

DigiRoller

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daxb

#1/12 Posted: 31.05.2009 - 19:01 Post subject: DigiRoller

Seems that playing is really "slow" with DigiRoller. I've to go below 22.05 kHz to get no drop-outs. DBP 2.x can play the same dbm with 44.1 kHz.

Feature Request:

If a dbm is selected the output file should be set with same name and ".aiff" as suffix as default.

krashan

#2/12 Posted: 04.06.2009 - 12:46 Post subject: Re: DigiRoller

daxb wrote:

Seems that playing is really "slow" with DigiRoller. I've to go below 22.05 kHz to get no drop-outs. DBP 2.x can play the same dbm with 44.1 kHz.

On which configuration (CPU/audio hardware)? DB3 player is generally slower (for now) for two reasons: it is not yet optimized and it provides better quality than DB2. Remember that DB2 player is written in pure assembler, while DB3 one in C. It is possible that DB3 player will be (for 68k) rewritten in assembler (partially or as a whole) if it will be worth the work.

daxb wrote:

Feature Request:

If a dbm is selected the output file should be set with same name and ".aiff" as suffix as default.

Nice idea. Will implement it in 1.1.

daxb

#3/12 Posted: 19.04.2012 - 20:05 Post subject: Re: DigiRoller

krashan wrote:

daxb wrote:

Feature Request:

If a dbm is selected the output file should be set with same name and ".aiff" as suffix as default.

Nice idea. Will implement it in 1.1.

Seems that I've missed your answer. 😊 However, the feature request above may go in V1.2. 🍀

Here my comments about V1.1:

For playback/render it is necessary to have an volume boost option. Without I get 1/5 volume as result.

For playback it would be fine to have at least the choice of AHI units (0-3). On 68k you need special (low) settings for digiroller but all other programs using unit 0 will sound crap then. And as in the guide mentioned AHI echo should be set off but for DBP2.x you must set it on. Nobody wants to change AHI settings everytime.

Would be nice to have module playing position in process bar or something else. Useful when render

infinity playing dbm`s or empty pattern at the end. Or just for the info. 😊

On 68k (at least on 040/40) digiroller is much to slow for quality playback. On 040 11kHz mixing frequency is the max but sounds crap. I guess this won`t change with high-level AHI device technic. What about low-level access like DBP2.x do it (if I remmeber right?)?

Thanks for attention.

krashan

#4/12 Posted: 20.04.2012 - 08:46 Post subject: Re: DigiRoller

daxb wrote:

Seems that I`ve missed your answer. 😊 However, the feature request above may go in V1.2. 🌐
Definitely...

daxb wrote:

For playback/render it is necessary to have an volume boost option. Without I get 1/5 volume as result.

This depends on module, but true in general. DigiRoller gives no boost at all, so most modules are too silent.

daxb wrote:

For playback it would be fine to have at least the choice of AHI units (0-3).
Will add an option (I guess a tooltype would be the best).

daxb wrote:

Would be nice to have module playing position in process bar or something else. Useful when render infinity playing dbm`s or empty pattern at the end. Or just for the info. 😊
In fact the progress bar **is** the module position indicator. The gauge level is set to the playlist

position.

daxb wrote:

On 68k (at least on 040/40) digiroller is much to slow for quality playback. On 040 11kHz mixing frequency is the max but sounds crap. I guess this won`t change with high-level AHI device technic. What about low-level access like DBP2.x do it (if I remmeber right?)?

Using low level won't help because of the fundamental difference between DBPro 2.x and DB3 engines. The former relies on AHI to perform mixing and resampling instruments ad also perform echo effects. DB3 engine does this all itself, just sending a ready downmix to AHI. Then optimal AHI settings are different. Here are some hints for DB3/DigiRoller:

- Turn echo off.
- Make sure mixing frequency in DigiRoller is the same as in AHI unit. This is unfortunately tricky for Paula, as I've fixed those frequencies in DigiRoller GUI at some typical AC97 codec values. If these frequencies are not equal, AHI resampling kicks in, which is both quality degrading and CPU consuming.
- If the above condition is fulfilled, use "Fast" modes. When AHI is not forced to resample, DB3 engine will yield **the same** quality in "Fast", normal and "HiFi" mode. This is because instrument resampling, all volume/panning and DSP effects are done inside the engine.
- For AHI unit set two channels and "full volume" scaling.

In fact for best performance on classic Amigas with Paula I should bypass AHI completely and write directly to Paula registers. On the other hand DB3 is designed rather for "nextgen" Amiga[like] systems and I advise everyone thinking about serious music work with DB3 to run it on either MorphOS or AmigaOS 4.

daxb

#5/12 Posted: 20.04.2012 - 12:33 Post subject: Re: DigiRoller

[quote="krashan"]

daxb wrote:

For playback/render it is necessary to have an volume boost option. Without I get 1/5 volume as result.

Quote:

This depends on module, but true in general. DigiRoller gives no boost at all, so most modules

are too silent.

My test dbm was a 8 channel (only 3 used). However, also in DBP2.x I've to boost between 600% and 2000% (depends on amount of channels).

Render a dbm seems to be an option for digiroller and it works on good speed. Only the result record is too silent. A max. vol function is needed. Maybe something like DBP2.x Mixer has. Here a screenshot to show the render result I get. It shows the max peak:

[pic:184fb3e0bd]https://www.amigafuture.de/uploadpic.php?thumb=/197_soundfx_1.png[pic:184fb3e0bd]

Quote:

In fact the progress bar **is** the module position indicator. The gauge level is set to the playlist position.

A position value gives the better information (e.g. 3/34, 4/34, 5/34, ...). I guess it will not take so much time to implement. 😊

Quote:

Here are some hints for DB3/DigiRoller:[...]

I've tried your hints but for playback 040 is still to slow.

krashan

#6/12 Posted: 20.04.2012 - 13:21 Post subject: Re: DigiRoller

daxb wrote:

My test dbm was a 8 channel (only 3 used). However, also in DBP2.x.

Then, even if you drive three channels to the max, you still have 0.375 final amplitude, so boost of 266% (+8.5 dB) should be applied without going into overdrive. If those 3 channels are not driven to the maximum amplitude, possible boost increases. DigiBooster 3 engine features internal boost up to +24 dB (1600%), which may be extended later by boosting the downmix. I will add the boost slider to DigiRoller.

daxb wrote:

A max. vol function is needed. Maybe something like DBP2.x Mixer has.

If you mean automatic boost estimation, this function will be available in the full version of DigiBooster 3. Some features have to be exclusive for full version 😊 .

daxb wrote:

A position value gives the better information (e.g. 3/34, 4/34, 5/34, ...). I guess it will not take so much time to implement. 😊

Yes, can be displayed along with the module name.

daxb wrote:

I've tried your hints but for playback 040 is still to slow.

I'm afraid not much can be done with it. 040 is simply not fast enough to handle it. This is because DB3 engine is written in C, is modular so can (and will) be extended with new plugins and provides better quality. My only advice is to use WinUAE or AmigaOS 4/MorphOS. I may try to optimize the replayer for 68k but it must be justified by potential customers demand.

krashan

#7/12 Posted: 09.05.2012 - 13:24 Post subject:

New version of DigiRoller is to be expected soon 😊 . With all of the above features added.

daxb

#8/12 Posted: 09.05.2012 - 18:04 Post subject:

Looking forward to test it. 😊

daxb

#9/12 Posted: 10.05.2012 - 12:23 Post subject:

- Program automatically suggests output file name based on module name and output type.

Does not work or not what I want. If I choose a DBM output file string is just ".aiff" or ".wav". I want: Choose supersong.DBM should make supersong.aiff (or .wav) as output file.

Btw. will the portamento commands changed (DBP V2 compatible) in the future?

krashan

#10/12 Posted: 10.05.2012 - 12:42 Post subject:

daxb wrote:

Does not work or not what I want. If I choose a DBM output file string is just ".aiff" or ".wav". I want: Choose supersong.DBM should make supersong.aiff (or .wav) as output file.

The name is created of module name stored in it. If the module name is empty, then in fact suggested name will contain only extension. I will add a fallback, so if the module name is empty, file name (after stripping extensions) is used.

daxb wrote:

Btw. will the portamento commands changed (DBP V2 compatible) in the future?

This is a hard decision of compatibility versus usability. DBPro 2.x creators have taken the easy path. In my opinion adjusting portamento units to the music scale is an advantage (portamentos are transposable and fully predictable). DigiBooster 3 is meant to be a tool for creating new music, not player for old modules, so while effort for maintaining backward compatibility was huge, it has its limits.

daxb

#11/12 Posted: 10.05.2012 - 19:08 Post subject:

If you don't want 100% compatibility then you should not care about and code a new/better DBP. 99% doesn't make sense. So feel free.

krashan

#12/12 Posted: 11.05.2012 - 06:05 Post subject:

daxb wrote:

If you don't want 100% compatibility then you should not care about and code a new/better DBP. 99% doesn't make sense. So feel free.

1. DigiBooster 3 is new 😊 .
2. DigiBooster 3 will be better, I hope 😊 .