

SY-P4VTP Motherboard

Quick Start Guide

**VIA 8237
Serial ATA Driver
Installation**

**VIA USB2.0
Driver
Installation**

The SOYO CD

**Quick BIOS
Setup**

**Hardware
Installation**

Introduction



1. **Please read the users guide before proceeding with your installations. Serious damage may occur if the procedure is not followed properly.**
 2. AGP cards running at 3.3v are not supported. Only AGP cards running at 1.5v (most 4x or 8x AGP cards) are supported on this motherboard.
 3. Please make sure that your memory modules are inserted correctly. They can go in only one way, and should fit completely in the socket without sticking out. Failure to do so will damage your motherboard and memory module.
 4. An ATX 12V power supply (Power supply for Pentium 4 system) is required for the system to operate normally. (Preferably 350 watts for minimal loading or 400 watts for fully loaded system).
 5. If you have any problem getting your system to work, please follow the troubleshooting tips in your user manual.
 6. On some motherboards, the actual chipset cooler may differ from the chipset cooler as shown on the picture or on the box. However, the chipset fan on the motherboard is of the same quality and will work just as well as the one shown in the picture. (The chipset cooler is as sufficient as the chipset fan based on a different design.)
 7. For immediate Technical questions, please visit SOYO tech support link at <http://www.soyousa.com/support> and <http://www.soyousa.com/kb>.
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SY-P4VTP Motherboard

mPGA Socket 478 processors

VIA PT800 AGP/PCI Motherboard

400/533/800 MHz Front Side Bus supported

ATX Form Factor

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About This Guide:

This Quick Start Guide can help system manufacturers and end users in setting up and installing the motherboard. Information in this guide has been carefully checked for reliability; however, to the correctness of the contents there is no guarantee given. The information in this document is subject to amend without notice.

For further information, please visit our **Web Site** on the Internet. The address is "<http://www.soyo.com>".

P4VTP Serial - Version 1.1 - Edition: October 2003

* These specifications are subject to change without notice

SY-P4VTP Quick Start Guide

1 Introduction

Congratulations on your purchase of the SY-P4VTP Motherboard. This Quick Start Guide illustrates the steps for installing and setting up your new Motherboard.

This guide provides all users with the basic steps of Motherboard setting and operation. For further information, please refer to the *SY-P4VTP Motherboard User's Manual* that came with your Motherboard.

Unpacking

When unpacking the Motherboard, check for the following items:

◆ The SY-P4VTP VIA PT800 AGP/PCI Motherboard



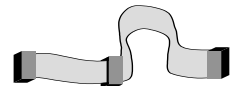
◆ The Quick Start Guide



◆ The Installation CD-ROM



◆ One IDE Device ATA 100 Flat Cable



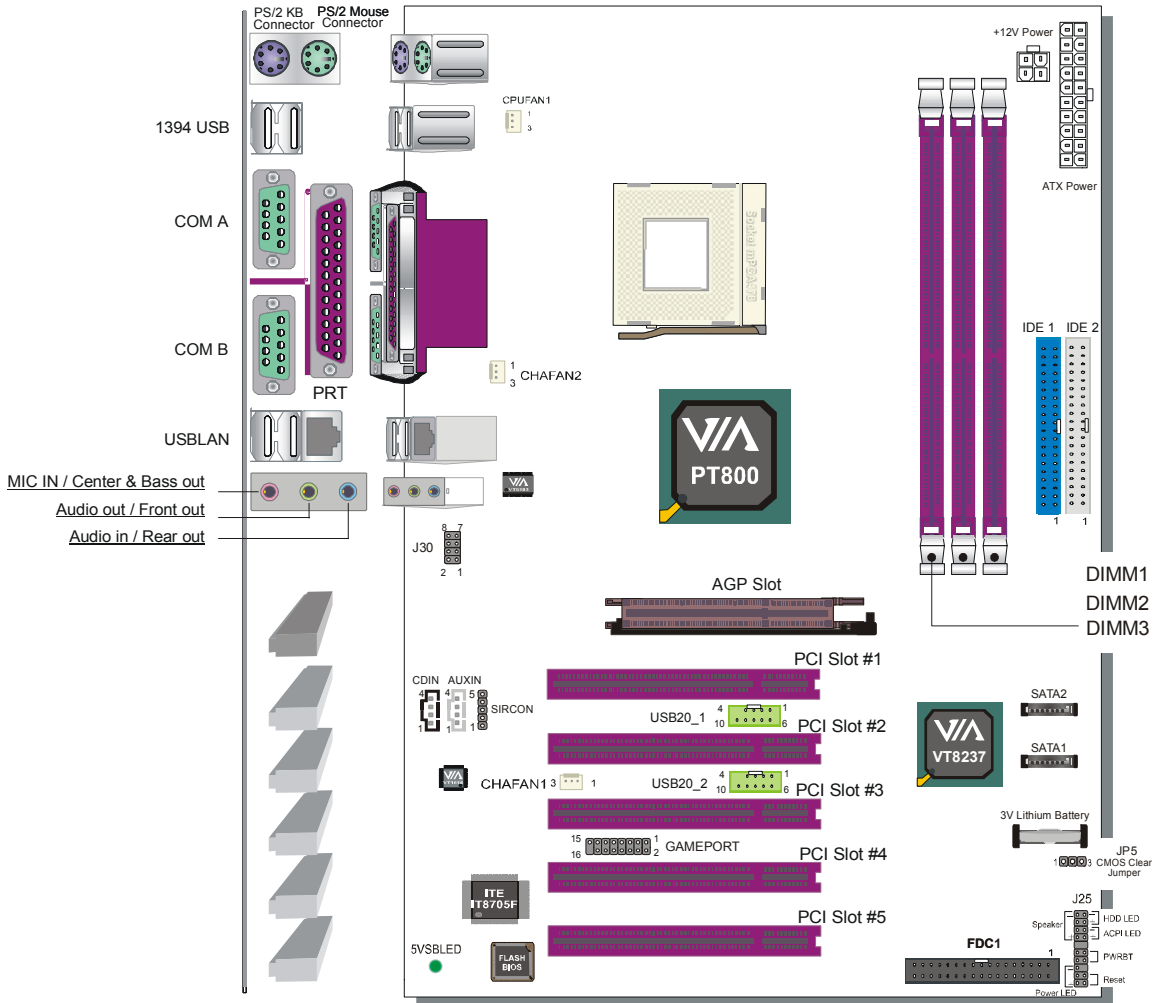
◆ One Floppy Disk Drive Flat Cable



◆ One Back panel



SY-P4VTP Motherboard Layout



SY-P4VTP Quick Start Guide

Key Features

CPU	<p>Supports Intel® mPGA Socket 478 processors :</p> <ul style="list-style-type: none"> ➤ Pentium® 4 with and without Hyperthreading, Northwood, Prescott (400/533/800MHz FSB) ➤ Pentium® 4 Celeron ➤ SOYO COMBO Setup CMOS setup menu for complete and easy changing of your CPU settings in CMOS setup, making jumpers obsolete.
Chipset	VIA PT800 / VIA 8237 Chipset
Memory	<ul style="list-style-type: none"> ➤ The SY-P4VTP supports PC2100, PC2700 and PC3200 DDR (non-registered and non-ECC) memory modules. ➤ SOYO COMBO Setup menu, to fully configure your memory settings.
AGP	1x AGP master 4x/8x slot (1.5v only)
PCI	5x 32-bit bus master PCI slots
Super I/O	<p>ITE IT8705F Super I/O controller supporting:</p> <ul style="list-style-type: none"> ➤ Floppy disk controller ➤ Parallel port (SPP, EPP and ECP compliant) ➤ 2x 16550A compatible RS232 serial ports ➤ PS/2 Keyboard and mouse ➤ 1x gameport pin header ➤ Hardware monitor for monitoring temperatures, voltages and fan speeds in the system.

Storage	<ul style="list-style-type: none">➤ 8237 Integrated Parallel ATA controller supporting up to 4x UDMA 33/66/100/133 Parallel ATA devices.➤ 8237 Integrated Serial ATA controller supporting up to 2x UDMA 150 hard disks in normal or RAID 0,1 mode
USB 2.0	8x USB 2.0 compliant ports (4x on rear IO panel, 4x pin headers.)
Sound	VT1616 6 channel Audio Codec
Network	10/100 MBps 100Base-T Ethernet controller, supporting Wake-On-Lan (WOL)
BIOS	<ul style="list-style-type: none">➤ Power Failure resume function to allow the system to turn on or off after a power failure, which is indispensable for server systems.➤ Wake On Ring and Power On by Alarm to allow your system to wake up from suspend or power on through the modem or RTC alarm.➤ Multiple boot, allowing your system to boot from for example CD-ROM
Industry standards	<p>This motherboard is compliant with the following industry standards :</p> <ul style="list-style-type: none">➤ Microsoft PC99➤ FCC➤ ACPI

2 Installation



To avoid damage to your Motherboard, please follow these simple rules while handling this equipment:

- Before handling the Motherboard, ground yourself by touching on an unpainted portion of the system's metal chassis.
- Remove the Motherboard from its anti-static packaging. Hold the motherboard by the edges and avoid touching its components.
- Check the Motherboard for damage. If any chip appears to be loose, press carefully to seat it firmly in its socket.

Follow the directions in this section which is designed to guide you through a quick and correct method to install your new **SY-P4VTP** Motherboard. For detailed information, please refer to the *SY-P4VTP Motherboard User's Manual and Technical Reference* online manual on the CD-ROM that came with your Motherboard.

Gather and prepare all necessary components to complete the installation successfully:

- ◆ Socket mPGA478 processor with CPU cooling fan (boxed type)
- ◆ DDR or SDRAM module(s)
- ◆ Computer case with adequate power supply unit (350W or greater)
- ◆ Monitor
- ◆ Keyboard
- ◆ Pointing Device (Mouse)
- ◆ Speaker(s) (optional)
- ◆ Disk Drives: HDD, CD-ROM, Floppy drive...
- ◆ External Peripherals: Printer and Modem (optional)
- ◆ VGA Card (optional)

Install the Motherboard

We will now begin the installation process. Please follow the systematic procedure designed to lead you to a complete and correct installation.

Step 1- Install the Central Processing Unit (CPU)

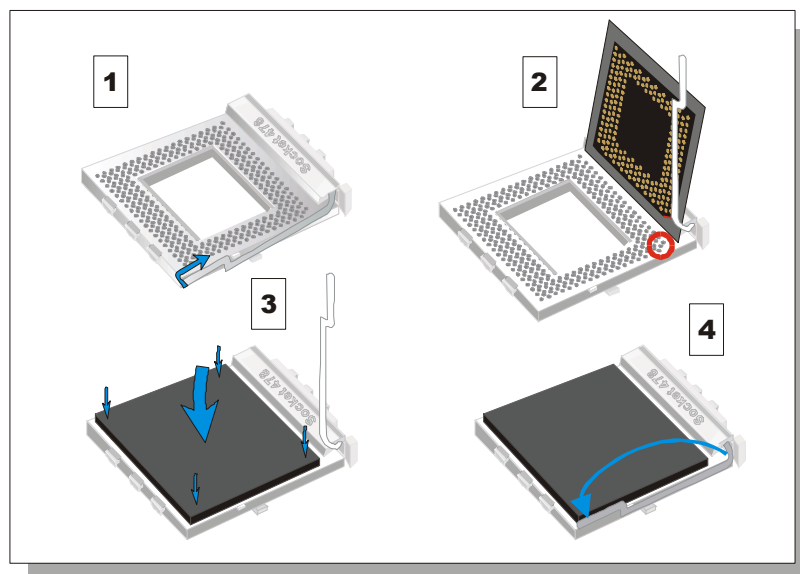
Step 2- Install memory modules

Step 3- Connect cables, case wires, and power supply Install expansion cards

Step 4- Install expansion cards

Step 1. Install the CPU

CPU Mount Procedure: To mount the Pentium® 4 or Celeron® Socket mPGA478 processor that you have purchased separately, follow these instructions.



1. Lift the socket handle up to a vertical position.
2. Align the blunt edge of the CPU with the matching pinhole edge on the socket.
3. Seat the processor in the socket completely and without forcing.
4. Then close the socket handle to secure the CPU in place.



Remember to connect the CPU Cooling Fan to the appropriate power connector on the Motherboard. *The fan is a key component that stabilizes the system. It prevents the equipment from overheating and prolongs the life of your CPU.*

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Step 2. Configure Memory

Your board comes with three DIMM sockets, providing support for up to 3GB of main memory using unbuffered and non-ECC DIMM modules. On this motherboard, DRAM speed can be set independent from the CPU FSB speed.

Memory Configuration Table

Number of Memory Modules	DIMM 1	DIMM 2	DIMM 3
RAM Type	DDR RAM PC2100/PC2700/3200 (non-register & non-ECC)		
Memory Module Size (MB)	128 / 256 / 512 / 1024 MB		

Step 3. Installation of Expansion Cards

The motherboard has 1 AGP slot and 5 PCI slots.

1. Read the related expansion card's instruction document before inserting the expansion card into the computer.
2. Press the expansion card firmly into expansion slot in the motherboard.
3. Make sure the metal contacts on the card are correctly seated in the slot.
4. Replace the screw to secure the slot bracket of the expansion card.
5. Install driver for the operating system you use.



Note: AGP cards working on 3.3V are not supported. Only AGP cards working on 1.5V can be used in this M/B. For AGP card voltage specification, please check the AGP card manual or contact your AGP card's manufacturer.

Step 4. Connections to the Motherboard

This section tells how to connect internal peripherals and the power supply to the motherboard.

The internal peripherals consist of IDE devices (HDD, CD-ROM), Floppy Disk Drive, Chassis Fan, Front Panel Devices (Internal Speaker, Reset Button, IDE LED and power switch), Wake-On-LAN card and other devices.

For more details on connecting internal and external peripherals to your new SY-KT600 DRAGON Plus motherboard, please refer to *SY-KT600 DRAGON Plus motherboard User's Manual and Technical Reference* online manual on the CD-ROM.

Connectors and Plug-ins

CPU Cooling Fan: CPUFAN1				Chassis Fan: CHAFAN1															
Pin1	Pin2	Pin3		Pin1	Pin2	Pin3													
GND	+12V	Sensor		GND	+12V	Sensor													
Chassis Fan: CHAFAN2				CD-IN															
Pin1	Pin2	Pin3		Pin1	Pin2	Pin3	Pin4												
GND	+12V	NC		Left	GND	GND	Right												
AUXIN				Standard IrDA (Infrared Device Header): SIRCON															
Pin1	Pin2	Pin3	Pin4	Pin1	Pin2	Pin3	Pin4	Pin5											
Left	GND	GND	Right	VCC	NC	IRRX	GND	IRTX											
MIC & LED Connector: J30																			
Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8												
Line_Out_L	GND	Line_Out_R	GND	MIC IN2	GND	LAN_ACTIVE_LED	VCC												
USB20_1 / USB20_2																			
Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8	Pin9	Pin10										
VCC	DATA-	DATA+	GND	NC	VCC	DATA-	DATA+	GND	GND										
GAMEPORT																			
Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8	Pin9	Pin10	Pin11	Pin12	Pin13	Pin14	Pin15	Pin16				
VCC	VCC	JOYA3	JOYB3	JOYA1	JOYB1	GND	MIDI_OUT	GND	JOYB2	JOYA2	JOYB4	JOYA4	MIDI_IN	VCC	NC				
								<th colspan="3">Power LED</th>								Power LED			
								Pin11			Pin12		Pin13						
								VCC			GND		GND						
								<th colspan="4">Speaker</th>								Speaker			
								Pin17		Pin18		Pin19		Pin20					
								VCC		NC		NC		Speaker out					

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HDD LED		ACPI LED		PWRBT		RESET	
Pin9	Pin10	Pin7	Pin8	Pin4	Pin5	Pin1	Pin2
LED Anode	LED Cathode	2.5V_DDR	Control Pin	Power On/Off	GND	Control PIN	GND
Power On/Off: PWRBT							
Connect your power switch to this header (momentary switch type).							
To turn off the system, press this switch and hold down for longer than 4 seconds.							

Power Supply

The power supply connector is the last connection to be made while installing a motherboard. This motherboard requires an ATX 12V power supply (For P4 system), and AT or ATX power supply cannot be used.

Steps:

1. Connect the 20 pin connector to the ATX power connector. See FIG. 1.
2. Connect the 4 pin connector to the +12V power connector. See FIG. 2.

Note1: The presence of the +12 V power connector indicates that a power supply is ATX12V; the absence of the +12V power connector indicates that a supply is ATX.

Note2: When using the Power-On by PS/2 Keyboard function, please make sure the ATX 12V power supply is able to provide at least 720mA on the 5V Standby lead (5VSB).

Note3: The minimum recommended wattage is 350 watts for a fully configured system. The system might become unstable if power supply is not enough.

Please install the ATX 12V power according to the following pin assignment:

ATX Power

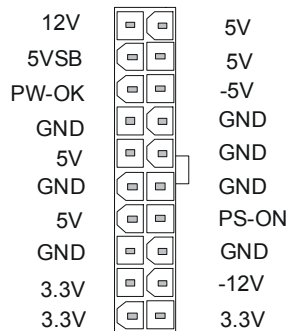
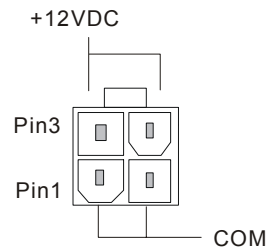


FIG1

➤ Pay special care to the directionality.



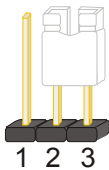
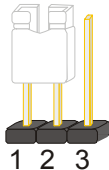
+12V Power Connector

FIG2

CMOS Clear (JP5)

In some cases the CMOS memory may contain wrong data, follow the steps below to clear the CMOS memory.

1. Clear the CMOS memory by momentarily shorting pin 2-3 on jumper JP5. This jumper can be easily identified by its white colored cap.
2. Then put the jumper back to 1-2 to allow writing of new data into the CMOS memory.

CMOS Clearing	Clear CMOS Data	Retain CMOS Data
JP5 Setting	Short pin 2-3 for at least 5 seconds to clear the CMOS 	Short pin 1-2 to retain new settings 
<p><i>Note: You must unplug the power cable from your power supply connector when performing the CMOS Clear operation.</i></p>		

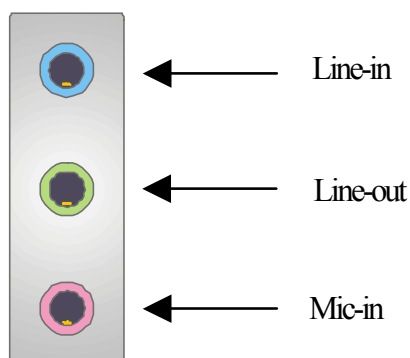
Hardware Installation

Audio Speakers connections

When using 2-channel speaker, connect the speaker cable to line-out.

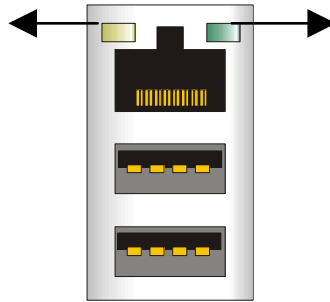
If you're using 4 channel speaker, connect **the front L/R speakers to line-out and rear L/R speakers to Line-in**. make sure to set the audio software for 4 channel speaker system. Do not forget to set the Audio Rack software to 4-channel system.

If you are using 6 channel speaker, connect the front L/R speaker to line out, rear L/R speaker to line-in and center/Bass speaker to Mic-in, make sure to set the audio software for 6 channel speaker system.



Onboard LAN LED Definition

When this LED is lit, this means the LAN is running at 100 mbps, if it is not lit, the Onboard LAN is working at 10 mbps.



This is the LAN activity LED. It will blink when it is active.

3 Quick BIOS Setup

After the hardware installation is complete, turn the power switch on, then press the key during the system diagnostic checks to enter the Award BIOS Setup program. The CMOS SETUP UTILITY will be shown on the screen. Then, follow these steps to configure the CPU settings.

Step 1. Select [STANDARD CMOS SETUP]

Set [Date/Time] and [Floppy drive type], then set [Hard Disk Type] to "Auto".

Step 2. Select [LOAD OPTIMIZED DEFAULTS]

Select the "LOAD OPTIMIZED DEFAULTS" menu and type "Y" at the prompt to load the BIOS optimal setup.

Step 3. Select [SAVE & EXIT SETUP]

Press <Enter> to save the new configuration to the CMOS memory, and continue the boot sequence.

4 The SOYO CD



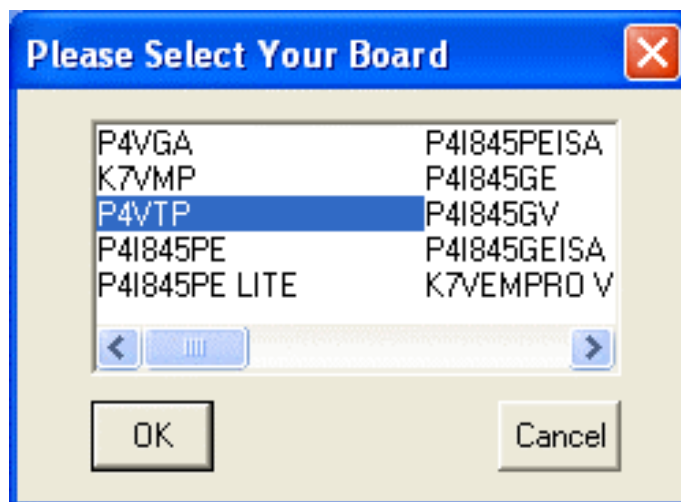
The SOYO-CD will Auto Run only in Windows Based Operating Systems.

Your SY-P4VTP motherboard comes with a CD-ROM labeled “SOYO CD”. The SOYO CD contains

- a. The user’s manual for your new motherboard in PDF format
- b. The driver software needed for installation
- c. A database in HTML format with information on SOYO motherboards and other products.

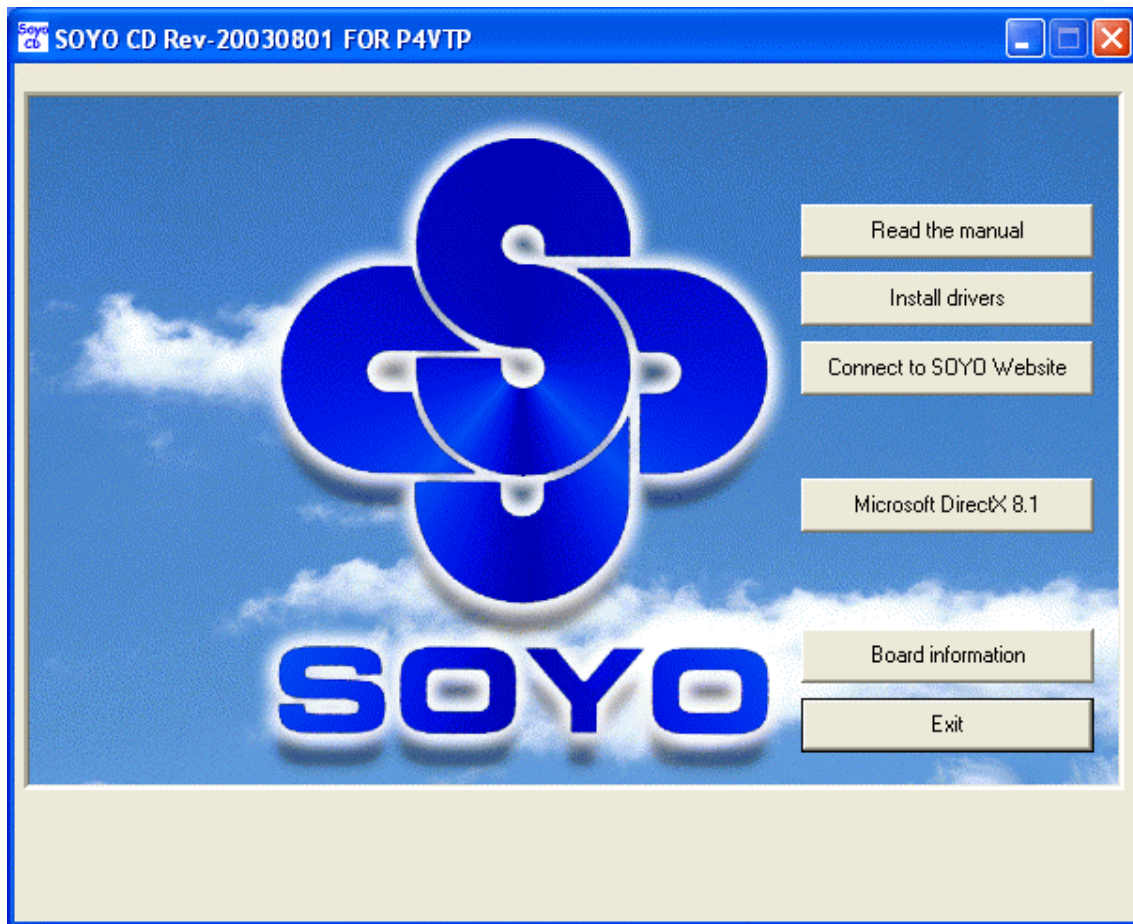
Step 1. Insert the SOYO CD into the CD-ROM drive

If you are running Windows NT/2K/XP, the SOYO-CD will not detect your motherboard type. In that case the following dialog will pop up. Please choose your motherboard model number and press OK.



(SOYO CD Start Up Program Menu)

Now the SOYO-CD Start Up Menu will come up as shown on the following page:



Under Windows 95/98/ME, the SOYO CD Start Up Program automatically detects the SOYO motherboard the system uses and displays the corresponding model name.

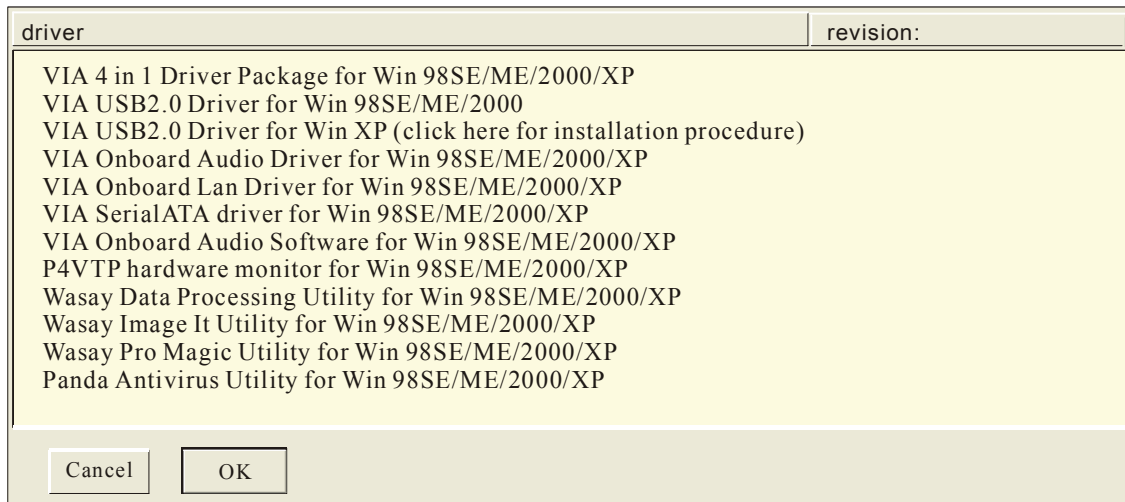
The user's manual files included on the SOYO CD are in PDF (Postscript Document Format). In order to read a PDF file, the appropriate Acrobat Reader software must be installed on your system.

Note: The Start Up program automatically detects if the Acrobat Reader utility is already present on your system, and otherwise prompts you on whether or not you want to install it. You must install the Acrobat Reader utility to be able to read the user's manual file. Follow the instructions on your screen during installation. Once the installation is completed, restart your system and re-run the SOYO CD.

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Step 2. Install Drivers and Utilities

Click the **Install Drivers** button to display the list of driver software that can be installed for your Motherboard. The Start Up program displays the drivers available for the particular model of Motherboard you own. We recommend that you only install those drivers.



(Driver Installation Menu)

A short description of all available drivers follows:

➤ **VIA 4 in 1 Driver Package for Win 98SE/ME/2000/XP**

VIA 4 In 1 driver includes four system drivers to improve the performance and maintain the stability of systems using VIA chipsets. These four drivers are:

VIA Registry (INF) Driver, VIA AGP VxD driver, VIA ATAPI Vendor Support Driver and VIA PCI IRQ Miniport Driver.

➤ **VIA USB2.0 Driver for Win 98SE/ME/2000**

This setup program will install the driver for VIA USB2.0 Host Controller for Windows 98SE and Windows ME. For Windows XP, please check Chapter 5.

➤ **VIA Onboard Audio Driver for Win 98SE/ME/2000/XP**

You have to install the drivers before installing any application for the Onboard Audio.

➤ **VIA Onboard Lan Driver for Win 98SE/ME/2000/XP**

This setup program will install the Driver for VIA Onboard Lan.

➤ **VIA SerialATA driver for Win 98SE/ME/2000/XP**

This program is for install Driver to use SerialATA function.

➤ **VIA Onboard Audio Software for Win 98SE/ME/2000/XP**

This driver support 2/4/6 speakers with 3D stereo enhancement.

➤ **P4VTP hardware monitor for Win 98SE/ME/2000/XP**

Your motherboard comes with a hardware monitoring IC. By installing this utility, Temperature, Fan speed and Voltages can be monitored. It is also possible to set alarms when current system values exceed or fall below pre-set values.

➤ **Wasay Data Processing Utility for Win 98SE/ME/2000/XP**

Wasay Data Processing Utility is an instant file restoration program that not only provides convenient & instant file recovery but also helps to manage your files.

➤ **Wasay Image It Utility for Win 98SE/ME/2000/XP**

Data Image software

➤ **Wasay Pro Magic Utility for Win 98SE/ME/2000/XP**

ProMagic is an instant system recovery software that provides convenient instant restoration to the preferred state at any specific restore time point as desired.

➤ **Panda Anti Virus Utility for Win 98SE/ME/2000/XP**

Anti Virus software for Windows 98SE/ME/2000/XP

Select which driver you want to install and click **OK**, or click **Cancel** to abort the driver installation and return to the main menu.

Note: Once you have selected a driver, the system will automatically exit the SOYO CD to begin the driver installation program. When the installation is complete, most drivers require a restart of your system before they become active.

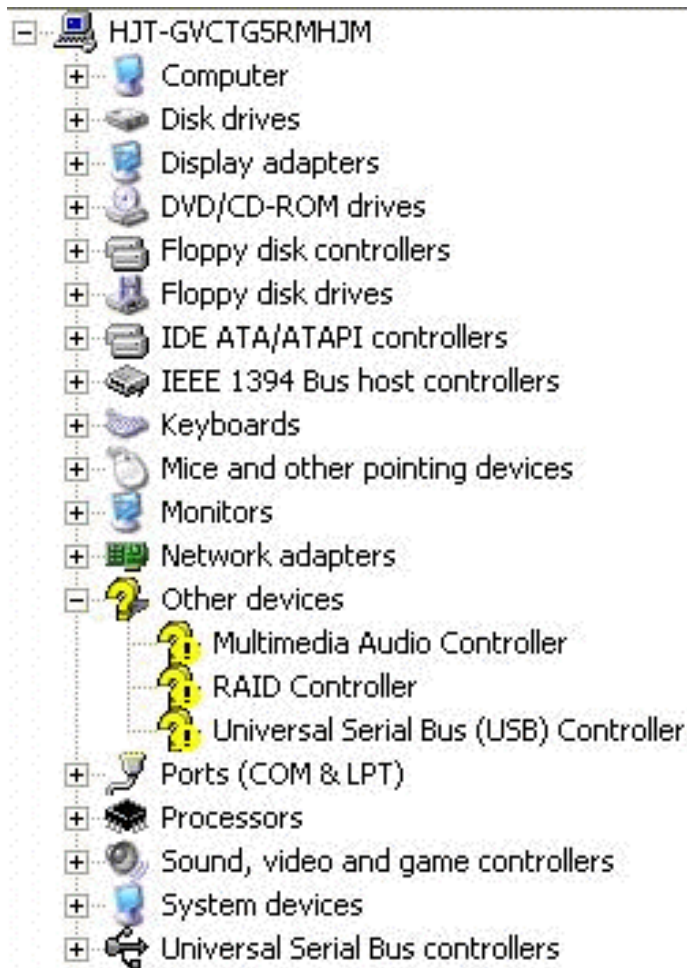
Step 3. Check the Latest Releases

Click the 'Connect to SOYO website' button to go the SOYO Website to find the latest BIOS, manual and driver releases for your motherboard. This button will only work if your computer is connected to the internet through a network or modem connection.

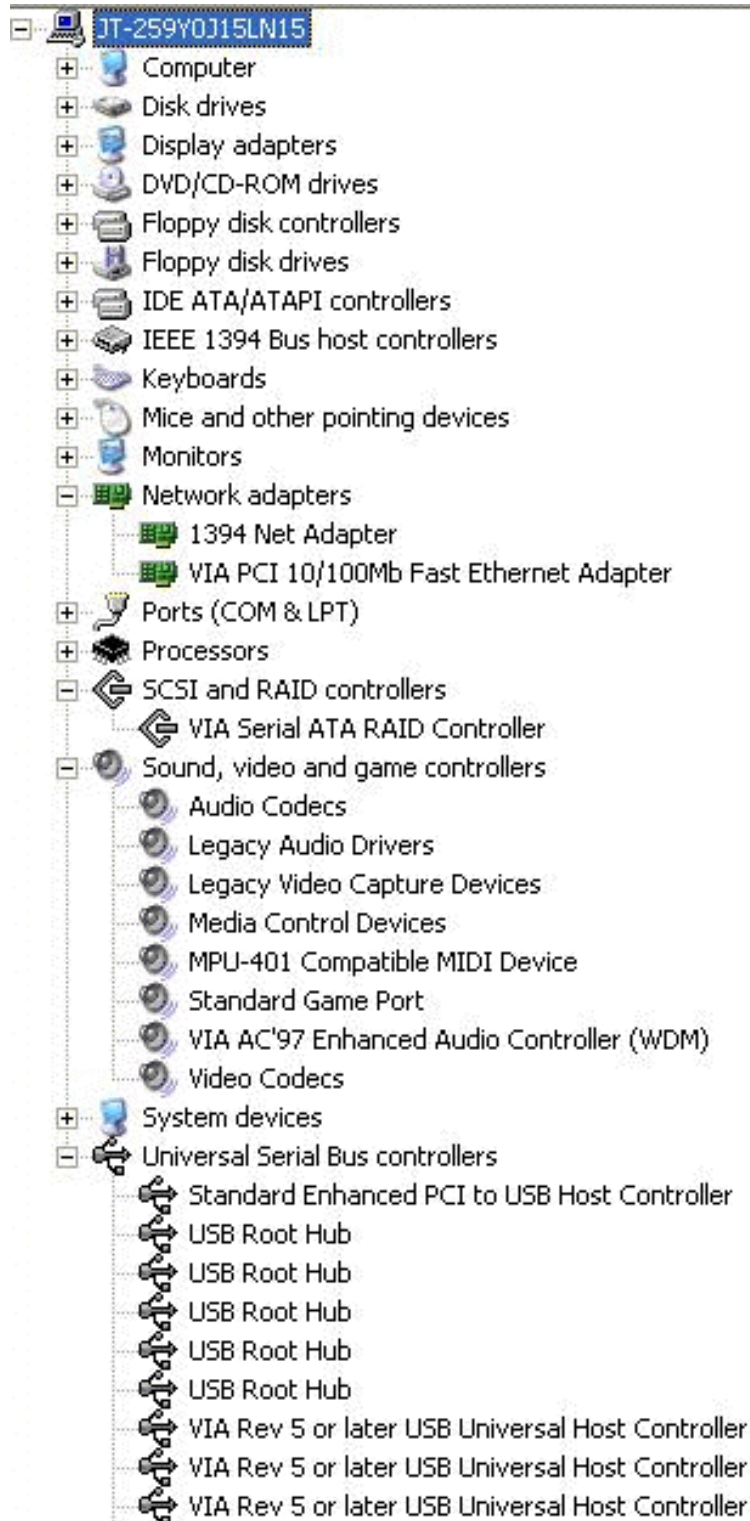
Make sure to get your internet connection up before clicking this button.

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After Windows XP installation, your device manager should look like this:



After driver installation, your Windows XP device manager should look like this:



Note: To install the USB 2.0 driver, please update to Windows XP service pack 1.

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Directory list of the driver CD

- [-] SOYOCD20030801 (D:)
 - [-] Audio
 - + AVANCE
 - + CMEDIA
 - + via — Audio Driver
 - + dmi-snmip
 - + driv-all
 - + driv-com
 - [-] drivers
 - + ITE
 - + VIA4in1 — VIA 4 in 1 Driver
 - [-] LAN
 - + DAVICOM
 - + Realteklan
 - + via — Onboard LAN
 - + MANUAL
 - + panda
 - [-] RAID
 - + 371ap
 - + HPT371
 - + vt8237 — RAID Driver
 - + source
 - + SOYO_BOX
 - + tools
 - [-] USB2.0 — USB2.0 Driver for Win 98SE/ME
 - + INTEL
 - + via
 - + utility
 - + VGA
 - [-] Wasay
 - + DPU
 - + ImageIt
 - + ProMagic


5 VIA USB2.0 Driver Installation

Installing the VIA LAN Drivers under Windows XP

USB 2.0 Drivers are available for download using Windows Update for both Windows XP. Alternatively, installing service pack 1 will also install the USB 2.0 drivers.

For additional information regarding USB 2.0 support in Windows XP, please visit <http://www.microsoft.com/hwdev/bus/USB/default.asp>

After installing service pack 1, please do the following:

- 1) Go into the device manager.
- 2) Remove “  Universal Serial Bus (USB) Controller ”.
- 3) Restart your system.

Next time Windows XP starts up a new USB 2.0 controller will be found.

6 VIA 8237 Serial ATA Driver Installation

You can use your VIA 8237 (SATA1,SATA2) as

1. Normal IDE function.
2. RAID function. (RAID0, 1)

To use SATA1 and SATA2 as normal IDE, please do the following steps

1. Go to the CMOS setup → Integrated Peripherals → VIA Onchip IDE device → “Onboard SATA1,2” to enable.
2. Then set the SATA Mode to “IDE”
3. Install the VIA Serial ATA driver, see driver installation instruction below.

To use SATA1 and SATA2 as RAID controller, please do the following steps

1. Go to the CMOS setup → Integrated Peripherals → VIA Onchip IDE device → “Onboard SATA1,2” to enable..
2. Then set the SATA Mode to “RAID”
3. Go to the CMOS setup → ADVANCED BIOS Features → and set the “First Boot Device” to “SATA1,2, SCSI”.
4. Set the “SATA1,2 & SCSI Boot Order” to “SATA1,2 ,SCSI”.

Installing VIA 8237 SATA during OS Installation

Install driver during Windows XP installation

1. Set the folder options to “show hidden files and folders”, check Microsoft help for more info on how to set this option.
2. Go to “**d:\raid\vt8237\driver disk**” directory, (assuming that your CD-ROM is drive d) copy all the files to a floppy disk. Some files are hidden, so step #1 must be done.
3. Windows XP will start to inspect your hardware configuration.
4. Press “F6” when the message “Press F6 if you need to install a third party SCSI or RAID driver....” Appear. below
5. Press **S** key to specify additional devices when the **Windows XP Setup** window appears.
6. Insert the floppy disk of driver, then press **Enter** to continue
7. In the follow-on window of device type, please select “**VIA 8237 SATARaid controller for windows XP**” to continue.

8. Win XP will prompt you that a message that the driver is newer than the default driver, press S (use the driver on floppy) to continue.
9. The follow-on interface will list the devices to be installed, in which “**VIA 8237 SATAraid SATAraid controller for windows XP**” item should be included. (If users want to install other devices, press “S” at this time.) Press ENTER to continue Windows XP setup.

Install driver during Windows 2000 installation

1. Set the folder options to “show hidden files and folders”, check Microsoft help for more info on how to set this option.
2. Go to “**d:\raid\vt8237\driver disk**”, (assuming that your CD-ROM is drive d) copy all the files and directory to a floppy disk. Some files are hidden, so step #1 must be done.
3. Windows 2000 will start to inspect your hardware configuration
4. Press “F6” when the message “Press F6 if you need to install a third party SCSI or RAID driver...” Appear.
5. Press **S** key to specify additional devices when the **Windows 2000 Setup** window appears.
6. Insert the floppy disk of driver, then press **Enter** to continue
7. In the follow-on window of device type, please select “**VIA 8237 SATAraid controller for Windows NT and 2000**” to continue
8. Win 2K will prompt you that a message that the driver is newer than the default driver, press S (use the driver on floppy) to continue
9. The follow-on interface will list the devices to be installed, in which “**VIA 8237 SATAraid controller for Windows NT and 2000**” item should be included. (If users want to install other devices, press “S” at this time.) Press ENTER to continue Windows 2000 setup

Quick Trouble shoot tips

Boot-up Issues

The system does not power-up, no beeping sound heard and the CPU fan does not turn on.

1. Check if the power cord is plug to the power source.
2. Check if the power is connected to the M/B.
3. Check if the cable of the case power button is connected to the M/B power button connector (see connectors and plug-ins in the manual for more info).
4. Make sure the power supply is not defective. Change the power supply. The minimum should be 350 watt for a minimally loaded system or 400 watt for a fully loaded system.
5. Remove the M/B from the case and test the system. The M/B might be shorted to the case.
6. Make sure your power supply is ATX 12V compliant.

The system powers-up, no video, no beeping sound heard, but the CPU fan is turning.

1. Clear CMOS RAM. (JP5 connector, see Quick start guide for more info on how to clear the CMOS).
2. Check all the jumper settings on the M/B.
3. Check if the CPU is ok by using another CPU (check the Quick start guide for CPU supported on this M/B).
4. Check if the power supply is ok. The minimum should be 350 watt for a minimally loaded system or 400 watt for a fully loaded system.
5. Make sure the CPU fan is connected to CPUFAN1 connector.
6. Remove the M/B from the case and test the system. The M/B might be shorted to the case.

The system power-up, no video, beeping heard.

1. Clear CMOS battery. (JP5 connector, see the Quick start guide for more info on how to clear the CMOS).
2. Check if the memory module and the VGA card are inserted properly in the M/B.
3. If yes, change the memory module, it might be defective. Make sure the memory specification is supported by the M/B. (for more info on this, check our FAQ website).

The system turns on for some seconds then shuts down by itself.

1. Check if the CPU fan is connected to the CPUFAN1 connector.
2. The CPU might be overheating. Check the CPU FAN if it is defective or see if the CPU fan is in contact with the CPU.
3. Clear CMOS battery. (JP5 connector, see the Quick start guide for more info on how to clear the CMOS).
4. Make sure the power supply you have on your system supports the M/B specification. Example. If you have a P4 M/B, you need to use a P4 power supply.
5. If you already checked the power supply specification, change the power supply. It might be defective. The minimum is 350 watt for a minimally loaded system or 400 watt for a fully loaded system.

When I boot up my system, everything works fine, it sees my CPU and memory, detects my hard drive, floppy drive and CD-ROM but locks up at "Verify DMI pool data... ". Don't go any further. What should I do?

1. Clear CMOS battery. (JP5 connector, see Quick start guide for more info on how to clear the CMOS).
2. If still has the problem, remove all other add-on cards except the video cards see if it boots further. Then put peripherals in one by one to identify which one causes the lockup.
3. Change the CPU.
4. Make sure the boot device (Harddisk, CDROM, Floppy, etc...) you are trying to boot from contains a valid, bootable medium or is bootable.

During Boot-up, my computer says CMOS memory Checksum error. What is the problem?

1. Clear CMOS memory.
2. Redo your CMOS setup settings. If your battery is empty, the error will occur more frequently. You will need to replace the battery in this case. If the problem persists, re-flash the BIOS. If all fails your BIOS chip is failing and needs to be replaced.
3. Change the CMOS battery.
4. Re-flash BIOS.
5. The BIOS chip might be failing.

Stability Issues

My system intermittently locks up, very unstable.

1. Check the CPU Temp, it might be overheating. Change the CPU FAN.
2. Do not overclock your CPU.

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3. Check the specification of the memory module, maybe the M/B does not support it.
4. Go to BIOS setup and load fail safe settings. Please check if the system performance in the BIOS setup is set to Turbo/Maximum. If so, try setting it to normal.
5. Check website for latest BIOS update.
6. Check website for FAQ's regarding instability issues.
7. Change the memory module or CPU.
8. The power supply might not have enough wattage to support all the peripherals. If your system has other peripherals connected, like CD-RW, extra HDD, etc. disconnect them.
9. Install the VIA 4 in 1 driver.

My system intermittently locks up, during Windows installation.

1. Go to BIOS and load "load optimized defaults".
2. Check website for any BIOS update.
3. If it still has the problem, remove all other add-on cards except CPU/ Memory/ Video card/Hard disk. See if you can finish Windows installation. Then put peripherals in one by one to identify which one causes the lockup.

BIOS Issue

Where can I find the BIOS revision of my mainboard?

It will be displayed on the up-left corner on the screen during boot-up. It will show as your board type followed by the revision number, such as kvxa_2BA1 (meaning BIOS revision 2BA1 for the SY-K7V Dragon plus! board) or 6BA+ IV_2AA2 which means SY-6BA+ IV motherboard with 2AA2 BIOS.

Where can I find the latest BIOS for my motherboard?

Please go to the technical support page of one of the SOYO websites (Taiwan: www.soyo.com.tw; USA: <http://www.soyousa.com/>), and look up your motherboard to find the latest BIOS revision.

How can I flash the BIOS?

You can:

1. Download the BIOS from our support website.
2. Make a bootable floppy disk with out any memory manager loaded (i.e. himem, emm386, etc...).
3. Copy the BIOS file and awdfash utility to the diskette.
4. Type "awdfash biosname.bin /sn /py".
5. Then reboot.

Or:

1. Download the BIOS from our support website.
2. Copy the BIOS to an empty floppy disk. (No other files on the disk!)

3. Press <ALT> <F2> after memory initialization.
4. The system will now automatically flash and reboot.

Note: That flashing from the BIOS is only possible if you use a normal floppy drive. It can't flash from any other device.

After flashing the BIOS, my system will not boot-up.

1. Try clearing the CMOS RAM.
2. The BIOS chip is defective due to an unsuccessful flash, contact your nearest SOYO branch for re-flashing.

Is there a way to reprogram my BIOS after an unsuccessful flash?

There is no other way, you need to send back the BIOS ROM to your nearest SOYO branch for re-flashing.

VGA Issue

I cannot set my VGA to go higher than 16 color (640x 480).

1. Make sure that you have installed the VIA 4 in 1 driver set.
2. Install/ re-install the VGA driver.

After wake-up from Suspend to RAM or Standby mode, the screen has no display but I can hear the hard disk operating (For External AGP card).

Check your VGA card's manufacturer for a driver and VGA BIOS update, make sure the VGA card supports the Suspend to Ram function.

Audio Issue

How can I disable the on-board Audio?

Go to "Integrated Peripherals\VIA Onchip PCI Device" in the BIOS setup, then set the "AC97 Audio" to disabled.

I cannot get the sound working on my system.

1. Check if the speaker wire is connected to the line out connector in the M/B.
2. Check if your speakers are powered on.
3. Install the audio driver supplied on our driver disc.
4. Check BIOS setup if "AC97 Audio" is enabled.
5. If sound already installed, check our website for an audio driver update.

The sound is working in my system, but when I play CD music from the CD-ROM, I do not get any sound. What is wrong?

This is because the 4-wire audio cable from the CD-ROM to the on-board CDIN connector or AUX connector on the M/B is not connected. See manual for location of CDIN.

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The sound and everything else works fine except that the recorder and microphone do not work. What is wrong?

1. Please go to sound properties and check if the recorder and microphone are enabled in the audio rack.
2. Check if the Microphone is ok.

Added PCI Audio Card does not work on this motherboard.

1. Go to "Integrated Peripherals\VIA Onchip PCI Device" and Disable "AC97 Audio".
2. Go to integrated peripherals and Disable "Game port address" and "Midi port address".

Hard disk/FDD/ CD-ROM issues

My Western digital HDD is not detected during boot-up

Change the jumper settings to cable select or single.

Sometimes the system finds my CD-ROM, sometimes not

1. Check CD-ROM if it is working properly.
2. The power supply might not have enough wattage to support all the peripherals. If your system has other peripherals connected, like CD-RW, extra HDD, etc. disconnect them.

When I boot up my new computer I get "floppy boot failure" and the LED on the floppy stays on

1. Make sure the red wire of floppy ribbon cable goes to Pin1 on the floppy drive side (don't trust the "key lock" or "notch") and use the end-connector of the cable (don't use middle one).
2. Some floppy drivers have their own jumper to make the same twist as the twist on the cable. Make sure this jumper is set not to "twist" the cable while the floppy drive is connected to the twisted end of the cable.

LAN Issues

During LAN driver installation, the system hangs on 75%, why?

Enable the onboard LAN in the BIOS setup.

I have problems installing Novell NetWare v.50

Disable the APIC option in the BIOS.

For updated FAQs, please check <http://www.soyo.com.tw/faq.htm> or <http://www.soyousa.com/faqs.html>

How to contact us:

- If you are interested in our products, please contact the SOYO sales department in the region you live.
- If you require Technical Assistance, please contact our Technical Support in the region you live.

SOYO prefers Email as communication medium, remember to *always add to the email the country that you live in.*

TAIWAN

SOYO COMPUTER INC.

No. 21 Wu-Kung 5 Rd., Hsing Chuang
City, Taipei Hsien, Taiwan, R.O.C.

TEL: 886-2-22903300

FAX: 886-2-22983322

<http://www.soyo.com/>

Email: info@mail.soyo.com.tw

USA

SOYO INC.

41484 Christy Street, Fremont, CA
94538, USA

TEL: 1-510-226-7696

FAX: 1-510-226-9218

<http://www.soyousa.com/>

<http://www.soyousa.com/kb>

Email: support@soyousa.com

GM

SOYO Deutschland GmbH

Gewerbepark 8a, 26209 Hatten,
Germany

TEL: 49-441-209100

FAX: 49-441-203442

<http://www.soyo.de/>

Email: sales@soyo.de

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