

AmiGenerator ii

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	AmiGenerator						
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AmiGenerator

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Chapter 1

AmiGenerator

1.1 AmiGenerator - The Sega Genesis/MegaDrive emulator for your Amiga!

```
AmiGenerator, version 1.04 (990415)
Copyright (c) 1999 Mathias "AmiDog" Roslund
                Introduction
                - What is this?
                Requirements
                - What does it require?
                Features
                - What can it do?
                Installation
                - How to install?
                Usage
                - How do I use it?
                Settings
                - What can I set?
                Speed
                - How fast is it?
                Disclaimer
                - Who's responsible?
                Development
                - How is it done?
                - Are there any known bugs?
```

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```
History
- What's new?

Future
- What will be added?

Contact
- How to contact me?

Thanks!
- Which have helped me?
```

This product includes software developed by James Ponder.

Visit the homepage at http://www.amidog.com/amigenerator/

1.2 AmiGenerator - Introduction

This is a Sega MegaDrive/Genesis emulator for PPC and 68k Amigas.

It's based upon the Sega MegaDrive/Genesis emulator called Generator, developed by James Ponder for X-window systems.

1.3 AmiGenerator - Requirements

Hardware:

- \star Amiga (040/060 or PPC)
- * AGA or CGFX
- \star 8 MB of RAM
- * OS 3.0+

1.4 AmiGenerator - Features

```
This is what's being emulated:
* ... (to be written)
```

1.5 AmiGenerator - Installation

Copy the version for your CPU to any place on your \mbox{HD} and rename it to $\mbox{AmiGenerator.}$

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1.6 AmiGenerator - Usage

```
* Starting AmiGenerator:
```

- 1. Open a shell window.
- 2. Increase the stack, 64k (stack 65536) should be enough.
- 3. Type AmiGenerator <ENTER>.
- 4. The GUI will open.
- 5. Select a screenmode.
- 5. Select a ROM using Open.
- 6. Press Start emulation.
- * These keys are used (incl. what they do):

```
ESC - Quit
A, 1 - A Button
B, 2, S - B Button
C, 3, D - C Button
Enter - Start
Arrow keys - Left, Right, Up, Down
```

1.7 AmiGenerator - Settings

Display

- * Size The size of the emulated display.
- * Layers You can toggle any layer they are listed in the order of priority that they are plotted. Turning off layers that a game doesn't use will speed the emulation up.
- * Frames If you find your machine cannot cope, you can ask the emulator to not display all frames. The game will not be affected.

CPU

- * Cycles We execute approximately 8 million 68000 clock cycles every second. Most games do not need all these clock cycles per frame in order to update the screen. Hence, you can reduce the number of clock cycles given per scanline.
- * Adaptive This facility will look to see if the game has finished the next frame and is waiting for the end of frame interrupt.

 When this occurs we force the interrupt as otherwise we would just be wasting time emulating instructions that do nothing. If this works for the game you are using then you may like to increase the number of clocks to 150% or 200% this will provide more clock cycles and hence can fix slowdown experienced on a real system when the processor can't cope with the amount of work needed.

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1.8 AmiGenerator - Speed

```
* ... (to be written)
```

1.9 AmiGenerator - 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.

1.10 AmiGenerator - Development

```
AmiGenerator is developed using:

.....-v1.02 A1300Ti -> 040/FPU/MMU'25, 603e'200, 2+128MB, AGA.
v1.03- A1300Ti -> 040/FPU/MMU'25, 603e'200, 2+128MB, BVision.
```

1.11 AmiGenerator - Bugs

These are the known bugs:

* You can NOT use different ROMs without restarting AmiGenerator! Using the same ROM with different settings will however work!

1.12 AmiGenerator - Contact

```
Bugreports, suggestions, comments or anything else you may want to contact me about can preferably be sent by e-mail to:
amidog@amidog.com

You may however also contact me by "snail-mail":
Mathias Roslund
Sveav. 2b, nb
S-702 14 Örebro
SWEDEN
```

1.13 AmiGenerator - Thanks!

```
I would like to thank the following persons:
```

* James Ponder - For developing Generator and releasing the source.

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1.14 AmiGenerator - Future

```
these features are planned:
  * Double buffering.
  * Timing (to get right speed).
  * Sound.
```

* . . .

1.15 AmiGenerator - History

```
.... -990110
      -Initial alpha release. It's AGA only, uses a DblPAL screen and is very \leftrightarrow
       It's not possible to change any settings at all.
.... -990111
      -Initial beta release. Still only AGA support, but now uses a PAL screen,
       speed has also improved a lot due to replacing SetRGB32 calls with one \,\,\,\,\,\,\,\,\,\,\,
           LoadRGB32.
       Played Sonic 1 for the first time ever on my Amiga.
      -Compiled a 68k version (040+) as well, it's however too slow to be really \leftrightarrow
       on my 040'25 (BPPC board).
v1.00 -990112
      -Reomved the memory trashing bug.
      -Started working on the GUI.
      -990113
      -The most important GUI functions are implented.
      -GFX-board support is added using WPA8 (untested).
v1.01 -990115
      -If AmiGenerator quits due to some error, the screen and GUI will always \,\,\leftrightarrow\,\,
          get closed.
      -Some optimization in palette changing routine.
      -Of some reason, two ROMs can't be used after each other, using the same \ensuremath{\hookleftarrow}
          with different
       settings will however work flawlessly.
v1.02 -990220
      -Removed palette bug (som games may have looked strange before).
      -Optimized the palette changing routine a bit more.
      -Removed some bugs when screen/window couldn't be opened.
v1.03 -990401
      -Now works properly with a CGFX screenmode, the colors do however flicker \leftrightarrow
          when the
       palette is changed.
      -990405
      -The palette is now only changed when required, and not once per frame as \leftrightarrow
          before.
       This has reduced the flicker a bit.
```

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- -The Name and Copyright fields in the GUI are now filled with the $\,\,\hookleftarrow\,\,$ information.
- -Cybergraphics library will now get properly closed.
- -990406
- -Replaced the WPA8 call with a direct gfx memory copy routine, the $\ \hookleftarrow$ speedincrease
- is so big that Sonic1 is playable in Every frame mode (on 603e'200), not $\, \hookleftarrow \,$ Every other

v1.04 -990415

- -Compiled 68k version, I finally got the CGFX includes working.
- -Replaced some loops with memcpy/memcmp which should be faster.