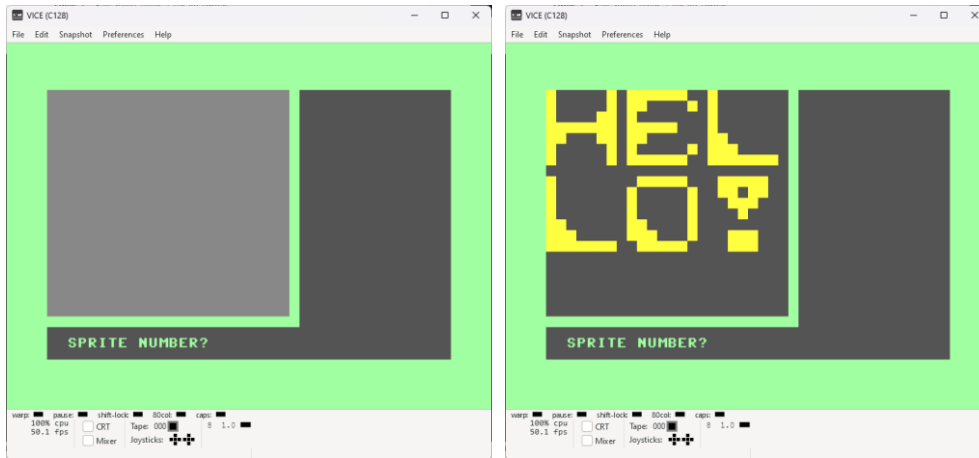


# SPRDEF { Commodore 128 - Sprite Definition Tool }

And actually much more if you understand and use it properly!

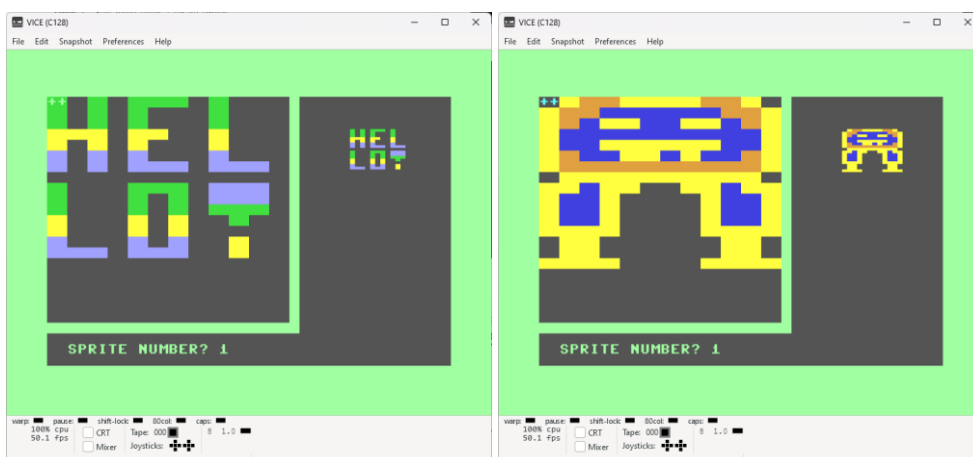


C128 BASIC command: **sprcolor**

Set colors for multi-color sprites, multi-color character and multi-color graphic elements as replacement for existing graphic symbols, meaning, be creative!

**Hint:** In command **sprcolor 6,13** when creating multi-color character or new multi-color graphic elements, "13", the 2<sup>nd</sup> color, is a color which shouldn't be used for colors numbers lower than 8 because that's the ColorMap { \$d800 - \$dbe7 } color when using Multi-Color-Character-Mode { lda #\$d8, sta \$d016 }. And before that BASIC screen setup interrupt must be disabled { lda #\$ff, sta \$d8 }.

Only upper 8 colors are allowed, however, they are actually representing the lower 8 colors in MCC Mode! Keep that in mind! That's the color under the key number 4.



A single character is made of 8x8 bits. Sprite is made of 24[x] X 21[y] bits.

Ergo, we can put 3 characters in 1<sup>st</sup> line and another 3 in 2<sup>nd</sup> line { Each in a 8x8 bits grid }. Then the next 6 characters from Sprite number two the same way. We need less than 6 sprites for a complete alphabet.

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

<b>1-8</b>	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! }
<b>A</b>	Turns on and off automatic cursor movement.
<b>CRSR keys</b>	Moves cursor in work/area.
<b>RETURN key</b>	Moves cursor to start of next line.
<b>RETURN key</b>	Exits sprite designer mode at the SPRITE NUMBER? Prompt only.
<b>HOME key</b>	Moves cursor to top left corner of sprite work area.
<b>CLR key</b>	Erases entire grid.
<b>1-4</b>	Selects color source (enables/disables pixels).
<b>CTRL key + 1 - 8</b>	Selects sprite foreground color (1-8).
<b>C= key + 1 - 8</b>	Selects sprite foreground color (9-16).
<b>STOP key</b>	Cancels changes and returns to prompt.
<b>SHIFT + RETURN</b>	Saves sprite and returns to SPRITE NUMBER? prompt. { pressing here on ENTER only one more time exits SPRDEF }
<b>X</b>	Expands sprite in X (horizontal) direction.
<b>Y</b>	Expands sprite in Y (vertical) direction.
<b>M</b>	Multi-color sprite mode.
<b>C</b>	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 number 8 – 15 { which are colors from 0 – 7 }. Weird, but that's how it is! <b>These colors are individual</b> , 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.