



# FLATOP **USER MANUAL**



This User Manual contains the warranty.

**Atec** ATEC SYSTEM CO., LTD.



Please read this manual before you contact us for service

Please read this manual before you start to use it.

### Before You Read. This User Manual



presents dangers, warnings and reasons for caution when using this device.



presents notes on using the device.



**This** user Manual was produced with careful consideration, but please let us know if there is anything that is wrong or needs correcting.

**This** manual may not, in whole or in part, be reproduced, photocopied, transcribed, translated, or transmitted in whatsoever form without the prior permission of the manufacturer.

**The** size and appearance of this device may be changed for improvement without notice.



## Approval Statements

### FCC Compliance Statement

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 measure :**

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 dealer or an experienced radio/TV technician for help.

## **Battery Warning Instruction**

### **Caution**

If battery is incorrectly replaced there poses a danger of explosion. Replace Battery only with same or equipment type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

## **Fuse Warning Instruction**

### **Caution**

For continued protection against risk of fire, replace only with same type and rating off use. Disconnect input power before serving. Only connect this equipment to an earthed socket outlet.

## **Laser Product**

### **Class 1 Laser Product**

This appliance contains a laser system and is classified as a " CLASS 1 LASER PRODUCT". To use this model properly, read this Owner's Manual carefully and keep this manual for future reference. In case of any trouble with this model, please contact your nearest " Authorized Repair Center".

**To prevent direct exposure to the laser beam, do not try to open the enclosure**

### **Caution**

**The laser used in the CD-ROM drive can damage your eyes. Do not attempt to open the cover**

To reduce the risk of electric shock, do not remove cover(or back).

No user-serviceable parts inside.

Refer servicing to qualified service personnel.

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Do not open the top cover of the drive and never touch the internal parts in order to avoid  
**EXPOSURE TO INVISIBLE LASER RADIATION.**

When the power switch is On, do not place your eyes close to the front panel opening door and other openings to look into the inside of the drive.



**ATEC SYSTEM CO., LTD.**

## Important Safety Instructions

**The following instructions pertain to the risk of fire, electric shock or bodily injury.**

**Please read all of these instructions carefully.**

1. Save these instructions for later use.
2. Follow all of the instructions and warnings marked on this product or included in this manual.
3. Do not use this computer on an unstable cart, stand or table.  
The product may fall, causing serious damage to the product.
4. Slots and openings in the cabinet and back have been provided for ventilation.  
To ensure the reliable operation of your computer, and to protect it from overheating, these openings must not be blocked or covered. Don't use this product on a bed, sofa, rug or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
5. Never push objects of any kind into the computer through the cabinet openings, as they may touch dangerous voltage points or short out parts that could result in a fire or electrical shock.  
Never spill liquid of any on the product.
6. This computer should only be connected to the AC power source indicated on your computer systems information label. If you are not sure of the type of AC power available, consult your dealer or local power company. Only connect this computer to a power outlet that matches the power requirements of this computer.
7. Do not allow anything to rest on the power cord.  
Do not locate this product where people will walk on the cord.
8. If you have to use an extension cord with this computer, make sure that the total amperage rating of all equipment plugged into it does not exceed the amperage rating of the extension cord. Also, make sure that the total of all products plugged into the main AC power outlet does not exceed 3.5amps.
9. Unplug your computer from the main electrical power outlet before cleaning.  
Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
10. Do not use this computer near water.
11. This product is equipped with a 3-wire grounding type plug, a plug having a third(grounding) pin.  
This plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert or replace your obsolete outlet, contact your electrician to replace your obsolete outlet.  
Do not defeat the purpose of the grounding-type plug.

## Maintenance

If the product does not operate normally, adjust only these controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and may require extensive repair work to restore the product to normal operation.

### **Unplug this product from the main power outlet and call for service under any of the following conditions :**

- A. If the power cord or plug is damaged or frayed.
- B. If liquid has been spilled into the product.
- C. If the product has been exposed to rain or water.
- D. If the product has been dropped or the cabinet has been damaged.
- E. If the product exhibits a distinct change in performance, indicating a need for service.

## Stop

**If you ever have to remove the main system unit cover observe the following precautions :**

- A. The power supply cord must be unplugged before the main system unit cover is removed.
- B. Once removed, the cover must be replaced and screwed in position before the power supply cord is plugged back in.





Good usage will give the product a long life

Thank you for purchasing our **FLATOP** product. In order to receive maximum effectiveness from this product, please read this manual before you start to use it.

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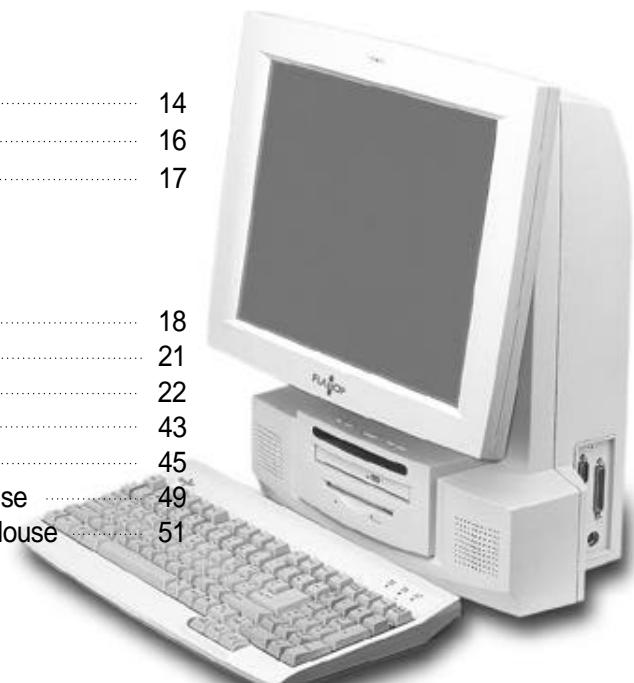
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# Before You Start



## Product Features MODEL : AF8

### CPU

Intel Pentium (FCPGA)

### SCREEN

Vertical viewing angle of  $-5^{\circ}$ ~ $25^{\circ}$ , Horizontal viewing angle (+left/-right) of  $120^{\circ}$  and vertical visible screen angle of  $90^{\circ}$

### NETWORK

Realtek RTL 8139B

### HIGH MOBILITY

light weight of 10.5kg

### EASY SCALABILITY

Expansion slot with 2PCI/1AMR Bus;2PCI or 1 PCI/AMR Bus

### LCD

1024 x 768 Max. resolution and 16.7 million colors on 15.1 "TFT LCD screen

### VIDEO

Support for Intel 810e Chipset 3D

### MEMORY

64MB DRAM, expandable to 512MB

### CACHE MEMORY

L2 cache memory of 256KB

### CD-ROM DRIVE

24X Slim size

### SOUND

Avance ALC AC 97 sound codec

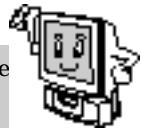
### KEYBOARD/MOUSE

Choose between wired/wireless keyboard and mouse



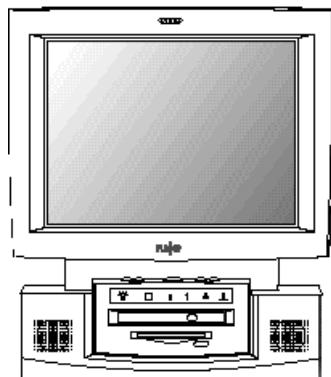
## Equipment Checklist

Check to make sure that you have all the following items. If any of the items are missing or damaged, contact your dealer immediately.

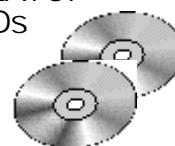


The FLATOP CDs contain the system programs, device drivers and utilities.

User Manual  
FLATOP



FLATOP  
CDs



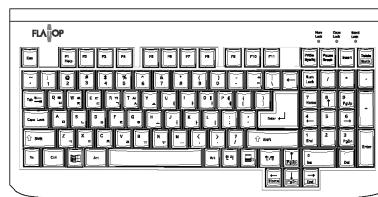
Windows 98  
CD and  
Installation  
boot disk



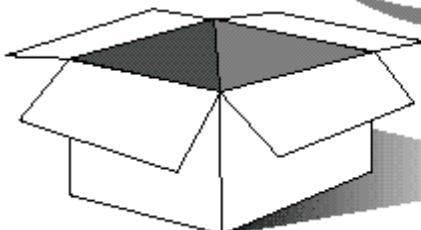
Cable



Mouse



Keyboard



Option: Wireless Keyboard, Wireless Mouse,  
DVD-ROM DRIVE, Mic

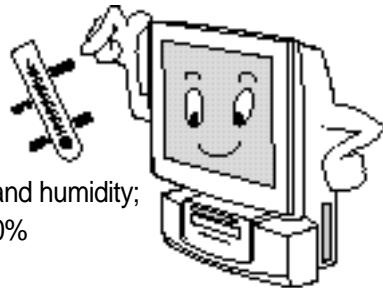
③

## Notes on Installation and Operation

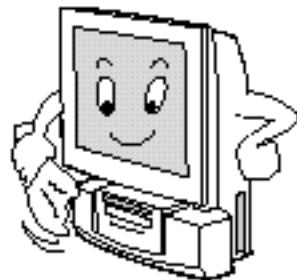
A good installation environment gives the product a longer life.  
Please sit the product on a stable and secure surface.

### Installation Environment

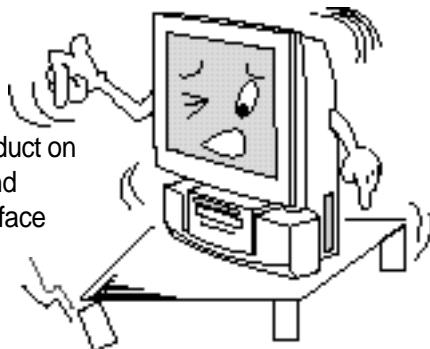
Maintain an optimum temperature and humidity; 5-25 and 30%



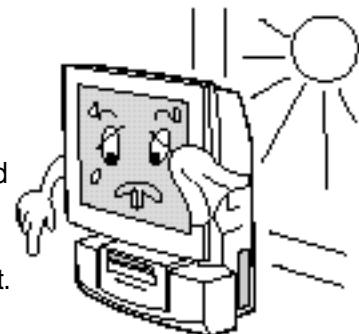
Clean the LCD panel with a soft materials(such as cotton cloth)



Sit the product on a stable and secure surface



Install the product in a well-ventilated room, not exposed to direct sunlight.

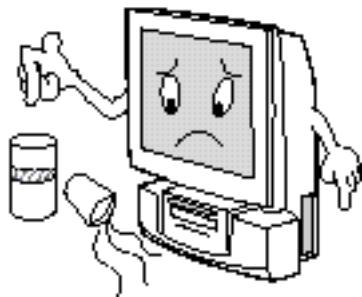


## Cautions in Use

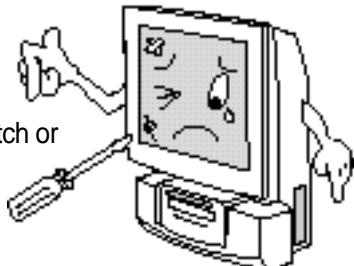
Do not drop or shake the product.



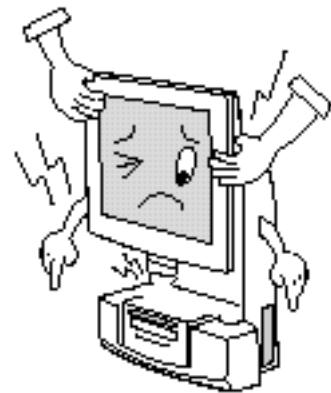
Do not spill beverages, such as coffee, on the product



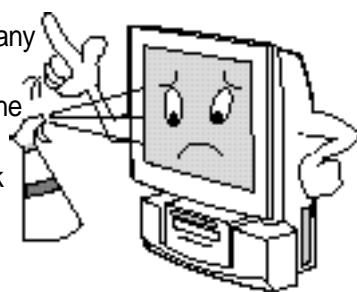
Do not scratch or jolt the LCD surface.



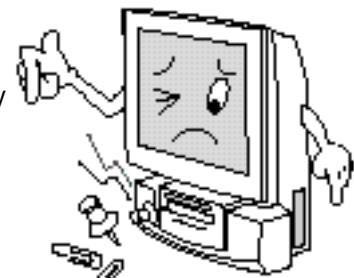
Do not lift up the product by holding the LCD panel.



Do not spray any detergent directly onto the LCD screen. (lest you mark the screen permanently)



Do not insert any foreign substances into product.



Damage caused by the users misuse or carelessness is not covered by the warranty service.



# Introduction

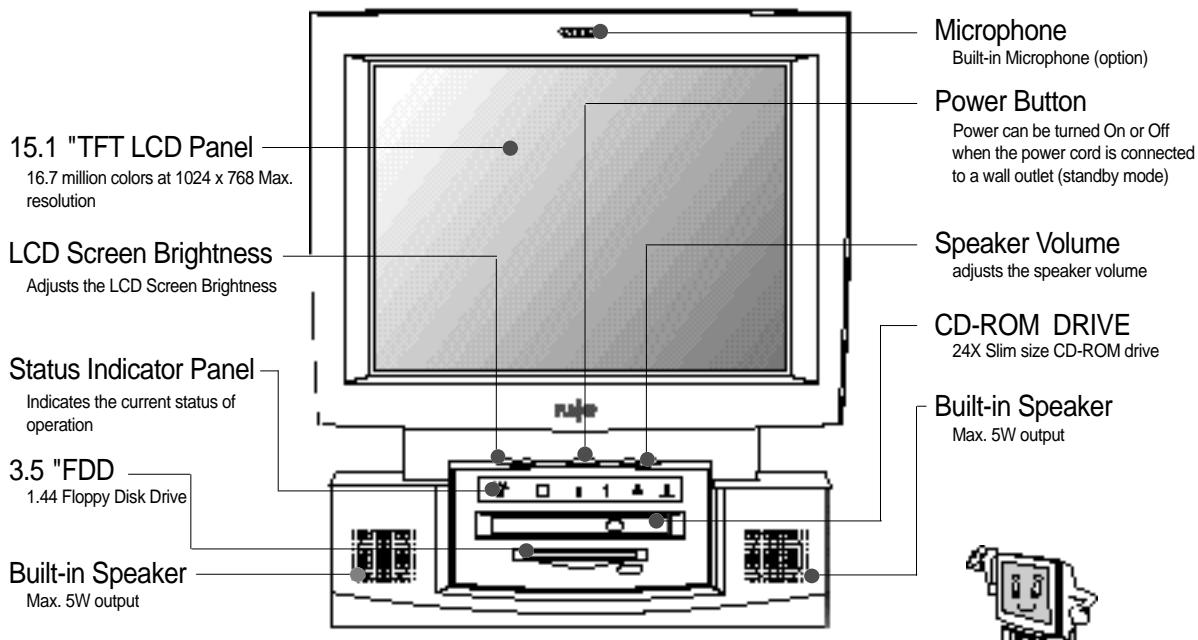


## 1 Appearance

This section describes the appearance and the various buttons and functions of the product. Please refer to the brief descriptions and names given in the illustrations in order to learn the functions of each component.

Become familiar with the names of the external Components

### The Front



This 392(W)mm x 430(H) sized product provides a space-saving feature and the display gives vertical viewing angles between -5° and 25 ° and a clean screen quality even when you view it from the side.

## The Back

### Selector Switch for Keyboard

Select between wired and wireless keyboard

### Speaker Out

Output terminal for external speakers

### Line in

### Joystick/Midi

Game port and Midi

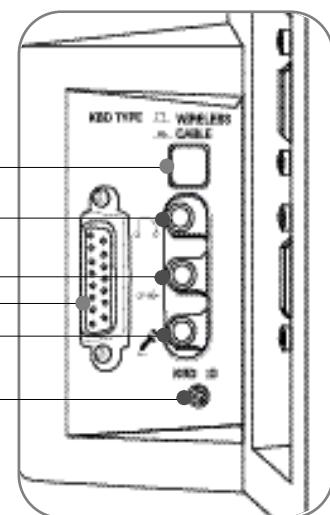
### Microphone

Terminal for External Microphone

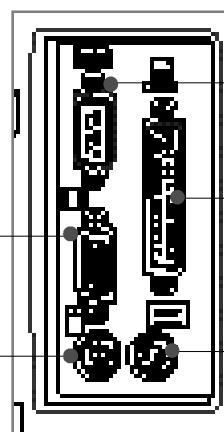
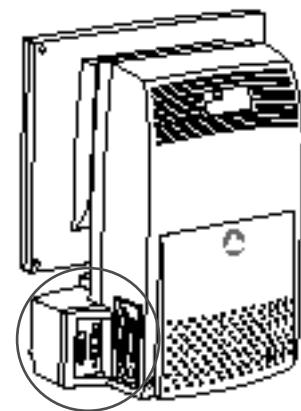
### Wireless Keyboard

### ID Reset Switch

The reset switch for the wireless keyboard ID



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### Serial Port

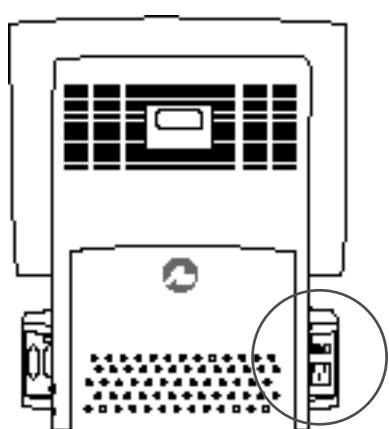
Communication port (COM1)

### Parallel Port

Printer port (LPT1)

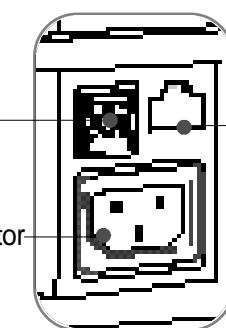
### Keyboard Connector

PS/2 type keyboard connector



### Mouse Connector

PS/2 type mouse connector



### USB Port

Port for USB connection

### RJ-45 Port

10/100Mbps Ethernet port

### Power Connector

Input for 240V/100V power



## Computer Status Indicator Panel

The computer status indicator panel shows the current operation of the computer. There is a symbol for each indicator light on FLATOP's indicator panel for the user to easily understand the current status of the computer.



**Power-On Indicator Light** : When this light is on, it means the computer's power is on.

**Red** : Normal power-on



**HDD In Use Indicator Light** : When this light is on, it means the computer is accessing the internal hard disk.

**Green** : HDD in use

These indicator lights are on when a wireless keyboard is being used!

1

**NUM LOCK** Green: NUM LOCK in use

This indicates that the number keypad of the FLATOP wireless keyboard

A

**CAPS LOCK** Green: CAPS LOCK in use

This indicates that the alphabet can be used only in capitals

↓

**SCROLL LOCK** Green: SCROLL LOCK in use

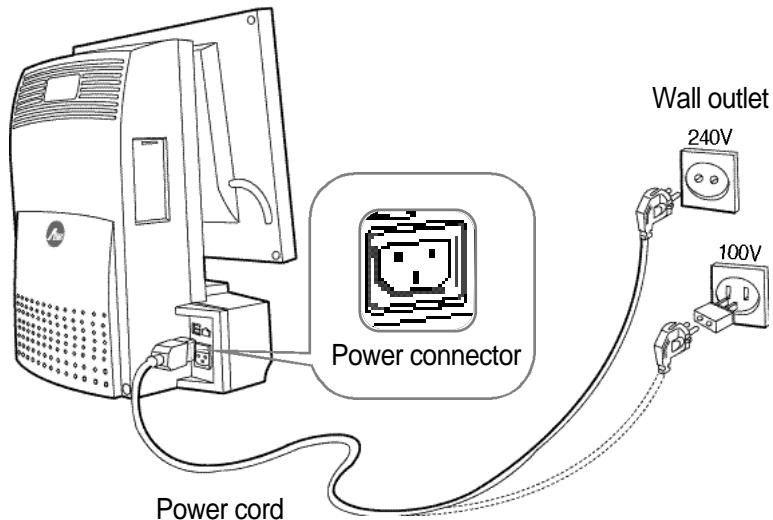
The arrow keys can be used as the keys for screen adjustment

### ③

## Connecting the Power Cord

The FLATOP voltage is automatically set between 100V and 240V without using a conversion switch.

- 1 Connect one end of the power cord to the power connector on the back of the computer as shown below.



- 2 Connect the other end to the 240V/100V wall outlet.
- 3 When the computer is connected to the wall outlet, but is not being used, it will automatically switch to standby mode.



When the computer is in the standby mode pressing either the power button or any key can start the computer.

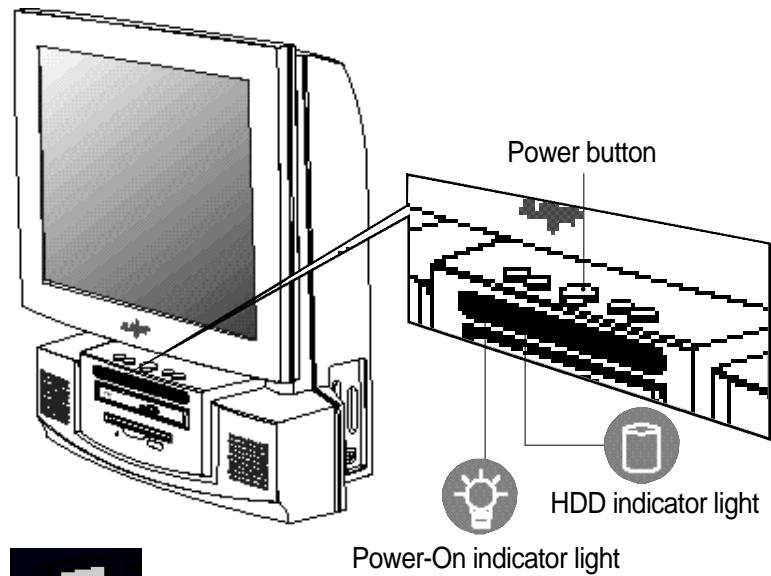


# Getting Started



## 1 Booting

If you press the power button softly, as shown below, the power indicator light turns on.



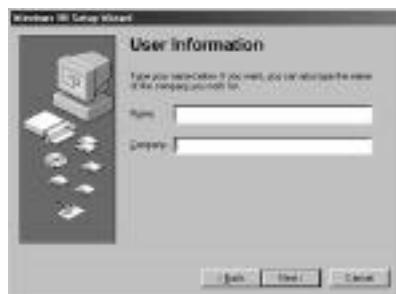
Please make sure that the keyboard, mouse and other peripheral devices are correctly connected before you turn the computer on.

For turning the power on using the keyboard  
(please refer to page 47)

If using **Keyboard/Mouse Power On** in the [**Integrated Peripherals**] section in CMOS Setup utility, you can turn the computer on by entering the password.

The first thing you have to do when you turn the computer on for the first time

1



A window appears prompting you to enter information about yourself. Enter your name and your company, and click the **Next >** button.

2



A window showing the license agreement appears. Select **Agree** and click the **Next >** button.

3



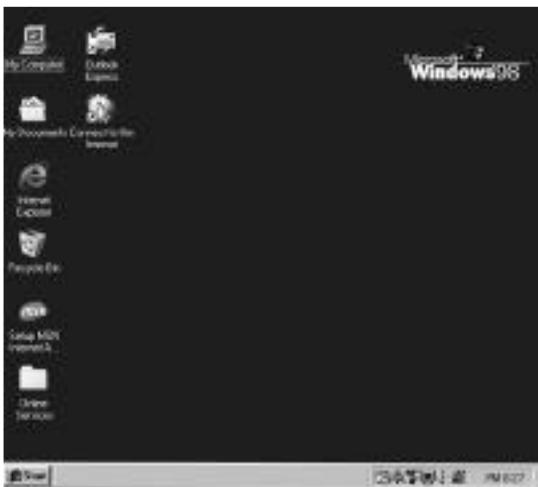
The authentication window appears. Enter the product number provided in the Windows 98 User Manual (enclosed with the computer). Enter the number and click the **Next >** button.

4



Click the **Finish** button in the start wizard window.

5



FLATOP has a variety of software, including Microsoft Windows 98, installed in its hard disk. Please read the Windows 98 Users Manual carefully to gain insight into its operation.



## Shutdown

### Computer Shutdown

Click **Start** and select **Shut down** to turn the computer off.

The computer turns off automatically after 3~4 seconds



When you are not use the computer for a long period of time, moving it or cleaning it, please be sure to disconnect the computer from the wall outlet.

Please follow this method if the computer does not operate normally, or if it needs a restart due to an error occurring.

1. Click **<Ctrl> + <Alt> + <Del>** keys.
2. Press and hold the power button for 4 seconds or more, and release it.  
( When the computer does not restart as in No.1 above )

## ③ Installing the Drivers

### How to install INF\_UPDATE

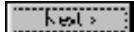
If **Unknown device** is indicated in the Device Manager of the System other device Properties dialog box, follow this procedure.

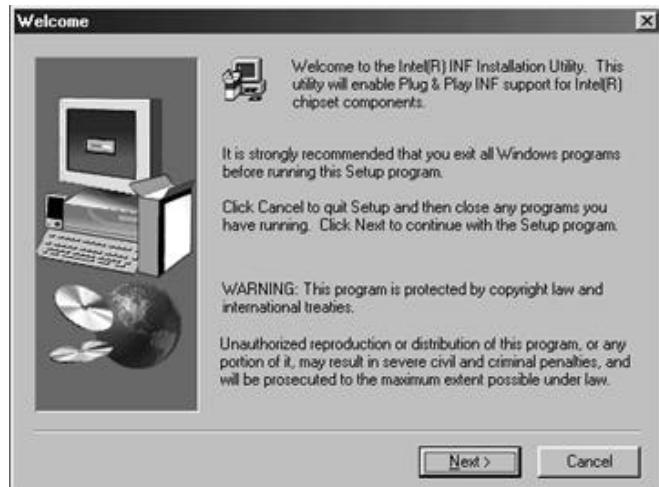


- 1 Double-click the My Computer icon on the desktop. Right-Button click the CD-ROM disk and select **Open**.  
Double-click the **INF\_UPDATE** folder. Run the Setup.

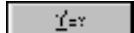


2

Click the  button to continue the setup.



3

Select the  button in the **Software License Agreement**.  
When the setup is complete, restart the system.

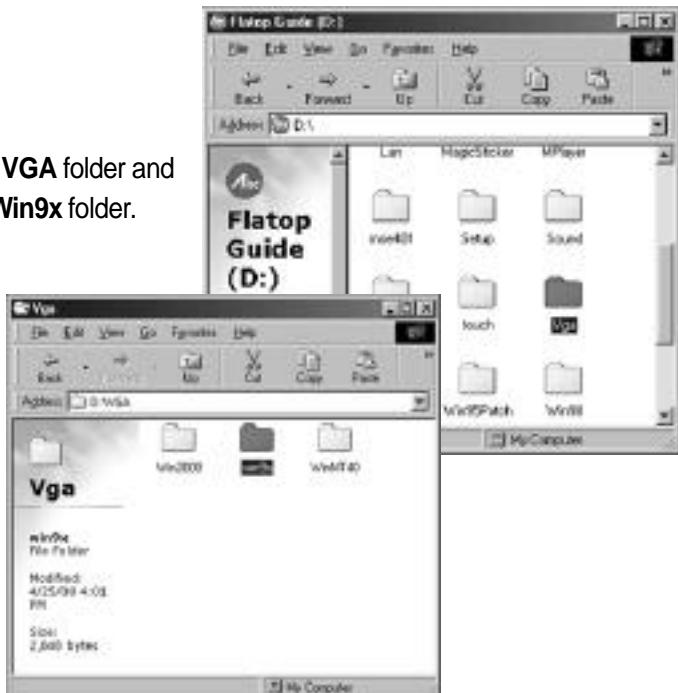


## How to Install the Video Driver

Double-click the **My Computer** icon. Right-Button click the CD-ROM disk and select **Open**



- 1 Open the **VGA** folder and then the **Win9x** folder.



2 Run the Setup.



3 Click the button.



4 Click the button in the Software License Agreement window.



5 Select the folder into which the **VGA** driver will be installed and click the **Next >** button.



6 When the driver installation is complete, select **Restart the Computer Now** and click the **Finish** button.



**!** For a trouble-free driver installation, please be sure to restart the computer.

## How to Install the Sound Driver (AVANCE-ALC100)

Right-Button click on **Sound folder** on the CD ROM and select **Open**

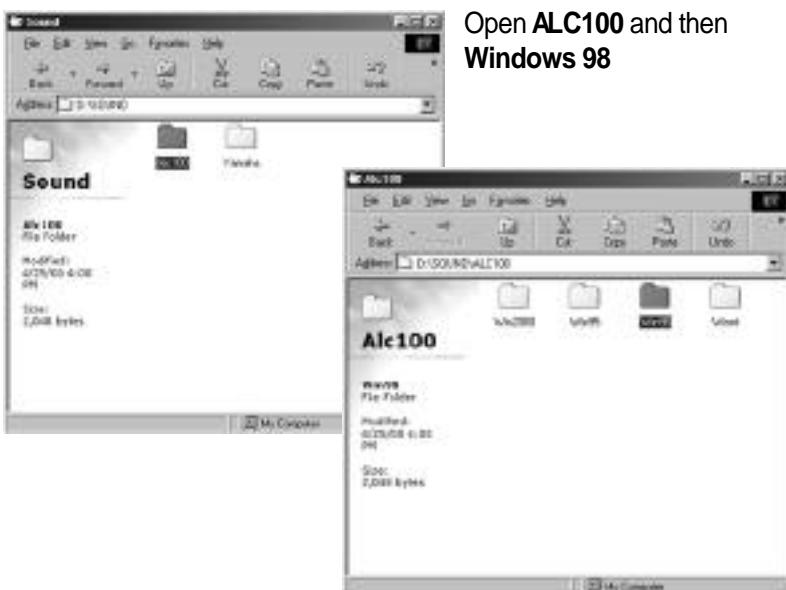


1

If a PCI Multimedia Audio Device exists, it means the sound driver is not installed.



2



Open **ALC100** and then  
**Windows 98**

## 3 Run the Setup.



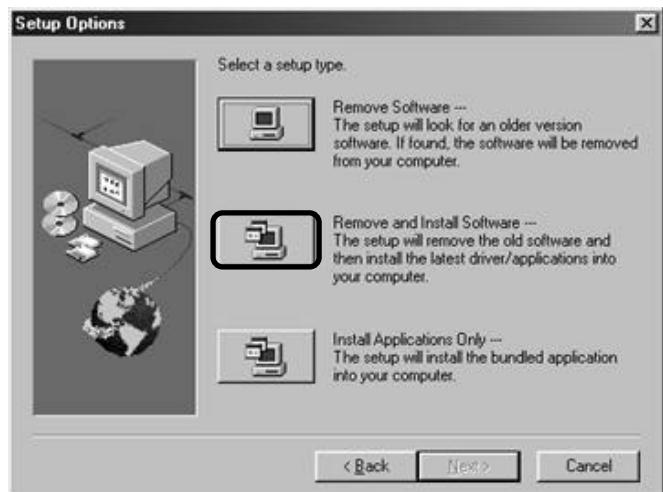
## 4 Choose English and click the **Next >** button.



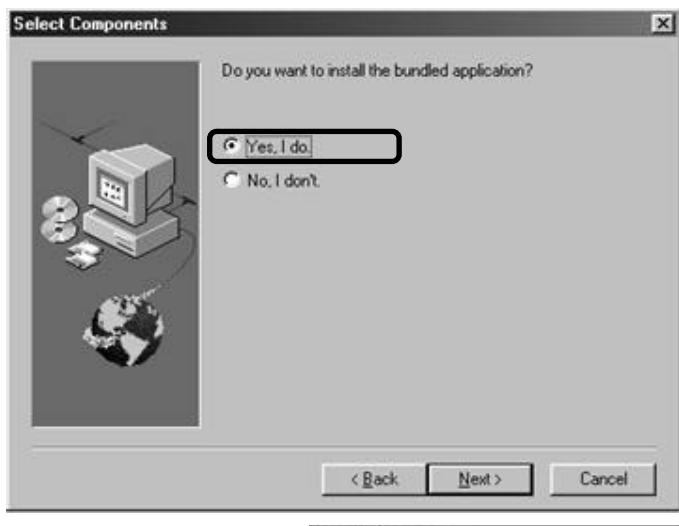
5 Click the  button.



6 Click the **Add/Remove software** icon for the setup options

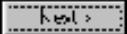


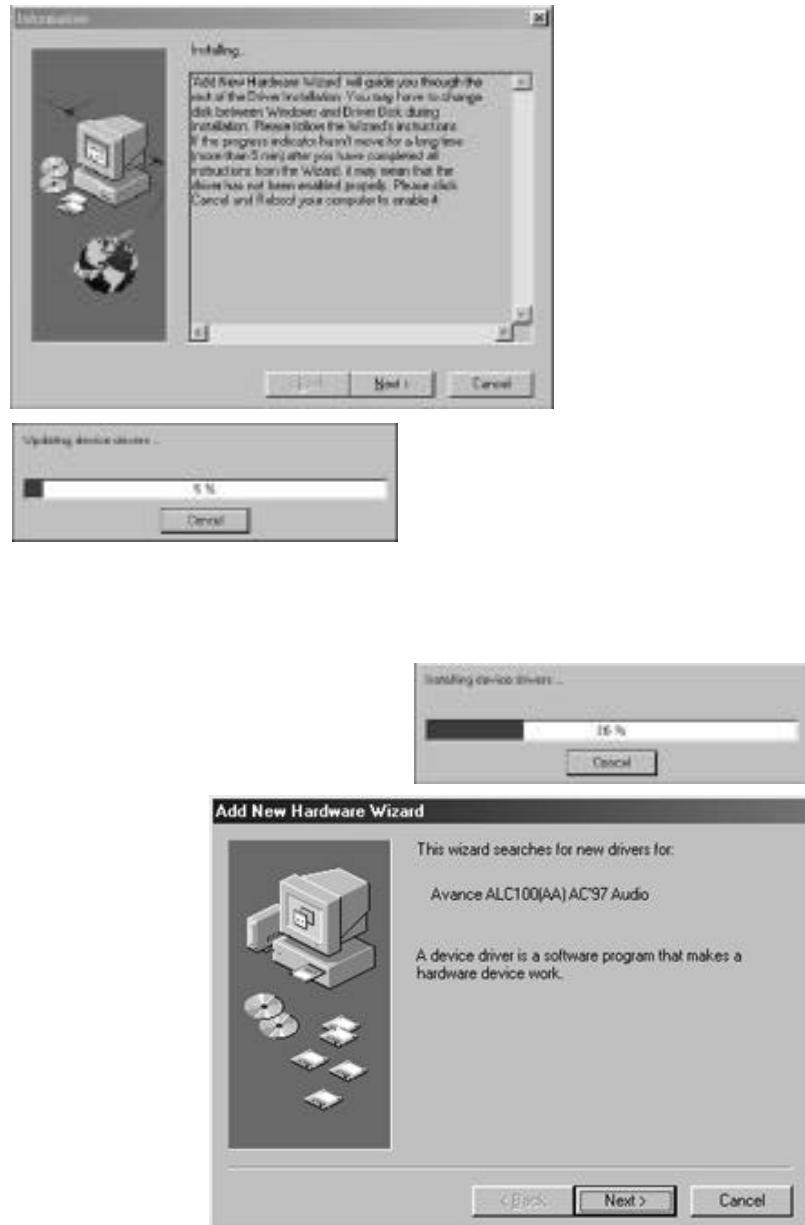
7 Select Yes for application installation.



8 Click the **Next >** button.



9 If the **Add New Hardware Wizard** wants to search for a driver, click the  button.



10 Select **Search for the best driver for your device (Recommended)** and click the **Next >** button.



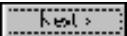
11 Specify the location to search in and click the **Next >** button.



12 If any new driver are discovered, click the **Next >** button.



13

Click the  button to copy the driver file.

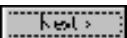


14

When driver installation is complete, click the  button.



15

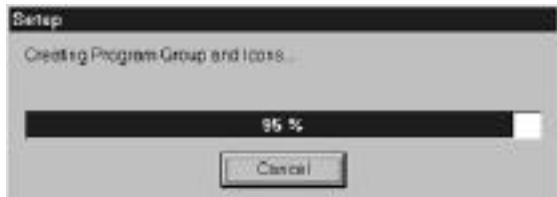
Click the  button for application installation.



16 Specify the directory to which the application has been copied and click the  button.



Setup Process

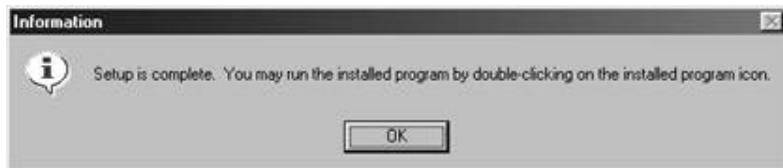


17 If you want to see the sound setup details, click **Yes**. If not, click the  button.



18

Click the **OK** button to confirm driver installation.



19

When the entire installation is complete, click the **Finish** button.



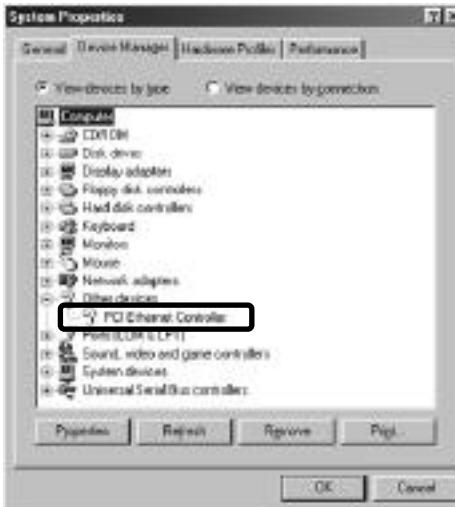
For a trouble-free driver installation,  
please be sure to restart the computer.

## How to Install the Network Driver

Make sure that the **Other Devices** of System Properties includes a **PCI Ethernet Controller**.



If a PCI Ethernet Controller exists, that means the network driver is not installed yet.

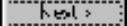


1 Choose **PCI Ethernet Controller** and Click **Properties** button

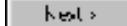


2 Click the  button in the **PCI Ethernet controller properties**.

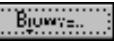
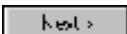


3 If the **Update Device Driver Wizard** window appears, click the  button.



4 Select **Search for a better driver than the only your device is using now (Recommended)** and click the .



5 Select the location to search. Click the  button to specify the driver's location and then click the  button.



6 If the device name for the driver you want to install matches, click the  button.



When you click the  button, the file copy will begin.

7 If the computer looks for **rtl8139.sys** during installation, specify the **D:\Lan\win98** folder and click the **OK** button.



During installation, the computer may need the Windows 98 CD. So, please have the CD ready.



8 When the driver installation is complete, click the **Finish** button to restart the computer.



System Settings Change

To finish setting up your new hardware, you must restart your computer.  
Do you want to restart your computer now?

Yes

No

## ↑ How to Install an AMR modem

To search for a driver in **Add New Hardware Wizard**,  
click the  button



The AMR modem is an option.  
You have to have an AMR  
modem card installed to  
install a driver for it.



- 1 Select **Search for a suitable driver for my device (Recommended)** and click the  button.



2 Select the location to search. Click the ***Browse...*** button to specify the driver's location and then click the ***Next >*** button.



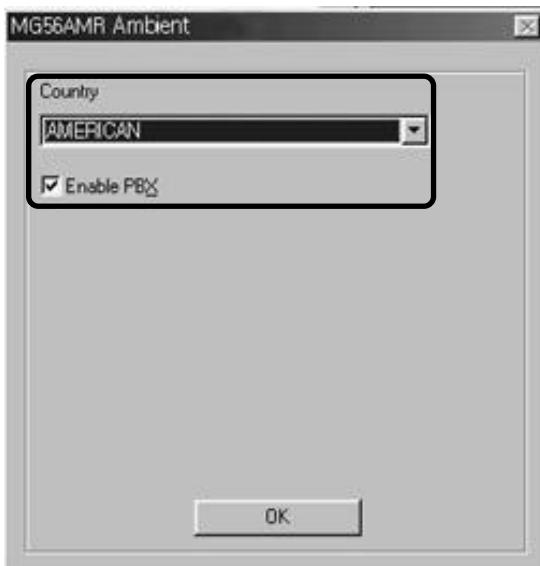
3 If the device name for the driver you want to install matches, click the ***Next >*** button. When you click the ***Next >*** button, the file copy will begin.



4 When the driver copy is complete, click the **Finish** button.  
This completes the **AMR** modem driver installation.



5 Select in **Add Country**, Enable PBX and click the **OK** button.



# ④

## Using an External Monitor

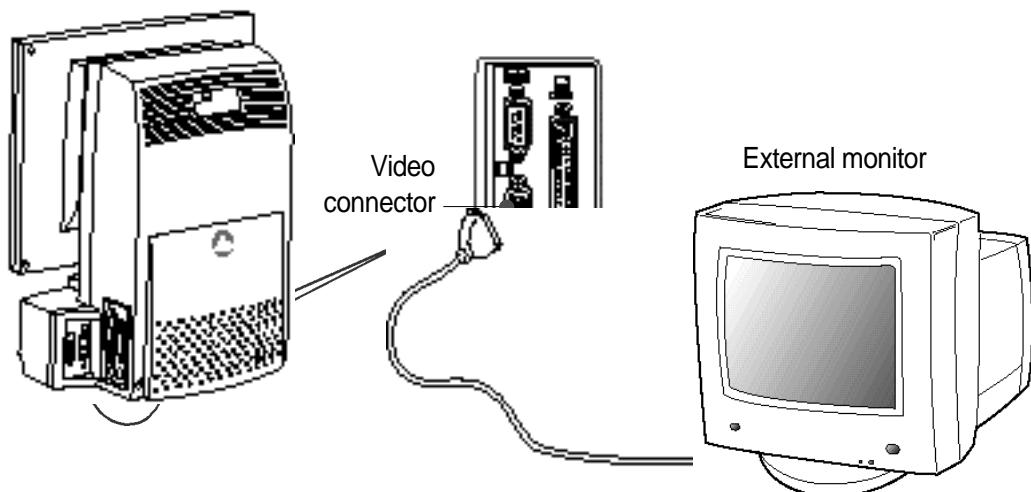
This section describes how to connect an external monitor to your FLATOP computer.



As the FLATOP LCD monitor has adopted TFT (Thin Film Transistor) technology to 16.7 million colors and 1024 x 768 resolution, you can enjoy a vivid screen quality without using an external monitor.

- 1. To use an external monitor, you must have the FLATOP VGA driver installed.
- 2. Turn off FLATOP when you connect the video connector into an external monitor

Connect the video connector on the back of FLATOP to the external monitor.





## LCD technology

FLATOP has adopted Black Matrix technology to give it an excellent screen quality. You can clearly recognize the difference in quality when you compare FLATOP with other products.

If you connect an external monitor without turning off your FLATOP, the computer will not be able to find the external monitor as shown in the diagram.



Once the external monitor is found, you can choose between the LCD panel (Figure 1) and external monitor (Figure 2), or both.



(Figure 1) LCD panel selected



(Figure 2) External monitor selected

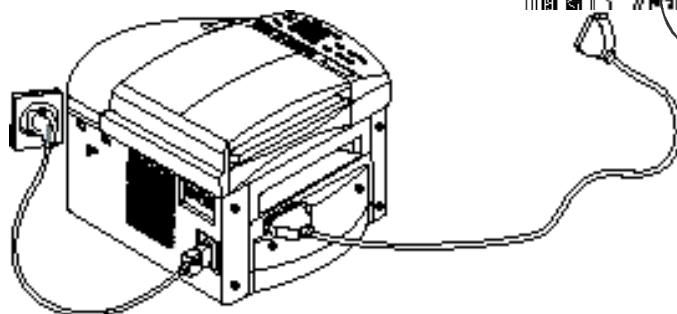


## Installing a Printer

- 1 Connect the printer cable to the print port of the computer.



Make sure that your computer is turned off before you begin the installation.



- 2 When the connection is established, first turn on the printer and then FLATOP to start Windows 98.



3



Double-click the **My Computer** icon. Open the Printer folder and run **Add Printer**.

4



The **Add Printer Wizard** begins.  
Click the **Next >** button.

5



Make sure that the printer is connected  
and click the **Next >** button.

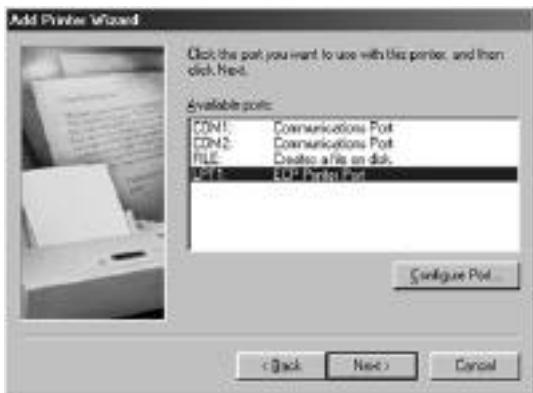
6



Select the manufacturer and model name, and click the **Next >** button.

If you have an installation disk, click the **Have Disk...** button.

7



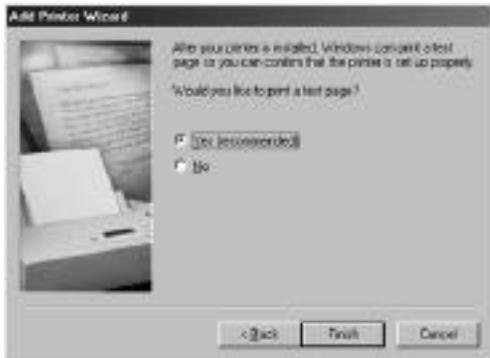
Select the LPT1 and click the **Next >** button.

8



Type the printer name you want  
and click the **Next >** button.

9



In the **Test Page Print**  
window, select **Yes**  
and click the  
**Finish** button.

10

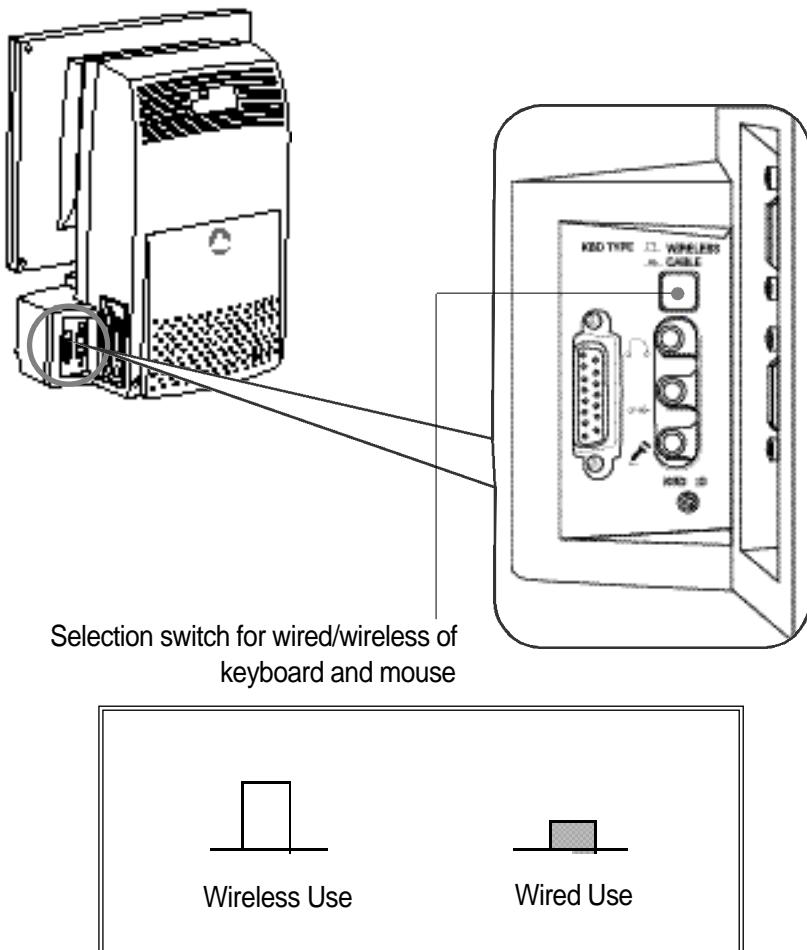


Check the print quality  
and click the **Yes** button.  
This completes the printer setup.

# 6

## Using a Wired Keyboard and a Mouse

To connect a wired keyboard and a mouse, turn off the computer and set the selection switch for wired/wireless keyboard and mouse to Wired Use.



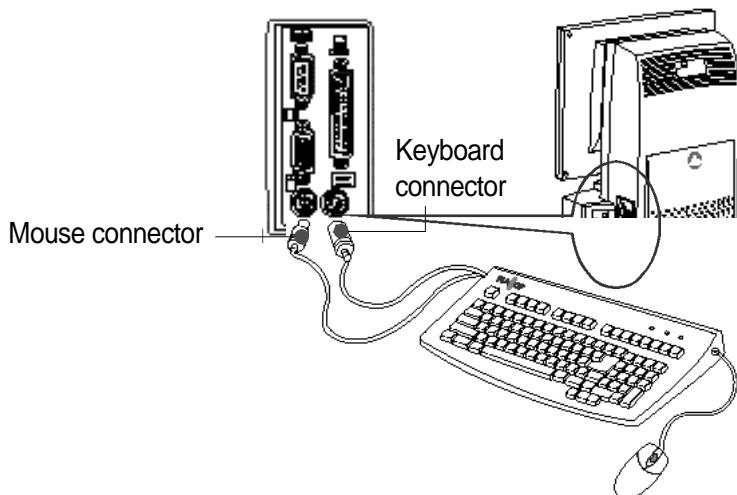
FLATOP provides for a wired PS/2 keyboard and mouse by default, but you can choose to use a wireless keyboard and mouse if preferred.

## Two Methods to Connect Wired Keyboards

1

### Connecting the mouse to the keyboard

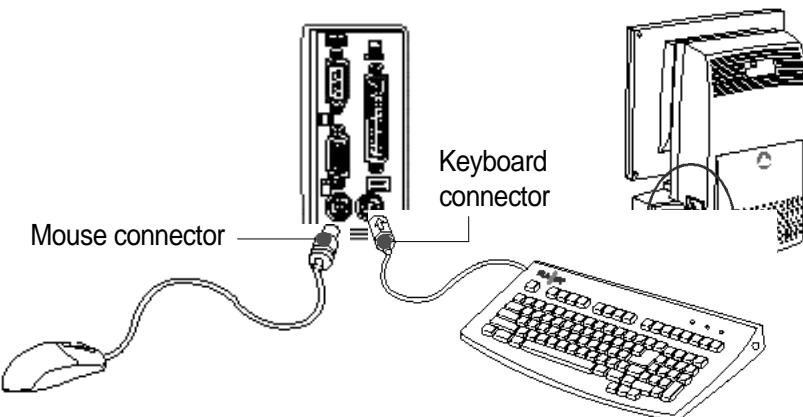
Connect the two keyboard cords to the two sockets for keyboard and mouse in the computer. And then connect the mouse to the keyboard.



2

### Connecting the mouse to the FLATOP

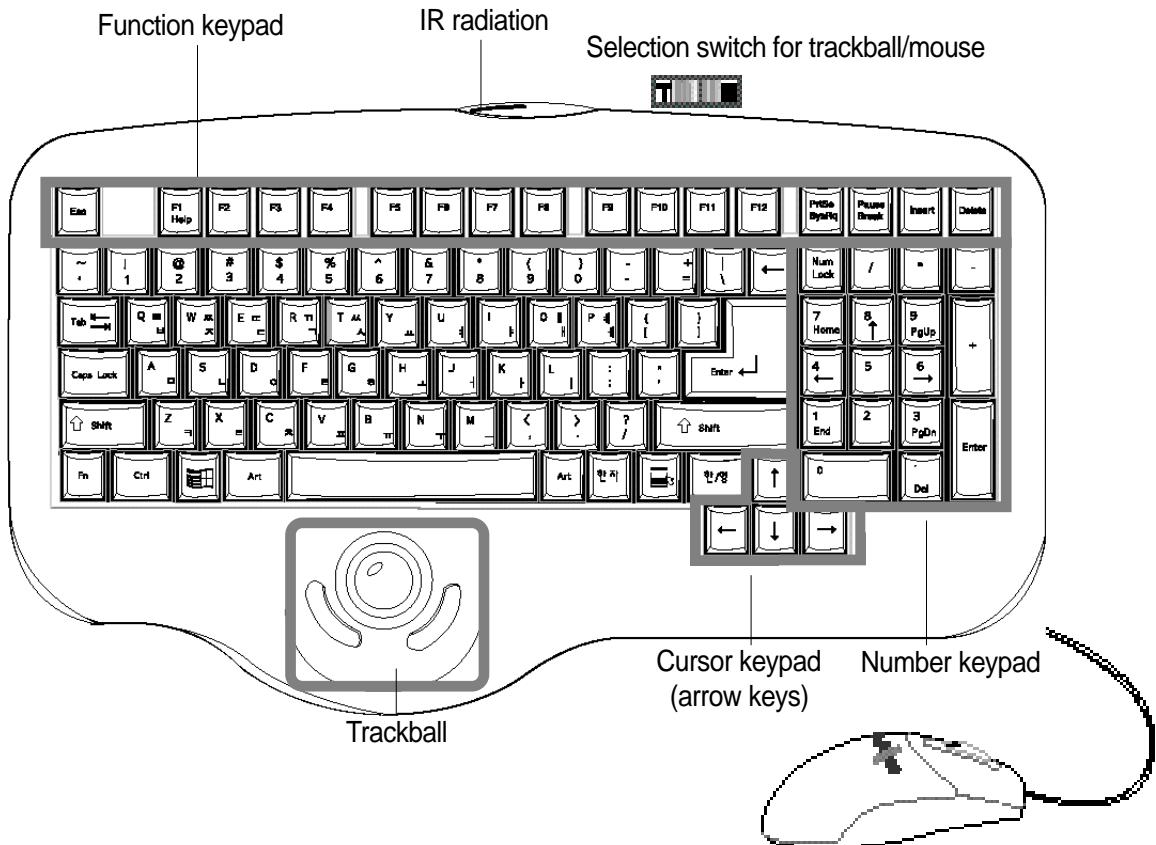
Connect the mouse to the FLATOP. and connect the keyboard cord of the two cords from the keyboard to the keyboard socket of FLATOP.





## 7 Using a Wireless Keyboard and a Mouse

The wireless keyboard used for FLATOP provides a high space utilization with 5m operation distance and 30° operation angle.



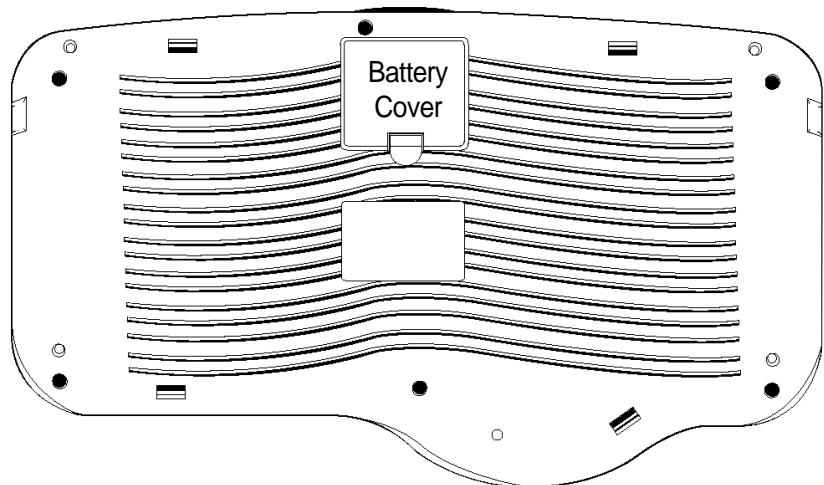
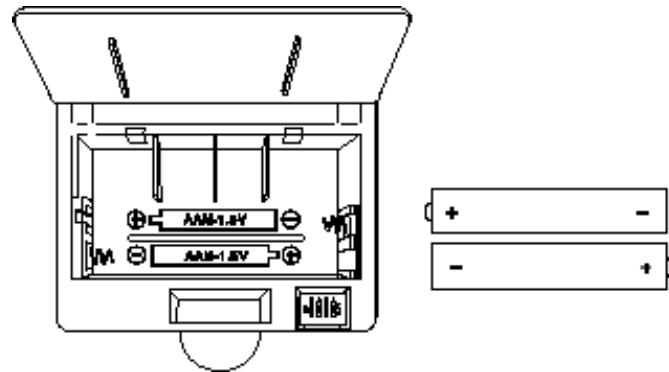
### How to use the keyboard battery

FLATOP's wireless keyboard uses DC 3V. The life of the battery spans about 3 months (depending on the keyboard operation time).

When the keyboard is not in use, it automatically converts to the power saving mode to reduce wasting the battery.

### Changing the Battery

1. The keyboard uses 2dry batteries of DC 1.5V and AA size.
2. Turn the computer upside down and open the battery cover.  
Insert the batteries according to the + and - poles.
3. Use batteries from the same supplier for higher efficiency.
4. Changing 2dry batteries at the same time will help the battery last longer

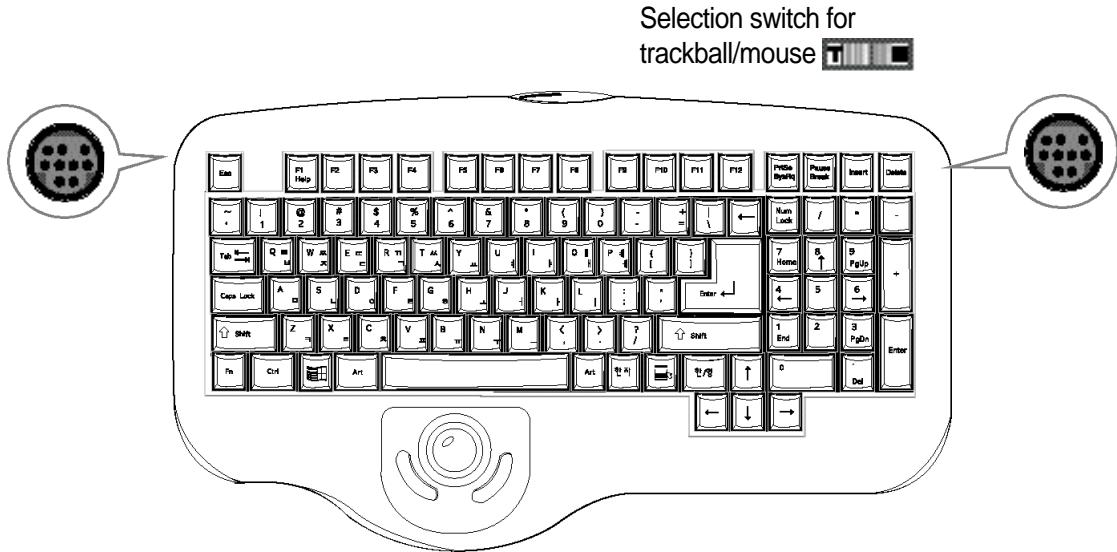


## Using the Mouse

FLATOP s wireless keyboard has two bus-type mouse sockets on its right and left sides. You can connect the mouse to either of the two sockets whichever, is most convenient.



Make sure that the computer is turned off before you connect the mouse. You cannot connect two mouses at the same time.



### Selection switch for trackball/mouse

To use the trackball, move the switch so that **T** is seen

To use the mouse, move the switch so that **M** is seen

## Setting the Keyboard ID

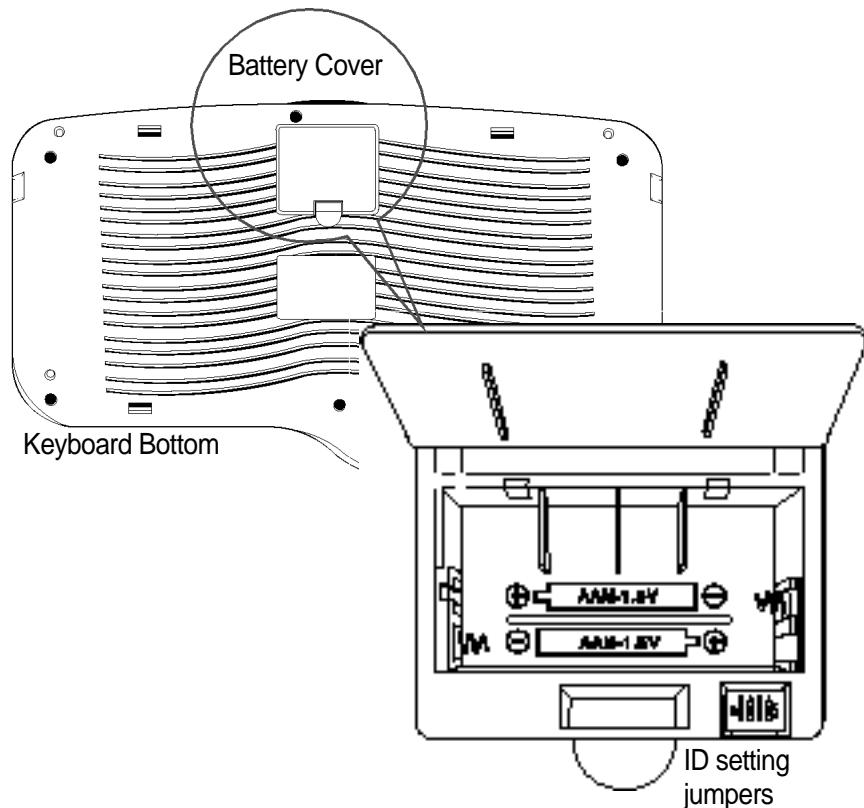


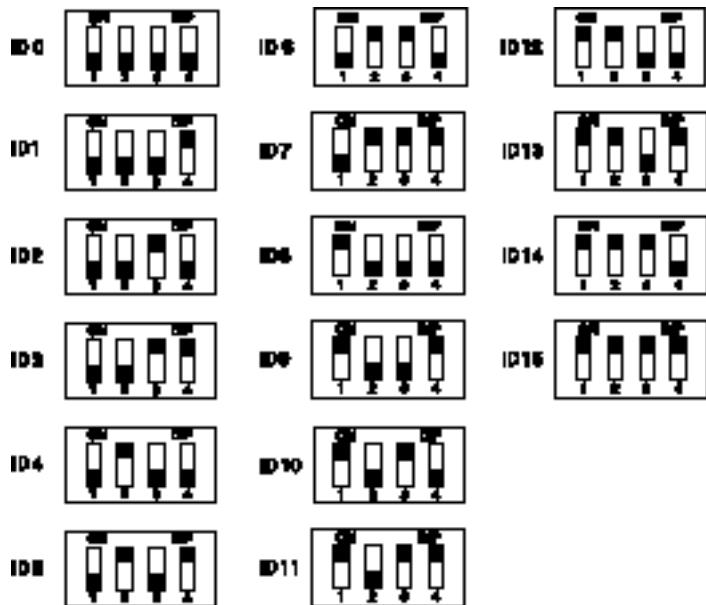
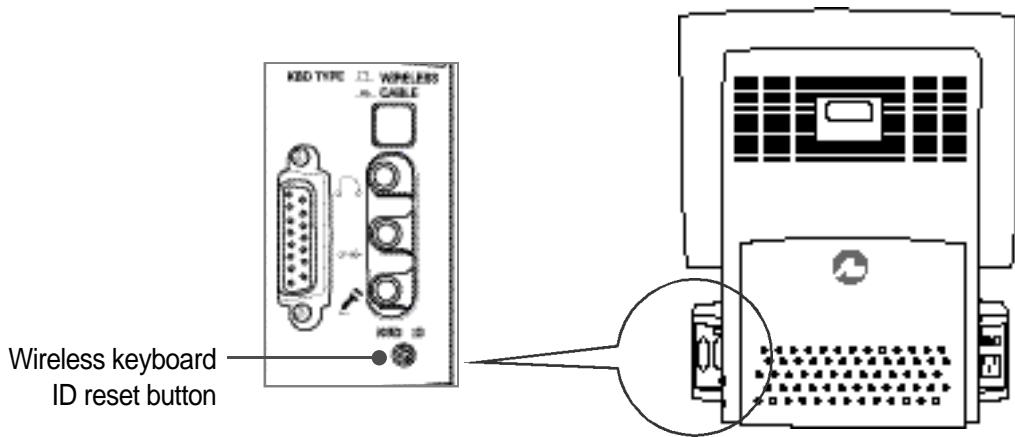
Remove the batteries before you set the keyboard ID

When two or more FLATOP s are used with wireless keyboards, different keystrokes could be input to your FLATOP. So, set a unique ID for your keyboard to ensure uninterrupted operation.

### How to set an ID

Turn the keyboard upside down, open the battery cover and you will see ID setting jumpers. You can use as many as 16 IDs from 0 to 15. Set the jumpers according to the following table.





If you set an ID for the wireless keyboard and press the reset button on the back of the computer, the ID will be changed.



# Advanced Operations



## Entering the System Setup

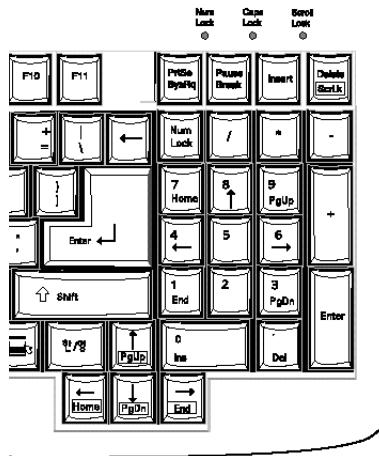
The system setup represents how you set the computer's hardware composition in CMOS. The computer checks the savings in CMOS every time it starts.

If there is discrepancy between the system setup and the hardware components, you will see error messages. In this case, you have to modify the CMOS setup according to the new environment.

### To Enter the System Setup



While the computer is initializing, you can enter the system setup by using the <DEL> key



Number keypad



## ② Turning the power on using the Keyboard

You can modify the BIOS setup to start the computer by using the keyboard



You can start the computer without pressing the power button, provided that the computer is in standby mode and that the computer's power cord is connected to a wall outlet

1 After you power up the system, the BIOS message appears on the screen and the memory count begins.

After the memory test, the following message will appear on the screen.

**Press DEL to enter setup.**

In CMOS Setup's primary screen, use the arrow keys to move to **Integrated Peripherals** and press **Enter**.

CMOS Setup Utility - Copyright(C) 1984 - 1999 Award Software

Standard CMOS Features Advanced BIOS Features Advanced Chipset Features <b>Integrated Peripherals</b> <span style="border: 1px solid black; padding: 2px;"> </span> Power Management Setup PnP/PCI Configurations  Pc Health Status	Frequency/Voltage control Load Optimized Defaults Set Supervisor Password Set User Password Save & Exit Setup Exit Without Saving
ESC : Quit F5 : Menu in BIOS F10 : Save & Exit Setup	† : Select Item
Time, Date, Hard Disk Type...	

## 2 Move to Keyboard/Mouse Power On

### INTEGRATED PERIPHERALS

		Item Help
		Menu Level
On-Chip Primary PCI IDE	Enabled	
On-Chip Secondary PCI IDE	Enabled	
IDE Primary Master PIO	Auto	
IDE Primary Slave PIO	Auto	
IDE Secondary Master PIO	Auto	
IDE Secondary Slave PIO	Auto	
IDE Primary Master UDMA	Auto	
IDE Primary Slave UDMA	Auto	
IDE Secondary Master UDMA	Auto	
IDE Secondary Slave UDMA	Auto	
USB Controller	Enabled	
USB Keyboard Support	Enabled	
Init Display First	PCI Slot	
AC97 Audio	Enabled	
AC97 Modem	Disabled	
Keyboard/Mouse Power On	Disabled	
X KB Power On Password	Enter	
X KB Power On Hot Key	Ctrl-F1	
Onboard FDC Controller	Enabled	
Onboard Serial Port 1	3F8/IRQ4	
Onboard Serial Port 2	2F8/IRQ3	
UART2 Mode Select	Normal	
X RxD, TxD Active	Hi,Lo	
X IR Transmission Delay	Enabled	
Onboard Parallel Port	378/IRQ7	
Parallel Port Mode	ECP+EPP	
EPP Mode Select	EPP1.7	
ECP Mode Use DMA	3	
PWR Lost Resume State	Keep Off	
Game Port Address	Disabled	
X Midi Port IRQ	5	

ESC : EXIT F1 : General Help  
F7 : Optimized Defaults

CMOS Setup Utility-Copyright(C)  
1984-1999 Award Software  
Integrated Peripherals

- **Disabled:** default setting
- **Password:** When this option is Selected, move the Cursor to the **KB Power On Password** field and press **Enter**. Enter your password. You can enter up to characters. Type in exactly the same password to confirm, the press **Enter**.

The power button will not function once a keyboard password has been set in the **KB Power On Password** field. You must type the correct password to power-on the system. If you forgot the password, power-on the system and then remove the battery. Wait for a few seconds and install it back before power-on the system.



- **Hot Key** : When this option is selected, move the cursor to the **KB Power On Hot Key** field to select a function Key you would like to use to power-on the system. The options are from Ctrl+F1 to Ctrl+F12.
- **Mouse Left** : If you select this option, you can turn on the system by double-clicking the mouse left button.
- **Mouse Right** : If you select this option, you can turn on the system by double-clicking the mouse right button
- **Any Key** : If you select this option, you can turn on the system by pressing any key.
- **Keyboard98** : If you select this option, you can turn on the system using the **Wake Up** button on the Windows 98 keyboard.
- **Button Only** : If you select this option, you can turn on the system only by pressing the power button (default).

### FREQUENCY / VOLTAGE CONTROL

CMOS Setup Utility-Copyright(C) 1984-1999 Award Software  
CPU Frequency Control

Auto Detect DIMM/PCI Clt	Enabled	Item Help Menu Level
Spread Spectrum	Enabled	
Host CPU/DIMM/PCI Clock	Default	
CPU Clock Ratio	X3	
† 與 Move Enter : Select Item +/-PU/PD : Value F10 : Save ESC : EXIT F1 : General Help F5 : Previous Values F6 : Fail-safe Defaults F7 : Optimized Defaults		

You can choose CPU Clock Ratio processor rate. The following options are provided; x3, x3.5, x4, x4.5, x5, x5.5, x6, x6.5.



The frequent ratio of some processors has been fixed by the manufacturer, therefore you don't need to over clock them. If you are using this kind of processor, please ignore this field.



# Improved Computer Performance



## 1 Opening the Computer Cover

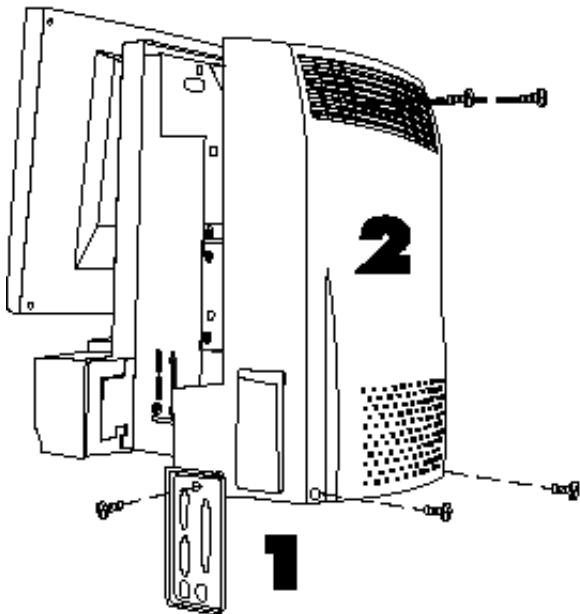
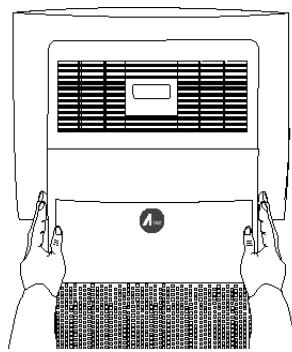
Disconnect the computer from the power before you remove the computer cover. Removing the cover with the computer turned on could cause damage to computer components due to fire or a short-circuit.

Put the computer on a clean place

Remove the screws.

Pull the cover softly

(Forced pulling could cause damage to the LCD panel).

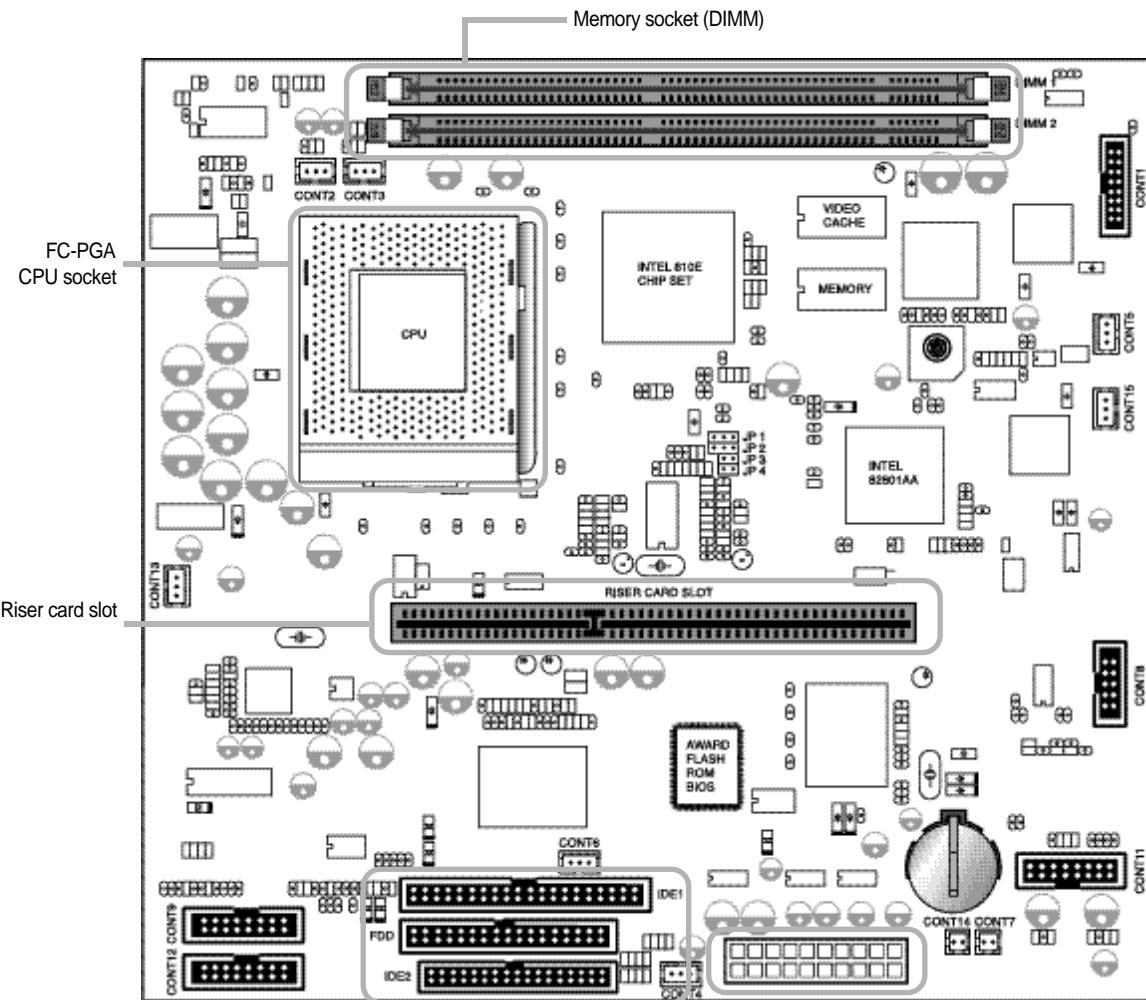


Open the computer according to the number.

2

## Composition of the Mainboard and Connectors

When you scale the computer up, check the related parts.



- Hard disk connector
- Floppy disk connector
- CD-ROM connector

### Power connector



1. Make a record of the information on the connection status before you remove the connectors.
2. Connect the hard disk drive, floppy disk drive and CD-ROM drive connectors according to their directions.

## Connector Functions

For correct connection, check the mainboard sconnector information

**Cont 1** LCD interface cable connector (for LCD output)

**Cont 2** FAN 1: CPU Cooling fan spower connector (permitted changing with **Cont 3**)

**Cont 3** FAN2: External radiator fan spower connector (permitted changing with **Cont 2**)

**Cont 4** Cooling fan spower connector

**Cont 5** Inverter Connector

**Cont 6** IR connector

**Cont 7** Internal Microphone connector

**Cont 8** Serial Port 2 connector

**Cont 9** External serial port, parallel port, VGA port connector

**Cont11** USB, Ethernet port connector

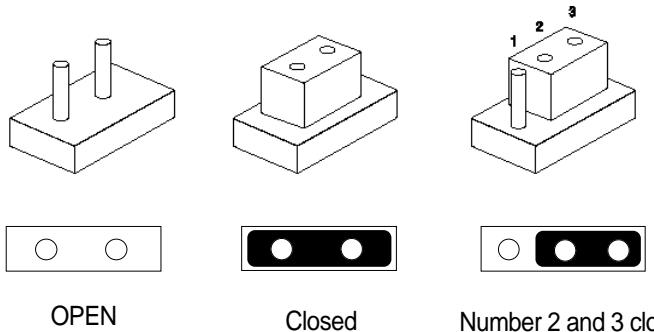
**Cont12** Sound, keyboard and mouse connector

**Cont13** Line in connector

**Cont14** Left speaker connector

**Cont15** MiCom Test (Don t used)

## Jumper Setting

Jumper Setting for CPU Speed  
(Removed in the mass production)

The AF8 mainboard supports the system bus clock from 66Mhz to 133Mhz (the default is 100Mhz).

Set the jumpers according to the CPU clock(**set in the closed mode**).

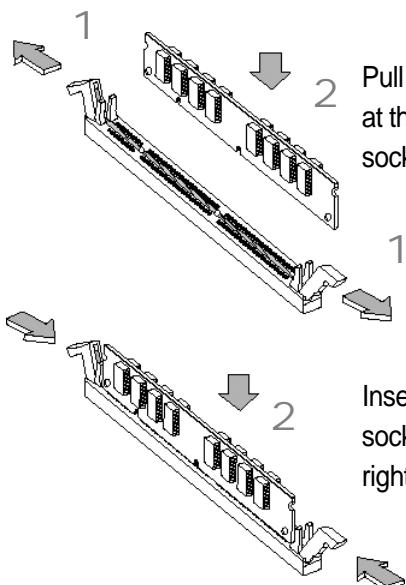
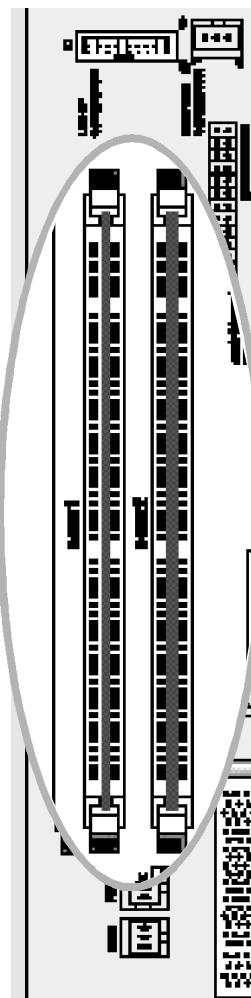
MHz	JP1	JP2
Celeron CPU 66 MHz	2-3	2-3
Pentium CPU E Type 100 MHz	1-2	2-3
Pentium CPU EB Type 133 MHz	1-2	1-2

Since AF8 senses the CPU speed automatically, you don't have to set the jumpers. The AF8 supports PPGA CELERON CPU and FCPGA PENTIUM CPU.

## Expanding the Memory

The AF8 uses 168 pin memory modules called DIMM (Dual In-line Memory Module) . It supports a maximum 512MB.

### 1. Inserting the memory module



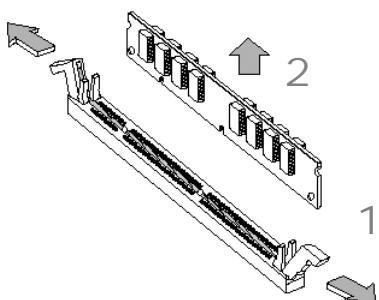
Pull the two lock-in tabs outwards at the both ends of the memory socket.

1

Insert the memory module into the socket perpendicularly in a rightwards direction.

2

### 2. Removing the memory module



the lock-in tabs outward to remove the memory module

1



FLATOP supports PC-100 and special PC-133 standard memory.

\* FLATOP cannot use PC-66 memory. A combination of Celeron CPU and PC-66 memory could cause abnormal operation in the memory.

We don't recommend this combination.

## Cautions

1. As memory is vulnerable to static electricity, be careful in inserting and removing the memory modules.
2. Check the memory module type before you install the new memory module.

Specifications for the memory module used for this product

Memory type : 168 pin DIMM (SDRAM)

Speed : PC-100

Capacity : 64MB, 128MB

Total Memory Capacity	DIMM 1	DIMM 2
32M	32M	
48M	32M	16M
64M	32M	32M
	64M	
80M	64M	16M
96M	64M	32M
128M	64M	64M
	128M	
192M	128M	64M
256M	128M	128M
512M	256M	256M

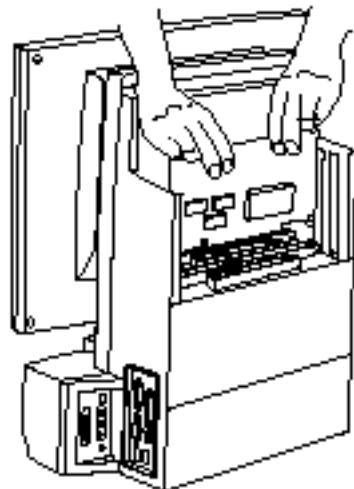


## 5 Installing cards in the Expansion Slot

FLATOP's mainboard can accommodate additional 2 PCI cards or 1 AMR card and 1 PCI card.

1

Open the computer cover and insert the card using both hands

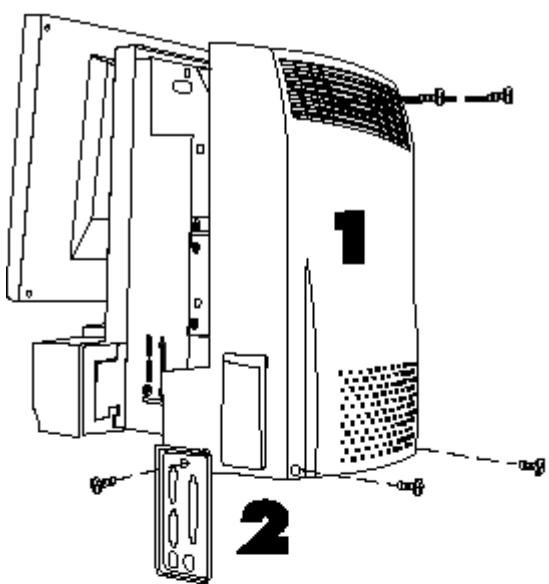


2

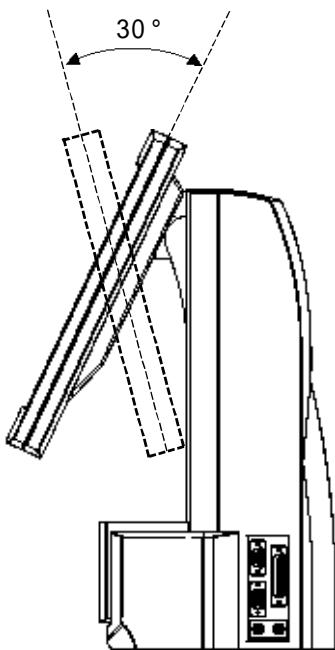
Make sure that the card is correctly inserted into the slot and fasten the card's bracket with a screw.

3

Close the cover and fasten it with screws



## Adjusting the FLATOP LCD Monitor



You can adjust FLATOP's TFT LCD monitor in the vertical range of -5 ~ +25°. To change its vertical angles, hold both sides of the panel and move it up and down.



# Troubleshooting

This section describes universal problems that could happen to your FLATOP. If you encounter difficulties and problems in using this product, first refer to this section. You can gain detailed explanations by calling our help desk at 82-2-2190-5050.

**Q1** One of my applications does not operate normally. Why?

**A**

Check the followings

1. Is there enough memory to run the application?
2. Is the application is designed for the current operating system?
3. Is the necessary device driver installed?
4. Does the application have a problem when it runs on another computer?

If you encounter an error message while using the application, refer to the manual that comes with the application. If you still have problems, contact the branch where you purchased the product or our help desk.

**Q2** I connected an external monitor, but why are the monitor screens overlapping and unstable?

**A** FLATOP s TFT LCD uses 1024 x 768 resolution. This resolution is applied to the external monitor. Therefore the screen could be distorted or tremble. Adjust the external monitor s resolution according to the following procedure.

1. Refer to the monitor s User Manual and check the supported resolutions.
2. Select **Display** from the Control Panel.
3. Select Settings tap in the Display Properties.
4. Set the resolution that the monitor supports and click **Yes**

If the above procedure doesn t solve the problem, check that the FLATOP video driver is correctly configured in the Display Properties

**Q3** I reinstalled Windows 98. Why do the sound, VGA, and LAN cards malfunction?

**A** To use FLATOP s sound, VGA, and LAN cards after reinstallation, install all the drivers provided by the manufacturer again. You can download those drivers from FLATOP s website at [www.flatop.co.kr](http://www.flatop.co.kr).

Please refer to **Installing drivers** on Page 18

**Q4** The computer issues a message **Keyboard error or no keyboard present** and the keyboard doesn't function. Why?

**A** You can use either a wired or a wireless keyboard by setting the selection switch for wired/wireless options

Check the following

1. Check the keyboard connection.
2. Check the selection switch for wired/wireless keyboard is correctly set.
3. When the dry battery is used up, the keyboard could malfunction.  
Check the battery.
4. If you are using a wireless keyboard, press the ID reset switch on the keyboard

**Q5** Why does the computer have white or colored spots on its LCD screen?

**A** FLATOP's LCD contains about 1 million pixels and bad pixels could occur. LCDs with higher quality pixels are extremely expensive and beyond the affordability of average users.

We are doing our best to minimize bad pixels. Bad pixels below a certain level don't affect the product.

**Q6** How can I find out how to install other operating systems and drivers for those systems?

**A** Please refer to the FLATOP installation guide or visit our website at [www.flatop.co.kr](http://www.flatop.co.kr) for information on new operating systems and device drivers

**Q7** Why can't FLATOP recognize the AMR card?

**A** After installing the AMR card, set the AC97 Audio or AC97 Modem to **Enabled** in **Integrated Peripherals** in the system BIOS.

**Q8** Why doesn't my FLATOP shutdown automatically under Windows 2000.

**A** 1. Click Start and point to **Settings** and then **Control Panel**. Run the Power Option and select **APM** and then **Advanced Power Management**. Activate the **Enable APM Support**.

2. Enable APM, ACPI related items in BIOS's Power Management and reinstall Windows 2000.

# Declaration of Conformity



This certifies the following designed product

## LCD PC Model No. : AF8

Assessment of compliance of the product with the requirements relating to electromagnetic compatibility and safety were based on the following standards in accordance with 89 / 336 / EEC-EMC Directive and LVD 73 / 23 / EEC:

<input type="checkbox"/> EN 55011	Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM) high frequency	<input type="checkbox"/> EN 50081-1	Generic emission standard Part 1 : Residential, commercial and light industry
<input checked="" type="checkbox"/> EN 55022	Limits and methods of measurement of radio disturbance characteristics of information technology equipment (ITE)	<input checked="" type="checkbox"/> EN 50082-1	Generic immunity standard part 1 : Residential, commercial and light industry
<input type="checkbox"/> EN 60065	Safety requirements for mains operated electronic and related apparatus for household and similar general use	<input checked="" type="checkbox"/> EN 60950	Safety for information technology equipment including electrical business equipment

This declaration is the responsibility of the manufacturer / importer.

**ATEC SYSTEM CO., LTD.**  
**1451-78, Seocho-Dong, Seocho-Gu, Seoul, Korea**

### Manufacturer / Importer

Jan. 9, 2000  
(Date)

Name, Company stamp

### Test laboratory

This is the result of test that was carried out from the submitted type-samples of a product in conformity with the specification of the respective standards.  
The certificate holder has the right to fix the CE mark for EMC on product complying with the inspection sample.

Jan. 03, 2000  
(Date)

Sung Dae, Park /  
KESI Director

Korea EMC & Safety Institute  
216-3 Youngdak-Ri, Kihyeung-Eup, Yongin-Shi, Kyungki-Do, Korea



MEMO



MEMO

# Customer's Card

Product name : FLATOP LCD PC Model name :

Date of Purchase :

Customer's Name : Tel. Address

Agency Name : Tel. Address



## Warranty

Product name : FLATOP LCD PC Model name :

Date of Purchase :

Customer's Name : Tel. Address

Agency Name : Tel. Address



You must present this warranty containing the date of purchase when you ask for service.

Please keep this warranty in a safe place.

1. The warranty of this product will be based on the contents in the warranty.
2. The warranty period is calculated from the date of purchase, please write down the date of purchase.
3. The warranty period lasts one year for normal use.
4. In the case of a separate agreement, the descriptions of the main agreement will be applied.

One-year  
warranty



**ATEC SYSTEM CO., LTD.**