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AOpen Inc.

Safety Instructions

Company: AOpen Inc.
Model No. : MP915-C/ MP915-P/ MP915-B
Input: 19Vdc, 3.42 A

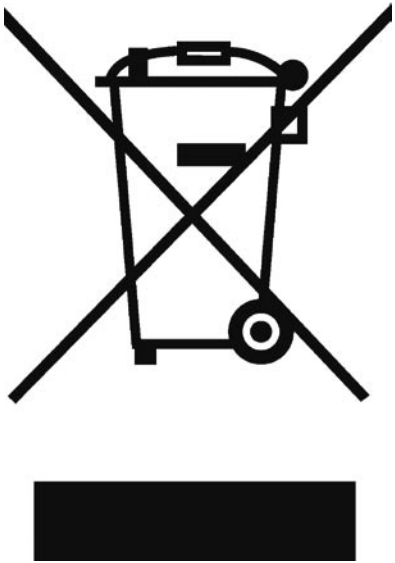
1. Please read these safety instructions carefully.
2. Please keep this User's Manual for later reference.
3. Please disconnect this equipment from connecter before cleaning. Don't use liquid or sprayed detergent for cleaning. Use moisture sheet or cloth for cleaning.
4. Make sure the equipment is connected to the power source with the correct voltage, frequency, and ampere.
5. All cautions and warnings on the equipment should be noted.
6. Never pour any liquid into opening; this could cause fire or electrical shock.
7. Never open the equipment. For safety reason, the equipment should only be opened by qualified service personnel.
8. If one of the following situations arises, get the equipment checked by a service personnel :
   a. Liquid has penetrated into the equipment.
   b. The equipment has been exposed to moisture.
   c. The equipment has not work well or you can not get it work according to user's manual.
   d. The equipment has dropped and damaged.
   e. If the equipment has obvious sign of breakage.

9. Ambient operation temperature: less than 40 degrees C.
10. Caution on use of battery: Use the battery recommended by the manufacturer or the same type of battery installed by the manufacturer. If incorrect battery is used, it may cause explosion or fire hazard. Recycle or discard used batteries according the manufacturer's instruction or your local authority.
11. Information of power supply manufacturers:

Model	Manufacturer
SADP-65KB DX	Delta
FSP065-AAB.	FSP

12. Safety caution concerning laser products:
    DVD-ROM/CD-RW combo drive is "Class I Laser Product"
    This equipment, built with DVD and/or CD disc drives using laser beam to read or write data on optical discs, is classified as "Class 1 laser product". While the laser optical drive is reading data from or writing data to an optical disc, do not force open the disc drive door. Press the Eject button to retrieve the optical disc only after the in-use indicator goes off.

Disposal Instruction



For better protection of our earth, please don't throw this electronic device into municipal trash bin when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle the product.

For more information about the collection and recycling of Waste Electrical and Electronic Equipment (WEEE) , you are invited to visit our homepage at www.aopen.com under "Green Products".

Chapter 1 Getting Started

Chapter 2 Connecting Your System

Chapter 3 Using Your System

Chapter 1 Getting Started

Unpacking Your System
The system is designed for easy installation and operation. When you open the package, you will see the following items:
1. The system unit
2. Power cable and adapter
3. S-Video to YPbPr connector
4. User's Manual
5. DVI to VGA converter.

System Overview

The system unit, measuring 165 by 165 by 51 mm, is one of the smallest Wintel personal computers in the world. The system is built with an Intel Pentium M or Celeron processor and runs Microsoft Windows XP operating system.

The system is equipped with optional slide-in DVD-RW and 2.5-inch high capacity hard disk drive. Its computing power is comparable with that of desktop PCs.

With optional built-in support to 802.11a/b/g communication, the system can access the Internet wirelessly and communicate easily with personal electronic appliances such as personal digital assistants (PDA), smart phones, printers, keyboards, mouses, etc.

The system also supports IEEE 1394 connector, which allows the users to connect digital video camera, digital camera, hard disk, and other 1394-compatible electronic appliances to the system.

The DVI, S-Video, and YPbPr connectors allow the users to connect the system to high quality large screen TVs and audio equipment.

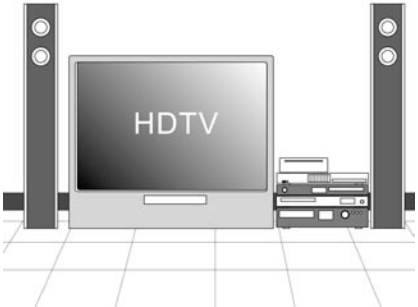
Application Scenarios

Study Scenario

You can place your system together with an LCD video display, speakers, printer/scanner/fax, DSL (cable) modem, or other peripheral devices in your study.

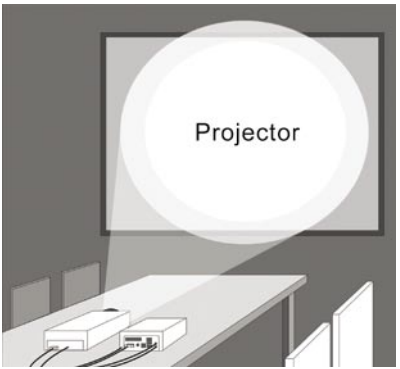
Living Room Scenario

You can connect the system in your living room to an HDTV, speakers, DVD/ VCD players, DSL (cable) modem, or other peripheral devices to build a digital home center.



Office Scenario

You can connect the system in a business conference room to a projector in order to make presentations.

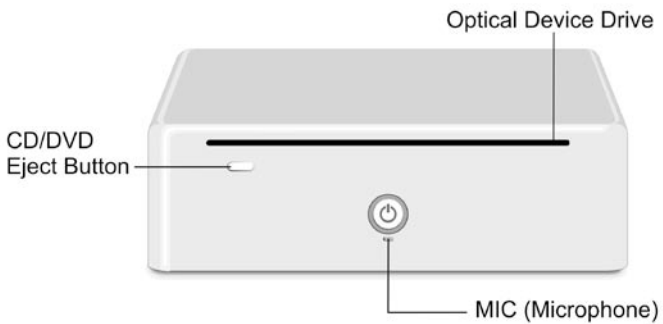


Mobility Scenario

Because the system comes in very compact size, you can carry it from your home to the office, or to a business meeting conveniently in a hand bag.

The Front View

The power button is located in the center of the front panel. An optional optical disc drive is also located near the top of the front panel. You can place an optical disc into the opening near the top of the front cover. The disc eject button is located to the left of the front panel when you face the front of the system. The front view of the system is illustrated below:

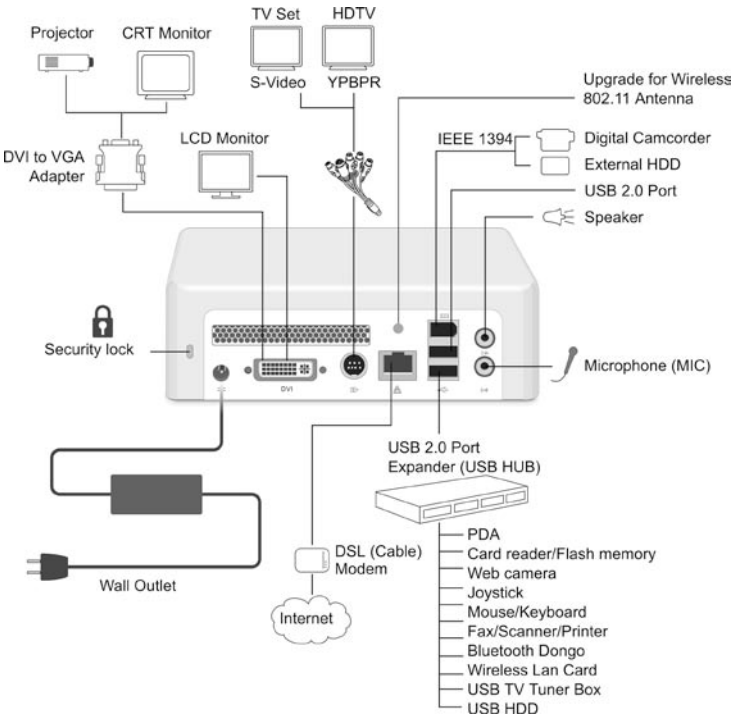


The Rear View

You can find the connectors for the power source, DVI, network, S-Video, IEEE 1394, USB 2.0, speaker, and MIC as illustrated below:

System Installation Diagram

The system is designed to connect to a wide range of peripheral options as illustrated:



Chapter 2 Connecting Your System

Connecting to Video Display

You can connect the system to many types of video display devices, including projector, LCD or traditional cathode ray tube (CRT) monitor, or TV unit.

Connecting the LCD or CRT Monitor

You can connect the system to an LCD monitor. The video signal connector from the LCD monitor connects to the DVI connector through a DVI cable.

If you want to connect the system to a CRT monitor, you have to use a DVI to VGA converter as illustrated in System Installation Diagram in chapter 1.

Connecting to HDTV Set

There is an S-Video connector on the back of the rear panel. You can use an "S-Video to S-Video/YPbPr/Composite Video" cable to connect your system to a TV unit. On most high quality TV unit, you can find the YPbPr inputs. On one end of the "S-Video to S-Video/YPbPr/Composite Video" cable, you can find the blue, green, red connectors, which are generally referred to as the YPbPr connectors. If your TV unit has YPbPr inputs, connect the YPbPr connectors to the YPbPr inputs of your HDTV unit or TV tuner.

Connecting to Conventional TV Set

The S-Video connector of the “S-Video to S-Video/YPbPr/Composite Video” cable comes in black color. In case your TV unit only has S-Video input, you can connect the S-Video connector to the S-Video input of your TV set. Some old TV units may only have Composite Video input. The Composite Video connector comes in yellow. In case your TV only has Composite Video input, connect the Composite Video connector to the Composite Video input of your TV set.

Connecting to Projector

More and more people have the need to connect a PC or a notebook PC to a projector in order to make presentations. The system is designed with the connector for outputting to a projector. In case you want to connect to a projector, you have to use a DVI to VGA converter as illustrated in System Installation Diagram in chapter 1.

Connecting the Keyboard and Mouse

You can connect the keyboard and mouse to the USB connectors.

Expanding the System

Because there are only two USB connectors on the rear panel of the system. After you have connected USB keyboard and mouse to the system, you will have no additional USB connectors to connect other USB peripherals. To add more USB devices to your system, you can install an optional “expander” box or an USB hub for system expansion. The functionality of the system can be upgraded with the optional “expander” which allows users to achieve outstanding expandability. The “expander” is designed to enhance the scalability and modularity of the system. It offers the expansion space for two 5-1/4” disc drives and two USB ports. One of its 5-1/4 disc drive space can accommodate two 3-1/2” disc drives. The expander also greatly enhances the system expansion flexibility. For example, the system can add an expander to incorporate CD/DVD copy function. It can also be used to accommodate hard disc drives, audio amplifier, speakers, online power supply, or cooling equipment. An expander can be daisy-chained to another expander, and the second expander can be connected to a third expander, etc.

Connecting to USB Hub

The system is designed to allow users to connect an USB hub which allows a user to install many USB devices to the system. Simply connect the USB connector of an USB hub to the system.

Connecting the Printer

You can connect the system to a USB printer.

Connecting to Fax/Printer/Scanner

Currently many manufacturers build the functions of printer, scanner, and fax into one unit. You can connect the system to a fax/printer/scanner unit in case the machine is built with USB connector.

Connecting the Speaker

The system comes with built-in mono speaker. You can install active speaker set which comes with its own power plug in order to enjoy stereo sound effect. The input of the speaker should be connected to the speaker output (earphone) jack as illustrated. You can also connect a headphone to the earphone jack.

Connecting to the Internet and Network

Your system is built with a network connector on the back panel as illustrated in Chapter 1. The connector allows you to connect your system to the Internet through a DSL (or ADSL) or cable modem, or to an Ethernet network.

If you want to connect to the Internet through DSL (or ADSL) modem, you should contact your local network service provider to subscribe the digital subscriber line. DSL (or ADSL) provides faster data transmission speed than conventional telephone line. Your local network service provider will help you install and set up the DSL (or ADSL) modem.

You can access the Internet through a cable modem. In case you prefer to set up a cable modem connection, you should contact your local cable provider, which will help you install and set up the cable modem.
The same connector allows you to connect the system to an Ethernet LAN (local area network). Connecting to a LAN is usually used in a workplace.

You can also connect the system to a conventional modem for accessing the Internet through a traditional telephone modem. In that case, you have to contact an Internet Service Provider for accessing the Internet. Please refer to the appendix for more details on accessing the Internet.

Connecting to Web Camera

More and more people are using instant messaging software or free international Internet phone calls to communicate over the Internet with friends. The effects can be enriched by installing a web camera to the system. You can shop around for a USB web camera from a local retail outlet or purchase one through a web-enabled retailer. The manual of web camera usually provides the information on how to install a web camera to your system. After you have installed a web camera, install the software driver for the web camera, and set up your instant messaging account properly, you will be able to see the person who is chatting with you through the Internet.

Connecting to Memory Sticks, Card Readers, Memory Cards

You can copy files from another PC to the system. There are a wide variety of memory devices which can be used for copying files from another PC. These memory devices include memory sticks (flash memory), smart memory, memory cards, portable hard disk drives, etc. Most such devices can connect to the USB port on the rear panel of the system. Flash memory cards have become one of the most convenient and popular methods of media storage for digital cameras, MP3 players, PDAs, and mobile phones.

To copy files from a memory stick to your system, simply plug the memory stick into one of the USB ports on the rear panel of your system or USB hub.

Notes:

1. To prevent damaging your memory stick inadvertently, you are suggested to "uninstall" the memory stick by clicking the hardware uninstallation icon at the lower right corner of the Windows task bar.
2. Never remove the memory stick while your system is formatting, reading, and writing data.
3. Never turn off the power abruptly while your system is formatting, reading, and writing data.
4. Read the operating instructions which come with your memory device carefully before using that memory device.

Once you insert a memory device to your system, a balloon will appear at the lower right corner of your screen, telling you that the system has detected that a new hardware was installed to the system. The balloon will also show the icon which is associated with the hardware device (memory). You should click that icon after you have finished copying files to or from the memory device.

After the system detected the new memory device, the Windows operating system will display a dialog box prompting you to install the software driver for the memory device. The instructions are quite self-explanatory and easy. You can simply follow the instructions to complete the installation process. After the software driver has been installed, you can copy files from the system hard disk drive to the memory device, or from the memory device to the system hard disk drive.

Connecting the Power Source

The system comes with a power cable and adapter. Plug the output of the power adapter to the power connector on the back panel of the system unit. Then, connect the power plug to the wall outlet. Once the system is connected to the power source, the power indicator in the middle of the front panel will light up. You should press the power button on the front panel to start the system.

Chapter 3 Using Your System

Power up the System

After you have connected the keyboard, mouse, and display monitor to the system, you can power up the system. The power plug is a three-pronged plug with a ground. Once the system is connected to the power source, the power indicator in the middle of the front panel will light up. You should press the power button on the front panel to start the system. The system is preloaded with Microsoft Windows XP operating system (home edition). The operating system will detect the peripherals connected to it automatically. You should spend sometime and get yourself familiarized with the Windows XP operating system. You can visit Microsoft's web site to learn more about the operating system which will help you get the most out of the system.

The Audio/Visual Functions of the System -- Listening to Music

If your system comes with an optional optic device which can play music, you can place a music CD into the optical device, and the system will play the video disc automatically. Windows XP provides a user-friendly dialog box which allows the user to control the playback of music easily.

Playing DVD Disc/Media Titles

If your system comes with an optional optic device which can play DVD disc, you can place a DVD disc into the optical device, and the system will play the music automatically. Windows XP provides a user-friendly dialog box which

allows the user to control the playback easily. Windows XP is built with the Media Player software, which makes DVD playback easily.

Transfer Photos from a Digital Camera

Currently most digital cameras or camcorders are designed with output port (connector) which can output digital image files of photos to a PC. The system unit provides USB connectors and an IEEE 1394 port on its rear panel. You can connect the output port of the digital cameras or camcorders to the input port of USB or 1394 with a cable provided by the manufacturer of your digital camera or camcorder. The output port of the digital cameras or camcorders is usually compatible with IEEE 1394 specifications. You have to follow the instructions on your digital camera user's manual to transfer (download) the image files of your camera to a personal computer.

The first time you install this system, you don't have to connect a digital camera to the system unless you want to transfer photos from a digital camera to the system. The manufacturer of your digital camera may provide photo editing and viewing software on a CD-ROM. You can install such software into your system.

Making Presentations Using a Projector

Because the system is smaller than a notebook PC, you can connect the system to a projector for making presentations.

Surfing the Internet

Before you are ready to surf on the Internet, make sure your system has been set up properly for Internet access. Read the appendix on accessing the Internet for information on Internet access setup. The Internet broadens the scope of life for many people. You can use your computer to browse (surf) the World Wide Web (WWW), chat with friends on the Internet, join discussion groups in a special interest group forum, send e-mails and photos to friends, make your own web site, blogs, or photo albums, buy or sell things through the WWW. You can buy airplane tickets, book hotels, books, cars, computers, etc. through the Internet. Students can search for study or research materials from the Internet.

Accessing the Internet through broadband or dial-up ISP

After you have made sure that your system had been set up properly for Internet access, move the pointer of your mouse to the ISP icon which allows you to make connection to the Internet network, and double click the icon. Then, the system will lead you to access the Internet.

Accessing the Internet through LAN

After you have made sure that your system had been set up properly for Internet access through a LAN, simply move the pointer of your mouse to the icon of your web browser and double click the icon. One of the widely used web browser is Microsoft's Internet Explorer.

Searching Information from the WWW

After you have double-clicked the ISP icon or the web browser's icon, a web page will display on your screen. You will see a white box under the menu bar in which a web address is being displayed. The web address is the character string prefixed with http:// The characters following the http:// are the actual web address or "uniform resource locator (URL)".

There are several web sites which allow you to search for useful information on the cyberspace. You can start from the web sites of yahoo or google. Their web addresses are: http://www.yahoo.com and www.google.com respectively.

Enter www.yahoo.com in the box into which a valid URL is to be given. The first (home) page of the Yahoo web site will display. On that page you can easily find a search box, type AOpen into that search box, and Yahoo will return its search results to you in one second. From the search result, you can visit AOpen's corporate web site and get downloads, useful product information, and technical support service from that site. There are many other sites which provide useful information and resources to end users. For example, http://www.lycos.com/ is one such site.

Sending Instant Message/Chatting

Another useful web site is: http://www.msn.com, which is the portal site from which you can get the free MSN Messenger software to send instant messages to your friends or family.

Before you can send instant message to a friend, you have to apply for an MSN instant message account from that web site. Once you enter MSN's web site, you will see "Get MSN Messenger" on the top line of the page. As soon as you move the pointer of your mouse to that line, the pointer will turn into a hand with a pointing finger. Click to download the software for sending instant messages. The interactive software will instruct you to set up the MSN function. After MSN instant message function has been set up successfully, you can invite friends or family to send instant messages to you. In order to send instant message to a friend, you have to ask your friend to provide you with his or her MSN account or hotmail e-mail account, and then enter his or her MSN account.

Yahoo also provides instant message service. You can find the "Messenger" icon on the upper right corner of its home (first) page and click that icon to get it. Using MSN Messenger, you can not only send instant message to your friends, you can also send photos, voice communication, images captured by your network digital camera, e-mails, and animated graphics to your friend.

Getting Free E-mail Accounts

Many web sites provide free e-mail accounts. Such web sites include Yahoo, Google, Lycos, and www.hotmail.com. The benefit of having such e-mail accounts is you can send and get e-mails no matter where you are. In many countries, you have access to the Internet at public libraries, where you can get and send e-mails conveniently. Getting free e-mail accounts from such sites

is easy, just go to these web sites and search for the word “mail” or “e-mail”. Once you click the word (hyperlink), the interactive message you get from those web sites will lead you through the membership registration process and let you select your own e-mail account and password. Make sure you record the e-mail account and password carefully.

Networking with Groups

You can join interest groups and make friends with group members. You can join groups either from Yahoo or MSN web sites. In the “Recreation and Sports” group in Yahoo’s web site, you can find subgroups ranging from adventure racing, baseball, basketball, football, gymnastics, to weightlifting. In a group, you can read and reply to group messages, start a new discussion, share photos with group members in your own photo album, coordinate events for your group with a shared calendar, ask members how they feel about any topic, and store links to web sites related to your group.

Making Free International/Long Distance Telephone Calls

More and more people are making international or long distance phone calls through the Internet. For example, you can download software from the web site of www.skype.com, install the software on your computer and make free calls over the internet to anyone else who also has Skype. Skype is a little program. It’s free and easy to download and use, and works with most computers.

If you click the “Messenger” icon on the upper right corner of its web page, you will also discover that Yahoo offers PC-to-PC free phone calls. All you and your friends need is Messenger with Voice -- and a microphone and speakers (or headset).

Internet Shopping

You can purchases a wide range of products from the Internet. For example, www.amazon.com web site offers apparel and accessories, electronics, jewelry and watches, shoes, textbooks, etc. Under the books, music, DVD subcategory of that web site, you can select books, DVD, magazines, music, video, and Amazon shorts. Other well-known web sites for shoppers are www.ebay.com, shoppers.com, etc.

Watching News

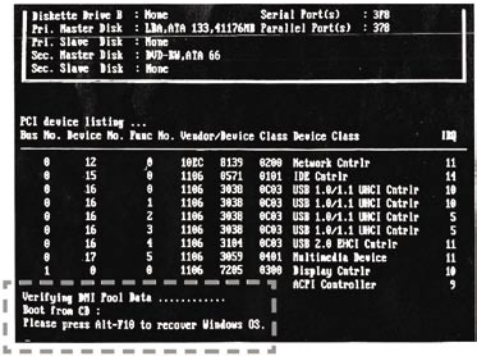
You can watch the latest news with your system. Once you visit the Yahoo’ s web site, the upper righter corner of its home page will show several “front page” news stories. But your choices of news sites are numerous. If you type in the name of a newspaper or a TV station into the search box of the Yahoo web site, the search result will show the web site of the newspaper or the TV station.

Chapter 4 Recover Windows Operating System

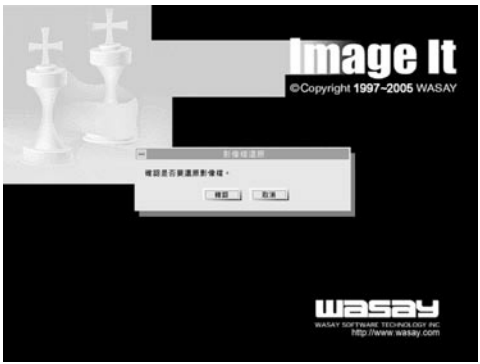
In some rare cases, a user may need to recover the Windows operating system. Normally if the user follows the instructions of Windows user documentation properly, there is hardly need for performing operating system recovery.

Warning:
Performing operating system recovery will return the system to its default (factory) installation status. However, performing operating system recovery may erase the application software you have previously installed to your system and the files you stored in its hard disk drive. You are recommended to back up all your important files to an external storage device such as a portable HDD or optical discs. After you have completed system recovery, you can copy those important files back to your system HDD.

To perform a operating system recovery operation, you have to press the Alt and F10 keys simultaneously while the following screen displays during power-up.



After you have pressed the Alt and F10 keys simultaneously, the system will prompt you to perform the system recovery operation with the screen below:



In order to make sure you are ready to perform the system recovery operation, the system will confirm again if you are sure you want to perform the recovery. After you have confirmed, the recovery operation will start automatically, and you will see the following screen.

After the system has completed the recovery procedure, the system will remind you to take out the recovery disc. However, because the recovery software was pre-loaded into the system hard drive, you only need to click the “Yes” button in the dialog box to continue. After you press click the “Yes” button, the system will restart again.

Chapter 5 Troubleshooting

Q: After connecting the peripherals to the system unit, the keyboard, mouse, and speakers does not work. The display monitor shows nothing. What should I do?

A: You can check if you follow the correct installation procedure to make the connection. Check if the peripherals are connected to their respective connectors correctly. Check if the connections are made too loosely. After checking connections, power up the system again to see if the system works as expected. If the speakers or video monitor does not work, please refer to the manuals which come with the speakers or monitor for troubleshooting.

Q: After making sure the monitor is connected correctly to the system, the monitor still shows nothing. What should I do?

A: The computer's power management function may blank the screen to save power, move the mouse slightly or press any key on the keyboard to turn the display back on. You can also adjust the brightness or contrast controls on the monitor for desired display effects.

Q: The cursor moves unsteadily across the screen. What should I do?

A: In case you use an optical mouse, it may not perform normally on a glossy surface or a sheet glass. Put the mouse on a clean paper will solve the problem.

Q: The system hangs or does not respond to any key strokes.

A: When the system is processing tasks, this may happen. If the situation lasts for an extended period of time, the application software the system is processing may be in need of more system resources. Don't be panic. You can press Ctrl + Alt + Del keys simultaneously to restart the system. When you press Ctrl + Alt + Del keys simultaneously, try to hold down these keys for more than five seconds to make sure the system performs a "warm reset". The other alternative is to follow system prompt message to turn the system to normal operation. The worst case scenario is to uninstall the application software and install that application again by making use Windows Install/Remove functions from the Control Panel.

Q: I have followed the installation processes mentioned in this manual, the system still does not work.

A: Consult your dealer or authorized maintenance service personnel. Do not try to fix the system by yourself for it may cause unexpected damages to your system.

Appendix A: Accessing the Internet

The Internet broadens the scope of life for many people. You can use your computer to browse (surf) the World Wide Web (WWW), chat with friends on the Internet, join discussion groups in a special interest group forum, send e-mails and photos to friends, make your own web site, blogs, or photo albums, buy or sell things through the WWW. You can buy airplane tickets, book hotels, books, cars, computers, etc. through the Internet. Students can search for study or research materials from the Internet.

DSL Internet Access

Before you can access the Internet, you have to decide what types of Internet access you want. Today the most common Internet access for home users is through high speed DSL (ADSL) or cable modem. Your local telephone company usually provides DSL (ADSL) service. Verizon in the United States, for example, offers $19.95 broadband DSL service for the first three months and $29.95 for the fourth through the 12th month (The rate may change). Once a user sets up a DSL account with Verizon, the company provides the following: high-speed Internet account, MSN® Premium Internet Software, 24/7 live technical support, 30-day money-back guarantee, self-install kit, 9 e-mail accounts, and 10 MB of Web space. You can shop around to find out the most reasonable DSL service in your area. Your local DSL access service providers normally provide toll-free phone numbers to solicit subscribers.

After you subscribed a DSL account and get your Internet account and password, you have to install a DSL modem between your computer and the telephone wall outlet. Normally the phone company will make the installation for a subscriber. In some countries, the phone companies only lease the DSL modem to a subscriber and provide the subscribers with user's manual for the modem and installation software. Please read your modem user's manual on how to operate and maintain the DSL modem.

After the DSL modem has been connected to your computer, you have to install the software which is required to "drive" your modem. The installation software is pretty easy to install and executes automatically. Before the installation, you or the person who does the software installation for you have to find out the connection information. The DSL access provider usually has the connection information. During the installation process, the system will request you enter your Internet account ID and password. Make sure you record your Internet account ID and password carefully for future reference. After the software installation process has been completed, you have to restart the system in order to surf on the Web. The first time you restart your computer after the installation, you will probably see a DSL access icon on the screen of your computer. After clicking that icon, you will go through the Internet on-ramp to the Internet highway. If you cannot access the Internet, please consult your DSL access service provider.

Accessing Internet through Cable Modem

Some people prefer to access the Internet through the cable modem. Many local cable TV companies offer cable modems to their customers for Internet access. You can check with your local cable TV providers for the price, transmission speed, connection information, service terms, etc.

As is the situation with DSL service, cable companies normally will help the cable modem subscriber install the cable modem, give Internet account and password to the subscriber. The cable modem is installed in between the computer and the cable. Cable modem providers will provide all the required accessories for the Internet access. Make sure you record your Internet account ID and password carefully for future reference.

After the cable modem has been connected to your computer, you have to install the software which is required to "drive" your modem. The installation software is pretty easy to install and executes automatically. During the installation process, the system will request you enter your Internet account ID and password.

After the software installation process has been completed, you have to restart the system in order to surf on the Web. The first time you restart your computer after the installation, you will see a cable modem access icon on the screen of your computer. After clicking that icon, you will go through the Internet on-ramp to the Internet highway. If you cannot access the Internet,

consult your cable access service provider.

When you select cable modem access, you actually share the bandwidth with the other cable modem subscribers in your area. The bandwidth is an indication of the data transmission capacity of your communication line. You can think of your bandwidth as the diameter of your community water main pipe.

Both cable and DSL Internet accesses are referred to as “broadband” service.

Dial-up Internet Access

In areas where DSL or cable Internet access is not available, you can contact an Internet Service Provider (ISP) to get Internet access. Dial-up Internet access is much slower compared with broadband service such as cable or DSL Internet access.

You can locate an ISP in your local phone directory in the category of “Internet Service Provider”, “Internet access”, or “Internet service”. You can check with your local cable TV providers for the price, transmission speed, connection information, service terms, etc. In case you only want to surf on the Internet occasionally, the dial-up service will meet your need.

In case you decide to surf the Internet using dial-up service, a conventional modem needs to be installed between your computer and the telephone wall outlet. You can refer to a modem user’s manual on how to install the modem.

Once you sign up with a dial-up ISP, the ISP will provide you with your Internet account and the password. Make sure you record your Internet account ID and password carefully for future reference.

After the modem has been connected to your computer, you have to install the software which is required to drive your modem. The installation software is pretty easy to install and executes automatically. During the installation process, the system will request you enter your Internet account ID and password.

After the software installation process has been completed, you have to restart the system in order to surf on the Web. The first time you restart your computer after the installation, you will probably see a modem access icon on the screen of your computer. After clicking that icon, you will go through the Internet on-ramp to the Internet highway. If you cannot access the Internet, consult your ISP.

Local area network (LAN) Internet Access

Accessing the Internet through a LAN is normally a workplace scenario. In a workplace the LAN is normally managed and maintained by the LAN administrator. In case you intend to access the Internet in a workplace, please contact the LAN administrator on the procedure to follow. You will need the LAN administrator to help you set up your computer in order to surf the Internet.

Wireless Internet Access

Using a computer which is built with wireless communication capability, you can access the Internet wirelessly. There are many wireless communication standards and protocols available today with 802.11a/b/g standard being the most frequently used standards.

Wireless ISP and Hotspots

As is the situation of broadband or dial-up Internet services, a user needs to access the Internet wirelessly through a wireless ISP in order to surf on the Internet. Some national chains such as Starbucks Coffee and fast food chain stores may offer wireless Internet access service free or for a fee. In some countries, you can locate wireless communication hot spots at airports, subway and railway stations, city halls, convention centers, etc. You can easily find wireless ISP from Yahoo's web site. Simply enter "wireless ISP" in its search box, and the search results will appear in just one second.

You can contact your preferred wireless ISP to find out the price, transmission speed, connection information, service terms, etc. In many areas, the local phone company may offer wireless Internet access.

Wireless Internet Account and Password

After you have selected your wireless ISP, you need wireless Internet account and password before you can surf on the Internet wirelessly.

Wi-Fi

You will see “Wi-Fi” when you study information about wireless communication. “Wi-Fi” is an abbreviation for wireless fidelity and is used generically when referring to any type of 802.11 network, whether 802.11b, 802.11a, dual-band, etc. “Wi-Fi” is a term promulgated by the Wi-Fi Alliance. Products tested and approved as “Wi-Fi Certified” (a registered trademark) by the Wi-Fi Alliance are certified as interoperable with one another, even if they are from different manufacturers. You can search for “Wi-Fi”, “802.11b” from Yahoo’s or Intel’s web sites to find out more information about wireless communication products and technology. You can visit www.54g.org to view the white paper and many other helpful resources to learn more about wireless network communication.

The Hardware for Connecting to Wireless LAN (WLAN)

Certain Wireless ISP refers to wireless Internet communication as wireless LAN or WLAN. A home user needs a product generally known as “access point” to connect to an DSL (ADSL) modem, which is connected to the telephone wall outlet. The access point (AP) receives digital signals transmitted from the wireless card of your computer system, and then transmit the received signals through the DSL modem to the Internet network. Nowadays the wireless card is frequently a “built-in” device inside a mini PC, notebook PC, or PDA. The access point can also transmitted digital data to the wireless logic (card) of your mini PC, notebook PC, or PDA. You can get an AP from a PC peripheral dealer or from a web-based retailer such as http://www.newegg.com In some cases,

the wireless ISP provides subscribers with the required access point and DSL modem, and help the subscribers set up the wireless Internet access.

Data Rates

Currently most APs available on the market are designed with a data transmission rate of 108Mbps (megabits per second). Some models are designed in compliance with IEEE 802.11g, 802.11b, 802.11, 802.3, IEEE 802.3u standards.

In case your home is very large, you may need more than one APs in your home to access the wireless network conveniently. Another option is to install an AP range extender, which may have a slower data rate than the AP. Some AP range extender has a data rate of 54Mbps. Some models have an operating range of up to 328 ft. indoors and about 1312 ft. outdoors.

Appendix B:
Combo Optical Drive and Software Drivers for Peripherals

A hardware device or peripheral needs a software driver (or driver program) to operate. For example, a user needs a driver program to drive a DVD+/-RW, or a combo DVD/VCD. Normally the vendor of the peripheral should provide the driver program to operate that particular peripheral. In most cases, such driver programs are stored on a CD-ROM disc which is delivered together with the peripheral. In some cases, a vendor may provide software drivers or updated version of the drivers through its web site. Consumers can download the software drivers or updates from the vendor's web site.

Back up data to CD/DVD discs

Many consumers need to copy textual data, image files, music, or DVD titles (movie stored on DVD disc) from one optical disc to a new optical disc. In case your system is installed with a CD/DVD burner (also known as combo optical drive), copying data is easy.

The DVD-ROM/CD-RW combo drive is the latest generation of optical drive for PCs. Many combo drives are offered with an industry-standard ATAPI interface and supported under Windows 2000, Windows XP operating environment. Such drive is designed to read not only DVD-ROM discs, but also CD-ROM/R and DVD-RAM discs. Some drive support a maximum speed of 16X with DVD and 52X when used with CD-ROM/Rs.

Such drives are always delivered with bundled software drivers program. One of the most popular drivers for such optical device is provided by Nero AG (www.nero.com). If you want to get more knowledge about CD/DVD copying or backup technology, Nero's web site provides nice reference materials.

In case you try to copy music or DVD movie titles to optical discs using a combo drive, you have to pay attention not to infringe the copyrights of the original producers of the music or movie. The manufacturer of the combo drive is supposed to provide detailed information on how to use the combo drive.

Appendix C: Making Presentations Wirelessly

Make presentations has become indispensable for many professionals, teachers, business executives, etc. However, connecting a system to a projector with a cable could limit the mobility of the system.

A user can get rid of the projector wires in case the user has a wireless projector adapter which is compatible with the 802.11a/b/g standard. The wireless projector adapter can broadcast screen-captured images from any Wi-Fi-enabled PC to VGA/XVGA projectors or multiple PCs which are built with a Wi-Fi receiver adapter.

Before connecting to a wireless projector adapter, you have to make sure your system is built to support the 802.11a/b/g function. In case your system supports the 802.11a/b/g standard, you can make presentations wirelessly.

Certain wireless projector adapter is designed with the auto scan function, which enables it to find clear wireless channel for quick connection between your system and the projector adapter. For example, you may find such function on the wireless projector adapter offered by NewSoft (www.newsoftinc.com).

The wireless projector adapter of NewSoft supports high frame rate of up to 15 frame per second, enabling users to share oversized video, image files, and PowerPoint files with embedded animation and video clips in real-time.

The wireless projector adapter of NewSoft supports high resolution of XGA (1024*768) and SVGA (800*600). The device provides color depth of 16/24/32 bit color modes. Users can update software driver through the company's web site, and the installation of the software driver is done automatically once the projector adapter is connected to your system. You can visit NewSoft web site for more details.

Appendix D:
Turning Your System into a Personal Video Recorder

You may turn your system into a personal video recorder (PVR) by adding a TV tuner box, which can connect to your system through a USB connector, and its bundled software.

You can get one such box from NewSoft (www.newsoftinc.com). The TV tuner box of NewSoft, compatible with the digital video broadcast television (DVB-T) standard in Europe and the NTSC standard in the U.S., can be used in Europe and Americas. The TV tuner box can process both digital video and analog video signals for HDTV and conventional TV systems.

The TV tuner box supports the following graphic resolutions: 1920 x 1080 (HDTV), 1024 x 576, and 720 x 480. The box provides both scheduled recording and time shift recording, subtitle display, electronic program guides (EPG) on daily, weekly, and monthly basis. Once a user calls up the EPG, the user can set up the system for scheduled recording.
In addition to powerful TV video recording functions, the PVR comes with a high performance DVD burning kernel that supports all kinds of DVD format burning, double layer format burning, over-burn and menu authoring.

The box supports such media formats as DVB MPEG-2 transport stream and MPEG-2 stream because they are built with powerful MPEG Codec that speeds up MPEG trans-coding process with high performance quality encoding and decoding capability. The TV tuner box is also designed to provide high definition decoding capability for HDTV.
The easy-to-use interface let users enjoy programs without any unneeded settings or complicated set-up operations. All advanced functions are automatic and invisible to the user who only wants to focus on watching and recording the programs they want. With patented DTCM and seamless viewing technology to keep the video always smooth and able to recover by itself under unstable transmission conditions.

PVR not only supports standard TV and video recorder features but also enables particular formats like PIP, POP, dual input with direct-to-disc burning. Moreover, users' precious video data can be recorded with applets like Create Video Disc and edited by applets such as Video Editing with ease. All popular DVD formats are supported.

If you want to know more about turning your system into a PVR, you can visit the company's web site.

Appendix E: Useful Web Sites

The purpose for offering the web site list is to allow the users experience surfing on the Internet. It does not necessarily mean endorsement or preference of our company to these web sites. Users should evaluate these web sites by their own judgment.

General portal sites:
htt://www.yahoo.com
htt://www.google.com
htt://www.msn.com

Sites providing computer-related knowledge:
http://www.cnet.com
http://www.webopedia.com
Sites offering shopping services:
http://www.amazon.com
http://www.ebay.com/
htt://www.yahoo.com

Web site offering free Internet phone call software
http://www.skype.com

Web sites offering information on ISPs
http://www.thelist.com/
http://www.findanisp.com/

Web sites offering news service
http://www.bbc.co.uk/
http://www.cnn.com/
http://www.msn.com
http://www.nytimes.com/

Web sites on weather
http://weather.yahoo.com
http://www.weather.com

Appendix Setting BIOS

Introduction

In the system unit, there is an integrated circuit (IC), in which the basic input/output system (BIOS) is stored. It is the built-in software that determines what a computer can do without accessing programs from a disk. On PCs, the BIOS contains all the code required to control the keyboard, display screen, disk drives, serial communications, and a number of miscellaneous functions. The BIOS is typically placed in a ROM chip that comes with the computer. The BIOS keeps a record of variables or system parameters which can determine the functions of the computer.

System parameters can be modified by going into BIOS Setup menu; this menu allows you to configure the system parameters and save the configuration into the 128 bytes CMOS area (normally in the RTC chip or in the main chipset).

The Phoenix-Award BIOS that installed in the Flash ROM of the motherboard is a custom version of an industry standard BIOS. The BIOS provides critical fundamental support for standard input and output devices such as hard disk drives, serial and parallel ports, optical devices, etc.

In most cases, you are not required to change the BIOS settings because our R&D engineering team has been optimizing most BIOS settings to meet the general requirements for the average users. Our BIOS is designed to allow the

experienced users change a certain settings to meet their specific requirements. This appendix is intended to explain how to change some settings.

To enter BIOS setup menu, press <Del> when POST (Power-On Self Test) screen is shown on your video monitor.

Note: Because BIOS code has been updated from time to time to meet the latest customers' requirement, the BIOS information contained in this manual may look slightly different from the BIOS messages, which comes with your system.

How to Use Phoenix-Award BIOS Setup Program

Generally, you can use arrow keys to highlight the options that you want to choose, press <Enter> key to select, and use <Page Up> and <Page Down> keys to change setting values. You can press <Esc> key to quit the BIOS setup program. The following table provides details about how to use keyboard while changing the settings in the BIOS.

Key	Description
Page Up or +	Change setting to next value or increase the value.
Page Down or -	Change setting to previous value or decrease value.
Enter	Select the item.
Esc	In main menu: Quit without saving any changes. In sub menu: Exit current menu to main menu.

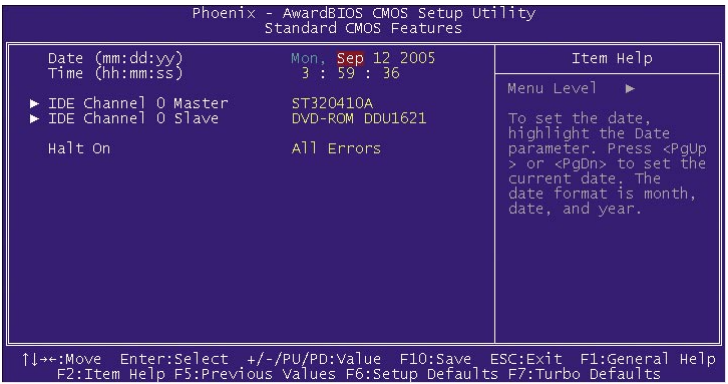
Up Arrow	Highlight previous item.
Down Arrow	Highlight next item.
Left Arrow	Move the highlight to left side of menu.
Right Arrow	Move the highlight to right side of menu.
F6	Load Setup Default setting value from CMOS.
F7	Load turbo setting value from CMOS.
F10	Save changed settings and exit setup program.

How to Enter BIOS Setup

Pressing <Del> during POST (Power-On Self Test) enables a user enter the BIOS Setup. The user can choose “Load Setup Defaults” for recommended optimal performance. The first BIOS Setup page is illustrated below:

Standard CMOS Features

The “Standard CMOS Setup” sets the basic system parameters such as the date, time, and the hard disk type. Use the arrow keys to highlight an item and <PgUp> or <PgDn> to make your selection.

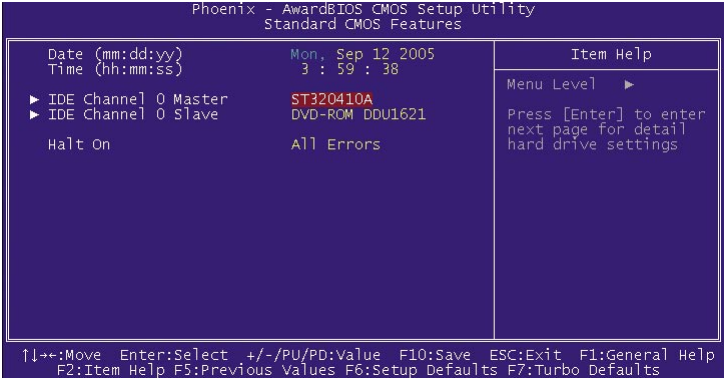


Standard CMOS Features > Date

To set the date, highlight the Date parameter. Press <PgUp> or <PgDn> to set the current date. The date format is month, date, and year.

Standard CMOS features > Time

To set the time, highlight the Time parameter. Press <PgUp> or <PgDn> to set the current time in hour, minute, and second format. The time is based on the 24-hour military clock.

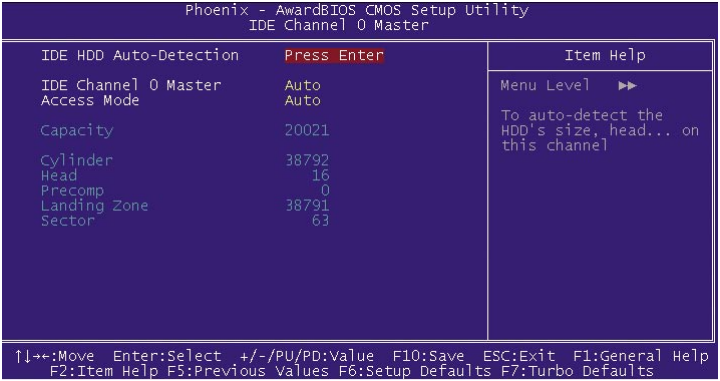


IDE Channel 0 Master (Slave): Define the parameters of IDE devices in Channel 0 (Master or Slave). Available options:

None: if there is no device, please select “None” for speeding boot up.

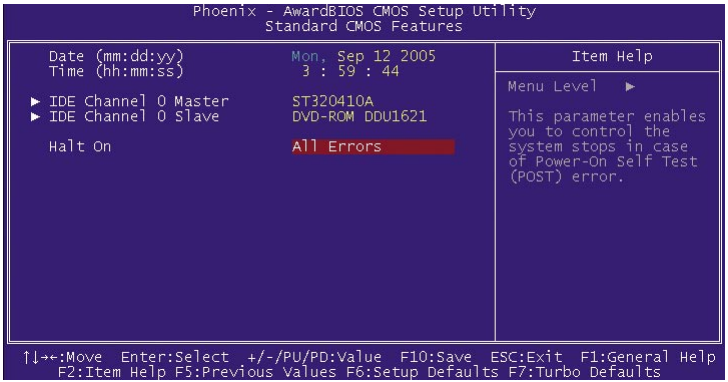
Auto: enables BIOS to auto-detect parameters of IDE device. (Default)

Manual: allows users to define parameter of IDE device.



IDE HDD Auto-Detection: Press “Enter” to allow the BIOS auto-detect parameters of HDD.
IDE Channel 0 Master: Define the parameters of IDE devices in Channel 0 (Master). Channel 0 is normally installed with the system hard drive.

Cylinder: Enter cylinder number
Head: Enter head number
Precomp: Write precompensation
Landing Zone: Location of head
Sector: Sector Number

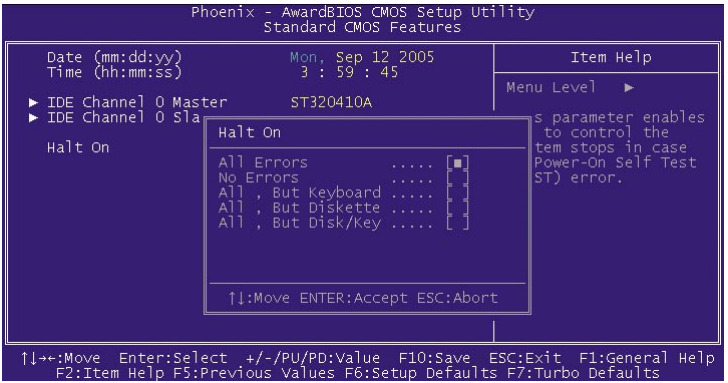


Standard CMOS features > HaltOn

This parameter enables you to control the system stops in case of Power-On Self Test (POST) error. Available items: No errors / All errors / All, But Keyboard / All, But Diskette / All, But Disk/Key

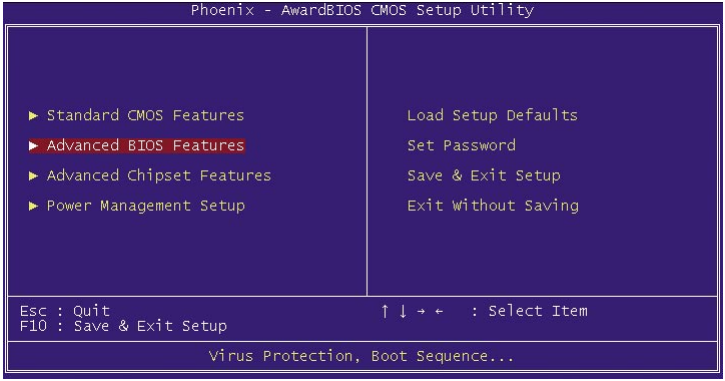
Advanced BIOS Features

This screen appears when you select the option “Advanced BIOS Features” from the main menu.

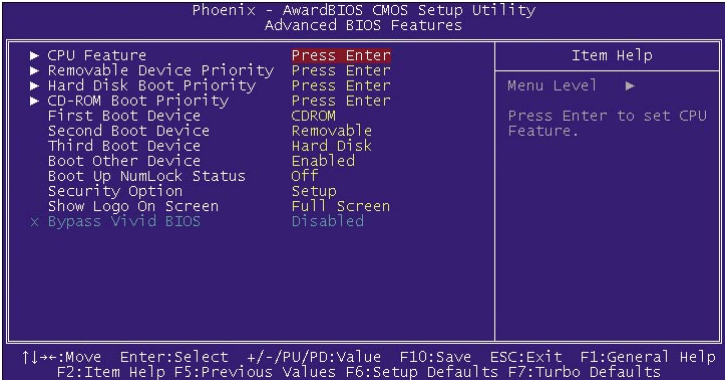


Advanced BIOS Features

From the first BIOS setup page illustrated below, you can select “Advanced BIOS Features” from the BIOS main menu.



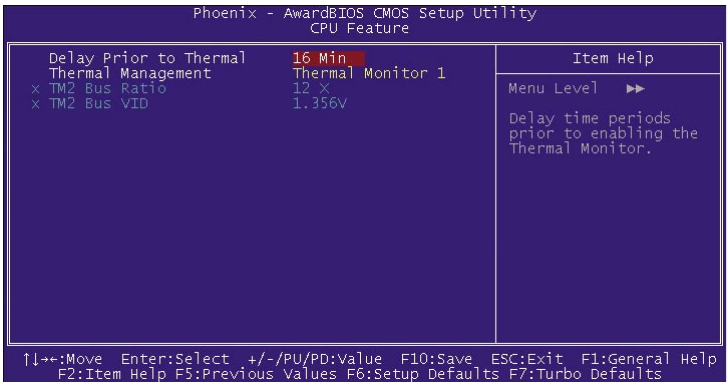
The following screen appears when you select the option “Advanced BIOS Features” from the main menu.



Advanced BIOS Features > CPU feature

Delay Prior to Thermal: Select delay time periods prior to enabling the Thermal Monitor. Available options: 4 Min / 8 Min / 16 Min / 32 Min

Thermal Management: Set the function of CPU internal Thermal Management. When CPU supports Thermal Monitor 1 (TM1) and Thermal Monitor 2 (TM2), user could select TM1 or TM2. But if CPU doesn't Support TM2, it will be fixed On TM1. When TM2 is enabled, and a high temperature situation is detected, it will cause the CPU to adjust its operating frequency via the core to bus ratio and input voltage via the VID signals. TM2 Bus Ratio and TM2 Bus VID show the CPU default value for TM2.



Advanced BIOS Features > Removable Device Priority
Advanced BIOS Features > Hard Disk Boot Priority
Advanced BIOS Features > CD-ROM Boot Priority
This parameter allows you to specify the system boot up search sequence.
Advanced BIOS Features > First Boot Device
Advanced BIOS Features > Second Boot Device
Advanced BIOS Features > Third Boot Device
This parameter allows you to specify the system boot up search sequence. Available options:

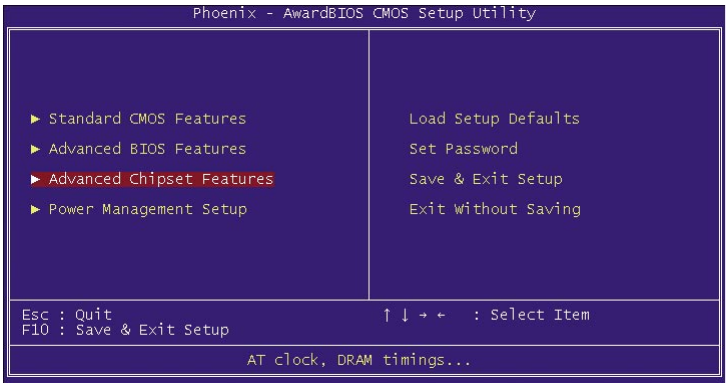
Removable: Floppy, USB, ZIP,…etc.
Hard Disk: Hard Disk Drives
CD-ROM: CD-ROM, DVD-ROM…etc
LAN: LAN Card with boot ROM
Disabled:

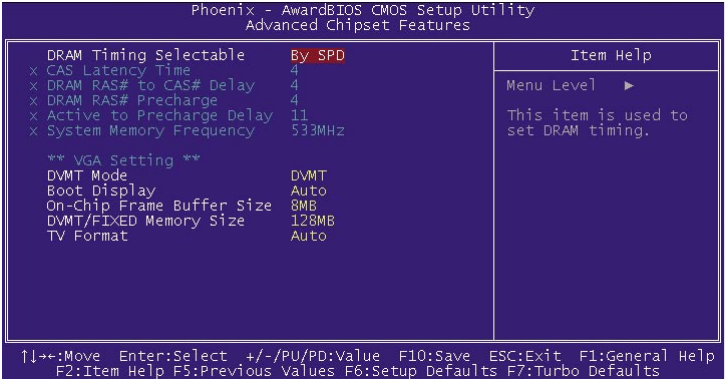
Advanced BIOS Features > Boot Other Device
This parameter allows you to enable other system boot up devices that is not described above.
Advanced BIOS Features > Boot Up NumLock Status
Set this parameter to “On” to enable the numeric function of the numeric keypad. Set this parameter to “Off” to disabling the numeric function allows you to use the numeric keypad for cursor control.
Advanced BIOS Features > Security Option
The “System” option limits access to both the System boot and BIOS setup. A prompt asking you to enter your password appears on the screen every time you

boot the system.
The “Setup” option limits access only to BIOS setup.
To disable the security option, select Password Setting from the main menu, don’t type anything and just press <Enter>
Advanced BIOS Features > Show Logo On Screen
This item allows user to select to show or hide “Full Screen logos” or “Disabled”.

Advanced Chipset Features

The “Advanced Chipset Features” includes settings for the chipset dependent features. These features are related to system performance. You can select “Advanced Chipset Features” on the first page of the BIOS setup program.





Warning: Make sure you fully understand the items contained in this menu before you try to change anything. You may change the parameter settings to improve system performance. However, it may cause your system to be unstable if the setting is not correct for your system configuration.

Advanced Chipset features > DRAM Timing Selection
Available options:

By SPD: System will determine memory timing according to default of DRAM. (Default)

Manual: Allow user to define memory timing.

Advanced Chipset features > CAS Latency Time
When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. Available options: 2, 2.5, 3
Advanced Chipset features > DRAM RAS# to CAS# Delay

This field lets user to insert a timing delay between the CAS and RAS strobe signals, used when RAM is written to, read from, or refreshed. Fast gives faster performance; and Slow give more stable performance. This field applies only when synchronous DRAM is installed in the system.
Available options: 2, 3, 4, 5

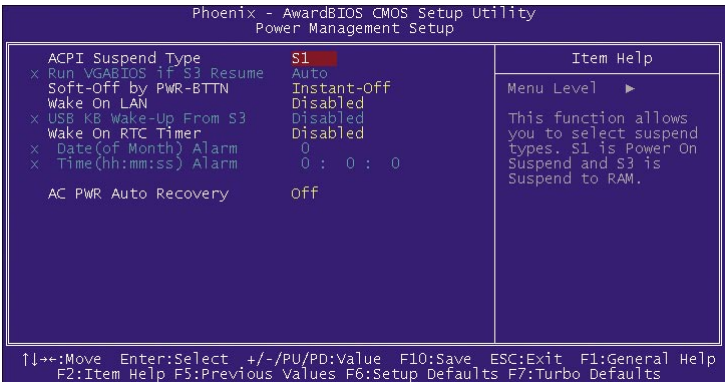
Advanced Chipset features > DRAM RAS# Precharge
If an insufficient number of cycles are allowed for the RAS to accumulate its charge before DRAM refresh, the refresh may be incomplete and the DRAM may fail to retain data. Fast give faster performance; and Slow gives more stable performance. This field applies only when synchronous DRAM is installed in the system. Available options: 2, 3, 4, 5
Advanced Chipset features > Active to Precharge Delay
Select the operating system that is active to precharge delay. Available options: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
Advanced Chipset features > System Memory Frequency
This item is used to set DRAM timing.
Available options: DDRII400 MHz, 533 MHz
Advanced Chipset features > Boot Display
This item is used to set booting display. Available options: Auto, CRT, TV, EFP
Advanced Chipset features > DVMI mode
This item allows user to control the on-chip frame buffer size, fixed memory size, DVMT.
Advanced Chipset features > On-Chip Frame Buffer Size
Advanced Chipset features > DVMT FIXED Memory Size

Advanced Chipset features > TV Format

Available options: Auto, NTSC_M, NTSC_M_J, NTSC_433, NTSC_N, PAL_B, PAL_G, PAL_D, PAL_H, PAL_I, PAL_M, PAL_N, PAL_60, SECAM_L, SECAM_L1, SECAM_B, SECAM_D, SECAM_G, SECAM_H, SECAM_K, SECAM_K1.

Power Management Setup

The Power Management Setup screen enables you to control the motherboard green features. See the following screen. You can select “Power Management Setup” on the first page of the BIOS setup program.



Power Management > ACPI Suspend Type

This function allows you to select suspend types. S1 is Power On Suspend and S3 is Suspend to RAM. Available Options: S1, S3, S1 & S3

Run VGA BIOS if S3 Resume.

Power Management > Soft-off by PWR-BTTN

This is a specification of ACPI and supported by hardware. When Delay 4 sec. is selected, the soft power switch on the front panel can be used to control power On, Suspend and Off. If the switch is pressed for less than 4 seconds during power On, the system will go into Suspend mode. If the switch is pressed for longer than 4 seconds, the system will be turned Off. The default setting is Instant-Off. If Instant-Off is selected the soft power switch is only used to control On and Off, so there is no need to press it for 4 seconds, and there is no Suspend.

Available Options: Delay 4 sec., Instant-Off

Power Management > Wake On LAN

This is a function of PCI specification 2.2. PCI bus supports standby current to PCI card and PCI card can wakeup system if it detects certain activity.

Available options: Disabled, Enabled

Use Keyboard Wakeup from S3.

Power Management > Wake On RTC Timer

The Wake Up Timer is more like an alarm, which wakes up and powers on your system at a pre-defined time for a specific application. It can be set to wake up everyday or on specific date within a month. The date/time is accurate to within a second. This option lets you enable or disable the RTC Wake Up function.

Available options: By Date, By Week, Disabled

Power Management > Date (of Month) Alarm

This item is displayed when you enable the Wake On RTC Timer option. Here you can specify what date you want to wake up the system. For Example, setting to 15 will wake up the system on the 15th day of every month.

Power Management > Time (hh:mm:ss) Alarm
This item is displayed when you enable the Wake On RTC Timer option. Here you can specify what time you want to wake up the system.

AC Power Auto Recovery: A traditional ATX system should remain at power off stage when AC power resumes from power failure. This design is inconvenient for a network server or workstation, without an UPS, that needs to keep power-on. This item is used to solve this problem. Selecting On enabling system to automatically power-on after AC power resumes; in the other hand, the system will remain power-off if you select Off. If Former-Sts (former status) option is selected, the system will power-on or power-off based on the original state. Available options: Former-Sts, On, Off

Load Setup Defaults
The "Load Setup Defaults" option loads optimized settings for optimum system performance. Optimal settings are relatively safer than the Turbo settings. All the product verification, compatibility/reliability test report and manufacture quality control are based on "Load Setup Defaults". We recommend using these settings for normal operation. "Load Setup Defaults" is not the slowest setting for this motherboard. If you need to verify an unstable problem, you may manually set the parameter in the "Advanced BIOS Features" and "Advanced Chipset Features" to get slowest and safer setting.

Set Password

Password prevents unauthorized use of your computer. If you set a password, the system prompts for the correct password before boot or access to Setup.

To set a password:

1. At the prompt, type your password. Your password can be up to 8 alphanumeric characters. When you type the characters, they appear as asterisks on the password screen box.
2. After typing the password, press.
3. At the next prompt, re-type your password and press again to confirm the new password. After the password entry, the screen automatically reverts to the main screen.

To disable the password, press “Enter” when being prompted to enter the password. The screen displays a message confirming that the password has been disabled.

Save & Exit Setup

This function automatically saves all CMOS values before leaving Setup.

Exit without Saving

Use this function to exit Setup without saving the CMOS value changes. Do not use this option if you want to save the new configuration.