# Taurus Hard Drive Reader



# About the Taurus Hard Drive Reader

The Taurus Hard Drive Reader (HD Reader) is a USB media adaptor that you can use to access the data on a hard drive removed from a Taurus. This document provides instructions and external references for using the HD Reader with PCs that are running either Linux or Windows.

The Taurus Digital Seismograph can store data on two types of media: a CompactFlash card and a Toshiba 1.8" ATA hard drive. Both media are formatted to use the Linux Ext3 file system. The software utility Ext2 Installable File System For Windows (Ext2IFS) is provided with the HD Reader to permit this file system to be read when connected to a Windows environment.

# Connecting and disconnecting the Taurus hard drive

The Taurus hard drive is not hot-swappable. Ensure that you follow the correct procedures for connecting and disconnecting the Taurus hard drive and the HD Reader.

On a Taurus:

• Use Shutdown > **Shutdown** on the Taurus before removing the hard drive from the Taurus or inserting the hard drive in the Taurus (see also the Taurus User Guide).

On a PC:

- Insert the hard drive in the HD Reader before you connect the USB cable.
- Unmount/Stop the HD Reader before you disconnect the USB cable.
- Disconnect the USB cable before you remove the hard drive from the HD Reader.

## Using the HD Reader under Linux



**Note** Some Linux versions will not detect a device such as a removable hard drive if the PC was not booted with the device attached. After booting with the removable device, it can be removed and exchanged for other media which will be detected.

#### **Connecting and mounting the hardware**

- 1. Insert the Taurus hard drive into the HD Reader.
- 2. Connect the HD Reader to the PC using the supplied USB cable.
- 3. Start a Linux command shell session on the PC: [log on to the Linux PC]
- 4. Check that a USB storage device is attached: cat /proc/bus/usb/devices
- 5. Check that a new SCSI device is registered: cat /proc/scsi/scsi
- Create a mount point if it does not already exist: mkdir /mnt/taurus\_media
- 7. Mount the Taurus media to a mount point, for example: mount /dev/sdal /mnt/taurus\_media

#### Unmounting and disconnecting the hardware

- 1. Unmount the Taurus media before disconnecting the HD Reader: umount /mnt/taurus\_media
- 2. Disconnect the HD Reader from the PC by unplugging the USB cable at either end.
- 3. Remove the Taurus hard drive from the HD Reader.

### **Using the HD Reader under Windows**

The following procedures are for PCs with the Windows XP or 2000 operating systems. Other Windows operating systems that support USB devices may be used but details of the procedure may vary.

#### **Connecting the hardware**

- 1. Insert the Taurus hard drive into the HD Reader.
- 2. Connect the HD Reader to the PC using the supplied USB cable. Windows recognizes the new drive, and the Unplug or Eject Hardware icon Sappears in the Windows system tray at the lower right of the screen.

#### Accessing the Store from a Windows file system

You can browse the Linux Ext3 file system and save the files under Windows with the utility Ext2IFS. For convenience, a copy of Ext2IFS is provided on the enclosed CD.

• Double-click the file Ext2IFS\_*x*\_*y*.exe to install Ext2IFS on your PC.

Once it is installed, Ext2IFS will be accessible from the Control Panel (go to Start > Settings > Control Panel > IFS Drives). For information on using Ext2IFS, see the file Readme\_Ext2\_IFS.rtf that is available once you have installed Ext2IFS. See also the author's web site http://www.fs-driver.org/index.html.

## Stopping and disconnecting the hardware

- 1. Exit Apollo Light if it is accessing a Store on the connected hard drive. (See the relevant appendix in the Taurus User Guide for more information on Apollo Light.)
- 2. Stop the HD Reader:
  - a) Double-click on the Unplug or Eject Hardware icon 5 in the Windows system tray to bring up the Safely Remove Hardware window.
  - b) Click Stop, choose the USB device to stop, then click OK.
- 3. Disconnect the HD Reader from the PC by unplugging the USB cable at either end.
- 4. Remove the Taurus hard drive from the HD Reader.

# Using the Taurus Store files on your PC

Apollo Light is a utility for extracting data from Taurus Store files on your PC or filesystem. It provides a web interface with the same options to view data availability and to download data that are provided in the Taurus UI.



**Note** Apollo Light is used for Stores created with Taurus firmware V2.*xx*, indicated by file names of the form taurus\_0123\_001.store. For Stores created with Taurus firmware V1.*xx*, indicated by file names of the form NmxVolume\_001, use the TaurusExtract utility.

• See the relevant appendix in the Taurus User Guide for instructions on installing and using Apollo Light.

## Support

If you need technical support please submit your request to support@nanometrics.ca, or by fax to Support at +1 (613) 592-5929. Include a full explanation of the problem.

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