

cybergraphics

COLLABORATORS

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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
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Bugs	Known bugs
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1.2 cybergraphics.guide/M1_INTRD

Introduction

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

- 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

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

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 smail. 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

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

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 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

Liability
Distribution
Trademarks
Copyright

1.9 cybergraphics.guide/Liability

Liability

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

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 paid for the share fee, hereby. It is not allowed to copy, distribute or generate registered versions.

1.11 cybergraphics.guide/Trademarks

Trademarks

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

1.12 cybergraphics.guide/Copyright

Copyright

The Cybergraphics system, the accompanying files and the manual is

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1.13 cybergraphics.guide/M1_BUGRP

Known bugs:

- 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.

1.14 cybergraphics.guide/M1_FUTUR

What will be done in the future

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

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
- HIRESRSR 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

Danksagung

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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