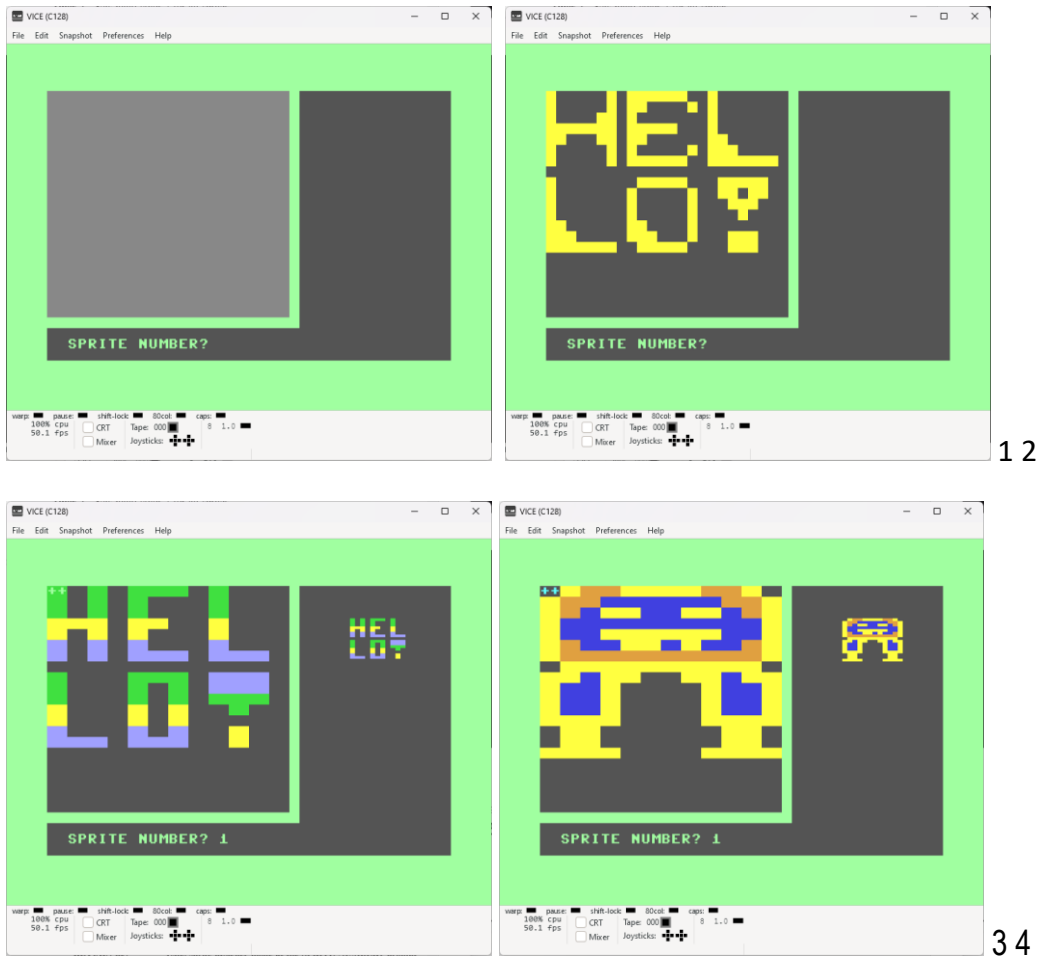


Commodore C128

SPRDEF - Sprite Definition Utility

By lived.ch (C)2024, October, version 1.0

It can be activated with the BASIC command **SPRDEF** or **sys 29554**



It's called **Sprite Definition** utility, but it can serve literally for everything. Like e.g. to quickly create totally new character set, or graphic elements for any game.

Also MCC {Multi Color Characters and of course MCC graphic elements} are absolutely no problem at all.

You can quickly export the so created data as decimal numbers to have them used in BASIC data statement, but also exporting hexadecimal numbers to use them in BASIC or assembly. This works just fine and needs just a few lines of code.

Note: Commodore BASIC 7.0 is having no commands to support MMC characters, but with few **peek's** and **poke's** you're good to go.

WHAT IS DOING WHAT in **SPRite DEFinition** tool?

1-8	Selects a sprite number at the SPRITE NUMBER? { at prompt only, meaning not during editing. You must first save your work with SHIFT+ENTER and then choose another sprite number! }
A	Turns on and off automatic cursor movement.
CRSR keys	Moves cursor in work/area.
RETURN key	Moves cursor to start of the next line.
RETURN key	Exits sprite definition mode at the SPRITE NUMBER prompt! Prompt only.
HOME key	Moves cursor to top left corner of sprite work area.
CLR key	Erases entire grid.
1-4	Selects color source (enables/disables pixels).
CTRL key + 1 - 8	Selects sprite foreground color (1-8).
C= key + 1 - 8	Selects sprite foreground color (9-16).
STOP key	Cancels changes and returns to prompt.
SHIFT + RETURN	Saves sprite and returns to SPRITE NUMBER? prompt. { pressing here on ENTER only one more time exits SPRDEF }
X	Expands sprite in X (horizontal) direction.
Y	Expands sprite in Y (vertical) direction.
M	Multi-color sprite mode.
C	Copies sprite data from one sprite to another. { press on a sprite number you want to edit, press on C and choose a sprite you want to copy from }

In Multi-Color-Character-Mode sprite colors 1-4 are equal to:

1 deleting pixels	A color visible under poke 53281,x { 0 – 15 } , same for all characters
2 multi-color 1	A color visible under poke 53282,x { 0 – 15 } , same for all characters
3 multi-color 2	A color visible under poke 53283,x { 0 – 15 } , same for all characters
4 multi-color 3	that's actually then a color visible under mentioned Color Map, where you must use only color numbers 8 – 15 { which are colors from 0 – 7 }. Weird, but that's how it is!

These colors are individual, meaning you can assign color 8 to character 1 and color 9 to character 2. If you use only color number 4 to draw a multi-color-character, then, of course, the whole character will change the color, otherwise only portion where 4 is presented within the character. Check again picture number 3.

Note: C128 **Color** command is ranged from **1 -16**, and in **poke** or **assembly** you use **0 – 15**
Sprites are also numbered from **1 – 8**, and poke and assembly **0 – 7**