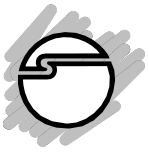


Chapter 1 Introduction

Congratulations on your purchase of the *EIDE Master ISA+I/O* board. SIIG goal is to provide its customers with affordable, quality products, backed by prompt customer support.

The purpose of this comprehensive user manual is to:

- introduce you to your *EIDE Master ISA+I/O* features and specifications
- guide you through the steps for an easy, trouble-free installation
- provide technical support information in the event of a problem.

Before installing your *EIDE Master ISA+I/O*, please take the time to review this chapter for unpacking instructions and an overview of the key features of your *EIDE Master ISA+I/O*. Then refer to *Chapters 2* and *3* for easy to follow installation instructions.

1-1 Unpack Your *EIDE Master ISA+I/O*

Before installing your *EIDE Master ISA+I/O* board, verify that the following items are included in the packaging carton:

- One 16-bit *EIDE Master ISA+I/O* controller board
- One 40-pin flat ribbon cable
- One 34-pin flat ribbon cable
- One connector bracket with 25-pin serial port (COMB) and game port
- One comprehensive user manual

Please consult your dealer if any item is damaged or missing.

1-1.1 Static Electricity Precaution

One of the routine precautions you must be aware of when working with computer components is the problem of static electricity discharge.

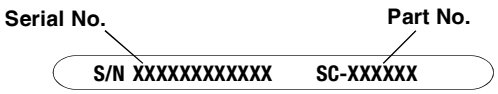
Leave the *EIDE Master ISA+I/O* board in its static-resistant bag until you are ready to install it.

WARNING: STATIC ELECTRICITY DISCHARGE may permanently damage your system. In order to avoid possible static electricity discharge during installation procedures, please follow the guidelines below:

- *Discharge any static electricity build up in your body by touching a large grounded metal surface or the computer case (if plugged in), for a few seconds.*
- *During installation procedures, avoid any contact with internal parts. Handle boards only by their edges.*

1-1.2 Record the Serial Number

In order for SIIG's Technical Support or Customer Service Department to give you prompt service (if needed), you will need the following *EIDE Master ISA+I/O* board information. ***The serial number label is located on the side of the box and on the back of the board.***



Please take a moment to record the serial number.

Serial Number:	_____
Part Number:	SC-JEE012
Date chased:	___pur_____

1-2 Introducing Your *EIDE Master ISA+I/O*

Congratulations on your purchase of the *EIDE Master ISA+I/O* board. Your *EIDE Master ISA+I/O* is a high performance all-in-one 16-bit dual channel I/O controller for use in AT-compatible personal computers. It supports up to four EIDE hard disk drives (up to 8.4GB each) and with its Enhanced Smart BIOS, breaks the existing 528MB drive size limitation so you can now connect multi-gigabyte drives to your computer. It also auto-detects the hard disk type which prevents data loss from incorrect CMOS settings. In addition, it supports two floppy disk drives up to 1.44MB and provides two high-speed 16550 serial ports (one 9-pin and one 25-pin), one IEEE 1284 EPP/ECP bidirectional parallel port, and one game port.

Key features and benefits are listed as follows:

1-2.1 Key Features and Benefits

- For use with AT-compatible computers
- Supports Fast ATA LBA mode protocol to break the 528MB partition limitation
- Supports up to four EIDE devices
- Supports up to two floppy drives
- Enhanced Smart BIOS feature auto-detects hard disk types which prevents data loss from incorrect CMOS settings

- Two 16550 UART serial ports (one 9-pin and one 25-pin) to support mice, serial printers, external modems and other high-speed serial peripherals
- One IEEE 1284 EPP/ECP bidirectional parallel port to use with iomega® and SyQuest® removable drives, SuperDisk™ LS-120 drives, tape drives, scanner and many other peripherals using a parallel port
- One game port for joystick game playing
- All ports can be individually configured and disabled

1-2.2 Enhanced IDE Controller

NOTE

Windows 95 only supports standard IDE I/O addresses 1F0h & 170h; addresses 1E8h and 168h will be supported under the DOS compatibility mode.

Although it is not recommended, if you want to connect a CD-ROM drive to a channel set to 1E8h or 168h, you must verify that your CD-ROM driver supports these addresses. Please consult your CD-ROM drive manufacturer regarding driver installation information.

- Each channel can be individually enabled or disabled
- Supports up to four EIDE devices, including hard disk drives, SyQuest® SyJet™ drives, EIDE CD-ROM drives, and tape backup drives

1-2.3 Floppy Drive Controller

- Supports 3.5" and 5.25" floppy disk drives
- Supports formats of 720KB/1.44MB and 360KB/1.2MB
- Can be enabled or disabled

1-2.4 Enhanced Smart BIOS

- Supports drive partitions greater than 528MB; directly supports drives up to 8.4GB
- Auto-detects hard disk types which prevents data loss from incorrect CMOS settings

1-2.5 16550 Serial Ports

- Two high-speed 16550 UART serial ports (one 9-pin and one 25-pin) support data transfer throughput up to 115.2Kbps
- Specially designed to keep high-speed external modems running at the fastest speed possible without any errors
- Supports COM1 - COM4 and IRQ 3, 4, 5, 7, 9, 10, 11, 12 & 15 for maximum flexibility
- Can be enabled or disabled

1-2.6 Enhanced Parallel Port

- Conforms to IEEE 1284 standard
- One high-speed EPP/ECP bidirectional parallel port
- Supports I/O port addresses: 3BCh, 378h and 278h
- Supports IRQ's 5, 7, 9, 10 and 11
- Supported modes of operation for data transfer:

  Standard parallel port (SPP)

  - *"Centronics" or standard mode*
    Transfers data from your PC to a parallel port device
  - *Nibble mode:* achieves reverse direction data transfers

  High-speed bidirectional port

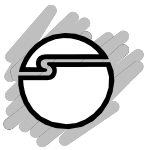
  - *EPP mode: (Intel Enhanced Parallel Port)*
    Supports data transfer rate up to 2MB/sec
  - *ECP mode: (Microsoft & HP Extended Capabilities Port)*
    Supports DMA data transfer

1-2.7 Game Port

- One game port for the support of a joystick

1-3 System Requirements

- One available 16-bit ISA expansion slot on an AT computer



Chapter 2
Quick Installation

This chapter provides a quick summary of the jumpers set by the factory for operation in your system. These are standard settings, compatible with most basic systems. However, a conflict results if two addresses are the same.Refer to *Chapter 3* for step-by-step installation instructions and *Chapter 4* for configuring hard drives >528MB.

2-1 Connectors

CN1:	40-pin IDE1 connector
CN2:	40-pin IDE2 connector
CN3:	HDD LED activity indicator connector
CN5:	34-pin floppy drive connector
J8:	Connector for game port
J5:	9-pin serial port (COMA)
J6:	Connector for 25-pin serial port (COMB)
J7:	25-pin parallel (printer) port

Note: Refer to *Chapter 3, Figure 3-1* for connector locations.

2-2 Default Jumper Settings

The following table and figure identify the factory set default jumper settings:

Description	Jumpers	Setting
IDE1: Primary channel **IDE2: Secondary channel**	JP10-1 pins 1-2 JP10-2 pins 1-2 J3 pins 1-3/2-4	IRQ14 IRQ15
Floppy Drive	JP10-3 pins1-2	Enable
ROM Address	JP11-1 pins 1-2 JP11-2 pins 2-3	D400
COMA (9-pin serial port)	JP10-5 pins 2-3 JP10-6 pins 2-3 JP16-I4	COM1 IRQ4
COMB (25-pin serial port)	JP10-7 pins 2-3 JP10-8 pins 2-3 JP15-I3	COM2 IRQ3
Printer (printer) port *Note: DMA setting is for ECP only. (See Chapter 3, section 3-2.7.)*	JP11-3 pins 1-2 JP11-4 pins 2-3 JP10-9 pins 2-3 JP10-10 pins 2-3 JP17-I7	EPP/SPP 378h IRQ7
Game port	JP10-4 pins 1-2	Enable

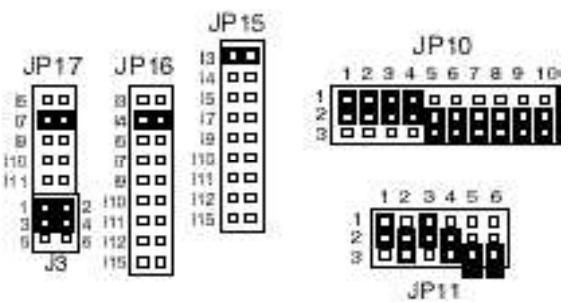


Figure 2-1. Factory Default Jumper Settings

Chapter 3
Hardware Installation

This chapter will guide you through the installation of your *EIDE Master ISA+I/O* board. It includes instructions on:

- how to properly configure the jumpers on your board
- how to install your board in your computer

3-1 Board Layout

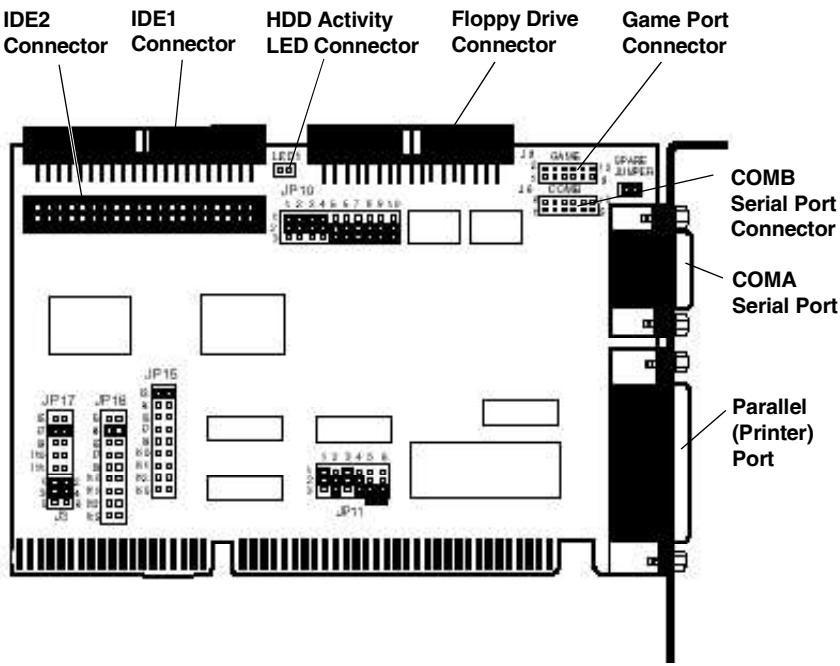


Figure 3-1. *EIDE Master ISA+I/O* Board Layout
(Showing Default Jumper Settings)

3-2 Configuring the *EIDE Master ISA+I/O*

Prior to installing the *EIDE Master ISA+I/O* board in your computer, verify the jumper settings on the board for proper operation. To do this, you must know the following about your computer:

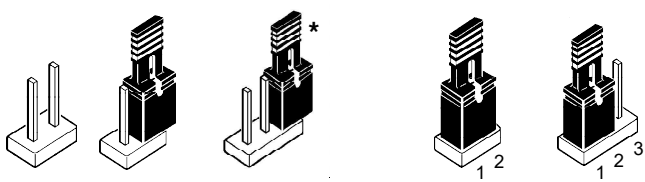
Are there any other hard and/or floppy disk drive controllers installed in your computer?

Are there any serial or parallel ports currently installed in your computer? If so, what I/O port addresses and Interrupts (IRQ) do they use?

After determining your computer's configuration, make sure the port addresses and IRQs set on the *EIDE Master ISA+I/O* board are different from any existing ports in your system. A conflict results when two addresses are the same. Refer to the next sections for determining the correct jumper settings for configuring ports on the board.

3-2.1 Setting Jumpers

The *EIDE Master ISA+I/O* options are set by jumpers. The following tables define the available jumper options which are set by installing a jumper. The following illustrates a jumper positioned on 2- and 3-pin jumper blocks. It also shows the non-jumpered position and position for convenient storing.

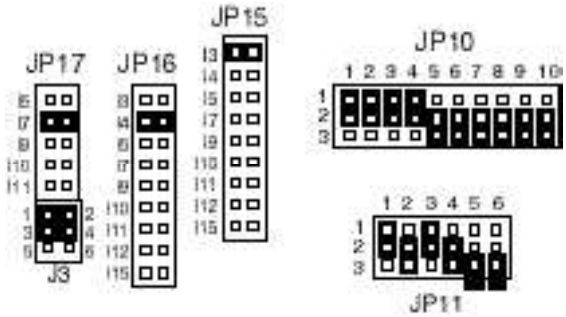


No Jumper Installed **Jumper Installed**

** (Use this method to store jumper)*

Figure 3-2. Jumper Setting Positions

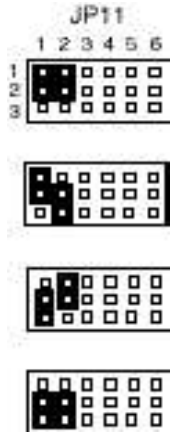
Note: To remove a jumper, simply pull up on the selected jumper pull tab. To install a jumper, center it over the two appropriate pins and push down gently until it is seated.



EIDE Master ISA+I/O ***Jumper Locations***
(Showing Factory Default Settings)

3-2.2 BIOS Address

The default BIOS address is factory set to **D400:0000**. It can be changed by resetting jumpers on **JP11**.



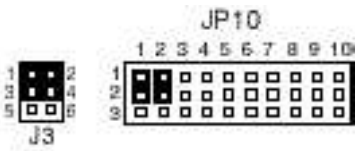
D000:0000	pin 1-2	1-2	
	pin 1-2	1-2	
D400:0000 *	pin 1-2	1-2	
	pin 1-2	2-3	
D800:0000	pin 1-2	2-3	
	pin 1-2	1-2	
DC00:0000	pin 1-2	2-3	
	pin 1-2	2-3	

***** = *Default Setting*

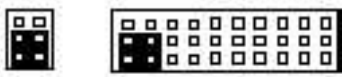
3-2.3 IDE Controller

IDE1 is factory set as the *primary* channel, IRQ14; IDE2 is set as the *secondary* channel, IRQ15. If you need to change this setting, reset jumpers **JP10-1, JP10-2** and **J3**.

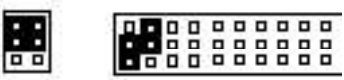
IDE1: Primary IRQ14*
IDE2: Secondary IRQ15
JP3 pins 1-3/2-4
JP10-1 pins 1-2
JP10-2 pins 1-2



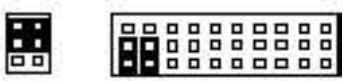
IDE1: Primary IRQ10
IDE2: Secondary IRQ12
JP3 pins 3-5/4-6
JP10-1 pins 2-3
JP10-2 pins 2-3



IDE1:
IDE2:
JP3 pins
JP10-1 pins
JP10-2 pins



IDE1: *Disabled*
IDE2: *Disabled*
JP3 pins
JP10-1 pins
JP10-2 pins

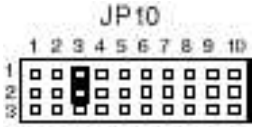


* = *Default Setting*

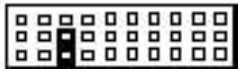
3-2.4 Floppy Controller

The factory default setting for the floppy disk controller is *enabled*. To *disable* this feature, change jumper JP10-3.

Floppy enabled* JP10-3 pins 1-2



Floppy disabled JP10-3 pins 2-3

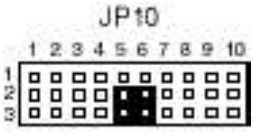


3-2.5 Serial Port COMA

Serial port COMA provides a DB9 (9-pin) connector mounted on the board. It is factory *enabled* as **COM1**, I/O port address **3F8h** and **IRQ4**. If you need to change these settings, reset jumpers **JP10-5**, **JP10-6** and **JP16**.

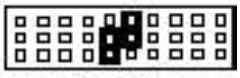
I/O Port Address

COM1 (3F8h)* JP10-5 pins 2-3
JP10-6 pins 2-3

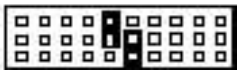


COM3 (3E8h) JP10-5 pins 1-2
JP10-6 pins 1-2

COM4 (2E8h) JP10-5 pins 2-3
JP10-6 pins 1-2

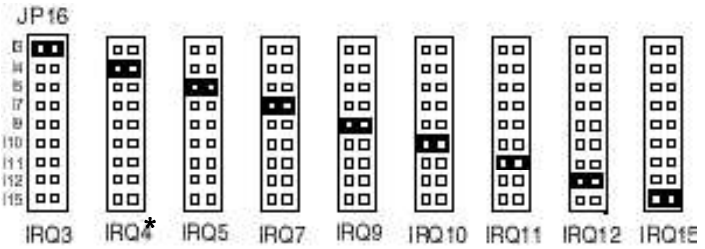


Disabled JP10-5 pins 1-2
JP10-6 pins 2-3



* = *Default Setting*

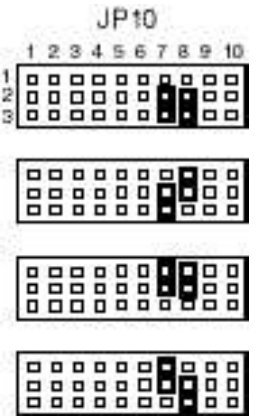
Interrupt Request



3-2.6 Serial Port COMB

If you intend to use the COMB 25-pin serial port, you must first install the additional connector bracket (with mounted 25-pin serial port and game port) that is included with the board. Port COMB is factory *enabled* as **COM2** I/O port address **2F8h** and **IRQ3**. It can be changed by resetting the following jumpers on **JP10-7**, **JP10-8** and **JP15**.

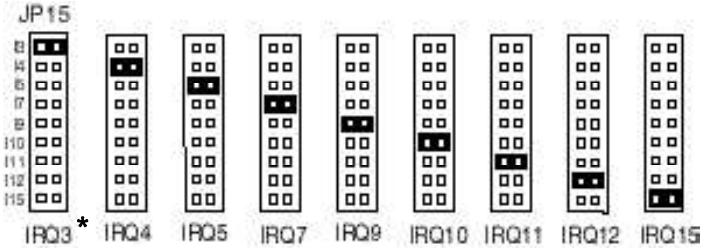
I/O Port Address



COM2 (2F8h)*	JP10-7 pins 2-3 JP10-8 pins 2-3	
COM3 (3E8h)	JP10-7 pins 2-3 JP10-8 pins 1-2	
COM4 (2E8h)	JP10-7 pins 1-2 JP10-8 pins 1-2	
Disabled	JP10-7 pins 1-2 JP10-8 pins 2-3	

* = *Default Setting*

Interrupt Request

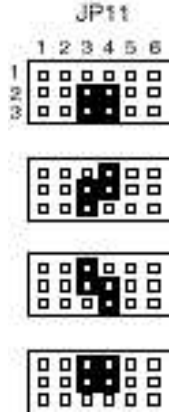


3-2.7 Parallel (Printer) Port

The parallel port provides a DB25 (25-pin) connector mounted on the board. It is factory set as I/O port address **378h, IRQ7**, and **SPP (Standard Parallel Port)/EPP (Enhanced Parallel Port)** mode. These assignments can be changed by resetting the following jumper options on **JP10-9, JP10-10, JP11-3, JP11-4, JP11-5, JP11-6** and **JP17**.

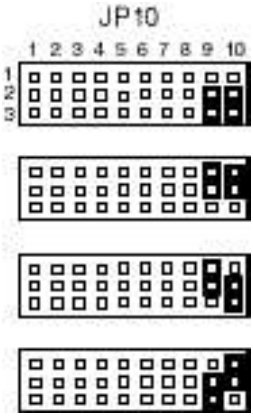
Port Mode

SPP (Printer)	pin 1-3	2-3	JP11
	pin 1-4	2-3	
EPP/ECP	pin 1-3	2-3	
	pin 1-4	1-2	
EPP/SPP*	pin 1-3	1-2	
	pin 1-4	2-3	
Not defined	pin 1-3	1-2	
	pin 1-4	1-2	



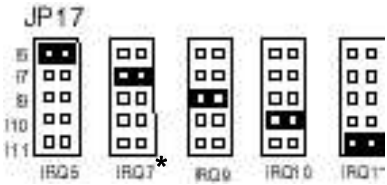
* = *Default Setting*

I/O Port Address



378h *	JP10-9 pins 2-3 JP10-10 pins 2-3
278h	JP10-9 pins 1-2 JP10-10 pins 1-2
3BCh	JP10-9 pins 1-2 JP10-10 pins 2-3
Disable	JP10-9 pins 2-3 JP10-10 pins 1-2

Interrupt Request

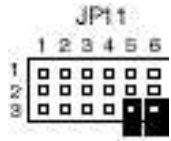


Note: A typical sound card like Sound Blaster 16 will use IRQ5. If you want to use IRQ5 as your parallel port setting, please refer to your sound card manual and reconfigure your sound card IRQ settings to avoid conflicts.

* = *Default Setting*

DMA Channel

DMA channels are used for some high speed communication devices. Assign a DMA channel only when you set the parallel port mode as **ECP** mode.

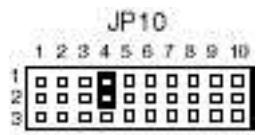


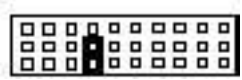
Disabled*			
DMA Channel 1	pin 1-6	1-2	
	pin 1-6	1-2	
DMA Channel 3	pin 1-6	2-3	
	pin 1-6	2-3	

Note: A typical sound card like Sound Blaster 16 will use DMA 1 for 8-bit sound and DMA 5 for 16-bit sound. If you want to use DMA 1 as your parallel port setting, please refer to your sound card manual and reconfigure your card DMA setting to avoid conflicts.

3-2.8 Game Port

The game port is factory set for normal operation (*enabled*). It can be disabled by changing jumper **JP10-4.**



Enabled*	JP10-4 pins 1-2	
Disabled	JP10-4 pins 2-3	

* = *Default Setting*

3-3 Installing the *EIDE Master ISA+I/O*

After you have verified the jumper settings of your *EIDE Master ISA+I/O,* proceed with the following instructions to install it in your computer. General instructions for installing the board are given since the design of computer cases varies. Refer to your computer reference manual whenever in doubt.

1. Turn OFF the power to your computer and any other connected peripheral devices. Follow the precautions for static electricity discharge.

   WARNING: *STATIC ELECTRICITY DISCHARGE may permanently damage your system. In order to avoid possible static electricity discharge during installation procedures, please follow the guidelines below:*

   - *Discharge any static electricity build up in your body by touching a large grounded metal surface such as the computer case if plugged in, a metal window frame, refrigerator, or water tap for a few seconds.*
   - *During installation procedures, avoid any contact with internal parts. Handle cards only by their edges.*

   WARNING: Disconnect the AC power source before removing the cover.

2. Unplug all power cords and cables from the back of the computer. (Be sure to note the cable connections for reconnection when the installation is complete.)

3. Remove your computer cover by removing its mounting screws with a screwdriver. Slide the cover OFF.

4. Your *EIDE Master ISA+I/O* board must be installed in an available 16-bit expansion slot. Also, if you intend to use the 25-pin serial port and/or game port, select an I/O expansion slot with an adjacent slot available for installing the additional connector bracket.

5. Remove the selected slot cover by unscrewing the holding screw and sliding it out. Save this screw for securing the *EIDE Master ISA+I/O* board after it installed. Follow the same procedure for the additional connector bracket.

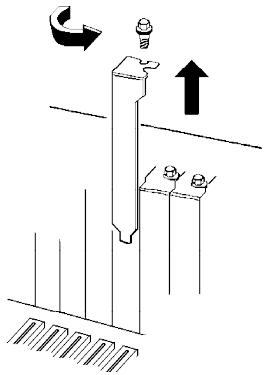


Figure 3-3. Remove the Slot Cover

6. To install the *EIDE Master ISA+I/O*, carefully align the board bus connector with the selected 16-bit expansion slot on the motherboard. Push the board down firmly, but gently, until it is well seated.

   NOTE: Hold the board by its external edges only. Try to avoid touching the components, connectors or pins.

7. Replace the slot cover holding screw to secure the board to the rear slot panel.

8. To install the second connector bracket, slide it into the selected rear panel slot where the slot cover had been removed. Replace the slot cover holding screw to secure the connector bracket in place.

9. Attach the loose-end connector of each cable on the connector bracket to its respective connector on the *EIDE Master ISA+I/O* board.
   a. Attach the connector end of the COMB 25-pin serial port cable to the **COMB (J6)** on-board connector. The colored stripe imprinted on the ribbon cable indicates the pin 1 side of the cable connector. Make sure this is matched with pin 1 on the board connector.
   b. Attach the connector end of the game port cable to the **GAME (J8)** on-board connector. The colored stripe imprinted on the ribbon cable indicates the pin 1 side of the cable connector. Again make sure the colored stripe side of the cable is matched with pin 1 on the board connector.

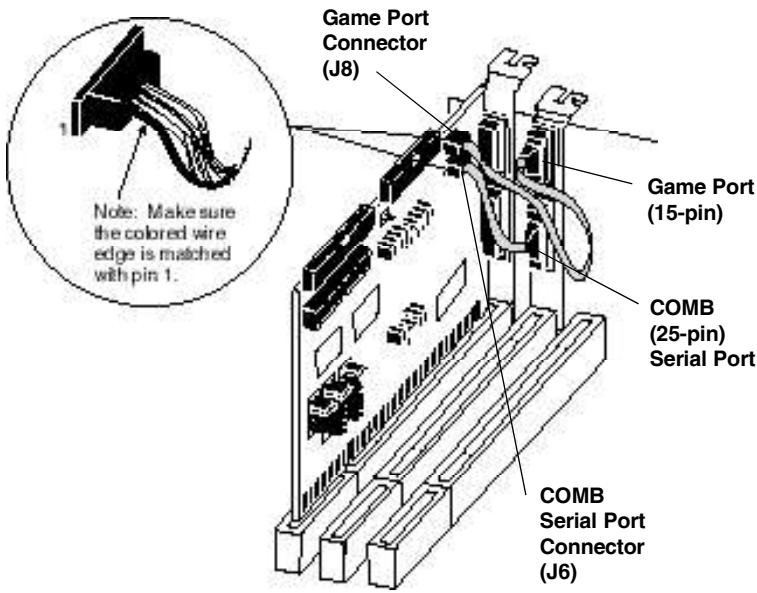


Figure 3-4. Installing the *EIDE Master ISA+I/O* and Connector Bracket

3-4 Connecting the Drives

If you have another hard disk controller in your computer, it is recommended that you remove it. There is no guarantee that the *EIDE Master ISA+I/O* will operate properly if both controllers are enabled in the system.

3-4.1 IDE Drive Connections

IDE1 Controller Connection

1. If you install two hard disk drives on the IDE1 channel, make sure you configure the drives as a *Master* and *Slave* and install the hard drive(s) in your computer according to the manufacturer instructions.

2. Attach the 40-pin ribbon cable that was included with the *EIDE Master ISA+I/O* to the on-board connector **CN1 (IDE1)**. Note that the guide box connector is keyed to insure that both pin 1s are matched. Make sure the connector is well seated when making the connection.

3. After installing the hard drive(s) in your computer, attach the other end of the 40-pin cable to the connector edge of the hard disk drive. Note that the ribbon cable has two connectors. If you have one drive, connect the last connector on the end to the drive (drive C). If you have two drives, the middle connector attaches to drive D. Make certain that pin 1 on the cable (indicated by the colored stripe) matches pin 1 on the hard disk drive connector when making the connections.

4. If your computer has a hard disk activity LED, attach the connecting LED wire to the **CN3 (LED1)** 2-pin connector on the board.

IDE2 Controller Connection

Your *EIDE Master ISA+I/O* is a dual channel IDE controller that supports up to four EIDE drives. Connector **CN2 (IDE2)** is used to connect the third and fourth EIDE drives. You will need to purchase a 40-pin IDE ribbon cable in order to connect these additional devices. The IDE2 port is set as the secondary channel (factory default setting).

Refer to steps 1 through 3 of the previous section *DE1 Controller Connection?* for instructions on connecting EIDE devices to CN2 (IDE2).

3-4.2 Floppy Disk Drive Connections

1. If you have another floppy disk controller in your computer, you may experience address conflicts between the controllers. Either remove the existing floppy controller or disable either controller.
2. Attach the 34-pin ribbon cable that was included with the *EIDE Master ISA+I/O* to the on-board **CN5** connector. Note that the guide box connector is keyed to insure that both pin 1s are matched. Make sure the connector is well seated when making the connection.
3. After installing the floppy drive(s) in the computer, attach the other end of the 34-pin cable to the connector edge of the floppy disk drive. Note that the ribbon cable has two groups of two connectors. If you have one drive, use either one of the last group of connectors to connect to drive (drive A). If you have two floppy drives, use either one of the middle group connectors to attach to drive B.

   Make certain that pin 1 on the cable (indicated by the colored stripe) matches pin 1 on the drive connector when making the connections.

After making all your internal connections, replace the computer cover and screws. Then reconnect all power cords and cables to the back of the computer and make any new connections to the *EIDE Master ISA+I/O* ports.

3-5 Running CMOS Setup

In most cases, your *EIDE Master ISA+I/O* will auto-detect the hard disk type of your drive(s) for you. However, for some systems, you may need to run your computer's CMOS SETUP program to define the type of drive(s) connected so they will be recognized by your system. To invoke the CMOS SETUP utility, most computers require that you press the <**Del**> key after powering ON or booting the system, when prompted. If your system is different, check your computer documentation for further help.

Select the tandard CMOS SETUP? menu and specify the drives installed. Where no drive is installed, select ? **Not Installed**?

For floppy drives A and B:

You must identify the type, such as ? **3? 1.44MB**?

For hard disk drives less than 528MB:

The Drive C and D hard disk options must be set to identify the drive(s) installed. If you know the drive number of cylinders, heads and sectors, define ype:? as **47=User Type**; then, manually set the *Cyln*, *Head* and *Sect* values.

For hard disk drives greater than 528MB:

IMPORTANT: Set the drive type as "**type 1**? to acknowledge that a drive is connected. Then save the new configurations and reboot your system. The on-board BIOS on the *EIDE Master ISA+I/O* will automatically detect and overwrite the CMOS BIOS with the correct drive parameters values.

NOTE

- If you run Norton Utilities, you may experience an error message such as ncorrect CMOS Setup? If this should occur, ignore the message and continue to run the routine. The on-board BIOS will override and correct this configuration conflict.
- If you experience difficulties in configuring a high-capacity drive, please refer *Chapter 4: Configuring Hard Drives >528MB.*

Most computers will display a system configuration table, including port addresses when powered ON or rebooted. Reboot your system after running SETUP and verify that the I/O port addresses are set properly.

Chapter 4 Configuring Hard Drives >528MB

This chapter provides information on how to configure hard drives greater than 528MB. If you have problems with your *EIDE Master ISA+I/O* using high-capacity drives, please refer to these instructions before calling technical support. You may be able to solve your problem yourself.

The following definitions will help you understand the conflict that can arise when using both LBA and a disk manager:

LBA (Logical Block Address) and OS: Novell, UNIX, Windows NT, and OS/2 are high performance operating systems with a built-in ability to handle multi-gigabyte drives.

LBA vs. Disk Manager: LBA and Disk Manager are both used to overcome the 528MB limitation and, therefore, *cannot* co-exist with each other. If your hard drive is already formatted with any type of disk manager, you must back up your data, un-install disk manager, repartition, format your hard drive, and restore your data. To un-install disk manager, refer to your disk manager software documentation or contact their technical support department. Sometimes repartitioning your hard drive using FDISK (master boot record) will work.

4-1 Configuring Hard Drives >528MB

The *EIDE Master ISA+I/O* supports Fast ATA LBA mode to address hard disk space larger than 528MB. If your hard drive is larger than 528MB, it may have a disk manager (software translation solution) pre-installed, which will cause problems with your *EIDE Master ISA+I/O*. Please refer to section *4-1.3 Configuration 3* for a solution. For systems with LBA support, leave the LBA feature OFF in the system BIOS.

The following sections provide specific instructions for setting up hard drives >528MB. Note that the procedures are different for different system configurations. Please refer to one of the following configuration sections that matches your own computer configuration.

Configuration 1: 1 or 2 existing hard drives <528MB

Configuration 2: 1 or 2 existing hard drives >528MB formatted as 528MB under DOS because of BIOS limitation

Configuration 3: 1 or 2 existing hard drives >528MB formatted with DISK MANAGER, MAXBLAS, EASYDRIVE, etc.

Configuration 4: New unformatted hard drive(s) >528MB

How to remove Ontrack Disk Manager v6.03

4-1.1 Configuration 1

An existing system with one or two hard drives less than 528MB.

1. Install the *EIDE Master ISA+I/O* according to the instructions in this manual.
2. Turn on the computer and check for error messages.
3. If there are any errors on the floppy or hard drive setup, then check the CMOS settings.
4. From the CMOS settings, set up the same hard drive type for the hard drive(s).
5. Reboot the system. It should automatically recognize the hard drive(s) on the controller.

4-1.2 Configuration 2

An existing system with one or two hard drives greater than 528MB, which have already been formatted as 528MB under DOS because of the BIOS limitation.

1. Make a DOS bootable diskette:
   Insert a blank diskette in drive A:>.
   Type: **FORMAT A: /S**
2. Copy the executable files to the diskette in drive A:/:
   Type: **COPY FDISK.EXE A:** , then
   type: **COPY FORMAT.COM A:**
3. **BACKUP THE HARD DRIVE(S)!!!!!**

> **CAUTION**
> ***Your drive is being reformatted - this will delete everything off of it.***

4. Turn the system power OFF.
5. Install the *EIDE Master ISA+I/O* according to the instructions in this manual.
6. Turn on the computer.
7. Boot the system using drive A:> with the bootable diskette prepared in Steps 1 and 2.

> **CAUTION**
> ***If you did not backup your drive, you must do so. This command deletes all data on the drive.***

8. Run **FDISK.EXE** to delete the old partition.
9. Press **<Esc>** two times to restart the system.

10. Boot up from drive A:> (with the bootable diskette).
11. Run **FDISK.EXE** to repartition the hard drives.
12. Format the drive to high-level:
    Type: **FORMAT C: /S**

> ***NOTE:*** *If you don know how to use these commands, refer to a DOS manual.*

13. Restore the data onto the drive(s) from the backup disks.

4-1.3 Configuration 3

An existing system with one or two hard drives larger than 528MB, which were previously formatted under DISK MANAGER, MAXBLAS, EASYDRIVE, etc.

1. Make a DOS bootable diskette (refer to **Configuration 2,** Steps 1 and 2).

> **CAUTION**
> ***If you did not backup your drive, you must do so. This command deletes all data on the drive.***

2. Run **DISK MANAGER** or **MAXBLAST** (or the partitioning software used to create partitions on the hard drive(s)) to delete the existing partitions. (Refer to instructions to remove Ontrack Disk Manager v6.03, Section 4-2.)

> *NOTE: FDISK from DOS cannot delete the boot partition information created by DISK MANAGER or any other third party partitioning software. If you run DISK MANAGER, you can try running* **DMCONFIG/R.** *Otherwise you need to go to the step-by-step procedure in deleting the partitions. Contact your software vendor for further instructions.*

3. Boot the system using drive A:> with the bootable diskette prepared in **Configuration 2**, Steps 1 and 2.

> *NOTE: Make sure there is no drive overlay loaded.*

4. Follow Steps 4- 13 from **Configuration 2**.

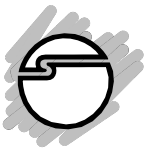
4-1.4 Configuration 4

A system with new *unformatted* hard drive(s) larger than 528MB under DOS.

1. Install the *EIDE Master ISA+I/O* according to the instructions in this manual.
2. Turn on the computer.
3. Run CMOS setup:
   Set drive C: to ? **Type 1**"
   If you have a second drive, also set it to ? **Type 1**"
4. Boot the system in drive A:> with DISK 1 of your DOS installation diskette.
5. Proceed with the installation of DOS and other applications.

4-2 How to Remove Ontrack Disk Manager v6.03

1. Make a DOS bootable diskette:
   Insert a blank diskette in drive A:>, then
   type: **FORMAT A:/S**
2. Copy the executable files to the diskette in drive A:/:
   Type: **COPY FDISK.EXE A:** , then
   type: **COPY FORMAT.COM A:**
3. Boot the system using drive A:> with the bootable diskette (see **Configuration 2**, Steps 1 and 2).
4. Start *Disk Manager.*
5. Press **<Alt><T>.**
6. From the screen that appears, select
   Disk Subsystem Overview
7. Select the appropriate drive, then press **<Enter>**.
8. Press<**Ctrl><F10>.**
9. Answer **YES** to the prompt,
   Do you want to erase [###] tracks.
10. Exit out of *Disk Manager.*



Chapter 5
Technical Support

5-1 Overview

This chapter will give you instructions on how to obtain technical information and support for your *EIDE Master ISA+I/O* board. It includes information on: 1) SIIG's Bulletin Board System, 2) SIIG's Technical Support, and 3) product return procedure.

5-2 Finding Technical Information

There are several steps you can take should you find problems with your *EIDE Master ISA+I/O*. It is most helpful if you consult the following resources:

1. Chapter 3 of this user's manual
2. SIIG's Web Site (Section 5-3.2)
3. SIIG's Bulletin Board System (Section 5-3.3)
4. SIIG's Technical Support Department (Section 5-3.4)
5. SIIG's Customer Service Department (Section 5-4)

This user's manual is written with easy-to-understand instructions on how to configure and install your *EIDE Master ISA+I/O* in your system. We encourage you to consult this manual as your first step for technical assistance.

5-3 Technical Assistance

If you are having problems with your *EIDE Master ISA+I/O*, prepare the information noted in this section and call Technical Support.

5-3.1 Important Board Information

In order for SIIG's Technical Support to give you prompt service, you will need the following information about your *EIDE Master ISA+I/O* board.

Part Number: SC-JEE012
Computer Configuration: _____

_____

_____

_____

_____

5-3.2 SIIG Web Site

Visit SIIG web site for more product features, drivers updates, upgrade solutions and where-to-buy information. Your opinions of SIIG products are very important to us. Through your feedback, SIIG can continue to deliver quality, innovative products to you.

Web Site: www.siig.com

5-3.3 SIIG's Bulletin Board System (BBS)

SIIG has a BBS number for 24-hour updated technical support information. This is for on-line reference help. It is not an actual Technical Support Specialist.

BBS Number: (510) 353-7532

5-3.4 SIIG's Technical Support Department

For additional support, SIIG's Technical Support Specialists are available from 8:00 a.m. to 5:00 p.m. Monday through Friday, Pacific Standard Time.

Technical Support: (510) 353-7542

NOTE: Make sure you are prepared with the required information: part number and description of the problem, so the Technical Support Specialist can better help you.

If the Technical Support Department could not help you, refer to the next section for how to return your *EIDE Master ISA+I/O*.

5-4 Product Return Procedure

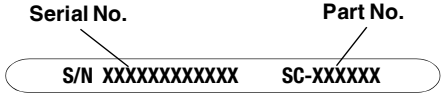
If the problem could not be solved and the Technical Support Specialist determines that the board may be defective, you can return your *EIDE Master ISA+I/O* for repair or replacement.

SIIG warrants to the original buyer of the *EIDE Master ISA+I/O* that the hardware is free of defects in materials and workmanship for a period of five years from the date of purchase. If your board fails to be in good working order during the warranty period, you may return it to SIIG for repair or replacement at SIIG's option.

To return your *EIDE Master ISA+I/O*, you need to follow these steps.

Step 1: Call SIIG's Customer Service Department

Call the SIIG Customer Service Department at **(510) 657-8688 ext. 333** for a Return Merchandise Authorization (RMA) number. **In order to get a RMA number, you must have your product serial number. The serial number is located on the side of the box it came in and on the back of the board**.



Step 2: Complete the RMA form

Fill out your Return Merchandise Authorization (RMA) form, and include it in the package with your *EIDE Master ISA+I/O* board.

Step 3: Pack the *EIDE Master ISA+I/O*

Properly pack the *EIDE Master ISA+I/O* for shipping. If the original box is not available, wrap the board in newspaper and place it in a sturdy cardboard box. Fill the rest of the box with more newspaper or foam to protect the board during shipping. Make sure you include all the materials that came with the original package, including this user's manual.

Step 4: Label the package

Clearly write your RMA number on the outside of the returned shipping package and on the accompanying RMA form.

> **SIIG will refuse, and not be responsible for a product returned without a RMA number posted on the outside of the shipping carton.**

Step 5: Ship the *EIDE Master ISA+I/O*

You are responsible for the cost of shipping back to SIIG at the following address:

SIIG, Inc. RMA#_____
6078 Stewart Ave.
Fremont, CA 94538

SIIG will ship the repaired or replaced *EIDE Master ISA+I/O* via UPS Ground or US Mail at no cost to you.

PRODUCT SUPPORT/SERVICE PROCEDURE

The Company is committed to producing quality products. Most of our customers will never have to address a product failure. However, in the unlikely event of a technical problem or a product failure, we have provided a return procedure and a RMA Form for your convenience.

In the event of a problem or product failure, please follow the steps below:

1. Collect as much information about the problem as you can. Note any on-screen messages or any other clues you observe when the problem occurs.

2. Have information about your computer's configuration (i.e. how many drives, memory, cards, ports, etc.) available. In addition, have information about the product available (i.e. product name, serial number & part or model number).

3. Call the Company's **Product Support for assistance at (510) 353-7542**. The Company's Product Support representatives are available M-F from 8:00 a.m. - 5:00 p.m. (Pacific time). Should you call on an off-hour or if there are no representatives available to take your call, please leave a message. Calls will be returned in the order that they were received. In most cases your question can be answered right away.

4. If the product is diagnosed as defective, you will be transferred to our customer service department and issued a Return Merchandise Authorization (RMA) number to authorize the return of the product to us for repair or replacement. **Customer Service: (510) 657-8688 ext. 5333**

5. Package the product so that it is well protected during transit. Please also include the attached RMA Form and a copy of your proof of purchase and mail to the address below. **Be sure to write the RMA number clearly on the outside of the box.**

Mail to: **SIIG, Inc. RMA #_____**
6078 Stewart Avenue
Fremont, CA 94538

Tear off and return bottom portion.

RETURN MERCHANDISE AUTHORIZATION (RMA) FORM

RMA Number:_____ Date:_____

Name:_____

Company:_____

Address:_____

City:_____ State:_____ Zip:_____

Phone Number: (_____)_____

Product Name/Model:_____ Purchase Date:_____

Serial Number:_____

Problem(s) (please be specific): _____

_____

_____

_____

_____

Please check additional items that you are returning (if applicable):

❒ original package ❒ manual(s) ❒ software

❒ accessories:_____

LIMITED 5 YEAR WARRANTY

The Company warrants to the original buyer of this product that the hardware is free of defects in materials and workmanship for a period of five years from the date of purchase from a reseller or dealer. Should this product fail to be in good working order during the warranty period, the Company, at its sole option, will repair or replace the defective product with an identical product or product having similar features and functionality as determined by the Company.

If the product has been modified without written approval by the Company, or the failure is a result of misuse, abuse or misapplication as determined by the Company, the warranty is void and the Company has no obligation to repair or replace the product.

The customer is responsible for properly packing the defective product for shipment and for the cost of shipping the product back to the Company. The Company will ship the repaired or replaced product via UPS Ground or US Mail at no cost to the customer.

At the request of the customer, the Company will ship the repaired or replaced product via a faster mode of shipment. The Company will pay for the cost of the shipping to return the product to the customer UP TO THE COST OF SHIPPING VIA UPS GROUND. The customer is responsible for any shipping charges above the cost of shipping via UPS Ground. This payment must be prepaid or included with the returned product, otherwise the Company will ship the repaired product COD for the amount of the additional costs.

Before returning a product for repair or replacement, you must first obtain a Return Merchandise Authorization (RMA) number from the Company's Customer Service Department by calling (510) 657-8688 ext. 5333 (see Product Repair/ Replacement Procedure). To verify that the product is within the five year warranty period, the customer must provide proof of purchase to the Company when requesting a return authorization. The RMA number should be clearly displayed on the outside of the returned package and on the accompanying RMA form. The Company will refuse any package without a RMA number.

Under no circumstance will the Company be liable for any direct, indirect, consequential or incidental damages arising out of the use or inability to use the Company's products. Some states do not allow the exclusion or limitation of liability for consequential or incidental damages, so the above limitations may not apply. The Company reserves the right to make modifications in both hardware and software without prior notification.