

Saving Files to a CD Using DirectCD: Roxio Easy CD Creator 5 Basic User's Guide

About Recordable CD's

There are two types of recordable CD's, the CD-R and the CD-RW.

A CD-R disk is a *Recordable* CD. CD-R's have the following characteristics:

- ➤ CD-R's are less expensive than CD-RW's.
- You can save files directly to a CD-R, as long as it has been properly formatted.
- You can copy files from the CD-R onto another drive (A: or C:).
- You can open and edit files directly from a CD-R and save those files back onto the CD-R, as long as it has been properly formatted.
- > CD-R's cannot be read by standard CD-ROM drives unless you "Close the CD to the UDF v.1.5 format" or close it completely.
- Although files can be deleted from a CD-R, the file is not actually removed from the CD, but is simply "hidden" from view. The space that the deleted file was using on the CD is closed and cannot be written to again.
- > Eventually, the CD-R will run out of space, forcing you to use another CD.
- > A CD-R cannot be reformatted or erased.

For those who want to be able to use the same CD over and over again, or who want to be able to erase and/or reformat their CD's, an alternative to the CD-R is the *CD-RW*.

A CD-RW is a *Rewritable* CD. CD-RW's have the following characteristics:

- > CD-RW's are more expensive than CD-R's.
- You can save files directly to a CD-RW, as long as it has been properly formatted.
- You can copy files from the CD-RW onto another drive (A: or C:).
- > You can open and edit files directly from a CD-R and save those files back onto the CD-R, as long as it has been properly formatted.
- > CD-RW's cannot be read by standard CD-ROM drives unless you "Close the CD to the UDF v.1.5 format" or close it completely.
- > Files can be permanently deleted from the CD-RW and the space that the deleted files were using can be written to again.
- > CD-RW's can be completely erased and/or reformatted for use over and over again.

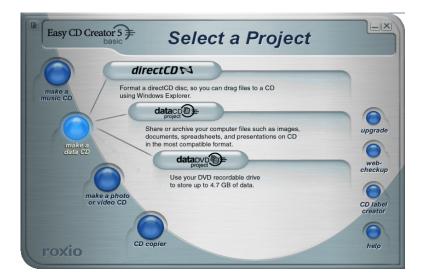
Formatting a CD-R/CD-RW

When you insert a blank, unformatted CD-R/CD-RW into your computer, the following box should appear. If it does not, eject the CD and re-insert it. In order to use the CD, you must first format the CD by selecting Create a CD: using Roxio Easy CD Creator.

- 1. Insert a blank, unformatted CD-R/CD-RW into your CD drive.
- 2. When the following box appears, select option 2, Create a CD: using Roxio Easy CD Creator.



3. The Roxio CD Creator 5 Project Selector will open up, which looks like this:



- 4. From the Roxio Select a Project menu, select Make a data CD.
- 5. Select **Direct CD**.



- 6. Click the format CD button. If there are any files on the CD, they will be erased during the format.
- 7. If the **format CD** button is grayed out, then you are using a CD-R disk that has already been formatted. CD-R's cannot be formatted more than once (CD-RW's can). Look at the **Type** section on the left to find out what type of CD you have in the drive.
- 8. The formatting process will take longer for a CD-RW than for a CD-R, but will run in the background, allowing you to do other work on your computer.
- 9. Once the formatting process is complete, the disk will be ejected and you will receive a message saying that the CD is ready for read/write access directly through the drive.
- 10. Click **OK**.
- 11. Now you can use your formatted CD-R/CD-RW as you would any other disk. You can save files directly onto the disk or drag and drop files to it from the Windows Explorer, just as you would do with a floppy disk in the A: drive.

Saving and Deleting Files from Your Formatted CD

Saving Files to a Formatted CD

Once your CD-R/CD-RW is formatted and ready for data, you can copy files to it a number of ways:

- In the My Documents folder or any Windows Explorer folder, use the **Copy** and **Move** features on the Common Tasks pane.
- In the My Documents folder or any Windows Explorer folder, drag and drop files onto the D: drive (when in Folders view as opposed to the Common Tasks view).
- Select **Save As** from any Windows program's File menu and select the D: drive.
- Use MS-DOS commands from a DOS window.

After you copy files to a CD, you can add more files to it or erase the files. If you previously formatted a CD-R or CD-RW disc using DirectCD, you can add more files to it until the CD is full.

Deleting Individual Files

You can delete individual files from a CD using Windows Explorer. When you delete files from CD-RW discs, you free up space on the CD. When you delete files from a CD-R disc, you only delete the internal directory where the files are listed. You can no longer see the files on the CD, but you do not actually free up space on the CD.

To delete individual files:

- 1. Insert the CD into your CD-Recorder.
- 2. In Windows Explorer, select the file or files you want to delete.
- 3. Select **Delete this file (or selected files)** from the common task pane on the left. Explorer confirms that you want to delete the selected files.
- 4. Click **Yes** to delete the selected files.

Erasing a CD-RW

You can use the Erase CD function on CD-RW discs to erase the internal directory that lists the files on the CD-RW, making the files inaccessible. *You must format the CD VD again before you can copy files to it.*

NOTE: You cannot use the Erase CD function on a CD-R disc.

To erase the contents of a CD-RW:

- 1. Insert the CD into your CD-Recorder.
- 2. From the Select CD drop-down list box on the DirectCD main window, select the CD-Recorder you want.
- 3. Click Erase CD.
- 4. DirectCD confirms that you want to delete all data from the CD and that the erase operation will take several minutes to complete.
- 5. Click **Yes** to confirm that you want to erase the CD. DirectCD erases the entire contents of the CD.

Ejecting Your CD-R/CD-RW

When you eject your CD, you should get a Direct CD dialog box. This dialog box lets you decide how to format the disk, depending on where you are bringing the disk. The option you select determines how the CD can be used.

<u>Leave As Is</u> – Leave the CD as it is so it can be read and written to as a drive letter. Standard CD-ROM drives will not be able to read the CD.

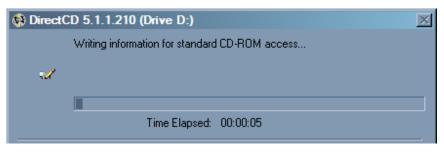
> Only computers with CD-R/CD-RW drives can read the CD.

- Use this option when you plan to keep adding files to the CD and you do not need to give the CD to someone else to use.
- ➤ When you choose this option, you will see the following message:



<u>Close to UDF v.1.5</u> – Close the CD to the UDF v.1.5 format so that it can be read on most CD-ROM drives after installing a UDF v.1.5 reader.

- ➤ Use this option when you need to give the CD to someone who has DirectCD 5.0 installed or who you know has a UDF v.1.5—compatible reader installed. This option uses less space on the CD for each session than described in the Note below for ISO 9660.
- ➤ When you make a CD using DirectCD, it automatically copies the UDF Reader for Windows to the CD. When you insert the CD into a CD-ROM drive, the reader will automatically ask if you want to install it.
- ➤ When you choose this option, you will see the following two messages:





> You can still read and overwrite the files on the CD, but if you add/change any of the files on the CD, you must again choose to "Close to UDF v.1.5" to be sure that most other CD-ROMs can read it (with a UDF v.1.5 reader).

<u>Close to Read on Any Computer</u> – Close the CD so that it can be read automatically in most standard CD-ROM drives.

➤ Use this option when you need to give the CD to someone else to use and that person may not have a UDF v.1.5—compatible reader installed. CD-ROM drives under other operating systems, such as Unix, Linux, and Macintosh, can also read the CD without using any special reader.

Note: This closes the CD to the ISO 9660 standard. The ISO 9660 information requires approximately 22 MB of space on the CD for the first session, and approximately 13 MB for each additional session. ISO 9660 is an international standard that specifies how data is arranged (its logical format) on a CD-R or CD-RW disc. This includes standards for the format of file names and directory names. CDs written in the ISO 9660 format can be read by computers running under various operating systems such as Windows, DOS, Macintosh, Linux, and Unix.

<u>Protect CD So It Cannot Be Written To Again</u> – This is only available if you use the Close to Read on Any Computer option. This option permanently closes the CD so you can never write more files to the CD.

<u>Eject</u> – Ejects the CD using the options you selected.

<u>Cancel</u> – Exits the Eject Options dialog box without ejecting the CD.

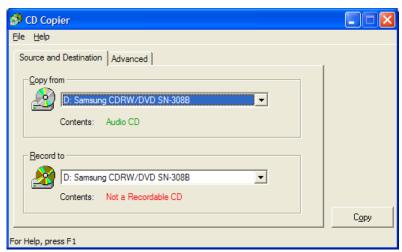
Comparing CD-R/CD-RW Eject Options				
Setting	Use of Space	File Name and Path Length	Read-Only Setting on Files	
Leave As Is	Uses no additional space on the CD.	No limits other than those of the Windows operating system.	Does not change files on the CD to read-only.	
Close to Read on Any Computer	Uses approximately 22 MB of space on the CD for the first session, and 13 MB for each additional session.	Limits file names to 64 characters and the path to 8 folders and subfolders.	Changes files on the CD to read- only. You can change the read-only setting after copying the file to another computer by right-clicking the file in Windows Explorer and selecting Properties .	
Close to UDF v.1.5	Uses less space than Close to Read on Any Computer for each closed session.	Limits file names to 64 characters and the path length to a total of 248 characters.	Does not change files on the CD to read-only.	

Copying CDs Using CD Copier: Roxio Easy CD Creator 5 Basic User's Guide

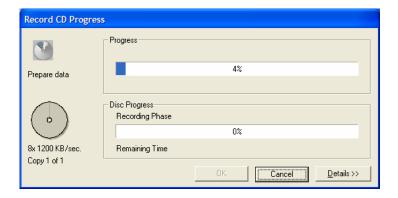
- 1. Insert your music CD into the CD drive.
- 2. Close **Real One** player when it appears
- 3. Click Start, Programs, Roxio, Project Selector.
- 4. Click the **CD Copier** button.



- 5. To copy just one CD, make sure the **D**: drive is listed in both the **Copy from** and the **Record to** boxes.
- 6. Click Copy.



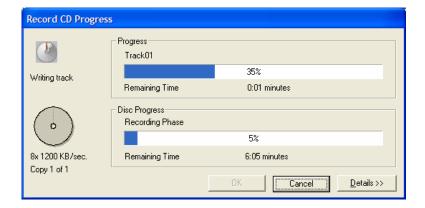
7. As the Source CD is copying, you will see the **Record CD Progress** box below:



- 8. When the Source CD is finished being copied, you will see the **Insert Disc** dialog box below. Remove the music CD from the D: drive and insert a blank formatted CD-R or CD-RW disk.
- 9. Click Retry.



10. As the Destination CD is being written to, you will see the following box.



11. When the copying process is finished, click **OK** and close the CD Copier by clicking on the **X** in the top right corner of the window. Real One player will open up and the CD will begin playing.

What Kinds of CDs Can I Copy?

With CD Copier, you can make backup copies of almost any type of CD. The most common use for making a copy of a CD is to make a working copy of a CD and to archive the original in a safe place.

NOTE: CD Copier is designed to assist you in reproducing material in which you own the copyright or have obtained permission to copy from the copyright owner. Unless you own the copyright or have permission to copy from the copyright owner, you may be violating copyright law and be subject to payment of damages and other remedies. If you are uncertain about your rights, contact your legal advisor.

The following table lists the types of CDs that you can copy, as well as some notes for making those copies.

Type of CD	Notes	
Data	Some commercial CDs are designed to prevent copying, and will not allow you to make a copy. Only single session data CDs can be copied in Disc-at-Once mode.	
Music	The CD-ROM or CD-Recorder drive used as the source drive must support digital audio extraction. (Easy CD Creator tests your drive to determine its capabilities when the source CD is inserted.) You can copy music CDs in Disc-at-Once mode if your CD-Recorder supports Disc-at-Once mode.	
DirectCD	Some CD-ROM drives may not be able to read a CD made with DirectCD. If your CD-ROM drive is MultiRead capable, there should be no problems.	
Mixed- Mode	Some mixed-mode CDs copy perfectly while others do not. If your mixed-mode CD cannot be copied, the CD may be formatted to prevent copying.	
Enhanced CD	Copy enhanced CDs in Disc-at-Once mode; otherwise, some audio may be lost if there is less than a two-second gap between tracks on the source CD.	
Photo CD	Requires a source CD-ROM drive capable of reading CD-ROM XA. Most current drives support this.	
Video CD	Requires a source CD-ROM drive capable of reading CD-ROM XA. Most current drives support this.	

NOTE: Due to technical limitations of CD-ROM and CD-Recorder drives, not every type of CD can be copied perfectly. Problems can arise from both the source CD-ROM drive and the source CD. Select the **Test** option in the CD Copier Advanced Tab settings to determine if your system can successfully copy a CD.

Understanding CD-R and CD-RW Technology

If you are new to making your own data CDs, the following sections will help you understand some of the related terms and technologies.

About CD-ReWritable Technology

If you have a CD-ReWritable drive, you can use two types of CDs to make your own CDs:

- CD-Recordable (CD-R) discs
- CD-ReWritable (CD-RW) discs

CD-RW is a technology that, like CD-R, allows you to record information to a CD. The difference is that with CD-RW you can also erase the contents of a CD and rewrite new information to it. Depending on how you want to use your CD, each CD type offers unique advantages.

NOTE: Only CD-RW and MultiRead CD-ROM drives can read CD-RW discs, and only CD-RW drives can write data to CD-RW discs.

About UDF v.1.5

Universal Disk Format version 1.5 is a file system standard that enables a CD-Recorder to be used as a logical device on a computer system. In other words, UDF lets you read files from and write files to a CD in your CD-Recorder, just as you would read and write files to a floppy disk or a hard disk.

If you have DirectCD 5.1 installed, you automatically have the UDF Reader needed to read UDF v.1.5-formatted CDs. When you make a CD using DirectCD, it automatically copies the UDF Reader for Windows to the CD. When you insert the CD into a drive, the reader will automatically ask if you want to install it

UDF v.1.5-compatible readers are available for most common operating systems and must be installed for CD-Recorders to read UDF v.1.5-formatted CDs.

Uses for DirectCD

DirectCD is the easiest way to copy data files directly to a CD. Some uses for DirectCD include:

- Archiving data
- Backing up a hard disk
- Disseminating information to field offices
- Transferring and distributing data to other Windows systems
- Distributing databases

You should use CD mastering software, such as Easy CD Creator, to make CDs when you want to make:

- A test copy of a CD before having it factory-duplicated
- CDs that can be read on different operating systems such as DOS or Windows 3.x
- Music CDs
- Special data CDs, such as enhanced CDs

Refer to your CD mastering software's Online Help for more information.

Understanding the DirectCD Main Window

The DirectCD main window gives you access to DirectCD's functions and displays information about the selected CD-Recorder and CD. From here you can format a CD, which prepares the CD for file copying. After you format a CD, you copy files to the CD using Windows Explorer or other Windows programs.



- **Select CD:** Select the CD-Recorder that contains the CD you want to work with. If you have only one CD-Recorder installed, that CD-Recorder is automatically selected for you. If the CD-Recorder you want to use is not listed, be sure that it is properly installed or check the Roxio Website for drive support updates.
- **CD Info:** Displays the following information about the CD in the selected CD-Recorder:
 - **Status:** Current state of the CD. Refer to the Online Help for information about the Status and Type.
 - o **Label:** Name you typed to identify the CD.
 - o **Free Space:** Amount of space (in MB) that is available for use on the CD.
 - o **Total Space:** Amount of data (in MB) that the CD can store.

- Type: Type of CD. Refer to the Online Help for information about the Status and Type.
- o **Compressed:** Compression status of the CD: Yes or No.
- o **Used By:** Program that is currently using the CD.
- **Format CD:** Displays the Format dialog box, where you can format a new, unused CD. Formatting a CD prepares it to accept files. You can also format a previously used CD-RW disc, which makes any existing files on the CD unavailable.
- **Eject:** Ejects the CD from the currently selected CD-Recorder. Depending on the type of CD and the options you have selected, the Eject Options dialog box may appear.
- **CD** Utilities: Displays the Utilities dialog box, where you can access ScanDisc.
- Erase CD: Allows you to erase the contents of a CD-RW disc to free up space
- Make Writable: Allows you to add files to a CD-R disc that was made using Easy CD Creator with the Close Session and Leave CD Open option. You must make the CD writable before you can add more files to the CD.
- **Web-CheckUp:** Launches your computer's Internet browser and automatically goes to a software update Website.
- Options: Displays the Options dialog box, where you can change DirectCD's options.

Changing DirectCD's Options

DirectCD allows you to customize several options.

To change options:

- 1. From the Select CD drop-down list box on the DirectCD main window, select the CD-Recorder you want.
- 2. Click **Options**. The Options dialog box appears.
- 3. Change the options, as needed.

The selected options apply whenever you use DirectCD on this computer.

The serious opinions upply whenever you use 2 needed on this computer.			
Setting	Description		
Show the CD Ready Notification	Select this option if you want the CD Ready dialog box to notify you that the CD is ready. This tells you that the CD is ready for direct read and write access when you insert a CD formatted by DirectCD into your CD-Recorder.		
Show the Ejected CD Notification	Select this option if you want the CD Ejected dialog box to notify you each time you eject a CD using DirectCD.		
Show Icon in	Select this option if you want the DirectCD icon to appear in the		

Setting	Description
Taskbar	Windows taskbar. Double-click or right-click the icon to access DirectCD's functions. This option is off by default on Dell systems.
CD-R Eject Options	For more information, see Ejecting a CD-R Disc and Comparing the CD-R Eject Options.
Always Leave As Is	Select this option if you want DirectCD to automatically leave the CD as it is so that it can be read and written through drive letter access in the future when you click Eject. Only computers with CD-R or CD-RW drives can read the CD.
Always Show Eject Options Dialog Box	Select this option if you want DirectCD to automatically display the Eject Options dialog box when you click Eject, letting you select the eject option you want to use each time.
Always Close	
Close to UDF v.1.5	Select this option if you want DirectCD to automatically close the CD to the UDF v.1.5 format when you click Eject. The CD can then be read on most CD-ROM drives after installing the UDF Reader.
Close to Read on Any Computer	Select this option if you want DirectCD to automatically close the CD to the ISO 9660 standard when you click Eject. The CD can then be read automatically in most standard CD-ROM drives under Windows.

- 4. Change the Options Available for Drive [letter], as needed. These options apply only to the CD-Recorder you selected on the DirectCD main window.
 - Label: Type a new name to identify your CD or keep the same name. The CD label can be up to 11 characters. You cannot use the following characters in a label: \/:; *?" <> | +=., [].

NOTE: You should be sure that the CDs you are using are rated for the speed of the drive. You do not normally need to change the read or write speeds.

- **Read Speed:** Displays the current read speed of the drive. You may want to change the read speed to be closer to your write speed if you are writing a lot of data to the CD. Refer to the Online Help for additional information about changing the read speed.
- Write Speed: Displays the current write speed of the drive. You may want to change the write speed to match the speed rating of the CD. If you make a CD and then cannot read it in the same drive, try lowering the write speed and writing the data again. Refer to the Online Help for additional information about changing the write speed.

5. Click OK.