

**cybergraphics**

**COLLABORATORS**

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**REVISION HISTORY**

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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 40.40

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

SHAREWARE

Introduction

What's CyBERgraphics ?

Min. requirements

Minimal sytem requirements

Installation

Installation

Registration

How do i become registered owner ?

Updates

Where to get the latest version

Legal stuff

Copyright, Trademarks

Limitations

Limitations of the shareware version

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Bugs	Known bugs
Things to come	What we try to do in the future
Versions	version history
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 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 (februar 95) Cybervision64 by Advanced Systems&Software. (of course including drivers for diverse graphics programs, screen promoters and much more).

Right now (4.2.95) there are drivers for Maxon Cinema, Real 3D, ADPro, AmaxIV, PhotoWorx and Photogenics available.

### FEATURES

- o stable Workbench emulation;
  - o dragable 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 Picasso II in linear mode (! not segmented !), GVP Spectrum or Piccolo Z2/3
- o Kickstart 3.x
- o 68020 or higher
- o 2 MB of fast memory

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.

### 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 Install\_PiccoloE or Install\_PicassoE in the draw cybershare.

### 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:

- 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

\* There is only an AdPro driver in the shareware package  
There also exist drivers for Maxon Cinema 4D, Real3D, Photogenics,  
PhotoWorx, AmaxIV ... 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 \$30,-, 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. I 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.

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

## 1.8 ImagedeskE.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

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## 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.

```

devs (dir)
  monitors (dir)
    Picasso                      Picasso.info
    Piccolo                      Piccolo.info
    Spectrum                     Spectrum.info
  monitors.info
libs (dir)
  cybergraphics.library          cyberintuition.library
  cyberlayers.library           vilintuisup.library
devdocs (dir)
  autodoc (dir)
    colormodels.doc             colormodels.doc.info
    cybergraphics.doc           cybergraphics.doc.info
  examples (dir)
    cybersavegio.c              cybersavegio.c.info
  fd (dir)
    cybergraphics_lib.fd
  include (dir)
    cybergraphics.h             cybergraphics.h.info
    cybergraphics.i             cybergraphics.i.info
  pragmas (dir)
    cybergraphics_pragmas.h
  autodoc.info                  examples.info
  fd.info                       include.info
  pragmas.info
drivers (dir)
  CyBERgraphics
Bestellformular                 Bestellformular.info
CyBERgfx_D.guide                CyBERgfx_D.guide.info
CyBERgfx_E.guide                CyBERgfx_E.guide.info
CyberGfx_Install                CyberGfx_Install.info
devdocs.info                    devs.info
drivers.info                     libs.info
Orderform                       Orderform.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 payed for the share fee, hereby. It is not allowed to copy, distribute or generate registered versions.

## 1.11 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.

## 1.12 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.

## 1.13 cybergraphics.guide/M1\_BUGRP

Known bugs:

- o some Picasso II gfx boards produce read or bliterrors in high resolutions or high refresh frequencies. In this case you have to select a smaller refresh rate in PicassoMode.

## 1.14 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:

- \* 15/16/24 bit extension of the "normal" graphics.library, that means that you can open 24bit screens as standard intuition screens and that you can use all graphics.library functions on them as before. (with some limitations of course because of the missing color lookup table)
- \* application to adjust the monitor parameters
- \* support for other gfx boards than Picasso&Piccolo

## 1.15 cybergraphics.guide/M1\_HISTO

Versionen  
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cybergraphics Revision V40.40

- mouse colors should be set correctly now, even on less than 32 colour screens
  - added ScalePixelFormat 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

- first official release

## 1.16 cybergraphics.guide/M1\_THANX

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## Danksagung

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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.
- Ralf Schmidt for hints with intuition und graphics
- Olaf Barthel for hints and testing the first versions as well as developing a driver for his PhotoCD application PhotoWorx
- Andreas Goiczky for beta testing cybergraphics on his Piccolo Z3 graphics board
- Thomas Dorn for adapting XIPaint for cybergraphics
- Kenneth Dyke for nice talks on IRC
- Robert Reiswig for creating the installer scripts

## 1.17 cybergraphics.guide/M1\_AUTOR

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