

**JPEG-Box**

<b>COLLABORATORS</b>
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	<i>TITLE :</i> JPEG-Box	
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>
WRITTEN BY		August 27, 2022
<i>SIGNATURE</i>		

<b>REVISION HISTORY</b>
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NUMBER	DATE	DESCRIPTION	NAME

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# Chapter 1

## JPEG-Box

### 1.1 JPEG-Box\_Documentation

JPEG-Box V4.30 (6.12.1999)

- SHAREWARE -

© 1998-99 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

68020-68060, PPC

Where to obtain Updates from

How to use it

Evaluation restrictions

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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 JPEG-Box in this version and its documentation files are (C)opyright 1998-99 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 U\$) [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.

JPEG-Box makes use of SuperView-Library, which is (C)opyright 1993-99 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 work of the Independent JPEG Group.

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

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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 JPEG-Box MUST NOT be redistributed. The Distribution of Keyfiles is FORBIDDEN.

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

The program JPEG-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

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

Besides that, there are several PPC modules available for use with SuperView-Libray, which JPEG-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

JPEG-Box is a program that has been designed to write JPEG (JFIF) files for WWW usage as easily as possible.

It can read any file format SuperView-Library does support and can make a JPEG 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 separately, 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

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Although the JPEG-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/JPEG-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 JPEG (JFIF) files with the following options:

- progression on/off
- compression 0..100 (attention: "0" means BIGGEST compression !)

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

It's also possible to view the JPEG compression source and destination files in a window on workbench. This way there's a preview possible.

That's it :-)

## 1.10 evaluationrestr

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

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

## 1.11 history

V4.30 (6.12.99):

- a few small - but necessary - changes
- changed image viewing mechanism
- please use at least V41.101 of wizard.library.  
You should find a copy coming with demo versions of various programs under ftp.haage-partner.com
- 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 PNG (PiNG) graphics for WWW uses or other purposes, please have a look at our PNG-Box tool, which has been designed especially for this purpose (Aminet:gfx/conv/PNG-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):

- improvements in detail
- updated docs

V4.15 (24.9.99):

- PPC DCT speedup
  - 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):

- small changes
- 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
- bumped version to illustrate equality to PNG-Box' state of development

V1.02 (16.11.98):

- PPC I/O speedup
-

V1.01 (17.10.98):

- gadget text mentioned wrong extension (.png instead of .jpg)
- added modified GUI, with nicer JPEG 'icons'  
(-> graphics composed and added by Georg Rottlaender)
- made sure, that the progress bar ends at 100% always when saving  
(in 68k mode, sometimes 97% or something like this was possible)  
(-> Jon Peterson)
- updated docs

V1.00 (2.10.98):

- 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
      Andreas_Kleinert@gmx.de
      ARK@News.wwbnet.de
```

- If nothing else works, try one of these public Fido-Usenet gateways:

```
In Germany:
      Andreas_Kleinert@p18.f350.n2457.z2.fido.sub.org
```

```
From USA or elsewhere:
      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 JPEG-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

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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

