CHANGING THE DISPLAY PROPERTIES UNDER WINDOWS

To change the display properties of your screen under Windows system, just right-click on the desktop area and select Properties or go to the Control Panel and click on the Display icon. The Display Properties dialog box will appear on your screen. Click on the Settings tab to set your desired configuration. Make sure to follow the configuration table above.

If you cannot configure the display properties, change the display driver first as mentioned on Section 5 "Installing the Notebook Device Drivers" of Chapter 2 in this manual. Consult your dealer for the latest Windows VGA driver.

3.5 Knowing the Power Saving Features

One of the great features in your notebook computer aside from its superior performance is the ability to save energy power. Your computer is designed to incorporate intelligent and advanced power management functions that turn off power of most components when system is idle or not in use. This feature not only gives you longer battery hours but cooler systems and components as well. For more information on how to control the power management features of your computer, refer to **Power Options** function in **Control Panel** of Windows.

The definitions of Standby Mode, Hibernation Mode, and Shutdown are depicted as follows:

Standby Mode

Standby Mode is mainly for power saving. When the Standby Mode is activated, your display and hard drive are shut down and all open applications

and documents are stored in RAM (Random Access Memory). This allows your notebook to wake up quickly, but a low level of power is required to maintain this suspended state. How quickly your system powers down into Standby mode is up to you by setting proper times in Power Options of Control Panel in Window. While the notebook is in Standby mode, the LED of power indicator flashes. To resume your working again, you can press the power button to return your work to the screen where you left off.

Hibernation Mode

In Hibernation mode, all system devices are powered down and the contents of RAM are stored on your hard drive. Hibernate mode uses less power than Standby mode, but takes a bit longer time to resume. When your notebook goes into hibernation, Windows saves your entire desktop state before powering down your computer. You don't need to save and close each document before you put your notebook into hibernation. When you press power button again, system will bring your notebook out of hibernation. You'll find your applications and documents open on your desktop exactly as you left them.

Hibernation is enabled by default. To verify that Hibernation is enabledd, Click Start, point to Settings, and then click Control Panel. Choose Power Options icon, then click on the Hibernate tab. IF the chock box of Enable Hibernate is selected, the Hibernation mode is enabled.

Shutdown

All power has been turned off from the notebook. This means that no power including external AC power source and battery power source will be consume by the notebook.

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3.6 Working with the Built-in HDD

Your notebook computer is equipped with a built-in large capacity 2.5 inch IDE hard disk drive where you store or install your computer operating system and all application software programs. You need to format the hard disk before using. The internal hard disk is normally assigned as Drive C after formatting. Sometimes divided into two partitions, adding a Drive D. Since your computer supports different hard disk capacities (up to 80 GB), you also need to setup the disk type first on your computer's BIOS SETUP program before formatting the disk drive. Your computer supports Auto-detect hard disk type, so you do not need to set it manually. Your dealer should already have done all of this for you. You can refer to **Chapter 6** on how to run the BIOS SETUP program.

You can increase the system's storage capacity by replacing the standard hard disk drive with a drive of greater storage capacity.

- + If you wish to replace your hard disk, contact your local dealer for more information about this dealer-installable device.
- + Always turn off your computer first before removing the hard disk drive. Failure to do so will damage the computer and the hard disk. Avoid jarring or moving the computer while the hard disk is still being accessed.

3.7 How to Access the Optical Drive

Your system ships with an optical disk drive installed on the left side of your computer. You would normally use the drive for installing operating system and software application programs.

To insert and remove a disc on the drive:

- Make sure the computer is turned on. Press the eject button found on the door cover of the combo drive. The CD tray mechanism will pop-out slightly and slowly pull out the whole length of the tray.
- 2. Place the disc on top of the CD tray with the label side facing up. Gently press the compact disc onto the center spindle to secure the disc.



- 3. To remove the disc, press on the center spindle and pull up the disc from the side until the disc snaps out of the spindle lock.
- + If the eject function is disabled by software or a power failure occurs, the Emergency Eject Hole allows you to manually remove a CD from the reader.
- 4. To close the combo drive, simply push the CD tray inside. The combo drive LED will activate when the disc is detected. Wait until the LED has turned off and then start to read the disc.

How to care the CD

When you handle CDs, pay attention to the following guidelines:

- Always pick up the CD by its edges.
- Avoid scratching or soiling either side of the CD.
- Do not write with the hard ball-point pen or apply labels on either side of the CD.
- · Keep the CD away from direct sunlight or high temperatures.
- Clean fingerprints or dust from the CD by wiping it with a soft cloth.

The above points also apply to other optical storage media.

+ The Combo drive is a Class 1 Laser Product.

3.8 ExpressCard

WHAT IS EXPRESSCARD?

The ExpressCard is a newly developed PC Card interface, its connector has just 26 pins and the interface has a potential transfer rate of up to 500 MB/sec (or 250 MB/sec in each direction) using a single-lane PCI Express link. Its form factor is up to 40 percent smaller than a PC Card, which allows ExpressCard modules to be included in smaller host systems. Designed for both desktop and mobile use, ExpressCard use either USB 2.0 or a single lane PCI Express technology.

The ExpressCard standard was developed by PCMCIA member companies including technology leaders, system manufacturers, card manufacturers, from all other parts of the PC Card industry.

Dimensions of ExpressCard

Current CardBus PC cards are 54 millimeters wide. ExpressCard can divided into two categories, based on width. Most designs will use the ExpressCard 34 design, which sets the width at 34 millimeters. For some applications, the wider ExpressCard 54 standard will be used to produce cards that can handle the higher thermal requirements of those applications.

All ExpressCard modules are 5mm thick but the standard also allows for card developers to build longer 'extended' modules.

INSERTING AND REMOVING A EXPRESS CARD

Your computer includes hot swapping capability, that allows you to exchange cards while the computer is turn on and start using it immediately.

Inserting ExpressCard

To insert a ExpressCard into the ExpressCard slot:

- 1. Locate the ExpressCard slot cover on the right side of the computer.
- Insert the side of ExpressCard with the 26-pin socket into the ExpressCard slot. The face label of the card should also be facing up.
- 3. When the full length of the card is almost inside the slot, push firmly but slowly, to ensure full connection with the computer. The ExpressCard will be automatically detected, and once the needed driver is installed, it will generate a beep sound to indicate that the card is detected.

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Removing ExpressCard

To remove a ExpressCard from the ExpressCard slot, you should first disable the ExpressCard card setting in the system as described followings:

- 1. Double click the ExpressCard icon on the right bottom side of the task bar.
- 2. Select the socket from the list that you want to remove, and click **Stop** button. The system then disables the function of ExpressCard card.
- 3. Then you can remove the inserted ExpressCard. To release the ExpressCard, just push the ExpressCard again to the end. Then the ExpressCard will automatically bounce off the ExpressCard slot.
- 4. When the ExpressCard has moved out a space out of the slot, hold the edges of the card and slowly slide it out.



+ The power consumption of ExpressCard/54 is about 2.1W, while the consumption of ExpressCard/34 is about 1.3W. To save energy, press the button to disconnect the card when it is not in use.

3.9 Using Flash Memory Cards

WHAT IS FLASH MEMORY CARD?

Flash Memory is a memory storage media. It is used by most digital camera, moreover, it can replace the traditional floppy disk. Flash memory card is built with different form factor and brand name. Their size is smaller than PCMCIA card. This computer supports most of the flash memory card, including SD, MMC, MS (Memory Stick), and MS_Pro card.

The 4 in 1 card slot is used by the following cards as SD, MS (Memory Stick), MMC, and MS_Pro.

+ For a single moment, only one card can be inserted into the 4 in 1 card slot

Inserting Flash Memory Card

To insert a flash memory card into the slot is similar to ExpressCard. You only need to pay more attention whenever insert the flash memory card into the slot with the correct side.

For MMC and SD card, you should position the copper connector at the bottom side. For Memory Stick card, you should position the copper connector at the topside. All of these cards should be located at the center of the slots in inserting.

Slot	Card type	Copper connector	
4 in 1	SD (Secure Digital)	Bottom side	
	MMC (MultiMedia Card)	Bottom	
	MS (Memory Stick)	Top side	
	MS_Pro	Top side	

Only one correct side can be accepted for the 4 in 1 card slots. If you cannot insert the card into the 4 in 1 slot or you had inserted the card but it is not recognized by the computer, please remove the card and turn the card upside down and insert it again. To prevent the damage made both on card and the slot, never forced an entry into the slot with incorrect side.



Removing Flash Memory Card

It is similar to ExpressCard for removing a flash memory card from the slot. You should first disable the card setting in the system as described in the former section.

To remove the flash memory card, you should only pull out the card by finger, there is no release button for flash memory slot.



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4 Fun with Multimedia



This chapter lets you make full use of all the multimedia features of your computer in having fun and excitement during work or leisure. You will learn how to mix and match the built-in sound system, use Combo drive in creating an exciting full multimedia presentation.

4.1 Notebook Multimedia Features

Your notebook computer is rich in multimedia features that make your computing fun, comfortable, exciting and easy. Your computer is well able to perform all multimedia tasks through the following:

- AMD TurionTM 64 x 2 mobile technology
- Up to 4GB DDRII- SDRAM
- DVD/CD-RW Combo, DVD Dual or DVD-Super Multi (Optional)
- Integrated Nvidia C51D graphics engine.
- Sound Blaster compatible. Compliant with Intel HD Audio (Azalia).

4.2 Audio Sound System Features

Your computer has a built-in 16-bit stereo sound controller that allows you to record, store, and playback voice, music and other sound effects with built-in mixer controls. An integrated full-duplex microphone and twin mini-speakers are also built-in into your computer to allow you to record and playback sound anytime and anywhere.

On the front side of your computer, you will find the audio ports that include the following:

- External 1/8-inch microphone jack that connects external microphone for recording purpose.
- Earphone or headphone jack for personal listening.
- SPDIF out port for digitized audio signal transmission.

Sound volume adjust by K/B hot-key

4.3 Setting up the Audio Driver Properties

Before you can start using the audio capabilities of your computer, you need first to setup properly the audio driver after installing Windows. If you bought your computer with Windows pre-installed, it is most likely that your dealer have configured the sound driver for you. If not, you must refer to Chapter 2 on how to setup the sound drivers for Windows.

4.4 Windows Multimedia Programs

Windows provides several multimedia programs that you can run with the built-in features of your computer. Pointing the **Start** button, **Programs**, **Accessories**, then **Entertainment**, you will find the Multimedia programs group. (The section below use Window XP as examples)



Figure 4-1 Entertainment Programs Group

The standard multimedia components are as follows:

- Windows Me dia Player for playing sound, vide o and animation files
- Sound Recorder for recording sounds and playback
- Volume Control for adjusting the volume of mixer
- For more information on how to operate these multimedia components, run
 the program and click on the Help menu

4.5 Recording Sounds

Your computer allows you to record voice and other sounds in several ways and stores them as files on your hard disk. These voice or sound files can then

be played back through the internal speaker or earphone jack using an external speaker, headphone, or earphone set. You can also use the files as voice annotations on many applications for more real presentation. This section will describe briefly how you can record sounds under Windows operating system.

To record sounds, you need to run the Sound Recorder program from the Multime dia program groups. The control buttons of the Sound Recorder are simple to understand which comprise of the Fast Rewind, Fast Forward, Play, Stop, and Record buttons. Click the Help menu on how to operate the Sound Recorder.



Figure 4-2 Sound Recorder

The Sound Recorder also allows you to record sound from different input audio source like the following:

- From the external microphone
- · From the Combo drive

Since you could record sound from different input sources, you must first set the proper audio input recording device under the Recording Control panel. To do this:

 Double-click on the Volume Control on the taskbar or click Start button, then point to Programs, Accessories, Entertainment and then click on Volume Control.

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- Click Properties in the Options main menu.
- Click the round button for Recording and tick off each component that list in the "Shows the following Volume Controls" box.



Figure 4-3 Audio Properties

4. Click OK and the Recording Control dialog box will appear. Here, you will select the input device for the recording source. If you want to record from the Combo drive with audio music, you must click on CD Player.

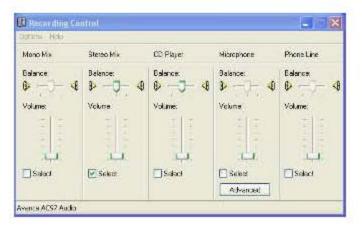


Figure 4-4 Recording Volume Control

USING AN EXTERNAL MICROPHONE

Your computer allows you to connect an external microphone for high quality recording. The external microphone jack is found on the left side of your computer. Use only microphone with 1/8-inch mini-jack connector. Follow the same procedure for recording voice.

Using the Built-in Combo Drive

You would normally use the Combo drive for recording audio music from the Audio CD. Follow these steps:

- 1. Activate CD Player volume on the Recording Control as discussed earlier.
- 2. Run the Sound Recorder program.
- 3. Insert the audio CD into the Combo drive. Unless you have disabled the CD auto-insertion notification for supporting Suspend mode, the CD Player should automatically run after you have inserted an audio compact disc and will start playing the audio CD.



Figure 4-5 Play Audio CD by Windows Media Player

- 4. Select the starting point where you want to start recording.
- 5. Switch to the Sound Recorder and press the Record button.
- Switch immediately to the Windows Media Player and press the Play button. You can adjust the volume control so you can also hear the music while in recording.

4.6 Playing Audio and Sound

Your computer has built-in twin speakers to playback audio and sound. You can also adjust the volume manually by adjusting the volume control hotkeys found on the keyboard.

For more quality sound output, you can choose to connect an external amplified speaker or earphone from headphone jack. Always minimize the volume first before placing the phone set to your ear.

USING THE WINDOWS MEDIA PLAYER

The easiest way to playback multimedia media files is to run the Windows Media Player. Follow these steps:

- Click on Start, point to Programs, Accessories, and then Entertainment.
- 2. Click on Windows Media Player to start program.
- 3. Click on the File menu and select the file you want to play.
- When the file is recognized and open, click on the Play button to start playback.

4.7 Playing Video and MPEG Files

Your computer is capable of running video motion files as well as MPEG (Motion Picture Expert Group) files on CD, DVD, or CD-RW. By using software MPEG program, you can watch real full-motion picture on your computer. You can also run the Windows Media Player under the Entertainment programs group as well to show all media device programs.



Figure 4-6 Windows Media Player

4.8 Using DVD

DVD is the breakthrough in superb full-motion picture playback. One disc can contain at least 4.7GB of information, capable of holding one full-length movie with soundtracks, subtitles, and different languages. Much more, the DVD-ROM drive of your computer is backward compatible with CD-ROM drive so it allows you to use any CD as well. It also works the same as the CD-ROM.

To playback DVD titles, you would need a software MPEG-2 program and the DVD-ROM drive at least. Your Notebook computer has installed Windows XP for operation system and its Windows Media Player supports DVD's playback...

You can use Windows Media Player to watch DVDs on your Notebook computer. Like a conventional DVD player, by using the Player, you can skip to specific titles and chapters, play sequences in slow motion, gain access to special features, and switch audio and caption languages. In addition to these conventional DVD player tasks, you can also retrieve information about each disc from the Internet.



Figure 4-7 To play a DVD

On the Play menu, point to DVD, VCD or CD Audio, and then click the drive that contains the DVD. In the Playlist pane, click a DVD title, or chapter name, if appropriate.

To eject a disc, on the Play menu, click Eject. To play a selected title in a DVD repeatedly, on the Play menu, click Repeat. A check mark appears next to the command to indicate it is turned on.

4.9 Using Rewritable Optical Disk Drive

DVD/CD-RW Combo or DVD+RW combo drive is a device that can write digital data to CD-R and CD-RW or DVD+R and DVD+RW media. With this device, you can backup your own data to CD-R or CD-RW disc for mass data storage and safely retaining. The CD-R disc can be written several times until the CD-R is full; the CD-RW disc, furthermore, can write and erase data repeatedly. Please refer to the related user manual about the CD-RW software.

+ Please pay attention to the copyright of the software or data you want to backup. Backup or distribute the software or data might be illegal according the restriction of the law.

5 Connecting to Peripherals



 ${
m T}$ his chapter describes how you attach peripheral devices to your notebook. You can attach a printer or mouse; connect an external monitor and keyboard, or any other peripheral device. You will learn how to use these peripheral devices with the step-by-step instructions depicted in this chapter.

5.1 Using the USB Port

USB (Universal Serial Bus) is a hardware interface that enables you to connect multiple devices (such as printers, mice, keyboards, storage devices, joysticks, digital cameras, and video conference cameras, etc.) to your notebook computer, and up to 127 devices can be attached. Besides, USB's hot swap capability allows everything to be plugged in and unplugged without turning the system off.

Microsoft, HP, Compaq, Intel, Agere, NEC and Philip are seven core members of USB-IF to have worked on USB 2.0 standardization. USB 2.0 offers data transfer rate up to 480Mbps (megabits per second) compared to USB 1.1 devices, which transfer at speeds of 12Mbps. So, you could know that USB 2.0 can transfer data between the computer and its peripherals 40 times faster than USB 1.1. However, USB 2.0 is fully backward compatible, you will be able to use a USB 1.1 device in a USB 2.0 compliant system.



+ Depending on your operational requirements, you may need to disable other ports in order to release system resource for the USB port.

The USB bus distributes 0.5 amps (500 milliamps) of power through each port. For the purpose of power saving, please disconnect your USB device while not in use.

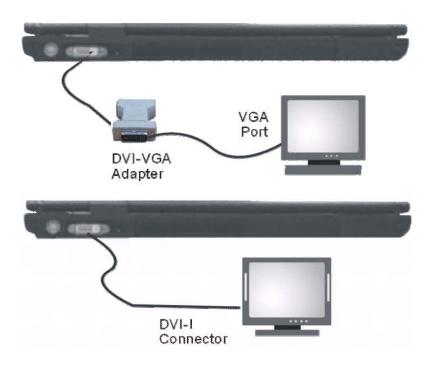
5.2 Using an External DVI-I Port

Your computer has a DVI-I port for supporting any external CRT or LCD color monitor. You need a display signal cable (usually provided with the monitor). One end of the cable must have a 24-pin connector for the system. All you have to do is plug the cable from the monitor into the rear of the system with a DVI-I Socket.

To connect an external monitor:

- Turn off your computer and make sure the monitor power switch is turned off.
- The notebook computer must be powered off or suspended while the monitor is being connected. Although you can connect the external Monitor without power off the computer and the external monitor, however, it is harmful to both devices and it shortens the life of these devices.
- Connect the connector cable of the monitor to the DVI port at the back of your computer (If connector cable is VGA port, please make sure with using the DVI-VGA Adapter). Secure the cable connection with the screws provided.
- Most monitors use a VGA cable to connect to a PC. In this case, you can connect the VGA cable from the monitor to the DVI-I Socket on the back of your Notebook via a DVI-VGA Adapter. Or you can connect directly to the monitor with DVI socket.

- Connect the monitor power cable and plug it into a properly grounded wall outlet.
- 4. Turn on the power of the monitor.
- Turn on your computer. Both the LCD panel and the monitor screen will show the display. Your computer is set at default to run at simultaneous display mode.
- 6. If you only want to show the display on the external monitor and shut off the LCD display, you can use the <Fn> + <F3> hot-key to switch display type between LCD and external monitor. Keep pressing the hotkey until you get the display to external monitor only.



Refer to Chapter 3 regarding the possible External CRT resolutions and how to change the display properties.

Using the IEEE 1394 Port 5.3

IEEE 1394, also known as FireWire, is a high-bandwidth serial bus developed by Apple and Texas Instruments. IEEE 1394 supports 100, 200, and 400 Mbps (Megabit per second) transfer rates and is widely used for downing video from digital camcorders to the computer. In addition to its high speed, IEEE 1394 enables isochronous (real-time) data transfer. This makes it ideal for devices that transfer high-bandwidth of data in real-time, such as video devices. It supports both Plug-and-Play and hot plugging, and also allows for the connection of up to 63 devices.

With built-in IEEE 1394 port, this computer enables the peripheral devices in transmitting digital video data or data backup. The Windows system will automatically recognize it after installing a suitable driver for it. Please visit Microsoft's web site for more information about it. Moreover, you should install the driver of peripheral device to connect with the IEEE 1394 port, for details please refer to the manual that comes with your peripheral device.



+ Please make sure that the external IEEE 1394 HDD box you purchase on local electronic store should provide external power adapter. There are different types of IEEE1394 HDD box and hard disk from different manufactures, the power consumption has varied range. If the power of the external IEEE 1394 HDD is supplied from the USB of this notebook, it may not run properly.

5.4 Using the TV Port

Also found at the right of your computer is one TV port (s-video).

To display your computer screen on the TV, please connect the TV port of this notebook to the Video Input of the TV set. You can press <Fn> + <F3>key continually to switch between TFT, external monitor, TFT + external monitor and TV only. Keep pressing the hot-key until you get the display to external TV only.

Or you can setup the detail by operate the computer as follows.

- 1. Turn off your computer and plug one end of the s-video jack cable to the end to the input video jack of your television set.
- 2. Turn on your computer and your television set.
- 3. Click the Start button, then point to Settings, and click Control Panel.



- Double-click on the Display icon and point to Setting tab.
- Click Advanced button and point to Displays tab. You can see the TV icon on the screen.
- Please click the red button above the TV icon. Click OK, Windows now automatically detect the TV port and enable this function.

Using the External Audio System 5.5

At the front side of your computer, you will find the built-in audio ports. You can connect Microphone jacks, earphone or powered speaker.

To connect to a audio jack:

- Locate the audio port (Microphone, Headphone) that you want to use to the target device.
- Plug the jack into the port on the front side of the system.
- If you use external speakers and experience the sound distortion or feedback, please lower the volume. Some factors is caused by too close locating the microphone and speakers from each other, moving away the external audio option from the unit may also help.