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How to Write Data on CD, DVD

CD's vs DVD's as data storage

CDs and DVDs are cheap and effective mass storage media. CD's are an older and more widely- used technology. Some of the older computers don't have DVD drives; however, they will most likely have CD drives.

DVD's offer much larger storage space **4.7 GigaBytes on a single layer DVD** disc (most commonly use), 8.4 GigaBytes on a double layer DVD Disc or 9.4 GigaBytes on a double sided DVD disc. Although in most situations you don't need to store that much data and the average volume of a **CD (650 Megabytes)** will work perfectly fine.

TIP: *To find out how much storage space you need, do the following: Create a New Folder, put all your data in this folder, right-click on the folder and choose properties in the scroll-down menu. The "General" tab will give you information about your folder size so you can choose the storage media accordingly.*

CD formats and types - CD-R (Read only) and CD-RW (Read & Write):

What is the capacity of a CD?
- For regular size CD: 650MB/74min, 700MB/80 min, or 800MB/90min.
- For mini CD media: 50MB/5min, 180MB/21min, 185MB/21min or 193MB/22min.

DVD formats and types

Which DVD disc format should I buy? There are two main formats: "**dash**" (DVD-R/RW) and "**plus**" (DVD+R/RW). There's not much difference between them. They both record data and video, and they both read back data and play back video. Both formats are available as recordable drives for computers and as home video recorders.

How much do they cost? The price varies on the Disc format (DVD-R, DVD-RW, DVD+R, DVD+RW), types (single or dual-layer), speed, and capacity.

Are there any compatibility problems with recordable DVD formats?

Yes. **None** of the writable formats are fully compatible with each other or even with existing drives and players. In other words, a DVD+R/RW drive can't write a DVD-R or DVD-RW disc, and vice versa (unless it's a combo drive that writes both formats). The good news is that almost all modern DVD players and DVD computer "**combo**" drives are becoming more compatible and more intermixed. It's a good idea to make sure that your DVD player will work with the DVD format that you are about to burn.

What are the speeds of DVD drives?

Recordable discs come in different speed ratings (2x = twice standard write speed, 8x = eight times standard speed, and so forth). The speed ratings of blank discs match the speed ratings of drives. When faster drives become available, new discs are designed to work with the new drives as well as older drives. This means you should use discs that are rated at or above the speed of your drive.

For example, if you have a 8x drive you should use 8x or faster discs, not 4x or 6x. Nowadays 16x is the theoretical maximum speed, so the latest drives from both formats are close to the limit.

 *Below is approximate time, in reality, writing will take longer time.

DVD drive speed	Disc write time*
1x	53 min.
2x	27 min.
4x	14 min.
5x	11 min.
6x	9 min.
8x	7 min.
10x	6 min.
16x	4 min.

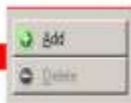# NERO 6.0 *(Basic DVD-Video authoring software for Windows.)*
Using NERO you can: You CANNOT:

• Archive data. • Save directly to a CD/DVD

• Back-up a hard drive to other media. • Edit and re-save individual documents

• Distribute databases to others.

• Make a master CD or DVD for disc duplication.
• Duplicate a CD or DVD.
• Erase and rewrite the contents only in CD-RW.

Step-by-Step Procedure how to burn data in CD/DVD:

1. Click on Windows "Start" menu, and select "All Programs." Select "Nero" and click on "Nero Start Smart" to open
the wizard program.

2. Choose the type of media that you are going to be working
with using the pull-down menu: CD/DVD or CD or DVD.
Selecting "CD/DVD" will give you an option to work with
both types of media.

3. Click on 'Data" icon to choose the type of the project and
on "Make Data CD" or "Make Data DVD," depending on
your media choice.

4. A Disk Content window will appear with and show the content of your future disc.

5. Click on "Add" button to start looking for the files and folders you need to store on the disc.

6. A browser window will pop up showing your computer's hard drive structure. Choose the files and folders that
you are going to put on CD (or DVD) by clicking on them and pressing the "Add" button. Press "Finished" when
you are done with your search.

7. Now when you have folders and files in your "Disc Content window the blue line on the bottom will show how much space your content will take form the disc volume. If all the folders take too much space to fit on the disc, you can always remove some of them by clicking "Delete." Click "Next" if everything looks right to you.

Using Microsoft Windows XP for burning files to CD

1. Insert a blank CD or DVD Disc in your computer's drive.

2. With Windows Explorer open, drag files you want to copy onto the CD/DVD burner drive letter.

3. A pop-up window will appear which states: "you have files waiting to be written to the CD"

4. Click the pop-up balloon to view the files

5. Select - File / write these files to CD

6. Follow the screen directions in the Wizard until files are written

7. You will be notified when the "Files have been written"

8. Click "Finish"