ArtPRO

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ArtPRO

1.1 ArtPRO v0.88u © 1994/1995 Frank Pagels / Defect Softworks

```
                               ArtPRO v0.88u

             multi-purpose graphics converter
                   and image processor

             © 1994-1995 by Frank Pagels
                   Defect Softworks




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           Copyright notes

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           Warranties? No way.

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1.2 Copyright

```
                            Copyright
```

The entire ArtPRO package was created and is copyrighted © 1994/1995
by Frank Pagels, except for reqtools.library which is copyrighted © by
Nico François.

1.3 Disclaimer

```
                           Disclaimer
```

This documentation and the ArtPRO program are provided "as is" without
any warranty, either expressed or implied. Use this software on your
own risk.

1.4 Distribution

```
                          Distribution
```

The ArtPRO package may be redistributed freely, as long as there are
no changes made to any part of this software or documentation. No
parts of this package may be omitted or altered by any means except
for archiving. You have to reproduce the package completely. Please
refer to the list of contents for verification:

```
   ArtPRO  (dir)
      ALoaders (dir)
         BMP
         PCX
      Icons (dir)
         ARTProLace.info
         ARTProMagicWB.info
         ARTProNoLace.info
```

```
    libs  (dir)
        reqtools.library
    ArtPRO
    ArtPRO.guide
    ArtPRO.guide.info
    ArtPRO.info
    libs.info
    Orderform.doc
    Orderform.dok
  ArtPRO.info
```

Neither fees may be charged nor profits may be made by distributing
this piece of software. Only a nominal fee for costs of magnetic media
is acceptable, whereby the amount of US $3 or DM 4,- must not be
exceeded for a disk containing ArtPRO.

1.5 Shareware

                                       Shareware

ArtPRO is shareware, which means that this software may be used and
redistributed freely. Nevertheless, you're requested to
                  ~register~
                   if
you wish to use ArtPRO frequently. First of all this helps to ensure
further development. Second, registered users will get a private
keyfile along with the latest version available, and finally, you'll
be able to use ALL the features provided by ArtPRO.

Keep in mind that ArtPRO is still under heavy development. There will
be many additional features available in the future. If you register,
you'll be preferred in different ways:

- You get one major update for free.

- More free updates are available if you send in a disk and include
  either german stamps or enough money for postage.

- Suggestions for improvements proposed by registered users will be
  taken into consideration first.

- Some oncoming features will be reserved for registered users.

The limitations for non-registered users are almost neglectable,
though: The requester for a customized sprite control-word calculation
doesn't show up, the screenmode lock doesn't work, and a

                  ~registration~
                    reminder pops up on exit - that's all. The number of
features reserved for registered users will grow in the future, of
course.

The shareware idea behind ArtPRO is that development stays transparent
to you. The earlier you
                  ~register~

, the better your demands can be
taken into account. Last not least, updates stay free until doomsday.

1.6 Registration

Registration

To register, fill out the registration form included, bring it to
paper and send it to the
~author~
. The registration fee is DM 20,- or
US $15 or UK £10. Try to get a registration with other currencies if
you dare. Include cash, international money order, or cheque. Coins in
currencies different from German Marks cannot be accepted. Cheques are
only acceptable from within Germany. Make international money orders
and cheques payable to Frank Pagels.

Registered users will receive a sending by mail, including your
personal keyfile and the latest ArtPRO revision. More updates are
available if you send disks and additional money or stamps for
postage. Updates should also be available at your local bulletin board
systems.

1.7 Author

Author

Submit suggestions, bug reports, registrations to:

Crazy Copper / Defect Softworks

Frank Pagels
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18106 Rostock
FR of Germany

Phone +49 (0)381 1207938

E-Mail: henryk.richter@stud.uni-rostock.de
Subject: Art-Pro

1.8 Introduction

Overview

ArtPRO was designed to combine these features:

 - Image conversion
 - IFF-to-RAW conversion for programmers

- Color and image processing
- Comfortable graphical user interface
- Programmable interfaces

The IFF-to-RAW conversion for programmers is the most finished part of ArtPRO so far. Highly flexible source code generation is supported as well as binary and linkable output. Images can be saved as bitplanes, chunky and truecolor in many variations. Copperlists and sprite control-words can be generated automatically. The AGA hardware features are extensively supported by ArtPRO.

Image conversion means interchange of different file formats for graphics. This part has been heavily improved – finally, ArtPRO supports datatypes and external loaders.

Color and image processing is not yet supported, except for one new and quite useful feature, Color-Bias. The long-awaited palette editor and image operators will be available in the next versions, the truecolor and rendering features are already being worked on.

ArtPRO doesn't consist of an empty screen with dozens of menues, driving you berzerk with unsuitable colors and weird screen resolutions – instead, it has got an expensive GUI which can be driven by both gadgets and keyboard shortcuts. Finally, the GUI has become font-sensitive and can be opened on public screens. It can be configured in many ways to suit your taste.

External loaders appear in this release for the first time. An ARexx port is still not available. The loader/saver/operator interfaces are almost finished and will be soon documented for public use.

ArtPRO is far away from being finished. Many essential functions are yet complete, though. You'll find IFF to RAW conversion (and vice versa) in quite innumerable ways implemented. ArtPRO is not yet a replacement for commercial high-tech image processors like Artdepartment or ImageFX and it will never be one. Right now, it's a great image converter for programmer's purposes, and in addition to that, it will offer many color and image processing features in the future.

1.9 System requirements

                              System requirements

ArtPRO requires an Amiga with operating system 2.04 (V37) or above. If not present (either no Amiga or no V37), ArtPRO won't work. ArtPRO makes use of a few features of V39, too.

One MB of memory is enough for most operations on small pictures. The presence of a hard disk and a lot of memory is no bad idea, but not required for this release.

1.10   Installation

Installation

There is no installation script supplied yet, since installation is
quite easy. All steps can be performed on the Workbench.

– Drag ArtPRO's icon to any location on your system and drag the
  ALoaders drawer to the same place.

– If not already present, copy reqtools.library to your Sys:Libs
  drawer.

– All other files may be copied anywhere.

– Create a new drawer in ENVARC: (which refers to
  SYS:Prefs/Env-Archive) named "ArtPRO".

ArtPRO can be started via Workbench or Shell then.

1.11   Usage

Usage

After starting ArtPRO from either Shell or Workbench, you find its
main window opened. Most actions can be performed by both clicking the
appropriate buttons and pressing their keyboard equivalents.

~Main~Control~Panel~

~Image~Control~~~~~~~~~~~

~File~Operation~~~~~

~Image~Operation~~~~~~~~~

~Brush~Operation~~~~

~Palette~Operation~~~~~~~

~Selecting~Modules~~

~Settings~Window~~~~

1.12   Main Control Panel

Main Control Panel

There are four buttons and several text fields located in this area,
affecting global operations and displaying general information.

The status line reflects ArtPRO's current status - errors are
displayed here as well as messages of any kind. At startup, you find a
welcome message there.

The three text fields below inform you about the memory currently
being available, seperated into "Memory" (total free), "Chip" and
"Fast".

~About~

~Settings~

~Iconify~

~Exit~

1.13 About

                                      About

"About" opens a stunning about requester with   some information
concerning the ArtPRO revision running, the
                ~author's~address~
                 and
stuff like that.

If you're a registered user, you can activate the "key" button for
further information on your registration key.

1.14 Iconify

                                     Iconify

As the name suggests, "Iconify" leads to iconification of ArtPRO and
frees as much memory as possible. ArtPRO opens a tiny window on the
Workbench then, appends an AppItem to the tool menu, or leaves an
AppIcon on your Workbench, depending on the selected iconification
mode. Refer to the
                ~settings~window~
                 section for details.

1.15 Exit

                                      Exit

Clicking this button or pressing its keyboard equivalent "x" quits
ArtPRO. On exit, ArtPRO saves the current load/savepath, window
positions, the screen-lock setting and the current loader/saver to

ENV:ArtPRO/.

1.16 File Operation

                                        File Operation

You find four buttons and three text fields in this area. They allow
you to import and export files, they reflect the status of currently
selected loaders and savers, and they inform you about the image file
you're actually working on.

                    ~Load~

                    ~Selecting~a~Loader~

                    ~Save~

                    ~Selecting~a~Saver~~

1.17 Load

                                            Load

Clicking this button opens a file requester, thus allowing you to
select an image file to be loaded. You find the actual loader
displayed in the text field right beside. Read the~
                    ~loaders~
                    ~ section
for details and the available formats.

1.18 Save

                                          Save

Clicking this button opens a file requester, thus allowing you to
specify a path and name for an image or brush or palette to be saved.
You find the actual saver displayed in the text field right beside.
Refer to the ~
                    ~savers~
                    ~ section for details and the available
formats. By default, you will be prompted to confirm overwriting files
which already exist. This behaviour can be changed in the
                    ~global

                    settings~
                    ~section.

1.19   Selecting a loader

Selecting a loader

This is the tiny question mark button on the right hand of the text
field displaying the currently selected loader. On activation, the
loaders window will be opened for you to select a loader. Please refer
to the
              ~module~selection~
                section for details and the
              ~loaders~
              section for the available file formats.

1.20   Selecting a Saver

Selecting a saver

This is the tiny question mark button on the right hand of the text
field displaying the currently selected saver. On activation, the
savers window will be opened for you to select a saver. Please refer
to the
              ~module~selection~
                section for details and the
              ~savers~
              section for the available file formats.

1.21   Image Control

Image Control

There are three buttons and three text fields located in this area.
They affect the screen's resolution, display mode, and depth, and they
reflect the size and depth of the picture currently being loaded. The
screen mode is displayed in the topmost text field. You find the image
size and depth below. The cycle gadget reflecting the image's depth is
ghosted in this release of ArtPRO, for changing it is not yet
implemented.

              ~~~~~~~~Screenmode~~~~~~~~
                                    ~
              ~Render/ReDisplay~
              ~
              ~Lock~

1.22   Selecting a Screen Mode

Screen Mode Selection

This button is located at the right hand of the text field that displays the screen mode. It brings up a list of all screen modes available to your system. The set of screen modes offered here depends on your machine's chipset revision and on the monitors located in your Devs/Monitors system drawer.

With this feature you can easily change a picture's screen mode. It depends on the picture's depth and your machine's chip set whether a screen mode modification will succeed or fail. E.g. it's not possible to change a 32 color LoRes picture to HighRes on an OCS/ECS machine in this release of ArtPRO.

1.23   Render / Redisplay

                         Render / Redisplay

In this release of ArtPRO, this button will just display a previously loaded picture.

1.24   Brush Operation

                             Brush Operation

This area displays the selected brush operator, the actual brush's dimensions and its size in bytes. There is only one brush operator available in this version of ArtPRO – "normal cut" – and for that reason the brush operation selector appears ghosted.

Select "Execute" to cut a brush. You will then enter your currently loaded image with a tiny control screen at the bottom.

                    ~Control~Screen~~~~

                    ~Selecting~a~Frame~

                    ~Grid~~~~~~~~~~~~~~

                    ~AutoCut~~~~~~~~~~~

1.25   Control Screen

                              Control Screen

There are three buttons and four text fields located on this control screen. They are named as follows:

X   - displays the current horizontal position of the cursor,
            relative to the left screen border

```
Y           - displays the current vertical position of the cursor,
              relative to the upper screen border

BW          - the current brush width

BH          - the current brush height

Wrd         - counts the brush width as words

empty box   - indicates whether the brush width is a multiple of 16.
              Check it out to see the effect.


              ~AutoCut~
               - to automatically enclosure the brush

Accept      - to accept a brush selection

Cancel      - to leave this section without a new brush
```

1.26 Selecting a Frame

                             Selecting a Frame

Move your mouse to an appropriate location inside your picture, press
the left mouse button and size the rubber frame to the dimensions of
your choice. There's no need to keep the left mouse button pressed.
Press the left mouse button once again to use the frame.

To redo that operation, press the right mouse button and reselect
another brush.

If you're satisfied with your brush selection, leave this section by
either clicking the "Accept" button or by pressing its keyboard
equivalent "a" - or just press "ESCape" for the same purpose. To
abort, click on "Cancel" or press "c".

If you're too lazy to cut your brush at its exact borders, try
clicking
              ~AutoCut~
               after you've selected a rough frame.

After you've selected a frame, you can easily modify it with the
cursor keys.

Cursor   will move the frame on your screen

SHIFT-Cursor   to resize the frame at the lower-right

ALT-Cursor   to resize the frame at the upper-left

1.27 Grid

Grid

You may toggle the grid by pressing the "g" key. The grid's width
amounts to 16 pixels which corresponds to the number of 16 bit words
your brush is wide. You might wish to switch off the grid on heavy DMA
torture screens, such as SuperHiresInterlace HAM8 :-).

By default, a grid is drawn. This can be changed in the
            ~global

            settings~
             section in the
            ~settings~window~
            .

1.28 AutoCut

AutoCut

This feature is very handy when there's no need to cut a brush at its
exact borders. The rubber frame will automatically enclosure your
brush at its outmost edges. The keyboard equivalent is "u".

1.29 Selecting a Module

Selecting a Module

Whenever you wish to select another ~
            ~loader~
             or
            ~saver~
             , image or
palette operator, you'll be confronted with a list window displaying
the modules currently being available to ArtPRO.

To select a module, activate an entry in the list view, then hit
"Okay" or "Accept and Operate". The second one will execute the
selected operator immediately. Hitting the close gadget will abort the
module selection, as well as selecting "Cancel". Doubleclicking an
operator is equivalent to "Accept and Operate" and leads to immediate
execution.

In this release, the gadgets "Add", "Add Dir", "Kill" and "Kill all"
are available in the
            ~loaders~
             list window only.

"Add" opens a file requester for adding an external module, "Add dir"
adds the modules inside a directory, "Kill" removes an external module
from the list, "Kill all" removes all external modules. Internal
modules cannot be killed.

1.30 Loaders

Loaders

In this version, ArtPRO supports the following internal loaders:

~IFF~ILBM~~~~~~~~~

~DATATYPE~~~~~~~~~~

~SCREEN~~~~~~~~~~~

~RAW~~~~~~~~~~~~~~~

~RAW~INTERLEAVED~~

~PALETTE~RAW~~~~~~~

~PALETTE~IFF~~~~~~
There are two external loaders supported so far: PCX and BMP. They ←
            can
be found in the ALoaders directory.

You may ask what sense it could make to use ArtPRO's loaders on
formats that are also accessable via Datatypes. Datatypes provide a
great concept, but loading is slower and requires more memory. In
addition to that, you can't load truecolor images via Datatypes, and
truecolor processing will become a feature of ArtPRO.

1.31 IFF ILBM

IFF ILBM

Simply loads an IFF-ILBM picture.

1.32 SCREEN

SCREEN

With this handy function you can grab any screen currently open on
your system. Simply select a screen of your choice after the screen
selector has popped up.

1.33 RAW

RAW

This loader allows you to load a standard (i.e. non interleaved) raw
file. After selecting "Load" a requester will pop up and prompt you to
specify the raw-formatted picture's width, height, depth, and display
mode. The cycle gadget entitled "Display" allows you to choose between
normal, halfbright and HAM display mode. Using the TAB key, you can
cycle between the string gadgets. Select "Do it" or press its keyboard
equivalent "d" to load the raw image file, or "Cancel" for abortion.
You will then be prompted to select a screen mode, and finally, the
raw picture will be loaded.

1.34 RAW INTERLEAVED

                                 RAW INTERLEAVED

This loader allows you to load an interleaved raw picture file. After
selecting "Load" a requester will pop up and prompt you to specify the
raw-formatted picture's width, height, depth, and display mode. The
cycle gadget entitled "Display" allows you to choose between normal,
halfbright and HAM display mode. Using the TAB key, you can cycle
through the string gadgets. Select "Do it" or press its keyboard
equivalent "d" to load the raw image file, or "Cancel" for abortion.
You will then be prompted to select a screen mode, and finally, the
raw picture will be loaded.

1.35 Savers

                                     Savers

In this version, ArtPRO supports the following savers:

              ~IFF~ILBM~~~~~~~~~

              ~PALETTE~~~~~~~~~~~

              ~RAW~~~~~~~~~~~~~~

              ~MASK~~~~~~~~~~~~~~

              ~RAW~INTERLEAVED~~

              ~MASK~INTERLEAVED~~

              ~SPRITE~~~~~~~~~~~

              ~CHUNKY~LEFT~~~~~~~

              ~CHUNKY~RIGHT~~~~~

              ~RGB~CHUNKY~12~~~~~

~RGB~CHUNKY~24~~~~

1.36 IFF ILBM

IFF ILBM

This saver allows you to save your current picture or brush as
IFF-ILBM.

1.37 RAW

RAW

This will save your current picture or brush in non-interleaved RAW
format. Please refer to the~settings~window section for the available

~options~
. If you've adjusted the image output to
~Link-object~
, a
requester will pop up and prompt you to
~specify~the~link~object~
before saving.

1.38 RAW INTERLEAVED

RAW INTERLEAVED

This will save your current picture or brush in interleaved RAW
format. Please refer to the~settings~window section for the available

~options~
. If you've adjusted the image output to
~Link-object~
, a
requester will pop up and prompt you to
~specify~the~link~object~
before saving.

1.39 SPRITE

SPRITE

This will save your current brush as one or multiple sprite(s). Please
refer to the settings~window section for the available
~options~
for

the sprite conversion. If you've adjusted the sprite output to

                ~Link-object~
                , a requester will pop up and prompt you to

                ~specify~the~link~object~
                 before saving.

1.40 PALETTE

                                        PALETTE

This will save your current picture's palette. Please refer to the
settings~window section for the available
                ~options~
                 for the palette
conversion. If you've adjusted the color output to
                ~Link-object~
                , a
requester will pop up and prompt you to
                ~specify~the~link~object~
                before saving.

1.41 MASK

                                        MASK

This will save your current picture or brush as a   mask for
non-interleaved blitting. All colors different from the background
color will be taken into account. If
                ~Ask~Mask-Color~
                 is enabled in
the global settings section, you will be prompted to enter a specific
mask color instead. If you've adjusted the image output to
                ~Link~
                , a
requester will pop up and prompt you to
                ~specify~the~link~object~
                before saving.

A normal MASK save results in a single-bitplaned mask to be used for
each single bitplane-oriented blitter operation.

1.42 MASK INTERLEAVED

                                        MASK INTERLEAVED

This will save your current picture or brush as a mask for interleaved
blitting. All colors different from the background color will be taken
into account. If

```
              ~Ask~Mask-Color~
               is enabled in the global settings
section,  you will be prompted to enter a specific mask color instead.
If you've adjusted the image output to
              ~Link~
              , a requester will pop up
and prompt you to
              ~specify~the~link~object~
               before saving.
```

A MASK INTERLEAVED save results in an interleaved, multi-bitplaned
mask, whereby the masking bits appear identical for each bitplane.

1.43 Settings Window

                                        Settings Window

Here you can adjust all your preferred settings and options for the
use with ArtPRO.

              ~Global~Settings~

              ~System~

              ~Source~Format~

              ~Image~Format~

              ~Color~Format~

              ~Sprite~Format~

              ~Save~as~

              ~Save~

              ~Load~

              ~Use~

              ~Cancel~

1.44 Show Pic

                              Show Pic

With this switch enabled, any picture will be displayed right after
loading.

1.45 Draw Grid

                                        Draw Grid

This switch represents your preferred setting whether a grid shall be
drawn when you're
                    ~selecting~a~frame~
                     for cutting a brush.

1.46 Overwrite

                                    Overwrite

With this option enabled, you'll be prompted to confirm overwriting
files which already exist.

1.47 Auto save Colors

                                Auto save Colors

If you want to automatically save a picture's palette along with the
image, this switch is the right one for you. When active, saving~an
image will generate a color output as well, whereby your preferred
color settings will be used. The name will be the same as of the
image, with an appropriate extension added, such as .asm for source
code or .col for binary etc. This switch appeared useful to me,
because I sometimes forget to save the colors :-).

1.48 Ask Mask-Color

                                            Ask Mask-Color

When saving a
                ~MASK~
                 or
                ~MASK~INTERLEAVED~
                 , normally all colors are
taken into account, except for the background color which will appear
transparent. When this switch is enabled, you will be asked for a
specific, single mask color instead.

1.49 Iconify Mode

                                Iconify Mode

ArtPRO offers three different ways of iconification - AppItem,
AppIcon, and Window. You can adjust your preferred mode here. An

AppItem named "ArtPRO" will be appended to the Workbench's tool menu,
an appicon will be put somewhere on your Workbench, or a tiny window
will be opened. To re-enter ArtPRO, select the menu item, double-click
the appicon or click the zip gadget in the tiny window's title bar.

1.50 Screen Palette

                          Adjust Palette

This button is available for custom screens only. A palette requester
will pop up. Adjust your favourite screen colors there.

1.51 Source Format

                                Source Format

In this area you can configure all the settings associated with the
source code generation.

            ~Language~~~~~~~~~~

            ~Indent~~~~~~~~~~~~

            ~Width~~~~~~~~~~~~~

            ~Indents~~~~~~~~~~~

            ~Line~Entries~~~~~~
                                Labels are not yet supported.

1.52 Language

                      Language

Here you can adjust the programming language for the source code
generation. Choose between Assembler, C, Pascal, E, and Basic.

1.53 Indent

                        Indent

This cycle gadget allows you to specify the character to be used for
indenting. This can be either Tabs or Spaces.

1.54   Number of Indents

                              Number of Indents

In this text gadget you can specify the number of indents for your
source code generation. This applies either to the number of tabs or
spaces (see section
              ~Indent~
).

1.55   Line Entries

                      Number of Line Entries

This text gadget allows you to specify the number of data entries for
each line of the source code. Enter 0 here if you want to omit line
feeds in order to fill up a line completely. Be careful with this, not
all editors can handle lines with extreme lengths.

1.56   Image Format

                                  Image Format

In this area you can configure all the settings associated with the
image output.

              ~Output~~~~~~~

              ~BlitWord~~~~~

1.57   Output

                                  Output

With this cycle gadget you can configure the image data output. Choose
between "Source", "Binary" or "Link".

Source

This one will output your brush or image as source code, using the
settings defined in the
              ~source~format~
               section.

Binary

This one will generate raw data for your image or brush.

Link

With this setting enabled, your image will be saved as a link-object.
Before saving, a requester will pop up and prompt you to

                    ~specify~the~link-object~
                    .

1.58 BlitWord

                              BlitWord

You can adjust this cycle gadget to "None", "Left", or "Right". To
treat a brush in a normal manner, select "None". For shifted blitting,
you may wish to add extra words at either the left or right side,
whereby the brush will be enlarged by one word (16 pixels) in width.

1.59 Save

                                Save

Click this gadget or press its keyboard equivalent "s" to save the
current settings under an existing name. A file requester won't show
up.

1.60 Load

                                Load

Click this button or press its keyboard equivalent "l" to load a
previously saved ArtPRO settings file. A file requester will pop up
and prompt you to specify a path and file name for your settings file.

1.61 Use

                                Use

Activate this button or press its keyboard equivalent "u" to accept
and use ArtPRO's current settings. The settings window will be closed
and you'll get back to the main screen.

1.62 Cancel

                                Cancel

Activate this button or press its keyboard equivalent "c" to forget
the actual settings and to go back to the main screen.

1.63 Global Settings

                                    Global settings

All switches affecting ArtPRO's general behaviour are grouped together
in the settings window's upper left.

                ~Show~Pic~~~~~~~~~~~~

                ~Auto~save~Colors~

                ~Draw~Grid~~~~~~~~~~~

                ~Ask~Mask-Color~~~

                ~Overwrite~~~~~~~~~~~

                ~Confirm~Exit~~~~~

1.64 Image / Palette Operations

                            Image Operation

There are no image operators implemented to ArtPRO yet, sorry!

1.65 Color Format

                                    Color Format

In this area you can configure all the settings associated with the

                ~PALETTE~
                 saver output. These settings also apply to the
                ~PALETTE~RAW~
                loader.

                ~Output~~~~~~~

```
                         ~Format~~~~~~~

                         ~Depth~~~~~~~~
```

1.66 Output

                                          Output

With this cycle gadget you can configure the color output. Choose
between "Source", "Binary", "Link" or "IFF".

Source

This one will output your palette as source code, using the settings
defined in the
                    ~source~format~
                     section.

Binary

This one will generate raw data for the screen's palette.

Link

With this setting enabled, your palette will be saved   as   a
link-object. Before saving, a requester will pop up and prompt you to

                    ~specify~the~link-object~
                     .

IFF

This will save the image's palette as IFF.

1.67 Format

                                          Format

Here you can specify the color format defining the source or binary

                    ~output~
                     . Choose between Copper, LoadRGB, or Pure.

Copper will generate a copperlist. Depending on the
                    ~Depth~
                     setting,
this applies to standard or AGA copperlists. Copperlist means in
detail that there are MOVE commands included for the appropriate color

registers.

LoadRGB will generate color data for the use with the graphics.library
LoadRGB function. Depending on the
                ~Depth~
                 setting, this applies to
LoadRGB4 or LoadRGB32 (V39).

Pure will generate a raw color table.

1.68   Depth

                                        Depth

Adjust this to either 4 or 8 Bit. This will affect all color
            ~output~
            and
            ~format~
             settings, except for IFF.

If you plan to use AGA color resolutions in your software projects,
adjust this switch to 8 Bit.

1.69   Sprite Format

                                    Sprite Format

In this area you can configure all the settings associated with the

            ~SPRITE~
             saver output.

            ~~~~~~Output~~~~~~

            ~Cols~

            ~Width~

            ~~~Ctrl.~Words~~~~

1.70   Output

                                        Output

With this cycle gadget you can configure the sprite output. Choose
between "Source", "Binary" or "Link".

Source

This one will output your sprite(s) as source code, using the settings
defined in the

                ~source~format~
                 section.

Binary

This one will generate raw data for your sprite(s).

Link

With this setting enabled, your sprite(s) will be saved   as a
link-object. Before saving, a requester will pop up and prompt you to

                ~specify~the~link-object~
                 .

1.71 Colors

                                Number of Colors

Here you can adjust the number of colors for the sprite conversion.
Select either 4 or 16 colors.

The Amiga customchip hardware supports sprites in either 4 or 16
colors. For the use of 16 colors, a sprite pair of two 4colored
sprites has to be "attached". Attaching means, the positions of
sprites belonging to a pair have to be identical (the sprites would
appear in the normal 4 color display otherwise), and the attach-bit of
at least the second (odd) sprite has to be set.

Using ArtPRO, there's no need to bother. Just select 16 colors, and
ArtPRO does the rest for you - Your brush selection is interpreted as
one or a multiple of 16colored sprites. If you select ArtPRO's

                ~control~~word~~calculation~
                 , even that position and attach-bit stuff
will be performed automatically.

1.72 Acknowledges

                          Acknowledgements

- Thanks to Captain Bifat / The Electronic Knights for suggestions,
  testing, designing the graphical user interface, drawing the logo,
  writing the documentation and the logo-rendering routine.

- Thanks to Buggs / Defect for suggestions, additional help, and
  testing.

- Thanks to M.U.D.U. / Defect for the nice Mona Lisa icon

- Greets fly to:

    - Gerd Frank (the 1st registered user)

    - Nazgul / Sabotage

    - Exterminators (hi Holger)

    - Fredrik Solenberg (mail me again please, i have lost your E-Address!)

    - Cockroach

    - and of course all members of Defect

1.73 Width

                                  Width

Select a sprite width for your purpose here. Choose between 16, 32, or
64 pixels. Keep in mind that sprites wider than 16 pixels are not
supported prior to AGA.

1.74 Control Words

                              Control Words

Sprite datalists for hardware-proramming purposes require control
words at their beginning. These control words contain all the
information needed for the sprite display, such as horizontal and
vertical start positions, vertical stop position, and the attach-bit
mentioned in the
                  ~colors~
                   section.

ArtPRO supports sprite control words in four ways: None, Empty, Auto,
or Prompt. Use the cycle gadget to adjust one of these.

None   ArtPRO doesn't care about control words. They will be
         omitted.

Empty   ArtPRO includes control words at the beginning of the
         sprite datalists, but they're empty, i.e. set to zero.

Auto   ArtPRO includes sprite control words containing ALL the
         information needed for proper display. The control word
         calculation will be performed as follows:

```
VerticalStart       = raster line $2c + brush's top edge inside your
                      picture

VerticalStop        = raster line $2c + brush's top edge + brush's
                      height

HorizontalStart     = DMA start $80 + brush's left edge inside your
                      picture


Prompt    ArtPRO will bring up a requester for a customized control
          word calculation when saving one or multiple sprites.
          Here you can adjust the VerticalStart and HorizontalStart
          values as well as the image-relative brush coordinates.
```

The latter two settings can be extremely useful for you, if you're one
of those hardware programmers who use static sprites for complex
screen layouts. Experienced programmers will have noticed that the
values used with the "Auto" setting apply to standard non-overscan
screens. Use the Prompt setting if these don't fulfill your needs.

1.75 History

```
                                     History


V0.88u  05.04.1995

          - Special release for the Amiga Inside CD by UMD!
            Read the ArtPRO.readme file!


V0.87  03.04.1995

          - "ART-Pro" changed to "ArtPRO". Please read the

                  ~Upgraders~
                   section.

          - GUI completely reworked. ArtPRO now opens a
            font-sensitive window on the Workbench or on a
            public screen, or opens an own public screen.
            A font can be selected.

          - Color-Bias screen overwork.

          - The windows' positions and a locked screenmode
            are saved on exit now.

          - External loaders included: PCX and BMP.

          - The Settings section has got a "Save" and a
            "Save as" button now.
```

  – "Confirm exit" included.

  – Bug removed when selecting a frame NOT from
    upper-left to lower-right. The brush size
    should be correct now.

  – The logo is scaled according to the window's
    dimensions and is rendered to a screen's palette
    (V37) or its sharable/obtainable pens (V39).

  – The "Center Pic" option caused some problems.
    Believe it or not, this mighty important feature
    has been REMOVED.

  – Few minor bugs removed.

V0.79 4.1.1995 (major bugfix)

  – Parts of the guide have been rewritten for V0.78. Some
    passages were linked incorrectly, some were completely
    wrong, some were malformatted. Fixed.

  – Saving images which have been loaded as RAW HAM6 crashed.
    Fixed.

  – Displaying or saving images which have been loaded as RAW
    EHB could crash under certain circumstances. In addition
    to that, saving images which have been loaded as RAW-EHB
    led to 64color non-EHB images. Fixed.

  – Iconify plus un-iconify "un-registered" ArtPRO. Solved.

  – The Load-RAW screenmode requester will now keep the last
    selected screenmode.

  – The RGB-CHUNKY-12Bit and RGB-CHUNKY-24Bit savers crashed
    on 68000 and 68010 based machines. This has been fixed.
    Now the code differenciates correctly between 68000 and
    680x0 based machines for the use of optimized routines.

  – Minor bugs and several Enforcer-hits removed.

V0.78 30.12.1994 (The Party 4 release)

  – After cutting a brush and iconifying, ArtPRO saved the
    complete picture instead of the brush. Solved.

  – GUI layout in the preference section changed, for the
    source code settings are now global and apply to all
    output formats.

  – RAW-CHUNKY (LEFT/RIGHT) savers implemented.

– RGB-CHUNKY-12BIT and 24BIT savers implemented.

– COLOR-RAW and COLOR-IFF loaders implemented.

– First public release with a keyfile for registered users.

– Color-Bias included.

– Ask Mask-Color crashed sometimes. Fixed.

– User prompt for customized control-word calculation
  included to the sprite output settings. (Registered
  users only.)

– various minor bugs fixed.

V0.77 ... V0.70 (several internal releases)

– Screenmode lock implemented. (Registered users only)

– ArtPRO crashed when saving an 8bit copperlist as binary.
  This has been fixed.

– Source-generator completed. ArtPRO now supports
  Assembler, C, Basic, E, and Pascal.

V0.641 12.11.1994 (quick update)

– ArtPRO crashed on 68000 based machines – now fixed

– ArtPRO did strange nosense when having no directory name
  in the file requester! Oops...

V0.64 05.11.1994 (Coma Party Köln)

– removed a major bug – ArtPRO crashed on exit if a
  screenmode wasn't available/supported – now fixed

– bug in AutoCut fixed – left box edge not set correctly
  sometimes

– added a text field at the control screen and inside
  the main window, displaying a brush's width in words

– ArtPRO now saves the selected loader/saver modules
  to its default prefs path on exit

– now a busy-pointer appears when needed

– some minor bugfixes

V0.62 21.10.1994

    – added link-object

    – ArtPRO now saves its load/save paths to its default
      prefs paths on exit

    – some bugfixes

V0.60 08.10.1994

    First puplic release for the tool competition at
    the Doomsday Party.

1.76 Specify Linkdata

                                      Specify Link-Object

After selecting
        ~Save~
        and specifying a filename, a requester will pop
up and prompt you to configure the link-object. The string gadget
entitled "External definition" allows you to define a label for
external reference. Using the cycle button labelled "Memory Type", you
can adjust the memory type for the object to be linked to. Choose
between any, chip, or fast. Select "Save" or press its keyboard
equivalent "s" to save the link-object or choose "Cancel" for
abortion.

1.77 Lock

                              Lock

Using this checkmark button, you can lock the screen mode that is
currently being selected. Whenever you load another image, ArtPRO will
try to keep the screen mode that you've adjusted before.

This feature is reserved for registered users only.

1.78 PALETTE RAW

                                   PALETTE RAW

This loader allows you to load a raw palette over a previously loaded
image. The raw color data will be interpreted according to your
preferred
        ~color~settings~
        . Please note: a RAW palette format cannot
be identified automatically, so don't blame ArtPRO if you find your
image colors scrambled after you've loaded a palette in a false
format.

1.79 PALETTE IFF

PALETTE IFF

With this loader you can load an IFF palette to be used for the image
currently being loaded.

1.80 CHUNKY LEFT

CHUNKY LEFT

This saver will generate chunky output, with the bits corresponding to
their bitplanes adjusted to the left. Have a look at this scheme:

chunky byte: %12345678

Each digit represents its corresponding bitplane. CHUNKY LEFT is a
rather unconventional format, mainly used for extremely fast
chunky-to-bitplane conversion with the ADDX opcode. With this format
there's no need to shift the chunkies when having less than 8
bitplanes.

See also the
          ~CHUNKY~RIGHT~
           section.

1.81 RAW CHUNKY RIGHT

CHUNKY RIGHT

This saver will generate chunky output, with the bits corresponding to
their bitplanes adjusted to the right. Have a look at this scheme:

chunky byte: %87654321

Each digit represents its corresponding bitplane. CHUNKY RIGHT is the
more common chunky format. Refer to
          ~CHUNKY~LEFT~
           for more details.

1.82 RGB CHUNKY 12

RGB CHUNKY 12

We've got you demo coders here, haven't we? This saver will generate
truecolor 12bit output, with each pixel represented by a word in the
format $0RGB. Pictures and brushes in HAM6 and HAM8 are treated
correctly, of course.

1.83   RGB CHUNKY 24

RGB CHUNKY 24

This saver will generate truecolor 24Bit output, with each pixel represented by a longword in the format $00RRGGBB. Pictures and brushes in HAM6 and HAM8 are treated correctly, of course.

1.84   Palette Operation

Palette Operation

Right now, there's only one palette operator implemented to ArtPRO. For that reason the palette operation selector appears ghosted in this release.

~Color-Bias~

1.85   ColorBias

Color Bias

Color-Bias is a great tool for global palette adjustments. Select the color-bias palette operator to enter your current picture with a tiny control screen at its bottom.

This control screen contains six sliders, entitled Color, Bright, Contrast, and R/G/B. In addition to these, you find three buttons at the right hand, entitled Use, Keep, Cancel.

Moving a slider to the left will reduce the appropriate value, moving it to the right will increase it. Check it out to see the effect, that's much easier than trying to explain this in a trivial way. The color bias palette modification will be performed real-time. This is a great means for fine-tuning your palette.

Press the "Use" button or press its keyboard equivalent "U" to leave this section with the new palette. If you select "Cancel" or "C", you abort the Color-Bias operator and undo all changes. Select "Keep" or press "K" to re-adjust the slider knobs to zero with the current settings.

By the way, color-biassing on HAM pictures won't do a good job in this release of ArtPRO, for the rendering routines are not yet completed.

1.86   Width

<div align="center">Width</div>

Use this cycle gadget to adjust your preferred data width for the
source code generation. Choose between bytes, words, and longwords.

1.87 Save as

<div align="center">Save as</div>

Click this gadget or press its keyboard equivalent "v" to save the
current settings under a new name. A file requester will pop up and
prompt you to specify a path and file name for your settings file.
Remember, the default path for ArtPRO's settings is ENV:ArtPRO
respectively ENVARC:ArtPRO. The default name is ArtPRO.prefs.

1.88 Confirm Exit

<div align="center">Confirm Exit</div>

Activate this checkmark if you want a "really exit?" requester to pop
up on exit.

1.89 DATATYPE

<div align="center">DATATYPE</div>

This loader is ArtPRO's interface to the operating system's Datatypes.
They've been introduced to OS3.0 (V39) and therefore this loader isn't
available under OS2.x.

Datatypes provide a general technique for the access to different data
formats, especially to formats that are unknown to a specific
application. Many datatypes (stored in SYS:Classes/Datatypes and
DEVS:Datatypes) are available.

Use this loader whenever you want to load an image format that is not
supported by ArtPro. Maybe you're lucky and you've got a datatype for
that image format.

1.90 Note to upgraders

<div align="center">Note to upgraders</div>

If you were using an earlier verion of ArtPRO, you should know that
ArtPRO does not longer search its preferences in

<div align="center">ENV:ART-Pro</div>

ArtPRO's name has changed, the preferences are now accessed via

ENV:ArtPRO

If you've got an old settings directory, please delete it completely
and create a new one named "ArtPRO", then re-adjust and save your
preferred settings once again.

1.91 System Settings

System settings

These settings apply to ArtPRO's system interface. They are grouped in
the settings window's upper middle.

~Iconify~~~~~~~~

~Font~~~~~~~~~~~

~Screen~/~Set~~~

~Adjust~Palette~

~Pool~~~~~~~~~~~

1.92 Font

Font

Select your favourit Font here!

1.93 Screen Mode

Screen / Set

Use the cycle gadget to select either of these screen modes:

Workbench   For ArtPRO to open its windows on
                   the Workbench. The "Set" gadget is
                   disabled in Workbench mode.

PublicScreen   For ArtPRO to open its windows on
                   a public screen that is currently
                   open on the system. Select a screen
                   with the "Set" gadget.

CustomScreen   For ArtPRO to open an own public
                   screen for its windows. Select a

                    screen mode with the "Set" gadget.

1.94 Pool

                                    Pool

The Memory Pool option is not yet available and for that reason this
gadget appears ghosted.