

# ADDING HARD DRIVES

If you are running out of usable hard drive space and need more, we recommend that you do the following:

Install a PCI eSATA controller card.

Install an eSATA external hard drive.

This will give you a new hard drive that

- 1) does not take up space (and heat up) the inside of your old computer and
- 2) runs a lot faster than your old IDE hard drive or an external USB hard drive.

Here are some technical facts that explain why we recommend eSATA external hard drives:

Internal IDE hard drives have a nominal transfer speed of 133 Megabytes per second.  
External USB hard drives have a nominal transfer speed of below 60 Megabytes per second.  
Internal eSATA hard drives have a nominal transfer speed of 300 Megabytes per second.  
External eSATA hard drives have a nominal transfer speed of 300 Megabytes per second.

Technical information about eSATA hard drives can be found at  
[http://en.wikipedia.org/wiki/Serial\\_ATA](http://en.wikipedia.org/wiki/Serial_ATA)

A comparison of USB and e-SATA external hard drives can be found at  
<http://www.yale.edu/pclt/PCHW/usbfirewire.htm>

The bottom line is that eSATA hard drives are faster than internal IDE hard drives and dramatically faster than external USB hard drives.

We recommend the  
Rosewill PCI eSATA adapter, model RC-210, see  
[http://www.newegg.com/Product/Product.aspx?Item=N82E16816132007&cm\\_re=rosewill\\_esata\\_-\\_16-132-007\\_-\\_Product](http://www.newegg.com/Product/Product.aspx?Item=N82E16816132007&cm_re=rosewill_esata_-_16-132-007_-_Product)

We also recommend the  
Rosewill 6.56-ft. eSATA cable, see  
[http://www.newegg.com/Product/Product.aspx?Item=N82E16812119250&cm\\_re=esata\\_to\\_esata\\_cable\\_-\\_12-119-250\\_-\\_Product](http://www.newegg.com/Product/Product.aspx?Item=N82E16812119250&cm_re=esata_to_esata_cable_-_12-119-250_-_Product)

Some economically-priced eSATA external hard drive enclosures, can be found at

<http://www.newegg.com/Product/ProductList.aspx?Submit=ENE&IsNodeld=1&Description=sartech%20SATA%20drive%20enclosure&bop=And&Order=RATING&PageSize=20>

or

<http://www.addonics.com>