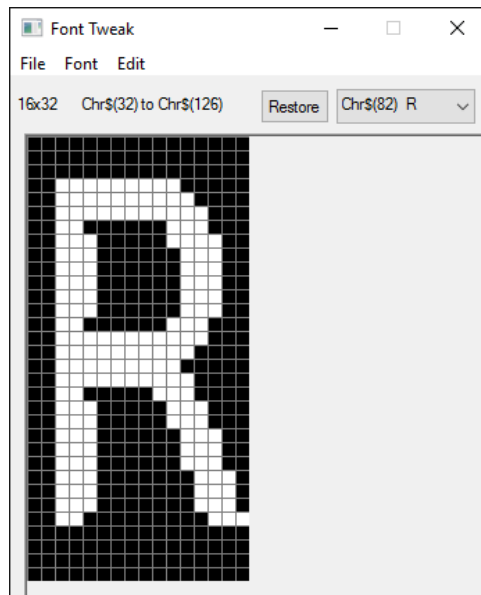


Font Tweak

A program for converting UTFT fonts to MMBasic BAS format and tweaking by TassyJim.

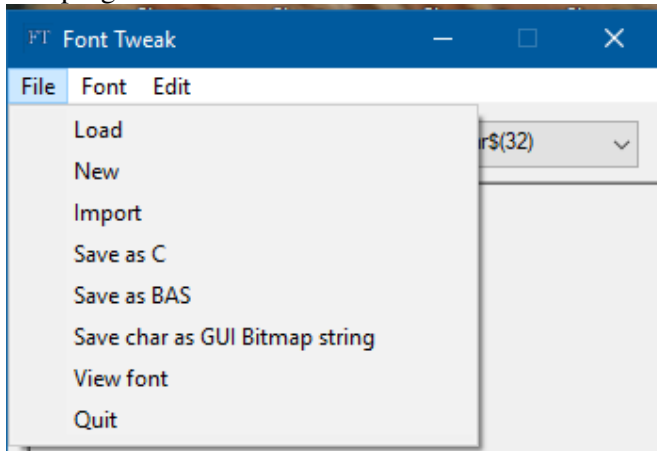


UTFT fonts are available from http://www.rinkydinkelectronics.com/r_fonts.php

A good source of fonts is “The Ultimate Oldschool PC Font Pack” from <https://int10h.org/oldschool-pc-fonts/>

A great font program is “Fony”, available from <http://hukka.ncn.fi/?fony>

The program needs no installation. Just run it from wherever you have permission.



Load opens ‘C’, ‘BAS’ or ‘BIN’ files. Any file extension is OK but the format must comply with the C, BAS or BIN format. The BIN format is the one used by Fony when ‘Exporting’ fonts. If there are multiple font definitions in the file, only the first one is imported. To import others, put a ‘REM’ at the start of the first font definition.

“ ’ DefineFont #8 ” or

“ // fontdatatype Grotesk16x32[6084] PROGMEM={ “
will skip over those definitions.

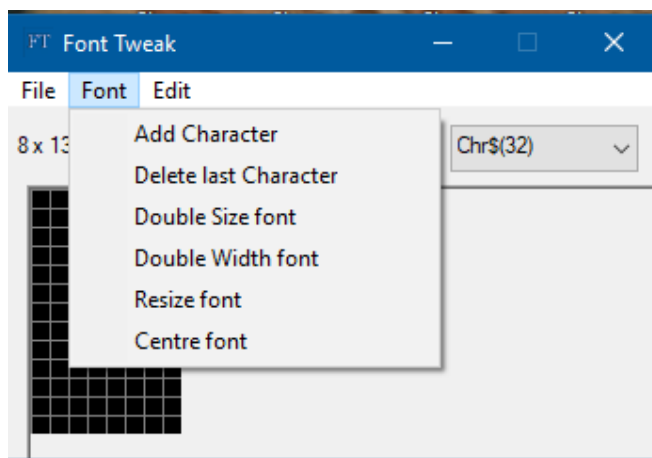
New creates a new file with the character dimensions you enter. The width times the height must be a multiple of 8. The file starts at the ASCII value you entered and initially has one character.

Import does nothing (yet)

Save as. You can save in either 'C' or 'BAS' format. This allows converting between the two formats.

You can also save a character as a GUI BITMAP string.

View font opens a new window with the full font displayed. Clicking on a character will change the edit window to that character.



Item under the "Font" menu affect the full font file rather than the individual character.

Add Character (ctrl-N) add a new character to the end of the font file.

Delete Character (ctrl-X) removes the last character in the file provided it is the currently selected character. If the last character is not selected, the selection will change to the last character and a second 'Delete character' will delete it.

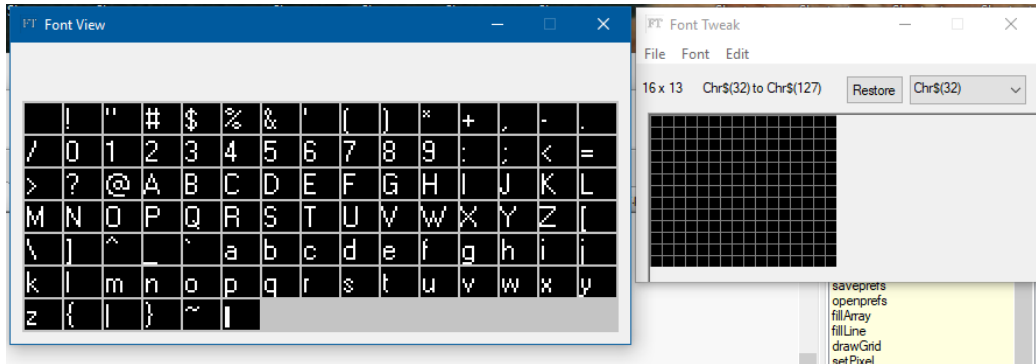
Double size (ctrl-2) increases the character width and height by 2 times. There is a limit to the maximum size the program permits.

Double width (ctrl-W) increases the character width by 2 times, keeping the height the same.

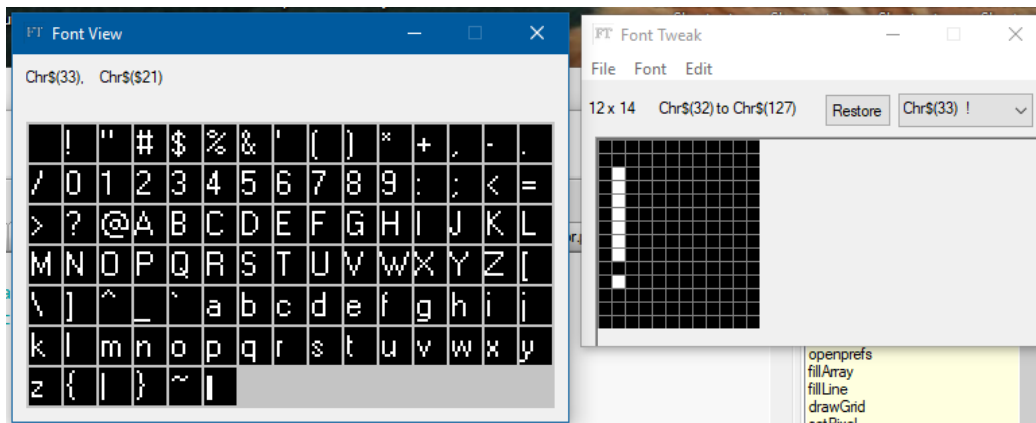
Resize font. Fonts imported from Fony often have a size unsuitable for MMBasic. Here you can resize them to something useable.

Centre font. After resizing, some imported fonts have the characters left justified. You can centre all characters horizontally in their box.

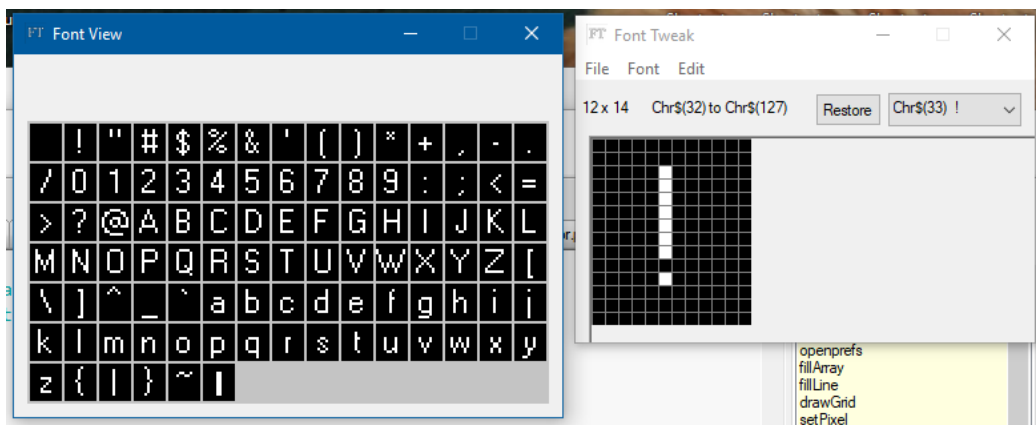
With the help of Fony, I exported one of the Ultimate old school fonts and opened it in Font Tweak: If you don't get the dimensions correct, it will be obvious when you view the full font.



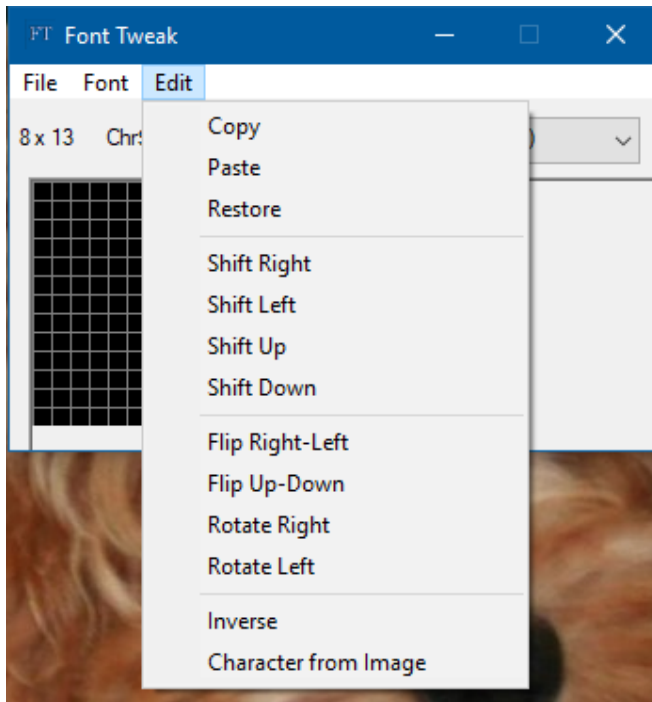
There is a lot of wasted space on the right of the font so I reduced it down to 12 pixels wide. To keep the multiple of 8 rule, I had to change from 13 to 14 pixels high.



Looking better but it needs to be centred:



All done and ready to save.



Items under the “Edit” menu operate on individual characters.

Select the character to edit using the dropdown list or use ctrl-right and ctrl-left to step through the characters.

Copy and **Paste** allow you to copy a character to a different character position in the font.

Restore recovers the character as it was when selected.

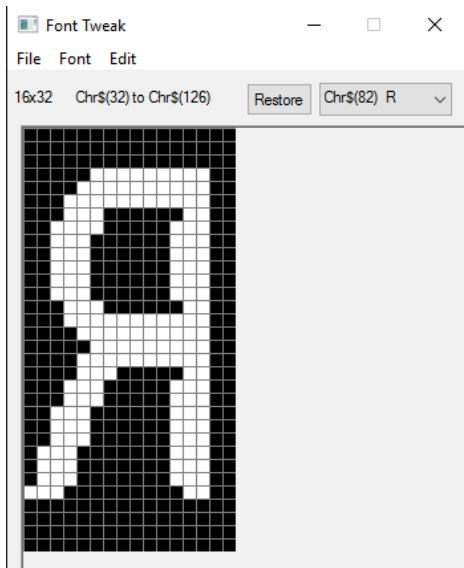
Shift Right/Left/Up/Down (Right/Left/Up/Down) moves the character one row/column at a time. Any pixels that go off the grid will be lost.

Flip Right-Left (ctrl-V) gives a mirror image, flipped about the vertical centreline.

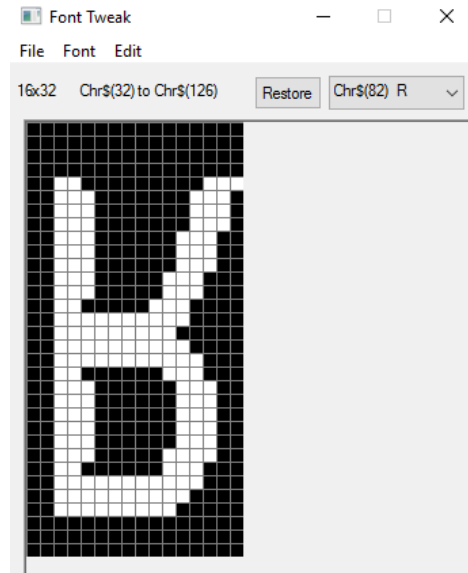
Flip Up-down (ctrl-H) gives an inverted image, flipped about the horizontal centreline.

Rotate Right/Left (ctrl-R, ctrl-L) rotates the character. If the character size is not equal, the top left portion if the character is rotated and the remaining pixels cleared.

Inverse (ctrl-I) changes all pixels. Black to white and white to black.

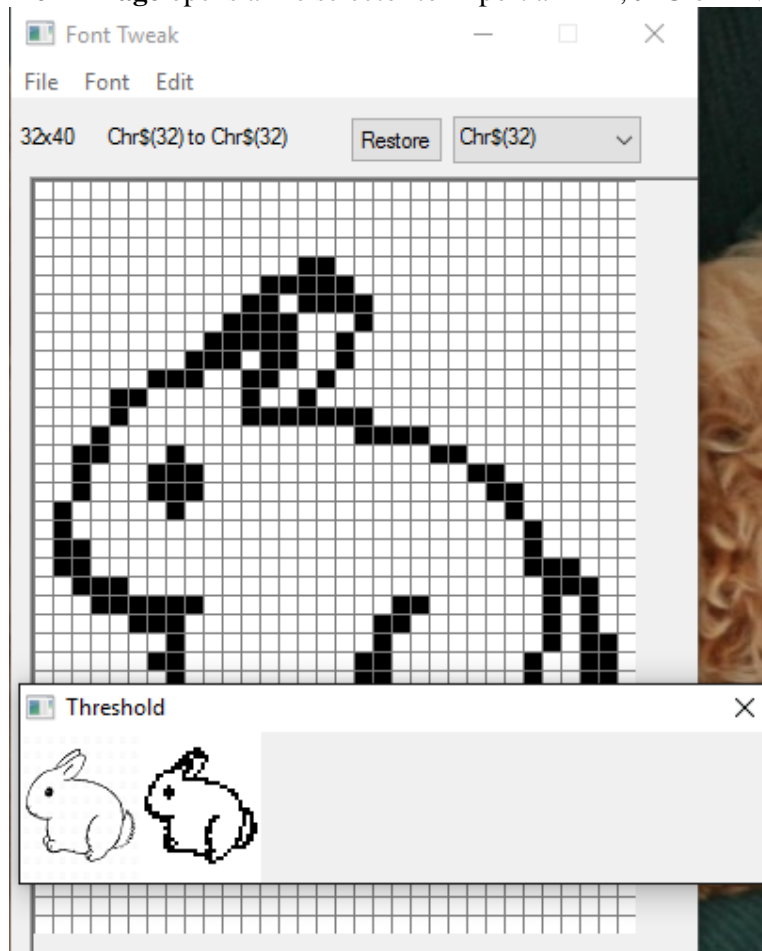


Ctrl_V or Flip Right-Left



Ctrl-H or Flip Up-Down

Character from Image opens a file selector to import a BMP, JPG or PNG image.



The size of the image is not important but its proportions are. If your font is 32 x 50, the image width to height should be in the same ratio. The image opens in a new window with the original one on the left and a black and white version on the right.

There are two methods used for converting the image.

Threshold changes each pixel to white if it is brighter than the set value, black otherwise. This mode is best for line art or silhouettes.

Region threshold sets the pixel white if it is brighter than the surrounding pixels.

This mode is usually best for true photos but you may need to experiment.

To switch between the two modes, press the space bar.

To adjust the threshold level, use the right and left arrow keys.

To adjust the size of the region (only in Region threshold mode), use the up and down arrow keys.

To transfer the image to the current font character, press return or enter.

Once transferred, some touch-up is usually needed.