2.5-inch SATA hard drives use the same connectors as their 3.5-inch counterparts, another benefit of using SATA. Because of this, no adapters are needed when transferring information from a laptop drive to a desktop drive (which is common when attempting to recover data). However, 2.5-inch PATA drives use a different connector than their 3.5-inch counterparts. Remember from Chapter 6 that a 3.5-inch PATA desktop hard drive has a 40-pin IDE connector for data and a 4-pin Molex connector for power. The problem is that a 2.5-inch PATA hard drive just doesn't have the space for these types of connectors. So a different 44-pin IDE connector was developed, which is much smaller and contains both the data *and* the power pins in one 44-pin package. However, this means that an adapter is necessary if you want to transfer data from the 2.5-inch PATA drive to a 3.5-inch PATA drive.

> If you are serious about PC repair, this item should be added to your PC toolkit. I also recommend an all-in-one SATA/IDE to USB adapter from vendors such as Vantec. This type of device enables you to plug in just about any hard drive (SATA, IDE 40-pin, and IDE 44-pin) and transfer the information from that drive via USB to another computer. Nice.

44-pin 2.5-inch PATA hard drives have four additional pins to the right of the IDE connector; these are used for master/slave configurations, which might be necessary to configure when rescuing data from a laptop drive.