

**PNG-Box**

<b>COLLABORATORS</b>
----------------------

	<i>TITLE :</i> PNG-Box		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		January 23, 2025	

<b>REVISION HISTORY</b>
-------------------------

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>PNG-Box</b>	<b>1</b>
1.1	PNG-Box_Documentation . . . . .	1
1.2	copyright . . . . .	2
1.3	disclaimer . . . . .	3
1.4	distribution . . . . .	3
1.5	PowerPC (powerUP) support . . . . .	3
1.6	purpose . . . . .	4
1.7	installation . . . . .	5
1.8	updatenote . . . . .	6
1.9	usage . . . . .	6
1.10	evaluationrestr . . . . .	6
1.11	history . . . . .	7
1.12	correspondence . . . . .	12
1.13	Making use of 680x0 CPUs . . . . .	14
1.14	thanks . . . . .	16
1.15	About PNG - successor of GIF . . . . .	16

# Chapter 1

## PNG-Box

### 1.1 PNG-Box\_Documentation

PNG-Box V4.32 (24.7.2000)

- SHAREWARE -

© 1997-2000 by Andreas Ralph Kleinert. All rights reserved.

A PerSuaSiVe SoftWorX PRODUCT.

Needs Kickstart V2.04. Kickstart release 3.x compatible.  
GUI created with StormWizard 2.0

Actively supports PowerPC (TM) via powerUP (TM)  
and ppc.library (or -emulation V0.6b+)

<Commercial> BTW: What is SViewIV ? </Commercial>

REGISTER NOW

Copyright

Disclaimer

Distribution

The program's purpose

How to install it

Free algorithms... PNG: successor of GIF ...and free speech !

68020-68060, PPC

Where to obtain Updates from

How to use it

Evaluation restrictions

Correspondence

Thanks

Version-History

PowerPC (powerUP) support

What can be expected ?

\_ //

Only \X/ Amiga makes it possible.

Please visit:

WWW Support Site  
<http://www.ar-kleinert.de> (AWeb-II)

Simon Edward's Image Engineer WWW Site  
<http://www.amigaworld.com/support/imageengineer/>  
(Image Processing program produced by Simon Edwards)

## 1.2 copyright

The program PNG-Box in this version and its documentation files are  
(C)opyright 1997-2000 by Andreas R. Kleinert. All rights reserved.

The right of using this program is granted to you by paying the  
SHAREWARE-fee of 25 DEM (15 US\$) [email shipment], respectively  
30 DEM (20 US) [snail mail shipment] or equivalent (e.g. in Euro)  
to the author.

You will receive a personal KEYFILE.  
See registration form for details.

PNG-Box makes use of SuperView-Library, which is  
(C)opyright 1993-2000 by Andreas R. Kleinert and comes separately.  
It has its own distribution and usage conditions. Read carefully.

This software is based in part on the png reference library (including  
libpng and zlib), which allows being used e.g. for freely distributable  
and commercial programs.

libpng:

libpng 1.0.7  
Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc.  
Copyright (c) 1996, 1997 Andreas Dilger  
Copyright (c) 1998, 1999, 2000 Glenn Randers-Pehrson

zlib:

zlib 1.1.3  
(C) 1995-1998 Jean-loup Gailly and Mark Adler

Some of the mentioned names or products above may be copyrighted by  
companies or trademarks of companies.

Should any of the listed terms and clauses within this document not be  
valid in conjunction with the law of certain countries this does not  
affect the validity of the other clauses.

---

## 1.3 disclaimer

The author takes no responsibility for any results of the use of this program.

This software is provided "AS IS" and there is no warranty of any kind, so that you use this software at your own risk.

The author reserves the right to discontinue development of the program.

## 1.4 distribution

Registered users which paid the SHAREWARE-fee get the rights described on the registration form.

The REGISTERED version of PNG-Box MUST NOT be redistributed.  
The Distribution of Keyfiles is FORBIDDEN.

The following only applies to the unregistered evaluation (EL) version of PNG-Box:

The program PNG-Box in this version is freely distributable (SHAREWARE). You may copy it, if the copyright notice is left intact and all of its parts are included in the distribution. This program must not be included in commercial packages or commercial program collections without my written permission. This program must not be sold in any way, but it is allowed to take a nominal fee including the costs for copying.

This program may be put on public domain disks or included in public domain disk libraries.

Special permission hereby goes to Fred Fish's AmigaLib-Disks and the german series (in alphabetical order):  
AmigaSzene, BerndSPD, FRANZ, GPD, SaarAG, TAIFUN and TIME.

This program may also be distributed via electronic mail and may be put into mailboxes as long as the redistribution conditions are respected in all points.

By using or distributing this program you automatically agree to all of the above conditions and terms.

## 1.5 PowerPC (powerUP) support

PNG-Box includes a PPC native PNG \*saver\* module - which is really extremely fast - that can only be utilized fromout the registered version ("PNG-Box.svm" - respectively PNG-Box.dll - won't be loaded and used unless you've registered PNG-Box and installed your personal keyfile).

Besides that, there are several PPC modules available for use with SuperView-Library, which PNG-Box utilizes for \*loading\* graphics. More detailed information on these PPC modules (PPC-Lib

---

and WOS versions) can be found in the documentation to SuperView-Library V23+

Where to obtain PPC modules from ?

The PPC plugin modules basically already are part of Picture Manager professional V5.5 (or any upgrade from earlier versions).

Additionally, the (non-exclusive) PPC modules also can be ordered by registered (as well as newly registering) users of SuperView/SViewNG/SViewII. or ImageEngineer.

For details, please see the registration form coming with SViewII.

## 1.6 purpose

PNG-Box is a program that has been designed to write PNG files for WWW usage as easily as possible.

It can read any file format SuperView-Library does support and can make a PNG file out of it (see USAGE section for details):

- support of external Fileformat-Libraries (SVOjects):

- IFF-ACBM	- Windows, OS/2 BMP	- PNM (PBM, PGM, PPM)
- IFF-ILBM	- JPEG (JFIF v6)	- IMG (GEM Graphics)
- IFF-DEEP	- PhotoCD	- WPG (WP Bitmaps)
- IFF-FAXX	- TIFF	- MacPaint MAC
- IFF-PBM	- PCX	- EPS (Header/PS)
- IFF-RGB8	- Atari Degas	- C64 (Koala, Doodle)
- IFF-RGBN	- Spectrum ZX	- TIM
- IFF-RGFX	- XWD	- FBM
- IFF-YUVN	- Windows Icon	- CDR-Previews
- QRT/POV Raytrace	- Mac PICT-2	- SGI
- SPP	- SVG	- Targa
- Pictor/PCPaint	- SunRaster	- UtahRLE
- PNG	- CVP (passphoto)	- Icons (WB/Magic/New)

as well as all OS3-Datatypes  
and 24 Bit DataTypes (picture.datatype V43).

Many formats with 24 Bit-Support.

Reads XPK- and PP20-packed data via Unpack.svobject.

Writes C-Sourcecode in chunky/RGB notation.

Together with external third party programs also the following file formats seamlessly can be embedded:

File Format	needs program	also needs support for
- AMF	MetaView	(ILBM)
- DXF/AutoCAD (tm)	MetaView	(ILBM)
- FIG	AmiFIG	(Postscript)
	or: MetaView	(ILBM)

- |                   |              |              |
|-------------------|--------------|--------------|
| - CGM             | GPlot        | (Postscript) |
|                   | or: MetaView | (ILBM)       |
| - IFF-DR2D        | MetaView     | (ILBM)       |
| - IFF-DRSD        | MetaView     | (ILBM)       |
| - Limbo           | Limbo 4.0    | (PNM)        |
| - Postscript (TM) | Ghostscript  | -            |
| - WPG-Vector      | MetaView     | (ILBM)       |
| - WMF             | MetaView     | (ILBM)       |
- support of external peripheral devices (DEVICE-access SVOjects):
- Scanner (scanner.device of ScanQuix)
  - Camedia (digital cameras)

## 1.7 installation

Even if you use the supplied Installer-Script, you should read the following notes. If you do not own the standard Installer-Program you should read them even more carefully and follow the instructions given.

Note: Should after starting the installer script appear an error message "Can't find program 'Installer'" (or similar), you have to enter the correct path to your Installer program via the Workbench menu Icon/Information.  
Please do also not forget, to obtain and install SuperView-Library !

If you own a KeyFile, place it to "S:", or place it elsewhere and change the environment variable "KEYPATH" to the corresponding directory.

The SuperView-Library has to be obtained and installed seperately, anyway !

### Needed Workbench Resources

HardDisk-Users won't perhaps have to install any additional Workbench Resources to their HardDisk.  
Disk-Users will have to copy the following libraries into their "LIBS:"-Directory, if these not already do reside in ROM (may depend on the version of the operating system):

- |                     |      |                             |
|---------------------|------|-----------------------------|
| - gadtools.library  | V37+ | (V39 versions recommended;  |
| - asl.library       | V37+ | it's really time to upgrade |
| - utility.library   | V37+ | to OS 3.1)                  |
| - workbench.library | V37+ |                             |
| - icon.library      | V37+ |                             |

Users of OS V2.04 or greater should also install the following libraries:

- amigaguide.library V34+  
(please avoid using V34 - it's known to cause problems)

### Other needed Resources

You will also have to copy the following libraries to your "LIBS:"-Directory (plus SVOjects, SVDDrivers and SVOperators):



- superview.library V22+
- superviewsupport.library V13+

GUI has been designed with StormWizard 2.0, so this program needs "wizard.library" V37+ (you can find a copy on Aminet under "biz/haage/WizardLibrary.lha").

For PowerPC support (optional modules) the following libraries are needed:

- ppc.library V45+ (V46+ recommended)

## 1.8 updatenote

General

~~~~~

Although the PNG-Box archive does contain most of the needed parts, you might wish to get updates sometimes.

The newest version usually can be found on Aminet under Aminet:gfx/conv/PNG-Box.LHA

SuperView-Library can be found under Aminet:gfx/misc/SvIV-#?.lha

## 1.9 usage

The GUI is quite self-explaining:

You can load SuperView-Library supported formats from:

- disk
- clipboard
- specific devices (Scanner, etc.)

and save these as PNG files with the following options:

- progression on/off
- transparency on/off (and set a color ranged 0..maxcolors)
- compression 0..9

The GUI will display some useful information about the work being done, there are also some useful menu entries.

That's it :-)

## 1.10 evaluationrestr

---

This is the evaluation version of PNG-Box, which is SHAREWARE.

- it ticks down a 30 seconds counter in the "annoy" requester at startup
- the PPC native PNG save module ("PNG-Box.elf" or "PNG-Box.dll") can't be utilized

## 1.11 history

V4.32 (24.7.2000):

- upgraded to libpng 1.0.7 (except WOS)

V4.31 (6.5.2000):

- added german documentation (by Gerd Frank <Gerd.Frank@gmx.de>)
- bumped millenium
- upgraded to libpng 1.0.6

V4.30 (6.12.99):

- a few small - but necessary - changes
- changed image viewing mechanism
- added "Select" option for transparent colors: the display window will be opened and the transparent region now may be selected graphically via the mouse. When done, the display window will be closed and the selected color will be reflected within the GUI (slider/integer).
- the recommended alternative for WarpOS (WOS) users is, to upgrade to WarpOS V4.0 and install the latest ppc.library emulation by Frank Wille (V0.6d or higher, V0.6 will not suffice), then run the PPC datatype in emulation mode (see prefs).

The latest ppc.library emulation for WOS can be found on Frank Wille's homepage under <http://home.owl.de/~frank/>

- if you need to create/optimized JPEG (JFIF) graphics for WWW uses or other purposes, please have a look at our JPEG-Box tool, which has been designed especially for this purpose (Aminet:gfx/conv/JPEG-Box.lha)
- credit card online registration via RegNet now is possible. Some special Offers have been set up for you, some of wich are derived from the usual Discount list.  
Or go to <http://www.ar-kleinert.de> to the Amiga Software Area (RegNet page) and order with only one click! Please have a look!
- please note our new WWW domain [www.ar-kleinert.de](http://www.ar-kleinert.de)

V4.21 (25.11.99):

- fixed "spaces in pathnames" problem for viewer (-> Kolbjorn Barmen)

V4.20 (7.11.99):

- upgraded to libpng 1.0.5
- improvements in detail
- updated docs

V4.15 (24.9.99):

- updated docs

V4.14 (5.8.99):

- small changes

V4.13 (13.6.99):

- "ask overwrite" now does work as it should  
(-> Kimme Utsi)
- "add extension" actually was "replace extension";  
now also adds an extension, if there wasn't one before  
(-> Kimme Utsi)
- fixed problem, when WS.EXE was in a PROGDIR: with  
ending with a colon (device, assign)  
[-> the colon wasn't handled as it should have been]  
or with a white space [-> wasn't handled at all]
- suppressing WS.EXE's CLI output now (oops)  
(-> Kimme Utsi)

V4.12 (1.6.99):

- maintenance release

V4.10 (1.4.99):

- now at least does require SuperView-Library V23+
- uses new ppc launching system of above mentioned version
- .elf module renamed to .svm
- added WOS PPC module (.dll)

V4.00 (19.3.99):

- it's now possible to view the JPEG compression source and  
destination files in a window on workbench. This way  
there's now a preview function available.

V3.26 (2.3.99):

- upgraded to libpng 1.0.3
- updated docs

V3.25 (1.1.99):

- updated docs, new year maintenance, etc.

V3.23 (28.11.98):

---

- now asks before overwriting existing files (optional)
- removed old logfile code
- adjusted version requirements
- reworked docs

V3.22 (16.11.98):

- PPC I/O speedup

V3.21 (11.10.98):

- updated docs
- fixed some minor bugs, quirks and problems

V3.20 (1.10.98):

- added special 68030+ version (main program and PNG loader part)
- increased library requirements as follows:

- superview.library V21+
- superviewsupport.library V12+
- ppc.library V45+ (V46+ recommended)

(in case you need to upgrade: the newest version of SuperView-Library can be found in the SViewII archive under Aminet:gfx/misc/SvII-#?.lha)

- fixed some minor things
- updated docs

V3.10 (5.9.98):

- optimized PNG saver the same way as the loader in akPNG (smaller, faster)

V3.02 (14.8.98):

- upgraded to zlib 1.1.3
- slightly changed PPC startup code
- stripped PPC ELF module

V3.01 (30.7.98):

- loading of the PPC module always failed. Fixed. (-> Georg Rottlaender)

V3.00 (8.7.98):

- new registration fee: 30 DM (mail), 25 DM (email)
  - added PPC native - very fast - PNG saver module, called "PNG-Box.elf" (located in PROGDIR:)  
It will only work for registered users, though.
  - you already did know, that the PPC modules for SuperView-Library of course also will speed up loading graphics into PNG-Box, didn't you ? See [http://home.t-online.de/home/Andreas\\_Kleinert/sviewppc.htm](http://home.t-online.de/home/Andreas_Kleinert/sviewppc.htm)
  - please make sure to upgrade to superview.library V21.4 or higher, as coming with SViewNG 7.70 or higher (not required, though)
-

- hey, did you already know, that the newest versions of Navigator and Internet Explorer do support PNG natively now ?

V2.62 (2.7.98):

- added info on new, permanent Shareware discount (bundling) offer
- fixed some nasty bugs and typos in the docs and updated certain sections
- updated every appearance of Georg Rottlaender's email address in this document...

V2.61 (27.6.98):

- fixed GUI's size display gadgets  
(-> Christian Beck)
- upgraded to libpng 1.0.2

V2.60 (7.6.98):

- there was a small bug in writing PNGs:  
files with 1..256 colors always would have been written as 8 bit (256 color) files, resulting in slightly bigger file sizes with 1..128 color graphics.  
Now you may save some more bytes...  
(-> Christian Beck)
- updated docs
- updated Simon's ImageEngineer URL information
- updated info on PPC modules
- typo: V2.50/2.51 was released in 1998, not 1997 ;)

V2.51 (11.4.98):

- fixed problem with About window remaining open  
(-> Darcy Baston)
- finally fixed problem with unreleased file handle ('object in use'): if the source file wasn't a GIF, there would have been a handle left that would never have been freed  
(-> Darcy Baston)
- fixed a small memory leak (same context, but with any file type)

V2.50 (31.3.98):

- upgraded to libpng 1.0.1 and zlib 1.1.2, which should fixed some bugs and improve overall speed
- small changes
- updated docs and information on PPC modules
- please make sure to upgrade to superview.library V21+ (not required, though)

V2.10 (20.12.97):

- GUI design (again) improved by Georg Rottlaender  
<Georg.Rottlaender@home.ivm.de> under use of a 'NewIcon' graphics by Philip Vedovatti  
<vedovatt@u.washington.edu> - included with kind permission
-

- by the 'Team NewIcons'
- updated docs
- added explicite mention of ppc.library
- updated powerUP information
- updated libpng and zlib (same as akPNG 43.130)

V2.06 (24.9.97):

- small fix: transparency slider offered a range 0..256, now (correctly) 0..255  
(-> Georg Rottlaender)
- small fix for ppc.library usage (pre-opening)
- there's now a PNG-Box homepage under <http://www.amigaworld.com/support/png-box/>
- updated docs and .readme

V2.05 (10.9.97):

- release version

V2.04 (7.9.97): [ internal beta version ]

- more GUI changes

V2.03 (7.9.97): [ internal beta version ]

- removed 'hide' menu item

V2.02 (6.9.97): [ internal beta version ]

- some more changes to the GUI  
(-> Georg Rottlaender <Georg.Rottlaender@home.ivm.de>)
- and more

V2.01 (6.9.97): [ internal beta version ]

- used Wizard-GUI with lots of improvements done by Georg Rottlaender <Georg.Rottlaender@home.ivm.de>
- SuperView 7.21/18.2 is out now, and re-loading of transparency information (of paletted PNG pictures with only one color being fully transparent) does work correctly with it

V2.00 (4.9.97): [ internal beta version ]

- now using wizard.library for supplying a fontsensitive and resizable GUI
- \*writing\* of PNG's interlacing scheme and \*reading\* \_and\_ \*writing\* of PNG's transparency scheme DID NOT WORK CORRECTLY !

For reading (re-importing):

Please also watch out for bug-fixed versions of akPNG.datatype (> 43.96) and SuperView-Library (> 7.20/18.1)

- task priority now 0, as usual
  - etc.
-

V1.50 (28.8.97):

- recompiled with SAS/C 6.58
- jumped from libpng 0.90 to 0.96
- updated docs
- superview.library V18+ required
- etc.

V1.40 (23.2.97):

- stupid: save size check was broken
- fixed various things
- debugged handling of 2..256 color pictures:  
make sure that you at least have PNG.svobject V4.9  
installed (coming with SViewFix580.lha or any library  
version greater than V16.1)

V1.30 (13.2.97):

- added support for superview.library V16+ transparency feature  
(GfxBuffer version V3) - transparent colors will be recognized  
and reflected on the GUI, just like with GIF before
- bugfix: transparent color could only be changed via keyboard,  
not mouse (argh!)
- remaining lock on source GIF file would not have been unlocked  
(transparency-extension check)

V1.20 (5.2.97):

- fixed transparency writing
- transparency checkbox toggled progressive mode as well (oops)
- added "extension mode (checkbox), where extensions source file  
names will be changed to ".png" automatically, if present  
(-> Philippe Duchenne)
- fixed transparency slider control
- added automatic transparency recognition for GIF files - if  
a GIF file had been loaded by an external loader or datatype  
it will again be scanned for transparency information and the  
GUI will reflect this (transparency gad is checked and color is set)  
(-> Philippe Duchenne)
- for all non-GIFs transparency settings will be reset always (yet)
- updated pnglib sources to V0.90

V1.10 (20.1.97):

- GUI now with better font-sensitivity  
(-> Patrik Nydensten)

V1.00 (18.1.97):

- first release

## 1.12 correspondence

---

\*\* General PerSuaSiVe SoftWorX WWW Support Site is <http://www.ar-kleinert.de> \*\*

```
| You may reach me the following way. |
| Send bug-reports, money or whatever to: |
|-----|
| * SuperView Development & Registration * |
| * DRAFU Development & Registration * |
| * Image Engineer Registration Site Europe * |
| |
| PerSuaSiVe SoftWorX |
| |
| Andreas R. Kleinert |
| Am Kornberg 48 |
| D-57076 Siegen |
| Germany, Europe |
| |
| +49-271-22869 |
| (also FAX + AM) |
| |
| Weekdays after 18.00h. |
| |
| When calling via phone you may leave a message, |
| if I'm not available - but don't expect me |
| calling back to USA, Australia, ... since |
| german phone rates are HIGHLY expensive. |
```

EMail:

Please ask before sending binaries!  
And please think twice before asking - my postbox  
is not unlimited in size.

\* Do not send binaries via Fido or Fido-Gates ! \*

- Fido    Andreas Kleinert 2:2457/350.18
- Usenet    >>>    [info@ar-kleinert.de](mailto:info@ar-kleinert.de)  
            [Andreas\\_Kleinert@gmx.de](mailto:Andreas_Kleinert@gmx.de)  
            [Andreas\\_Kleinert@t-online.de](mailto:Andreas_Kleinert@t-online.de)
- If nothing else works, try one of these public  
  Fido-Usenet gateways:

In Germany:  
  [Andreas\\_Kleinert@p18.f350.n2457.z2.fido.sub.org](mailto:Andreas_Kleinert@p18.f350.n2457.z2.fido.sub.org)

From USA or elsewhere:  
  [Andreas\\_Kleinert@p18.f350.n2457.z2.fidonet.org](mailto:Andreas_Kleinert@p18.f350.n2457.z2.fidonet.org)

When reporting any bugs, please don't forget to include a detailed  
description of the bug and tell me, if it is reproduceable or not.  
Please also mention the version number of PNG-Box you used and describe  
your system configuration (Amiga model 500/.../4000T-060, Kickstart/OS,  
RAM, HardDisk, special configurations).



## 1.13 Making use of 680x0 CPUs

Basically, this program does run with a plain 68000 CPU.

However, if you do own an 68020/030+68881/882 FPU or 68040/060+FPU, or maybe a dual processor board with PPC, you may wish to make use of the extra horse power.

There are certain configuration options, special libraries and/or patches available, so you perhaps should investigate into that issue a little bit deeper - but carefully.

### PPC Support

=====

1. With CyberStorm PPC cards, it may make sense to make use of the "SetFastAvec" and "Set60nsMode" (SetMemMode) tools, which should speed up the system performance somewhat, i.e. by addressing your RAM with 60ns instead of 70ns access time. Newer versions allow to do these settings fromout the card's bootmenu. If you get random crashes, step back to 70ns.
2. Make sure, that you have a lot of RAM on the accelerator, so that the PPC isn't forced to make accesses to the slow motherboard RAM. If you get random crashes, make sure you followed the installation instructions, and did not configure SIMMs of different vendors for a 64 bit access bank.
3. This program does make use of "ppc.library". So:  
Make sure, that you a) don't have "powerpc.library" installed or b) have a version of "powerpc.library" installed, which does not conflict with "ppc.library" (V7 is said to work together with ppc.library). Don't install ppc.library without having a PPC board plugged in. Always make use of the newest 68040/68060.library plus ppc.library - as available under ftp.phase5.de or Aminet.

(There's BTW now indirect support for powerpc.library V14 as well, so you can decide. It should work to run the PPC-Library versions under Frank Wille's ppc.library emulation for WOS.)

4. Read the corresponding FAQ pages for more information on PPC support and configuration - especially note, that a keyfile is required for fully functional PPC support within this datatype.

### 68020/030+68881/882 FPU and 68040/060+FPU Support

=====

Usually, Amiga OS' mathieeee-Libraries do automatically manage the coprocessor support, but for some reasons, these libraries are not used with this datatype:

- they can't be shared between processes
- they are not actually optimized for 68040/060+FPU as with OS 3.1

Unfortunately, the used FFP libraries don't support an FPU at all.

But there are certain patches available on Aminet, to speed up FPU support in general, add FPU support for the FFP libraries or in general allow more efficient use of the 040/060 CPUs, e.g. by avoiding unnecessary emulation of missing instructions through 68040/68060.library.

Make sure, that those patches don't conflict with certain versions of the 680x0 libraries or even are part of these already. If you've carefully read the docs you may wish to check out the following solutions:

#### 1. Fix bugs within the math libraries

This one has nothing to do with the FFP libraries, but since there's also a bug in mathieeesingbas.library (which resides in ROM), you should install a patch for that:

- a) best solution is a newer SetPatch Version V43.x  
(available from ftp.amiga.de somewhere in "/pub/")
- b) if SetPatch V43 does not work with your OS version,  
you should try for example "SetMathPatch"  
(coming e.g. with GhostScript - see Aminet:gfx/show)

Those patches may conflict with some math library replacements - it seems to be logically, that a completely rewritten replacement library of course does not need to be patched any further. At least not for the same bugs...

#### 2. Patching the math#? libraries for better (or introducing) FPU support:

- a) - FMath V40.6   Aminet:util/libs/FMath406.LHA  
    - FFPPatch     Aminet:util/boot/ffppatch.lha
- b) - HSMathLibs   Aminet:util/libs/HSMathLibs\_040.lha  
                  Aminet:util/libs/HSMathLibs\_060.lha
- c)   various other patches from the "util" area of Aminet

With the 68040/68060.libraries of p5, according to their docs, further patches of the math libraries are not recommended - however may work nevertheless.

#### 3. General 040/060 speedup

For automatic speedup on 68020+ systems, this datatype makes use of utility.library.

This one has nothing to do with the FPU, but if you do own a 060 and OS 3.0 you should perhaps consider to install

"Mult64Patch", which claims to implement the 64 bit integer functions UMult64/SMult64 of utility.library V39+ (which have to be software emulated on the 060) two times faster than the patches done by 68060.library and four times faster than the trap emulation. A speed test program is included.

That program can be found under Aminet:util/boot/Mult64Patch.lha - however, it may already be obsolete for newer versions of your 68060.library. Do the speed check, then decide.

#### 4. Better performance on 680x0 and PPC

Here, the following tools work quite fine on a 040/PPC board (taken in this order from s:startup-sequence):

```
C:FastExec >NIL: <NIL: NOEXEC FASTSSP FASTVBR FASTEXP FASTMEM FASTINT  ←
      REBOOT
C:SetPatch QUIET
C:QuickRom >NIL: <NIL:
Run >NIL: <NIL: C:CpuBlit
```

```
FastExec V2.9      (Aminet)      -> various speedups
SetPatch V43.6b    (www.amiga.de) -> OS patches
QuickRom V36.08    (Aminet)      -> ROM to RAM
CpuBlit98          (Aminet)      -> let the CPU do blitting
```

This all runs fine in 60ns mode, together with SetFastAvec, PPCInstall and CyberGraphX V3.

## 1.14 thanks

Thanks go to (in order of appearance ;-)  
=====

(some of these people did register, others did make suggestions/bug reports - how about you ?)

|                            |                     |                     |
|----------------------------|---------------------|---------------------|
| - Roman Patzner (RomIcons) | - Patrik Nydensten  | - Philippe Duchenne |
| - Christian Hoklas         | - Georg Rottlaender | - Jon Peterson      |

Credits go to Georg Rottlaender <Georg.Rottlaender@home.ivm.de> for improving my Wizard GUI and making it more user-friendly.

Beta Testers:

|                     |                     |                    |
|---------------------|---------------------|--------------------|
| - Patrik Nydensten  | - Philippe Duchenne | - Christian Hoklas |
| - Georg Rottlaender | - Jon Peterson      | - Christian Beck   |
| - Kimme Utsi        | - Kolbjorn Barmen   |                    |

## 1.15 About PNG - successor of GIF

PNG is the successor of the GIF file format. Other than GIF it is completely free of patent claims and has been designed with free data exchange in mind. Drop GIF for PNG - free algorithms are as important as free speech on the internet:

GIF is obsolete - you neither should use nor support it any longer. If you are doing WWW design, use PNG and JPEG instead. It's important !

For more information on PNG (pronounce: PiNG) for example look at:

- [1] PNG specification (AmigaGuide format)  
-> [Aminet:docs/hyper/PNG-guide.lha](#)
  - [2] PNG WWW homepage  
-> <http://www.cdrom.com/pub/png/>
  - [3] PNG upgrade tools like gif2png  
-> [Aminet:gfx/conv/gif2png-0.6.lha](#)
  - [4] programs capable of PNG, like PPaint, SuperView,  
or PNG-Box, etc.
-