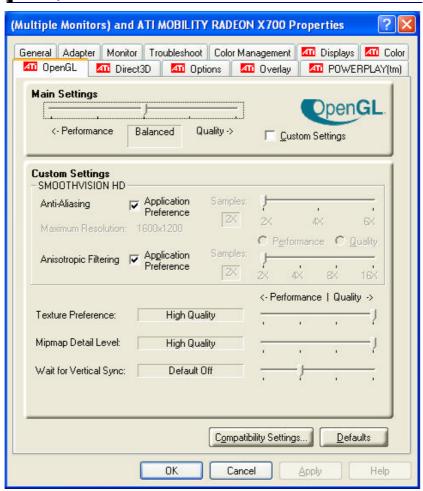
VGA UTILITIES

After you have restarted Windows, open the "Control Panel" and double click on the "Display" icon. From the "Display Properties" window, select the "Settings" tab and click on the "Advanced" tab to enter the "(Multiple Monitors) on ATi MOBILITY RADEON X700 Series Properties" window.



ATI OpenGL



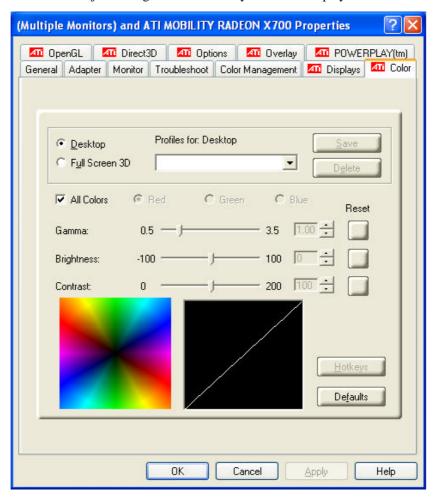
ATI's Display

The ATI's Display driver allows three simultaneous outputs to LCD, CRT, LCD/CRT, TV/LCD, LCD/TV and CRT. Before proceeding, be sure the monitor is connected to the computer. User can also use hotkeys by typing the name that corresponds with the combinations mentioned above.



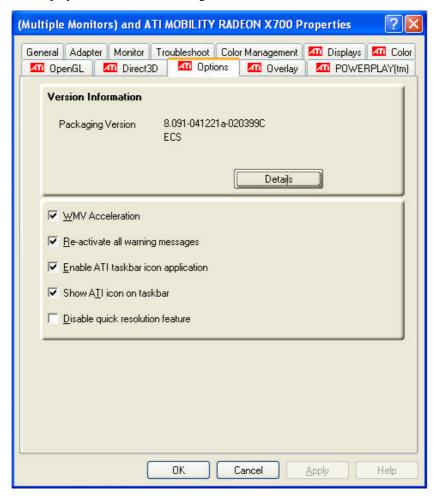
Color

You can adjust the right resolution for your screen display.

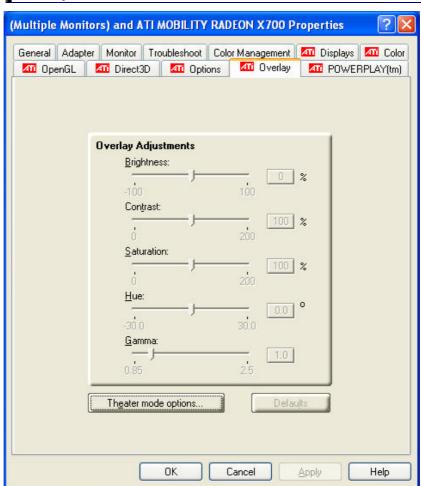


Options

Display all the items concerning the ATI related function.



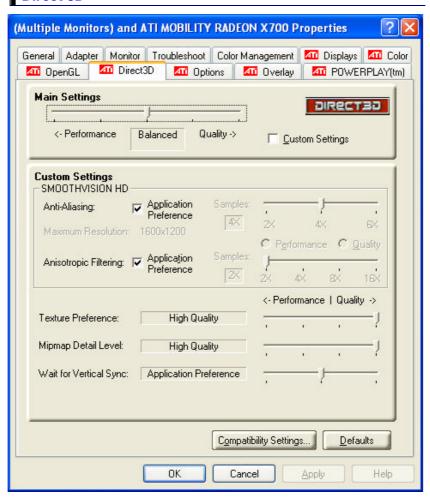
Overlay

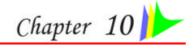


ATI PowerPlay



Direct 3D





VIEWING LIVE VIDEO (OPTION)

The Utility allows you to access the entire range of display controls and configuration options. Its live video can co-exist with other applications running at the time. In addition, you have the choice of keeping the default video window size, scaling it to any other size or using the entire screen for video display. You can either sit in front of your monitor, controlling the video with menu commands, toolbar buttons as well as the TV Tuner, or lay back in your chair with the remote control pad in your hand.



For more detailed information on the function for each individual mode on the Remote Control, please refer to the Remote Control Guide user's manual.

Using the Remote Control



The Remote Control comes with three multimedia softwares: WinDVR, WinDVD, and WinRip. These softwares use only one remote control; the function of each buttons will vary on different software.

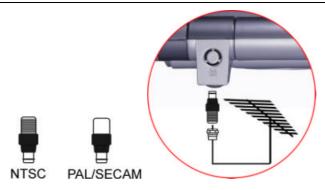
- DVR Mode Button Press the DVR button if you want to use the WinDVR software. "WinDVR" gives you high-quality digital recording of your favorite TV shows on your PC.
- DVD Mode Button Press the DVD button if you want to use the WinDVD software. "WinDVD" uses the power of your PC to bring DVDs to life.
- RIP Mode Button Press the Music/Audio DJ button if you want to use the WinRIP software.

WinDVR Mode

Cable Connection

Your notebook supports three video standard namely: NTSC, PAL and SECAM. Ask your local dealer on the type of standard being used in your respective country of origin.

- Remove the cover on the cable TV connector at the rear of the computer with the aid of a screwdriver .
- Connect one end of the cable wire to the RF connector of the computer while the other end is connected to the wall socket or directly to the antenna.



Defining the Video Source



Select the PAL, NTSC or SECAM, depending on which standard the selected source is using. The factory default is the standard used by your purchase country, and normally there is no need to change this setting.

If you are working outside your country, you are required to adjust the setting of our video source. From the WinDVR window, click on your mouse right button and select the "Setup" item.

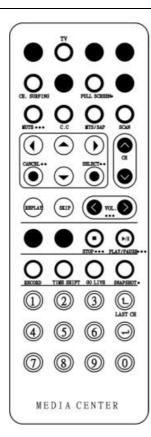
From the "**Setup**" dialog window, click on the "**Standard**" selection items and drag down the arrow to select on the type of TV standard based on your respective country of origin.



Application buttons in DVR mode



- > TV Launch the WinDVR application
- Channel Surfing Surf channels by displaying 16 channels at once.
- Full screen Change display size to full screen.
- > **Mute** Mute or restore sound when watching TV.
- > C.C. (Close Caption) Display overlay text caption.
- > MTS/SAP Switch TV sound mode to mono stereo or SAP
- > Scan (Auto scan) Scans all available channels for context.
- > Arrow Up and Down Navigates up or down.
- > Arrow Left and Right Navigates left or right.
- > Cancel Cancel last operation.
- > Select Selection.

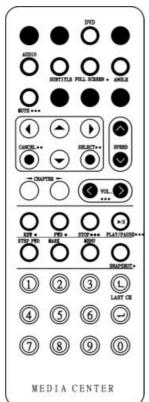


- CH Up & Down Selects next higher or lower channel in channel memory.
- Replay Playback previous sequel after pressing the TimeShift.
- Skip Skip the recorded program.
- Volume (Volume up and down) -Increase and decrease sound.
- Stop Stops functions such as record, play, rewind, forward and pause.
- Play/Pause Plays or pauses a scene.
- Record Records TV and encodes it into MPEG I/II format.
- > TimeShift Pauses live TV.
- Real Screen (Go Live) Stop timeshift.
- > **Snapshot -** Captures a favorite screen shots from the program.
- Numeric Keypad (0-9) Select a channel up to 99 by pressing two numbers.



Application buttons in DVD mode





- DVD Launch the WinDVD application.
- > Audio Selection Selects a language.
- Subtitle Activates language subtitles.
- Full screen Change display size to full screen.
- Angle (Angle Selection) Allows multiple angle viewing
- Mute Mute or restore sound when watching CD title or MPEG file.
- Arrow Up and Down Navigates up or down.
- Arrow Left and Right Navigates left or right.
- Cancel Cancel last operation.
- Select Selection.
- > Speed Speed up the play.
- CHAPTER (Previous & Next) -Selects previous or next chapter.
- Volume (Volume up and down) -Increase and decrease sound.
- REW Play disc in fast reverse mode.
- > FWD Play disc in fast forward mode.
- Stop Stops the current play.
- Play/Pause Starts or pause the disc.
- > Step Forward Single frame advance while in pause mode.
- **Bookmark** Instantly mark your favorite scene.
- Menu Opens DVD title main menu.
- > SnapShot Captures still images of current playback.
- > Numeric Keypad (0-9) Inputs chapter number to playback.





Please take note that when you are playing the DVD applicaton, you will only be able to use the Remote Control DVD button if your system support the InterVideo WinCinema application. If your system support the WinXPMCE application, you will have to use the "Microsoft Remote Control" that comes with your package.

Use Lunch key to chosoe between these two applications, please proceed to BIOS Setup and select the "Advanced" menu. From the "Shortcut Key Working With" selection item, select the "InterVideo" if your system only support the "InterVideo" application or the "WinXP MCE" application if your system support the Microsoft's WinXP MCE application.



Limitation when playing DVD files

The computer allows you to connect external devices such as monitor and TV to your notebook computer. Open the "Control Panel" and double click on the "Display" icon. From the "Display Properties" window, select the "Settings" tab and click on the "Advanced" tab to enter the "(Multiple Monitors) on ATI MOBILITY RADEON X700 Series Properties" window.

Click on the "Displays" tab to set the monitor or TV or LCD as your "Primary" display device to play the DVD files.

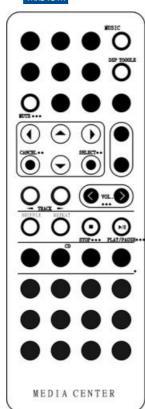




The VGA driver default value set the LCD as Primary display device. If the LCD is set as "Primary" display therefore the video image will not display on the monitor or TV. However, if you wish to have the video image display on your external display devices, set the monitor or TV as your "Primary" display device.

Application buttons in Music mode





- Music Launch the WinRIP application.
- DSP Toggle Let you enable or disable the DSP window when the WinRIP application is launched.
- Mute Mute or restore sound when playing music.
- Arrow Up and Down Navigates up or down.
- Arrow Left and Right Navigates left or right.
- > Cancel Cancel last operation.
- > Select Selection.
- Track (Previous & Next) Plays previous or next track in the list.
- Volume (Volume up and down) -Increase and decrease sound.
- > Shuffle Play tracks in random order.
- Repeat Repeat current track or all tracks.
- > Stop Stop playback.
- Play/Pause Play or pause a music track.



TROUBLESHOOTING

This chapter describes locating and solving problems that you may encounter while using your computer.

Locating a Problem

Problems with your computer can be caused by something as minor as an unplugged power cord — or as major as a damaged hard disk. The information in this chapter is designed to help you find and solve minor problems. If you try all the suggested solutions and you still have a problem, make a list of what steps you have taken to correct the problem and contact your dealer.

Successful troubleshooting is the result of careful observation, deductive reasoning, and an organized approach to solving the problem.

The problems that you will encounter can be divided into two basic categories: hardware problems and software problems. Hardware problems can be further divided into electrical and mechanical problems. You will know you have a hardware problem if the screen is dark, the computer cannot read the disk drives, or you get an error message during the Power-On Self Test (POST).

Software errors can occur at several levels. The ROM BIOS and the operating system can give you a large number of error messages. On top of this, each application software package has its own set of error messages. It is important to determine whether the software error message you are getting is from the application or the operating system. Once you know this, you can look in the respective manual for a solution to the problem.

Checking Cables and Connections

Start by performing a careful visual inspection of the exterior of the computer. If no LEDs are illuminated, make sure that your computer and its peripherals are getting power and communicating with each other properly.

To check the power cables, and connections:

- 1. If you have been using battery power, connect the Notebook to an external power source and make sure that the battery has a charge.
- 2. If you are using the Notebook with the AC adapter, check the power outlet, the power cord, and any power switches that may affect your computer.
 - Check the wall outlet or power strip with an item that you know is functioning properly. A lamp or radio is a convenient item for checking the power. You may also need to check the fuses and breakers in your electric box.
 - If the outlet is controlled by a wall switch, make sure that the switch is on.
 - If the outlet is controlled by a dimmer switch, use a different outlet.
 - If your computer is plugged into a power strip with an On/Off switch, make sure the switch is on.
- **3.** With the computer's power switched off, check all cable connections. If the computer is connected to any peripheral devices, look for loose or disconnected cables.
 - If the computer is too close to a wall, a cable connection may be loose or the cables may be crimped.
 - Do not substitute cables for different devices (other than the manufacturer recommended cables) even if they look exactly alike. The wiring inside the cable may be different.
- 4. When you are certain that you have power available and all connections are good, turn the computer on again. If the computer still does not start, you may have a hardware problem.

The Power-On Self Test

The Power-On Self Test (POST) runs every time you turn on or reset the Notebook. The POST checks memory, the main system board, the display, the keyboard, the disk drives, and other installed options.

A few seconds after you turn on your computer, a copyright message appears on your display screen. A memory test message appears next; as the test continues, memory size increases until all installed memory is tested. Normally, the only test routine visible on the screen will be the memory test.

Two classifications of malfunctions can be detected during the POST:

• Error messages that indicate a failure with either the hardware, the

software, or the Basic Input/Output System (BIOS). These critical malfunctions prevent the computer from operating at all or could cause incorrect and apparent results. An example of a critical error is microprocessor malfunction.

 Messages that furnish important information on the power-on and boot processes (such as memory status). These non-critical malfunctions are those that cause incorrect results that may not be readily apparent. An example of a non-critical error would be a memory chip failure.

In general, if the POST detects a system board failure (a critical error), the computer halts and generates a series of beeps. If failure is detected in an area other than the system board (such as the display, keyboard, or an adapter card) an error message is displayed on the screen and testing is stopped. It is important to remember that the POST does not test all areas of the computer, only those that allow it to be operational enough to run diagnostic programs.

If your system does not successfully complete the POST, but displays a blank screen, emits a series of beeps, or displays an error code, consult your dealer.

General Hardware Problems

A few common hardware problems and suggested solutions are presented in the table below:

Problem: The capacity of the battery is between 95 to 99% but can not fully charged.

Solution: Please discharged to less than 95% of its capacity then recharge the battery.

Problem: Failure in the installation of the Audio driver.

Solution: Be sure to first remove the current audio device from your system. Please follow the instruction on the installation of audio driver.

Problem: The display screen is dark

Solution: Make sure that the computer is not in Suspend mode. Check the Brightness controls for the screen. If the controls are turned too far down, the screen will be dark.

Problem: An incorrect date and time are displayed.

Solution: Correct the date and time using the DOS DATE and TIME commands or the options in the Setup Utility. If the date and time become incorrect after a short time, your CMOS battery may

be depleted. Contact your dealer to change the battery.

Problem: You hear irregular beeps during operation of the Notebook and the system halts.

Solution: The problem is beyond the scope of this manual. Contact technical support.

Problem: An unidentified message is displayed.

Solution: Reboot the computer and run the BIOS system setup. Confirm the Setup parameters. If the same message is displayed after booting up again, contact technical support for assistance.

Problem: The system cannot access the DVD-ROM drive. **Solution:** Check that a CD is properly inserted in the drive.

Make sure that you are using the correct program for that kind of CD. For example, the system cannot read a data CD using an audio program.

Problem: You cannot operate the printer.

Solution: Check the printer USB cable connection. Ensure that the printer power switch is turned on. Confirm that the printer is on-line.

Problem: You cannot use the mouse. **Solution:** Check the cable connection.

Check the mouse with another application to see if there is a software incompatibility problem.

If possible, check the mouse with another computer to see if it works. If it doesn't operate on a different system, the mouse might be broken.

Problem: The fan does not stop operating when the system enters the suspend mode.

Solution: Before entering the suspend mode, the fan still operates in full speed to lower down the temperature of the system. When the system temperature reduces into normal condition then the fan will gradually slow down into its normal speed.

Contacting Your Dealer

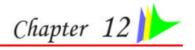
If you still have a problem after reading the preceding sections, the next step is to contact your dealer. Your dealer can determine if the problem is something that requires the computer to be taken to the shop. Before you call your dealer, however, prepare the following information:

• How is your computer configured? Your dealer needs to know what

peripheral devices you are using.

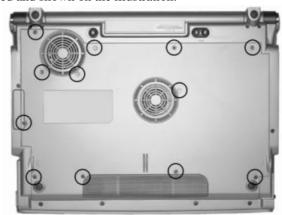
- What messages, if any, are on the screen?
- What software were you running at the time?
- What have you done already to try to solve the problem? If you have overlooked a step, your dealer may be able to solve the problem over the phone.

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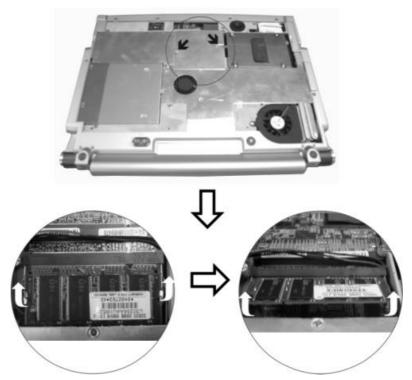
How do I Expand MY NOTEBOOK

Turn off the computer; disconnect the AC adapter and all peripherals. With your computer turning upside down, remove all the screws that are encircled and shown on the illustration.





Upgrading your Memory



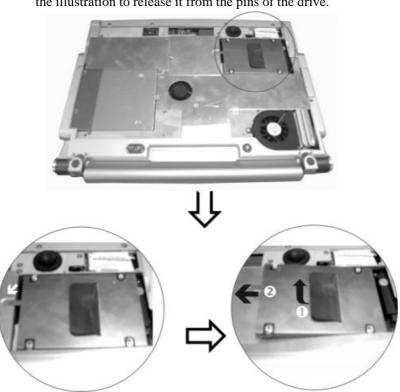
- 1. If you need to install a higher capacity module, gently push the edge clips on both sides to release the module.
- **2.** Angle the card slightly upward and gently slide it from its edge connector slot. Store the card in the anti-static bag that contains your new module(s).
- 3. To install the new memory card, hold the card with its gold edge connector toward the edge connector slot of the compartment. To help you orient the cards, the edge connector has been made with two unequal-length sections. You will only be able to insert the card in one direction.
- **4.** Insert the edge connector into the slot. The gold edge connector of the card should not be visible when the card is fully inserted.
- **5.** Press the card downward where you should hear an audible click as the latches of the connector secure the card in place.

Easy to Upgrade HDD Module

The hard drive in your notebook computer is made to be easily swapped out for upgrading.

How to Remove your Hard Drive

- 1. Remove the screw that secure the compartment cover and set them in a safe place.
- **2.** Remove the HDD cover from the compartment.
- **3.** The drive is attached to a special bracket that secures it to the notebook computer.
- **4.** Gently hold the grip of the HDD, **●** lift it up to release from its compartment.
- 5. Push the **2** HDD slightly in the direction of the arrow as shown in the illustration to release it from the pins of the drive.



How to install your New Hard Drive

- 1. You will need to align the tabs on the drive bracket with the slots on the bay.
- 2. Press down gently on the drive bracket until it engages with the system. Do not force the drive into place this can bend the pins on the hard drive.
- 3. Secure the cover with the screw.



SPECIFICATION

Detailed Notebook Specifications

| Processor | • | Intel® Pentium® M processor Dothan 1.86GHz |
|---------------|---|---|
| | • | 478pin mFCPGA package |
| Operating | • | Microsoft® Windows® XP Professional Edition |
| System | • | Microsoft® Windows® XP Home Edition |
| Compliance | • | Microsoft® Windows® XP Media Center Edition |
| Core Logic | • | Intel® 915PM (Alviso)+ ICH6-M |
| Memory | • | 512MBx2 |
| LCD Display | • | 15.4" WXGA (1280 x 800; 16:10) TFT LCD |
| | | display (185nit/glare 220nit) |
| Video & | • | Graphic controller: ATi® Mobile X300/X700, |
| Graphics | | X16 PCI Express, DX9 compliant |
| • | • | External video memory up to 64/128/256MB |
| | | flexible frame buffer DDR SDRAM memory |
| Hard Drive | • | 40GB, 2.5" 9.5mm height, ATA33/66/100 or |
| | | Serial ATA Dual support |
| Optical Drive | • | DVD Dual (DVD+/-RW), |

| AV Feature Buil | t-in | |
|-----------------|------|--|
| TV Tuner | • | Mini PCI TV Tuner w/ Coaxial connector, |
| | | support PAL, NTSC, SECAM |
| | • | Support capture function to record the TV |
| | | programs into Hard Disk |
| | • | Multi-function remote control to enjoy TV |
| - | | program |
| Remote Control | • | Power on the system, Play TV, DVD play, |
| | | Music |
| Pointing Device | • | Synaptics touchpad with 4 way scrolling button |
| Application | • | E-mail, Internet, WLAN, TV, DVD hot keys |
| Launch Key | | |
| LED Status | • | Power, Suspend/Resume, Battery charging |
| Indicator | | status, WLAN status, Hard Disk Access, |
| | • | NumLock mode, CapsLock mode, Scroll Lock |
| | | mode |
| Keyboard | • | 3.0mm travel, inverted-T, 88 keys with |
| | | windows key |
| Interface Ports | • | Left – PCMCIA slot, 4 in 1 Card Reader, 1394 |
| | | (Mini Jack) |
| | • | Right – VGA connector, TV out connector, |
| | | LAN port, Modem port, USB 2.0 port*2, |
| | | Coaxial SPDIF out, Mic-in |
| | • | Rear – USB 2.0 port*2, TV-in connector |
| PCMCIA | | (cable), MCE port One Type II PCMCIA slot, support CardBus |
| | | |
| Audio | • | AC'97 2.2, SPDIF out, 5.1 channel support |
| | • | Built-in two high quality stereo speakers on |
| | | sides of K/B |
| AC Adapter | • | Input: 100-240V AC, 50-60Hz, 1.5A, Universal |
| | • | Output: 19V DC, 4.74A, 90W |
| Battery | • | 8 cell Li-Ion battery pack |
| Battery Charge | • | 3.5 hrs charge time to 100% capacity while |
| | | system off (TBD) |
| | • | 4 hrs charge time to 100% capacity while |
| D. " " | | system on (TBD) |
| Battery Life | • | More than 2 hours by 8 cell Li-Ion battery pack |
| BIOS | • | AMI, Support PnP, password, Bootable from |
| | | |

| | USB Disk |
|----------------|--|
| Card Reader | 4 in 1 Card Reader (SD/MS/MS Pro/MMC |
| | card) |
| Communication | 10/100/1000Mbps Gigabit Ethernet on board |
| | Intel[®] PRO/Wireless 2915ABG (802.11a/b/g) |
| | network connection |
| | TV-Turner Mini-PCI interface, support |
| | PAL/NTSC (optional) |
| | MDC combo: V9.0/9.2 56Kbps Fax/Modem |
| | Web CAM/CMOS sensor, 0.3 Mega pixel |
| | resolution CMOS image (optional) |
| USB Connector | Four USB2.0 ports, up to 480Mbit/s |
| Power | ACPI 2.0 compliance, Support Stand-by, |
| Management | Suspend to Disk, Suspend to RAM |
| Size | • 363.0(W) x 281.0(D) x 27.0(H) mm/30.0 mm |
| | (front/back) |
| Weight | 3 kg with 15.4" panel, Li-lon battery and |
| | Optical drive installed |
| Accessories | |
| Packing | Quick Guide, Support CD (Driver, Utility, |
| | Manual), AC Adapter, Power Cord, Battery |
| | Pack |
| Factory Option | TV-Turner Mini-PCI interface, support |
| | PAL/NTSC |
| | Intel® PRO/Wireless 915ABG network |
| | connection |
| | • 802.11a/802.11b/802.11g WLAN |
| | MDC combo: V9.0/9.2 56Kbps Fax/Modem |
| | Web CAM/CMOS sensor, 0.3 Mega pixel |
| | resolution CMOS image |
| | Optical Device: CD-ROM, DVD-ROM, Combo |
| | Drive (DVD-ROM+CD-RW), DVD Dual |
| | (DVD+/-RW) |
| | DVD Multi (DVD-RW+DVD-RAM), DVD Super |
| | Multi (DVD+/-RW+DVD-RAM) |
| | Bootable external USB1.1 FDD |
| | |



Spec subject to change without notice Battery life will vary depending on your specific hardware and software configuration

Federal Communication Commission Interference 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 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 dealer or an experienced radio/TV technician for help.

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE: FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting. For operation within $5.15 \sim 5.25 \, \text{GHz}$ frequency range, it is restricted to indoor environment, and the antenna of this device must be integral.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

ECS declares that the 600 (FCC ID: SA66000IABG) is limited in CH1~CH11 by specified firmware controlled in the USA.