

SID-Searcher ii

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SID-Searcher iii

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Chapter 1

SID-Searcher

1.1 SID-Searcher v1.99g

SID-Searcher v1.99g

bу

Mathias Roslund

```
What is SID-Searcher???

How does it work???

Which formats does it support???

Transfering the SIDs...

Installation...

Usage...

Prefs...

Giftware???

Distribution...

Requirements!!!

Disclaimer!!!

Known bugs!!!

Please help!!!

Development...
```

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History...

Home Page!!!

Things to do...

How to contact me...

People I would like to thank!!!
```

1.2 What is SID-Searcher???

Well, lets take it from the beginning.

A while ago when I got access to Internet I found out that there was a program called PlaySID, for playing SIDs, and since I had quite a collection myself I thought this piece of software would be really helpful to

ME

since I then would be able to use my Amiga (with HD) to both store and play all those gorgious SIDs. But almost as soon as I had unpacked the archive I also found out that I would have to convert all those SIDs to be able to listen to them. Ouch! I just didn't have time to convert more than 500 SIDs by hand so I thought for a while, "-Why not make a program that would play all those songs whitout

MF.

having to convert them first?". And from that moment SID-Searcher was born!

After a while I also noticed that there existed a piece of software for the PC, called SIDPlay, which had it's own format, so therefor SID-Searcher also supports that one!

1.3 How does it work???

The idea is quite simple. Since most of my SID-songs were ripped by me with help of softwares such as AMS (Advanced Music Searcher). I just had a look at them to find out how they were able to recognize the songs. They searches for a specific byte at a specific address (actually four bytes), and so does SID-Searcher. Ofcourse this means that it isn't able to recognize all SID-songs, but atleast all of the one's I've ripped.

But please keep in mind that this way of recognizing SID-songs isn't bullet proof. There is always a risk that it will think that a certain type is actually a different one. This

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might happend when new formats are being produced and doesn't differ as much as they should from older ones! One way to be a little bit more secure that it actually is the right type it have recognized is to just check the infowindow. If it displays crap, something sure is wrong! DONT PUSH PLAY! Or it might crash!

1.4 Transfering the SIDs...

To be able to transfer the SIDs from the C64 to the Amiga I'm currently using Easy1541, with the Easy1541 cable, which can be bought from the author of Easy1541 for only \$10!!!

The cable connects a C1541 C64 diskdrive to the parallell-port of the Amiga. The diskdrive will then act like any other Amiga diskdrive exept the fact that you need to tell the Amiga, by clicking on an icon, when the disk have been changed.

If you like, I can transfer your SIDs for you, if you don't have too many disks (more than 10) with SIDs. I will then send them to you lha/lzx packed with e-mail. If you don't have an e-mail address, please send some Amiga formatted disks DD or HD along with enogh money (NO COINS!!!) to cover the shipping charge!

If you would like to get your C64 disks back, then you will have to send enough money to cover the shipping charge!

And please don't forget to send $_{\rm me}$

a gift along with your disks!

If you can't afford anything else, the disks them selves will do!

1.5 Which formats does it support???

```
Converted:
PSID - onefile
PSID - twofile (icon)
SIDPlay - twofile (*.sid and *.dat)

Standard:
Compute! - (*.mus) WARNING!!!
SID-Searcher ONLY looks for .mus at the end of the filename!!!
```

+ a number of other SID-songs with builtin player. These are the players that the info window will tell you the amount of!

1.6 Usage...

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The main thing to remember is that you MUST NOT remove the two bytes at the beginning of your transferred SID-songs, without them SID-Searcher will not be able to recognize the type of your SIDs.

Since this program is growing all the time, I will quite soon update this guide to cover all the features of SID-Searcher.

Change in v1.99f:

The check file button, not only let's you check converted SIDs, it also let's you check through a memory rip. Just load a memory rip, press the check file button, and follow instructions.

Very important: If your memory rip is saved with for example an Action Replay cartridge, the file will have two bytes at the beginning which gives the startaddress. To make SID-Searcher do it's job, you will therefor have to give startaddress-2, otherwise the two startaddressbytes will be "placed" in the memory location where the first two bytes of the memory-rip is supposed to be! The value which SID-Searcher suggests is just that, the computed startaddress-2!

Note: You will be asked which type of "search mode" you would like to use. Most tunes in demos actally is at \$1000, but a lot of them is also at other \$x000 locations (\$1000=4096), that's why there is a FAST mode. Future composer tunes seems often to be at \$1800, just as well as other tunes can be at \$xy00 locations, (\$100=256), which is the reason for the NORMAL mode. There shouldn't really be any reason to use the DEEP mode since not to many people will reallocate there tunes to such locations, but it's there just in case!

Important: I don't really have much use of this function myself, but since I got a request for it, I decided to implent it. I haven't either spent to much time "bugtesting" it, so please report any strange behavior to

me '

Version 1.99g also adds these functions:

Any unknown SID with the size 65535 will automatically be treated as a RAM-rip with startaddress 0 (zero). It's also possible to continue a search after a SID has been found. Simply press the check file button.

1.7 Prefs...

From v1.99c SID-Searcher preferences are no longer set in a text file since I've added a preferences window!

I hope this will make things a lot easier for both you and me!

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In v1.99e I completely changed the way the prefs file is created, therefor you will have to set your preferences once again. If I ever change the format again, I will supply a prefs updater!

IMPORTANT!!!

As a requester will tell you, you will have to restart SID-Searcher for the changes to take effect. The ONLY exception is if you press the 'Use XPK Settings' button. The reason is quite simple, since the ability to turn XPK saving on/off is quite important.

I recommend you to use the SHRI sub-library, since it produces the smallest files. Ofcourse it also is the slowest, but since the files are very small, even when unpacked, the time it takes to (un)pack a SID is hardly noticeable even on a slow (68000) Amiga.

1.8 Giftware???

 $\,$ Yes! This piece of software is Giftware, which means that if you use it you MUST send

MF.

a gift of some kind.

If you are a ShareWare/Commercial programmer, a Full/Registered version of Your software would be nice!

Otherwise please choose one of the following:

- * C64 Hardware (Memory expansions, Diskdrives, Turbo's, Cartridges, C64's, or anything else you don't use/want anymore!)
- * C64 software (ONLY original software with manuals!)
- * C64 books/magazines (Any you think I deserve!)
- * Some cash (USA Dollars, German mark, Brittish Pounds or Swedish Crowns) NO COINS!!!
- * SIDs (not anything from The High Voltage SID Collection, JCH-Collection, NemeSIDs-Collection or C64musicshow)
- * C64 demo(s), music software or other nice products

Or if you can't afford anything else:

* A postcard

Please send ALL files/programs, except for the SIDs SID-Searcher asks you to send me, on a DISK, NOT by e-mail!

If you have some hardware you don't use, but can't affort the shipping charge, then please write a letter and tell me what you have got, if I'm

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1.9 Distribution...

This product may be copied freely as long as NO changes are made to neither the docs or SID-Searcher it self.

1.10 Requirements!!!

Hardware:

 \star Any Amiga with OS1.3 or later and some RAM.

Software:

- * PlaySID.library copyright © Per Håkan Sundell & Ron Birk
- \star ReqTools.library copyright © Nico François and Magnus Holmgren

XPK-Support requires:

- * Xpkmaster.library copyright © Dirk Stoecker, Christian von Roques, Urban $\,\,\,\,\,\,\,\,\,\,\,\,\,\,\,\,$ Dominik Mueller, ...
 - + Sub-libraries (for example SQSH, SHRI, NUKE)

Note for OS1.3 users:

- \star PlaySID.library requires OS2.x, and therefor you are NOT able to play the found SIDs, but you can save them as PSIDs.
- * K-P Koljonen, the author of HippoPlayer have made some sort of a patch which makes you able to listen to PSIDs with HippoPlayer.
- \star As a conclusion to the above. Convert your SIDs with SID-Searcher and listen to them with HippoPlayer.

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1.11 Disclaimer!!!

Remember! You use this piece of software at your own risk! I can never be held responsible for any sort of damage caused to your software or hardware by the use of this product!

Bugreports and suggestions might be sent to one of my addresses

See also

IMPORTANT!!!

1.12 Development...

This product has been developed totaly by ${\tt ME}$

in AmigaE 3.1i.

To produce the SID-Searcher.dat file I'm currently using AMOSPro v2.0, since it's the easiest way.

Since I'm a student, I just don't have the time to spend several hours a day developing this product, especially when approaching Christmas and summer since I then will have a lot of schoolwork to finish. Therefor please don't write to

ME

and complain about the slow development! Thanks!

SID-Searcher was/is developed using:

vX.XX-v1.12 Amiga1200HD, 020/28, FPU/28, 2+4MB v1.12-v?.?? Amiga1200HD, 030/50, FPU/50, 2+32MB

1.13 Please help!!!

I don't have ANY information about the different types or formats that SID-Searcher supports!!! The only things I know about them is what I have been able to find out by looking at a few different ones!!!

If you do have any information regarding the different file formats, or perhaps you know about another one, then PLEASE let $\ensuremath{\mathsf{PLEASE}}$

ME know!!!

 $\ensuremath{\text{I'm}}$ especially interested in information about the Compute! file format.

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1.14 IMPORTANT!!!

THIS PRODUCT HAS ONLY BEEN TESTED ON MY VERY OWN AMIGA.

I THEREFOR CAN NOT GARANTEE IT WILL WORK ON YOUR SETUP!
IT HAS NOT BEEN TESTED ON LOW MEMORY SYSTEMS AND THEREFOR
I DO NOT KNOW WHAT WILL HAPPEND IF YOU RUN OUT OF MEMORY!
PLEASE SEND

ME

ALL INFORMATION YOU CAN TO HELP

ME

IMPROVE

THIS PRODUCT!

AND ALWAYS REMEMBER! A PROGRAM ONLY GETS AS GOOD AS THE USERS WANT IT TO BE. SO IF YOU DO NOT SUPPORT

ME

, SEND

BUGREPORTS AND SUGGESTIONS, THIS PROGRAM WILL NEVER BE AS GOOD AS IT COULD HAVE!

See also

Disclaimer!!!

1.15 Known bugs!!!

* Caused by me?

None.

* Caused by incompatibilities in PlaySID.library

Since a few types of tunes uses samples and thereby instructions that aren't supported by PlaySID.library some songs can't be played! I don't know which formats it is yet, but I'll try to find out and if it is possible SID-Searcher will automatically replace the old player with a new one, which is rewritten the way you can read about in the docs for PlaySID.

I have also experienced problems with certain types that doesn't use samples. Sometimes you will be able to play a song of a certain type, but another song of the same type might not work! I don't know why yet! Press

here

for a complete list of these "troublemakers"!

I'm do not know much about assembler, but some player seem to use certain registers on the C64, that just aren't beeing emulated by PlaySID.library. I will make you unable to try to play this types, although SID-Searcher will be able to recognize them!

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1.16 Troublemakers!!!

```
* MAD V3.0 - one out of two won't work!

* 20CC X - a lot of these different types won't work!
```

There are several types of which I've found only one tune which won't work. These will NOT be included in this list since it might be just be THAT one which will NOT work!

1.17 Installation...

If you have booted from your HD, then klick the Install icon and SID-Searcher will automatically be installed for you.

Otherwise do the following:

* Copy SID-Searcher.dat to S:

And if you haven't got a prefs file already:

* Copy SID-Searcher.prefs to S:

After the installation you should copy SID-Searcher to whatever location you like, to a floppy, or onto you HD. You may also save this guide for future use.

1.18 Me!!!

Please send gifts, bugreports and suggestions to the following address.

Mathias Roslund Sveav. 2b, nb S-702 14 Örebro SWEDEN

Bugreports, suggestions and short letters might also be sent by e-mail.

e-mail: sidsearcher@hotmail.com

or

e-mail: mathiasroslund@hotmail.com

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1.19 Home Page!!!

```
Yes! Now SID-Searcher has got it's own Home Page!!!

"http://hem2.passagen.se/sids/SID-Searcher/index.html"
```

1.20 Things to do...

```
-Show played time...
-Make SID-Searcher able to play SIDs under OS1.3...
-More preferences...
-Make windows multitask...
-Perhaps a MUI userinterface???
.
.
.
And a lot of other ones I quess...
```

1.21 People I would like to thank!!!

```
People who have given me a gift...

None... Sadly...

People I would like to thank anyway...

Henning Peters - For helping me with the debugging!!!

Jacques Fiset - For sending me some SIDs by e-mail...

Special thanks goes to...

Wouter van Oortmerssen - For helping me with ALL my problems!!!
```

1.22 Old history...

```
961028 -Starting to program in AmigaE for my first time ever!

----- -A lot of small test versions and programs...

961115 -First working version...Lot of bugs(?) and improvements to work with!

961117 -Removed bug, did not close filehandle...

961118 -Completely changed the way SID-Searcher looks...

-Made changes to save memory...

-Now also shows PSID-info...

961121 -Added limited support for Compute! SID-songs, only searches for .mus in the file name, and no info YET!...
```

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```
961125
       -Made SID-Searcher smaller...
961130 -Added support for SIDPlayer files (*.dat and *.sid)...
       -Changed file format support checking procedure (Que?)...
       -Added icon and turned filter off using KFO-program...
961202
       -Added support for PSID icon-format...
       -Shows PSID icon-format-info...
       -Added support for multi-song files...
       -Possible to turn off and on channels...
       -Removed some nasty bugs!...
961203
       -Rearrenged most of the code, is now much easier to change!...
       -Saved some RAM, although the program grew bigger!...
       -Removed bugs, shortened the program, and so on...
961205 -Now shows Compute! SID-sogs info!...
961206 -Worked a lot with the user interface...
       -Removed a few small bugs...
       -Added option to choose PAL/NTSC...
       -I think that v1.00 is almost finished!...
961209 -Removed one nasty bug!...
       -A small improvement...
       -Finally finished v1.00!...
961211 -Completely rewrote everything that had anything to do with the
        SID-Searcher.dat - file. Made SID-Searcher.dat 2 bytes longer,
        saved 986 bytes of AmigaE-code, and 450 bytes of program file...
       -Moved to v1.05 due to the changes...
961212 -Removed a bug, had to add one byte to SID-Searcher.dat to do it...
       -Found a bug a while ago, channel ON/OFF didn't work, fixed...
961218
       -Added a lot of types to the SID-Searcher.dat file...
961225
       -Added button to switch filter ON/OFF, no need for KFO anymore...
       -Removed a few variables, guess I saved some RAM...
       -Moved to v1.06...
961227 -SID-Searcher now supports all 292 types supported by AMS v5.0...
970106 -Removed file-requester bug...
970107 -Removed silly bug, caused problems with short filenames...
       -Moved to v1.07...
       -Changed PAL/NTSC switching, buttons will now change...
       -Made this guide out of a textfile...
       -Removed another silly bug...
970115 -Small improvement, SID-Searcher can now be told NOT to let
        you play certain types...
v1.08
       -970119
       -You can now save found SIDs in PSID-format, although it's slow...
       -Updated and changed a few things, nothing big...
```

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```
v1.09
       -970119
        -Ouch... I found out what caused the problems with showing Compute!
         SID-info... Have spent all day on that!!! I had to make my own C64
         charset emulation, and a lot more!!!
        -970128
        -Improved charset emulation a bit, but there is still much to do! I
         also rearranged some of the code to save some bytes of AmigaE-code...
v1.10
        -970206
        -No major changes... I mainly finished the char-emulation... It
         doesn't support all characters (far from), but some of the most
         used ones... Not much more done really...
        -Uploaded SID-Searcher to Aminet...
        -970210
        -Now resets pausebutton when play is pushed...
        -970213
        -Some more cosmetics concerning info-displaying...
v1.11
        -970310
        -SID-Searcher now uses reqtools.library instead of asl.library and
        thereby supports OS1.3 (NO playing yet)...
        -The saved files became one byte to long, fixed...
        -Some cosmetics...
v1.12
        -970319
        -Speeded up saving a lot, thanks to 'Wouter van Oortmerssen' (E-author)...
        -Added prefs file, only default dir yet...
        -970320
        -Now shows Cumpute! PSIDs real info if other info is missing...
        -Cosmetics, like always...
        -More prefs (window x & y position)...
        -970324
        -Cosmetics...
        -Found out which bit that controlled the filter, you are therefor able
        to set it ON or OFF as default...
        -??????
        -Uploaded SID-Searcher to Aminet...
        -970502
        -Removed bug, jamed the system for a few seconds on 030(+?) machines...
v1.13
        -970516
        -Completely rewrote everything that had anything to do with the
         SID-Searcher.dat - file (again!). Saved 567 bytes on the file and
         made updating a lot easier...
        -970522
        -Added 5 more types, now only one from 300!!!
        -Improved info displaying, now displays the correct letters even if
        the internal info is in POKE-codes...
        -970525
        -Updated the installation script...
        -970526
        -Added 2 more types...
v1.14
        -970611
        -Mainly to announce the SID-Searcher Home Page!!!
```

-Some changes in this guide and in the info that SID-Searcher

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will display at certain times...

1.23 History...

```
Old history (v1.00-v1.14)
                v1.99a -970716
        -It's now possible to enter the PSID info while saving files...
v1.99b -970719
        -Automatically splits one-song PSIDs when loaded...
        -Has gotten a check button for converted SIDs...
        -Can now save either as PSID or Standard...
        -970721
        -Minor change, will not check Standard (incl. Compute!) SIDs...
        -My trafo "broke down". It didn't like me getting an CD-ROM drive,
         even though it was an 20A one!!!
        -970807
        -Finished check and save procedures...
v1.99c -970807
        -Added preferences window, no buttons/options yet...
        -970811
        -Worked a few hours with the preferences window, the layout
         is finished, but only the filter button is working...
        Vacation... No comments...
        -970828
        -Got my self a new HomePage without filetype restrictions!!!
        -970831
        -Finally "finished" the prefs window!!! You are able to set a
         default save path, although it will not work yet...
        -Found a silly bug, I had forgotten a couple of () signs which
         caused unknown SIDs to become Compute! ones... Removed!!!
        -971013
         Optimized the code a bit, tried to remove the "jam the system bug",
         but no luck, as always!!!
v1.99d -971021
        -Finally!!! I managed to remove ALL bugs I had found by the use of
        Enforcer+Mungwall and EFindHit!!! Sometimes it's nice to have a MMU!!!
        -The default save path is now working...
        -971022
        -Updated this guide...
        -971023
        -Worked an hour with updating of the dat-file... Checked some types for
         playability and internal info, must be the most boring one can do!!!
        -971111
        -Removed overwriting when files had long filenames (silly!)...
        -Removed silly "could not load files larger than 32k" bug...
v1.99e -980101
```

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- -Finally got some time over to work with SID-Searcher...
- -Added XPK support (only loading right now, saving might come!!!)...
- -980102
- -Made XPK-support optional (No library installed means No XPK-support) \dots
- -980103
- -Completed the XPK support, now includes saving!!!
- -Changed the preferences window to contain XPK saving ON/OFF and choice of XPK sub-library...
- -A few "bugs" removed, and some minor improvements, I also cleaned up the code a little bit...
- -980104
- -Hopefully removed the stupid bug, which did disappear when I used the SYM and DEBUG directives. I simply had forgotten one TAG_END in one of the "change requester attributes" commands (ReqTools). Enforcer doesn't report any illegal memory accesses anymore!!! This also made the executable more than 10k smaller...
- int. -980114
 - -Removed a VERY silly bug, when filenames were very long SID-Searcher always though the file type was PSID (icon) (don't ask me what stupid thing I had done!)...
- v1.99f -980117
 - -I've implented an experimental "memory rip" search function after getting such a request. It's able to play any tune found (but stop's searching when one is found, NO continue yet!), it also removes the "garbage" in front of the tune. But since it's almost impossible to know the end address of the tune, all the "garbage" after it will be saved when you saves the tune...
 - -Removed silly "cancel button in choose file to save window" didn't work \leftrightarrow bug...
 - -Some small changes as always...
 - -You can now choose a file-length manually when saving RAM-rip songs...
 - -Added three search mode requester (RAM-rip), not fully working...
 - -980118
 - -Finished the search modes...
 - -980118 (a few minutes later)
 - -Major oops!!! Made one VERY stupid thing, which caused "Normal" SID-tunes to get their play and init 2 bytes to high!!! Fixed!!!
 - -980119
 - -As always I forgot to think about one thing, which made the RAM-rip unable to play most found tunes... Fixed!!!
 - -SID-Searcher now suggests a startaddress... Also another improvement which actually should have been there at the first place...
- v1.99g -980122
 - -Unknown SIDs with the length 65535 will automatically be treated as RAM- \hookleftarrow rips,
 - for all other sizes you will have to press the checkbutton manually...
 - -Fixed "bug" in the PSID-split function. If the first two bytes of the SID had been removed before the PSID was created SID-Searcher didn't like the PSID, now the two bytes will automatically be inserted. A requster will \leftarrow tell
 - you what's going on though...
 - -It's now possible to continue a search of a RAM-rip when a SID has been $\,$ found,

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```
simply push the check file button, select mode, and the search will \leftarrow continue automatically. This way you are able to rip ALL SIDs that is in the RAM- \leftarrow rip, NOT only the one with the lowest startaddress!!!
```