CHEATING like a PRO

A FEW TOOLS TO GET YOU PIXELING AND CONVERTING FOR C64

AGENDA

* A quick note about wiring
* Tools
* Conversion mistakes
* Tricks to look smooth
  - Palette fixing
  - Dithering
  - Anti-aliasing
* Deep Dive: Multipaint

IS WIRING OK?

The Trooper by Carrion/Bonzai

The Trooper - BZ [2021]

Released by :
Bonzai [web]

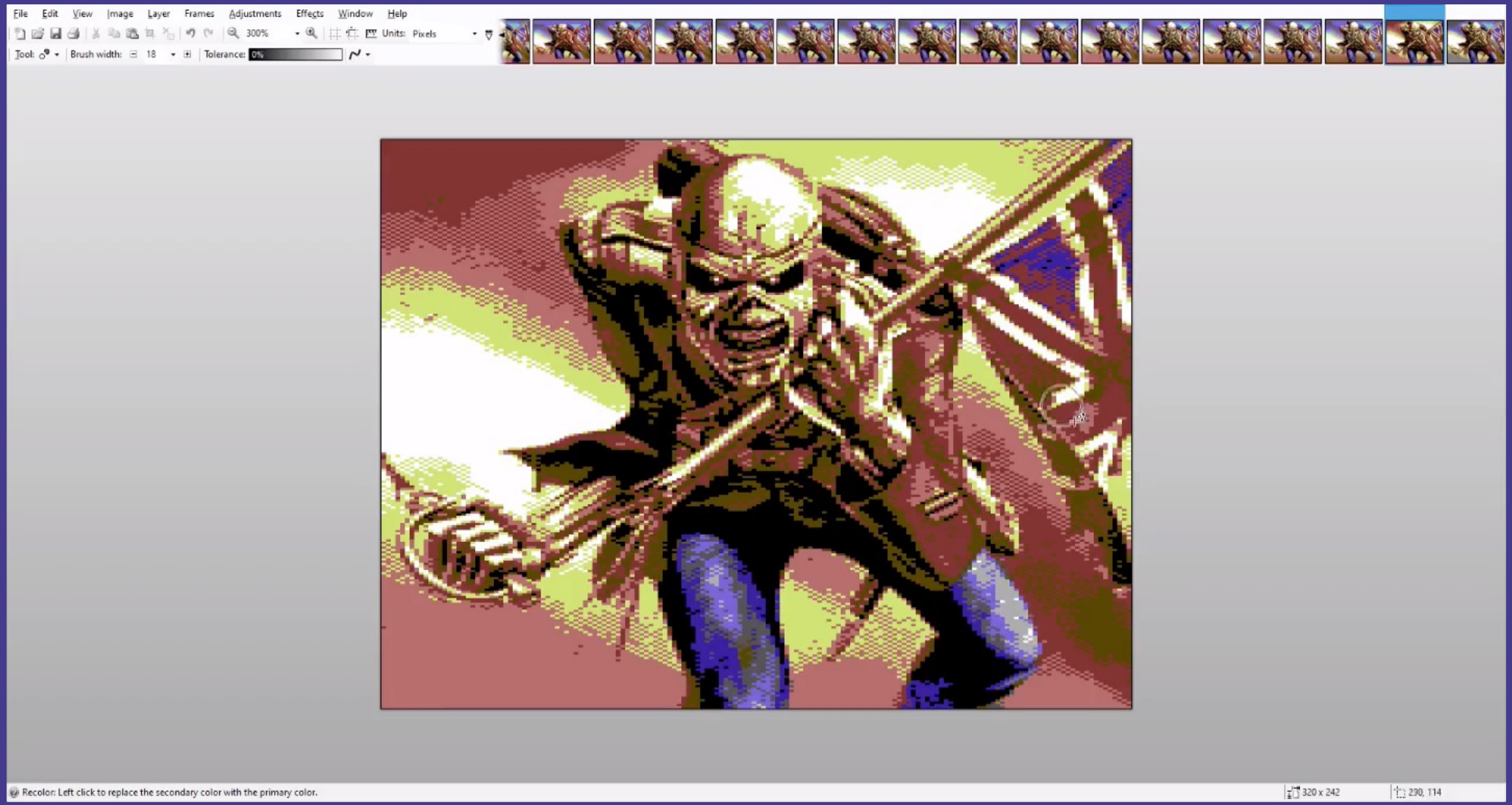
Release Date :
4 January 2021

Type :
C64 Graphics (MultiColor + Sprites)

User rating: 9.7/10 (39 votes) See votestatistics
10/10 (11 votes) - Public votes only.

Credits :
Code .... Walt of Bonzai, Miami Fun Project
Music .... 6R6 of Nostalgia, SHAPE
Graphics .... Carrion of Bonzai

https://csdb.dk/release/?id=75871



https://www.youtube.com/watch?v=UNF-QpQdsRA

The Trooper
by Carrion/Bonzai

* Not an original
* Photoshop
* Timanthes
* Lots of extra work

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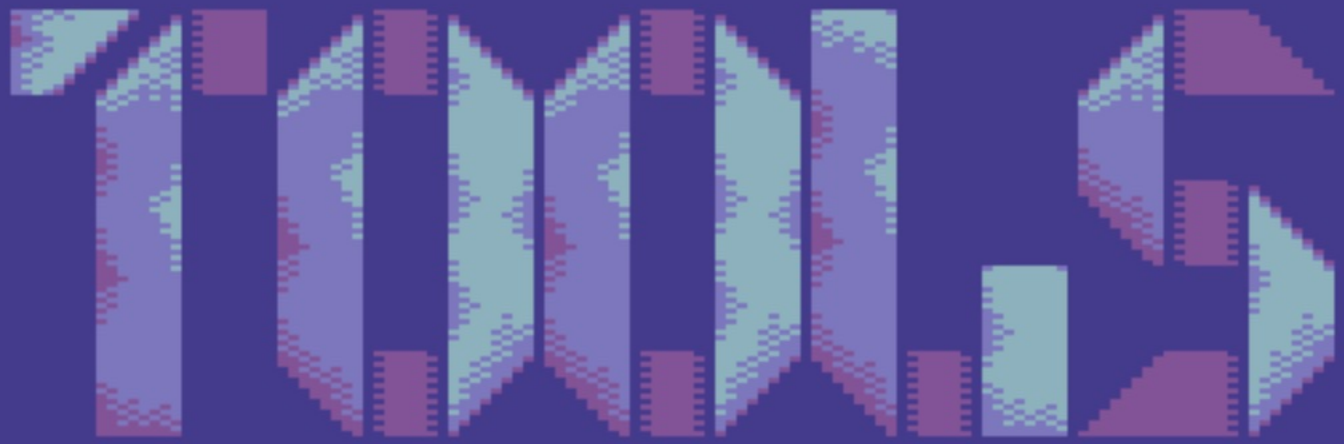
IS WIRING ART OR CRAFT?



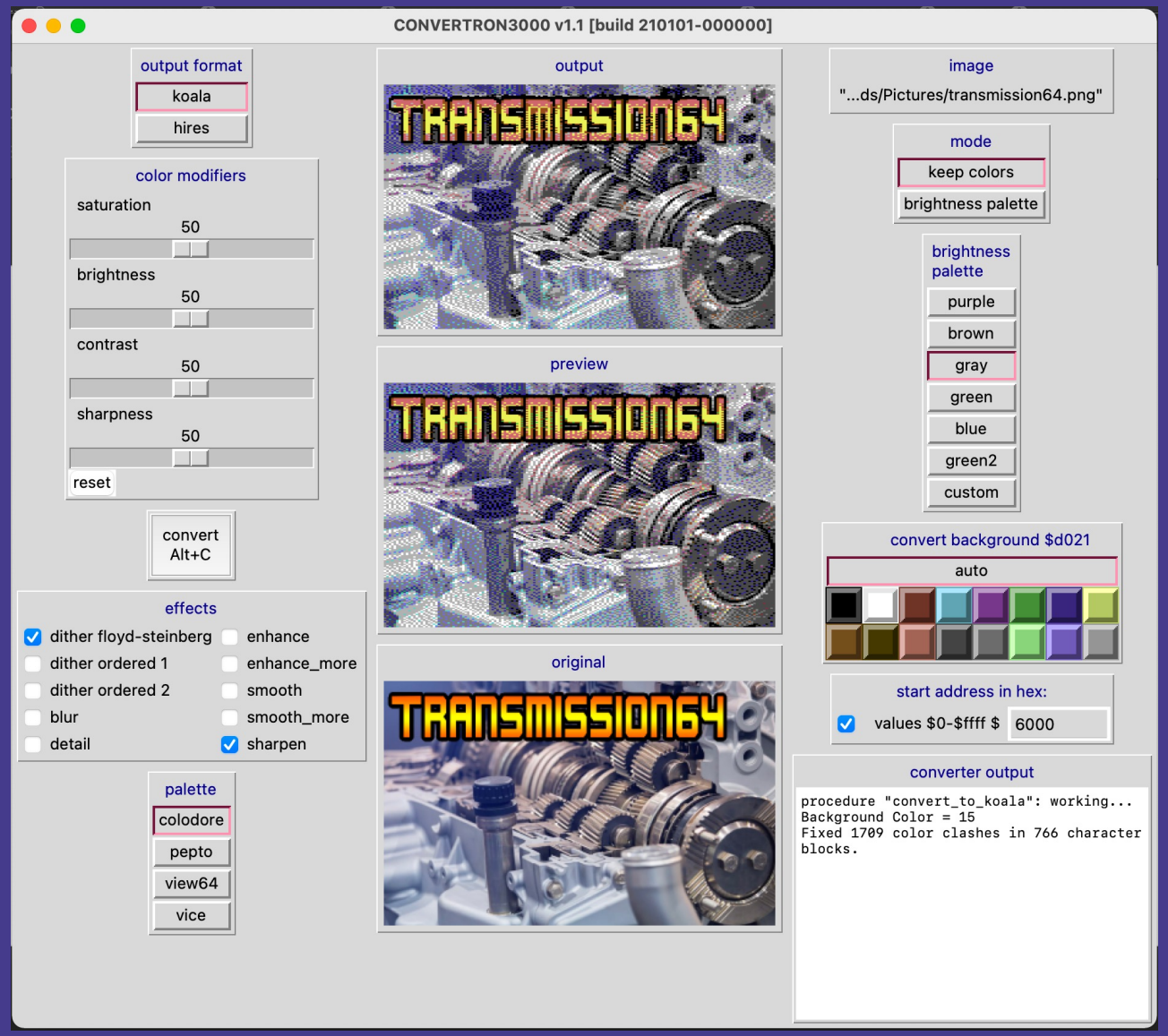
Lots to choose from. The ones I cover here are:

* Multi Platform
* Free
* Used by me :)

CONVERTRON 3000

FieserWolf/Abyss Connection

+ Lots of tweaking options
+ Brightness palettes
+ Dither options
+ Live preview
- Only .koa output

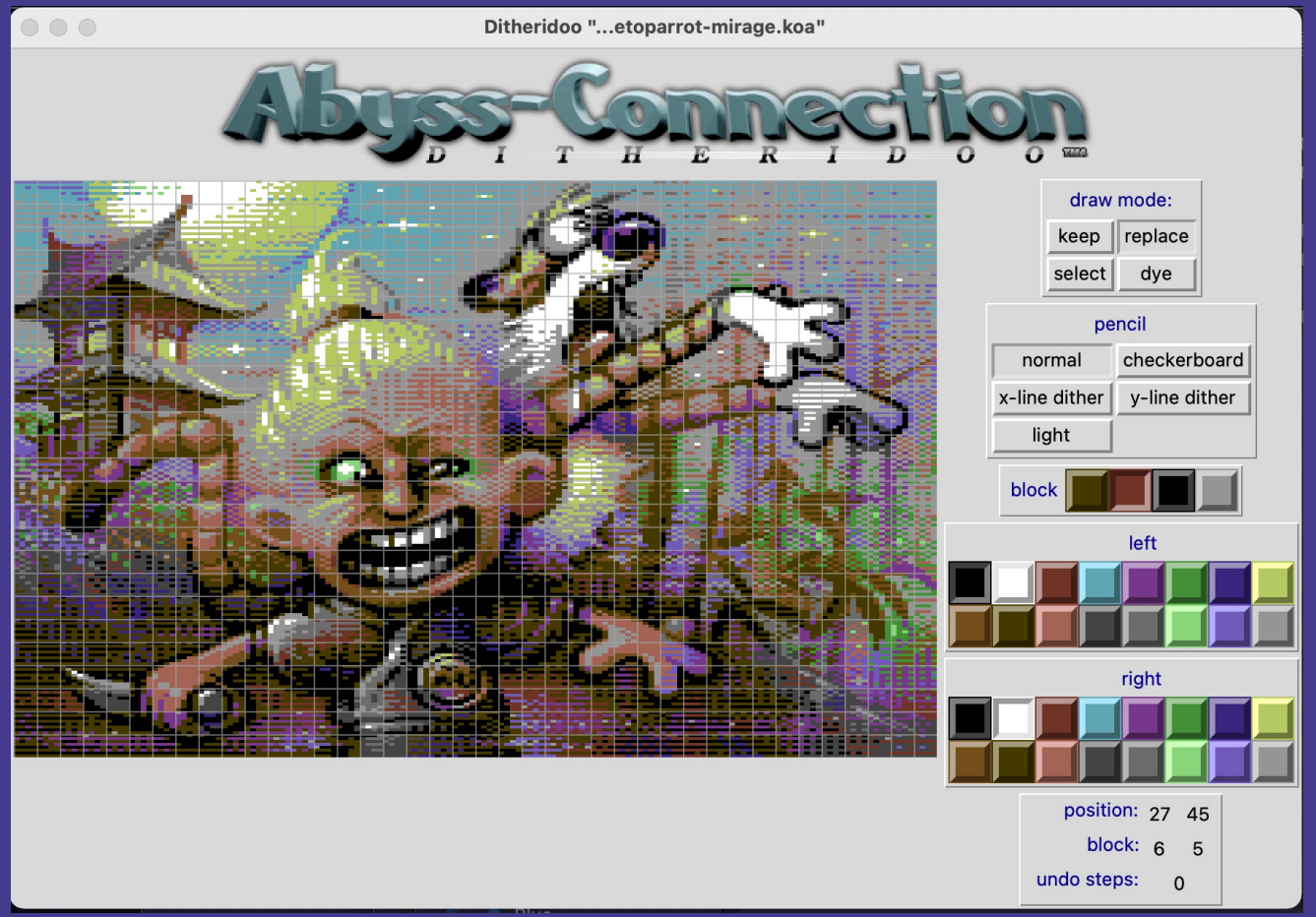


https://github.com/fieserWolF/convertron3000

DITHERIDOO

FieserWolf/Abyss Connection

+ Granular 8x8 control
+ Dither brushes
- No zoom
- No tools (cirle, line, etc)
- Only .koa support



https://github.com/fieserWolF/ditheridoo

RETROPIXELS

Michel de Bree

+ NPM/CLI tool
+ PNG, Koala, Sprites, FLI and AFLI
+ Dither and palette control

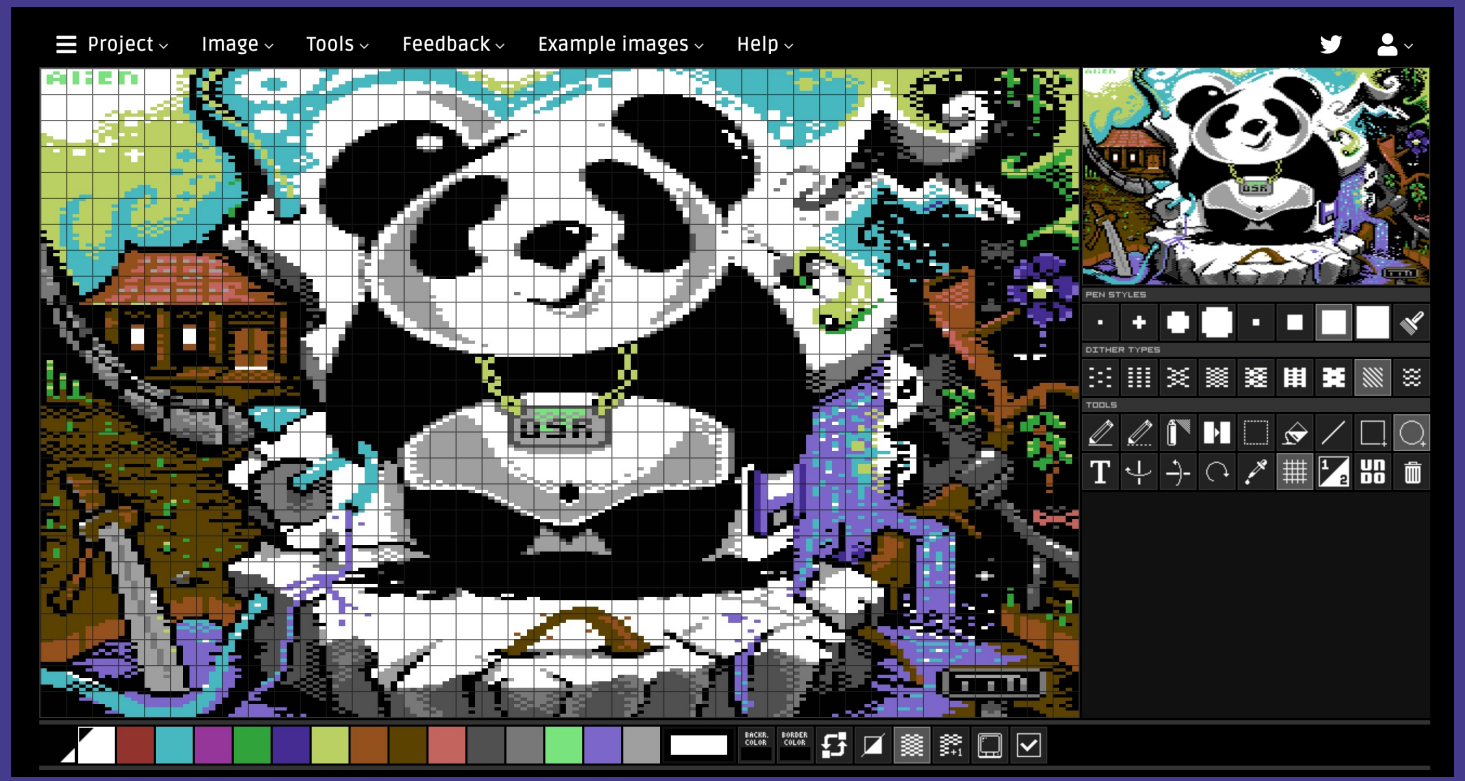
```
retropixels --format png paintface.jpg
```

https://www.micheldebree.nl/posts/retropixels-0-7-1/

MCDRAW

Zooperdan/DESiRE/PriorArt

+ Runs in the browser!
+ Koala/PNG support
+ Validates colour clash
+ Dither brushes
+ Preview in VICE!
- Buggy drawing in zoom
  (fixed soon, I guess)

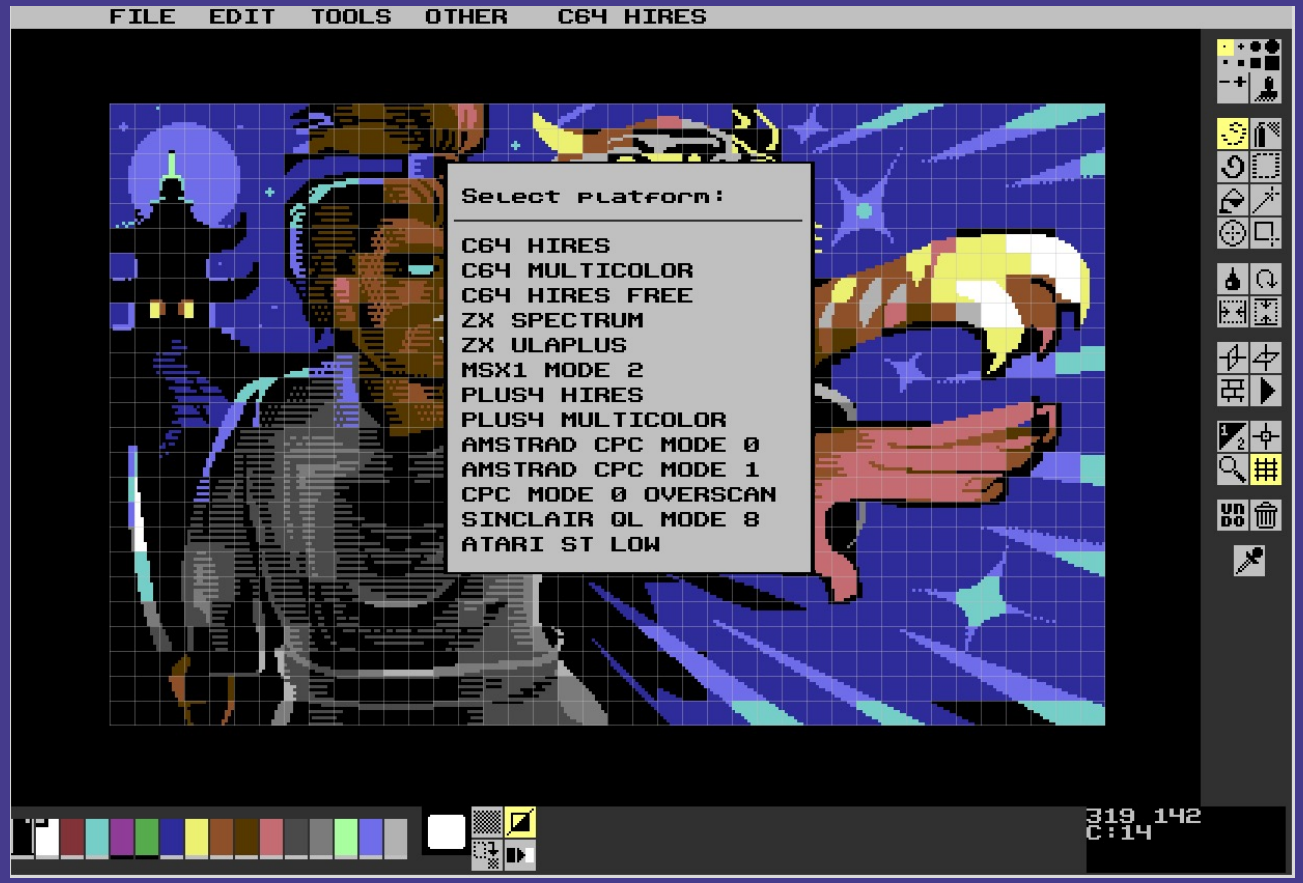


https://mcdraw.xyz/

MULTIPAINT

Dr. TerroZ

+ Lots of platforms!
+ PNG/Bin support
+ Validates colour clash
+ Dithers
+ Snap to char
+ Recolour mode
+ Play brush for sprites
- Resource hungry



http://multipaint.kameli.net/

conversion
mistakes

CONVERSION MISTAKES

* Relying on rescaling

  (Start with 320*200 or multiples)

* Make the thing bigger(TM)

* Relying on AFLI/UIFLI/IFLI to bring magic

* Starting with a full colour image (worse: JPG)

64
TRANSMISSION

FILE EDIT TOOLS OTHER C64 MULTICOLOR
TRANSMISSION
UNDO

FILE EDIT TOOLS OTHER C64 MULTICOLOR
96 80
C:8

Save for web

PNG: 5.4 KB 5.574 B

Format: PNG

Width: 320 px

Height: 200 8 : 5

Quality: 11%

don't use palettes

Save

FILE EDIT TOOLS OTHER C64 MULTICOLOR
TRANSMISSION
112 24
C:15

Fact:

It is easier to set a few good looking pixels than to find all the wrong ones.

tricks to
look smooth

FIXING THE PALETTE

* Most conversion tools use luminosity of the colour to match to one of the C64 ones
* C64 luminosity is a very complex matter
* This is why badly converted images will use mid grey, light red and light blue interchangeably
* Often this means cleaning out lots of weird looking pixels

CONVERTRON3000 v1.1 [build 210101-000000]

output format
koala
hires

color modifiers
saturation
50
brightness
50
contrast
50
sharpness
50
reset

convert
Alt+C

effects
dither floyd-steinberg
dither ordered 1
dither ordered 2
blur
detail
enhance
enhance_more
smooth
smooth_more
sharpen

palette
colodore
pepto
view64
vice

output

preview

original

image
"...wnloads/Pictures/exploring.png"

mode
keep colors
brightness palette

brightness palette
purple
brown
gray
green
blue
green2
custom

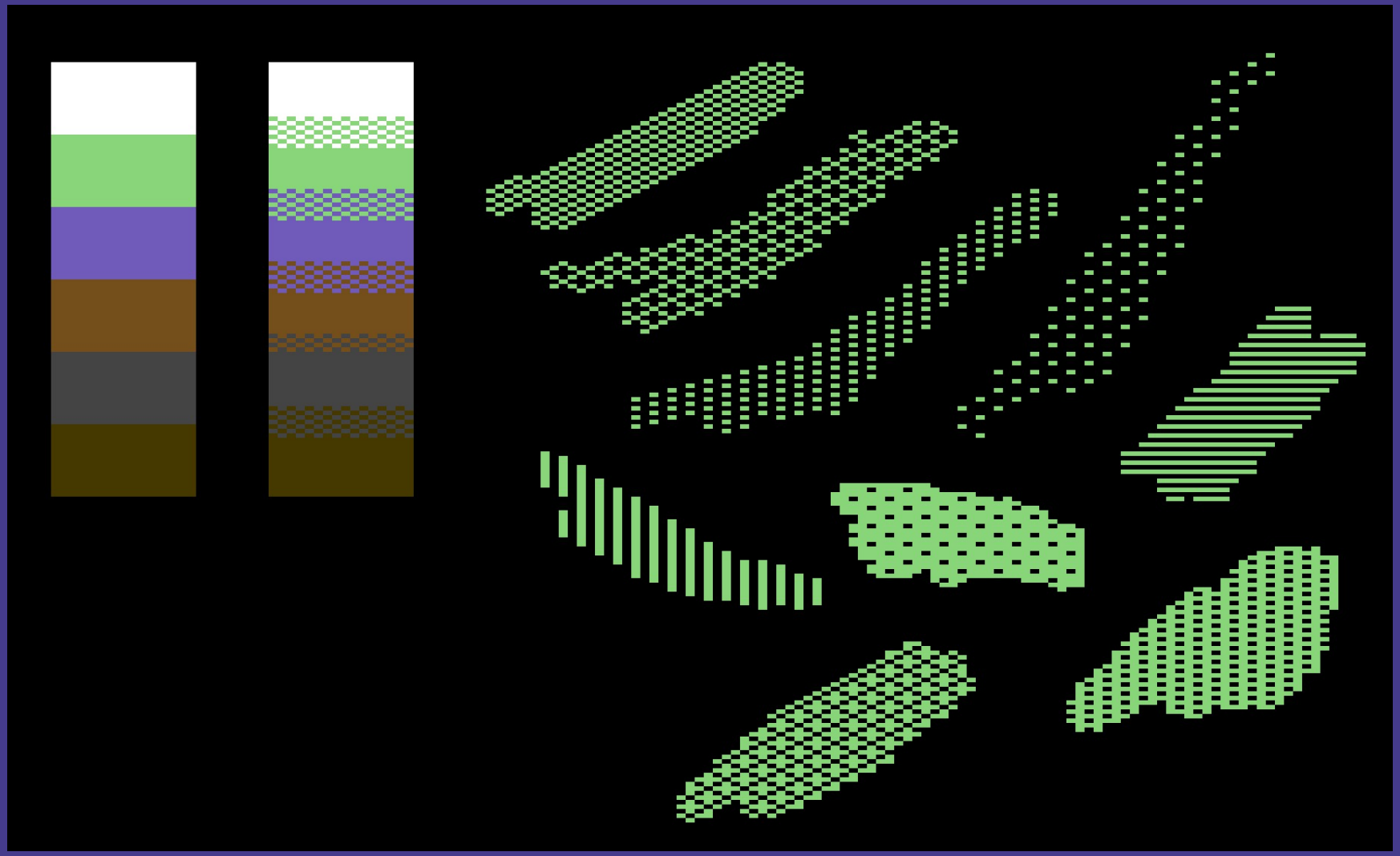
convert background $d021
auto

start address in hex:
values $0-$ffff $ 6000

converter output
```
procedure "convert_to_koala": working...
Background Color = 1
Fixed 1388 color clashes in 518 character
blocks.
```

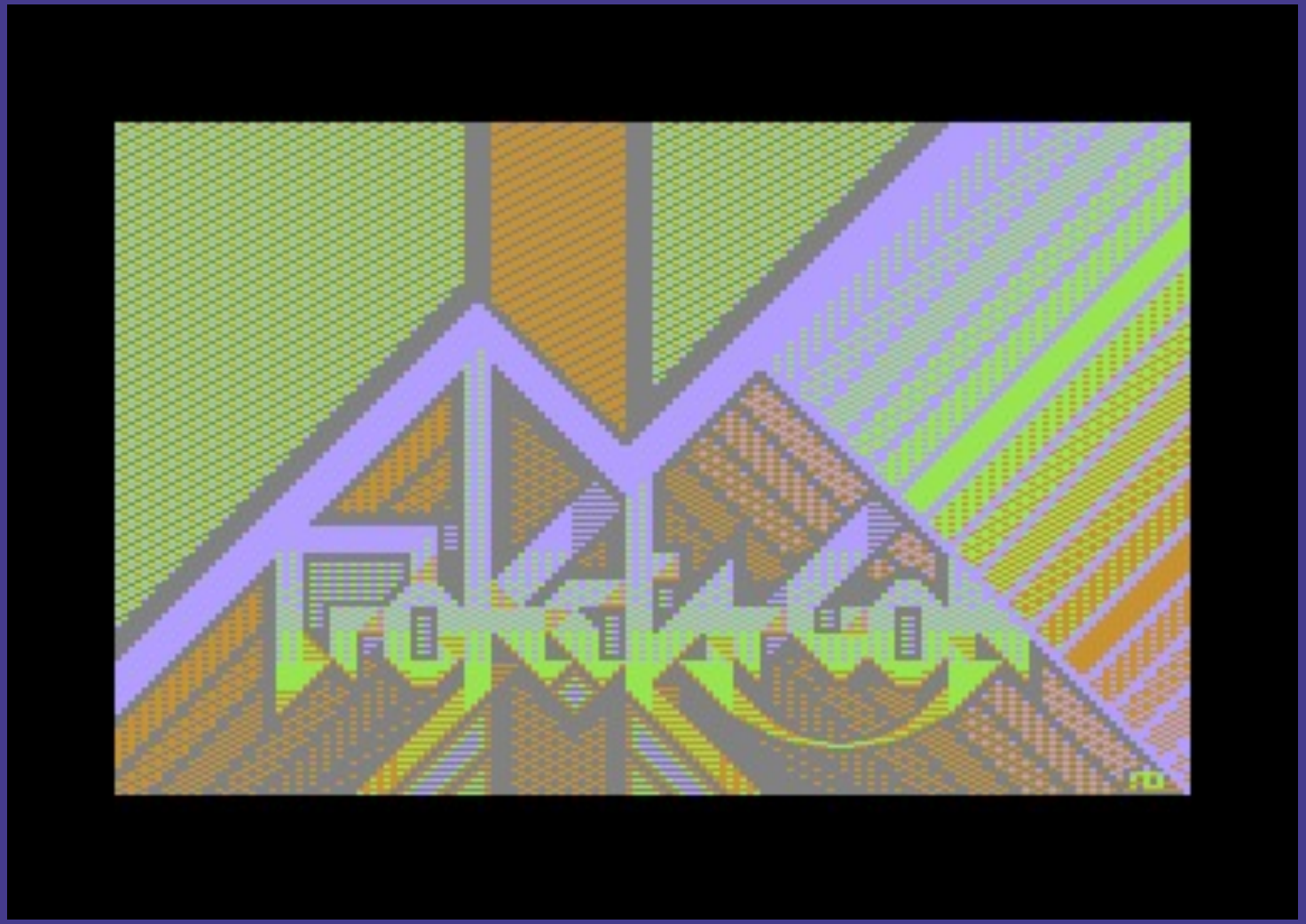
DITHERING

"The art of faking more colours"



DITHERING

"The art of faking more colours"



Project Argon

by rexbeng

https://csdb.dk/release/index.php?id=116626

DITHERING

To be used in moderation...

User Comment
Submitted by Compyx on 4 March 2020

This looks way too wired.

https://csdb.dk/release/?id=188404

DITHERING

To be used in moderation...

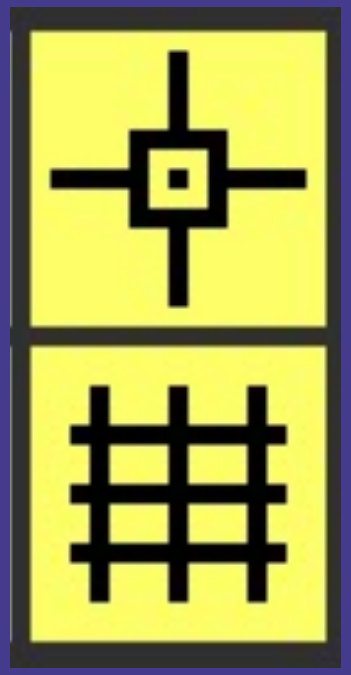
https://csdb.dk/release/viewpic.php?id=191775

ANTIALIASING

"The art of making pixels disappear"

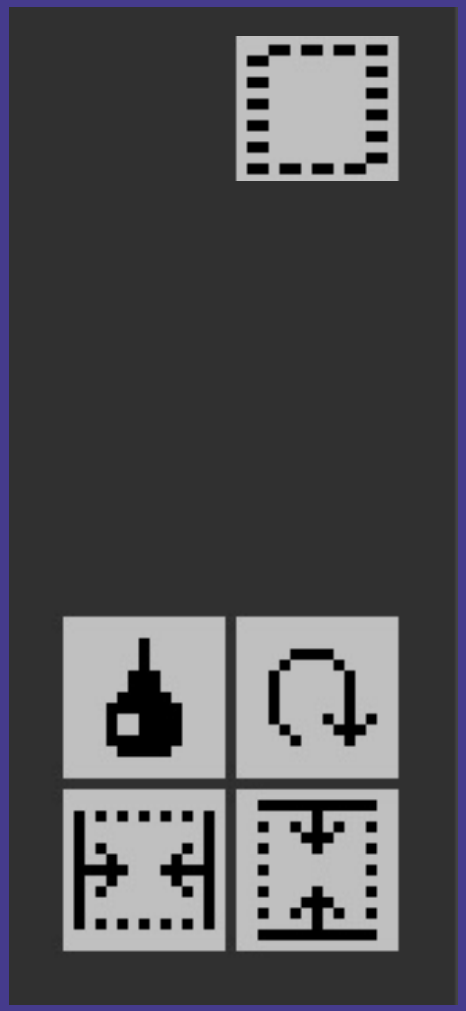
deep dive into multipoint

Char grid and snap to grid

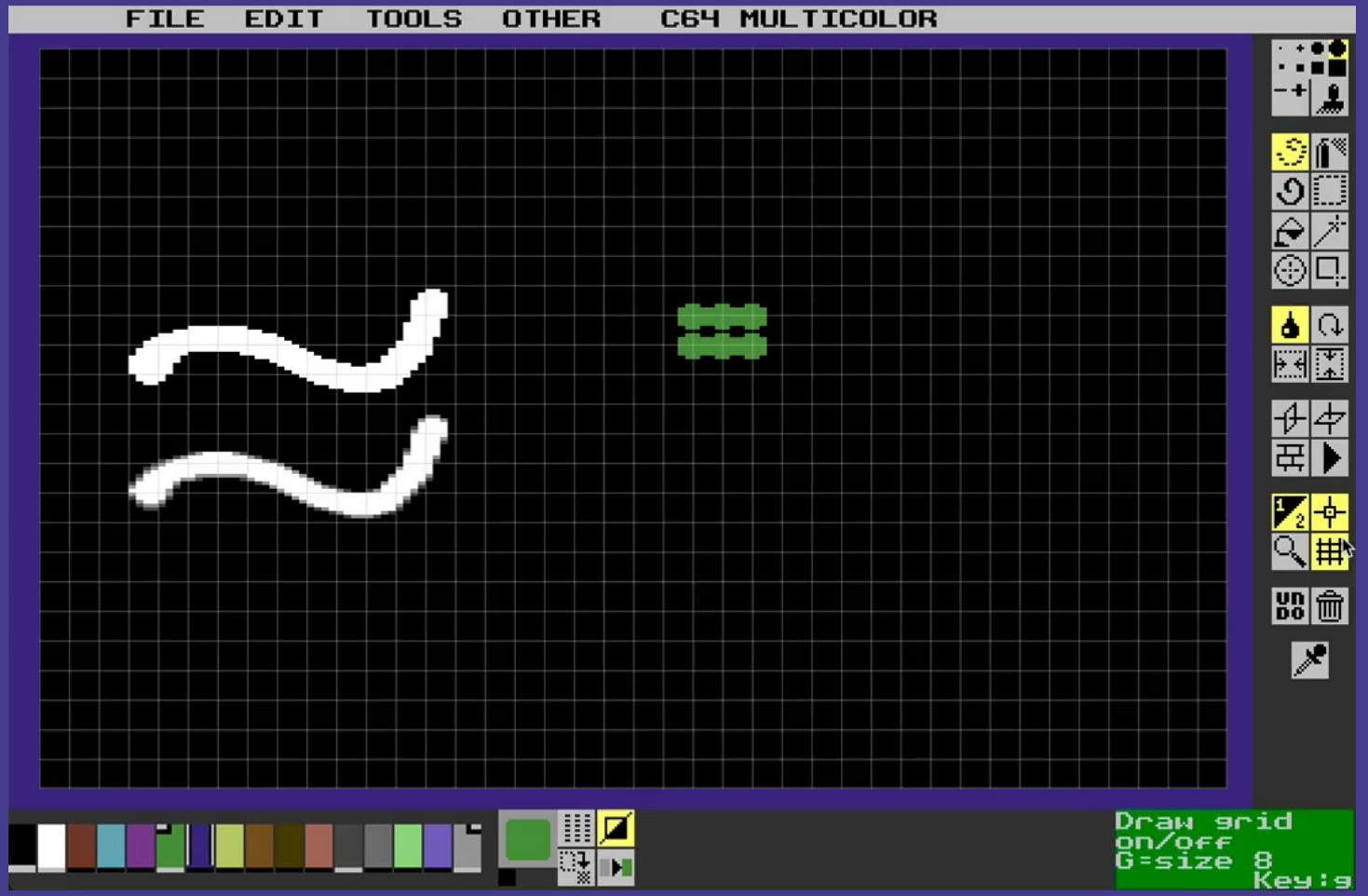


Recolouring mode

Selections are brushes!



Dither brushes and priorities



64
TRANSMISSION

TRANSMISSION

building your own tools

C64 COLOUR CHANGER

https://codepo8.github.io/c64-colour-changer/

LOGO-O-MATIC

C-64 CHARSET LOGO GENERATOR

Info and Credits

1 Choose your font:

big | medium | small | 75 fonts

1

Font by Ollie format: Multicolour Bitmap

2

Font by Cupid (2021) format: Hires Bitmap

3

Font by Reward / Scoopex ^ Complex ^ Damones ^ Finnish Gold (2020) format: Amiga

2 Logo text (~ for linebreak): excellent chars: a-z

Space between chars: 2

Space between words: 15

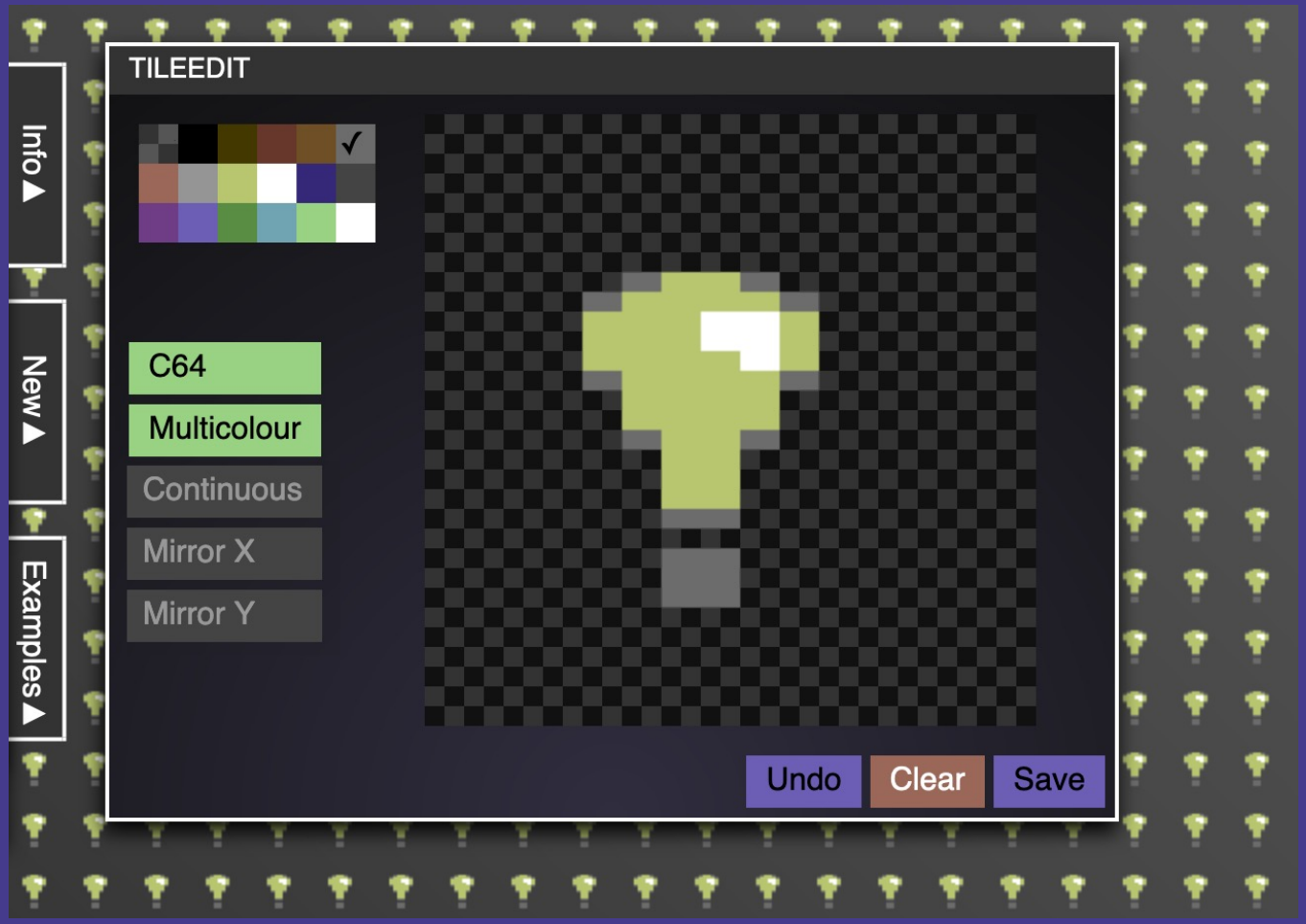
Offset each 2nd char: 0

Size: 330(!) x 85

Click on a colour in the logo and select from the palette below to change it. Double click or click the ✔ to finish changing colours.

https://codepo8.github.io/logo-o-matic/#goto-orc

TILEEDIT



https://codepo8.github.io/TileEdit/

IN SUMMARY

* Art is hard
* Craft is knowledge and repetition
* Using powerful tools is OK
* Selling other people's work as yours, less so
* A bit more effort yields great results
* There are lot of channels out there talking about pixel goodness, come and take a look!

tinyurl.com/c64conversion

Cupid/Padua/The Solution