

ReadRDB

COLLABORATORS

	<i>TITLE :</i> ReadRDB		
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WRITTEN BY		July 26, 2024	

REVISION HISTORY

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Chapter 1

ReadRDB

1.1 ReadRDB 0.5 ©1995-96 Gérard Cornu - Guide summary

ReadRDB 0.5 - Guide Summary - (30-Jan-96)

by Gérard Cornu

Copyright
Distribution
Requirements
Introduction
Installation
Using ReadRDB
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1.2 ReadRDB copyright and other boring stuff

ReadRDB - version 0.4 27-Jan-96

©1995-96 Gérard Cornu - Compiled with SAS/C ® 6.56

ReadRDB, as well as all the accompanying files, is ©1995-96 Gérard Cornu.

ReadRDB is heavily based on the source file Readrsk.c .

1.3 NO warranty for ReadRDB

NO WARRANTY
~~~~~

There is no warranty for this software package. Although the author has tried to prevent errors, he can't guarantee that the software package described in this document is 100% reliable. You are therefore using this material at your own risk. The author cannot be made responsible for any damage which is caused by using this software package.

## 1.4 ReadRDB distribution

### DISTRIBUTION

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This software package is freely distributable. It may be put on any media which is used for the distribution of free software, like Public Domain disk collections, CDROMs, FTP servers or bulletin board systems.

In order to ensure the integrity of this software package, distributors should use the complete original distribution. The author cannot be made responsible if this software has become unusable due to modifications of the distribution contents or of the distribution files themselves. There is no limit on the costs of the distribution, e.g. for the media, like floppy disks, streamer tapes or compact disks, or the process of duplicating. Such limits have been proven to be harmful to the idea of freely distributable software, e.g. instead of reducing the price of the floppy disk below the limit, the software was simply removed from the master disk.

Although the author does not impose any limit on the distribution of this software, he would like to express his personal opinions on this matter:

- * This software package should be made available to everyone free of charge whenever it is possible.
- * If you have acquired this software package under normal conditions from a Public Domain dealer on a floppy disk at a price higher than 25FF or US \$5, then you have definitely paid too much. Please don't support this improper profit making any longer and switch to a cheaper source as soon as possible.

Alan Pfeil is certainly allowed to include it in the I.C.P.U.G. Amiga library.

Fred Fish is obviously allowed to include it on one of his CDROM.

Thierry Colin is authorised to include it in the D.P.A.T. collection.

1.5 Fred FISH and the AmigaLibDisk library

FRED FISH and the AmigaLibDisk Library:

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As Fred has been releasing CDROMs from a while now, just choose carefully your Fish CDs retailers, if you don't buy them directly from Fred. Those resellers aren't supposed to make money with them.

## 1.6 Usage restrictions for ReadRDB

### USAGE RESTRICTIONS

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No program, document, data file or source code from this software neither in whole nor in part, may be used on any machine which is used

- * for the research, development, construction, testing or production of weapons or other military applications. This also includes any machine which is used in the education for any of the above mentioned purposes.
- * by people who accept, support or use violence against other people, e.g. citizens from foreign countries.

1.7 ReadRDB requirements

REQUIREMENTS

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ReadRDB needs at least System 2.04 to run, and has been developed and tested with KS 39.106 and WB 40.42. It should work with higher versions as well.

Due to the very nature of this little utility, one or several hard disk(s) using the Commodore Rigid Disk Block specification, are of course required ;-)

## 1.8 Installing ReadRDB

### Installing ReadRDB:

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Just double-click on the Install icon of your choice. This suppose that you have Installer somewhere in your command path.

You prefer a hand made installation? OK, (me too ;-), just copy ReadRDB in a directory on your command path.

1.9 Introduction to ReadRDB

INTRODUCTION

~~~~~

ReadRDB allows you to save the RDB of your hard disk to a file, for backup purpose, and then, to copy the saved RDB back to your hard disk.

A good thing to do, if you want to be on the safe side, is to save the RDB of each of your hard disks to one or more floppies, along with a copy of ReadRDB. You may be thankful to yourself one day for having done it. (I have, several times, already!).

A rogue program, or a wrong manipulation while using HDToolBox or other such hard disk utility, may corrupt or destroy your RDB. If that happen and you don't have a backup of your RDB, the only way to get back the use of your hard disk is to re-install it.

Please read this little warning .

## 1.10 Warning!

### WARNING:

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BE VERY CAREFUL WHEN YOU USE THE "WRITE" OPTION OF READRDB, DUE TO ITS VERY NATURE, WHICH IS TO OVERWRITE AN RDB WITH A SAVED ONE IN A FILE, YOU MAY RENDER ANY HD UNUSABLE BY AMIGADOS. THIS CAN HAPPEN IF FOR EXAMPLE YOU WRITE BACK THE RDB FROM A GIVEN HARD DISK TO ANOTHER HARD DISK. A WAY TO AVOID THIS KIND OF EVENT, IS TO NAME YOUR SAVED RDBS WITH THE BRAND NAME AND MODEL OF THE ORIGINAL HARD DISK.

Don't let yourself be put off by this warning, if you use ReadRDB correctly you shouldn't have any problem. You may be thankful to it the day you'll be able to restore a saved RDB over a corrupted one. I have had to do it a few times, and I am much thankful to Randell Jesup who wrote Readrsk.c .

1.11 Readrsk.c

"Readrsk.c" is a little C source which I found on Usenet a while ago, (in January 1991!).

ReadRDB is heavily based on this source. I have added ReadArgs support, several more checks, and simplified its command line interface. The original allowed to set the length and start offset of the RDB to save (or write).

The author of Readrsk.c is Randell Jesup, who was the Keeper of AmigaDos, at Commodore Engineering. (and is also a Jack-of-quite-a-few-trades ;-)

1.12 Rigid Disk Block

RDB:

~~~

The RDB, or Rigid Disk Block, is a Commodore specification that defines blocks of data on a hard disk to describe that disk. These blocks are created and modified with installation utilities such as HDToolBox, and they are read and used by the device driver ROM or expansion code.

These blocks contain information about the drive, such as number and size of blocks, tracks, cylinders, bad block list, partitions data, file system and drive initialisation.

They are not generally accessible to the user as they do not appear on any DOS device.

For a more complete description of the RDB and other hardblocks, see the RKRM libraries, 3rd edition (ISBN 0-201-56774-1), pages 769-776. (Or pages 538-545 for the second edition of RKRM Libraries & Devices).

## 1.13 Using ReadRDB

Using ReadRDB

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ReadRDB is a Shell only utility.

Template

Examples

Extra info

1.14 The template for ReadRDB

The template is as follow:

D=DEVICE/K,U=UNIT/K/N,WRITE/S,FILE,H=HELP/S,FORCE/S

Only for those who don't usually read their manuals ;-):

/K means that the keyword must be given with the argument.

/N the argument is numeric.

/S the argument work as a switch.

= the equals sign means that 2 different forms of the keyword are equivalent, and either will be accepted.

The first argument, D or DEVICE, must be followed by your scsi device name. This argument is optional, the default device is "scsi.device".

The second argument, U or UNIT, must be followed by the unit number of the device. This argument is also optional, the default unit is "6".

The third argument, `WRITE`, should only be used if you want to write a saved RDB back to your hard disk. This argument is an optional switch. The default action is to read the RDB and save it to a file. Please read this little warning .

The 4th argument, `FILE`, must be followed by the name of the file that will contain the RDB , if option `WRITE` is not specified, or by the name of the file containing the RDB to write back to the hard disk if option `WRITE` was specified. This argument is optional if the `WRITE` option is not specified and in this case the default file name is `"T:RDB"`. On the other hand, if option `WRITE` is specified, the argument `FILE` is mandatory, as a safety measure.

The 5th argument, `H` or `HELP`, will give you some help about the usage of `ReadRDB`.

The last argument, `FORCE` (new from version 0.4) allow the reading and writing of non standard RDBs, those not having `"RDSK"` as their first 4 bytes.

1.15 How do I know which unit my HD is?

If you don't know the unit number for your SCSI hard disk(s), just run `HDToolBox` and once the window is opened you will see the following:

```

Hard Drives in System

Interface  Address  LUN  ...
SCSI       x
           ^
           |

```

The unit number is displayed here, in the Addresses column.

If you used another utility to install your hard disk(s), it should have a similar layout, or at least tell you the address of your installed hard disks.

1.16 Examples

Examples:

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Assuming your hard disk uses a scsi device named `"foo_scsi.device"` and is addressed as unit `"0"`:

If you wish to save the RDB of this hard disk to a file named `"DF1:RDBs/Barracuda"`, the syntax will be:

```
ReadRDB DEVICE=foo_scsi.device UNIT=0 FILE=DF1:RDBs/Barracuda
```

If you now wish to overwrite this hard disk's RDB with the saved file:

```
ReadRDB DEVICE=foo_scsi.device UNIT=0 WRITE FILE=DF1:RDBs/Barracuda
```

## 1.17 Extra info

ReadRDB also displays some information contained in the RDB .

The first part concerns the so called 'physical layout' of the drive. It must be understood that this layout is not the real physical layout, but an equivalent arrangement made by the installation software to be used by the driver. For example it might say 1 for the number of heads, but the drive may in fact have 4 heads. This is done to simplify the layout used by the device driver. But the total size, which is equal to:

$$(\text{cylinders} * \text{sectors} * \text{heads}) * \text{bytesperblock}$$

will correspond to the actual size of the drive.

Then ReadRDB will tell you if reselection is enabled or disabled. Some drivers don't support reselection properly. So if you have problems with more than one hard disk connected to the same SCSI controller, you may try to turn reselection off on ALL of your SCSI drives. You may do it with Prod\_Prep and the accompanying scripts which are usually supplied on the Workbench Install disk. This can be useful while you are waiting for the new ROM driver that you just ordered ;-)

To finish ReadRDB will check if the following rdb\_Flags are set: RDBFF\_LAST, RDBFF\_LASTLUN, RDBFF\_LASTTID and RDBFF\_SYNCH.

Those flags are defined in the Commodore include file "devices/hardblocks.h" as follow:

|               |                                                                                |
|---------------|--------------------------------------------------------------------------------|
| RDBFF_LAST    | no disks exist to be configured after this one on this controller              |
| RDBFF_LASTLUN | no LUNs exist to be configured greater than this one at this SCSI Target ID    |
| RDBFF_LASTTID | no Target IDs exist to be configured greater than this one on this SCSI bus    |
| RDBFF_SYNCH   | drive supports scsi synchronous mode<br>CAN BE DANGEROUS TO USE IF IT DOESN'T! |

## 1.18 ReadRDB author

Send any suggestion, bug report, compliment ;-), DARK chocolate (BLACK, containing at least 69% cocoa!), Bergerac Affiné tobacco, freely distributable software, 4 GB hard disks (not more than 4 GB in size, otherwise ReadRDB will give a wrong size (ULONG) ;-), A3 48 bits colour scanners, CDROM drives and CDROM disks, tape streamers, brand new AMIGA 8000 with 256 bits RISC CPU, etc..., etc...

OR JUST A POST CARD, to:

Gérard CORNU  
11 avenue Edouard Aynard  
69130 ECULLY

FRANCE. (WPC)

Email: gerard@ariane.univ-lyon2.fr

Have plenty of nice days! ... me too!

Translations ...

## 1.19 W.P.C.

World People Community ;-)

## 1.20 Translations ...

I can translate commercial software's documentations or hardware manuals, in fact anything technical, from English (or American!) to French, and vice versa.

I have a very good knowledge and experience of the Amiga and of computing in general.

Send your proposition to:

Gérard Cornu  
11, Avenue Edouard Aynard  
69130 Écully  
(France)

Email: gerard@ariane.univ-lyon2.fr

## 1.21 D.P.A.T.

D.P.A.T  
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French PD library, Domaine Public Amiga Toulouse.
Started and managed by Thierry Colin at AmigaNews .

1.22 ICPUG

I.C.P.U.G
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ICPUG is the one and only Independent Commodore Products Users Group.  
ICPUG is a non-profit making voluntary group run by its members for  
its members.

To become a member of this brilliant club contact:

Jonathan Cooley  
ICPUG Membership secretary  
10 Willson Road,  
EGHAM, Surrey,  
TW20 0QB

ENGLAND.

## 1.23 ReadRDB's author would like to thank...

(in alphabetical order...)

|                                               |                                                                                                                                                                                                |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Amiga                                         | For being the best platform to 'work' on. And still alive in spite of some sad facts.                                                                                                          |
| AmigaNews                                     | The first French Amiga magazine edited and published on an Amiga.                                                                                                                              |
| Bernard Kubler                                | For the delicious chocolates.                                                                                                                                                                  |
| Christian Marz                                | For sending the Aminet 4 CDROM, for the Mod lists and much more.                                                                                                                               |
| Commodore-Amiga's Software and Hardware Teams | For improving it.                                                                                                                                                                              |
| Fred Fish                                     | For the much helpful AmigaLibDisk library .                                                                                                                                                    |
| G rard Cornu ;-)                              | For the excellent french translations of all ReadRDB documents ;-) ;-) ;-) .                                                                                                                   |
| I.C.P.U.G.                                    | For all the nice guys and gals making it!                                                                                                                                                      |
| Jen Allen                                     | For the chocolate bars, and everything else.                                                                                                                                                   |
| J r me Chesnot                                | For showing me his nice country in the Pyr n es and for making me discover 'Parapente' through Pierre Nicolas and Ariane.<br>For all the support and much much more. J r me pushed me to<br>to |



- 0.1 First release
- 0.2 Fixed bug that made it impossible under OS 39.x to write back an RDB. Sorry all :-(
- 0.3 Private version, not publicly released.
- 0.4 Added FORCE switch, to allow reading and writing of non standard RDBs (those not having RDSK as their first 4 bytes). Suggested by Roman Patzner. Thanks Roman.
- 0.5 The bug fixed in V0.2 in fact introduced a new one: inability to write back the RDB under AmigaOS 2.x :-( Thanks to "Sheer Panic" for emailing me about it.

## 1.26 Index

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modified and re-formatted by Gérard Cornu ;-)

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