intro

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intro

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                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 wri-
te you own routines thanks to this amigaguide which fully describes the
system's internals.

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1.2 1.1 Detailed Features List

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1.1   Detailed Features List


This is what can be (effortlessly, thru the tcs.library) achieved with TCS:

 - TrueColor-like pixels, i.e. the value of a pixel is its own RGBx value,
   not an index to a color lookup table

 - chunky access, i.e. a pixel value is read/written with an access to a
   single memory location, calculated as:

    PxlAdr  = ChnkScrAdr + y*ScrWd + x

    where:
```

```
     (x,y)      : pixel coordinates
     ChnkScrAdr : start address of screen's chunky buffer (top-left corner)
     ScrWd      : screen's width in pixels (=bytes, in this case)
     PxlAdr     : pixel address
```

- 2 horizontal resolutions: HalfRes, FullRes (280 ns, 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 trasparent color and with variable front playfield opacity)

- up to 337 unique indipendent colors in Dual Cross Playfield mode (Cross Playfield mode with selectable transparent color)

- multiple RGB-like color definitions, named "RGBx"

- scrollable screens with horizontal increments of 35 ns

- freely bufferable screens

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 degre 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 this guide (the technical section, in particular, is a sort of "snap-shot" of my (twisted) mental processes).
"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 kinda 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!)): it's brand-new (at least, I totally designed and written it from the scratch) and offers some

really cool features

I'm really 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!