

RECORDING CDS: USING ADAPTEC EASY CD CREATOR 4.X

General:

The CD-R (Compact Disc-Recordable) is a one-write per sector permanent media storage. The average CD-R is a 120mm diameter disc capable of storing 650Megs of data or 74Mins of digital audio. This is the same amount of storage as 7 Zip disks, 435 3.5" floppy disks, 540 5.25" floppy disks, or 10,400 standard 64K data cassettes. The CD-RW (Compact Disc-ReWritable) is an extension of the original CD-R technology, reworking the material of the reflective surface to allow for a rearranging of "burned" grooves back to their original state, reverting them back to a writable state. **The CD-RW is not as universal as a standard CD or CD-R, so please use the CD-RWs for your own backups and the CD-Rs whenever you need to exchange information with an external party.**

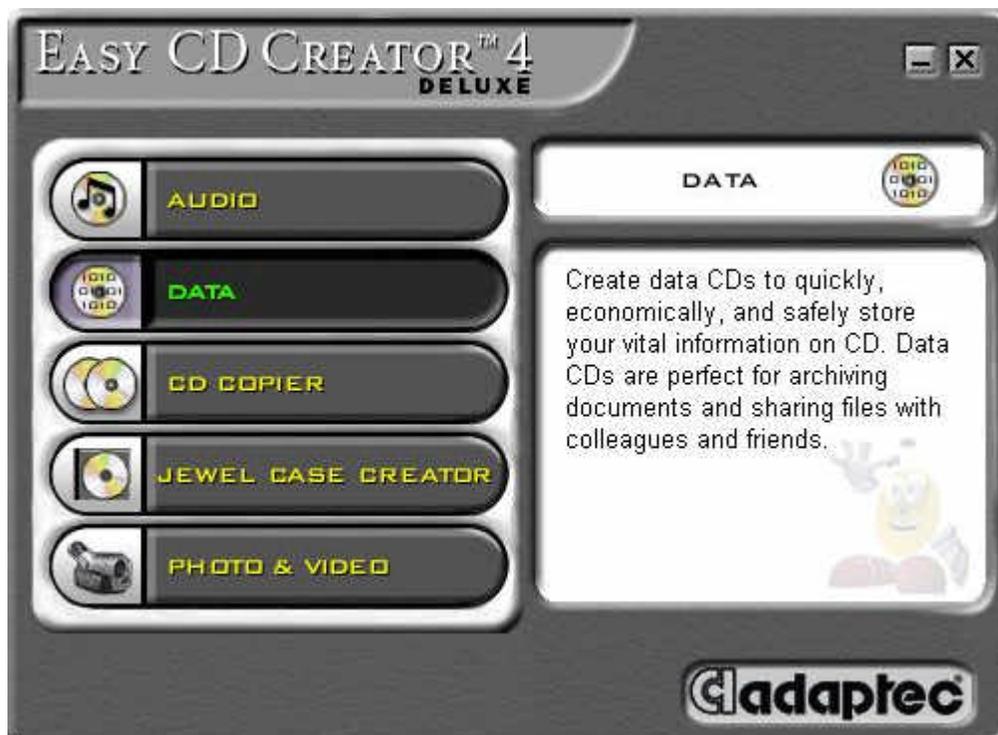
DirectCD is used to handle all the options of the CD-RWs (i.e. formatting, erasing, ejecting, and locking). If you stick a CD-RW into the drive, it will act like a 533Meg Removable Storage device. You can write, delete, and edit, just like it was a zip disk or floppy. You can create CDs simply by using Drag-and-Drop copy techniques or by saving directly to the Disc. CD-Rs however, need to have the data processed by a "mastering" program, before it can be burnt. CD-Rs can hold 650Meg, and CAN be written to more that once, but cannot have portions erased/re-written. CD-Rs burn in sessions, and CD-RWs burn in packets.

Getting Started:

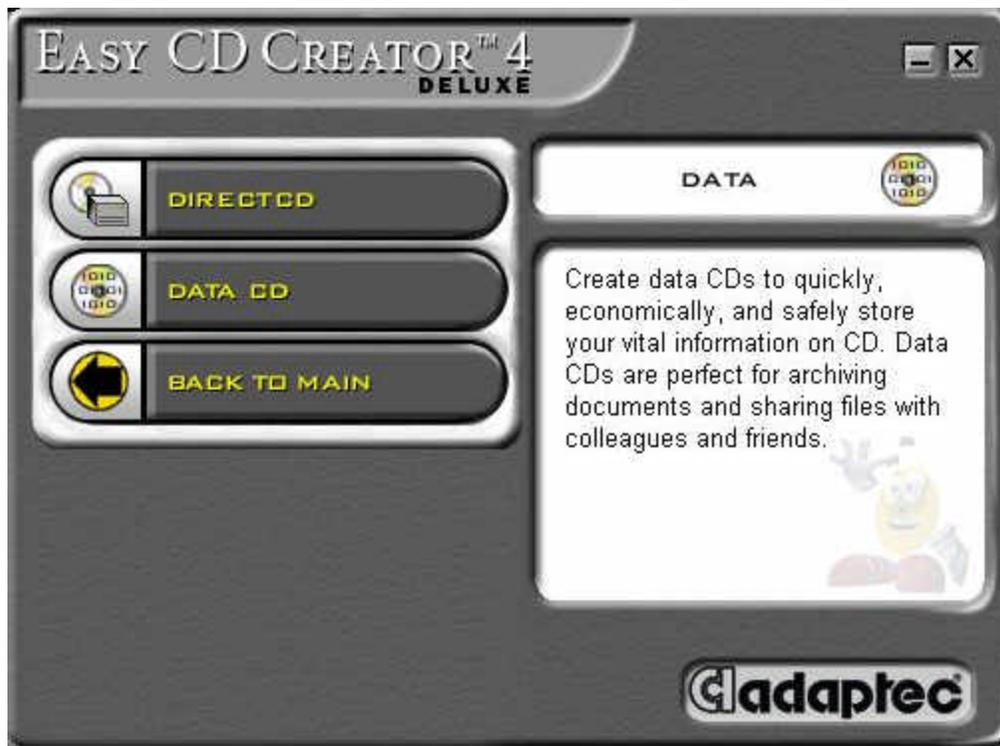
1) To get started, double-click the "Create CD" Icon on the desktop. You can also launch the program by going to Start | Programs | Easy CD Creator 4 | Create CD.



2) A menu appears, select the option you need... for now, we're going to create a Data CD. As you can see, the program can also create Red-book Audio CDs (CDDA) like those used in your personal stereos. It also supports CD copying, for when a 1:1 copy of a CD is needed. Audio, Jewel Case Creator, and Photo & Video will not be covered in this tutorial.



3) From the second menu, you can choose either **DirectCD** (for CD-RW) or **Easy CD Creator** (to create an image to be burned to CD-R). First, we'll select Data CD to show how the “mastering” portion of **Easy CD Creator** works.



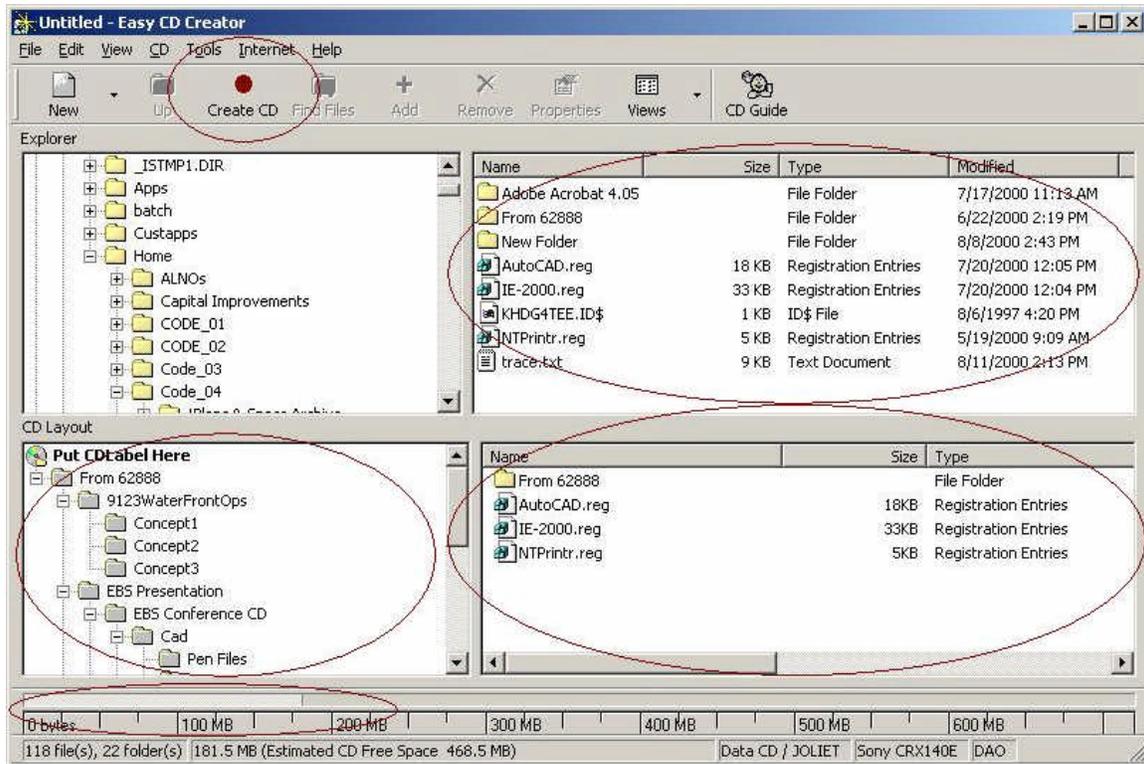
Next Steps:

For CD-R see steps 4a, 5a, 6a.

For CD-RW see steps 4b, 5b, 6b.

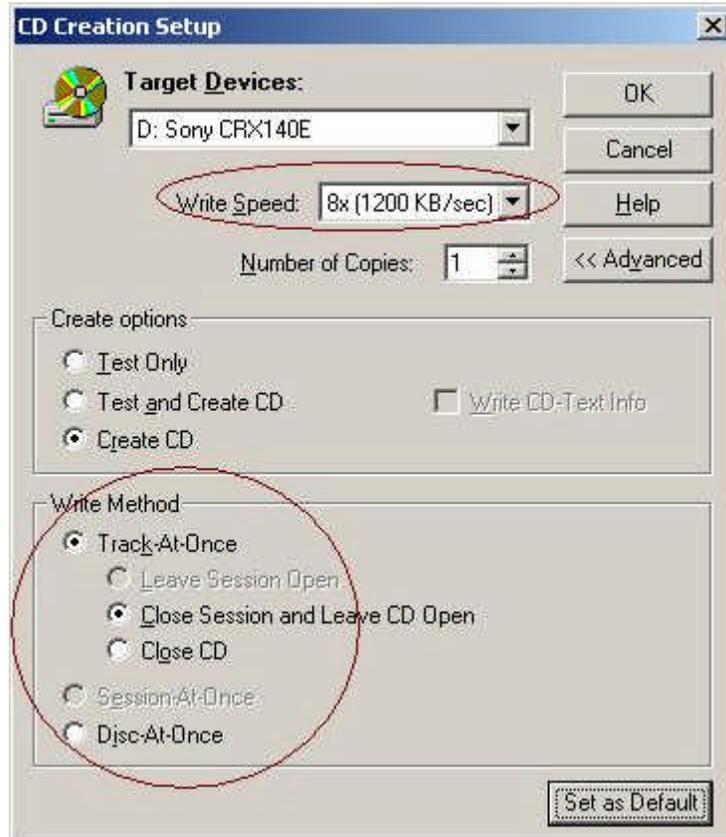
CD-R:

4a) A window similar to the one below will appear. The top half of the window is source window. This is where you choose what files will go to the CD. Simply drag and drop the files/folders you wish to burn to the CD, to the destination part of the window on the lower half. As you can see, the layouts look just like windows from Windows Explorer, so navigation through drive letters is easy. At the very bottom of the screen, you have a status bar showing how much space the image you are creating will take up. Remember that a standard CD-R can only hold 650Meg, so watch the status bar to make sure you don't go over, or the CD will not burn. After you've set up the image in the lower window, as you want it to burn, you can name the CD by clicking on the text to the right of the CD icon in the lower left window, and changing it. After the image is ready, click the Create CD button on the toolbar.



Important Note: It is important to make sure that you never use files from another Removable Storage device as the source. The transfer speeds of some removable devices such as Bernoulli Drives and Parallel Port Zip Drives cannot keep up with the burn speed of the CD Burner. Copy the files to a temporary location on the Hard Drive, and then burn from the Hard Drive. Also, make sure that the files you plan on burning will **not be modified** during the burn process, especially if the source files are located on the network. This can cause errors with the burn process and can leave you with nothing more than a shiny coaster for your drink.

5a) The window below appears when you hit *Create CD* (you may need to click *Advanced* in order to see the whole window), and the following settings are our suggested ones. The burn speed should be set as high as possible (8x for 733 desktops, 4x for laptops and those w/ HP 8200 burners). We will use the *Track-At-Once* method for burning, with the *Disc left Open* for further burning. This way, we can recycle the Disc and keep burning to it until the whole 650Meg is used up. If the Disc were to be closed, further writing would not be allowed, even if empty space still existed on the Disc. We could also burn *Disc-At-Once* for an audio or more professional data disc, or *Track-At-Once w/ the Close CD* option selected if we wanted to prevent further writing to the Disc. If you use a certain type of settings often, you can set them as the defaults by clicking the *Set As Default* button. The *Test Only* option will not turn on the burn laser during the creation process, but will go through the whole process, and is useful for troubleshooting CD creation problems. When all the options are set, click *OK* and the Disc will burn.



6a) The size of the image and the speed of the burn (4x, 8x) are in direct relation to the amount of time it takes a disc to burn. A good rough estimate of the time in minutes it will take for a CD to burn is $(\text{image size} / 650\text{Meg}) * (60 / \text{burn speed})$. So to burn 200Meg at 4x would roughly be $(200/650)*(60/4) = 4.6$ Minutes.

CD-RW:

4b) Our CD-RWs are ready to go straight out of the jewel case. All you need to do is insert them into the CD drive, and they are ready to be written to via Drag-and-Drop or directly saving to it, just as with a Zip, floppy disk, or other removable media. The Disc will be locked in the drive, and can only be ejected by **DirectCD**. To eject the Disc, choose **DirectCD** from the menu in (3).

5b) The **DirectCD** Wizard will appear. Click *Next*.



6b) Select the Disc you wish to eject and click *Next*, then click *Finish* to eject the Disc.

