

Update Field Recovery Disk (FReD)

Requirements:

MLTI IV MacBook Air

Updated MLTI Field Recovery Disk (FReD)

One (or more) 32GB USB Flash drives (e.g. prior MLTI 1:1 Restore, or FReD)

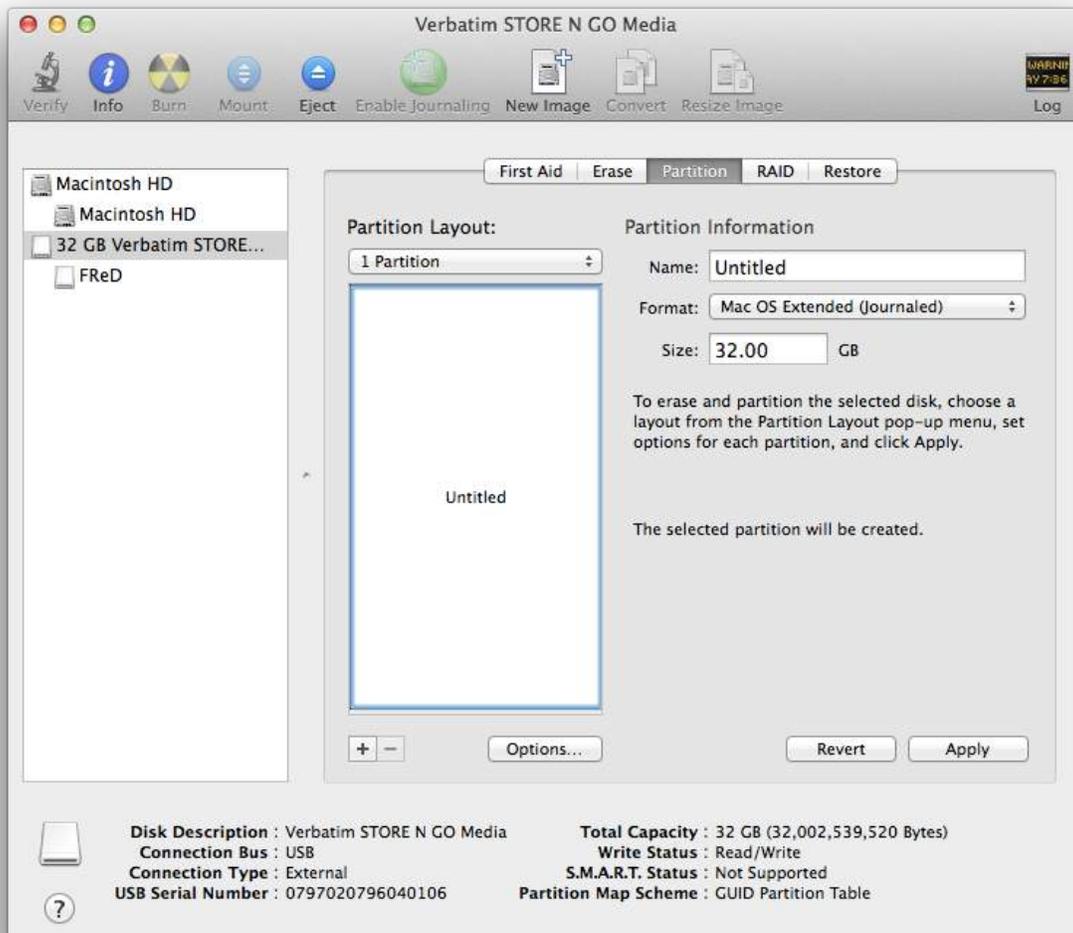
Optional: Faster media (e.g. Thunderbolt, USB 3.0) or Thunderbolt cable

This document describes the process to replicate the MLTI Field Recovery Disk (FReD) onto additional 32GB USB 2.0 Flash drives provided as part of MLTI III, or optionally onto faster external media such as one or more Thunderbolt, or USB 3.0 external drive(s).

Additionally, this document describes the process of using a spare MacBook Air as an external Thunderbolt drive. This method allows you to boot, wipe and prepare an MLTI MacBook Air with an updated Recovery HD in just under three minutes.

If you require additional assistance, please contact the MLTI AppleCare Help Desk at (800) 919-2775 pin 4MLTI, or <https://acbd.apple.com/mlti/>

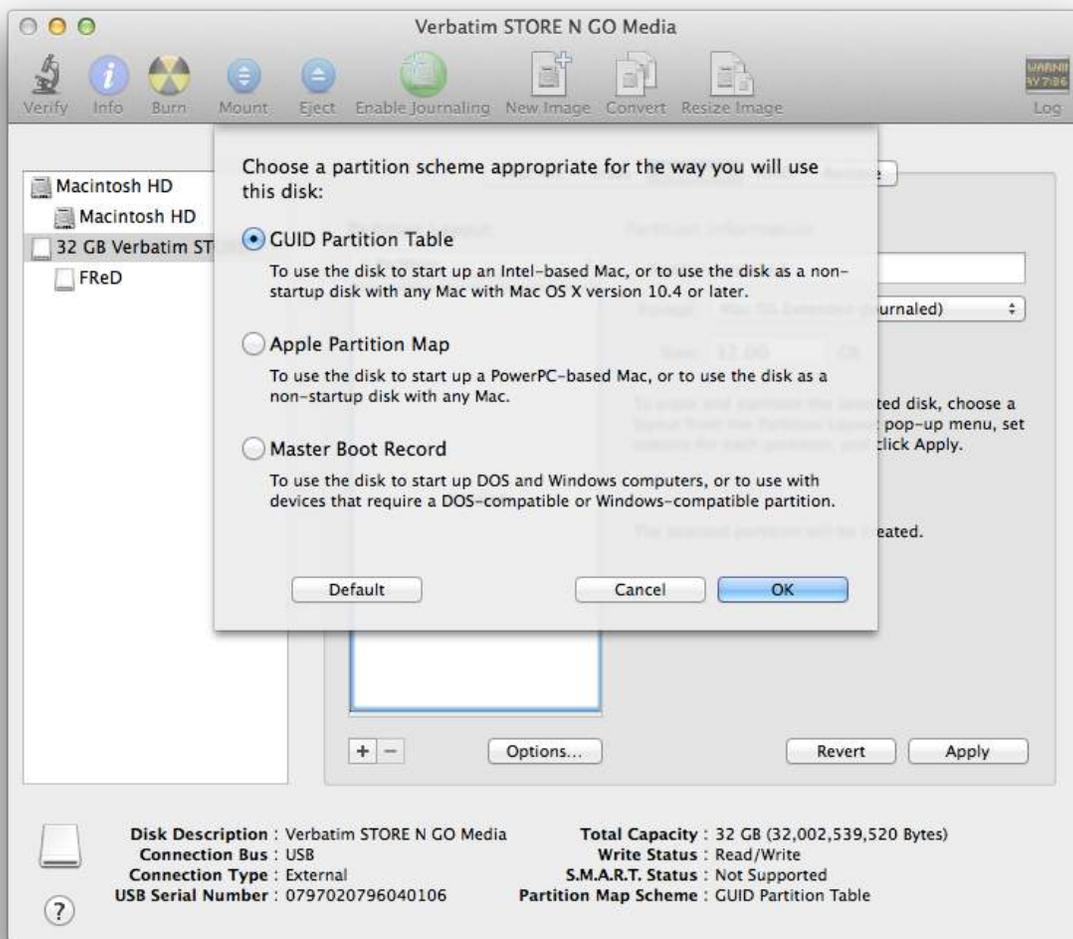
Step One: Connect the disk to be erased¹ and open the Disk Utility application (located in /Applications/Utilities/).



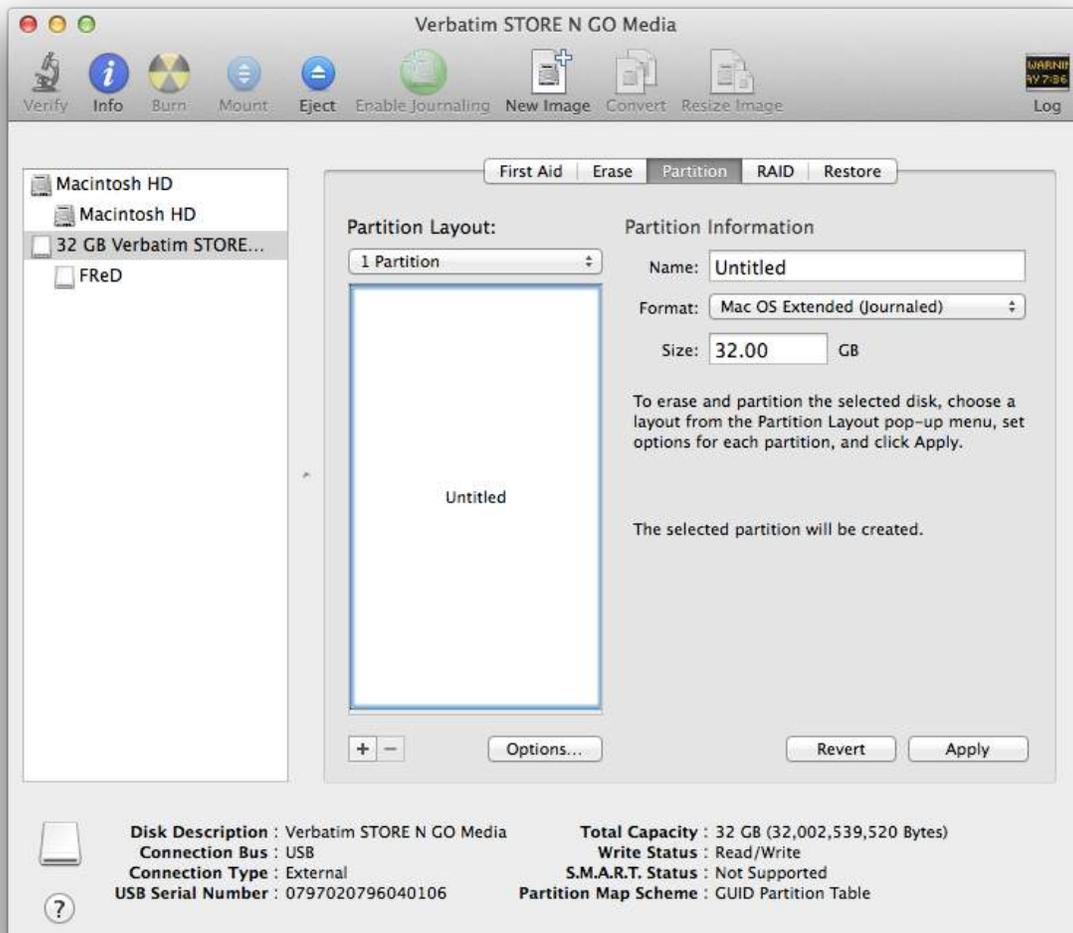
Drive for consideration may include: The original MLTI Filed Recovery (FReD) disk, the MLTI III 1-to-1 Restore Drive, or a faster drive such as a Thunderbolt, or USB 3.0 external drive (not supplied by MLTI) Be sure that this drive is at least 32GB in size.

¹ Please be sure to connect ONLY the drive to be erased. Do not connect the new FReD drive at this time.

Step Two: Click 'Options' and select 'GUID Partition Table'

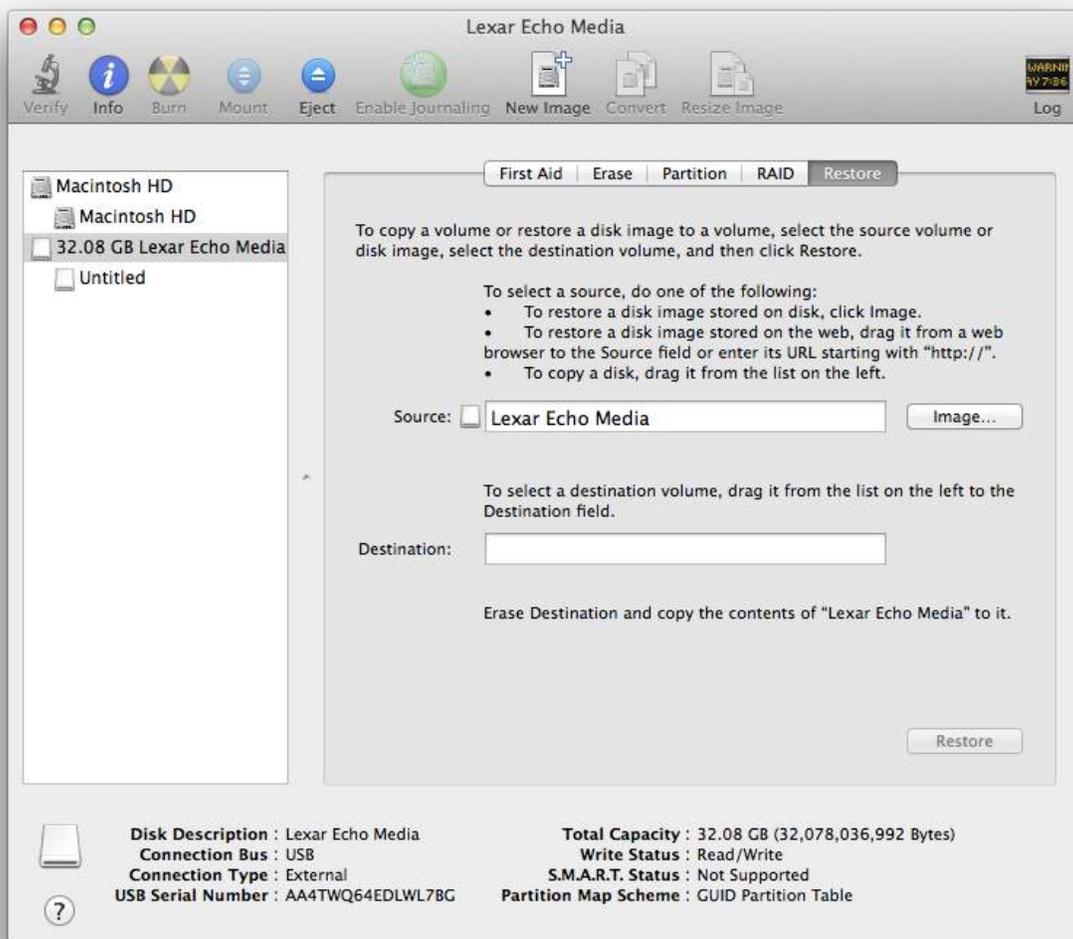


Step Three: Click 'Apply' to partition the drive².

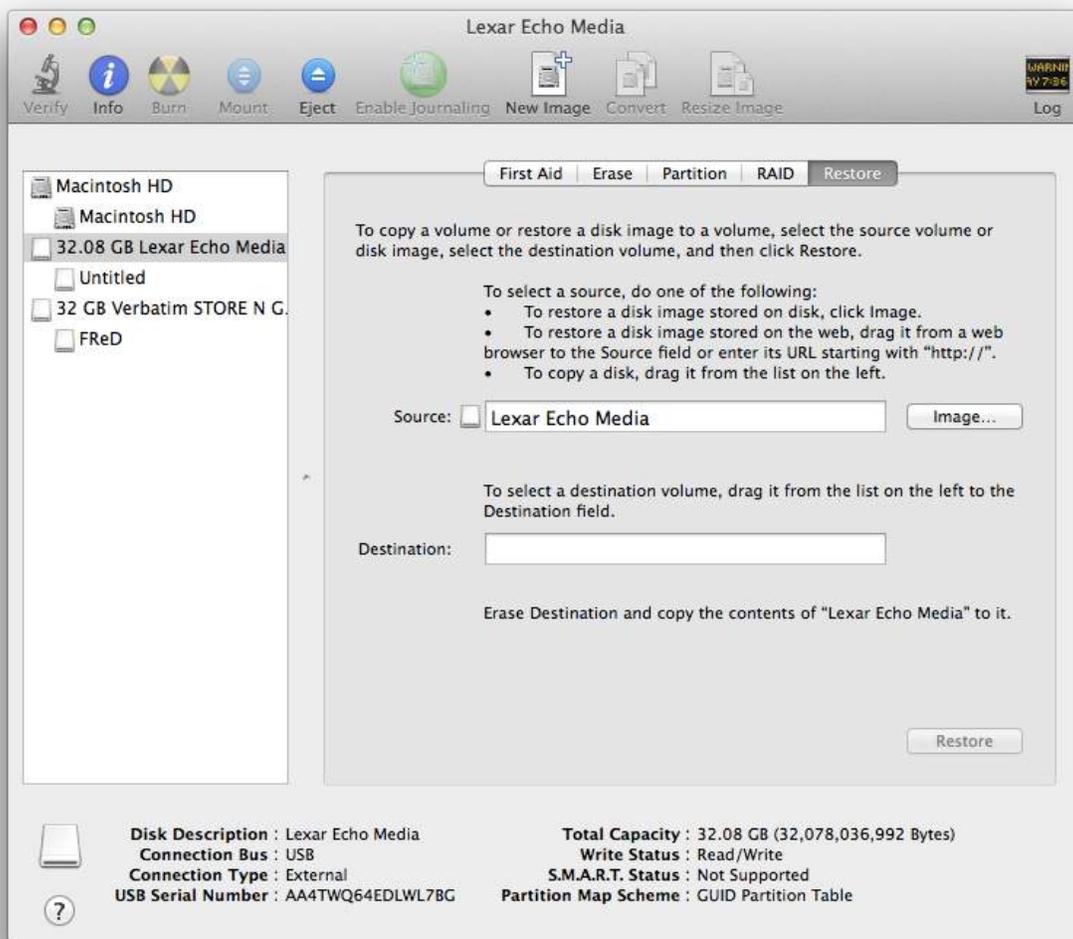


² Please note the disk name ('Untitled,' 'Untitled 1' etc). This name will be used in Step Seven below.

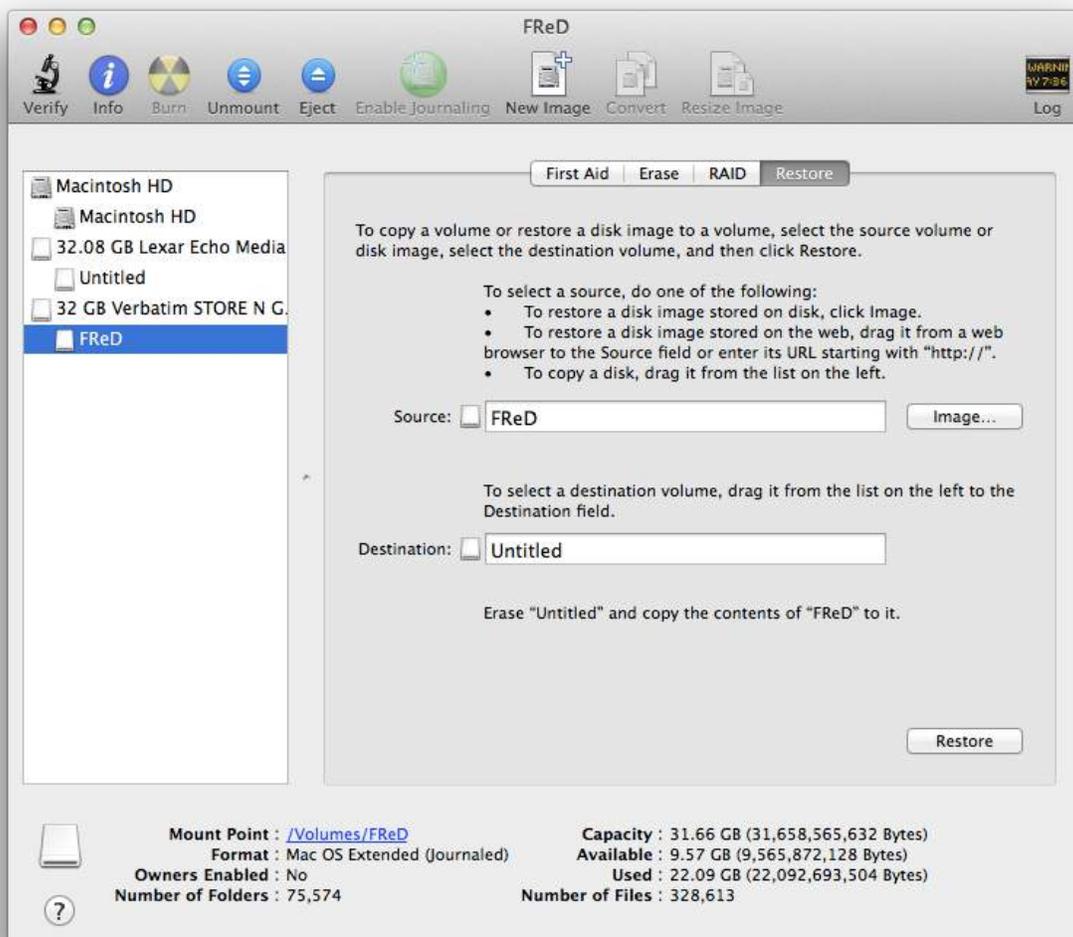
Step Four: Select 'Restore'



Step Five: Insert the new MLTI Field Recovery Disk (FReD)



Step Six: Select the 'FReD' volume and verify that it appears as the 'Source'



Step Seven: Drag the 'Untitled' disk from Step Three, to the 'Destination' section.

Step Eight: Click 'Restore' and authenticate to erase 'Untitled' and copy the contents of 'FReD' to it.

The newly completed drive can be used in place of, or in addition to your existing allotment of MLTI IV Field Recovery Disk(s). To create or convert additional drives to the latest version of FReD, simply repeat this process.

Use MacBook Air as FReD

Requirements:

MLTI IV MacBook Air

Second MLTI IV MacBook Air (to be used as faster Field Recovery Disk)

Updated MLTI Field Recovery Disk (FReD)

Thunderbolt cable (e.g. MD862ZM/A)

Each MLTI school should have at least one (1) spare MacBook Air unit. This device, booted in Target Disk Mode (<http://support.apple.com/kb/PH10725>), can act as an external Thunderbolt Solid State Drive. The performance will be significantly higher than that of USB 2.0 flash drives.

Part One: Prepare the MLTI IV MacBook Air for use as FReD

Please note that this process need only be completed ONCE for each MacBook Air that you plan to use as a faster Field Recovery Disk. You will need one Thunderbolt cable for each MacBook Air that you intend to use in this configuration. MacBook Air 11 or 13 can be used interchangeably.

Step 1: Connect the Thunderbolt cable to the FReD MacBook Air



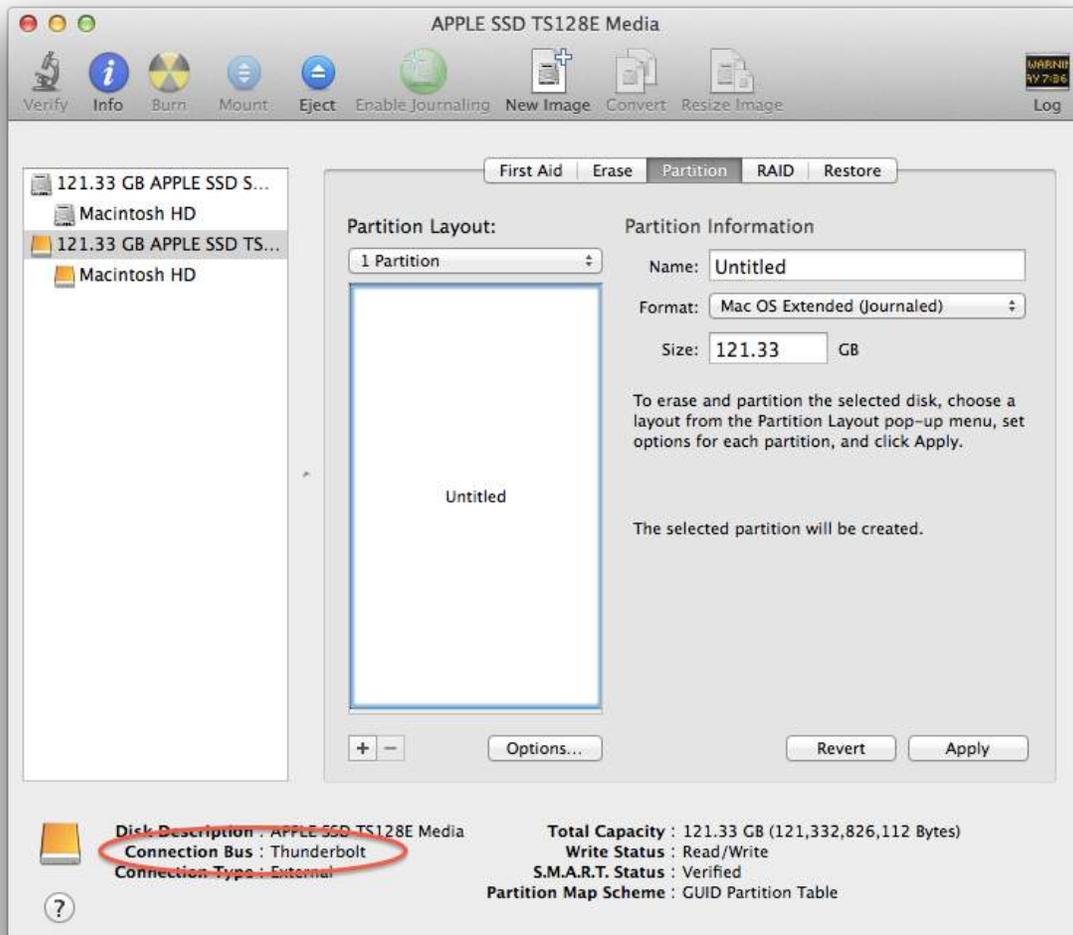
Step 2: Boot the FReD MacBook Air in Target Disk Mode



For more information about Target Disk Mode, please see the following:

<http://support.apple.com/kb/PH10725>

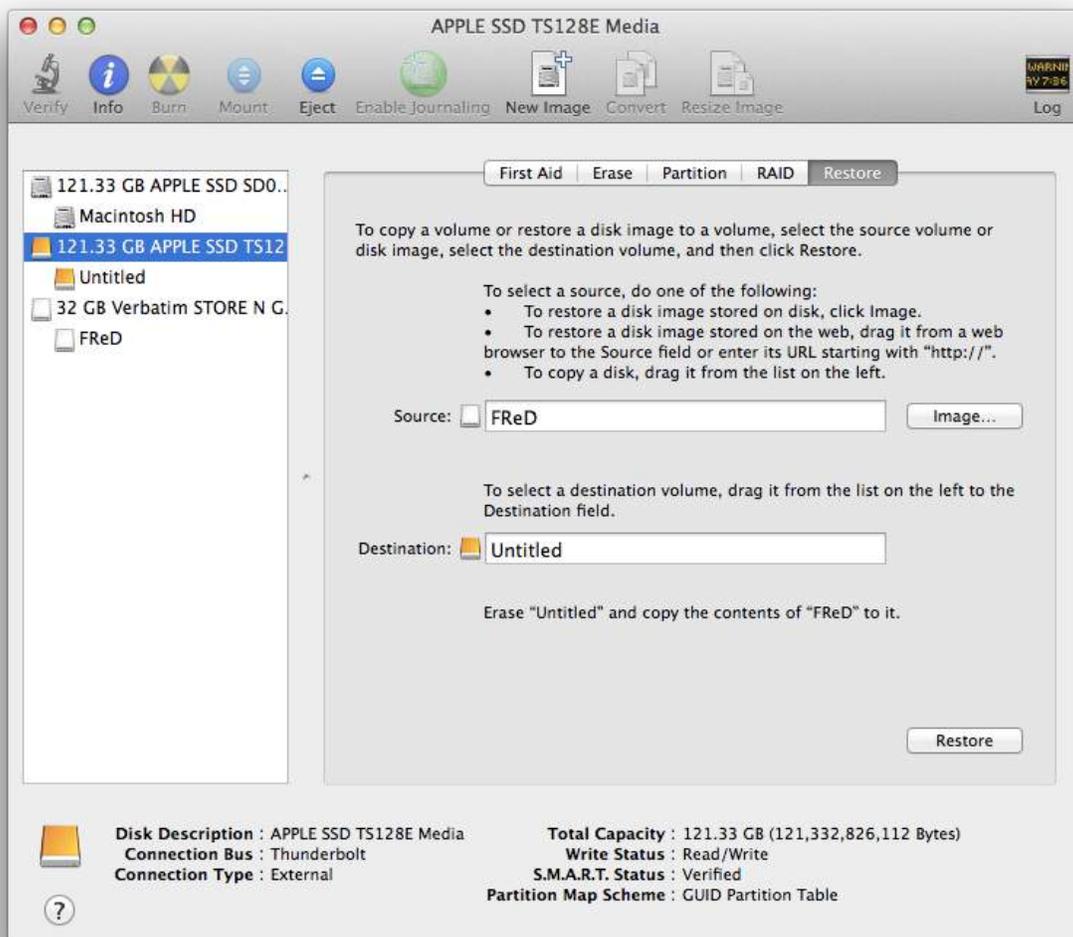
- Step 3: Connect the Thunderbolt Cable to a MacBook Air booted to OS X
- Step 4: Open Disk Utility from /Applications/Utilities/
- Step 5: Select the Thunderbolt disk (orange icon):



- Step 6: Select the 'Partition' tab.
- Step 7: Select '1 Partition' from the Partition Layout popup menu.
- Step 8: Make note of the disk name ('Untitled' in this example)
- Step 9: Click 'Apply' (this process may take several seconds)

Step 10: Connect the new Field Recovery Disk USB flash drive.

Step 11: Select Restore tab



Step 12: Drag the USB FReD (white icon) to 'Source'

Step 13: Drag the Thunderbolt disk (orange icon) from Step 8 to 'Destination'

Step 14: Click 'Restore' (you may be challenged for your login password)

Step 15: Eject and disconnect the USB FReD (white icon)

When this process is complete, the MacBook Air booted to Target Disk Mode can be used as if it were an external Thunderbolt drive. Proceed to Part Two.

Part Two: Erase and prepare MLTI IV MacBook Air units with FReD

Please note that this process will erase the entire contents of the internal storage on MLTI IV MacBook Air units and install an updated Recovery HD. This updated Recovery HD will install the MLTI IV 2014 OS X Mavericks 10.9.3 image.

Please be sure you have completed Part One before proceeding. You should have a MacBook Air booted to Target Disk Mode with a Thunderbolt cable connected.

Step 1: Connect the Thunderbolt cable to the MacBook Air to be re-imaged.



If the device is powered on, the 'FReD' icon should appear on the desktop. The icon is orange, indicating that this is an external Thunderbolt drive.

Step 2: Start (or restart) MacBook Air to be re-imaged and hold 'Option' key.

Step 3: Select 'FReD' (orange icon, not disk icon) at boot picker.

Step 4: Follow process from Section 4 of [MLTI Mavericks Recovery Update](#)

Step 5: Restart MacBook Air, and disconnect Thunderbolt cable.

MacBook Air will boot to the updated Recovery volume. Complete the recovery process to install the OS X Mavericks MLTI custom image.

Part Three: Redeploy the 'FReD' MacBook Air after use.

- Step 1: Hold the power button to power down the unit.
- Step 2: Remove the Thunderbolt cable.
- Step 3: Insert a USB (or other external media) 'Field Recovery Disk.'
- Step 4: Start MacBook Air and hold 'Option' key.
- Step 5: Select external 'FReD' (orange icon, not disk icon) at boot picker.
- Step 6: Follow process from Section 4 of [MLTI Mavericks Recovery Update](#)