

intro

COLLABORATORS

	<i>TITLE :</i> intro		
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WRITTEN BY		July 31, 2024	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

intro

1.1 1 Introduction

1 Introduction

The Tricky Color System (TCS) is a new, fantastic, software-only, video system which provides some new cool video modes on normal AGA Amigas by exploiting some basic concepts of the composition of colors. It comes in the shape of a shared library, but, if you want, you can write you own routines thanks to this documentation, which fully describes the system's internals.

1.1 Detailed Features List

1.2 How TCS Was Born

1.2 1.1 Detailed Features List

1.1 Detailed Features List

Here's what can be (almost effortlessly, with the `tcs.library`) achieved with TCS:

- TrueColor-like pixels, i.e. the value of a pixel is its own RGBx value
 - chunky access, i.e. a pixel is read/written with a single access to memory
 - 2 horizontal resolutions: HalfRes (280 ns pixels) and FullRes (140 ns pixels)
 - all the display sizes allowable by the Amiga hardware
 - screens of any size (limited only by the available memory)
 - 256 independently selectable colors per screen
 - up to 256 unique colors per screen
 - variable display brightness
 - Cross Playfield mode (a kind of Dual Playfield mode without a transparent color and with variable front playfield opacity)
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- up to 337 unique independent colors in Dual Cross Playfield mode (Cross Playfield mode with selectable transparent color)
- multiple RGB-like color definitions, named "RGBx"
- scrollable screens with horizontal increment of 35 ns
- freely bufferable screens

The library, besides the functions for displays management (which implement all the features listed above), provides also many other comfortable functions for:

- handling RGBx color/palette/data
- drawing graphics
- handling picture files

1.3 1.2 How TCS Was Born

1.2 How TCS Was Born

Not many years ago, Fabio Bizzetti used in some of his productions a new technique (as far as I know, he was the first one) for chunky screens that aroused a good deal of varied reactions among the Amigans.

Personally, I was impressed by its cleverness, but not to the same degree by the quality of the final output. So, inspired, I left some ideas free of floating in my mind for many months (or years...), until a nice (or bad? - I had an exam getting closer) night everything was so clear that I got up and started writing a general design document that slowly turned into these amigaguides (the technical section, in particular, is a sort of "chronicle" of my (twisted) mental processes).

Please let me stress that "inspired" does not mean "documented": if I had done so, I would have stuck to Fabio's ideas, so nothing really new could possibly come. The only thing I ever read was a scenemag's acid article intended as a sort of personal attack of the author to Fabio: there were some tech indications, but I did not put myself into studying them... just a superficial glance was enough at that time.

Anyway, TCS should be quite different from Fabio's technique (ignoring much of it, I can give no guarantee - I just remember he talked about "fooling the RF signal" and things like that; besides, I also asked him about it but I had no answer (he suddenly disappeared, after many months of e-mailing!)): it's brand-new (at least, I totally designed and written it from the scratch, without any source/hint from Fabio or anybody else) and offers some really cool features that I must admit I am very pleased (and impressed!) of.

- many months have passed since I wrote the lines above and something new, something **great** has happened: I proposed this project for my Computer Graphics exam to my professor and he proved to be a very open-minded person (I'll be grateful to him forever) by accepting despite TCS did **not** meet many of the exam's requirements!
- several months more (8) have passed since I wrote the note above; now

I'm writing here just after I passing the exam: TCS has been given the best rating possible (30 e lode)... I'm feeling extremely proud of being an Amigan among a sea of dumb Wintelers (I even had to bring my Amiga and my C=1940 at the Computer Lab)!