SecondSpin

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# Contents

1	Seco	ondSpin 1
	1.1	SecondSpin guide
	1.2	Disclaimer
	1.3	Introduction
	1.4	Requirements
	1.5	Usage
	1.6	Encoder
	1.7	Features
	1.8	Installation
	1.9	History
	1.10	Future
	1.11	Thanks
	1.12	mpeg audio on amiga
	1.13	Known Problems
	1.14	RandomTracks
	1.15	CDDB and SecondSpin
	1.16	Supported (proven to be working) cdrom drives
	1.17	How to obtain the Encoder archive
	1.18	LAME encoder project
	1.19	How can you help me to develop SecondSpin?
	1.20	About SecondSpin

## **Chapter 1**

# SecondSpin

## 1.1 SecondSpin guide

-: -zk SecondSpin :mpeg audio converter(mp1/mp2/mp3) Disclaimer Introduction Requirements Features Usage Installation Obtaining the second archive CDDB and SecondSpin Screengrab Bonus util: RandomTracks SecondSpin encoder MPEG Audio on Amiga info The 'should be done' list How can you help? History Problems / FAQ / Q&A Supported CDROM drives

Thanks

LAME encoder project Author / About SecondSpin : -zuulikuuli / embassy - second.spin@pp.inet.fi (c) 1999-2000

#### 1.2 Disclaimer

DISCLAIMER: No warranty of what-so-ever given. This is just a "simple" program which I made to make my life easier, it isn't meant to work perfectly; it does the job in my machine. I deny all my responsibility if you use this program, you're using this entirely with your own risk.

> Absolutely every legal resposibity are held by the user. The author provides this package to your use if you take all the possible legal responsibilities by yourself.

This is not public domain so you aren't allowed to use any parts from SecondSpin without my written permission. Also, all reverse engineering is prohibited!

If you're an USA citizen, I'd suggest you to leave this alone. Or atleast contact your lawyer and ask for guidance. Either way, you can't sue me, as you've been warned.

It may be distributed freely under the condition that no profit is gained from its distribution, nor from any other program distributed in the same package.

Bear in mind that encoding an cd audio does not make copying legal. Copyrights still apply!

If you like the SecondSpin system, you must send me some feedback and preferably visit my homepages.. it wouldn't mind a small gift, like reg key to your program if you're amiga developer or something else nice.

Using SecondSpin means that you're accepting this disclaimer. If you don't accept this, don't install or use the SecondSpin package.

#### 1.3 Introduction

#### INTRODUCTION:

This is just a program I originally created in hurry as I needed it badly. I decided to make it a bit better so others could use it too. It just wasn't nice to use makecd, mpega, numerous shell applications plus lots of other stuff just to encode a freaking audiocd to mp3s or to transfer them to a cd. So SecondSpin was born.

See

Features for more info...

#### 1.4 Requirements

REQUIREMENTS:

- AmigaOS 3.0 or greater.
- a supported(?) CDDA audio extraction capable cd-rom drive
   & drivers for it if you mean to encode directly from a cd.
- 68020 (FPU heavily recommended), preferably a 68060 or PPC
- Minimum of 640x480 with 2 colors. (\*)
- lots of patience, hdspace and free cpu cycles.
- executive is recommended but not required as mpegencoding is really cpu intensive stuff it might help keeping the system more useable when encoding.
- optionally atleast v1.61 of Pegase installed is c: for Layer 1/2 support
- optionally, the ppc.library and elfloadseg, if you want to use the ppc version of the encoder. ppclibemu should work ok.
- optionally amitcp or miami (online), if you want to fetch cddb information from the www.cddb.com.
- PIPE: device mounted.
- ARexx system up and running.

(\*) SecondSpin defaults to Workbench screen, but you can create a new screen for SecondSpin with Triton-GUI preferences program. 640x256 or similiar resolution just isn't enough for SecondSpins GUI - and no plans to make any smaller has been made.

#### 1.5 Usage

#### Encoding a track

After starting SecondSpin you will see the SecondSpin window. If you have not already done so, insert the Audio CD you wish to convert into your CD Drive. SecondSpin should automatically detect the presence of a suitable CD and list the tracks in it's window, I.E:

The list contains the following information.

o The track no (I.E #001)

o The name of the track (If you have the suitable CDDB file available, or SecondSpin has been able to download the relevent CDDB file from www.cddb.com)

o The track length (HH:MM:SS)

At this stage, none of the tracks have been selected. To select a track, click on it with the mouse. A selected track will have a ">" on the left hand side of it, I.E:

>#002: Unknown title ..... (00:04:24)

You can also select "All" or "None" of the tracks by clicking on the "All" or "None" button.

When you have selected all of the tracks you wish to encode, select the way in which you want SecondSpin to work. SecondSpin can either Transfer the tracks only and save them as AIFF files and then possibly later convert them as MPEG with Convert already transfered tracks ("Offline" mode) or decode existing MPEG files and save them as AIFF files.

Encoding files

Select "Input file selection" from the menu and select the files you'd like to handle. Currently supported fileformats are:

- Standard AIFF and WAV soundfiles.

Stereo / mono, preferably 48/44.1/32/22.05/16/11.025 kHz for good quality, but others will be resampled to nearest value.

- Protracker, XM, S3M, MTM, and MED modules

YES, you can convert these moduleformats to all the supported output formats of SecondSpin.

- MPEG Layer 3 Audio

SecondSpin can be used to decode mp3 files to AIFF or re-encode them to a different bitrate, eg. converting 128kbps j-stereo mp3 to 24kbps mono mp3.

If a selected file will not appear on the listview, the fileformat isn't supported  $\leftrightarrow$  !

This currently means XPK Packed files too. XPK may be supported in the future but no decision has yet been made.

The following sections apply for both cd mode and file mode.

Description of GUI selections

You can choose to keep the "temporary" AIFF files as well by selected "don't delete aiffs" from the cycle gadget. Unless you have a desire to fill up your HD with 40Mb+ AIFF files, leave this set to the default "delete aiffs". This delete selection only affects to the AIFFs created by SecondSpin. It will NEVER delete any input etc. AIFFs.

You can also select the bitrate you wish to encode the track at. Leave this at the default 128 kpbs unless you have a genuine reason to use a different bitrate. Greater value means better quality, some guide-default values have been given at the end of this page.

If you wish, you can change the audio mode that the final MPEG will be encoded with. This will either be mono, stereo, or j-stereo. In most cases you will use stereo, or j-stereo. If you don't know what the difference is, try experimenting with both, and decide which you prefer. J-Stereo is a special trick to only create a one mono stream and adding the stereo data to the sound by only describing the differences of the Left/Right channels to the mono core. This mode is usually much better with lower bitrate stereo encodings, like 128kbps. J-Stereo will give ↔ better

quality with lower bitrates, but it also is much slower than stereo!

The MPEG Layer can either be layer 1, layer 2, layer 3 or the special layer 3 (fast) mode. There's also a HiFi layer 3 which gives slightly better audio quality but is about 20% slower than normal layer 3. Avoid layer 1 unless you want to really know what mangled Audio sounds like (This isn't SecondSpins fault, layer 1 really sounds that bad). layer 2 and layer 3 are perfectly good choices, but these day's most MPEG's are encoded with layer 3. Read the following

comparision for more information on these two modes.

The VRB (Variable Bit Rate) is a special trick to make better quality streams. If the data won't fit to the specific bitrate, SecondSpin won't try to force it, but gives extra bits to the frame instead and thus producing better quality. Files might come much larger though, so experiment with the VBR value, 0-9, where 0 means best quality possible. The VBR option is a bit hard to master. When using VBR, the bitrate selection indicates the lowest allowed bitrate!

A direct quote from LAME USAGE-textfile:

>>Note: VBR is currently under heavy development. Right now it can often result in too much compression. I would recommend using VBR with a minimum bitrate of 112kbs. This will let LAME increase the bitrate for difficult-to-encode frames, but prevent LAME from being too aggressive for simple frames:>>

Layer 3 (fast) mode is a special mode developed for SecondSpin. Basically, it is about 2-3 times faster than encoding in normal layer 3 mode. It does produce slightly larger files (only in the region of tens of k, however), and your results may very. However, layer 3 (fast) produces results which are sometimes just as good as the normal layer 3 mode under many circumstances. Test it out and if it produces lousy results, use normal modes instead.. But if you value very good quality, leave fast mode alone and use Normal/HiFi!

Once you have selected the encoding options you wish to use, click the "start

process" button, or select "Start Process" from the "Project" menu. You can cancel the encoding process at any time by clicking the "stop encoding" button or by quiting SecondSpin, but you cannot abort other functions!

Some guidance default values

Normal quality (fast) ....: Layer 3 (fast), 128kbs, j-stereo Normal quality .....: Layer 3, 128kbs, j-stereo

Medium quality .....: Layer 3, 160kbs, j-stereostereo HiFi quality ..... Layer 3 (HiFi), 192kbs, stereo

Best possible quality ....: Layer 3, 320kbs, stereo

If you're going to use bitrates < 112kbps, use mono. If you're going to use bitrates >128kbps, use normal stereo instead of j-stereo.

Suggested notes conserning encoding speed

- It's actually a good idea to use 192kbps stereo mode with normal or HiFi setting it gives very good results and actually very fast!
- VBR slows down encoding.
- j-stereo slows down encoding.

Good tips

- #1: Turn the VBR off if you're going to make small files. The VBR is meant to preserve audio quality in cases where the bitrate setting would cause the audio quality to drop dramatically. It's not a good idea to use vbr with standard mp3 files like 128kbps stereo / 64 or 32kbps mono. Use VRB off instead. However, if you wish to preserve the original quality, you should use VBR or atleast stereo 192kbps fixed bitrate.
- #2: About requester shows some extra information, like the current LAME core engine in use.
- #3: Edit external\_commands/encode.script or external\_commands/cddaread.script to suit your system better (ONLY IF YOU KNOW WHAT YOU'RE DOING!)

If you'd like to use other LAME options than the gui allows, you can edit SecondSpin:external\_commands/encode.script and add the necessary options to there. But don't do it if you aren't absolutely sure what you're doing nor what the heck I'm talking about!

The default priority (-3) can be changed if it causes problems. Eg. with ppc cpus priority 1 could be better.

- #4: You can also repack mp3 files with secondspin to another bitrate. Just select the settings and choose the mp3 like you would choose other input files.
- #5: If cdda program won't work with your cd-rom drive, you can always edit cddaread.script to support other cdda readers. It'd be great if MakeCD had an arexx port, but...

More to come...

### 1.6 Encoder

The mpencoder in use is a special version of the LAME encoder. It's been developed by my friend Rolando Rivas with the help from various people and has been made for universal use and isn't therefore restricted for SecondSpin usage only.

The development efforts I have made for the encoding parts have already been merged to the LAME project itself, so the latest LAME should have all the same features as SecondSpin encoder has. However, I dropped the development of the encoder part and left that to my friend Rivas. It's better to work towards the same goal, everyone will benefit.

It's also got a fast mode which was a crazy idea of mine as we were trying to reimplement lower layers to LAME and missed the psychoacoustic routines.. the output actually sounded very good so I started to work with this fast mode which would give huge speedup without sacrifying too much audioquality. Fortunatelly, Mark Taylor (LAME 3.x author) finished it.

Other encoders or LAME versions \_WILL NOT\_ work as the output is peeked directly via pipe: and the cli format is bit different due the layer and other additions. This, however, might change in the future

Layers 1 and 2 are supported but using pegase only.

I wouldn't advise you to use lower bitrates than 128kbps for stereo and 64kbps for mono with mp3, unless you want to hear stupid boiling chipmunks. Feel free to experiment though, but the encoder I'm using doesn't seem to be very good in lower bitrates with mp3.. >128kbps seem ok as well as does layer 2 with <128kbps. Layer 1 is obsolete shit and you'd better leave it unused, ok?

If you'd like to make SecondSpin compatible Encoder engine, take a look the archive called 'HowToCreateEncoder.lha' which is included in the Encoder archive. It contains all the files and knowledge needed! Off you go to make WarpUP etc. compiles!

#### 1.7 Features

FEATURES:

- will easily convert audiocds (CDDA) to mpeg audio files or additionally only leech the tracks as aiff files.
- will easily convert your existing AIFF or WAV files to mpeg audio
- will convert Protracker, XM, S3M, FastTracker modules to AIFF or mpeg audio files

- also converts mpeg files back to AIFF for general use.
- is able to directly convert existing mpeg layer 3 files to another mpeg format (eg. conversion of 128kbps jstereo file to 32kbps mono.
- outputs mpeg audio layers 1, 2 and 3 with mono, stereo and j-stereo with bitrates of:

layer 3: 320, 256, 190, 160, 128, 112, 96, 64, 32, 24, 16 or 8 kbps layer 2: 320, 256, 190, 160, 128, 112, 96, 64, 32 layer 1: 320, 256, 192, 160, 128, 96, 64, 32

- a full fontsensitive and easy GUI
- supports all amigas (with or without fpu) as well as amigas equipped with a ppc.
- supports www.cddb.com, so it's able to fetch track information from the site.
- fully localized
- it's absolutely free!

#### 1.8 Installation

INSTALLATION:

Unpack both archives (Install & Encoder) to same directory and run the installer script provided!

Obtain Pegase v1.61 or newer and install it to c:

#### 1.9 History

HISTORY:

v1.1x - a better version :) (03/Feb/1999)

- v1.3x added www.cddb.com support and mpeg audio tag system. All outputted mpeg audiofiles will have a proper tag files and renamed accordingly to the cddb data. Also added a configuration file.. (28/Feb/1999 -> )
- v1.4x brushed up version with numerous internal additions. Also added

9 / 18

many features, but no need to list them here as these still
aren't release versions.
(15/Mar/1999 -> )

- v1.5x jstereo mp3, encoder now always based on the latest LAME version. (15/May/1999 -> )
- v1.6x numerous little & bigger additions, like decoding of mpeg files, selection based track selection instead of the old range based, the ever-so-much-needed offline mode etc. (18/Jul/1999 -> )
- v1.7x too many things added and too many bugs fixed to be mentioned here. (21/Sep/1999 -> )

- v1.76 the first public release version (released as public beta) (07/Nov/1999)
- v1.77 some minor bugfixes, added 8/16/24 kbps modes. MPTAGs don't have underscores anymore if convert spaces to underscore is enabled. updated suomi/finnish catalog. keep those catalog files rolling! (06/Dec/1999)
- v1.78 minor unvisible tweaks, added Save system information to the BETA VERSION MENU. If you're going to send bug/nag reports, send the file generated with this option with the mail! (09/Dec/1999)
- v1.79 fixed some small bugs, including the typo in Install script which caused installed mpega.library to be overwritten by the Install process. Also fixed the bug which caused an unidentified error requester, if SecondSpin GUI couldn't be opened, instead of the more sophisticated one. (Thanks to Vadim Vlasenko for reporting them.) (13/Dec/1999)
- v1.80 I was experimenting with some new stuff and found out some bugs if
   multiple cds were encoded in a row and some had cddb files downloaded
   and some didn't. Also tweaked some things which may have caused ↔
   trouble.
   I'm studying a more sophisticated way to handle the cddb files. A
   central database and a to-be-downloaded queue maybe? (Thanks to all of
   you who gave suggestions, especially to ExiE and Gerd Schmidt.)
   (14/Dec/1999)
- v1.85 Added full support for converting Protracker, XM, S3M and FastTracker modules to AIFF or MP3. Thanks to K-P Koljonen for PS3MREC. Usage is similiar to the usage of existing AIFF/WAV files, eg. Input File Selection. Also made good file identifying routines, no more extensions needed in input files. Many general bugfixes + changed the english and finnish locales a bit. MED support coming soon, but only with Jouko Pynnönens med2xm unless you help me and do a med2aiff converter! I also added some stuff to the guide. Maybe I should take a vacation for a few

days. :P (17/Dec/1999)

- v1.86 Added OS check. SecondSpin now requires AmigaOS 3.0 as it's way much easier for me not to even think about OS 2.x. Sorry :(. Also made some little bugfixes, but you wouldn't find them anyway :P. (27/Dec/1999)
- v1.87 Took the first steps to TAG EDITING engine. Now all entries have  $\, \leftrightarrow \,$  proper

author & name variables and SecondSpin tries to seek them in all ways. You can't yet edit them by hand, but this is a good start. This also caused the listview to change a bit. Added preliminary support for TAG stuff for mpegs created from modules, modulename is now properly added ↔

Very good routines for module name seeking added. Hopefully I've fixed the mpega.library installation for good. Let me know if it still does something unwanted!! (02/Jan/2000)

v1.88 - Due to some internal restrictions, the v1.87 release didn't work as it was intended. However, it's fixed now :). I had to move the internal english strings to an external file, but this should be of no problem. (08/Jan/2000)

pre 2.00 releases, eg. v2.00 betas:

v1.96 - I adopted some module author scanning routines from my old CNet  $\, \leftrightarrow \,$ utility called ZoolDIZ. Now all supported input modules are scanned for  $\leftrightarrow$ possible match on author name. The routines are very sophisticated but in no  $\,\,\leftrightarrow\,\,$ wav perfect. I hope they'll get even better some day.. The authorscanning  $\leftrightarrow$ is quite fast, but you'll certainly notice some delays when selecting  $\leftrightarrow$ files or starting the converting, especially when you've selected many files  $\leftrightarrow$ That's too bad, but hey: nothing's free you know.. I practically ↔ rewrote them + made them better in many ways when compared to the old version  $\,\leftrightarrow\,$ in ZoolDIZ. Now the module support is much more better. Thanks Halil  $\leftrightarrow$ Ýbrahim Tapova <CaptainHIT@Gmx.net> for motivating me. Implemented mp3 tag scanning. Author and name tags will be preserved if converted to another bitrate etc. I also added a PIPE: check as more and more people don't seen to understand that SecondSpin really needs PIPE mounted and working  $\, \leftrightarrow \,$ before it will work properly. Tweaked up some existing routines.

And.. hmm, yes I also implemented MPEGA Library FPU check so if you're going to decode mpeg files SecondSpin will tell you that the MPEGA version isn't FPU. FPU versions deliver much better audio quality! Also added a few more progress bars to some routines. ... ooops :P The Decode Mode Only - menuselection didn't work at all. I implemented the routines, now it should be ok. PLUS! Layer 1 and 2 modes enabled and using the high speed Pegase by Didier Levet! The implementation is a bit kludgy, but that is because the Peqase isn't really intended to be used with SecondSpin or  $\leftrightarrow$ similiar packages.. Hope it works, ok. You need to have the latest Pegase (v1.6  $\leftrightarrow$ X) currently installed in C: for it to work. Thanks Didier! Currently mp3 files as input will be skipped if selected and layer 1/2 is output  $\leftarrow$ format. The speed display works correctly only with 44100 kHz 16bit stereo  $\,\leftrightarrow\,$ files. Now I hope that you stop comparing SecondSpin with Pegase as they have very different functions. SecondSpin is a full featured package for  $\leftrightarrow$ all mpeg and aiff conversions and Pegase is layer 1/2 encoder. You want  $\leftrightarrow$ speed, you use Pegase with SecondSpin :) The SecondSpin encoder is no longer required, you can use this in  $\, \leftrightarrow \,$ layer 2 mode only if Peqase is installed and the Lame base isn't. As usual, also fixed many bugs. Very many. Gee, I've been busy! Hope you enjoy! (14/Jan/2000) v1.97 - Added check for installed cdrom drive. If the selected drive isn't located, it won't be seeked until restarting SecondSpin. Now people without working cdrom drives can access SecondSpin easier. Added another simple check for succeeded trackleeching. Now SecondSpin shouldn't hang as ofter when trackleeching fails. Found a very stupid bug which caused the process to fail if cddb wasn'  $\leftrightarrow$ used. How silly of me. This was introduced in v1.96Beta. (15/Jan/2000) "xx/xxx/xxxx ->" means that the version was developed from xx/xxx/xxx to the next version date.

#### 1.10 Future

```
enable mpeg conversion to all output formats, not just mp3.
better cddb stuff.
proper med support (you could do a med2aiff converter!)
full featured TAG EDITOR for all type of input.
your suggestions?
```

#### 1.11 Thanks

THANKS (in no particular order):

- Michael van Elst <mlelstv@serpens.swb.de> for the cdda program.
- cstar / Mike Cheng <mikecheng@cryogen.com> for the LAME project initialization.
- Mark Taylor <mt@sulaco.org> for LAME 3.x, jstereo capable GSPSYCHO model and for his coding etc. support.
- Jesper Svennevid <Chip-pwl/#amycoders> for his help with the pipe: support and LAME encoder modifications.
- Kristian Van Der Vliet <kris@vanders.demon.co.uk> for betatesting, ideas, installation script and other nice stuff. Thanks!!
- Teemu Suikki zuikkis/#amigafin, zu@iki.fi> for mpeg encoder bonus coding, cddb implementation code and general help. Thank you!
- Stéphane Tavenard for mpega what would we do with audio mpegs, if we couldn't play them?
- Jürgen Kohrmeyer for his fabulous arexx support libraries.
- Didier Levet <kakace@pacwan.fr> for pegase why on earth would anyone bother to work on layer 2 encoder programming as you've made it near perfect!
- Rolando Rivas <rolando.rivas@pp.inet.fi> for his latest efforts with the encoding engine and the compiles. Thanks man, you've really helped me a lot!
- K-P Koljonen <kpk@cc.tut.fi> for his PS3MREC program.. Thanks!
- Steffen Häuser for being such a great guy.
- Pauli Porkka for his SNext program he made for me years ago.
- All the people enjoying SecondSpin.
- Al the freaks at #amigafin the ultimate "amiga" channel.
- + Hellos to D.F. Duck for being ok afterall.

#### 1.12 mpeg audio on amiga

This section is obsolete:

[- Please note that this section is very outdated as SecondSpin has been developed a great deal since I made this and the output quality has been hugely improved. -]

Ok. You probably think that doing mpeg stuff with fpu is slower, but the mpeg quality is hugely improved if you use floats and its actually much faster to use fpu when encoding: \_6-7\_ times faster in my setup when encoding mpeg layer 3.

The fact is that those free mp3 encoders available which are based to the original iso sources aren't that good. I made a test as I had to know how much original audio quality suffers when encoding them as mpeg audio:

I encoded several techno tracks as mpeg audio with LAME and pegase:

Panasonic : Kulma / Tracks #2, #3 (minimalistic techno)
 Jeff Mills : The Other Day / Track #1 (detroit techno)

I chose these tracks as they're most likely going to suffer from mpeg encoding as they have huge variations of clear noise and dynamics.

I encoded stereo mpeg layer 3 files with bitrates 128, 160 and 256 plus 128 kbps j-stereo mpeg layer 2 file with pegase.

There was no need to use special equipment or programs to analyse the audiodata as I think that if you can't hear the difference, WHO CARES!

When I had encoded the tracks (which was VERY slow, btw) I decoded them with mpega (I always use fpu as it has much better quality) to aiff files and compiled a audiocd with the encoded tracks as well as the originals.

Then I just started playing with my hifi systems and I couldn't believe how much \_layer 3\_ distorted original Panasonic tracks. They were almost unusable! Jeff Mills however was quite good and the low bass and it's heavy dynamics were left almost untouched... bitrate didn't seem to make much difference (it didn't fix the distortions)..

The most surprising was that layer 2 actually coped all the tracks much better, I'd say almost perfectly.

The biggest problem with this test was that as layer 3 lacks j-stereo on amiga, so I couldn't test it. Anyway, it shouldn't matter with higher bitrates so the test should still be very much referrable. Other problem is that I should test with more complex audio to see if complex sound reduces dynamics...

So here are some hard facts I think you'd like to consider when encoding cds to mpeg audio:

14 / 18

- mpeg layer 3:

- is much slower than other layers
- doesn't always have the best audio quality
- it's the industrial standard but especially the free encoders available can deliver \_very\_ crappy results with certain audiodata or when the bitrate isn't high enough.

- mpeg layer 2 files:

- files aren't actually much bigger than mp3 and if they are, you can always lha them ;)
- they're easier to decode as well as easier to encode (encoding times with those panasonic tracks 2.6:1 mp2, 40:1 mp3!)
- can actually deliver better results!
- can't always handle more complex audio correctly (might cut bass / treble)

If you like to encode mpeg audio with your amiga, you should try how mpeg layer 2 j-stereo sounds. It's fast and can sometimes give the best results.

#### 1.13 Known Problems

PROBLEM: SecondSpin won't recognize inserted audiodisk.

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- reinstall SecondSpin with a different cd-rom type until it does.

- if it still doesn't work, send me a nag message.

PROBLEM: bad audio quality.

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- some cd-rom drives output truncated audio packets which cause bad audio quality.
- not all cd-rom drives support proper trackdownloading

- if encoded mpeg files sound like some audio is missing now and then (one beat is missing etc.), it usually is caused by badly configured hd-filesystem. Try to download a track to ramdisk and to harddrive and test if the audio is ok.

 $\ensuremath{\texttt{PROBLEM}}$  : The SecondSpin just freezes when it starts to encode a track

- This is most probably caused by that the "SecondSpin\_encoder" isn't executable. Please set +e tag and start ppcloadseg if you're using the ppc version. This should not happen however, as SecondSpin automatically sets the +e tag to the encoder executable. - The LAME engine might have got jammed because of corrupted input. Check the aiff file created by SecondSpin. If it's 0 bytes or very small, the audio grabbing (cdda leeching) process might fail.

PROBLEM: The SecondSpin encoder crashes.

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- you might have installed a FPU version of the encoder although your cpu doesn't have one, or it isn't working properly.
- you have found a bug in the code. please report it and hope it will be fixed when the next release comes. (yeah, sure)

PROBLEM: Unable to initialize program GUI requester appears!

- SecondSpin cannot open a window for its GUI. You're most probably trying to run SecondSpin on too small screen. 640x480x1 is minimum.

PROBLEM: When encoding layer 1 or 2 files the speed display is nonsense

- The speed display is correct only with 44100kHz 16 bit stereo files.

GENERAL PROBLEM INFO:

- elfloadseg MUST be running if you try to run the ppc version.
- PPC version isn't tested much so it might not always work properly ..
- After encoding of one track has been completed, your system might lock up for couple of seconds. I have no precise idea what might cause it, possibly the encoder additions made :).
- If you're going to send a bug/nag report, please tell these things too:
  - a) Your configuration, including CPU & CD-ROM Drive!
  - b) Send the information file, which is generated by SecondSpin:

- Use BETA VERSION MENU / SAVE SYSTEM INFORMATION

c) What audio cd / file were you encoding.

### 1.14 RandomTracks

RandomTracks is a simple utility which renames all files in a directory randomly. This is very useful if you're creating a compilation audio cd from your mpeg audio files and and cannot decide the trackorder :).

... RandomTracks is still in Alpha state and isn't yet distributed.

#### 1.15 CDDB and SecondSpin

www.cddb.com is an internet service which contains the tracklistings for almost every audiocd ever made. The SecondSpin supports this server and utilizes it if you're connected to the internet and start SecondSpin.

All downloaded trackinfofiles will be stored to SecondSpin:cddbs/ and can be used later on, so trackinfo will be downloaded only once. This means that you don't have to be connected when encoding files, you'll just need to start SecondSpin and let it download the trackinfo to your hd for later use.

#### 1.16 Supported (proven to be working) cdrom drives

This list is in no way complete, but if you manage to get your ↔ cdrom drive(s) working, please send me an email which describes the

model, maker & modesetting you used to install it.

Please send an email if you can't get a cdrom working with SecondSpin!

WORKING CDROM DRIVES:

- Philips CDD-3600 SCSI CD-RW, installed as 'Standard ATAPI / SCSI' (tested by SecondSpin author)
- Toshiba XM-6201B(TA) SCSI CDROM, installed as 'Toshiba compatible' (tested by SecondSpin author)
- Toshiba XM-4101TA SCSI CDROM, installed as 'Toshiba compatible' (tested by Kristian Van Der Vliet)
- Plextor PX-40TS 1.01, installed as 'Sony compatible'
   (tested by (Rasmus <r\_bothe@mail.netwave.de>)
- Yamaha 6416 CD-RW, installed as 'Sony compatible' (tested by (Kai Eckardt <DHA418@t-online.de>)

NONWORKING CDROM DRIVES:

 Goldstar CD-ROM GCD-R580B ATAPI CDROM, installed as 'Standard ATAPI / SCSI' This drive does not support CD-DA, which leads to poor quality/missing audio ↔ data. (tested by Kristian Van Der Vliet)

### 1.17 How to obtain the Encoder archive

The Encoder cannot be distributed because of the legal licence terms, but

you can create the Encoder with some simple instructions which are included in the archive as docs/HowToCreateEncoder.lha.

#### 1.18 LAME encoder project

SecondSpin encoding routines have been based on the efforts of the LAME project, which is open source.

The main LAME site can be located at http://www.sulaco.org/mp3

#### 1.19 How can you help me to develop SecondSpin?

- Motivate me :).. if you like SecondSpin, send me a message / a small gift.
- Tell me your suggestions & the problems you've encountered.
- Make a catalog file for you language and send it to me to be included with the distribution.
- Make sure you're using the latest version before you nag :P
- Tell people about SecondSpin I'd like as many as possible to use this.
- Merge TooLame project to LAME !!

#### 1.20 About SecondSpin

SecondSpin DEVELOPMENT MACHINE:

- Amiga 4000 with 144 mb of fast
- 2.5gb scsi-2 barracuda, 2.1gb seagate ide + 1gb fujitsu scsi-2
- Cybervision 64/4mb classic
- Cyberstorm mk-ii 060/50MHz & cyberscsi-ii module
- Toshiba XM-6201B 32x SCSI cd-rom
- Philips CDD-3600 SCSI cd-rw drive
- Canon CanoScan 300 SCSI flatbed scanner
- Epson Stylus Photo 700 printer
- GVP DSS8+ sampler

Yes, no PPC.

Output quality etc. test equipment:

- Yamaha RX-V592RDS amplifier
- Yamaha CDX-390 cd-player
- KEF Q35 speakers
- Sony 32" 100Hz Wega (FD Trinitron)
- Sony PlayStation console with VideoCD expansion

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