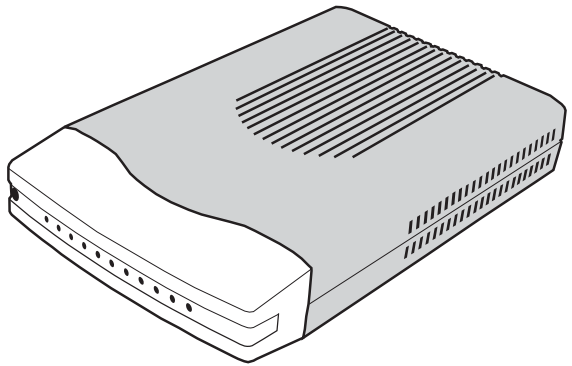


**IEEE 1394
IDE Hard Drive
Enclosure**



fire

DRIVE[®]

1 3 9 4 DRIVE

by:



1

Before Proceeding: To prevent damage to the FireDrive's electronics, touch a bare metal portion of your computer's case or a similar grounded metal surface with your finger to discharge any static electricity your body may have.

Getting Started

1. Set the hard disk you are installing in the FireDrive as master drive according to the manufacturer's instructions. New hard disks are typically already configured as master drives.
2. Lava recommends installing an already-formatted hard drive into the Kazan Drive Enclosure. New drives may already be formatted by the manufacturer. FAT or FAT32 formatted drives are the easiest to troubleshoot. Some NTFS-partitioned drives occasionally may not work.

To externally format a hard drive in Windows, attach the drive to a motherboard connector and format it with FDISK.EXE before installing it into the external drive enclosure.

If it is not possible to format the hard drive before installing it into the drive enclosure (in the case of notebook computers, for instance), it is possible to format the hard drive inside the enclosure when using Windows 2000 or XP. See www.lavalink.com for instructions on formatting a hard drive already installed in the enclosure.

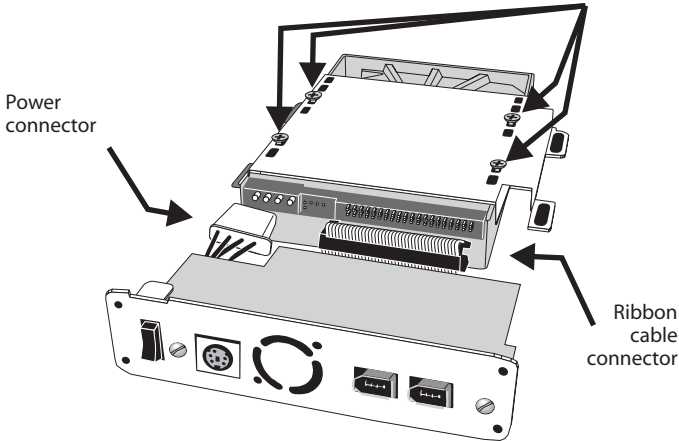
3. The FireDrive ships with a small plastic bag containing the ribbon cable connector and screws used for assembly.

2

Installation

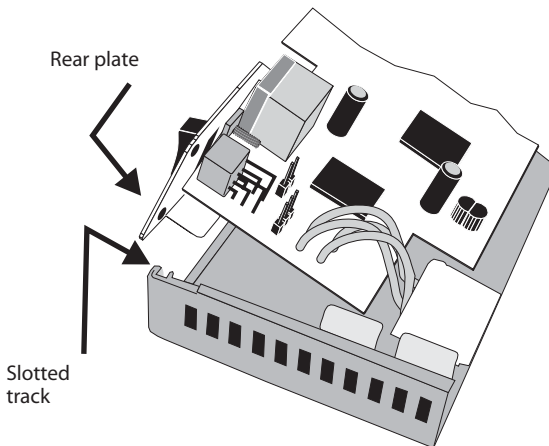
Remove the FireDrive interface board from the FireDrive enclosure by unplugging the green and black LED cable and unscrewing the rear plate. Place your hard disk drive and the FireDrive rear plate/interface board assembly upside down on a flat surface.

Fasten the hard disk drive bracket to the hard disk drive with four screws in the holes shown.



Firmly attach the power and ribbon cable connectors on the interface board to the hard disk drive.

Turn the hard disk drive/interface board assembly right side up and place it into the bottom half of the FireDrive enclosure. (The bottom half is the portion with the front bezel attached.)



Fit the rear plate into the slotted tracks at the rear of the enclosure.

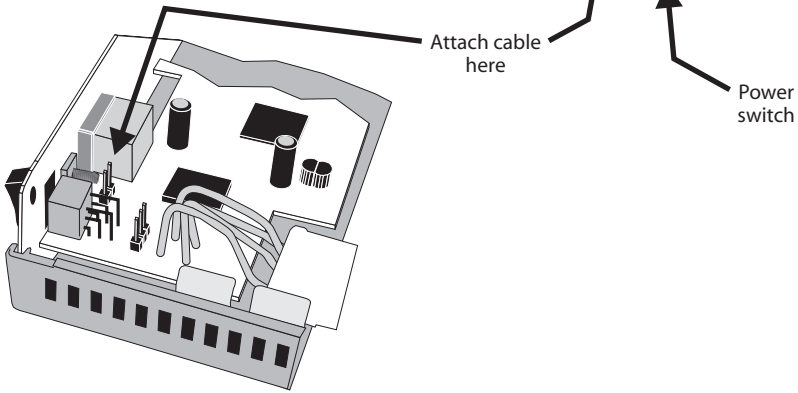
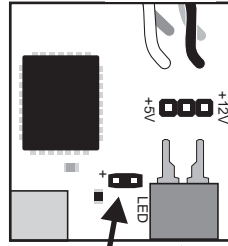
3

Attach the hard disk drive LED cable connector to the interface board pins.

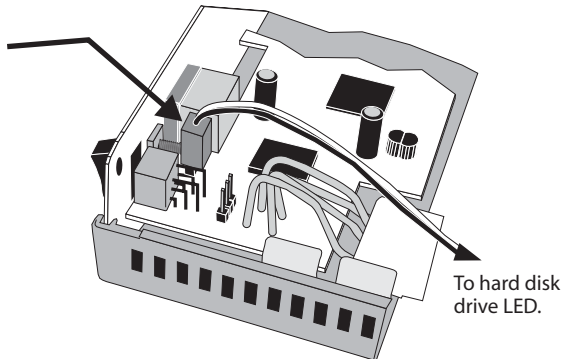
NOTE:

LED connector fastens to posts with green wire on the "+" terminal, as marked on the interface board.

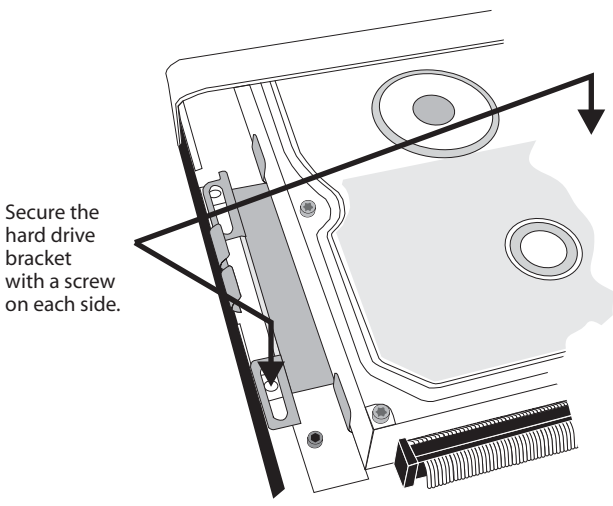
Interface Board
Top View



Push LED
connector
gently down
onto pins.

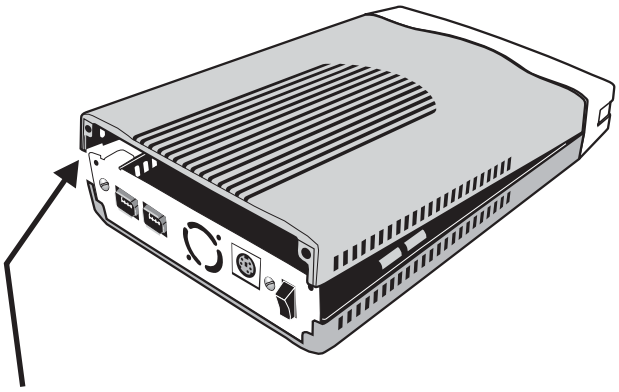


4



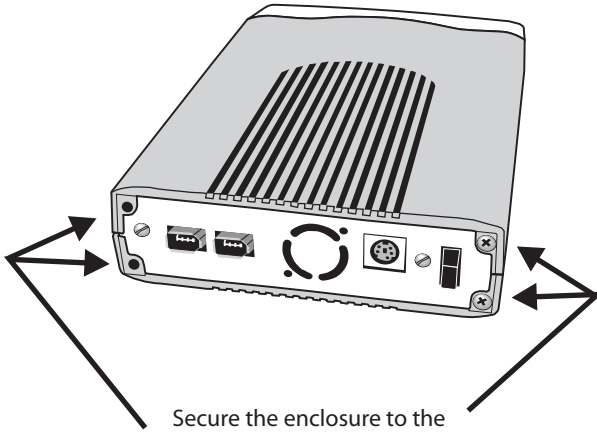
Secure the hard drive bracket with a screw on each side.

Fit the top half of the enclosure to the bottom half by sliding it forwards and then down.



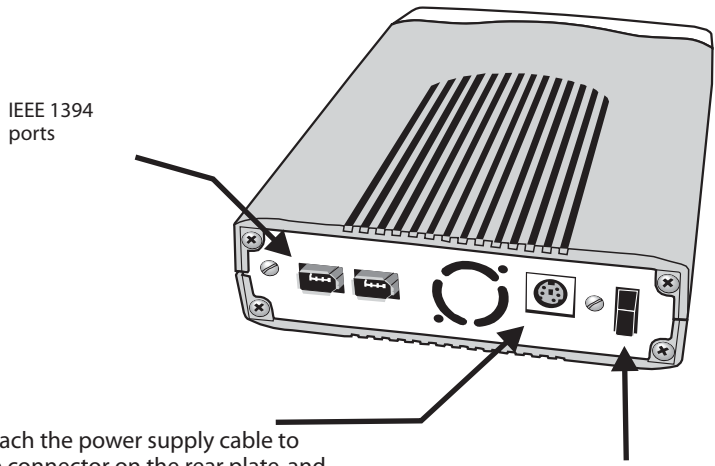
Fit the rear plate into the slotted tracks in the top half of the enclosure.

5



Secure the enclosure to the rear plate with four screws.

Connect the FireDrive to an IEEE 1394/FireWire port with the included IEEE 1394 cable. The second IEEE 1394 port on the back of the FireDrive is for daisy-chaining other IEEE 1394 devices.



IEEE 1394 ports

Attach the power supply cable to the connector on the rear plate, and connect the power supply to a power source.

Turn the FireDrive on with the power switch on the rear of the enclosure.

6

Release Notes

Windows Error Messages: At times Windows' Device Manager or the Properties dialog box of the drive's System Tray icon will give a "This device cannot start (Code 10)" error message or a "This device is either not present, not working properly, or does not have all the drivers installed (Code 28)" error message when attempting to access a drive in a FireDrive®. First ensure that the power, data, and IDE cables are all correctly and snugly attached. Check the power supply's LED indicator is green to verify it is operating. If the problem persists, ensure that the hard drive has been formatted as described above.

Drive Data Capacity: The limit on drive size for the IDE drive enclosure is set by the limit of addressability in the industry-standard ATA specification for hard drives generally. In the case of the ATA interface implemented in the drive enclosure, 28 bits are given to the sector number interface between the operating system, the BIOS, and the hard disk. A hard disk can therefore have at most 2^{28} or 268,435,456 sectors of 512 bytes. The ATA interface, and the drive enclosure as a result, has a maximum capacity of approximately 137.4 GB.

Western Digital drives: Some new Western Digital drives do not work in the FireDrive® enclosure. Western Digital drives manufactured after November 15, 2001 should NOT have this problem.

Windows 98SE Patch for IEEE 1394 Operation: Users of Windows 98SE can download the following patch from Microsoft: *Windows 98 Second Edition 1394 Storage Supplement*:
http://www.microsoft.com/windows98/downloads/contents/wurecommended/s_wufeatured/1394/Default.asp

Microsoft says: "The update installs a Safe Removal utility that allows you to safely stop a Plug and Play storage device prior to physically unplugging the device. This component also includes an update for 1394 drivers to resolve issues related to the surprise removal of peripheral devices. Large performance improvements, in the order of 300%, have been made over the implementation of 1394 storage drivers in Windows 98 Second Edition.

Fix for delayed write errors under Windows XP/2000: At times when using the FireDrive with Windows 2000 or Windows XP a "Delayed write error" will appear. This message may also be accompanied by corrupted or cross-linked files on the FireDrive's hard disk. To fix this problem, follow the steps below:

1. Enter the disk management utility which is located under Control Panel > Administrative Tools > Computer Management.
2. In the right hand window, each of the drives in your system will be listed. For each one, right-click on the drive and select "Change Drive Letter and Path."
3. In the window that appears, highlight the drive again and select "Edit" (or "Change" in XP). Leave the settings as they are and select OK (or Cancel in XP as the OK button is grayed out).
4. Below the listing of drives will be a graphical interpretation of the partition table. For each device (ie. Zip Drives, CD-RW, etc.) right-click and again choose "Change Drive Letter and Path" and then exit the window.
5. Reboot your computer and attempt a file transfer.

Lava Technical Support

9:00 am to 5:30 pm Monday to Friday (Eastern Time)

Tel: +416 674-5942
Fax: + 416 674-8262

E-mail: tech@lavalink.com
Internet: www.lavalink.com



Lava Computer MFG Inc.
Toronto, Canada



This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Lava Computer MFG Inc. 908 Niagara Falls Blvd. #629. North Tonawanda NY 14120-2060

