

This publication, including all photographs, illustrations and software, is protected under international copyright laws, with all rights reserved. Neither this manual, nor any of the material contained herein, may be reproduced without written consent of the author.

The information in this document is subject to change without notice. The manufacturer makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. Further, the manufacturer reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of the manufacturer to notify any person of such revision or changes.

Trademarks

IBM, VGA, and PS/2 are registered trademarks of International Business Machines.

AMD and Duron are registered trademarks of Advanced Micro Devices Inc.

Microsoft, MS-DOS and Windows 98/ME/NT/2000/XP are registered trademarks of Microsoft Corporation.

PC-cillin is a trademark of Trend Micro Inc.

AMI is a trademark of Award Software Inc.

MediaRing Talk is a registered trademark of MediaRing Inc.

3Deep is a registered trademark of E-Color Inc.

Other names used in this publication may be trademarks and are acknowledged.

**Copyright © 2003
All Rights Reserved
M810 Series, V8.0
S730S/May 2003**

Notice:

Owing to Microsoft's certifying schedule is various to every supplier, we might have some drivers not certified yet by Microsoft. Therefore, it might happen under Windows XP that a dialogue box (shown as below) pop out warning you this software has not passed Windows Logo testing to verify its compatibility with Windows XP. Please rest assured that our RD department has already tested and verified these drivers. Just click the "Continue Anyway" button and go ahead the installation.



Table of Contents

Trademarks.....	I
Chapter 1 Introduction.....	1
Key Features.....	2
Package Contents.....	5
Static Electricity Precautions.....	6
Pre-Installation Inspection.....	6
Chapter 2 Mainboard Installation.....	7
Mainboard Components.....	8
I/O Ports.....	8
Installing the Processor.....	9
Installing Memory Modules.....	10
Setting Jumper Switches.....	11
Install the Mainboard.....	12
Connecting Optional Devices.....	13
Install Other Devices.....	15
Expansion Slots.....	17
Chapter 3 BIOS Setup Utility.....	19
Introduction.....	19
Running the Setup Utility.....	20
Standard CMOS Setup Page.....	21
Advanced Setup Page.....	22
Power Management Setup Page.....	24
PCI / Plug and Play Setup Page.....	26
Load Optimal Settings.....	27
Load Best Performance Settings.....	27
Features Setup Page.....	28
CPU PnP Setup Page.....	30
Hardware Monitor Page.....	31
Change Password.....	31
Exit.....	32
Chapter 4 Software & Applications.....	33
Introduction.....	33
Installing Support Software.....	34
Bundled Software Installation.....	36

Notice for AGP4X Slot:

This mainboard provides an optional AGP4x slot. We recommend the user should use one of the AGP VGA cards that we have tested. We will test more AGP VGA cards in the future. Users may get this information from our World Wide Web at www.pchips.com.tw.

Model Chipset	Memory	Manufacture
GeForce 2 GTS	32M	Winfast
GeForce 2 GTS DDR	32M	MSI MS-8815
GeForce 2 GTS DDR PRO	64M	ELSA GLADIAC
GeForce 2 GTS DDR PRO	64M	GIGABYTE GV-GF2010
GeForce 2 MX	32M	ASUS AGP-V7100
GeForce 3 DDR	64M	ELSA GLADIAC 920
Matrox Millennium G400	32M	Matrox
NVIDIA RIVA TNT2 Vanta	32M	Top solution
RIVA TNT2	32M	ASUS AGP-V3800

Chapter 1

Introduction

This mainboard has a **Socket-462** processor socket for an **AMD K7** type CPUs. You can install any one of these processors on the mainboard.

The mainboard supports Socket-462 processor front-side bus speeds of **200/266MHz**.

This mainboard uses the **SiS730S** chipset that integrates a **128-bit AGP Graphics Accelerator**, and provides an optional **4X AGP** slot for highly graphics display, the **CPU Plug & Play** through firmware, and **Ultra DMA 33/66/100** function. This mainboard has a built-in **AC97 Codec**, an **AMR** (Audio Modem Riser) slot to support Audio and Modem application and a built-in **10BaseT/100BaseTX Network Interface (optional)**. In addition, there is a full set of I/O Ports including PS/2 keyboard and mouse ports, one LAN port, one parallel port, one serial port, one VGA port and maximum four USB2.0 ports – two back-panel ports and onboard USB header JUSB1 providing two extra ports by connecting the Extended USB Module to the mainboard.

This mainboard has all the features you need to develop a powerful multimedia workstation that is network ready. The board is **Micro ATX size** and has power connectors for an **ATX** power supply.

Key Features

The key features of this mainboard include:

Socket-462 Processor Support

- ◆ Supports AMD **Athlon XP/Athlon/Duron** processors
- ◆ Supports 200/**266** MHz Front-Side Bus

Memory Support

- ◆ Two DIMM sockets for 168-pin SDRAM memory modules
- ◆ Support for 100/133 MHz memory bus
- ◆ Maximum installed memory is 2 x 512MB = 1GB

Expansion Slots

- ◆ One AMR slot for a special audio/modem riser card
- ◆ One optional AGP4X slot for AGP 2.0-compliant interface
- ◆ Two 32-bit PCI slots for PCI 2.2-compliant bus interface.

Onboard IDE channels

- ◆ Primary and Secondary PCI IDE channels
- ◆ Support for PIO (programmable input/output) modes
- ◆ Support for Multiword DMA modes
- ◆ Support for Bus Mastering and Ultra DMA 33/66/**100** modes

Power Supply and Power Management

- ◆ ATX power supply connector
- ◆ ACPI and previous PMU support, suspend switch, keyboard power on/off
- ◆ Supports Wake on Modem, Wake on LAN and Wake on Alarm

Built-in Graphics System

- ◆ Onboard 128-bit 2D/3D 100MHz Host interface **AGP Graphics Accelerator** Complies with AGP V2.0
- ◆ Shared memory architecture allows a maximum of 64 MB main memory to act as frame buffer
- ◆ Supports high resolutions up to 1920x1440 Hi-colors, up to 2048x2048 Texture size and Virtual screen up to 4096x4096
- ◆ Supports hardware DVD Accelerator

AC97 Codec

- ◆ Compliant with AC97 2.2 specification
- ◆ 16-bit stereo full-duplex CODEC with fixed 48KHz sampling rate
- ◆ 3 analog line-level stereo inputs with 5-bit volume control: LINE-IN, CE-IN, AUX-IN
- ◆ 1 analog line-level mono input: PHONE-IN
- ◆ Power management
- ◆ 2Ch DAC, support 2-channel speak-out

Onboard I/O Ports

- ◆ Provides PC99 Color Connectors for easy peripheral device connections
- ◆ Floppy disk drive connector with 1Mb/s transfer rate
- ◆ Two PS/2 ports for keyboard and mouse
- ◆ One serial port with 16550-compatible fast UART
- ◆ One parallel port with ECP and EPP support
- ◆ One VGA port
- ◆ Maximum four USB ports—two back-panel USB2.0 ports and onboard USB header JUSB1 making two extra USB2.0 ports by connecting the Extended USB Module to the mainboard
- ◆ One infrared port connector for optional module

Hardware Monitoring

- ◆ Built-in hardware monitoring for CPU & System temperatures, fan speeds and mainboard voltages

Built-in Ethernet LAN (optional)

- ◆ Supports 10/100 Mbps operation and half/full duplex operation
- ◆ IEEE 802.3/802.3u compliant
- ◆ Supports IEEE 802.3u clause 28 auto negotiation
- ◆ Supports operation under Link Down Power Saving mode
- ◆ Supports Base Line Winder (BLW) compensation
- ◆ Adaptive Equalization

Onboard Flash ROM

- ◆ Automatic CPU and board configuration
- ◆ Supports Plug and Play configuration of peripheral devices and expansion cards

Bundled Software

- ◆ **PC-Cillin2002** provides automatic virus protection under Windows 98/ME/NT/2000/XP
- ◆ **MediaRing Talk** provides PC to PC or PC to Phone internet phone communication
- ◆ **3Deep** delivers the precise imagery and displays accurate color in your monitor
- ◆ **PC DJ** is a dual-MP3 player that enables users to actually mix music right on their own personal computers.
- ◆ **Adobe Acrobat Reader V5.0** is the software to help users read .PDF files.

Dimensions

- ◆ Micro ATX form factor (24.4cm x 22cm)

Note: Hardware specifications and software items are subject to change without notification.

Package Contents

Attention: This mainboard series includes two different models. They are M810LU (LAN, USB2.0) and M810U (USB2.0). Please contact your local supplier for your purchase model. Each model will support different specification, list as below:

Model	Specification
M810LU	Onboard LAN PHY(U5) and USB + LAN (RJ45) connectors
M810U	Supports USB connector

Your mainboard package ships with the following items:

- The mainboard
- This User's Manual
- One diskette drive ribbon cable and bracket (optional)
- One IDE drive ribbon cable and bracket
- Software support CD

Optional Accessories

You can purchase the following optional accessories for this mainboard.

- Extended USB module
- AMR v.90 Fax/Modem card

Static Electricity Precautions

Components on this mainboard can be damaged by static electricity. Take the following precautions when unpacking the mainboard and installing it in a system.

1. Keep the mainboard and other components in their original static-proof packaging until you are ready to install them.
2. During installation, wear a grounded wrist strap if possible. If you don't have a wrist strap, discharge static electricity by touching the bare metal of the system chassis.
3. Handle the mainboard carefully by the edges. Avoid touching the components unless it is absolutely necessary. During installation put the mainboard on top of the static-protection packaging it came in with the component side facing up.

Pre-Installation Inspection

1. Inspect the mainboard for damage to the components and connectors on the board.
2. If you suspect that the mainboard has been damaged, do not connect power to the system. Contact your mainboard vendor and report the damage.

Chapter 2

Mainboard Installation

To install this mainboard in a system, follow the procedures in this chapter:

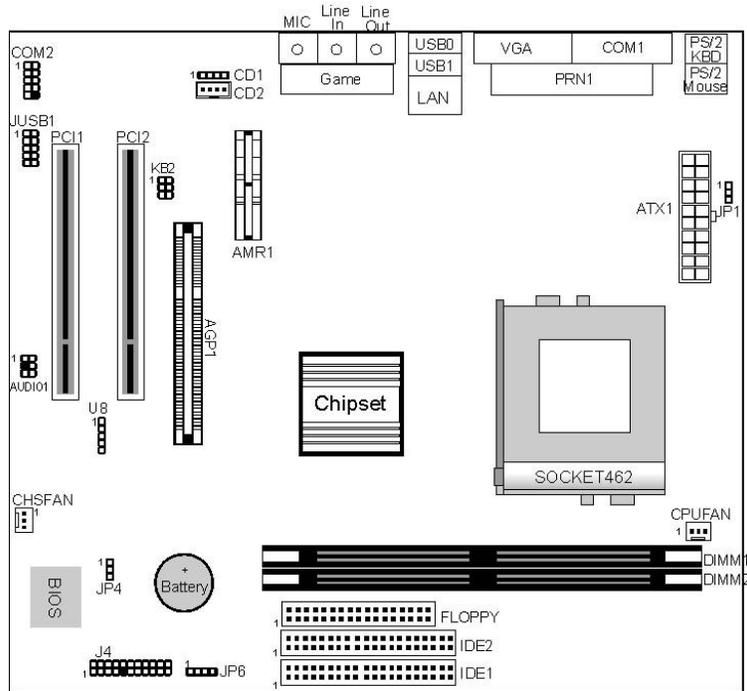
- ❑ Identify the mainboard components
- ❑ Install a CPU
- ❑ Install one or more system memory modules
- ❑ Verify that any jumpers or switches are set correctly
- ❑ Install the mainboard in a system chassis (case)
- ❑ Connect any extension brackets or cables to the mainboard connector headers
- ❑ Install any other devices and make the appropriate connections to the mainboard connector headers.

Note:

1. Before installing this mainboard, make sure jumper JP4 set to Normal setting. See this chapter for information on locating JP4 and the setting options.
2. Never connect power to the system during installation. Doing so may damage the mainboard.

Mainboard Components

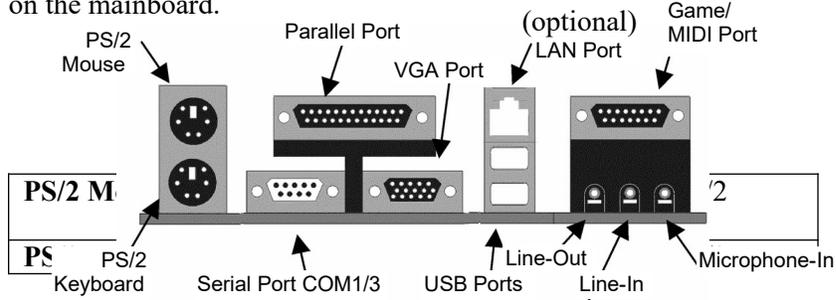
This diagram helps you identify major components on this mainboard.



Note: Any jumpers on your mainboard but not appearing in this illustration are for testing only.

I/O Ports

The illustration below shows a side view of the built-in I/O ports on the mainboard.



Keyboard	keyboard.
Parallel Port	Use the Parallel port to connect printers or other parallel communications devices.
COM1	Use the COM port to connect serial devices such as mice or fax/modems. COM1 is identified by the system as COM1. <i>Note: You can also obtain a serial port extension bracket by plugging the serial cable into header COM2 on the mainboard.</i>
VGA	Use the VGA port to connect VGA devices.
LAN Port (optional)	Connect an RJ-45 jack to the LAN port to connect your computer to the Network.
USB Ports	Use the USB ports to connect USB devices.
Audio Ports	Use the three audio ports to connect audio devices. The first jack is for stereo Line-In signal. The second jack is for stereo Line-Out signal. The third jack is for Microphone.

Installing the Processor

This mainboard has a Socket 462 processor socket. When choosing a processor, consider the performance requirements of the system. Performance is based on the processor design, the clock speed and system bus frequency of the processor, and the quantity of internal cache memory and external cache memory.

CPU Installation Procedure

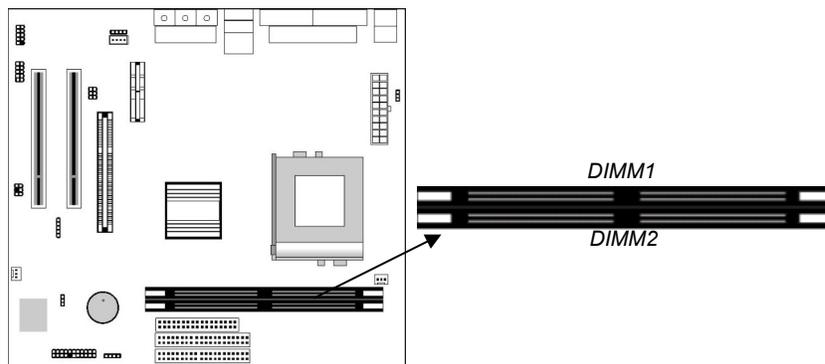
Follow these instructions to install the CPU:

1. Unhook the CPU socket's locking lever by pulling it away from socket and raising it to the upright position.
2. Match the pin1 corner on the CPU (the beveled edge) with the pin1 corner on the socket (at the base of the locking lever). Insert the CPU into the socket. Do not use force.
3. Push the locking lever down and hook it under the latch on the edge of socket.
4. Apply thermal grease to the top of the CPU.
5. Lower the CPU fan/heatsink unit onto the CPU.

6. Secure two retention clips on either side of the fan/heatsink unit onto the socket base.
7. Connect the CPU fan power cable to the CPU fan connector on the mainboard.

Installing Memory Modules

The mainboard has two 168-pin 3.3V SDRAM Dual Inline Memory Module (DIMM) sockets for system memory modules. SDRAM provides 800 MB/s or 1 GB/s data transfer rate depending on whether the bus is 100 MHz or 133 MHz. You can install any size memory module from 32 MB to 512MB, so the maximum memory size is 2 x 512MB = 1GB.



Installation Procedure

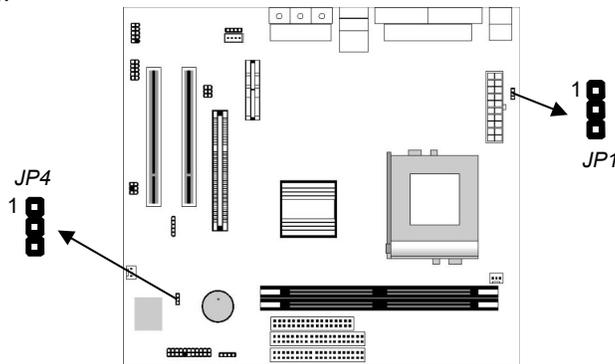
Refer to the following steps to install the memory modules.

1. Push the latches on each side of the DIMM socket down.
2. Align the memory module with the socket. The DIMM sockets are keyed with notches and the DIMMs are keyed with cutouts so that they can only be installed correctly.
3. Check that the cutouts on the DIMM module edge connector match the notches in the DIMM socket.
4. Install the DIMM module into the socket and press it firmly down until it is seated correctly. The socket latches are levered upwards and latch on to the edges of the DIMM.

5. Install any remaining DIMM modules.

Setting Jumper Switches

Jumpers are sets of pins connected together with caps. Jumper caps change the way of mainboard's operation by changing the electronic circuits on the mainboard. If a jumper cap connects two pins, we say those pins are SHORT; if the cap is removed, they are OPEN.



Jumper JP4: Clear CMOS Memory

This jumper is to clear the contents of CMOS memory. You may need to clear the CMOS memory if the settings in the Setup Utility are incorrect that prevents your mainboard from operating. To clear the CMOS memory, disconnect all the power cables from the mainboard and then move the jumper cap into the CLEAR setting for a few seconds.

Function	Jumper Setting
Clear CMOS Memory	Short Pins 1-2
Normal Operation	Short Pins 2-3

Jumper JP1: Keyboard Power On Selector

If you enable the keyboard power on feature, you can use hot keys on your keyboard as a power on/off switch for the system.

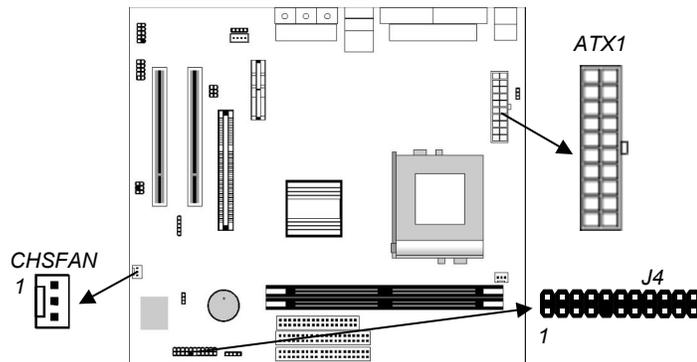
Function	Jumper Setting
Disable Keyboard Power On	Short Pins 1-2
Enable Keyboard Power On	Short Pins 2-3

Note: The system must provide 1A on the +5VSB (+5V Standby) signal before using the Keyboard Power On function.

Install the Mainboard

Install the mainboard in a system chassis (case). The board is a Micro ATX size mainboard. You can install this mainboard in an ATX case. Make sure your case has an I/O cover plate that matches the ports on this mainboard.

Install this mainboard in a case. Follow these instructions of the case manufacturer to use the hardware and internal mounting points on the chassis.



Connect the power connector from the power supply to the **ATX1** connector on the mainboard.

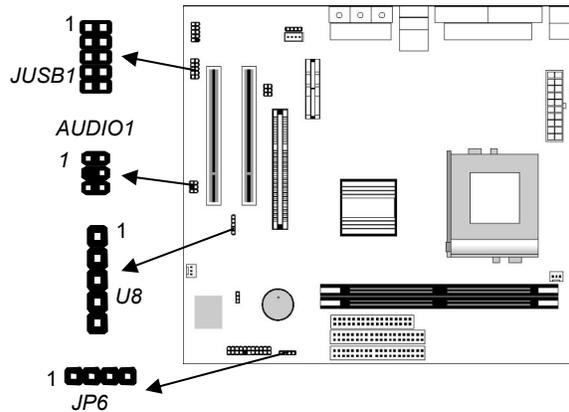
If there is a cooling fan installed in the system chassis, connect the cable from the cooling fan to the **CHSFAN** fan power connector on the mainboard

Connect the case switches and indicator LEDs to the **J4** header. Here is the list of J4 pin assignment.

Pin	Signal	Pin	Signal
1	SPEAKER	2	POWER LED
3	SPEAKER	4	POWER LED
5	SPEAKER	6	POWER LED
7	SPEAKER	8	KEYLOCK
9	KEY	10	KEYLOCK
11	NC	12	NC
13	NC	14	NC
15	HDD LED	16	HDD LED
17	RESET SWITCH	18	RESET SWITCH
19	ACPI LED	20	ACPI LED
21	POWERBUTTON/ SUSPEND SWITCH	22	POWERBUTTON/ SUSPEND SWITCH

Connecting Optional Devices

Refer to the following for information on connecting the mainboard's optional devices:



AUDIO1: Front Panel Audio Header

This header allows the user to install auxiliary front-oriented microphone and line-out ports for easier access.

Pin	Signal	Pin	Signal
1	LINE OUT_L	2	MIC1L
3	KEY	4	GND
5	LINE OUT_R	6	MIC1R

JUSB1: Front panel USB Connector

The mainboard has USB ports installed on the rear edge I/O port array. Additionally, some computer cases have USB ports at the front of the case. If you have this kind of case, use auxiliary USB connector JUSB1 to connect the front-mounted ports to the mainboard.

Pin	Signal	Pin	Signal
1	VCC5	2	GND
3	NC	4	+DATA2
5	-DATA1	6	-DATA2
7	+DATA1	8	NC
9	GND	10	VCC5

1. Locate the JUSB1 header on the mainboard.
2. Plug the bracket cable onto the JUSB1 header.
3. Remove a slot cover from one of the expansion slots on the system chassis. Install an extension bracket in the opening. Secure the extension bracket to the chassis with a screw.

U8: Infrared Port

The infrared port allows the wireless exchange of information between your computer and similarly equipped devices such as printers, laptops, Personal Digital Assistants (PDAs), and other computers.

Pin	Signal
1	+5V
2	NC
3	IRRX
4	GND
5	IRTX

1. Locate the infrared port **U8** header on the mainboard.
2. If you are adding an infrared port, connect the ribbon cable from the port to the U8 header and then secure the port to an appropriate place in your system chassis.

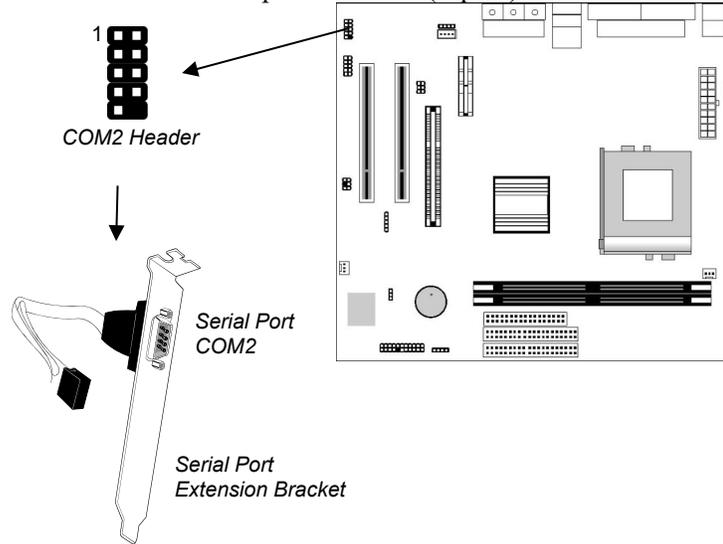
JP6: Onboard LAN LED Indicator

This connector is attached to LAN device that needs a LED indicator.

Pins	Signal
1, 2	Link LED
3, 4	10/100 Mbps Mode LED

Serial Port Extension Bracket

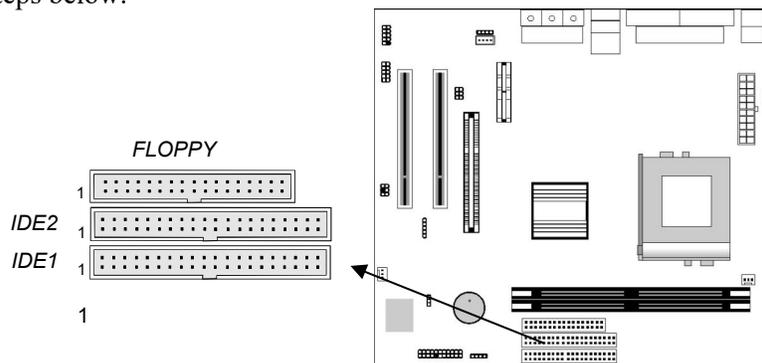
This bracket has one serial port – COM2 (9-pins).



1. On the mainboard, locate the header COM2 for this bracket.
2. Plug the serial cable into COM2.
3. In the system chassis, remove a blanking plate from one of the expansion slots, install the extension bracket in that slot, and secure the bracket to the chassis with a screw.

Install Other Devices

Install and connect any other devices in the system following the steps below.



Floppy Disk Drive

The mainboard ships with a floppy disk drive cable that can support one or two drives. Drives can be 3.5" or 5.25" wide, with capacities of 360K, 720K, 1.2MB, 1.44MB, or 2.88MB.

Install your drives and connect power from the system power supply. Use the cable provided to connect the drives to the floppy disk drive header **FLOPPY**.

IDE Devices

IDE devices include hard disk drives, high-density diskette drives, and CD-ROM or DVD-ROM drives, among others.

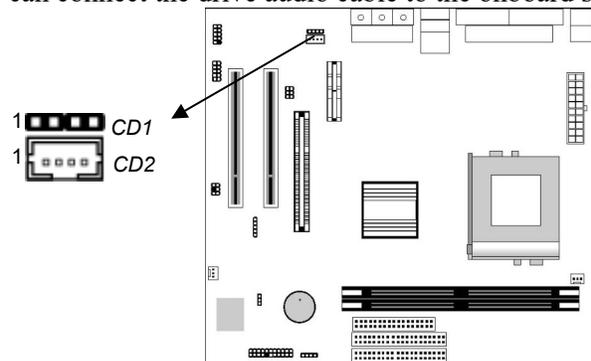
The mainboard ships with an IDE cable that can support one or two IDE devices. If you connect two devices to a single cable, you must configure one of the drives as Master and one of the drives as Slave. The documentation of the IDE device will tell you how to configure the device as a Master or Slave device. The Master device connects to the end of the cable.

Install the device(s) and connect power from the system power supply. Use the cable provided to connect the device(s) to the Primary IDE channel connector **IDE1** on the mainboard.

If you want to install more IDE devices, you can purchase a second IDE cable and connect one or two devices to the Secondary IDE channel connector **IDE2** on the mainboard. If you have two devices on the cable, one must be Master and one must be Slave.

Internal Sound Connections

If you have installed a CD-ROM drive or DVD-ROM drive, you can connect the drive audio cable to the onboard sound system.

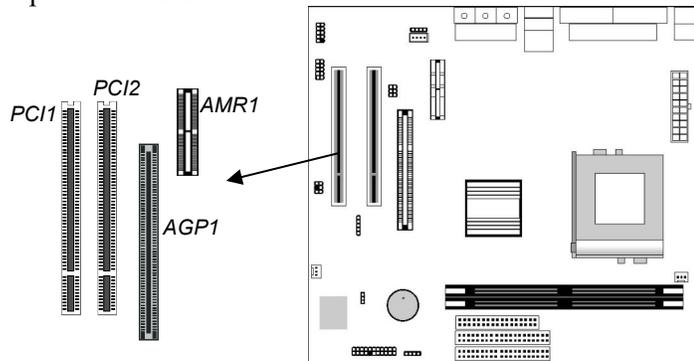


When you first start up your system, the BIOS should automatically detect your CD-ROM/DVD drive. If it doesn't, enter the Setup Utility and configure the CD-ROM/DVD drive that you have installed. On the mainboard, locate the two 4-pin connectors **CD1** and **CD2**.

CD1		CD2	
Pin	Signal	Pin	Signal
1	CD IN L	1	GND
2	GND	2	CD IN R
3	GND	3	GND
4	CD IN R	4	CD IN L

Expansion Slots

This mainboard has two 32-bit PCI expansion slots, one AMR slot and one optional AGP slot.



Follow the steps below to install a PCI/AMR/AGP expansion card.

1. Locate the AGP, AMR or PCI slots on the mainboard.
2. Remove the slot cover from the system chassis.
3. Insert the edge connector of expansion card into the slot and press it firmly down into until fully inserted.
4. Secure the expansion card bracket to the system chassis with a screw.

AMR Slot

The AMR (Audio Modem Riser) slot is an industry standard slot that allows the installation of a special audio/modem riser card. Different territories have different regulations regarding the specifications of a modem card. You can purchase an approved AMR card in your area and install it directly into the AMR slot.

Chapter 3

BIOS Setup Utility

Introduction

The BIOS Setup Utility records settings and information about your computer, such as date and time, the type of installed hardware and various configuration settings. Your computer applies the information to initialize all the components when booting up and basic functions of coordination between system components.

If the Setup Utility configuration is incorrect, it may cause the system to malfunction. It can even stop your computer booting properly. If it happens, you can use the clear CMOS jumper to clear the CMOS memory which has stored the configuration information, or you can hold down the **Page Up** key while rebooting your computer. Holding down the **Page Up** key also clears the setup information.

You can run the setup utility and manually change the configuration. You might need to do this to configure some hardware installed in or connected to the mainboard, such as the CPU, system memory, disk drives, etc.

Running the Setup Utility

Each time you start your computer, a message appears on the screen before the operating system loading that prompts you to “Hit if you want to run SETUP”. Whenever you see this message, press the **Delete** key, and the Main menu page of the Setup Utility appears on your monitor.

AMIBIOS SIMPLE SETUP UTILITY – VERSION 1.21.06 (C) 2000 American Megatrends, Inc. All Rights Reserved	
Standard CMOS Setup Advanced Setup Power Management Setup PCI / Plug and Play Setup Load Optimal Settings Load Best Performance Settings	Features Setup CPU PnP Setup Hardware Monitor Change Password Exit
Esc : Quit ↑ ↓ ← →: Select Item (Shift)F2 : Change Color F5 : Old Values F6 : Optimal values F7 : Best performance values F10 : Save&Exit	
Standards CMOS setup for changing time, date, hard disk type, etc.	

You can use the cursor arrow keys to highlight any of the options on the main menu page. Press **Enter** to select the highlighted option. To leave the setup utility, press the **Escape** key. To cycle through the Setup Utility’s optional color schemes hold down the **Shift** key and press **F2**.

Some of the options on the main menu page lead to tables of items with installed values. In these pages, use the cursor arrow keys to highlight the items, and then use the **PgUp** and **PgDn** keys to cycle through the alternate values for each of the items. Other options on the main menu page lead to dialog boxes that require you to answer Yes or No by hitting the **Y** or **N** keys.

If you have already made changes to the setup utility, press **F10** to save those changes and exit the utility. Press **F5** to reset the changes to the original values. Press **F6** to install the setup utility with a set of default values. Press **F7** to install the setup utility with a set of high-performance values.

Standard CMOS Setup Page

Use this page to set basic information such as the date, the time, the IDE devices, and the diskette drives. If you press the F3 key, the system will automatically detect and configure the hard disks on the IDE channels.

AMIBIOS SETUP - STANDARD CMOS SETUP										
(C) 2000 American Megatrends, Inc. All Rights Reserved										
Date (mm/dd/yy) : Tue May 13, 2003										
Time (hh/mm/ss) : 11:31:23										
	Type	Size	Cyln	Head	WPcom	Sec	LBA Mode	Blk Mode	PIO Mode	32Bit Mode
Pri Master	: Auto									On
Pri Slave	: Auto									On
Sec Master	: Auto									On
Sec Slave	: Auto									On
Floppy Drive A : 1.44 MB 3 1/2										
Floppy Drive B : Not Installed										
Month : Jan - Dec					ESC : Exit					
Day : 01 - 31					↑↓ : Select Item					
Year : 1901 - 2099					PU/PD/+/- : Modify					
					(Shift)F2 : Color					
					F3 : Detect All HDD					

Date & Time	Use these items to set the system date and time
Pri Master Pri Slave Sec Master Sec Slave	Use these items to configure devices connected to the Primary and Secondary IDE channels. To configure an IDE hard disk drive, choose <i>Auto</i> . If the <i>Auto</i> setting fails to find a hard disk drive, set it to <i>User</i> , and then fill in the hard disk characteristics (Size, Cyls, etc.) manually. If you have a CD-ROM drive, select the setting <i>CDROM</i> . If you have an ATAPI device with removable media (e.g. a ZIP drive or an LS-120) select <i>Floptical</i> .
Floppy Drive A Floppy Drive B	Use these items to set the size and capacity of the floppy diskette drive(s) installed in the system.

Advanced Setup Page

Use this page to set more advanced information about your system. Take some care with this page. Making changes can affect the operation of your computer.

AMIBIOS SETUP – ADVANCED SETUP (C) 2000 American Megatrends, Inc. All Rights Reserved		
Quick Boot	Enabled	ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults
1 st Boot Device	Floppy	
2 nd Boot Device	IDE-0	
3 rd Boot Device	CDROM	
Try Other Boot Devices	Yes	
S.M.A.R.T. for Hard Disks	Disabled	
BootUp Num-Lock	On	
Floppy Drive Swap	Disabled	
Floppy Drive Seek	Disabled	
Password Check	Setup	
Boot To OS/2 > 64MB	No	
L1 Cache	Enabled	
L2 Cache	Enabled	
System BIOS Cacheable	Enabled	
Auto Detect DIMM/PCI Clk	Enabled	
CLK GEN Spread Spectrum	Disabled	

Quick Boot	If you enable this item, the system starts up more quickly by elimination of some of the power on test routines.
1st Boot Device 2nd Boot Device 3rd Boot Device	Use these items to determine the device order the computer uses to look for an operating system to load at start-up time.
Try Other Boot Device	If you enable this item, the system will also search for other boot devices if it fails to find an operating system from the first two locations.
S.M.A.R.T. for Hard Disks	Enable this item if any IDE hard disks support the S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) feature.
BootUp Num-Lock	This item determines if the Num Lock key is active or inactive at system start-up time.
Floppy Drive Swap	If you have two diskette drives installed and you enable this item, drive A becomes drive B and drive B becomes drive A.

Floppy Drive Seek	If you enable this item, your system will check all floppy disk drives at start up. Disable this item unless you are using an old 360KB drive.
Password Check	If you have entered a password for the system, use this item to determine, if the password is required to enter the Setup Utility (<i>Setup</i>) or required both at start-up and to enter the Setup Utility (<i>Always</i>).
Boot to OS/2 > 64MB	Enable this item if you are booting the OS/2 operating system and you have more than 64MB of system memory installed.
L1/L2 Cache	Leave these items enabled since all the processors that can be installed on this board have internal L1/L2 cache memory.
System BIOS Cacheable	If you enable this item, a segment of the system BIOS will be cached to main memory for faster execution.
Auto Detect DIMM/PCI Clk	When this item is enabled, BIOS will disable the clock signal of free DIMM/PCI slots.
CLK GEN Spread Spectrum	This item can set up the system bus spread spectrum for the installed processor.

Power Management Setup Page

This page sets some of the parameters for system power management operation.

AMBIOS SETUP - POWER MANAGEMENT SETUP (C) 2000 American Megatrends, Inc. All Rights Reserved		
Power Management	APM/ACPI	
Standby Time Out	Disabled	
Suspend Time Out	Disabled	
Display Time Out	Disabled	
Hard Disk Time Out	Disabled	
Ring On Power On	Disabled	
Keyboard Power On	Disabled	
RTC Alarm Power On	Disabled	
RTC Alarm Date	Every Day	
RTC Alarm Hour	12	
RTC Alarm Minute	30	
RTC Alarm Second	00	
Power On By LAN	Disabled	
		ESC : Quit ↑↓←→ : Select Item
		F1 : Help PU/PD/+/- : Modify
		F5 : Old Values (Shift)F2 : Color
		F6 : Load BIOS Defaults
		F7 : Load Setup Defaults

Power Management	Use this item to enable or disable a power management scheme. If you enable power management, you can use the items below to set the power management operation. Both APM and ACPI are supported.
Standby Time Out	This sets the timeout for Standby mode in minutes. If the time selected passes without any system activity, the computer will enter power-saving Standby mode.
Suspend Time Out	This sets the timeout for Suspend mode in minutes. If the time selected passes without any system activity, the computer will enter power-saving Suspend mode.
Display Time Out	This sets the timeout for display device in minutes. If the time selected passes without any display activity, the display will enter power-saving mode.
Hard Disk Time Out	This sets the timeout for hard disk in minutes. If the time selected passes without any hard disk activity, the disk will enter power-saving mode.
Ring On Power On	The system can be turned off with a software command. If you enable this item, the system can automatically resume if there is an incoming call on the Fax/Modem. You must use an ATX power supply in order to use this feature.
KeyBoard Power On	If you enable this item, you can turn the system on and off by pressing hot keys on the keyboard. You must enable the Keyboard Power On jumper in order to use this feature.
RTC Alarm Power On / Date / Hour / Minute / Second	The system can be turned off with a software command. If you enable this item, the system can automatically resume at a fixed time based on the system's RTC (realtime clock). Use the items below this one to set the date and time of the wake-up alarm. You must use an ATX power supply in order to use this

feature.

Power On By LAN	The system can be turned off with a software command. If you enable this item, the system can automatically resume on LAN. You must use an ATX power supply in order to use this feature.
------------------------	---

PCI / Plug and Play Setup Page

This page sets some of the parameters for devices installed on the PCI bus and devices that use the system plug and play capability.

AMIBIOS SETUP - PCI / PLUG AND PLAY SETUP (C) 2000 American Megatrends, Inc. All Rights Reserved	
Plug and Play Aware O/S	Yes
Share Memory Size	N/A
O/S Control	Normal
Primary Graphics Adapter	PCI
Allocate IRQ to PCI VGA	Yes
PCI IDE BusMaster	Disabled
ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults	

Plug and Play Aware O/S	Enable this item if you are using an O/S that supports Plug and Play such as Windows 95 or 98.
Share Memory Size	This item lets you allocate a portion of the main memory for use by the onboard VGA display.
O/S Control	This item lets you select Japanese operating system or not.
Primary Graphics Adapter	This item indicates if the primary graphics adapter uses the PCI or the AGP bus. The default PCI setting still lets the onboard display work and allows the use of a second display card installed in a PCI slot.
Allocate IRQ to PCI VGA	If this item is enabled, an IRQ will be assigned to the PCI VGA graphics system. You set this value to No to free up an IRQ.
PCI IDE BusMaster	This item enables or disables the DMA under DOS mode. We recommend you to leave this item at the default value.

Load Optimal Settings

If you select this item and press **Enter** a dialog box appears. If you press **Y**, and then **Enter**, the Setup Utility loads a set of fail-safe default values. These default values are not very demanding and they should allow your system to function with most kinds of hardware and memory chips.

Note: It is highly recommended that users enter this option to load optimal values for accessing the best performance.

Load Best Performance Settings

If you select this item and press **Enter** a dialog box appears. If you press **Y**, and then **Enter**, the Setup Utility loads a set of best-performance default values. These default values are quite demanding and your system might not function properly if you are using slower memory chips or other low-performance components.

Features Setup Page

This page sets some of the parameters for peripheral devices connected to the system.

AMIBIOS SETUP - PERIPHERAL SETUP (C) 2000 American Megatrends, Inc. All Rights Reserved		
OnBoard FDC	Enabled	
OnBoard Serial PortA	3F8h/COM1	
OnBoard Serial PortB	2F8h/COM2	
Serial PortB Mode	Normal	
OnBoard Parallel Port	378h	
Parallel Port Mode	SPP	
Parallel Port IRQ	7	
Parallel Port DMA	N/A	
OnBoard Game Port	201h	
OnBoard MIDI Port	300h	
MIDI Port IRQ	10	
OnBoard PCI IDE	Both	
OnBoard AC'97 Sound	Enabled	
OnBoard AC'97 Modem	Auto	
OnBoard LAN	Enabled	
USB Function Support	Enabled	
USB Function for DOS	Disabled	
		ESC : Quit ↑↓←→ : Select Item
		F1 : Help PU/PD/+/- : Modify
		F5 : Old Values (Shift)F2 : Color
		F6 : Load BIOS Defaults
		F7 : Load Setup Defaults

OnBoard FDC	Use this item to enable or disable the onboard floppy disk drive interface.
OnBoard Serial PortA	Use this item to enable or disable the onboard COM1 serial port, and to assign a port address.
OnBoard Serial PortB	Use this item to enable or disable the onboard COM2 serial port, and to assign a port address.
Serial PortB Mode	Use this item to allocate the resources of the second serial port. Under Normal, the resources are allocated to the onboard serial port. Under ASKIR or IrDA, the resources are allocated to the onboard IR port.
Onboard Parallel Port	Use this item to enable or disable the onboard LPT1 parallel port, and to assign a port address. The Auto setting will detect and available address.

Parallel Port Mode	Use this item to set the parallel port mode. You can select SPP (Standard Parallel Port), ECP (Extended Capabilities Port), EPP (Enhanced Parallel Port), or ECP + EPP.
Parallel Port IRQ	Use this item to assign either IRQ 5 or 7 to the parallel port.
Parallel Port DMA	Use this item to assign a DMA channel to the parallel port. The options are 0, 1 and 3.
OnBoard Game Port	Use this item to enable or disable the onboard game port, and to assign a port address.
OnBoard MIDI Port	Use this item to enable or disable the onboard MIDI port, and to assign a port address.
MIDI Port IRQ	Use this item to assign an IRQ to the MIDI port.
Onboard PCI IDE	Use this item to enable or disable either or both of the onboard Primary and Secondary IDE channels.
OnBoard AC'97 Sound	This item enables or disables the onboard AC'97 audio chip.
OnBoard AC'97 Modem	This item enables or disables the onboard AC'97 modem chip.
OnBoard LAN	This item enables or disables the onboard LAN chip.
USB Function Support	Enable this item if you plan to use the USB ports on this mainboard.
USB Function for DOS	Enable this item if you plan to use the USB ports on this mainboard in a DOS environment.

CPU PnP Setup Page

This page lets you manually configure the mainboard for the CPU. The system will automatically detect the kind of CPU that you have installed and make the appropriate adjustments to the items on this page.

AMIBIOS SETUP – CPU PnP SETUP	
©2000 American Megatrends, Inc. All Rights Reserved	
CPU BRAND	AMD K7
CPU Type	Athlon
CPU Speed	700 MHz
CPU Core Voltage	1.700 V
CPU Ratio	7.0x
CPU Frequency	100 MHz
DRAM Frequency	100 MHz
ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift) F2 : Color F6 : Load Optimal values F7 : Load Best performance values	

CPU BRAND/Type/ Core Voltage/Ratio /Frequency	These items show the kind, core voltage, ratio and frequency of CPU that has installed in your system.
CPU Speed	Use this item to set the CPU speed that has installed in your system.
DRAM Frequency	Use this item to set the frequency of DRAM that has installed in your system.

Note: If you manually set the wrong speed and the system won't run properly, press the **Page Up** key while the system is booting and a default setting will replace the incorrect CPU setting.

Hardware Monitor Page

This page sets up some parameters for the hardware monitoring function of this mainboard.

AMIBIOS SETUP - HARDWARE MONITOR (C) 2000 American Megatrends, Inc. All Rights Reserved	
--- Hardware Monitor ---	
CPU Temperature	39°C/102°F
System Temperature	33°C/ 91°F
CPU Fan Speed	5400 RPM
System Fan Speed	0 RPM
Vcore	1.616 V
Vcc2.5V	2.496 V
Vcc3.3V	3.392 V
Vcc5.0V	4.972 V
+12V	11.968 V
-12V	-11.721 V
SB3V	3.488 V
SB5V	5.053 V
Voltage Battery	3.488 V
ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BUIOS Defaults F7 : Load Setup Defaults	

CPU / System Temperature	These items display CPU and system temperature measurement.
FANS & Voltage Measurements	These items indicate cooling fan speeds in RPM and the various system voltage measurements.

Change Password

If you highlight this item and press **Enter**, a dialog box appears which lets you enter a Supervisor password. You can enter no more than six letters or numbers. Press **Enter** after you have typed in the password. A second dialog box asks you to retype the password for confirmation. Press **Enter** after you have retyped it correctly. The password is then required to access the Setup Utility or for that and at start-up, depending on the setting of the Password Check item in Advanced Setup.

Change or Remove the Password

Highlight this item, press Enter and type in the current password. At the next dialog box, type in the new password, or just press Enter to disable password protection.

Exit

Highlight this item and press **Enter** to save the changes that you have made in the Setup Utility configuration and exit the program. When the Save and Exit dialog box appears, press **Y** to save and exit, or press **N** to exit without saving.

Chapter 4

Software & Applications

Introduction

This chapter describes the contents of the support CD-ROM that comes with the mainboard package.

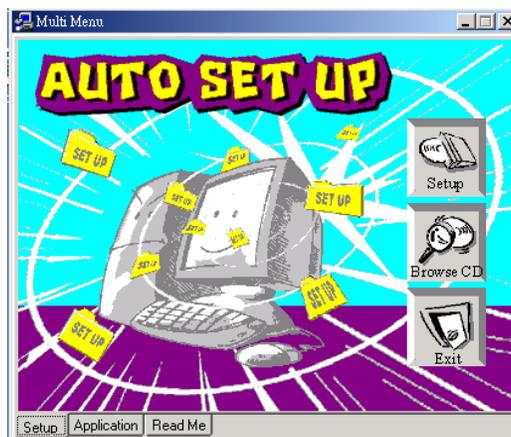
The support CD-ROM contains all useful software, necessary drivers and utility programs to properly run our products. More program information is available in a README file, located in the same directory as the software.

To run the support CD, simply insert the CD into your CD-ROM drive. An Auto Setup screen automatically pops out, and then you can go on the auto-installing or manual installation depending on your operating system.

If your operating system is Windows 98/ME/2000/XP, it will automatically install all the drivers and utilities for your mainboard; if Windows NT or manual installation, please follow the instructions described as the Installing under Windows NT or Manual Installation section.

Installing Support Software

1. Insert the support CD-ROM disc in the CD-ROM drive.
2. When you insert the CD-ROM disc in the system CD-ROM drive, the CD automatically displays an Auto Setup screen.
3. The screen displays three buttons of **Setup**, **Browse CD** and **Exit** on the right side, and three others **Setup**, **Application** and **ReadMe** at the bottom. Please see the following illustration.



The **Setup** button runs the software auto-installing program as explained in next section.

The **Browse CD** button is a standard Windows command that you can check the contents of the disc with the Windows 98 file browsing interface.

The **Exit** button closes the Auto Setup window. To run the program again, reinsert the CD-ROM disc in the drive; or click the CD-ROM driver from the Windows Explorer, and click the Setup icon.

The **Application** button brings up a software menu. It shows the bundled software that this mainboard supports.

The **ReadMe** brings you to the Install Path where you can find out path names of software driver.

Auto-Installing under Windows 98/ME/2000/XP

If you are under Windows 98/ME/2000/XP, please click the **Setup** button to run the software auto-installing program while the Auto Setup screen pops out after inserting the support CD-ROM:

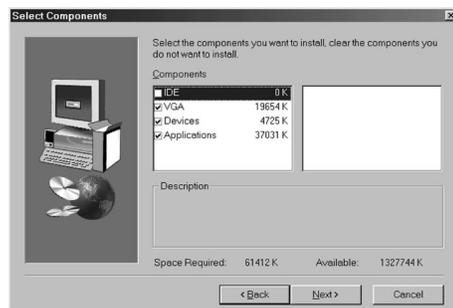
1. The installation program loads and displays the



following

screen. Click the **Next** button.

2. Select the items that you want to setup by clicking on it (the default options are recommended). Click the **Next** button to proceed.



3. The support software will automatically install.

Once any of the installation procedures start, software is automatically installed in sequence. You need to follow the onscreen instructions, confirm commands and allow the computer to restart as few times as needed to complete installing whatever software you selected. When the process is finished, all the support software will be installed and start working.

Installing under Windows NT or Manual Installation

If you are under Windows NT, the auto-installing program doesn't work out; or you have to do the manual installation, please follow this procedure while the Auto Setup screen pops out after inserting the support CD-ROM:

1. Click the **ReadMe** to bring up a screen, and then click the Install Path at the bottom of the screen.
2. Find out your mainboard model name and click on it to obtain its correct driver directory.
3. Install each software in accordance with the corresponding driver path.

Bundled Software Installation

All bundled software available on the CD-ROM is for users' convenience. You can install bundled software as follows:

1. Click the **Application** button while the Auto Setup screen pops out after inserting the support CD-ROM.
2. A software menu appears. Click the software you want to install.
3. Follow onscreen instructions to install the software program step by step until finished.