



# GRDuw 3.1x

**GRDuw for ©Windows 95: The fast & easy way to duplicate and format your disks.**

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This help file is small as the program is simple to use.

However, if something is not clear or you have questions, please don't hesitate to contact me. See [Contact Information](#) for my mailing addresses.

Many thanks to my wife, Michela, and our sons, Fabio and Ilaria for their patience and encouragement.

Many thanks to Kauppi Asko, John Christian, Ted Tatman, Ken L. Walker and David Guerreiro for their review and suggestions.

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# User Guide

## User Guide.

When you run the shareware version of the program, the **About** dialog box will appear showing the program version and the author's name, from here you can quickly register the program. Clicking the **OK** button will start the GRDuw program.

The program uses a property sheet dialog box interface. Click on the Tab you want an explanation for:



The **Drive** combo box that appears in the upper right corner of the dialog box (except for the Options and System options) allows the user to select the logical drive to work with. The drive selection is the same for each dialog box except for the DupDisk option that only allows the selection of removable drives.

## Installing GRDuw.

Decompress or unzip the archive file to a directory of your choice and run the setup.exe program. This program will copy all the necessary files and will register GRDuw on your system. The setup program allows you to add a desktop icon, and list the program in the "Start Menu" or the "Start Menu\Programs" menu. It also registers itself in the Windows Control Panel to allow a quick and complete Removal.

## Removing GRDuw.

From the "Control Panel" - "Add/Remove Programs" you can quickly and completely remove the program from your system.

# DupDisk

**This options allows you to duplicate disks.**

Select a drive from the **Drive** box in the upper right corner.

In this dialog box there are four groups:

- Source
- Destination
- Memory Image
- Image

The first time you select this option, only the **Read Disk** and the **View disk** buttons in the Source group and the **Load File Image** button in the Image group are active.

Before continuing, load the program memory with a disk image. You have two choices:

1. Press the **Read Disk** button to read a disk. If you haven't put a disk in the drive, the program will ask for it and warn you if the source disk isn't write protected. Write protection will prevent mixing source and destination disks by accident. While reading the disk, a Progress Bar will appear indicating the percentage of disk already read. (See below for saving the image file).
2. Press the **Load Disk Image** button to read a disk image from any drive. The Open file select dialog allows you to view the file image comment that you assigned when you saved it. This same comment is also shown above the **Load Disk Image** button when you have loaded the image file.

If the **Skip empty tracks** option is checked this can save some time, the program will only read the disk tracks that contains data and skip the others.

Before reading the disk you can inspect it by pressing the **View Disk** button. If the disk is formatted and readable, a new dialog box will appear showing you the disk contents. This dialog box also shows you how many bytes the disk can hold and how many bytes are free. When the memory has been loaded with a disk image, the **Memory Image** group will display the volume label, the serial number and the disk media in order to identify the selected disk image.

When one of the previous operations 1. and/or 2. have been completed, the remaining three buttons will become active and you can perform any of the following:

- Press the **Compare** button to compare the current memory image against another disk.
- Press the **Write Disk** button to write the current memory image o another disk. Selecting **Verify after Write** takes a little more time but assures that the data are correctly written. If the program determines that the disk isn't formatted it will automatically format it. If the **Always format before write** option is selected the destination disk will be formatted even if it is already formatted.
- Press the **Save File Image** button to save the current memory image to an image file for later use. The first time you press this button, you must enter a proper file name to

save the file. If you enter a file name that ends with a number, the subsequent saves automatically set the file name with the number incremented. You may also assign a file image comment that will allow you to quickly identify and select an image file for loadin. You may save image files in various formats (GRDuw .dim is the default).

The Last operation Result text always shows you the result of the last operation.

# Format

**This option allows you to format disks.**

Select a drive from the **Drive** combo box in the upper right corner.

In this dialog box there are three groups:

- Media
- Mode
- Format

## Media.

Select a disk media type, or you can select the **Auto** option to leave the choice to GRDw.

The listed media are the standard 720KB (3½), 1.2MB (5¼) and 1.44MB (3½) formats, plus two additional nonstandard formats; the 1.72MB (3½) and the 1.68MB (3½) formats.

The 1.72MB media is recognized by Windows 95, but NOT by DOS or Windows 3.x. Windows 95 however, will not format 1.72MB but will read and write to this type of disk media. In the distribution package there is the Grdptadj.sys, MS-DOS driver that enables any DOS or Windows 3.x version to read/write to 1.72MB or 1.68MB disks.

The 1.68MB media is the format used by Microsoft to distribute its software packages. This format is identified as 1.68MB or MSDMF. The number of sectors for MSDMF is equal to the 1.72MB format; the difference is, MSDMF format only allows 16 files or directories on the disk root, while the 1.72MB, has two more tracks on the disk surface, and allows a root directory equal to that of a 1.44MB format.

To be more compatible with some systems the check box "**Format in compatibility mode (slower)**" should be active. When this option is checked the format procedure will be slower for the 1.68MB and 1.72MB formats. Activate this option only if you have problems with these formats. The first time you format 1.68MB or 1.72MB a warning message will notify you of this possible compatibility problem. There is a check box in the dialog box that allows you to disable this message.

When you select a fixed drive all the media options will become inactive and the selected option is **Auto**.

## Mode.

The available modes are:

- **Standard:** the classic MS-DOS format (interleave 1 and skew 0).
- **Optimized:** to have the best interleave and skew factor in order to speed up the read/write operations on the disk.

## Format.

You can select a **Full** format or a **Quick** format.

The **Full** format performs a low level creation of the disk tracks by tracks regenerating the

sector synchs and other low level signals.

**Quick** format only rewrites the system area to free up all the disk space.

The advantage of **Quick** format is speed, while the **Full** format is slower but safer.

### **Other options.**

You have the option to verify that the format procedure was successful. To enable verify, check the **Verify After Format** box. When the program has completed formatting the disk, it automatically starts a verification procedure. During disk verify, the program will mark as BAD any tracks that cannot be read, but creates a safe usable diskette. This operation takes some additional time but is recommended to avoid problems when you copy data to the disk.

### **Volume Label.**

You may automatically assign a volume label during format of the disk by typing a string into the **Volume Label** box (before starting the format process). Leave the **Volume Label** box empty if you don't want the disk to have a label. Press the **Change Volume Label** button for a dialog box that allows you to edit the selected drive Volume Label. Enter a new label and press the **Change** button in this dialog box to write the new label to the disk. If the disk is write protected or isn't properly inserted into the drive (for example a floppy disk) you will get a message that the program is unable to write the volume label to the disk. Correct the problem and press the **Change** button again. Press **Cancel** to exit, and the volume label will not be changed. When the volume label is changed, it will be written into the **Volume Label** box.

If you enter a string into the **Volume Label** box and press the **Change Volume Label** button, this string is ignored, the program will read the volume label from the current selected drive.

Press the **Start Format** button to begin the format procedure with all selected options. At the end of the operation if the **Enable automatic report display** option is enabled (see Options) a dialog box will show the format results.

The Last operation Result text always shows the result of the last operation.

# Repair

**This option allows you to repair disks.**

Select a drive from the **Drive** combo box in the upper right corner.

There are three groups in this dialog box:

- On boot sector error
- On sys area error
- On data area error

This dialog box allows you to try a disk repair procedure when you discover disk errors.

Selecting the **Stop** option on all 3 groups only checks the disk and advise if any errors are found; modification or repair action is taken.

## **On Boot Sector Error.**

In this group you may select **Write a New Boot** option to regenerate the boot sector, or the **Stop** option to only check for errors. With the **Write a New Boot** option, a new standard boot sector will be written to the disk if there are errors in the current boot sector.

This option is useful if you suspect, or have a virus in the boot sector.

## **On Sys Area Error.**

There are 3 options in this group. The **Try to Format** option tries to format the track in error. This is the only valid option you have when trying to recover a disk damaged in the system area. The **Run ScandiskW** option runs Windows Scandisk for analysis and repair. The **Stop** option will only check the disk and advise if any errors are found; no modification or repair action is taken.

## **On Data Area Error.**

This area has the best possibility of repair success.

There are 4 options in this group:

- Try to Format (with data restore)
- Mark Track BAD (with data move)
- Mark Cylinder BAD (with data move)
- Stop (This option, will only warn you and stop the procedure.)

### **Try to Format (with data restore).**

This option reads the track(s) with the error(s) trying to read all the sectors with errors, it then tries to re-format the bad track(s). If the format succeeds, the program writes back the data it was able to read, otherwise it terminates.

### **Mark Track BAD (with data move).**



This option reads the clusters with errors (as many clusters that fit on a track) and moves them to a safe free disk data area. The program then marks these clusters as BAD so that the file system will never use them.

### **Mark Cylinder BAD (with data move).**

This option is similar to the previous option except that it works with a disk cylinder instead of a disk track. A cylinder is a track for all the heads i.e., it's a data area greater than the previous one. This option is useful on hard drives when a complete disk area is damaged, it's safer not to use any part of the damaged area but mark it all unusable.

### **Start.**

Press the **Start** button to begin the repair procedure.

When the repair procedure has been completed, the **Report ...** button will become active. This button opens a dialog box which details the repair process steps and their results. While in this dialog box you can press the **Save ...** button to save the report to a text file. The report dialog box is automatically shown if the option **Enable automatic report display** is active (see [Options](#)).

The Last operation Result text always shows the result of the last operation.

# Boot

**This option allows you to repair a disk's boot sector.**

Select a drive from the **Drive** combo box in the upper right corner.

Press the **Check** button to determine if the boot sector is damaged or infected by a virus. This operation will read and evaluate the boot sector. The check data are shown in the **Results** box and shows damage (if any) found.

Some boot sector test results are not vital for a disk to work correctly, each item shown in the **Results** box is prefixed with:

- **WARNING** : if the test result does not stop the disk from working properly.
- **ERROR** : if the test result is vital for the disk to work properly.

Press the **Recreate** button to write a safe boot sector. This operation will not destroy your data on the disk but only recreates a safe boot sector.

# Info

**This option allows you to collect technical information about disks.**

Select a drive from the **Drive** combo box in the upper right corner.

Press the **Get Info** button for information on the selected drive. The information is shown in the **Drive Media Information** box. You can scroll the information in the **Drive Media Information** box by pressing the up/down keys or clicking with the mouse on the scrollbars.

Information shown in the **Drive Media Information** box:

- program version and time date stamp
- selected drive
- volume label of the selected drive
- media type
- boot OEM string that identifies which program formatted the media
- physical drive device (type of the drive)
- media type (standard or double space compressed)
- FAT type (FAT 12, FAT 16, FAT 32).
- total number of sectors
- disk size
- free disk space

and the more advanced user will find also:

- the logical disk layout
- the physical disk layout

The **Save ...** button becomes active when there is information in the **Drive Media Information** box. This button will save the **Drive Media Information** box contents to an ASCII text file.

# Options

**This option allows you to customize and set the GRDuw program options.**

## **Define Sounds.**

You may define a sound that the program will use to signal that the requested operation (Job) is completed, or that an error has occurred.

The two buttons **End ...** and **Error ...** allow you to select a wave file that will be played when the task is completed or there is an error. The name or path of the selected sounds are shown in the define sounds edit box. The **Play** buttons check the selected sound. The program initially selects two windows standard sounds for these events , you can type the path to a different .wav sound file or a standard windows sound name to change these sounds. Delete the entries in the define sounds edit boxes if you don't want any sound be played.

## **Show tool tips.**

This option enable(s)/disable(s) the tool tips messages.

## **Enable hard disk drives.**

This option enables hard drive(s) access.

**WARNING:** Use this option with caution (you can format your hard drive), the default is disable (NOT selected). If you have problems with your hard drives you can enable it and try to repair the problem. When you are finished it is recommended and safer to UN-CHECK this option (OFF).

## **Bring GRDuw on top after an operation.**

This option allows you to perform other tasks while your disk is being duplicated, repaired, or formatted by GRDuw. When the operation is complete, the GRDuw window will becomes the topmost and alert you that it's work is completed. Pay attention, if you use the keyboard when the GRDuw window is topmost all keystrokes will be accepted by GRDuw.

## **Enable multiple disk write and format.**

This option is useful when making multiple copies from a disk or image. With this option checked you will be alerted by the program **End ...** sound that the current disk is complete. Remove the finished disk from the drive, insert another disk and wait for the next **End ...** sound event. When all copies are made, click on the **Finish** button.

The same also applies when formatting multiple disks, this option can speed up the format process. Simply remove the formatted disk after the program end sound and insert the next disk to be for formatted. When you have finished formatting press **Finish BEFORE** removing the last formatted disk.

## **Hide SUBST drive letters.**

This option will skip the drive letters created with the SUBST command line utility. This utility maps a drive letter to an existing path name.

The only limitation of this option is: if you have two physical hard drives with the same volume label or no volume label, then the second hard drive is incorrectly interpreted as SUBST. This error is because the Win32 environment doesn't support SUBST drives which has been inserted by Microsoft on Windows 95 for compatibility with Windows 3.1.

#### **Enable boot check before read and write.**

This option will enable the boot consistency check every time it reads or writes to a disk. This can be useful when duplicating a non MS-DOS fully compliant disk. Disable this option if you want to avoid the annoying messages about not in full compliance.

#### **Enable automatic report display.**

This option will automatically generate a dialog box with the results after a format, or repair operation. This box will detail what problems, if any, where found.

#### **Language.**

This option allows the user to select the language preference. See [Language Translations](#) for more details.

# System

**This option display information about your system.**

Displayed information:

- Installed hardware devices
- Windows version
- BIOS version, date and Manufacturer
- Memory usage
- Memory total, and free space

This information is useful to check how Windows has analyzed and configured your system, and to report any problems with this product.

When you select this option the information is automatically displayed. Scroll the information by clicking on the scrollbars. Save it to an ASCII text file by pressing the Save ... button. The saved report may be viewed with almost any text viewer, and e-mailed either as embedded text into a message or as an attached file.

# Progress

The progress dialog box allows you to see how program is proceeding.

**First Text line.**

Shows the disk media type.

**Second Text line.**

Shows the various other tasks that GRDuw is doing.

**Third text line.**

Shows the elapsed time since the current operation started.

The right animated icon rotates while the disk is running.

The colored bar, with the percentage of execution inside, lets you visually check how much work has been done. This bar is colored in different manners based upon the current operation. This allows you to take a quick look to see what the program is doing. The color key is as follows:

<b>Operation</b>	<b>Bar color</b>	<b>Text color</b>
Formatting	red	white
Verifying/comparing	green	black
reading	cyan	black
repairing/writing	blue	white

The **Abort** button will stop the current operation. When you press it, the text inside it changes in **Wait...** This alerts you that the program has registered your command, but must synchronize with the disk activity in order to execute it. When the synchronization is done, this dialog disappears and you are returned to the previous main dialog box.

When the **Enable multiple disk Format and Write** option is on and the current disk operation is completed the **Abort** button changes to **Terminate** so it is more obvious that by pressing it you will terminate the multiple operation.

# What's new

Here are the new **GRDuw Version 3.1** features:

- Lower license price: regular \$29.00US, special time limited offer \$25.00US.
- A setup program added, to make GRDuw more professional.
- Full support to format/duplicate/repair any removable hard disk.
- New language translations: French, Spanish, Catalan, Serbian and Portuguese.
- Format and Repair report dialog may now be shown automatically at the end of the operation.
- New System dialog box to list your system hardware devices other than Windows and BIOS version.
- Command line options added which allows you duplicate disks in batch.
- Enhanced the low-level code to make the program more compatible with any PC.
- Minor bug fixes.

The major addition to this version is full support to format, duplicate and repair the emerging removable hard disks (Iomega ZIP, JAZ, Syquest EZFlyer and many others) the only constrain is that you have sufficient fixed disk space to hold the removable disk image. These new devices will soon replace floppy disks, and GRDuw offers ease of use and better performance utilities than those distributed by the removable HD manufacturers.

Language translations for French, Spanish, Catalan, Serbian and Portuguese were added to meet growing International users.

A new added option allows you to automatically display a report dialog after a format or repair operation. This dialog describes if there were errors and where. Another useful option for batch users is the addition of some Command line options that allow disk duplication without user intervention.

A new System dialog box has been added which shows your system devices, as well as the Windows version, the BIOS version and date, the memory usage, and the total and free disk space. This option is useful (in case of problems) to compile a detailed report of your system.

As usual, also this version has few minor bug fixes.

## What's Next.

We are working to make GRDuw run with the Windows NT Operating System.

We plan to update the Repair feature to make it work on FAT32 disks.

The "make disk bootable" option will be added to the Format dialog.



# Command line options

Usage:

GRDuw [Options] imagefile.dim

## [Options]

**/Wx:** write to drive x:  
**/S0** write all disk tracks  
**/S1** skip empty tracks  
**/F0** do not format before write  
**/F1** always format before write  
**/V0** do not verify after write  
**/V1** verify after write  
**/B0** do not check the boot  
**/B1** enable boot check  
**/C0** disable the format compatibility mode  
**/C1** enable the format compatibility mode (slower)  
**/Q** quit after the operation is complete  
**/M** runs minimized  
**/O** overwrite destination disk if not empty  
**/H** display this help page  
**/?** display this help page

If none of the preceding options is specified the currently selected program options will be applied (those that are shown running the program normally).

At the program exit the following return codes are available through the ERRORLEVEL variable:

0	Operation success
1	Operation aborted
2	Operation failed

# What is GRDuw ?

GRDuw is a 32-bit disk utility for Windows 95.

## What functions does it perform?

The following functions can be performed:

- Format disks (supported media are: 720KB, 1.44MB, 1.2MB, 1.68MB and 1.72MB. The 1.68MB media corresponds to the Microsoft Distribution Media Format (DMF).
- Format hard drives fixed and removable (Iomega Zip/Jaz etc.).
- Format in read/write access speed optimized mode, or in standard MS-DOS mode.
- Duplicate disks on a single drive in two passes: read source disk and write destination disk. You have the option to skip empty tracks and save read time. You can also view the disk contents before to reading.
- Save the disk bit map image to a file on your hard drive for later use. You can also assign a comment to the file image for easy identification before loading it.
- Retrieve the disk bit map image from a file and write it to a disk.
- Compare one disk to another.
- Check disk boot sector for viruses and, if necessary, create a new safe boot sector.
- Repair disk.
- Get technical disk information; logical and physical layouts.
- Get information about your Computer system's installed devices.
- Multiple language support. Some language translations are already available and others are to come.

GRDuw for Windows 95 enhances the Windows Explorer function for formatting and/or duplicating disks. To evaluate the power of GRDuw, consider:

- Time it takes to duplicate/format a disk from the explorer vs GRDuw.
- The explorer cannot format/duplicate a DMF (1.68MB) diskette.

## Why use GRDuw?

GRDuw offers many advantages over similar utilities and is much better than the standard Windows 95 explorer capabilities.

- GRDuw has an intuitive and easy interface.
- GRDuw can format a disk in an optimized layout that speeds up the read/write process.
- GRDuw can format and duplicate your removable hard disks.
- GRDuw supports the nonstandard software distribution formats.
- GRDuw can duplicate disks faster.
- GRDuw can repair either floppy disks or hard drives.

## GRDuw Limitations.

- The program only functions under Windows 95/98, it will not run under other operating systems.
- A Windows NT version **IS NOT** currently available.
- The program was tested using standard 1.44MB floppy drives. The 2.88MB drive and the LS-120 drives have never been tested. Beta testers are welcome.



# Version History

## December 1997 : Version 3.1.

This version is a minor update that corrects some problems on the first 3.0x releases.

- Enhancement: to support the LS-120 drives the 1.44Mb and 720Kb media has been enabled when you select a removable drive. The 1.68Mb and 1.72Mb media cannot be formatted with these drives as the BIOS level is not available for them.
- Enhancement: the setup procedure has been improved to completely clean up your system when uninstall is performed.
- Bug Fix: corrected an error when formatting a removable drive.
- Bug Fix: the Boot check procedure was occasionally showing boot errors for no apparent reason.
- Bug Fix: the setup program has been fixed, in some systems it was showing the dialog box and causing a fatal error.
- Bug Fix: The setup program was unable to install the program from the root directory of a disk ( from the root of a floppy disk).
- Bug Fix: Pressing the Register Now button the register program ran but the register window was hidden under the about dialog box window and was unavailable, the exit buttons X's in the top right corner of these windows did not work and the program seemed to be locked.
- Bug Fix: The disk compare procedure fails with some types of media (on the first cylinder). The problem was related to the Windows 95 volume tracking behavior.
- Bug Fix: The setup program (version 1.02 or less) erroneously searched for the file GRSoftware.url that was renamed as Home.url to meet the 8.3 name convention.
- Bug Fix: The tool tips were not showing when this option was enabled. This error was caused by a buggy compiler update.
- Bug Fix: The repair procedure failed if used for a hard disk.
- Bug Fix: When formatting virgin disks (disk never formatted before) as 1.44Mb the program did not recognize the disk in the drive, and the full format option had problems when writing to the disk.

## November 1997 : Version 3.00.

See [What's new](#) for the version 3.0x news.

## May 1997 : Version 2.60.

- Added the option **Enable boot check before read and write** (see [Options](#) ).
- German language support was added.
- Bug fixes.

## March 1997 : Version 2.20.

- Killed any registered user "only" option. This version is now fully functional and has no differences with the registered version.
- Better compatibility on all Windows 95 installations.
- Multiple language support ( English, Italian, Danish, Sweden, Chinese ). See [Language Translations](#) for more details.
- Added support to format removable hard disks (as for example Iomega Zip/Jaz or similar).

- Added on the DupDisk dialog the "Skip empty tracks" option to cut the read and write times on disks with available free space.
- Added on the DupDisk dialog the "Always format before write" option to be sure to write a freshly formatted disk.
- You can now assign a comment to any image file you save. In this way you can easily select an image file, when you want to load it, as these comments can be previewed from the "Load File" dialog.
- Added a button into the DupDisk dialog that allows viewing the disk contents before to read it. This eases the search of the disk you want to duplicate without leaving the program.
- The format procedure has been speeded up about 20% in Standard mode (MS-DOS like). This is especially useful for removable hard disks.
- Added in the Format dialog the "Format Gap Test" button to best tune the non standard 1.72Mb and 1.68Mb (MS-DMF) media.
- Added a report facility to the Repair procedure.
- Better track details has been added into the progress dialog when reading, writing, comparing and formatting.
- The program safe boot sector has been made compliant with Windows 95 (previous version was adherent to MS-DOS 6.2).
- Fixed a bug while calculating the elapsed time into the progress dialog.
- The "Verify after write" option on the DupDisk dialog is now executed at the end of the whole disk write instead of during it. This strategy saves time.
- Minor BUG fixes and dialog text refinements

#### **December 1996 : Version 2.00.**

- Added support for 1.2Mb 5 ¼ drives.
- Modified drive combo box to show the floppy drive type instead of the simple FLOPPY string. This allows a better distinction between removable drives.
- Relaxed the boot sector checks when loading an image file. This allows disks with boot sectors not fully compliant to be loaded as image file.
- Added to the Info dialog box a line that shows the FAT type (FAT 12, FAT 16 or FAT 32).
- Added the option to hide SUBST drive letters from the drive combo box. Previous versions had this option always on by default.
- Added the Language option. This allows future versions to support more languages. Now only English (U.S.) and Italian languages are supported.
- Modified the shareware program version. It does not stop the program from running after the 30 days trial period but only shows you how many days you are evaluating the program. You are on your honor to stop using this program if you are not a registered user.
- Few little bug fixes.

#### **November 1996 : Version 1.92.**

- Fixed a bug into the shareware expiration time calculation that prevents shareware version 1.91 of the program from running after November 4, 1996.
- Expanded the payment methods to allow an easier and automated registration of the program (see How to Register ).

#### **October 1996 : Version 1.91.**

- Integrated more tightly into the Explorer shell automatically adding ".dim" extension support.
- Added an Options property sheet to select the following program options:
  - Show tool tips.

### **For registered users only:**

- Programmable sounds.
- Enable hard drives to avoid unsafe operations.
- Bring GRDuw topmost after completing an operation.
- Enable multiple disk write and format.
- Added the free space display to the Info property sheet.
- Added an animated icon to the Progress dialog.
- Moved the "Change Volume Label" button from the Info property sheet to the Format property sheet.
- Changed the color of the progress bar, as follows:
  - While formatting : red bar with white text.
  - While verifying/comparing: green bar with black text.
  - While repairing/writing: blue bar with white text.
  - While reading: cyan bar with black text.
- The title of the progress bar was changed in order to show the volume label of the current disk.
- Added the About button to the main dialog to allow easier access to the program information dialog.
- Deleted a useless test during the compare disk procedure that warned the user that the disk is not write protected. If a user selects the compare function after having completed a disk write, it is obvious that the disk is not write protected.
- The Progress dialog size was reduced.
- Added text to the DupDisk, Format and Repair boxes that explains whether the "Last operation Result" was completed successfully.
- After a disk has been read by the DupDisk box, the "Write Disk" button is activated and the source disk can be duplicated by simply pressing the return key after inserting a blank disk. The "Enable multiple disk Format and Write" option on the Options dialog box allows (for registered users only) to write multiple copy of the same source disk without pressing any keys: only removing the written disk and inserting a blank one.

### **August 1996 : Version 1.82.**

- Added a help file instead of a manual.txt file.
- Easy activation of the registered user version by means of the grduw.key file. Using the GRDuw.key file, the registered users can update their current version by simply downloading the latest shareware version.
- Added a starting parameter so that it is possible to create a GRDuw desktop link icon. An image file can be dropped on the icon and loaded automatically. It's also possible to associate GRDuw and the .dim extension so that double clicking on a .dim file will execute GRDuw with the specified image file loaded. See Frequently Asked Questions for details.
- Corrected a bug with handling SUBSTed disk drives.
- Added a minimize box so that it is possible to minimize the progress and main dialogs. The task bar shows the percentage of the operation as the main dialog title.
- Fixed a bug when duplicating a disk when the destination disk is not formatted.
- Allows the read of a disk file image that is not the exact same size as the disk media. The current image file loading procedure checks the first 512 bytes of the file to determine if this file piece is part of a boot sector. If you load an image file smaller then the original disk size, the unread data are random.
- Minor dialog text refinements.

### **June 1996: Version 1.71**

- Added the volume label to the drive list box in order to better identify the correct disk

drive.

- The image file format was changed in order to accept a pure binary disk image.
- Tool tips has been added to the dialog boxes as a simple help guide.
- In the DupDisk dialog box, a "Verify after write" check box has been added to verify the disk write procedure.
- Minor dialogs styling.
- Minor bug fixes.

#### **April 1996: Version 1.51**

- This was the first release of this program.

# Language Translations

This product is mostly distributed in English (U.S.). Other language translations are however available:

<b>Language</b>	<b>Corresponding archive file name</b>
English (U.S.)	GRDuw318.zip
Italian	GRDita31.zip
Chinese	GRDchi31.zip
Danish	GRDdan31.zip
Sweden	GRDswe31.zip
German	GRDger31.zip
Spanish	GRDspa31.zip
Catalan	GRDspc31.zip
Portuguese	GRDpor31.zip
Serbian	GRDser31.zip
French	GRDfra31.zip
Polish	GRDpol31.zip
Russian	GRDrus31.zip
Slovak	GRDslo31.zip
Dutch	GRDdut31.zip

All these packages are available for download from the following Internet site:

<http://www.grsoftware.net/xxx.zip>

The xxx.zip must be replaced with any of the preceding archive file names.

A language development KIT is available for users that are interested in translating GRDuw into another language.

Program, Language translation kit:

[http://www.grsoftware.net/grduw\\_rc.zip](http://www.grsoftware.net/grduw_rc.zip)

Help file, Language translation kit:

[http://www.grsoftware.net/grduw\\_rtf.zip](http://www.grsoftware.net/grduw_rtf.zip)



Please contact the author for more details before starting any translation: [Contact Information](#) .



# Frequently Asked Questions

**Q: Does GRDuw run under Windows NT?**

**A:** No, it currently works only in Windows 95 . A Windows NT version will be released in the near future.

**Q: Does GRDuw support 2.88MB disk drives?**

**A:** No, support for this kind of drive may be added in a future release.

**Q: Is the disk image a binary copy of the disk?**

**A:** Yes, the content of the disk image is a one-to-one binary image copy of the disk contents.

**Q: Why is a 1.72MB disk listed by the Windows 95 Explorer as 1.66MB?**

**A:** Click your desktop's "My Computer" icon. Next click the right button on the floppy icon and then select the "Properties" menu option. A property sheet will appear. Under the "General" Tab, the detailed disk information will be displayed. The "Capacity" row will show you two numbers: the first is 1,745,408 bytes, while the second is 1.66MB. The first number is the EXACT disk capacity, while the second is the approximate disk capacity. The explorer calculates the exact capacity as follows:

$$1,664550781 * 1024 * 1024 = 1745408.$$

(Similar differences occur for all floppy disk formats)  
A kilobyte is 1024 bytes, not 1000 bytes.

**Q: How I can associate a .dim (disk image) extension to GRDuw.exe?**

**A:** GRDuw does this automatically.

**Q: How I can create a desktop icon to drop my .dim files on?**

**A:** Click the right mouse button on the desktop. Select the "New" option and then the "Shortcut" option. The "Create Shortcut" Wizard will appear. Press the "Browse..." button and locate the GRDuw.exe file; press the "Open" button. Press the "Next" button and the "Finish" button. The GRDuw icon will now be displayed on the desktop where the .dim (disk image) files can be dropped. Starting from version 3.00 the included setup.exe program will do all these operations for you. Starting with version 3.00 the setup.exe program will do these operations for you.

**Q: Can I use the explorer while GRDuw is writing/formatting a disk?**

**A:** In theory, the answer is yes. However, some users have reported a system hang. As GRDuw uses the standard Win32 programming interface the cause of this problem is not presently known. What is known is that similar utilities to GRDuw also cause the same problem.

**Q: Why is it, on my system after formatting a 1.68MB or a 1.72MB disk I cannot write to it?**

**A:** Some users have experienced this problem after formatting not standard disks where they cannot write to them. The problem in most cases is the disk drive not properly aligned or dirty, usually dust. These formats require all the disk drive capabilities so the drive needs to be properly aligned and clean. In other cases the problem can be an old (or a too new) BIOS ROM version. In a few cases the cause is not yet known. Please contact the program author if you experience these problems for a personal diagnosis.



# How to Register

## Why register?

Registering this software provides these advantages:

- Qualifies you for technical support, notification of upgrades, maintenance releases and information about new products. You will be added to our E-Mail list and alerted when major new releases become available.
- The license agreement (see [License/Copyright](#)) allows the use of registered software both at your home and at your workplace. This guarantees that you are NOT in violation of International Copyright laws!
- With your registration you support the development of updates and you may help to refine the program with your suggestions.

## What do you get after you register?

To convert your shareware product into a registered version one you need a license (or registration) key file. This text file will contain your personal data, it MUST NOT be changed or modified in any way otherwise the program will revert back to a shareware version. After you have registered this product you will receive a personal license key file that enables you to use the product. It is very important that you complete all areas of the order form with your personal data, otherwise the license key file can not be properly prepared.

## How to register.

You are guaranteed that your License fee will only be accepted after your key license file has been delivered to you (via e-mail or snail mail)!

**IMPORTANT: I recommend that you register the program ONLY after you have fully tested it on your system. Remember that (except for the nag screens) the shareware version works exactly like the registered version.**

In order to register, you must complete the form that appears by running the [register.exe](#) application that accompanies the software package. To run this register application, press the **Register Now** button on the **About GRDw ...** dialog box that appear when you run the shareware version.

From within the [register.exe](#) program, perform the following steps:

### **STEP 1: Enter all the required information.**

Complete the "Register To:", the "Email" address and the "Postal Address" fields and, and any comments about this product (they are welcome).

### **STEP 2: Select the type of software license you require.**

Specify the "Quantity" and the "License" type you require.

You have the option to request a disk with the latest registered version to be mailed to you (if you don't specify this option you will only receive your personal registration key file).

f required, be sure to check the "Paper Receipt" check box .

Here are the available License types:

**Single user license**, gives you the right to you to use the program at your home and at your workplace.

**Site license**, gives you the right to use the program within a single organization for an area of up to 100 miles (160 kilometers) in radius.

**Worldwide license**, give you the right to use the program within a single organization worldwide.

### ***STEP 3: Select the method of payment.***

You have several options: cash to the author (with a 10% discount), check or money order, VISA, Master Card, American Express, Discovery, Dinners Club, First Virtual and Invoice.

### ***STEP 4: Send the form.***

If you have an e-mail connection, you can send the form directly to the "Kagi" shareware registration service. Otherwise, you can print the form and surface mail it to the address specified in the lower right hand corner of the dialog box.

After you have sent the form to Kagi for processing, you will be sent an E-mail or surface mail note from "Kagi" confirming receipt of your application and payment. You will also get E-mail or surface mail from the "Author" with your personal copy of the **GRDuw.key** file (based on your personal registration data). This key file must be placed in the same directory containing the program executable (.exe) file. [GRDUW.EXE]



### **IMPORTANT NOTE:**

If you want or need any more information about the program, please contact the author only (see [Contact Information](#) ). Please, be sure to include all the required data in the registration form, so that we may format your personal registration key file for GRDuw!

# Update/Support

## Updates.

For registered users, until further notice, all updates are free, provided that you get the latest version of the software from an electronic archive.

**The important thing to remember, if you are a registered user, is to keep your personal GRDuw.key license file.** So make a backup copy and place it in a safe place.

## Where is the latest Shareware version?

If you do not have access to a modem, if requested we will mail you a disk with the latest available version when we receive your registration form and license fee.

Otherwise check the following home page on the World Wide Web:

<http://www.grsoftware.net>

## Reporting Bugs.

If you find a bug in the program, Please report it to one of the addresses listed in the documentation, and provide the following information:

- An exact description of the bug and how it can be reproduced.
- The report generated by the program in the System dialog.
- Fatal errors: The error address and the contents of the error box displayed by Windows.

## Support.

If you have problems please read Frequently Asked Questions first for a possible solution.



If you still have questions or bug reports, you can reach us at the addresses listed in Contact Information .

# Software License/Copyright

## Software License.

**IMPORTANT - READ CAREFULLY:** By installing and using this Software Product, you agree to be bound by the terms of this Software License. If you do not agree with the terms of this user license, remove the product from your machine.

## Shareware Version.

You have a right to test this program for a period of **one month**.

Use of this product after the trial period of one month is in **violation of International Copyright law!** It is also unfair to the author, who has spent hundreds of hours developing it.

You are permitted to copy the Shareware Version, and **ONLY** the Shareware Version, and give it to any other person, as long as it is not modified in any way. Modification is understood to mean changing, adding or removing any files in this package without the author's written permission.

## Registration.

This program is neither freeware nor public domain. Use after the 30-day trial period requires registration. This program is not sold but is licensed for personal/site/worldwide use. See [How to Register](#) for details on registration.

## Registered version (Personal license).

The registered version may be installed on a maximum of two computers, so long as it is **ONLY** running on one system at any time: i.e. one installation at home and one installation at the workplace and used by the licensee. Simultaneous use of this product by multiple personnel requires additional licenses.

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### **Liability.**

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Please evaluate this program with non-critical data only. We cannot guarantee the safety of your data. Should you detect errors before registration, a description of the software errors will be accepted and evaluated, however we cannot guarantee that the errors can be corrected. the user accepts the program errors after registration.

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The author's legal domicile is Torino, Italy.

# Distribution



The distribution of outdated versions of this package without written permission of the author is prohibited. If the software version you have is over twelve (12) months old, please contact the author, see [Contact Information](#), to confirm that you have the most current version.

## Reseller Program.

Please email to us to request our reseller agreement if you want to become an Independent Agent for this product.

## Vendor information.

The Shareware version of this program may be copied and given to anyone so long as it is not modified in any way. Modification is understood to mean the changing, adding or removing of any files of this package without the written permission of the author.

Small additions to the package, such as introductory comments or an installation batch file used by many shareware disk vendors are permitted and authorized.

This program MAY NOT be packaged with any commercial program or book without a written permission of the author.

A distribution fee may be charged to cover the cost of the disk, shipping and handling. The distribution fee, per disk, may not exceed \$8.00 (US) in the U.S. and Canada, or \$12.00 (US) internationally.

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The author will appreciate copies of any articles written about this software. Please forward copies of any reviews, articles, catalog descriptions, or other information regarding this package.

Thank you for your time and assistance in supporting the shareware marketing concept.





**Internet e-mail:**

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Ing. Roberto Grassi.

I'm a software developer since 1978 (BASIC language) when I received my first degree in Electronics. Then I started working and studying to become an Electronic Engineer in 1985. I have been writing programs in 'C' since 1990 and in 'C++' since 1994.

am currently writing embedded applications in C/C++ language, and develop (what I hope are useful) Windows utilities that are being marketed via the shareware concept.

***Please contact me if you need a software consultant and/or if you would like to discuss a business proposition.***

# Other Programs

## **GRBack**

**GRBack** is a 32-bit program used for backing up your drive's data. **GRBack** works with both Windows 95 and Windows NT. **GRBack** is a backup utility designed to backup one drive's data to another drive (either fixed, network or removable). The program recreates the source's exact directories structure and, for each directory, it creates a PKZIP compatible archive with long file name support.

**GRBack** is fully customizable to include or exclude files, or skip whole directories by modifying simple \$backup.??? text files which are located in the source directory.

**GRBack** is fully integrated with Microsoft's System Agent that comes with the Microsoft Plus! for Windows 95, it automatically inserts a task into the task list so the user may initiate a backup at each system start.

**GRBack** has an easy and intuitive user interface.

Surf the following World Wide Web page and download it :

[\*\*http://www.grsoftware.net\*\*](http://www.grsoftware.net)

A professional version of GRBack is now available and it is named GRBackPro.

# The Shareware Principle

Shareware distribution gives users a chance to try software before buying it. If you try a Shareware program and continue using it after a reasonable and specified evaluation period, you are expected to register. This product, for example, requires that you register after a 30 days trial period. With registration you get anything, from the simple right to continue using the software to an updated program with printed manual. A licensed version of this product includes the permanent right to use the product for an unlimited time. The licensed version also disables the register instructions reminder.

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Shareware is a distribution method, not a type of software. You should find software that suits your needs and pocketbook, whether it's commercial or Shareware. The Shareware system makes fitting your needs easier, because you can try before you buy. And because the overhead is low, prices are low also. Shareware has the ultimate money-back guarantee -- if you don't use the product, you don't pay for it.



