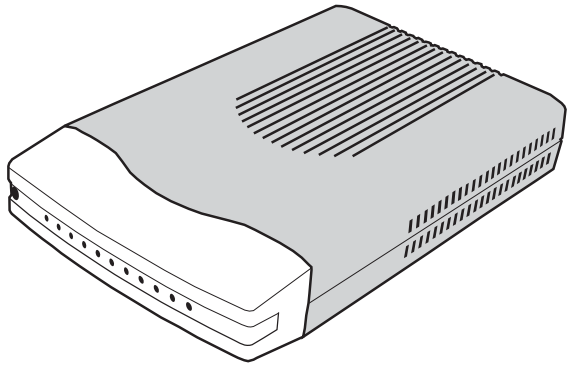


# USB 2.0 IDE Hard Drive Enclosure



*Kazan*

USB 2.0 DRIVE

by:



# 1

**Before Proceeding:** To prevent damage to the Kazan'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 Kazan 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 partition it with FDISK.EXE before installing it into the external drive enclosure. Format the drive with FORMAT.EXE.

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](http://www.lavalink.com) for instructions.

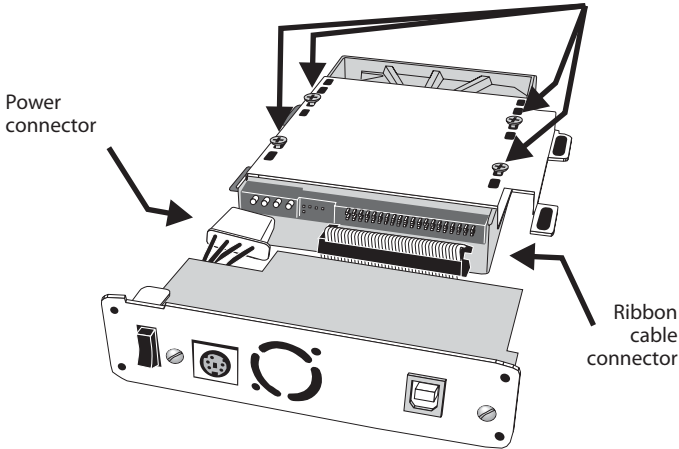
3. The Kazan ships with a small plastic bag containing the ribbon cable connector and screws used for assembly.

## 2

### Installation

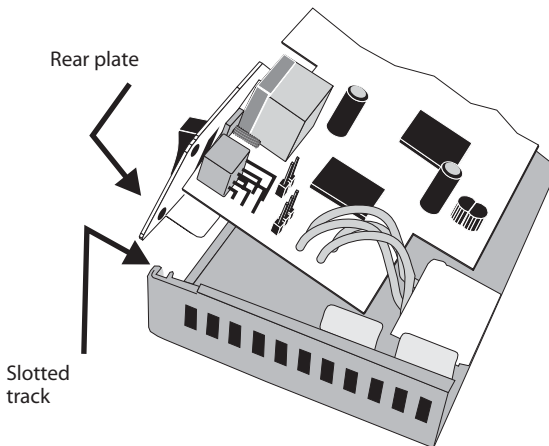
Remove the Kazan interface board from the Kazan enclosure by unplugging the green and black LED cable and unscrewing the rear plate. Place your hard disk drive and the Kazan rear plate/interface board assembly upside down on a flat surface.

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 Kazan enclosure. (The bottom half is the portion with the front bezel attached.)



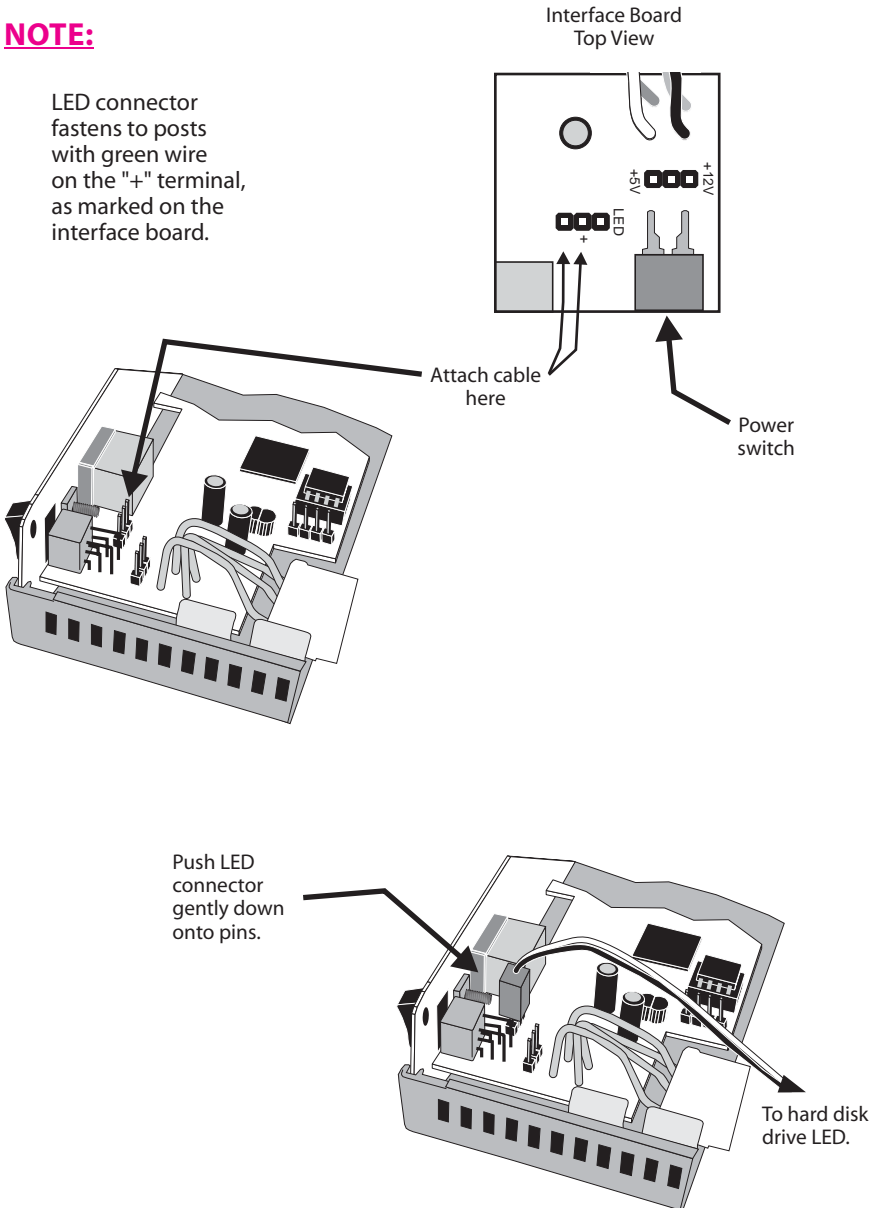
Fit the rear plate into the slotted tracks at the rear of the enclosure.

3

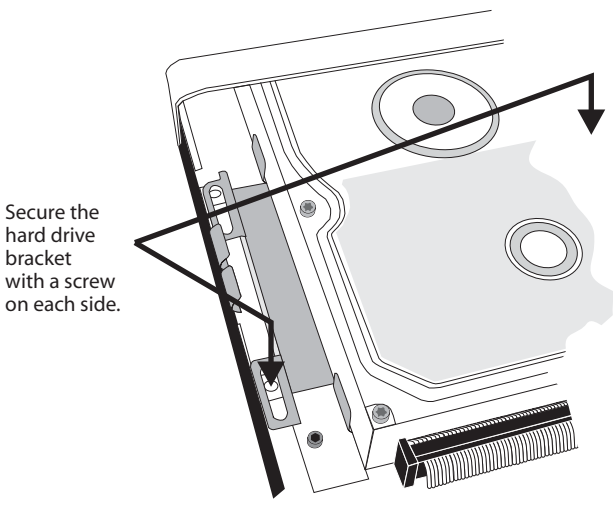
Attach the hard disk drive LED cable connector to the interface board pins.

**NOTE:**

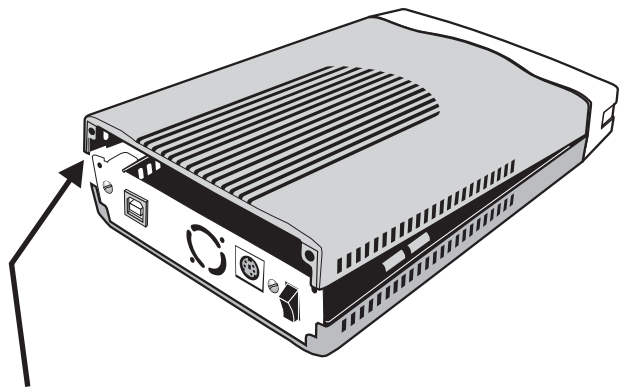
LED connector fastens to posts with green wire on the "+" terminal, as marked on the interface board.



4

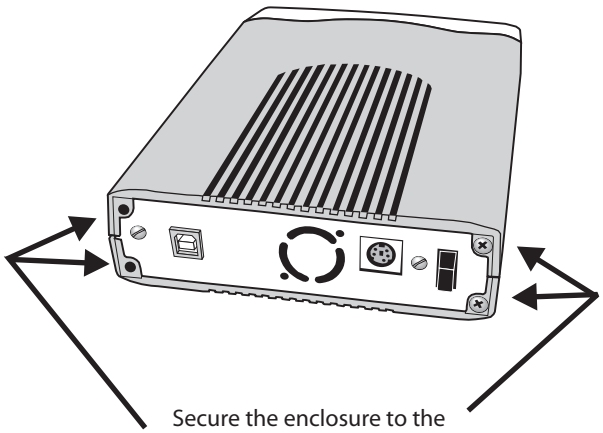


Fit the top half of the enclosure to the bottom half by sliding it forwards and then down.



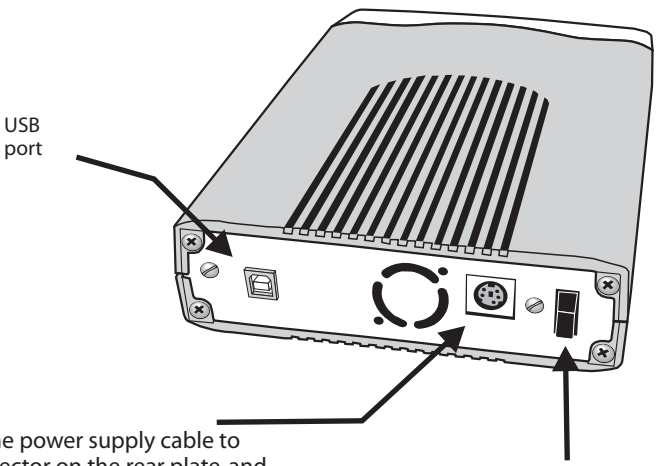
Fit the rear plate into the slotted tracks in the top half of the enclosure.

5



Secure the enclosure to the rear plate with four screws.

Connect the Kazan to a USB port with the included USB cable.



USB port

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

Turn the Kazan drive on with the power switch. The drive activity LED on the front of the enclosure will show read/write activity when the drive is operating.

# 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 Kazan. 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.

**Installing the Kazan USB 2.0 Drive Enclosure in Windows 98SE:** To use the Kazan USB 2.0 Drive Enclosure with a Windows 98SE system, run the tppinst.exe file which can be downloaded from [www.lavalink.com](http://www.lavalink.com). Once this file is run, you will be able to connect and install the Kazan USB 2.0 Drive Enclosure using the Lava driver disk when prompted by Windows. This will enable the Kazan to operate as a USB 1.1 external device.

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

# 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](mailto:tech@lavalink.com)  
Internet: [www.lavalink.com](http://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

