

Copper-Demon

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COLLABORATORS

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Chapter 1

Copper-Demon

1.1 Welcome to Copper-Demon!

*** Copper-Demon 3.1 ***

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Introduction What the hell is it? **Legal stuff** Copyright and disclaimer

Requirements 68060, 18Megs... :-) **Installation** Nothing could be easier...

Usage Tooltypes and arguments **Using the GUI** Grab your mouse! **Signals** Ctrl- C,D,E,F

Problems and solutions **History**

Thanks **The author** How to reach me

1.2 Introduction

Introduction

Copper-Demon lets you create rainbow color effects for a selectable pen color number on public screens, using the entire 16 million color range of the AGA chips. You specify max. 32 colors (but at least 2), and Copper-Demon will make a smooth color change by setting a new color value on every scanline.

Main features include:

- o All pubscreen supported, not only the Workbench
- o Color-cache makes the refresh faster
- o Optimized copperlist
- o Pointer resolution can be fixed
- o OpenWorkBench() patch, no more deadlocks
- o Commodity, GUI interface (now font sensitive)
- o Written in pure, highly optimized assembly (source ~80K)

1.3 Copyright and disclaimer

Copyright ©1995,1996 **Valenta Ferenc**

This product is copyrighted freeware. You may distribute it as long as all files are included and no profit is made. (Except if the profit goes to me ;-) Parts of this product may NOT be included in commercial software and it may NOT be modified in any way without my written permission. This software is provided "as is". No warranty. Use at your own risk! (Copper-Demon is tested in everyday use and has shown no errors.)

1.4 System requirements

System requirements

o Amiga with AGA chipset (currently A1200, A4000 and CD32) o At least MC68EC020 processor (as found in the A1200) o Kickstart 3.0 or better o Commodities.library V39 o Reqtools.library V38 (© Nico Francois & Magnus Holmgren) o ScreenNotify.library V1 recommended (© Stefan Becker) o Some free memory

Won't work on gfx boards. (Unless they emulate the Copper :-) Reqtools.library and ScreenNotify.library can be downloaded from AmiNet. (util/libs/ReqToolsUsr.lha and util/libs/ScreenNotify10.lha) No other disk-based library required.

Tested on A1200/EC020, A4000/040 (Pogi), A1200/060 (Alan) Checked with Enforcer (Pogi)

1.5 Installation

Installation

Simply copy Copper-Demon and it's icon to C: or SYS:WBStartup or wherever you want. Copy **Copper-Demon.prefs** and **.presets** to either the same directory as the main program (PROGDIR:), or ENV: or S:. It will search for the prefs file in the above order. The presets file will be searched for only in the same dir as the prefs found in. That's all!

For a quick look, click [here](#).

1.6 Tooltypes and arguments

Tooltypes and arguments

Copper-Demon accepts the same CLI-arguments and tooltypes. Once it's started, it can be controlled by **signals**, Exchange commands or the **GUI**

CXPRI= (CXPRI/N/K)

Commodity priority. Not very useful, just ignore it.

POPKEY= (POPKEY/K)

Popup **hotkey**. Default to 'Shift Alt C'

POPUP (POPUP/S)

Open the GUI at program start

PATCHOPENWB (PATCHOPENWB/S)

There is a bug in the 3.0 Kickstarts. If a program opens the WB screen, a deadlock may occur, depending on the task priorities and system load. This is a workaround for this problem. See also **quit**

NOLIB (NOLIB/S)

Do not use scrennotify.library. Only useful when debugging, ignore it.

DELAY= (DELAY/N/K)

Copperlist refresh delay in milliseconds. The lower this value, the faster Copper-Demon's reaction is on sprite-resolution changes, but eats more CPU-time. Default is 500ms.

DEBUG (DEBUG/S)

Print **debug** information to the default output. If started from WB, a reasonable console window will be opened.

1.7 Using the GUI

Using the GUI

The GUI is font-sensitive since V3.1. It always used topaz.font before. If you are using amigaguide.datatype V40 or better, you can double-click on the 'gadgets'. But be careful, see [problems!](#)

```
lol-----||-----|| Affected Screens
Colors ||||-----||-----| R !!!!!!!!!!!!!!! 100 |||| Color | G !!!!!!!!!!!!!!! 100 |||| select| B !!!!!!!!!!!!!!!
100 || Screen selector ||| Up New Presets ||||| Down Delete Restore ||||| On Misc About ||||| Step 5 ||-----
-----|| Screens Remove Hide Quit Load Save ||-----|
```

Links:

[Screens Remove Hide Quit Load Save Up Down New Delete Presets Restore Misc About Step On Colors](#)

1.8 Problems

Problems (and solutions)

Copper-Demon creates user-copperlists for the screens, using the OS 2.0 userclip option. Some programs may don't like this. Contact [me](#) immediately if you have problems with some program. I will try to fix it. I want Copper-Demon to be as system friendly as possible.

- o PC-Task (© Chris Hames) hangs up very often when dealing with mouse (using it's built in mouse driver) This is not my fault: it hangs up with ALL this kind of software I have tried (MagicCopper, WBVerlauf, CopperPrefs... All crashed.) You should not use Copper-Demon and PC-Task's mouse driver together.

- o Some program, for example Term 34 (© Olaf Olsen Barthel) cannot close it's screen. Disable the lock option in the [misc](#) requester.

- o Copper-Demon may conflict with some screen/mouse blanker prg. There is no problem with MultiCX and MCP. CygnusEd 3.5's built-in mouse blanker sometime blanks the pointer forever. If you open a filerequester (you can cancel it immediately) the pointer reappears. BlitzBlank makes the pointer jump at every second. (Reported by ???) I don't know how to fix this. Note that most of the blankers are hacks!

- o Alan reported problems with the DbIPal monitor driver. We are not sure what the problem is... If you are using DbIPal, please tell me if it works or not! (Try to drag a screen SLOWLY!)

- o Copper-Demon may not work with virtual memory (I couldn't check this)

WARNING! Due to some software errors in the amigaguide.datatype V40, this document may crash your system. (Guru Meditation #80000004, illegal instruction) In most case, this happens if you double-click on a too long word, for example on the top/bottom borders of the 'window' in the page [GUI](#).

1.9 Revision history

History

1.0 *initial release*

- o CLI only
- o Works only on the WB screen
- o 2 colors (Like MagicCopper, WBVerlauf)

2.0 Released at SCENEST'96

- o Support all pubscreens (each screen have it's own process)
- o 16 color/screen
- o Uses ScreenNotify.library
- o Sprite-resolution can be fixed
- o Built-in help text

3.0 Released at Pie Slice (and AmiNet)

- o GUI, Commodity interface
- o Now one simple process does everything
- o Can be started from Workbench (tooltypes)
- o Pref-s/presets file
- o Uses timer.device instead of Delay()
- o 32 color/screen
- o Nice guide instead of the online help
- o Many bugs fixed

3.1 AmiNet release

* Warning! On 96.11.08 I accidentally uploaded the wrong * version. It still causes Enforcer hits, and the icon * contains bad tooltypes. (Delay=0 etc...)

o GUI is now font sensitive, always uses the screen font o Presets remember the step value (suggested by Troy D. Davis) o Improved documentation, including history :-)

- o Some more nice effects included (created by Pogi)
- o BUG: The GUI should hide when the owner tries to close the screen which the GUI is opened on, but this didn't work on the Workbench screen before.
- o BUG: Changing the sprite-resolution now causes the copperlist to be refreshed even if the refresh is disabled.
- o BUG: Copper-Demon caused (harmless) enforcer hits if a screen hasn't been in the front since it's opened/added to the list/ Copper-Demon started. Reported by Pogi.
- o BUG: Some memory handling bug fixed.

See also [problems](#)

1.10 Thanks

A "thank you" to the following people:

Pogi for testing with Enforcer and for the color effects

Alan for testing on the 68060

All people who sent me bug reports and suggestions

Nico François and Magnus Holmgren for the reqtools.library

Stefan Becker for the screennotify.library

Amiga Technologies for making all this possible

1.11 About the author

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Homepage: <http://caesar.elte.hu/~vf/> Under construction - links may not work this time, sorry :-(New versions and my other programs will be available here

Ideas, suggestions, remarks, bug reports, nice color effects are always welcomed. Please send me a mail if you like/use this proggy. Send me a mail also if you don't, and tell me (nicely) why.

Note that english is not my native language.

1.12 Controlling Copper-Demon by signals

Signals

CTRL/C **quit** CTRL/D enable/disable **debug** messages CTRL/E force refresh all screens CTRL/F **popup**

Signals can be sent by pressing the keys or by Break.

1.13 Hide interface

Hide interface

You can hide Copper-Demon's interface by:

- o pressing the window's close gadget,
- o pressing the hide gadget,
- o using the commodity Exchange program.
- o closing the public screen where the **GUI** is. (This will happen only if the ScreenNotify.library is available.)

The GUI will be closed immediately, no other actions will be done. The **undo buffer** will be left unchanged.

1.14 Opening the GUI

Popup

You can open the GUI by: o specifying the POPUP **tooltype** or **CLI-argument** o sending a ctrl/f **signal** o pressing the defined **hotkey** o using the commodity Exchange program. o starting the program once again.

The **GUI** will always pop up on the default public screen.

1.15 Quit

Quit

You can quit Copper-Demon by: o pressing the quit gadget. A requester will ask if you are sure you want to quit. o sending a ctrl/c **signal**. o using the commodity Exchange program.

The **GUI** will be closed immediately and all resources will be released. If the **PATCHOPENWB** option is activated and an other program patched the OpenWorkBench() function since Copper-Demon had been started, a requester will warn you and the program will not quit until the vector is restored.

1.16 Debug

Debug info

This option can be activated by: o specifying the DEBUG **tooltype** or **CLI-argument** o sending a ctrl/d **signal**. The second time this will disable it. (In other word: toggle)

The following actions will be displayed: o reading items from the **prefs/presets** file o opening/closing or changing the status of a screen that is added to the list o signals, Exchange commands o etc...

Error messages are always displayed, unless you redirect them to NIL:.

1.17 Load preferences

Load preferences

This will re-load the **prefs file**. All changes made to the screen list and to the colors will be lost!

1.18 Save preferences

Save preferences

This will save your settings to the **prefs file**. Be careful, don't hit me if this option doesn't seem to work; perhaps you saved your settings to Env: which may be assigned to Ram:Env and will go away at reset! Some guy reported this as a bug. :-) Ok, you are right, this is a little strange. The reason is that I have Env: on HDD. If you don't you should move the prefs/presets file to PROGDIR: or S: or you will have copy the files from Env: to Envarc: everytime after you save them.

1.19 Prefs and presets file format

Preferences and presets

Both are text files, but I suggest you should not edit them yourself. Each line will be parsed by ReadArgs() and if some line can't be parsed, they will be simply ignored. Comments and bad lines won't be saved if you save the prefs! Copper-Demon will search

for the prefs file in the following directories: PROGDIR:, ENV:, S:. (In this order) If not found, one will be created in ENV:. The presets file will be searched for only in the same directory as the prefs found in, and won't be created if not found.

Copper-Demon.prefs This file is used to store the actual settings.

Template: SCREEN/A, COLORS/A/M, NORFSH/S, NOLOCK/S, OFF/S, STEP/N/K, COLNUM/N/K, SPRES/N/K

Copper-Demon.presets This file is used to store the pre-defined color effects.

Template: NAME/A, COLORS/A/M, STEP/N/K

Colors are 6 digits hexadecimal numbers, 2 digits for each of R, G, B. (As shown in the **color-selector** gadget)

1.20 Undo

Undo

This will undo the changes made to the selected screen's colors. If you select a new screen, the undo-buffer will be purged.

1.21 Step

Step

Set the number of lines between color changes. If you have a fast processor, you may set this lower, this will look a tad better, but gives slower screen dragging.

1.22 Move color up

Move up

Move the **selected color** up a place.

1.23 Move color down

Move down

Move the **selected color** down a place.

1.24 Add new color

Add new color

Add a new entry to the color list. It will be inserted after the **selected color**.

1.25 Delete color

Delete color

Delete the **selected color** from the list.

1.26 About requester

About

Brings up the about requester. Version number, author info and freeware notes will be displayed.

1.27 On/off

On

Enable/disable copperlist for a particular screen.

1.28 Colors

Color selector

You can select a color with the **color-selector** gadget. The color operations always affect the selected color.

1.29 Screens

Screen selector

You can select a screen with the **screen-selector** gadget. Only the selected screen's flags or colors can be changed. Everytime you select a screen, the **undo buffer** is purged.

You can add new screens with the screen requester. (Press the Screens gadget and it will pop up) You can remove them with the **Remove** gadget.

1.30 Remove screen from list

Remove screen

Remove the **selected screen** from the list. A requester will ask you if you are sure you want to remove it.

1.31 Open the misc requester

Open the misc requester

Pointer resolution

Fix the resolution of all sprites on the screen in question.

Lock

If set, the screen remains locked when Copper-Demon is waiting. The screen owner can't close the screen without first waking up Copper-Demon, so the effect can safely be removed before the screen is closed. This function is rather unnecessary this time, but may be useful later. Disabled if the screennotify.library is not available. Switch it off if the program can't close the screen. (For example: Term 34)

Refresh

If not set, the copperlist will not be refreshed until you change something, (colors, flags...) or refresh **signal** received.

Color

The color to be changed by the copper. You can change all the 256 color registers, even if you have a 2 color screen.

1.32 Open the preset requester

Open the preset requester

Add

Add the **selected screen**'s colors to the list. You will be asked for the name.

Remove

Remove the selected effect from the list.

Load

Re-load the **presets file**.

Save

Save the presets file.