

### In Case of Trouble

The following chapter is used to assist with troubleshooting conflicts and EIDEPRO installation problems. Also refer to the “README.TXT” file on the EIDEPRO driver and utility diskette for more recent information as well as the **PromiseOnline™** services listed in Appendix A.

Problems accessing previously formatted drives

Eliminate Master/Slave combination problems

Disable Onboard IDE controllers

IBM PS/1 and ValuePoint Systems

“Not Installed” Drive Type in Standard CMOS Setup enables LBA

Ontrack Disk Manager and other drive translation software

Partitioning and formatting IDE drive

ATAPI IDE CD-ROM Installation

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QEMM Int76 ROM handler error

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#### **Problems accessing previously formatted drives**

Previous DOS/Windows installations on hard disks >504MB must use LBA drive translation to be compatible with the EIDEPRO controller. When other methods are used, there may be symptoms where the drive is not bootable or is missing extended partitions or files. This can be the result of software drive translation or using other partitioning schemes besides LBA drive translation.

<p><b>NOTE:</b> This does not apply to drives less than 504MB in capacity.</p>
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Refer to the following section “Ontrack Disk Manager and other drive translation software” which describes the removal process.

If there are drives typically specified at 540MB by the drive manufacturer that have been partitioned at the 504MB limit and not its full capacity, they should be backed up first, then repartitioned and reformatted with LBA drive translation enabled.

### **Eliminate Master/Slave combination problems**

The *EIDEPRO* provides a workaround to master/slave problems that may exist when two IDE drives of different brands are attached to a single cable. With two hard disks in the system, it is possible to separate a master/slave combination by cabling one hard disk on the Primary (J1) IDE connector and one on the (J2) IDE connector. Both drives should be jumpered as Master (Single, master with no slave present) settings. In the standard CMOS Setup, indicate “Not Installed” or “None” for the D: Drive Type.

### **Disable Onboard IDE controllers**

Disable any IDE controllers including those integrated onto the Mainboard to properly install the *EIDEPRO*. NOTE: Some manufacturers instruct to set “Not Installed” in the Mainboard CMOS Setup to disable the onboard IDE controller. However this may not free IRQ 14 and port address 1F0H which are needed for *EIDEPRO* operation.

If confirmed that the onboard IDE and/or floppy controller cannot disable, try disabling the *EIDEPRO* Primary (J1) IDE controller and/or floppy controller (Refer to Chapter 2 - *EIDEPRO* Jumper Settings) and attach the first two IDE hard disks to the Mainboard integrated primary IDE controller. The *EIDEPRO* BIOS will still provide LBA drive translation support for first two IDE drives installed on the Mainboard integrated IDE controller as well as for the third or fourth IDE drive on the *EIDEPRO* Secondary (J2) IDE controller.

### **IBM PS/1 and ValuePoint**

The *EIDEPRO* BIOS will give support for LBA drive translation for up to 2 EIDE/IDE drives attached to the PS/1 or ValuePoint onboard IDE controller. The *EIDEPRO* Primary and Secondary IDE controllers and the floppy controllers must be disabled as well as the *EIDEPRO* Multi-I/O functions reconfigured to avoid conflicts.

### **“Not Installed” Drive Type in Standard CMOS Setup enables LBA**

In the Mainboard Standard CMOS setup, you may indicate “Not Installed” or “None” to enable the *EIDEPRO* BIOS LBA drive translation as a substitute for “TYPE 1.” The “Not Installed” setting may be more compatible for some Mainboard BIOS where “TYPE 1” fails or gives an error message.

### **Ontrack Disk Manager and other drive translation software**

Drivers usually shipped on a diskette with large capacity hard disks are not compatible with the *EIDEPRO* LBA drive translation. Some of these software include Disk Manager and EZ Drive. The drivers sometimes display blue boxes that identify themselves during startup. Follow the procedure below:

<p><b>WARNING:</b> Use of the following procedures will result in data loss. Backup any necessary data before proceeding.</p>
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Sometimes FDISK cannot delete Disk Manager information from the boot sector. Follow these steps to remove Disk Manager drivers from the partition and boot sector:

1. Backup any necessary data first. All data will be lost during this process.
2. Make a DOS Bootable disk containing the FDISK and FORMAT utilities. Insert the disk into the A: drive and boot the system.
3. Restore the Boot sector: Type “*FDISK /MBR* <Enter>”; you should receive a blank line.
4. Use the DOS installation disks or follow the steps under “Partitioning and Formatting IDE drive(s)” in the next section.

Optional Removal Methods:

### **Disk Manager Erase Method**

1. Boot to DOS Bootable disk in the A: Drive
2. Insert Disk Manager floppy; Type “DM<Enter>” to start Disk Manager
3. At the Menu, Press “<ALT>-T”
4. Select “Disk Subsystem Overview”
5. Press <CTRL><F10>. Answer Yes to Zero the Drive and Remove Disk Manager

### **EZ Drive Software Removal**

1. Boot to DOS Bootable disk in the A: Drive
2. Insert EZ Drive floppy; Type “EZSETUP <Enter>” to start EZ Drive
3. Choose Disable EZ Drive

### **Partitioning and Formatting IDE drive(s)**

The following section describes the process to manually partition and format a new high capacity IDE drive. The automatic DOS installation disk method is also recommended - refer to the DOS User manual.

In Standard CMOS setup, set “Type 1,” “Not Installed,” or “None” for greater than 504MB IDE drive(s).

Boot to DOS Bootable disk with FORMAT and FDISK utilities in the A: Drive.

Partition the drive(s): Type “FDISK <Enter>” and follow the steps to create a primary DOS partition. NOTE: Do not be alarmed when the size displayed by FDISK under “total disk capacity” of the drive is smaller than specified by the drive manufacturer. FDISK reports the unit 1MB=1,048,756 Bytes while drive specifications list 1MB=1,000,000 Bytes. Reboot to the floppy after completed.

Format the drive(s): Type “FORMAT C: /S <Enter>” and continue to format any additional drive letters.

### **ATAPI IDE CD-ROM Installation**

The *EIDEPRO* controller features an ATAPI-ready IDE controller which supports an ATAPI IDE CD-ROM. Since the *EIDEPRO* is a standard IDE controller and its BIOS does not play a role supporting the CD-ROM, there are no special considerations to consider versus its compatibility. Under the DOS environment, a device driver is provided by the CD-ROM manufacturer that is loaded from the CONFIG.SYS and the *EIDEPRO* functions no different than a standard IDE controller. Follow the directions from the ATAPI CD-ROM manufacturer.

### **Coexist with and boot to a SCSI adapter**

Set “Not Installed” or “None” in the Standard CMOS Setup Drive Types. Depending on whether the *EIDEPRO* or the SCSI card BIOS loads first determines which drive is the bootable C:.

#### **Boot to SCSI**

Configure the *EIDEPRO* BIOS to a higher address location than the SCSI adapter BIOS address.

For example: Change the *EIDEPRO* BIOS address to DC000H (See Chapter 2 - *EIDEPRO* Jumper Settings) and the SCSI Adapter to the C8000H.

#### **Boot to IDE**

Configure the *EIDEPRO* BIOS to a lower address location than the SCSI adapter BIOS address.

For example: Change the *EIDEPRO* BIOS address to C8000H (See Chapter 2 - *EIDEPRO* Jumper Settings) and the SCSI Adapter to the CC000H.

### **QEMM Int76 ROM handler error**

With the QEMM memory management utility installed using the Stealth mode feature, use the “Optimize/ST” command option to add the proper exclusions. Or, manually edit the QEMM command line by adding “XSTI:76” or “XSTI=76” parameter to the CONFIG.SYS.

Device=C:\QEMM\QEMM386.SYS XSTI:76

### **Windows for Workgroups 3.11 32-bit File Access**

The *EIDEPRO* is compatible with the software cache “32-bit File Access” in Windows for Workgroups 3.11. 32-bit File Access can be used for the drives on the Primary (J1) IDE controller but not drives on the Secondary (J2) IDE controller. There is no provision for Secondary IDE controller support from Microsoft’s 32-bit File Access function.

**NOTE:** 32-bit Disk Access is a different function which is enabled system wide unlike 32-bit File Access which enables per individual drive. To maintain 32-bit Disk Access functions, keep the virtual memory swap file on drives on the Primary (J1) IDE controller.