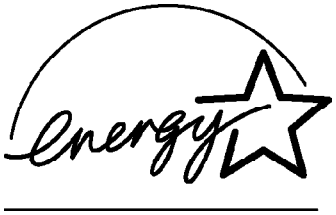
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