akLJPG_Documentation

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Chapter 1

akLJPG_Documentation

1.1   akLJPG : Documentation

```
                    akLJPG.datatype V44.4

               - licenseable FREEWARE -

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                 (also see Copyright notices below)

            A PerSuaSiVe SoftWorX PRODUCT.

               Needs Kickstart V3.x

            Release Date : 9.8.1998


       <Commercial> BTW: What is SViewII ? </Commercial>
       <Commercial> Already tested PMPro ? </Commercial>


                      Copyright
                      Disclaimer
                     Distribution
                   Usage and Notes
                     Datatype FAQ
                        Prefs
                   Correspondence
                        Thanks
                    Version-History


              _ //
        Only \X/ Amiga makes it possible!



                  Please visit:

                WWW Support Site
           http://wdo.de/ark/ (AWeb-II)
```

```
    The CHAOS theory:

    "Like finding that bloody butterfly whose flapping
     wings cause all these storms we've been having lately
     and getting it to stop." (see "Witches Abroad" by Terry Pratchett)


    Ahm...well:

    ...and thanks for all the fish.
```

1.2 copyright

The akLJPG.datatype in this version and its documentation files are
(C)opyright 1997-98 by Andreas R. Kleinert. All rights reserved.

akDT_Installer by Robert C. Reiswig ©1996-1998.
If you wish to use any part of this installer you must ask. May not be
integrated/placed into any other package! Changes, suggestions or problems:
akDatatype@vgr.com

Prefs GUI design improved by Georg Rottlaender <Georg.Rottlaender@bonn.netsurf.de>
under use of a 'NewIcon' graphics by Philip Vedovatti <vedovatt@u.washington.edu>
– included with kind permission by the 'Team NewIcons'

The patch files were created using the scompare SAS Binary File
Compare Program V6.50 which is copyright © 1992-1993 SAS Institute,
Inc. The spatch SAS Binary File Patcher V6.50 is copyright © 1992
SAS Institute, Inc.

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documents may be copyrighted by companies or trademarks of companies
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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.

The sources are based on the original "ljpgtopnm" utility, which
is available from ftp.cs.cornell.edu in the pub/multimed/ljpg directory,
from where I fetched the "Lossless JPEG Codec (Version 1.0; June 20, 1994)"
by Kongji Huang and Brian Smith, Department of Computer Science, Cornell
University. Precisely, the original sources of the "ljpgtopng" utility,
have been used.

So, for the LJPEG part, note the following:

This software is based in part on the work of the Independent JPEG Group.

Copyright (c) 1993 Cornell University, Kongji Huang

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deletions, or changes to the original files must be clearly indicated
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claims are assumed by the product vendor.

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

The akJFIF.datatype in this version is freely distributable (FREEWARE).
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all of its parts are included in the distribution.

This program may only be included in commercial packages or commercial
program collections with my written permission – ask for it.

This program may be put on public domain disks or included in public
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that as "commercial" in the above mentioned sense.

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 Usage and so on

```
Usage
-----
Just install the datatype files to their appropriate directories,
and copy the akLJPGPrefs command to SYS:Prefs/Datatypes (optionally).


Program information
-------------------
It supports reading of LJPG graphics files.
LJPG is a freely distributable lossless JPEG image compression package.

There's a port of the encoding program "pnmtoljpg" available on Aminet
as gfx/pbm/pnmtoljpg.lha, which compresses a Portable Pixmap (PPM, PNM-P6)
or Portable Graymap image (PGM, PNM-P5) to a lossles JPEG (LJPG) image
using the JPEG standard (DIS) lossless mode of operation.

This datatype decodes a ljpg image to either 24 Bit RGB or 256 grayscales
depending on the number of color components stored in the LJPG image file.

With V39-V42 picture.datatype it either produces (upto) 256 color
palette-based or HAM6/8 output (256 colors exported unmodified,
24 Bit data either dithered or converted to HAM6/HAM8) with
picture.datatype V43 as well 24 Bit may be exported unmodified.

There are picture.datatype V43 versions available for both,
CyberGraphX and Picasso96, while the one for Picasso96 does work
with ECS/AGA, too - simply use the appropriate one.

akLJPG.datatype is FREEWARE, but donations are always welcome.
```


1.6 Datatype FAQ

```
PPC module (ELF)
----------------
  Yes, this datatype is prepared for a great speed up with phase5's
  powerUP (TM) boards.

  For this, the ELF LJPG decoder module has to be placed at location
  SYS:Classes/Datatypes/akLJPG.ppc - the installer script will
  manage this for you on demand.

  Make sure that you've the 68040/060 versions of the datatype
  installed, since the 68000/030 versions don't contain the necessary
  extra code (there are no powerUP boards with 68000/030s CPU
  available or planned as far as I know). Also, don't install
  the ELF module and/or ppc.library if you don't have a PPC board
  plugged in.

  Raw loading speed up should be very impressive with this PPC module,
  although it of course can't increase rendering or dithering (remapping)
  speed of other system modules or the calling program.

  HAM conversion or ordered dithering (for 24 bit images, i.e. if not
```

    in V43 mode) are NOT yet PPC optimized - get a graphics card !

    NOTE: decoding will need about twice as much memory as with
          the 68k decoder, plus approximately another 50K for
          the loaded ELF module, 16K for stack and 2x16K for I/O buffers
          (you know, RISC is 'reduced instruction set' and not
           'reduced memory usage' - but now you are able to actually
           make use of all that expensive RAM ;-)
          Also, the progressbar is not available for PPC decoding
          (does not make much sense when e.g. WWW browsing, anyway).

Small PPC FAQ

   Q: Why is a 060/PPC combo faster than the 040/PPC combo ?
   A: Perhaps because the 060 can process the I/O requests (aka OS calls)
      faster than the 040. Small differences may also be caused by
      using different hard drives - to minimize this, one could put
      the files into RAM: for example, but this wouldn't deliver
      real-life results. The following question is related, too.

   Q: Can't PPC loaders be faster than this datatype one ?
   A: Yes, they actually *can* be faster than the measured results
      may indicate. Problem is, that datatypes have to deal with
      bitmaps, which slows everything down. For example, in 24 bit
      mode DTM_WRITEPIXELARRAY still has to be performed by the 68k,
      and in 8 bit mode, the same does apply to WritePixelLine8()
      - the latter one may include a c2p version on systems without
      a graphics card. To avoid the latter, one for example could
      try the PPC native loaders for SuperView-Library instead.

   Q: Why are there different speed-up factors for different images ?
      I've performed Jan Uerpmann's PicBench test from his site
      <http://www.tu-bs.de/~y0002723/files/PicBench.lha> and it
      seems to indicate this.
   A: The "larger" the images, the more the PPC can help increasing
      decoding speed - so larger images may deliver better results
      than smaller images.

More datatypes ?

   On Aminet:util/dtype/ you can also find akJFIF, akPNG, akSVG and
   the co-production FAXX (with GPSoft) datatype.

What's the relationship between JFIF and LJPG ?

   The answer is simple: on file format level, there actually
   is none, thus neither one of the two datatypes does replace
   the other one and you would need to install both to get the
   functionality of both - but akJFIF perhaps is the more
   important one.

No V43 with AGA ?

   There's a V43 picture.datatype coming with the Picasso96 RTG
   package (on Aminet), which works with plain AGA, too.

Crashes ?

```
  ---------
    The first reason for a crash often is stack size. Not enough stack size.
    IPrefs/WBPatterns has this problem, and others as well.
    Checking this and/or using FastIPrefs (the replacement) is recommended.

  No write support ?
  ------------------
    Sorry, there won't be write support (DTM_WRITE method), since I think,
    that datatypes are mainly a system for data exchange and not to do
    the job of existing conversion utilities.

    To explain it even further:

    The datatype mechanism certainly is a system to HIDE implementation and
    data format details. If one does offer too much choices for destination
    file formats, this would - in my opinion - completely be against this
    concept. The ideal way of keeping the datatypes' concept cleanly OOP
    would be to internally handle everything in an amiga-unique IFF format
    - which BTW is quite essential for clipboard data exchange as well.
    Unfortunately IFF-ILBM isn't very suitable for color depths greater
    than 8 bit. Maybe IFF-RGFX could be a good choice, here.

  Odd screenmode selection
  ------------------------
    graphics.library's BestModeID function isn't so well designed.
    Try Patching to a better one, e.g. with Aminet:util/sys/ModeP.lha

  Progressbar and programs (esp. Browsers)
  ----------------------------------------
    Please note, that the (optional) progress bar will either open
    on a windows's screen as specified via pr_WindowPtr, or on the default
    Public Screen, thus if your favoured Web Browser does not set
    pr_WindowPtr or does not declare its screen as default pub screen,
    that's not my fault. PDTA_Screen will be checked first, as well
    - but usually this won't work at all.

  Ramlib Crashes
  --------------
    If you get "ramlib" gurus with this or any other program,
    then try installing Aminet:util/sys/StackAid.lha

  Unknown datatypes (V43)
  -----------------------
    If your datatypes stop working (unknown file format), please don't
    blame me, but at first check, whether you've still installed an already
    expired beta version of picture.datatype V43...
```

1.7 correspondence

```
  ** General PerSuaSiVe SoftWorX WWW Support Site is http://wdo.de/ark/
  ** - actually redirected to http://home.t-online.de/home/Andreas_Kleinert/


    _____
  |        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                   |
|                     Sandstrasse 1                         |
|                     D-57072 Siegen                        |
|                     Germany, Europe                       |
|                                                          |
| Any snail mail to the old address will still be routed.   |
|                                                          |
|                     Phone:  +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 send binaries via ARK@News.wwbnet.de, and keep
        them smaller than 16 KB - otherwise ask before.
        Please think twice before sending them - my postbox
        is not unlimited in size.

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

            - Fido   Andreas Kleinert 2:2457/350.18
            - Usenet
              >>>   Andreas_Kleinert@t-online.de   (T-Online)
                    ARK@News.wwbnet.de   (Z-Netz)
                    ARK@superview.ftn.neckar-alb.de   (Fido-Gate)
                    Andreas_Kleinert@gmx.de   (GMX)

            (note, that mail sent to @gmx.de currently will be
             forwarded to @t-online.de - so, as long as it works,
             try to address the latter directly)

          - 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

1.8 thanks

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

 (some of these people sent money, others did make
  suggestions/bug reports or helped otherwise - how about you ?)

 - Jörn Krüger        - Andreas Schwarz      - Per Jonsson
 - Roland Mainz       - Robert C. Reiswig    - B & D Kubler
 - Georg Rottlaender  - Phil Vedovatti       - Petra Struck
 - Heiko Kröhnert     - Alvaro Thompson      - Achim Stegemann
 - Bert Bosma         - Javier Marcet        - Michael Merkel
 - Ralph Ewers        - Steve Krueger        - Jim Cooper


Thanks also must go to:

  - ...the Amitrix team, namely Brant Coghlan and Dale Currie
  - ...the Cloanto team, namely Michael C. Battilana
  - ...the DOpus team, namely Dr. Greg Perry and Jonathan Potter
  - ...the Haage and Partner people, namely Jürgen Haage and Markus Nerding
  - ...the people from phase5, namely Ralph Schmidt and Claus Herrmann
  - ...the picture datatype V43 programmers, namely Frank Mariak and Olaf Barthel
  - ...the other programmers of datatypes, for information exchange
       and useful comments
  - ...dozens of people I forgot to mention here !
```

1.9 prefs

```
 akLJPGPrefs
 -----------
 akLJPGPrefs is the Preferences Program for akLJPG.datatype.

 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").

 Icon by Bert Bosma <lmb@wxs.nl> (based on NewIcons).

 An alternative MUI prefs program replacement by Alvaro Thompson
 (originally) and Achim Stegemann (later) is now available as
 util/dtype/akMUIPrefs.lha


 The global settings will be written to ENV: (and maybe also ENVARC:)
 into a preferences file called "Datatypes/akLJPG.prefs".

                          OPTIONAL
 ---------------- task specific settings files ----------------------
 Settings specific to different caller programs may be created
 by copying the global settings from "Datatypes/akLJPG.prefs" to an
 optional task-related prefs file called
```

        "Datatypes/akLJPG.prefs_Tasks/TaSkNaMe"

  where "TaSkNaMe" means the name of the program as e.g. shown by
  a system monitor (for obvious reasons, this does work best with
  workbench programs, which don't require name patterns as some
  CLI programs might do, like for example "CLI(3):Work:Browsers/XWebber").
  So, with AWeb for example, you would just edit your global settings
  file and then do the following:

    MakeDir ENV:Datatypes/akLJPG.prefs_Tasks
    Copy ENV:Datatypes/akLJPG.prefs ENV:Datatypes/akLJPG.prefs_Tasks/AWebIP"

      [... and the same for ENVARC: ...]

  After that, AWeb will ignore the global settings and fetch its own
  from the given file.

  As with V44.1 this no longer needs to be done by hand, but easily
  can be managed fromout the (original) preferences program (as long
  as the corresponding task actually is running at the same time).

  You can do the following settings:

1) V43_MODE=(NO_DITHERING|V40_DITHERING)
2) V40_24BIT_MODE=(DITHER_ORDERED|HAM_OUTPUT)
3) V40_DEPTH=(3..8)
4) HAM_MODE=(HAM6|HAM8)
5) PROGRESSBAR=(ON|OFF)
6) INTERLEAVED_BM8=(ON|OFF)
7) SPEEDUP
8) CUSTOM_MODES
9) NOPPC
10) NOASPECT

  That's mostly self-explaining, but as an example,
  here are the default settings and a short explanation:

V43_MODE=NO_DITHERING
V40_24BIT_MODE=DITHER_ORDERED
V40_DEPTH=8
HAM_MODE=HAM6
INTERLEAVED_BM8=ON
PROGRESSBAR=ON

  General Explanation of Options
  ==============================

1) V43_MODE

  NO_DITHERING: does output 24 Bit data when running pic-dt V43
  V40_DITHERING: switches to V40 mode settings when running pic-dt V43

2) V40_24BIT_MODE (when running picture datatype V40 or V43 in V40 mode)

```
  DITHER_ORDERED: does ordered dithering of 24 Bit data
  HAM_OUTPUT:     does convert 24 Bit data to HAM6/8


3) V40_DEPTH
------------
  When dithering to a palette (so: when in V40 mode and ordered dithering
  being selected) the number of palette colors, which is 256 by default,
  may be reduced here (e.g. on ECS systems).
  Valid depth values are 3..8 (which results in 16..256 colors, easily
  calculated by 2^depth).


4) HAM_MODE
-----------
  HAM6: generates HAM6 output for 24 Bit graphics, when running V39-42
  HAM8: generates HAM8 output for 24 Bit graphics, when running V39-42

    Note, that HAM8 is native to AGA machines and thus may cause
    difficulties with graphic boards and won't work with OCS/ECS Amigas.
    With HAM6 and graphic boards also problems may occur.


5) INTERLEAVED_BM8
------------------
  ON:  will output interleaved bitmaps upto 256 colors
  OFF: will output normal bitmaps (BMF_CLEAR only) - you may
       switch interleaved mode off for specific programs, which
       cannot handle it, or when AllocBitmap() has been patched
       for chunky modes by a graphics card software or e.g. EGSPlus

  Note: There's no need for BMF_DISPLAYABLE, don't rely on it.
  And:  If you encounter 'out of memory' or 'cannot open screen'
         problems, first try disabling interleaved bitmaps.


6) PROGRESSBAR
--------------
  ON:  pop up percentage display
  OFF: do not pop up percentage display


7) SPEEDUP        (hidden option)
---------------------------------
  Activates some bitmap related optimizations, including a special
  hack for making image loading with AWeb somewhat faster.


8) CUSTOM_MODES   (hidden option)
---------------------------------
  When the keyword CUSTOM_MODES is set,
  only viewmodes out of the standard set
  will be generated: - LowRes            ( 320x200/256)
                     - HighRes           ( 640x200/256)
                     - SuperHighRes      (1280x200/256)
                     - LowRes Lace       ( 320x400/512)
                     - HighRes Lace      ( 640x400/512)
                     - SuperHighRes Lace (1280x400/512)

  When CUSTOM_MODES=0x######## (e.g. CUSTOM_MODES=0x00000000)
  is set, the specified hexadecimal viewmode ID will be used always
  - alternatively, you can specify the viewmode name as plain text,
  for example "CUSTOM_MODES=PAL:HighRes". Note, that spelling is
```

  very critical here.

  For HAM output, this is only true, if the mode ID actually is
  capable of HAM (this usually is indicated by OR'ing it with HAM_KEY),
  otherwise a different ID will be computed.

9) NOPPC   (hidden option)

  When the keyword NOPPC is set, the PPC encoder module won't be used,
  even with a PPC available. Instead the datatype will fall back to
  68k mode. Useful e.g. for speed comparisons.

10) NOASPECT   (hidden option)

  If x/y aspect generation produces buggy results,
  e.g. with PictIcon, this option may be used to
  always force 1:1 to be returned.

1.10 history

  Known Bugs: - Some people reported problems with the installation
                scripts in the past. If you encounter any problems or
                bugs, please report these directly to the script author
                Robert C. Reiswig <akDatatype@vgr.com>

              - There did occur problems with V36.126 of wizard.library,
                so you may wish to upgrade to V37.127 or higher (see
                Aminet:gfx/misc/SvII-WIZ.lha). There also are newer
                versions available, but obviously not on Aminet - ask
                Haage and Partner or check their latest demo version
                releases. -- Since it's only used for the prefs program,
                there's no need to worry, if you don't use the wizard
                version, though...

              - viewmode selection may not alway be 'perfect'

  History
  =======
  V44.4 (9.8.98):   - *** FINAL RELEASE ***

                         It's suggested to use JFIF style JPEGs where
                         possible - lossless JPEG as implemented
                         for LJPG only is experimental/proprietary.

                         Further updates to akLJPG-dt are unlikely.

                       - bumped version of PPC part
                       - fixed small problem in PPC startup code
                       - stripped ELF module (~2000 bytes)

  V44.3 (28.7.98):   - semaphore locking now more restrictive; possible
                         problem when under heavy parallel use of the
                         PPC decoder ?
                       - stackswap in LibInit now only when necessary

```
                            and only to 8K (not 16K)
                          - addressed minor cacheflush problem (strlen+1)
                          - V44.2 still was labeled V44.1
                          - rewrote major parts of the documentation;
                            check it out!
                          - fixed "can't close shell window problem"
                            (thanks to Michael Merkel for pointing out)
                          - fixed problem with SAS/C's stdio initialization
                            that could cause crashes when there was tried
                            to do an Open("*", ...) - now all the three
                            stdio handles are NIL: since we don't use
                            these, anyway. This finally should fix the
                            problems we sometimes ran into with DOpus and
                            IPrefs/WBPattern. Also, they're now properly
                            unlocked (which was a problem related to
                            the reuse of our ELF module and caused those
                            shell problems).
                            (-> thanks to Michael Merkel, Javier Marcet
                            and Ralph Ewers for beta testing, Olaf Barthel,
                            Frank Mariak, Dr. Greg Perry and Jonathan
                            Potter for useful comments and Steve Krueger
                            and Jim Cooper for all their work on SAS/C
                            for PPC as we have it now).
                          - fixed 1032 byte memory leak, as introduced
                            in one of the latest versions
                            (-> Troels Walsted Hansen)
                          - fixed problem in prefs file handling, that
                            could occur under low memory conditions


V44.2 (15.7.98):          - removed commercial header in guide file
                          - increased stacksize in prefs' icon from
                            4096 to 32768 bytes to avoid crashes from WB
                          - made some efforts to reduce stack usage
                            within the datatypes' 68k code where possible;
                            may help to avoid crashes sometimes
                          - iffparse.library was opened although not needed
                          - added temporarily 16K stackswap to init code,
                            where it is safe (I will _not_ do that for the
                            main datatype dispatcher, it would most likely
                            cause a bunch of new problems)
                          - added StackCheck mechanism that will put up
                            a requester and will allow you to make the choice
                            to quit - giving a low memory error - before
                            its too late. It's been tested with MultiView
                            and DOpus5.
                          - if you get "ramlib" gurus with this or any other
                            program, then try installing the following patch:
                                Aminet:util/sys/RamLibPatch.lha

V44.1 (27.6.98):          - prefs program now allows to do task-specific
                            settings directly
                          - jumped to V44 since some people seem to prefer
                            version inflation over clarification
                          - you should upgrade to ppc.library V46 (ftp.phase5.de)

V43.187 (5.6.98):         - updated akDT_Installer by Robert C. Reiswig
                            (-> Robert C. Reiswig, akDatatype@vgr.com)
```

```
                              - prefs were screwed up since 43.181, trying to
                                load akJFIF's .wizard file instead of the LJPG one
                                (-> Magnus Bouvin)

V43.185 (7.5.98):    - if x/y aspect generation produces buggy results,
                                e.g. with PictIcon, there's now an optional
                                (and hidden) prefs switch to be set: "NOASPECT"
                                will always let the datatype return 1:1
                                (-> Gunnar Schuster)
                              - added internal replacement for BestModeID();
                                maybe it's still not perfect, but seems to
                                work better than the original one, at least
                                under CyberGraphX
                              - fixed a bug in the HAM viewmode ID selection
                                (related)

V43.181 (23.4.98):   - prefs program redone with StormC 2.00.32
                              - prefs program now internally does include
                                a copy of the .wizard file, so even if it
                                isn't in PROGDIR:, the GUI can be opened
                                (it just won't remember size and position, then)

                              - added missing icons
                                (-> CPurnell)

V43.180 (29.3.98):   - cleaned up source code
                              - better modularization
                              - reduced number of file access during handling
                                of preferences settings (now just opened and
                                read once)
                              - various optimizations and fixes to the source code
                              - added PPC support via an ELF plugin module;
                                will work with all applications, no keyfile needed.
                                See FAQ for questions on PPC support.
                                (installer has not yet been tested to handle this
                                 PPC module, so you may have to install the PPC module
                                 by hand, if it's not copied during installation)
                              - main datatype code accidentally generated
                                for 68060. Not really a serious problem, unless
                                you actually tried running the 68000 version on
                                a 68000 ;)
                              - ordered dithering was completely broken,
                                additionally it did result in a memory leak
                              - using bigger I/O buffer on 68k side now, too
                              - now checks ENV:Classes/Datatypes/ for preferences, too
                              - adopted (hidden) "CUSTOM_MODES", "SPEEDUP" and "NOPPC"
                                prefs options from akPNG/akJFIF
                              - updated/fixed prefs description
                              - updated statement on DTM_WRITE support
                              - added new, improved Installer script by
                                Robert C. Reiswig (-> a lot of credits
                                hereby go to his address :-)

V43.175 (17.3.98):   - unified installation procedure, removed
                                "Install" and "FIRST_Unpatch" scripts,
                                added new Installer script by Robert C. Reiswig
                                which now again does handle everything that's
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                        necessary for a proper installation

V43.165 (7.3.98):    - 030/040/060 versions now generated from patch files

V43.155 (13.2.98):   - small changes

V43.140 (25.1.98):   - added new icon for prefs program (NewIcons)
                       (-> by Bert Bosma <lmb@wxs.nl>)
                     - fixed enforcer hit as introduced in 43.135
                       (-> Sebastian Becker, Thomas Tavoly, various)

V43.135 (5.1.98):    - optimized progress bar code
                     - fixed possible bugs in the progress bar code
                     - upgraded outdated "1997" to "1998" bugfix
                       release ;-)
                     - made bitmap allocation and handling a little
                       bit more cgfx-aware
                     - added special speed hack for 8 Bit output on
                       AWeb-II screens under CGfx

V43.130 (12.12.97):  - speed: optimized compiler's code generation

V43.121 (23.11.97):  - OLD_DTM_WRITE switch was taken from akJFIF.prefs :-(
                     - the new dispatch routine again (or still) has been
                       causing problems, this time with IBrowse (not
                       displaying certain images, maybe because of refresh
                       problems). Removed all the new code, again using
                       David N. Junods good old method, here
                       (-> Philippe Duchenne)

V43.120 (5.11.97):   - Prefs now with correct version id
                     - included fixed "install" script by Roger Hagensen,
                       which - besides some other bug fixes - now also does
                       check for the GUI version
                       (-> several)

V43.110 (15.10.97):  - Prefs GUI design improved by Georg Rottlaender
                       <Georg.Rottlaender@bonn.netsurf.de>
                       under use of a 'NewIcon' graphics by Philip Vedovatti
                       <vedovatt@u.washington.edu> - included with kind  ←
                          permission
                       by the 'Team NewIcons'
                     - Prefs program accidentally linked with storm020.lib. Fixed ←
                        .
                     - this will be the LAST update, until there's a MAJOR
                       reason to fix/update something

V43.100 (5.10.97) :  - rewrote Dispatch() routine completely,
                       implemented new routines derived
                       from Roland Mainz' improved sample code
                     - DTM_WRITE now can be forced to its
                       old behaviour by specifying the hidden
                       prefs option "OLD_DTM_WRITE"
                       (IFF-ILBM then will be written without
                        any error code given because of
                        unsupported DTWR_RAW)
                     - recompiled prefs program with StormC 3.0 (2.00.23)
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                              - prefs now using external .wizard file
                                (improve GUI, if you like)
                              - prefs GUI now remembers position and size

V43.95 (12.08.97)  : - recompiled with SAS/C V6.58

V43.92 (28.07.97)  : - updated docs
                     - updated 680x0 info
                     - updated akDT_Installer by Robert C. Reiswig
                       (-> Robert C. Reiswig, akDatatype@vgr.com)
                     - recompiled prefs program with StormC V3.0
                     - fixed possible, _small_ memory leak within
                       progress window's msg handling

V43.91 (04.07.97)  : - fixed "memory loss on LibInit failure" bug
                     - added new akT script V43.90
                       (-> Roger Hâgensen)
                     - updated scripts
                       (-> done by Roger Hagensen)
                     - progress bar: replaced two
                       Forbid/Permit by semaphore
                     - removed another (unnecessary)
                       Forbid/Permit pair
                     - some __saveds were missing
                     - __inlined CalcProgressPos()
                       (not time-critical)

V43.90 (24.06.97)  : - V43.81 should had been available as binary-only
                       fix archive "akFix4381.lha" together with
                       the other datatypes, only.
                       Upload did not succeed
                       (-> a zillion people did report V43.80 bug)
                     - added akDT_Installer by Robert C. Reiswig
                       (-> Robert C. Reiswig, akDatatype@vgr.com)

V43.81 (16.06.97)  : - prefs icon was renamed differently than program
                       (-> detected by Roger Hagensen)
                     - new dispatcher code either still is
                       buggy, only works with V45 or has been
                       implemented wrongly. Anyway: V43.80
                       was messed up, better use V43.81 !!
                     - prefs icon had be wrongly named
                       (-> Roger Hagensen, Andreas Schwarz)

V43.80 (14.06.97)  : - SetPatch 43.6 is on ftp.amiga.de
                       Get it!
                     - protection bits now correctly set
                       (-> Per Jonsson)
                     - updated class dispatcher
                       (-> Roland Mainz)

V43.75 (27.05.97)  : - HAM indicator seems to have been broken since
                       some releases (viewmode field, HAM_KEY)
                     - added new viewmode generation routine, expecial
                       for HAM modes, which takes care of AGA HAM
                       capabilities and PAL/NTSC
                     - added correct viewmode generation for all other
```

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                          modes, too
                        – aspect ratio fields of BitMapHeader structure
                          now are filled according the selected viewmode
                        – added new akT V43.70
                          (-> Roger Hâgensen)

V43.60 (20.04.97)  : – in the prefs, "24 Bit" was "Dithering" and vice versa ( ←
   V43_MODE)
                        – temporary file in T: would not have been deleted
                        – updated email
                        – updated docs

V43.1 (25.3.97)    : – first version
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