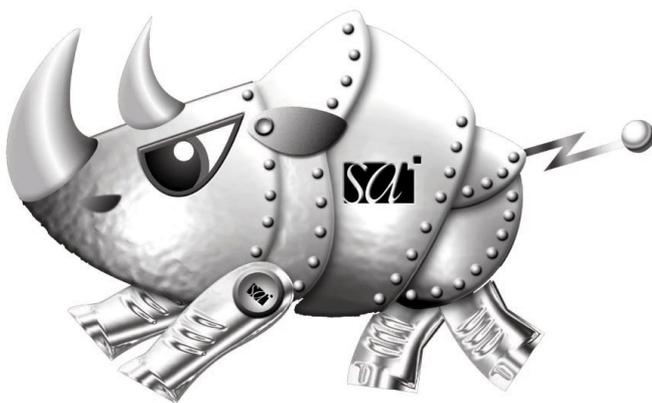




WriteCD-RW![™]

Version 3.0

Drag and Drop Utility for MS Windows[™]
(“Mt. Rainier” Compliant)



User's Guide

for

*Windows[®] 98/98SE/Me, Windows NT[®] 4.0,
& Windows[®] 2000 versions*

Copyright © 2001 Software Architects, Inc. (SAI) and its licensors. All rights reserved. The Software Architects, Inc. logo and WriteCD-RW! are trademarks of Software Architects, Inc. All other product names are trademarks or registered trademarks of their respective holders.

WriteCD-RW!™ User's Guide

SOFTWARE ARCHITECTS, INC. (SAI)
19102 NORTH CREEK PARKWAY, SUITE 101
BOTHELL, WASHINGTON 98011-8005
USA
PHONE (425) 487-0122
FAX (425) 487-0467

Email: support@softarch.com
Web site: <http://www.softarch.com/>

V3.0WCDRW121501

Table of Contents

INTRODUCTION	4
CONVENTIONS USED IN THIS MANUAL	5
SYSTEM REQUIREMENTS.....	6
INSTALLING WRITECD-RW!	7
USING WRITECD-RW!	10
DISC “DE-ICING” (FORMATTING).....	13
TROUBLESHOOTING	14
Frequently Asked Questions	14
Common Problems and How to Solve Them	16
GLOSSARY OF TECHNICAL TERMS	18

WriteCD-RW![™]

Version 3.0

Drag and Drop Utility for CD-RW Drives (including “Mt. Rainier”-compliant drives) for Windows[®] 98/98SE/Me, Windows[®] NT 4.0 and Windows[®] 2000

INTRODUCTION

WriteCD-RW! is a CD-RW drag and drop file utility, useful for anyone who would like to have more external disk storage. WriteCD-RW! can be used with conventional drives, as well as with the new “Mt. Rainier” CD-RW drives. The Mt. Rainier-compliant CD-MRW drives are manufactured especially for reliability and background formatting to make them easy to use. Unlike conventional CD-RW drives, Mt. Rainier-compliant CD-MRW drives also support defect management. This means that when the program tries to write to a sector on the disc which turns out to be a “bad” sector, that sector will be hidden and spare sectors will be used instead.

With WriteCD-RW!, you can take any CD-RW disc and turn it into reliable extra storage space for your Windows machine. WriteCD-RW! allows CD-RW discs to be used as if they were large floppy disks, providing up to 500 megabytes of storage space. WriteCD-RW! allows you to drag and drop files, using MS Windows Explorer[™], to the CD-RW disc. You can then perform functions just as you would with any other type of removable media.

The drag and drop file system created by WriteCD-RW! is compliant with the Optical Storage Technology Association (OSTA) UDF 1.02 standard for Mt. Rainier CD-MRW drives, the UDF 1.5 standard for conventional drives and the Mt. Rainier 1.1 specification. Discs given UDF formats with WriteCD-RW! are read-compatible with Windows Me, Windows 2000 and Windows XP UDF readers.

CONVENTIONS USED IN THIS MANUAL

This document makes use of several conventions, as follows:

- The program name always appears as WriteCD-RW!.
- Items in **bold** type represent actual menu commands or dialogue box choices.
- References to other sections of this document or to other documents appear in *italics*.
- “Disc,” “volume” and “media” are interchangeable and are used to describe a method of data storage used in a drive.
- The Note icon, shown below, is meant to draw your attention to particular important points, to make sure you don’t miss the information.



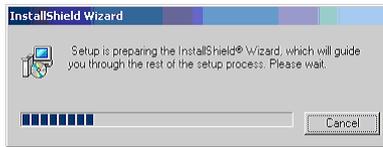
SYSTEM REQUIREMENTS

In order to run WriteCD-RW!, you will need the following minimum system configuration:

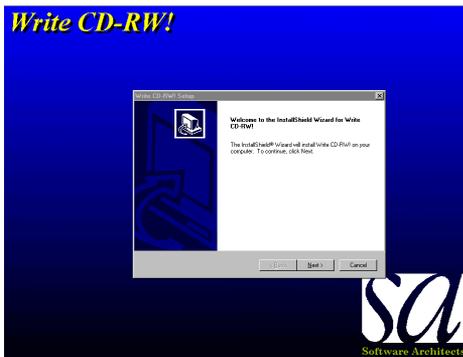
- Windows 98/98 SE/ Me on a Pentium with 32MB RAM; Windows NT4.0 (SP 4 or later) / 2000 on a Pentium 150 with 64MB RAM
- An installed CD-RW drive, conventional or Mt. Rainier-compliant (CD-MRW).

INSTALLING WRITECD-RW!

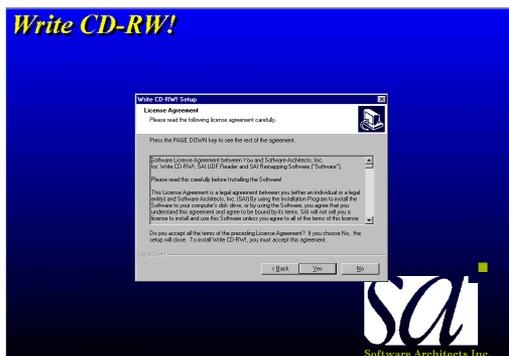
To install WriteCD-RW!, insert the program CD-ROM in the appropriate drive and run SETUP. The following InstallShield screens, one of the WriteCD-RW! logo and the other a progress bar, will appear:



When the progress bar finishes, your screen will look like this:



Click on **Next** and the license agreement screen will appear, as shown in the following example.



Please read the terms of the software license and disclaimer of warranty and determine whether or not you want to continue with the installation of WriteCD-RW!. If you do not agree to the terms of the license agreement, click **No** and return the product and its original package to the place of purchase for a refund.

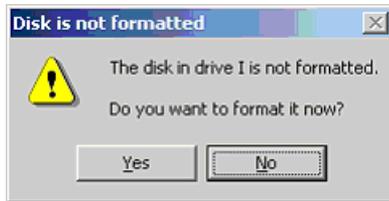
If you wish to continue, click the **Yes** button. The “Choose Destination Location” screen, shown below, will appear. You can let the program be installed to the default folder listed, or you can choose another location for it.



If you choose a folder other than the default, the next screen to appear will be titled “Select Program Folder.”

USING WRITECD-RW!

The CD-RW drive which you will be formatting with the WriteCD-RW! program will appear in your “My Computer” list of drives. Once you have installed the program and restarted your system, insert a new blank CD-RW disc into that drive. The following blank disc notification dialog box will appear.



You must click the **Yes** box on this screen to proceed.



Note: If you choose **No**, you will be unable to go any further because a disc must be formatted to be usable by the WriteCD-RW! program.

A format dialog box will appear, as shown below. Two headers at the top of the box are shown; the CD-MRW screen shows up in the case of Mt. Rainier-compliant drives and the other appears if you have a conventional drive.



Since the CD-RW you are working with is new, under “Format Type” you must choose the **Full** option. This

will be the only active choice. (If you were working with a previously formatted disc, you could choose the **Quick (erase)** option.)

After selecting a format type for the disc, in the “Other Options” part of the dialog box give the disc a title. This name can contain up to 11 characters. (If you use more than 11 characters, the program will automatically truncate it.)

If you want to create a bootable CD, which can be used to boot your computer into DOS, you can check the box beside **Create bootable CD**.

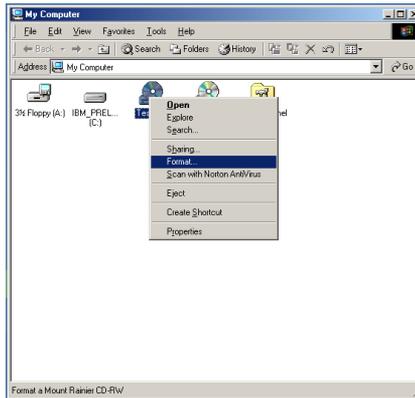
In the upper right corner of the Format window, click **Start**. This will initialize the CD-RW disc and start the format process.



Note: Once you have performed the above actions on a new CD-RW, if you try to format it again you will notice that the active “Format Type” has changed from **Full** to **Quick**. This signifies that a UDF directory has been already applied to the disc.

If you have a Mt. Rainer-compliant drive, you will be able to begin using the disc within less than a minute. (See following section about *De-Icing*). With a conventional drive, you will need to wait until formatting has been completed. Then you can write to the CD-RW by copying files or dragging and dropping files onto it (using Explorer within “My Computer” on your screen). You can read the disc and write to it just as if it were any other hard drive containing 500 megabytes of storage.

If you want to use a previously formatted disc, once you have installed WriteCD-RW! and restarted your system, and the drive name appears in your “My Computer” list of drives, insert the disc into the drive. Then click the right mouse button to bring up the menu, as shown in the example below.



Choose **Format** from this menu and the format dialog box shown in the second example above will appear. Since the disc is already formatted, choose the **Quick** option as the format type.

DISC “DE-ICING” (FORMATTING)

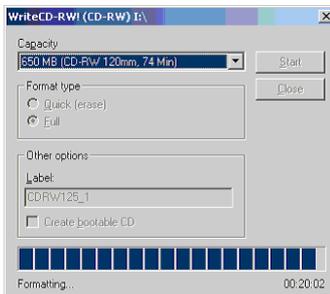
With Mt. Rainier-compliant CD-MRW drives, once you have formatted a disc in the manner described above, you can begin using the disc in less than a minute, even though preparation of all sectors on the disc is still taking place. This preparation is called “de-icing.” If you eject the disc before this process is complete, a screen will appear telling you that a track is being completed. When you use a disc which has been only partially “de-iced” again, the Mt. Rainier drive will automatically resume the de-icing process as necessary.



Note: If you look at a disc that is partially de-iced, you can see an actual physical difference between the “before” and “after” sectors.



Note: With conventional drives, you will be unable to use the disc until the formatting process has been completed. A progress bar will remain on your screen, with the scroll of the bar showing you how much formatting has been completed and the numbers below it telling you how much time has elapsed. You should expect formatting to take at least 20 minutes.



TROUBLESHOOTING

The WriteCD-RW! application is designed to provide you with the ability to obtain extra storage on UDF-formatted media. As with any kind of software program, however, you may occasionally have questions about its use. If you experience difficulties, perhaps you can find the answer to your question in this section, which addresses some typical types of user problems in the subsections *Frequently Asked Questions* and *Some Common Problems and How to Solve Them*.

You can obtain answers to your other questions about this product by filling out the tech support form you will find on the Software Architects, Inc. website (<http://www.softarch.com> — click on the **Support** selection at the top of the page).



Note: To be eligible for complimentary technical support, you must register your product. If you have not done so already, please complete the registration as directed on your WriteCD-RW! installation CD.

Frequently Asked Questions

Q. “What does UDF mean?”

A. UDF stands for Universal Disk Format, a standard data format for disks that ensures compatibility with devices throughout the world. This format is based on an internationally recognized standard developed by the Optical Storage Technology Association (OSTA).

Q. “What is a volume?”

A. **Volume** refers to the logical structure of directories and files as they are laid out on a disc. A disc can contain one or more volumes. The words “volume,” “media” and “disc” (or disk) are sometimes used interchangeably.

Q. “What versions of a UDF volume will this program work on?”

A. The Mt. Rainier CD specification requires the use of UDF revision 1.02. The WriteCD-RW! formatter initializes discs with a UDF 1.02 format only to satisfy this restriction. On conventional drives, the WriteCD-RW! formatter initializes discs with UDF format 1.50. The UDF file system engine is capable of reading and writing discs formatted with UDF versions 1.0 through 2.01.

Q. “What other formats besides UDF might I find on a disk?”

A. Some common formats include: FAT 16 and FAT 32 (File Allocation Table, either 16 or 32 bit), NTFS (Windows NT File System), HFS and HFS+ (Hierarchical File Systems used on Mac disks) CDFS (ISO 9660, the file format used on CD-ROM disks) and various UNIX file systems.

Q. “What is the difference between a ‘Full’ and a ‘Quick’ format?”

A. A **Quick** format writes a new logical UDF file system directory to the disc, which ignores preexisting data and therefore can be performed quickly. But the data will then be inaccessible, so for the purposes of you, the user, it is wiped out. A **Full** format means that preexisting data will be literally wiped out and then new physical and logical UDF formats will be applied to the disc.

Q: “Will Mt. Rainier allow me to use other file systems besides UDF?”

A: No. Mt. Rainier only allows for formatting in the UDF file system.

Q: “Can I read a Mt. Rainier - formatted disc using an ordinary CD-RW drive?”

A: *No.* But you can obtain a software utility from Software Architects that will allow you to read a Mt. Rainier - formatted disc using a legacy drive (this means any older CD-ROM, CD-R or CD-RW drive that does not contain the Mt. Rainier feature).

Some Common Problems and How to Solve Them

Q. “When I insert a disc, nothing happens.”

A1: *Improper cabling or termination.* Good cabling and termination determines whether or not your hardware will work consistently. Twisted or improperly seated cables can cause problems, as can incorrect termination. Make sure power to each drive is turned on before starting the computer.

A2: *Possible ATAPI master/slave conflict.* If you have more than one drive on an ATAPI cable, check to make sure that you have no more than one master and one slave.

A3: *Device must be supported.* Make sure that the device is supported by WriteCD-RW!. You can find a list of supported devices on the Software Architects web site at [http:// www.softarch.com/](http://www.softarch.com/)

A4. *The disc is the wrong speed for your drive.* Make sure you use discs rated for the speed of the drive you have. For example, use only 4x discs with drives that have a CD-RW write speed of 4x.

Q. “It seems like I can’t use CD-R discs with WriteCD-RW!!”

A. *That’s correct.* The current version of WriteCD-RW! can only write to CD-RW media. Therefore, the discs you use with the program must be intended specifically for CD-RW.

Q: “I titled my disc ‘numbersevendisc’ but it does not show up labeled with that name. Why?”

A: *The title is longer than 11 characters.* The WriteCD-RW! program allows for a maximum of 11 characters for a disc label. If you use a title with more characters than that, the name will be automatically shortened by the program.

GLOSSARY OF TECHNICAL TERMS

CDFS – compact disk file system (another name for ISO 9660, the file format used on CD-ROM disks).

CD-ROM – compact disk read-only memory.

CD-RW – compact disk, rewritable.

Disc – a flat, circular data storage medium (also spelled ‘disk’) which contains logical structures of directories and files. See also “volume” and “media.”

DVD – Digital Versatile Disk.

DVD-ROM – Digital Versatile Disk Read-only Memory.

FAT 16 – 16 bit File Allocation Table. A file format used by various Windows operating systems.

FAT 32 – 32 bit File Allocation Table. A file format used by various Windows operating systems.

ISO 9660 – an international standard number for the file format used on CD-ROM disks.

Log File – a listing of errors and comments, generated by a program.

Media – the physical matter that stores data for logical structures of directories and files. See also “volume” and “disk.”

Mt. Rainier-compliant disc drives – Different from conventional drives, these CD-RW drive support devices are manufactured especially for reliability and background formatting to make them easy to use.

NTFS – Windows NT File System.

OSTA – Optical Storage Technology Association, the consortium of manufacturers which controls the specifications for UDF devices.

Space Bitmap – a mapping used on a UDF disk to store information about which space is in use and which is free.

UDF – Universal Disk Format, a standard data format for DVD and other media that ensures compatibility and interchange for devices on different operating systems. This format is based on an internationally recognized standard developed by the Optical Storage Technology Association (see OSTA).

UNIX – a widely ported operating system available on many hardware platforms.

Volume – the logical structures of directories and files as they are laid out on the disk. A disk can contain one or more volumes. See also “disk” and “media.”

Windows NT – a Microsoft operating system used mainly on servers with multiple users.

Software Architects, Inc. Technical Support:

Hours: Monday to Friday, 9:00 a.m. to 5:00 p.m.
(Pacific Standard Time)

Phone: 425-487-0122

Fax: 425-487-0467

Email: support@softarch.com

Web site: <http://www.softarch.com/>