

**cybergraphics**

<b>COLLABORATORS</b>
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	<i>TITLE :</i> cybergraphics		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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<b>REVISION HISTORY</b>
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NUMBER	DATE	DESCRIPTION	NAME

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# Chapter 1

## cybergraphics

### 1.1 cybergraphics.guide

CyBERgraphics WB emulation

The attempt to standardize the intuition emulation for gfx boards

Version 40.49

(C) Copyright 1994-1995 by Thomas Sontowski & Frank Mariak

Introduction	What's CyBERgraphics ?
Min. requirements	Minimal sytem requirements
Installation	Installation
Legal stuff	Copyright, Trademarks
Limitations	Limitations of the "crippled" version
Environment-vars	cyber-environment-vars
Monitordefinitions	about monitordefinitions
Bugs	known bugs
Things to come	what we try to do in the future
CyBERgraphics Soft	What software is available ?
Mailing List	CyBERgraphics mailing list
Deinstallation	How can I get rid of cybergraphics ?
Versions	version history
Additional drivers	additional drivers for programs
Thanks	Thanks to ..
Authors	How to reach us ..

### 1.2 cybergraphics.guide/M1\_INTRD

Introduction

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The cybergraphics system was designed to define an independant graphics standard for graphics boards. We also wanted to continue our development of workbench emulations. We could include all our knowledge of about 3 years

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of gfx board software development (wb-emulation of visiona, domino, picasso and now the cybervision64).

cybergraphics is based on hardware dependant monitor drivers and hardware independant libraries. This has some advantages: Bug fixes in the workbench emulation or speed optimizations is of benefit for ALL gfx boards that are supported by the cybergraphics system. There is no third like XpERT or Village-Tronic inbetween developers and users. That guarantees bug fixes and continued development of the software in the future.

cybergraphics allows using of 15/16/24 screens independant of the used color model. You are able to use the cybergraphics.library functions to modify this screens. Using graphics.library functions is currently not possible but this may change in one of the next releases.

cybergraphics will also be the standard workbench emulation for the soon coming (April 95) Cybervision64 by Advanced Systems&Software. (of course including drivers for diverse graphics programs, screen promoters and much more).

Right now (6.4.95) there are drivers for Maxon Cinema, Real 3D, ADPro, AmaxIV, PhotoWorx, Emplant, ImageFX and Photogenics available.

There is also a picture viewer called CyberView which can be found on AmiNet.

#### FEATURES

- o stable Workbench emulation;
- o draggable screens
- o no chipmem required for screen display
- o modular design, it is possible to use multiple (and different) gfx boards at one time
- o cybergraphics based vilintuisup.library. As long as there exist not much cybergraphics 15/16/24 bit applications the old picassoII drivers may be used. (but: use it at your own risk)
- o uses cirrus blitter for plane to chunky conversion

## 1.3 cybergraphics.guide/M1\_REQUI

Minimum requirements to run cybergraphics

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- o One of the following boards
  - Domino
  - Picasso II in linear mode (! not segmented !)
  - Piccolo Z2/Z3 or Piccolo SD64
  - GVP Spectrum
  - RetinaZ3
  - CyberVision64
- o Kickstart 3.x
- o 68020 or higher
- o 2 MB of fast memory

Please avoid it to contact us to do new drivers (e.g. Retina Z2, A2410, Merlin and so on). We know that this boards exist. But we do not develop software main time, so we can not provide drivers for any boards right now.

As soon as there are new drivers available, we will release them.

That certain driver don't exist right now, has a simple reason. Main reason is, that we don't have certain hardware documentation or that we have no time to develop a new driver. There is also the problem that we do not own certain graphics boards.

To guarantee problem-free working of the new intuition emulation, you have to remove the old VillageTronic or EGS emulation. This is mainly done by the installation script but in some cases you have to do it by yourself.

Remove tools like PatchDT to avoid conflicts.

## 1.4 cybergraphics.guide/M1\_INSTL

### Installation

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The installation is done by the Commodore Installer. So the only thing you have to do is double-click the icon with the name CyberGfx\_Install in the drawer cybershare. In the registered release you find this Installscript in the rootpath.

If you have any problems while installing cybergraphics, please feel free contact Robert Reiswig (rcr@netcom.com). He has done the installer script.

## 1.5 cybergraphics.guide/M1\_LIMIT

### Restrictions

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Without a personalized version of cybergraphics emulation you can not use all features of it. The limitations are as follows:

\* In the Shareware release there are no custom modes available. Only 9 fixed resolution modes are defined whereas 8 resolutions are 8 bit (usable by Workbench) and one resolution may be used by the cybergraphics custom drivers (32768 colours). In the registered version there are no limitations of this kind of course. You may define higher colordepth and refresh frequencies.

The resolutions are defined as follows:

- 320x240 pixels in 58Hz, 37,35kHz
- 640x480 pixels in 70Hz, 37,03kHz
- 800x600 pixels in 58Hz, 36,42kHz
- 1024x768 pixels in 74Hz/Interlace, 30,26kHz
- 1120x832 pixels in 62Hz/Interlace, 27,46kHz
- 1152x900 pixels in 51Hz/Interlace, 26,57kHz
- 1280x1024 pixels in 43Hz/Interlace, 24.16kHz
- 1600x1200 pixels in 29Hz/Interlace, 18.32kHz

as well as one mode in 32768 colours:

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- 320x240 pixels in 58Hz, 37,35kHz

JUST TO SAY IT TWICE: MUCH HIGHER FREQUENCIES ARE POSSIBLE WITH THIS DRIVER  
THIS IS ONLY A LIMITATION TO AVOID THAT NOBODY PAYS THE SHAREWARE FEE SO  
THAT WE CAN NOT CONTINUE OUR WORK

\* The Domino driver only supports a 1024x768 interlace resolution in  
the shareware package.

\* In the shareware package there are drivers for Maxon Cinema 4D,  
Real3D, Photogenics, PhotoWorx and ImageFX ... more to come

\* If you are registered we grant support if you have any problems  
or questions by email and/or snail. We can't do this for any person who  
has problems with the unregistered release !

We apply on your insight for these restrictions. How to get a personalized  
version can be read in Registration.

## 1.6 cybergraphics.guide/M1\_REGIS

Register

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As you may have noticed, cybergraphics is a shareware product. Nearly  
all functionality is available for testing without paying any money. If  
you think cybergraphics is worth the amount of 50,- DM or \$35,-, fill out  
the orderform and send it to one of us.

To get registered for cybergraphics, please print the file OrderForm on  
your printer (if no printer is available, write off this text), fill up  
this form and send it to the given address. We will endeavour to act upon  
your registration within two weeks after we get the register form and  
the sharefee. In most cases it will be done faster. Prospectively the  
registered driver will be shipped by (snail)mail.

## 1.7 cybergraphics.guide/M1\_UPDAT

Updates

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When you become a registered user, you will get the latest registered  
release of cybergraphics including a personalized graphics board driver.

The first update of the graphics board driver is for free, any forthcoming  
update will cost DM 5 (US\$ 5 outside EU) just to pay our posting&packaging

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costs. email updates will be charge free.  
This offer is valid for registered users only of course.

## 1.8 CyBERgfx\_E.guide/M1\_RIGHT

Legal Stuff  
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Liability  
Distribution  
Trademarks  
Copyright

## 1.9 cybergraphics.guide/Liability

Liability  
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THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDER AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

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## 1.10 cybergraphics/Distribution

Distribution  
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It is allowed to distribute cybergraphics on any data medium and to make it available on bulletin boards or other network compounds if the following directory structure will be kept:

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```

devs (dir)
  monitors (dir)
    Domino
    Picasso
    Piccolo
    PiccoSD64
    RetinaZ3
    Spectrum
  monitors.info
libs (dir)
  cybergraphics.library
  cyberlayers.library
  vilintuisup.library
devdocs (dir)
  autodoc (dir)
    colormodels.doc
    cybergraphics
    cybergraphics.doc.info
  examples (dir)
    cybersavegio.c
    Real3DLibMain.c
  fd (dir)
    cybergraphics_lib.fd
  include (dir)
    inline (dir)
    clib (dir)
      cybergraphics_protos.h
    cybergraphics (dir)
      cybergraphics.h
      cybergraphics.i
      cyberinline.h
    pragmas (dir)
      cybergraphics_pragmas.h
    proto (dir)
      cybergraphics.h
  mod (dir)
    CyberGraphics.mod
  autodoc.info
  fd.info
  mod.info
drivers (dir)
  adpro (dir)
    CyBERgraphics
  cinema4d (dir)
    cinemaausgabe.library
  photogenics (dir)
    CyBERgraphics.gio
  photoworx (dir)
    cyber.viewer
  real3d (dir)
    cybergfx_r3d.library
  imagefx (dir)
    CyberGraphics.000
    CyberGraphics.030
modes (dir)
  Monitor-15khz
  Monitor-35khz
    Domino.info
    Picasso.info
    Piccolo.info
    PiccoSD64.info
    RetinaZ3.info
    Spectrum.info
  cyberintuition.library
  gtlayout.library
  colormodels.doc.info
  cybergraphics.doc
  cybergraphics.info
  cybersavegio.c.info
  Real3DLibMain.c.info
  cybergraphics.h.info
  cybergraphics.i.info
  CyberIntrf.readme
  examples.info
  include.info
  CyberGraphics.000.info
  CyberGraphics.030.info
  Monitor-31khz
  Monitor-38khz

```

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Monitor-48khz	Monitor-57khz
Monitor-64khz	
Catalogs (dir)	
deutsch (dir)	
cvmode.catalog	
Bestellformular	Bestellformular.info
CVMode	CVMode.info
CyBERgfx_D.guide	CyBERgfx_D.guide.info
CyBERgfx_E.guide	CyBERgfx_E.guide.info
CyberGfx_Install	CyberGfx_Install.info
CyberGfx_SetEnv	CyberGfx_SetEnv.info
devdocs.info	devs.info
drivers.info	libs.info
Orderform	Orderform.info
Versions	Versions.info

It is of course allowed to distribute these files in a packed archive file. It is also allowed to levy copy charges for the distribution on floppy disks or CD-ROMs, as long as it has stated clearly for the user that he has not paid for the share fee, hereby. It is not allowed to copy, distribute or generate registered versions.

cybergraphics must NOT be included or used in commercial products unless by written permission from the authors. Permission for Phase5 to distribute this program together with their graphics board CyberVision 64 is hereby given.

cybergraphics must NOT be used on any machine which is used for the research, development, construction, testing or production of weapons or other military applications. This also includes any machine which is used for training persons for \*any\* of the above mentioned purposes.

## 1.11 cybergraphics module

### Adpro saver

This is a Saver module for Art Department Pro from Elastic Reality. This one was only tested with Version 2.5 of Adpro and maybe has problems with earlier versions.

### Maxon Cinema4D module

There is not much to say about that one. This module will be installed by the installer script in the libs: directory and is called cinemaausgabe.library.

How the module works can be found in the Maxon Cinema manual. This module even works with the new Cinema4d version 2.0.

### ImageFX Render Modul

This module has been developed by Uwe Roehm. Now follows the description:

This is a render module for ImageFX and the CyberGraphics RTG system. It supports rendering of ImageFX' main buffer in a Hi- or TrueColor

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CyberGraphics screen or even a window on ImageFX' panel screen (see installation for more details). Bigger images can be scrolled with mouse or the cursor keys. If enough memory is available the render screens allow autoscrolling.

### Installation

There're two versions of the render module, one compiled for any CPU (ending .000) and one compiled for MC68030 and higher (ending .030).

Copy both into the directory: ImageFX:Modules/Render/  
Now you can choose the CyberGraphics render module via the "Render..." button in the preferences window of ImageFX.

If you want to be able to render in a window on the ImageFX panel screen, you must start ImageFX in its workbench-mode on a CyberGraphics Hi- or TrueColor screen. A "normal" 256 color screen isn't enough! Due to the current limitations of Workbench's screenmode and the configuration of ImageFX you have to do some steps:

1. Open a PublicScreen in a 15, 16 or 24Bit CyberGraphics mode.  
There're some PublicScreen manager available which help a lot.
2. Set the tooltypes WORKBENCH and PUBSCREEN=<name of new screen> in the icon of ImageFX.
3. Start ImageFX and switch to your new PublicScreen.
4. Now you should be able to select the "Render in window on panel screen" button in the GUI of the CyberGraphics render module. You can change the position and dimensions of this render window and save them with the preferences of ImageFX.

### GUI

The GUI of the CyberGraphics render module consists of the following buttons:

Module	: Choose another render module
Output Format	: Choose where to render the image. You can "Render in new CyberGraphics screen" or even "Render in window on panel screen". For the later you must use ImageFX itself on a Hi- or TrueColor CyberGraphics screen (see installation for details).
Display Mode	: If you choosed rendering in a new CyberGraphics screen you can select any CyberGraphics 15, 16 or 24 bit screenmode with this cycle gadget. The render module will automatically pre-select the best mode for the current image.
Render	: Start rendering in screen/window. (Shortcut: r)
Close	: Closes own render screen/window (Shortcut: c)

### Scrolling

Images which are bigger than the actual render screen/window can be scrolled with the cursor keys. Without further qualifiers they scroll one pixel, with SHIFT 10 pixels and with CONTROL the whole window/screen size. In render

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screens you can also scroll with the mouse - if enough memory is available the screen will be opened as an autoscroll screen.

#### Preferences

The render module saves the position and dimensions of the render window, and also the selected output format (screen or window) with ImageFX' preferences.

#### Photogenics Saver

This saver makes it possible to view photogenics projects on a 15/16/24 bit screen.

#### PhotoWorx Display Treiber

This driver has been developed by the PhotoWorx author himself and should have no incompatibility problems.

#### Real3D external screen module

This module is an external render module for Real3D. Please choose external screen/Settings in the Project menu to select cybergfx\_r3d.library as output library.

If you select external screen/Open then, a cybergraphics 15/16/24 bit screen will be opened. By using Set modes you can choose the render screen resolution.

## 1.12 cybergraphics.guide/Trademarks

### Trademarks

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Workbench (TM), Intuition(TM) and Amiga (TM) are registered trademarks of Commodore Amiga Inc., West Chester, USA.

## 1.13 cybergraphics.guide/Copyright

### Copyright

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The Cybergraphics system, the accompanying files and the manual is

Copyright (C) 1994-1995, Thomas Sontowski & Frank Mariak. All Rights reserved.

## 1.14 cybergraphics.guide/M1\_BUGRP

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Known bugs with Cirrus boards:

- o some Picasso II gfx boards produce read or blit errors in high resolutions or high refresh frequencies. In this case you have to select a smaller refresh rate in PicassoMode.
- o In 24 bit Mode you can see three mousepointers on the screen. This is a hardware bug and is fixed as soon as possible
- o When the mouse pointer crosses two screens it continues to appear at the top of the bottom most screen a while and then dissapear row by row as it moves up on the other screen. (hardware restriction)

## 1.15 cybergraphics.guide/M1\_MONIT

The following is only relevant for users of the registered version:

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Until the program for creating cybergraphics-monitordefinitions exists, you have to use the provided monitor-files. All cybergraphics-monitorfiles use the same data-format, the monitor-definitions are therefore exchangeable. The program CVMODE for cybergraphics is now available since a short time. It makes it much easier to change the monitor definitions. phase5 has allowed us to distribute this program which was recently thought for the cybervision64 board only together with this archive.

- o Domino :           There is no definitionfile for the Domino graphics board. By using `setenv cybergraphics/dominomonitor` you can change the maximum horizontal frequency. You may choose 31,50 or 57.
  - o Picasso II :       The monitorfile loads the definition-file specified by the environment-variable `PICASSOMONITOR` from `ENV:cybergraphics/Picasso/` (should be installed correctly by the install-script) If no valid definitionfile could be loaded, you can specify a default-resolution in a requester. You can convert the old mode-files created by PicassoMode with the program `CvtMode`. (the files in `devs:village/#?` are converted and saved in `envarc:cybergraphics/Picasso/` )
  - o Piccolo Z3 :       The monitorfile loads the definition-file specified by the environment-variable `PICCOLOMONITOR` from `ENV:cybergraphics/Piccolo/` (should be installed correctly by the install-script) If no valid definitionfile could be loaded, you can specify a default-resolution in a requester.
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- o Piccolo SD64 : The monitorfile loads the definition-file specified by the environment-variable PICCOSD64MONITOR from ENV:cybergraphics/PiccoSD64/ (should be installed correctly by the install-script) If no valid definitionfile could be loaded, you can specify a default-resolution in a requester.
- o GVP Spectrum : The monitorfile loads the definition-file specified by the environment-variable SPECTRUMMONITOR from ENV:cybergraphics/spectrum/ (should be installed correctly by the install-script) If no valid definitionfile could be loaded, you can specify a default-resolution in a requester.
- o CyberVision64 : The monitorfile loads the definition-file specified by the environment-variable CYBERVISION from ENV:cybergraphics/Cybervision/ (should be installed correctly by the install-script) If no valid definitionfile could be loaded, you can specify a default-resolution in a requester.
- o RetinaZ3: The monitorfile loads the definition-file specified by the environment-variable RETINAZ3MONITOR from ENV:cybergraphics/RetinaZ3/ (should be installed correctly by the install-script) If no valid definitionfile could be loaded, you can specify a default-resolution in a requester.

## 1.16 cybergraphics.guide/M1\_FUTUR

What will be done in the future

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Planned features for forthcoming versions of cybergraphics whereas order is no sign of priority:

- \* support for further gfx boards

## 1.17 cybergraphics.guide/M1\_CSOFTE

Which software has cybergraphics support currently ?

We are often asked which software supports the extended possibilities of cybergraphics (>8 bit support). Well, cybergraphics is quite a new thing and it takes some time until software developers have noticed the

advantages of this system. Nevertheless we want to tell you which applications currently support it.

#### CyberView 2.0

CyberView is the equivalent to CyberWindow but it uses screens instead of windows for showing the actual image. You can find it on AMInet in gfx/board.

#### CyberWindow 2.0

CyberWindow is a picture viewer which displays the actual image in a window on a 15/16/24 bit public screen. It can be found on AMInet, too.

#### Emplant

The MAC Emulator Emplant also supports cybergraphics since version 5.x. But it can only up to 8 bit depth screens currently.

#### ImageDesk 1.5

ImageDesk is a program to catalog picture directories by generating small representants of the pictures, so called thumbnails. Those thumbnails are internally being expanded to objects which will include all essential attributes of the represented pictures. Several thumbnail objects which corresponding pictures are in the same directory, could be saved together into a catalog file for being available immediately on request. These files could be saved packed, too provided XPK has been installed. ImageDesk is shareware and can be found on AMInet CD5 in gfx/misc.

#### ImageFX 2.x (available soon)

In an upcoming update of ImageFX there will be full cybergraphics support. You can edit projects in 15/16/24 bits colour depth directly on a cybergraphics screen if you want.

#### Photogenics 1.2 (soon coming)

Photogenics is a complex image manipulation package that will support cybergraphics with the soon coming 1.2 version. You can manipulate pictures directly in 15/16/24 bit.

#### ShapeShifter

ShapeShifter is a software only MAC-II Emulator which can also emulate the 15/24 bit modes of the mac os. All possibilities of cybergraphics are used. You can find this software on AMInet too.

#### VLabTV

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VLabTV is a framegrabber software for the VLab par from MacroSystem. You are able to open a preview monitor on a 15/16/24 bit screen and to grab a frame directly. Up to 8 parallel projects are possible. This software is available on AMInet, too.

## 1.18 cybergraphics.guide/M1\_MLIST

CyBERgraphics mailing list

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If you have a email connection, you are able to join the cybergraphics mailing list. Thanks must go to Matthias Scheler for moderating this list.

This mailing list has been created for discussing CyBERgraphics related topics. It can be reached as "CyberGFX@lyssa.owl.de".

To join the list send a mail with a message text (NOT subject) like this to "request@lyssa.owl.de", NOT to the list:

```
SUBSCRIBE CyberGFX "Your Realname" your@e-mail.address  
HELP
```

Replace "Your Realname" and "your@e-mail.address" with your realname and E-Mail address e.g.:

```
SUBSCRIBE CyberGFX "Frank Mariak" fmariak@chaosengine.ping.de  
HELP
```

To leave the list send a mail with a message text (NOT subject) like this to "request@lyssa.owl.de", NOT to the list:

```
UNSUBSCRIBE CyberGFX "Your Realname" your@e-mail.address
```

Replace "Your Realname" and "your@e-mail.address" with your realname and E-Mail address e.g.:

```
UNSUBSCRIBE CyberGFX "Frank Mariak" fmariak@chaosengine.ping.de
```

This list was created for discussion, NOT for distributing binaries.

## 1.19 cybergraphics.guide/M1\_DEINS

How to deinstall cybergraphics

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Here we gave some hints on how to deactivate the cybergraphics driver in order to activate the old emulation (or egs) again.



- Domino
- Picasso II
- Piccolo Z2/Z3 oder Piccolo SD64
- GVP Spectrum
- RetinaZ3

If you have chosen the option 'Store old files' while installing the retinaz3 version of the driver, you can find the original retinaz3 emulation files in the directory 'sys:storage/MacroSystemZ3'. To deactivate cybergraphics you have to move or delete the file devs:monitors/RetinaZ3. After this operation, you have to copy the file retinaemu from sys:storage/MacroSystemZ3 to sys:wbstartup and the library retina.library to libs: again. That's all. If you want to delete cybergraphics completely you have to delete the whole envarc:cybergraphics directory and the corresponding cyber#?.libraries.

## 1.20 cybergraphics.guide/M1\_HISTO

### Versions

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Revision V40.49 (changes since 40.47)

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- changed the way ReadPixel() works on non clut screens. MatchPenColour now scans palette in reverse order in order to fix some problems.
- CygnusED EOF marker is now shown correctly
- pctask text modes now show up correctly under cybergraphics (inverse text before)
- fixed jam2 line pattern bugs
- fixed "pointer gets square" bug when screen was dragged down too far. Some machines even crashed .....

(- added faster text output ) <- disabled in 40.49 (to be revised)

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cybergraphics Revision V40.47

- fixed bug in WritePixelLine8. Width was calculated wrong. (seen in ImageFX 2.0 wb preview)

cyberintuition Revision V40.21

- added additional zero check in CloseScreen
- added DisplayAlert() replacement to provide alerts on cybergraphics screens.

Did some changes in the autodocs. (Drawing into window rastports with 15/16/24 bit function is no problem anymore since 40.28)

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## cybergraphics Revision V40.46

- autoscroll screens positions are now refreshed correctly after video param changes
- added HIDE15BIT environment variable. Now you can switch off 15bit modes to reduce screenmode list length. modes are still available but hidden

## Picasso/Piccolo/PiccoloSD64/Spectrum/Domino 1.20

- Piccolo SD64 support (first public release)
- fixed a bug in test screen handling

There now is a U.S. registration site .... Have a look at the Orderform .....

## cybergraphics Revision V40.45

- minor fixes
- sprite resolution is now changeable in 15/16/24 bit, too

## cyberintuition Revision V40.20

- made some changes in the pubscreen locking stuff to avoid some problems with wb resolution change in 15/16/24 bit

## cybergfx\_r3d.library V40.2 (Real3D CyBERgraphics display driver)

- minor modifications (only DIPF\_IS\_WB modes are shown)

## Picasso/Piccolo/Spectrum/Domino V1.19

- added support for 16bit temp patt blit
- driver library is now made resident correctly (no mungwall hit at startup anymore)

## RetinaZ3 V1.1

- first public release (has no blitter and 24 bit support currently)

## cybergraphics Revision V40.44 (made available only to registered owners)

- added additional code to allow screenmode testing (screenmode tool still not finished yet)
- fixed enforcer hits in bob funcs

## vilintuisup Revision 2.34

- minor changes

## cybergraphics Revision V40.43

- fixed some problems with screen dragging that occurred since early 40.43 releases
- diverse changes in the view stuff
- xor'ed pattern blits work now correctly on extended screens
- hopefully fixed the "cybergraphics does not work on my system anymore" problem ...
- added blitter version of BltPattern for 15/16/24 bit (only works on CVision up to now)

- fixed bug in AreaFillFuncs on 15/16/24 extended rastports
- fixed a bug in the color functions on extended viewports

vilintuisup Revision 2.33

- some bugs fixed

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cybergraphics Revision 40.42

- cache optimized some special planar->chunky->rgb blits to speed up blitting on 68030 systems when 15/16 bit screens are opened
- now screen swap stuff uses MOVE16 on 68040 machines

cyberintuition Revision V40.19

- fixed some problems when OpenWorkbench() was used on extended screens

cyberlayers Revision V40.5

- fixed a bug in 8 bit smart refresh window refreshing (hopefully fixes all problems that occurred in the 40.41 AMInet release)
- tried to optimize smart refresh window resizing

Maxon Cinema4D cinemaausgabe.library Revision V1.1

- fixed a bug in the saver (red and blue color values were exchanged when an IFF picture was saved).

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cybergraphics Revision 40.41

- displaying alerts now works again. The monitor switch was not toggled in V40.40
  - IconMasks now work perfectly on extended bitmaps too
  - changed the allocbitmap stuff a bit. Now picture datatypes should work on extended displays too.
  - all extended bitmaps are now correctly aligned
  - some changes in the sprite stuff
  - added blitter support for extended display BltTemplate (currently only cvision is supported)
  - GREY8 & CLUT8 RECTFMTs did only sizex-1 rectangle writes. now fixed
  - tried to optimize some code in Write/Fill/ScalePixelArray
  - TDNestCnt state was not restored correctly when no memory could be allocated for screen conversion.
  - fixed bug in conjunction with interleaved bitmaps
  - fixed a bug in ScalePixelArray
  - added a missing mem alloc failed check in 15 bit bitmap allocation routines
  - very bad system crashes when being low on memory and opening screens then should be a thing of the past now.
  - Blitting should be more low memory tolerant now (Chunky2Planar blits failed in previous versions if not enough chip memory could be allocated)
  - fixed a rounding problem in the rgb15 color models
-

## cybergraphics Revision V40.40

- mouse colors should be set correctly now, even on less than 32 colour screens
- added ScalePixelArray function
- fixed a bug in GetCyberIDAttr & GetCyberMapAttr
- added clipping for InvertPixelArray
- fixed layer offset bugs in WritePixelArray
- added ReadPixel for extended screens (via FindColor)
- diverse changes in the extended screen support stuff
- CYBRMREQ\_MaxDepth is now set to 32 by default
- fixed a bug in GetCyberMapAttr when a amiga bitmap was supplied
- added CopyCyberMap function to allow faster image transfers
- did some optimizations in the chunky to rgb code parts
- dim\_MaxRasterHeight was set to dim\_MaxRasterWidth. This is fixed now.
- fixed a bug in the Draw 15/16 bit function. FgPen & BgPen was not set correctly
- fixed diverse bugs in MovePixeArray and added minimal clipping support

## cybergraphics Revision V40.36

- graphics' WritePixelArray8 also works on extended bitmaps now
- cybergraphics' WritePixelArray works in a layered environment now too
- fixed some problems with normal chunky bitmaps in GetCyberMapAttr
- complement text mode works now correctly
- cybergraphics library can not be opened without a driver installed anymore
- fixed memory loss problems in FreeModeList & FreeBitmap
- fixed memory loss problem with extended (15/16/24) bitmaps
- added WriteChunkyPixels patch
- fixed a clipping bug in the drawing routine
- fixed further bugs in ReadPixelArray
- added PIXFMT\_RGBA32
- added minimal clipping support for Read & WritePixelArray
- fixed a cycle eating bug in the sub task. Signaling was not handled correctly

## cybergraphics Revision V40.29

- added CPUP2C environment variable
- HIRESCRSR environment variable is supported now
- internal speedups
- fixed titlebar problem in 15/16/24 bit
- fixed another small masking bug with cirrus-boards
- added blitter support for (Move & InvertPixelArray).
- fixed a minor bug in ReadRGBPixel & ReadPixelArray
- fixed bugs in extended bitmap support routines
- Fixed bugs in Fill & InvertPixelArray
- fixed bugs in MovePixelArray

cybergraphics Revision V40.23

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- first official release

## 1.21 cybergraphics.guide/M1\_THANX

Thanks

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The following people/firms we have to thank a lot. Maybe without some of them cybergraphics would not exist:

- Advanced Systems&Software for developing a "state of the art" graphics board which was decisive for the development of CyBERgraphics.
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- Robert Reiswig for creating the installer scripts
- Uwe Roehm für creating the ImageFX Render module
- Henning Friedl from MacroSystem for RetinaZ3 support

## 1.22 cybergraphics.guide/M1\_AUTOR

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## 1.23 cybergraphics.guide/M1\_ENVIR

the following environment-vars are known by the cybergraphics-lib :

### o cybergraphics/CPUP2C

By setting this variable, the planar-to-chunky conversion will be done by the CPU (in contrast to the blitter-conversion) Therefore the ugly-looking "planar" blitting-effects are gone, but the software-conversion is slower.  
The cpu-conversion can be activated by:

```
setenv cybergraphics/CPUP2C="1"
```

(this creates the file env:cybergraphics/CPUP2C  
-> you have to copy this file to envarc:cybergraphics/ if  
you want the variable permanently to be set)

### o cybergraphics/HIRESCRSR

By setting this variable, the Lores-Sprites on non-AA-machines become Hires-sprites (they are no longer doubled by the cybergraphics-Software).  
This variable is identical to the tooltype HIRESSPRITE of older Picasso-monitor files  
Hierssprites can be activated by:

```
setenv cybergraphics/HIRESCRSR="1"
```

(this creates the file env:cybergraphics/HIRESCRSR  
-> you have to copy this file to envarc:cybergraphics/ if  
you want the variable permanently to be set)

### o cybergraphics/HIDE15BIT

By setting this variable, you can switch off 15bit modes to reduce screenmode list length. The Modes are still available but hidden.  
This can be done by:

```
setenv cybergraphics/HIDE15BIT="1"
```

This value is only read one at startup time, it can't be changed "online".

### o cybergraphics/ALERTEMU

By setting this variable, DisplayAlert(), (The Screens you get when the machine crashes.) will be placed on an CyberGraphics screen.

```
setenv cybergraphics/ALERTEMU="1"
```

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