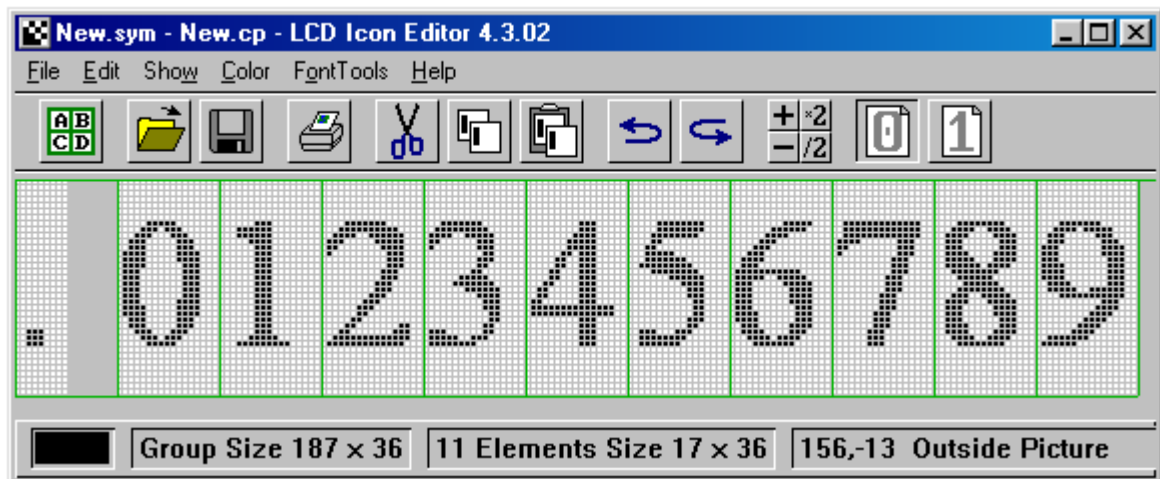


Getting started with

LCD Icon Editor

Graphic Font & Icon Designer for Windows



Version 4.3 & 5.3

06 May 2005

**This manual is only an introduction.
The full documentation is in the Help menu.**

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Unpacking:

The LCD Icon Editor Package Includes:

- ***LcdIcon.exe*** or ***LcdColor.exe*** for Windows 98 - XP / NT - 2000.
- ***Bin2Hex.exe*** for DOS.
- Help file.
- Icon and font samples.

Software Installation:

- Read the Licence.pdf, and if you agree, continue:
- Double click ***LcdIconEdit.exe*** or ***ColorLcdIconEdit.exe*** in the explorer, and input the licence number.
If you do not have a licence, the program will run in demo mode, and can not save files.
- The LCD Icon Editor is now ready to use.

Quick Guide to get started at once:

How to draw a Font with 256 Characters:

This example assumes that the LCD Icon Editor is reset to defaults, or:



Black pen is selected.

If you want to make a font first set up the LCD Icon Editor to font mode.



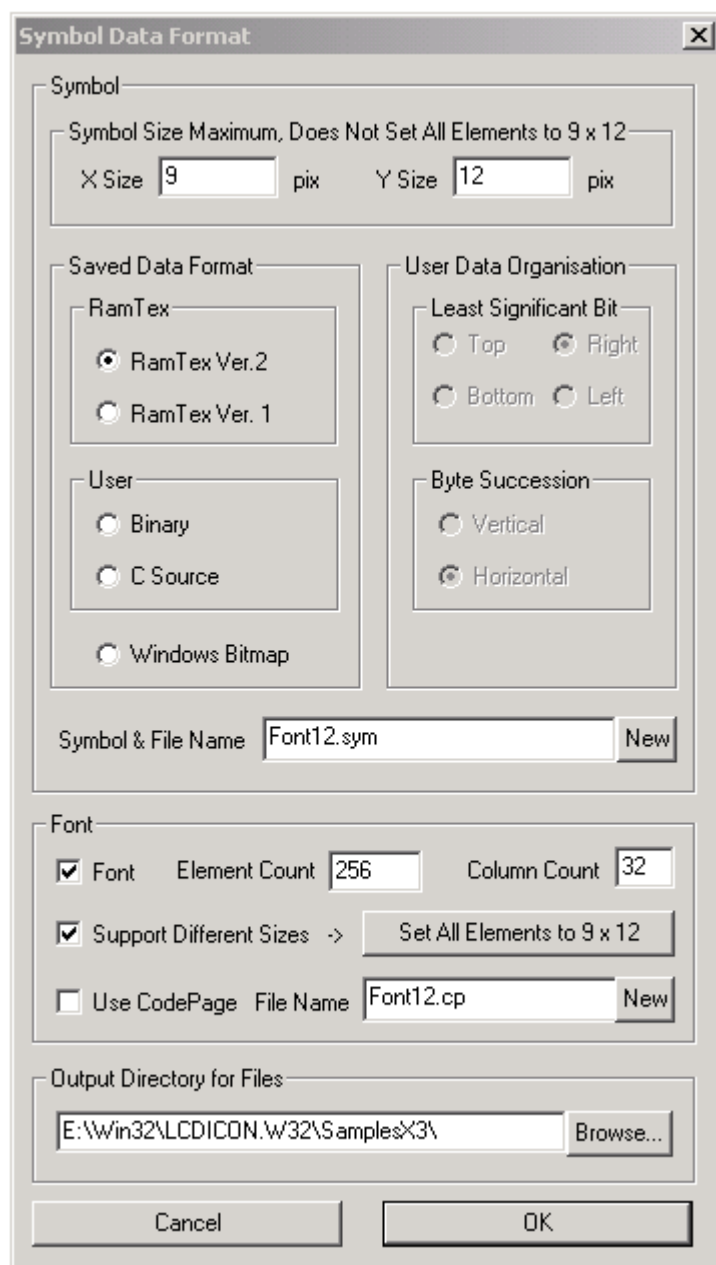
Monochrome version of the LCD Icon Editor.



Color version of the LCD Icon Editor.

Press the leftmost button in the Main window to get the Symbol Data Format DialogBox:

Monochrome version:



The dialog box is titled "Symbol Data Format" and contains several sections for configuring font symbols. The "Symbol" section at the top allows setting the maximum symbol size, with X and Y dimensions set to 9 and 12 pixels respectively. Below this, the "Saved Data Format" section offers options for "RamTex" (Ver. 2 or Ver. 1), "User" (Binary, C Source, or Windows Bitmap), and "User Data Organisation" (Least Significant Bit: Top, Right, Bottom, Left; and Byte Succession: Vertical or Horizontal). The "Font" section includes checkboxes for "Font", "Support Different Sizes", and "Use CodePage", along with fields for "Element Count" (256), "Column Count" (32), and "File Name" (Font12.cp). The "Output Directory for Files" section shows a text field with the path "E:\Win32\LCDICON.W32\Samples\X3\" and a "Browse..." button. At the bottom are "Cancel" and "OK" buttons.

Symbol Data Format

Symbol

Symbol Size Maximum, Does Not Set All Elements to 9 x 12

X Size pix Y Size pix

Saved Data Format

RamTex

☒ RamTex Ver. 2

☐ RamTex Ver. 1

User

☐ Binary

☐ C Source

☐ Windows Bitmap

User Data Organisation

Least Significant Bit

☐ Top ☒ Right

☐ Bottom ☐ Left

Byte Succession

☐ Vertical

☒ Horizontal

Symbol & File Name **New**

Font

☒ Font Element Count Column Count

☒ Support Different Sizes -> **Set All Elements to 9 x 12**

☐ Use CodePage File Name **New**

Output Directory for Files

Browse...

Cancel **OK**

Color version:

Symbol Data Format

Symbol

Symbol Size

X Size pix Y Size pix

Saved Data Format

RamTex

☒ RamTex Ver. 2

☐ RamTex Ver. 1

User

☐ Binary

☐ C Source

☐ Windows Bitmap

User Data Organisation

Least Significant Bit

☐ Top ☒ Right

☐ Bottom ☐ Left

Byte Succession

☐ Vertical

☒ Horizontal

Symbol & File Name

Font

☒ Font Element Count Column Count

☐ Support Different Sizes ->

☐ Use CodePage File Name

Output Directory for Files

Display Mode

☐ Black & White

☐ Gray Level

☐ Gray Palette

☒ Color RGB 24 Bit per Pixel 16777216 Simultaneous Colors

☐ Color Palette

☐ Disable Color to B/W Conversion Dialogbox type="checkbox"/> Open Bitmaps to Current Format

Palette

Symbol Palette

☐ Skip Symbol Palette When Saving All Files

System Palette

☐ Use System Palette System Palette Size ☐ Skip System Palette When Saving All Files

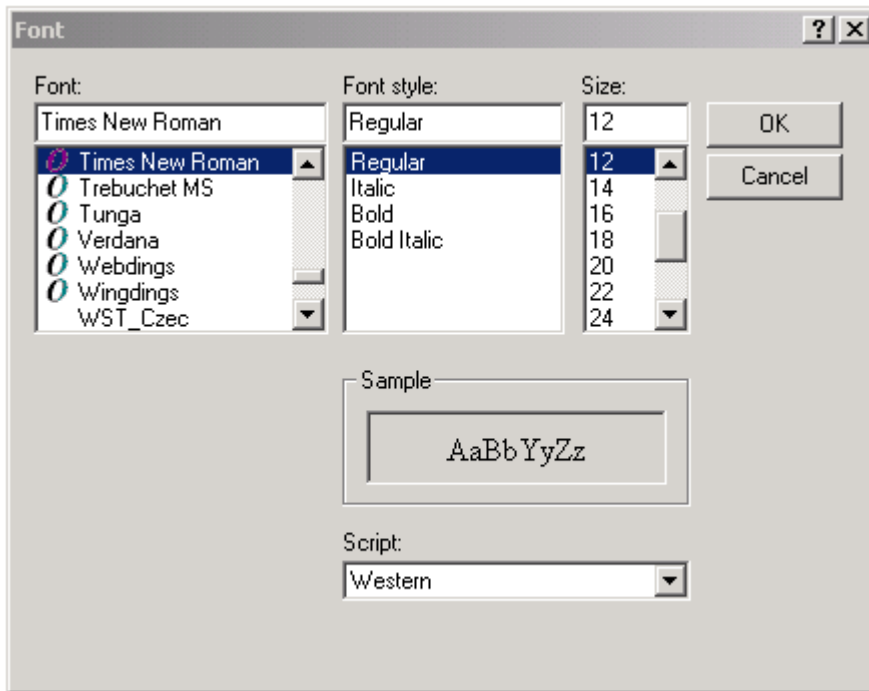
Press the Font tick box, set an element count and a column count, and maybe write a Symbol File Name and an Output Directory.

The New Button in Symbol File Name generate the default extension to the file name.

Now you have made room for a font, to select a font...

N

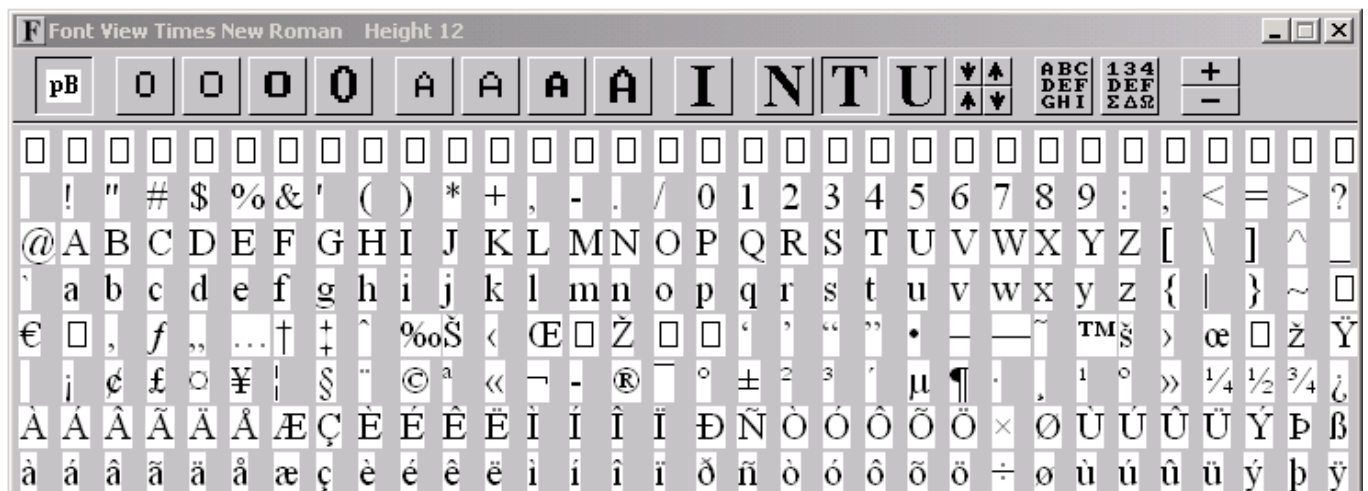
Press the New TrueType button in the Font View:



This is a Windows dialog box, and the look will vary according to your Windows version and nationality.

Fill in the 3 top fields to get the font you want. The last field is height of the whole Character including top and bottom white space, this number will be the height of the Element in pixels.

The Font View window then looks like this:

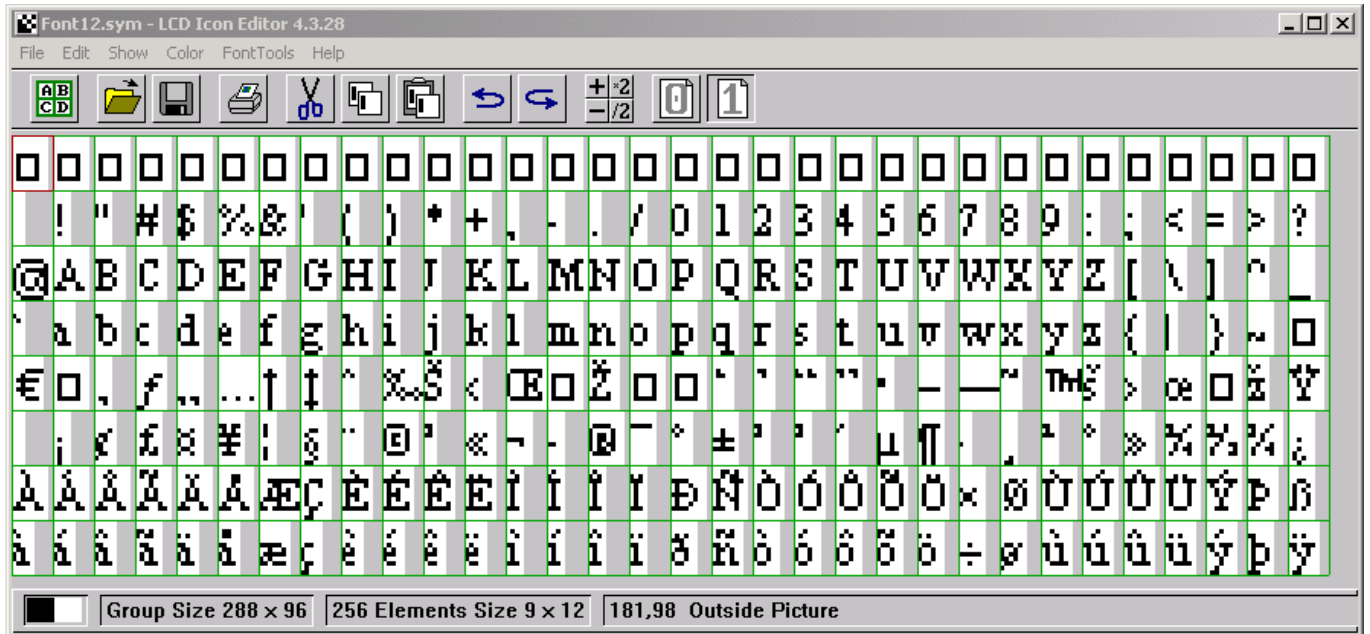


Now you have selected a font, to draw it



Press the Draw a Whole Font button in Font View, to draw the font in the Main window.

Warning: This may infringe the copyright of the font designer, please check your licence.



Your Font is ready for saving....



Press the Save All button in the Main window to save pixel data in the Font12.sym.

How to draw a Proportional CodePage Font with only numbers:

The CodePage and Range system is for removing unused characters and symbols without changing the original character codes or symbol numbers. The CodePage and the Delete Elements works together to facilitate the generation of CodePage Fonts from a whole font.

This example assumes that the LCD Icon Editor is reset to defaults, or:



Black pen is selected.

If you want to make a font with only decimal point and numbers like this “.0123456789” first set up the LCD Icon Editor to font with CodePage mode.



Monochrome version of the LCD Icon Editor.



Color version of the LCD Icon Editor.

Press the leftmost button in the Main window to get the Symbol Data Format DialogBox:

Monochrome version:

Symbol

Symbol Size

X Size 32 pixY Size 32 pix

Saved Data Format

RamTex

☒ RamTex Ver. 2
☐ RamTex Ver. 1

User

☐ Binary
☐ C Source

☐ Windows Bitmap

User Data Organisation

Least Significant Bit

☐ Top ☒ Right
☐ Bottom ☐ Left

Byte Succession

☐ Vertical
☒ Horizontal

Symbol File Name New.symNew

Font

☒ Font Element Count 256Column Count 32

☐ Support Different Sizes -> Update Element Size

☒ Use CodePage File Name New.cpNew

Output Directory for Files

Path to Files c:\Browse...

Cancel

OK

Color version:

Symbol Data Format

Symbol

Symbol Size

X Size pix Y Size pix

Saved Data Format

RamTex

☒ RamTex Ver. 2

☐ RamTex Ver. 1

User

☐ Binary

☐ C Source

☐ Windows Bitmap

User Data Organisation

Least Significant Bit

☐ Top ☒ Right

☐ Bottom ☐ Left

Byte Succession

☐ Vertical

☒ Horizontal

Symbol File Name **New**

Font

☒ Font Element Count Column Count

☐ Support Different Sizes -> **Set All Elements to 32 x 32**

☒ Use CodePage File Name **New**

Output Directory for Files

Path to Files **Browse...**

Display Mode

☐ Black & White

☐ Gray Level

☐ Gray Palette

☒ Color RGB 24 Bit per Pixel 16777216 Simultaneous Colors

☐ Color Palette

Change Display Color Resolution...

Change Background Color...

☐ Disable Color to B/W Conversion Dialogbox

☐ Open Bitmaps to Current Format

Palette

Symbol Palette

Change Symbol Palette Size...

File Name **New** **Browse...**

Change Symbol Palette Colors...

System Palette

☐ Use System Palette System Palette Size

File Name **New** **Browse...**

Change System Palette Colors...

Cancel **OK**

Press the Font and Use Code Page tick boxes, and maybe write a Symbol File Name and an Output Directory.

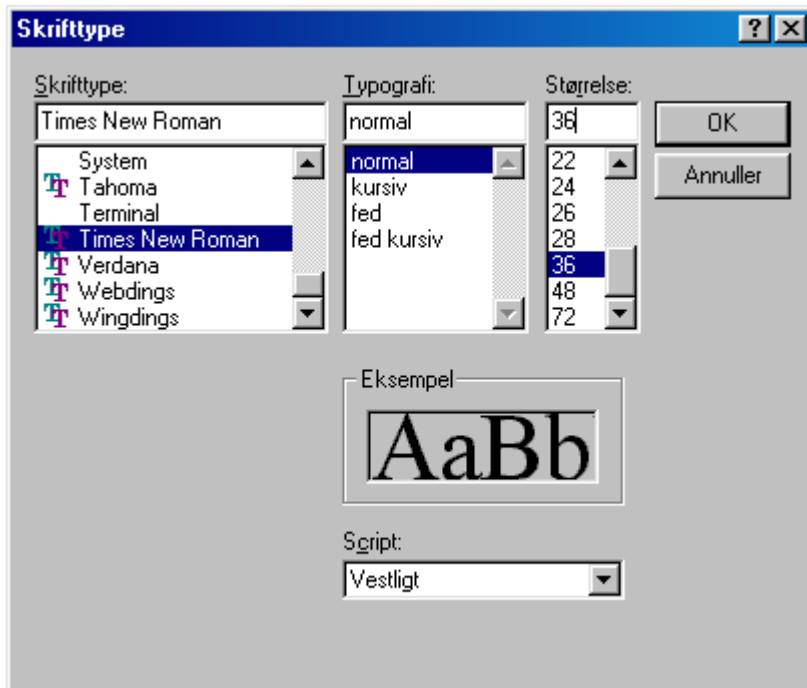
The New Button in Symbol File Name generate the default extension to the file name.

The New Button in Code Page File Name generate the default name and extension based on the Symbol File Name.

Now you have room for a whole font, to select one...

N

Press the New TrueType button in the Font View:



This is a Windows dialog box, and the look will vary according to your Windows version and nationality.

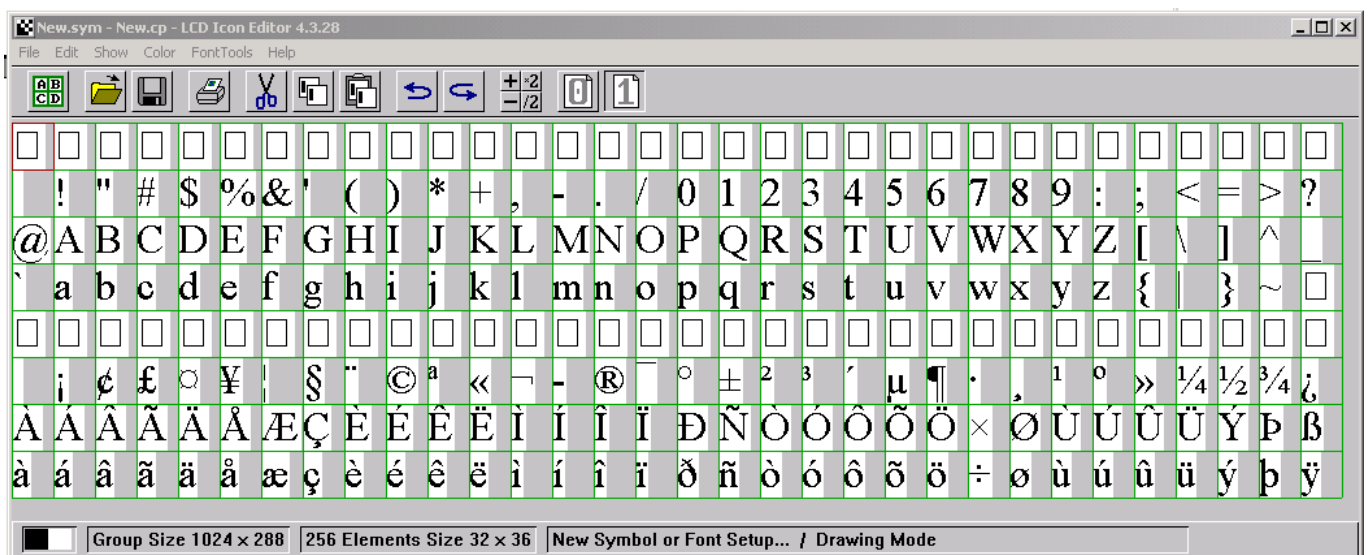
Fill in the 3 top fields to get the font you want. The last field is height of the whole Character including top and bottom white space, this number will be the height of the Element in pixels.

Now you have a font, in this example we first draw a whole font, and throw most of it away...



Press the Draw a Whole Font button in Font View, to draw the font in the Main window.

Warning: This may infringe the copyright of the font designer, please check your licence.



To delete the unwanted characters...

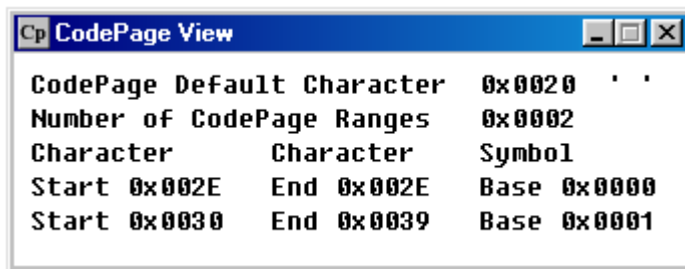


Press the Delete One Element in the Tool Box with the **right** mouse button to get the **From - To** delete button.



Press the Delete From - To button with the **left** mouse button to get the delete tool, then Delete Elements from the **NULL** char to the - delete from the / to the / and delete from : to the end. This generates 2 CodePage ranges, one with the decimal point, and one with the numbers:

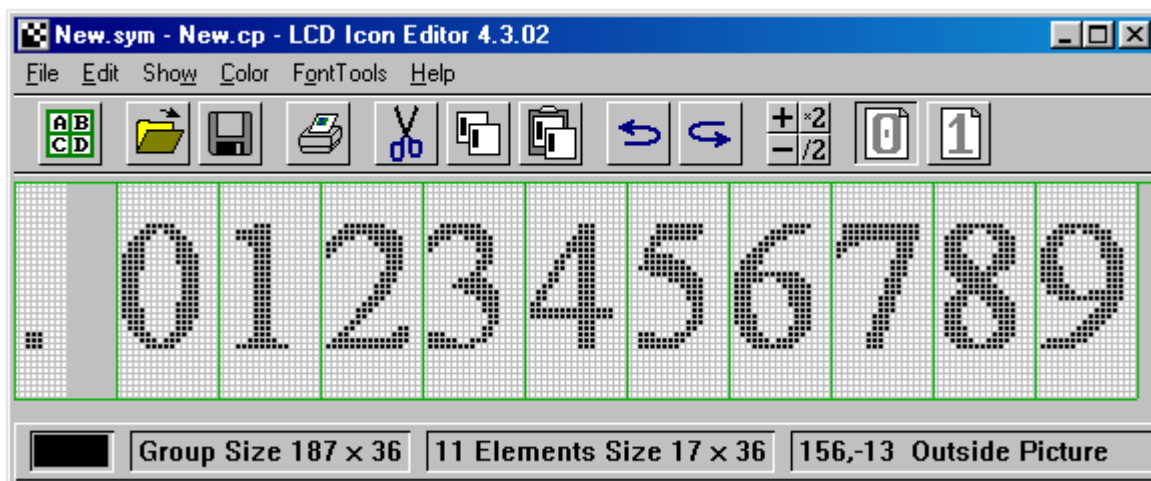
```
Start 0x002E      End 0x002E      Base 0x0000
Start 0x0030      End 0x0039      Base 0x0001
```



The font now has a lot of unused space in the right end of each character, to get rid of that...



Press the Remove Column from Element several times to make the symbols look like this:



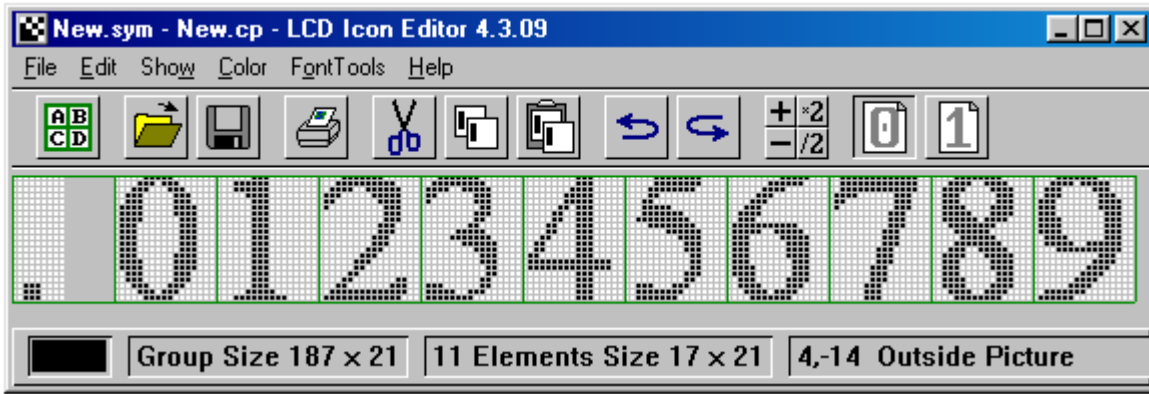
The font is now 36 pixels high, but the symbols only require 21, to remove external leading...



Press the scroll up a number of times to move the numbers to the top of the elements,



then press the shrink button a number of times to remove the unused space under the numbers.



Your Code Page Font is ready for saving.



Press the Save All button in the Main window to save pixel data in the New.sym file, and the Code Page data in New.cp.

How to draw a Proportional CodePage Font with ASCII and Hiragana:

The CodePage and Range system is for removing unused characters and symbols without changing the original character codes or symbol numbers. The CodePage and the Insert and Delete Elements works together to facilitate the generation of CodePage Fonts from a whole font.

This example assumes that your Windows installation have support for Chinese characters, and that the LCD Icon Editor is reset to defaults, or:



Black pen is selected.

If you want to make a font first set up the LCD Icon Editor to font with CodePage mode.



Monochrome version of the LCD Icon Editor.



Color version of the LCD Icon Editor.

Press the leftmost button in the Main window to get the Symbol Data Format DialogBox:

Symbol Data Format

Symbol

Symbol Size
 X Size pix Y Size pix

Saved Data Format

RamTex
☒ RamTex Ver. 2
☐ RamTex Ver. 1

User
☐ Binary
☐ C Source
☐ Windows Bitmap

User Data Organisation

Least Significant Bit
☐ Top ☒ Right
☐ Bottom ☐ Left

Byte Succession
☐ Vertical
☒ Horizontal

Symbol File Name **New**

Font

☒ Font Element Count Column Count
☐ Support Different Sizes ->
☒ Use CodePage File Name **New**

Output Directory for Files

Path to Files **Browse...**

Cancel **OK**

Press the Font and Use Code Page tick boxes, and maybe write a Symbol File Name and an Output Directory.

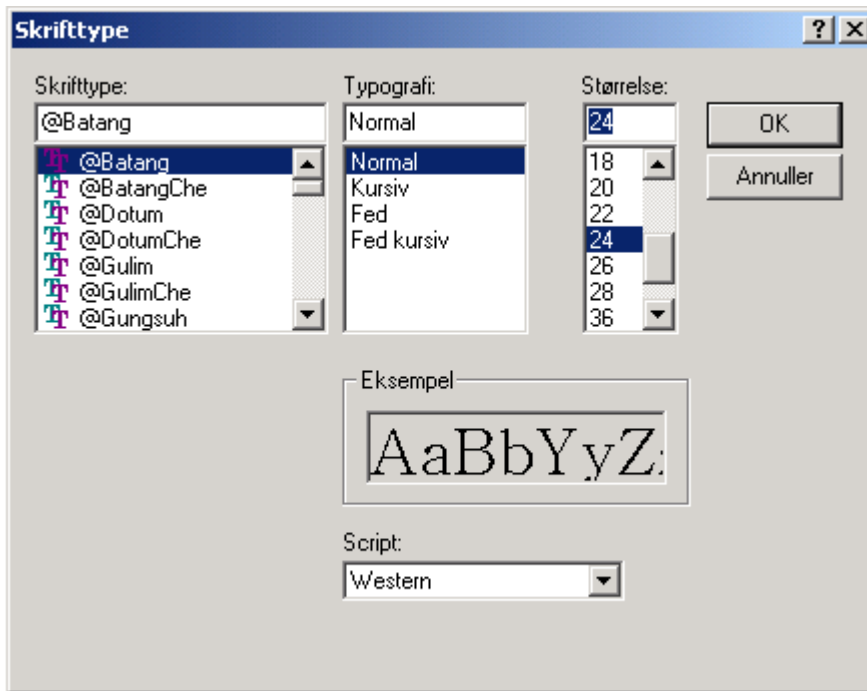
The New Button in Symbol File Name generate the default extension to the file name.

The New Button in Code Page File Name generate the default name and extension based on the Symbol File Name.

Now you have room for a font...

N

Press the New TrueType button in the Font View:



This is a Windows dialog box, and the look will vary according to your Windows version and nationality.

Fill in the 3 top fields to get the font you want. The last field is height of the whole Character including top and bottom white space, this number will be the height of the Element in pixels.

Now we have selected a font, to make it Unicode....



Press the Unicode button in the Font View to change the Font display mode to Unicode. The ASCII characters occupy the range 0x0020 - 0x007F.

The LCD Icon Editor make Fonts by drawing them in the main window. The limit is 1600x1200 pixels in the main window. The LCD Icon Editor can make 5x6 Fonts up to about 64000 characters, and 24x24 Fonts up to about 3000 characters. In this example we need less than 200 characters, so we start by making a latin font of 256 characters and then throwing the unwanted parts away....



Press the Draw a Whole Font button in Font View, to draw the Unicode font in the Main window.
Warning: This may infringe the copyright of the font designer, please check your licence.

We will be operating on character level, so remove the pixel grid by clicking the menu **Show - Show Pixel Grid**.



Minimise the pixels by clicking the - a few times.

Now to deleting unwanted parts....



Press the Delete One Element in the Tool Box with the **right** mouse button to get the **From - To** delete button.



Press the Delete From - To with the **left** mouse button to get the delete tool, then Delete the first 2 lines and the last 8 lines to get only ASCII characters. This generates 1 CodePage range, with the ASCII:

Start 0x0020 End 0x007F Base 0x0000

The Hiragana characters occupy the Unicode range 0x3040 - 0x309F, scroll down in the Font View to get the 0x3000 - 0x30FF page.

For the code numbers of other characters consult www.unicode.org.

To find the Hiragana.....



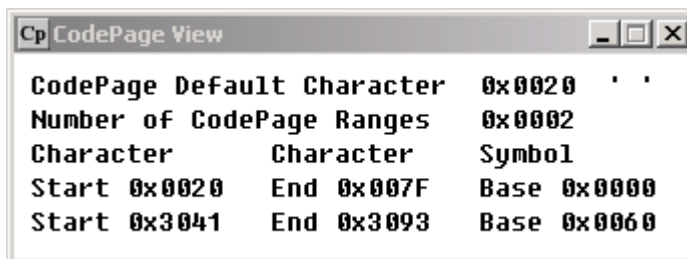
Press the Draw Character button in the Tool Box to get character codes in the Status Bar in the Main Window.

To append the Hiragana to the ASCII.....

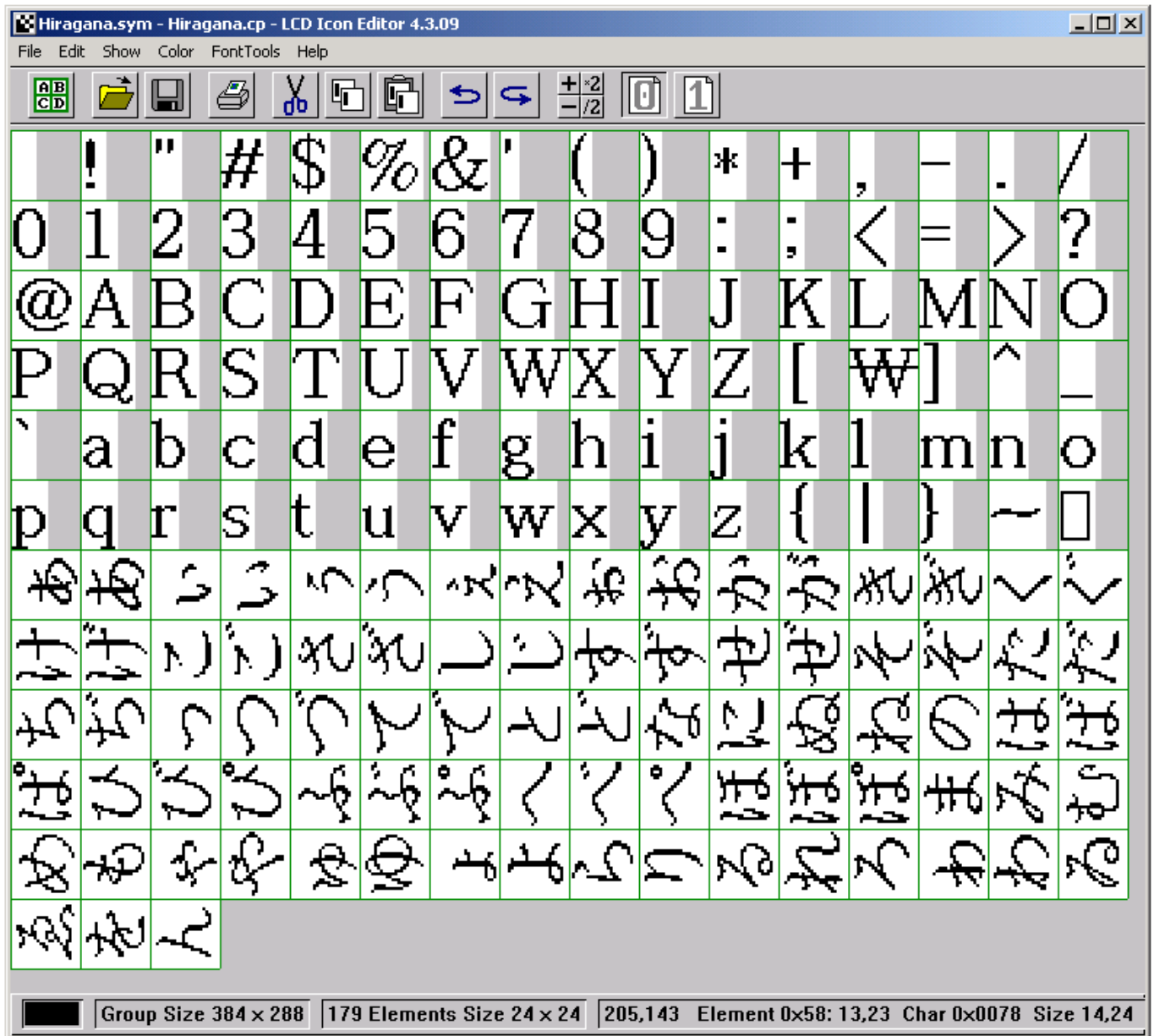


Press the Choose Symbols From F and To T in Font View, and Insert in Main button in the Tool Box. With the **F** cursor Press Mouse to Select From Symbol 0x3041 in the Font View Window. With the **T** cursor Press Mouse to Select To Symbol 0x3093 in the Font View. With the **I** cursor press the Right Half of the last ASCII character in the Main Window. This appends the Hiragana in the Main window and generates 1 more CodePage range with the Hiragana:

Start 0x0020 End 0x007F Base 0x0000
Start 0x3041 End 0x3093 Base 0x0060



The Font should now look like this:



The Hiragana characters are turned 90° CCW, as they usually are in TrueType fonts. If all the characters are to be used on the same display, this is impractical.

We now go a few steps back to turn the ASCII to fit the Hiragana.....



Undo the insert of the Hiragana characters.



Turn the ASCII characters 90° CCW to match the Hiragana.



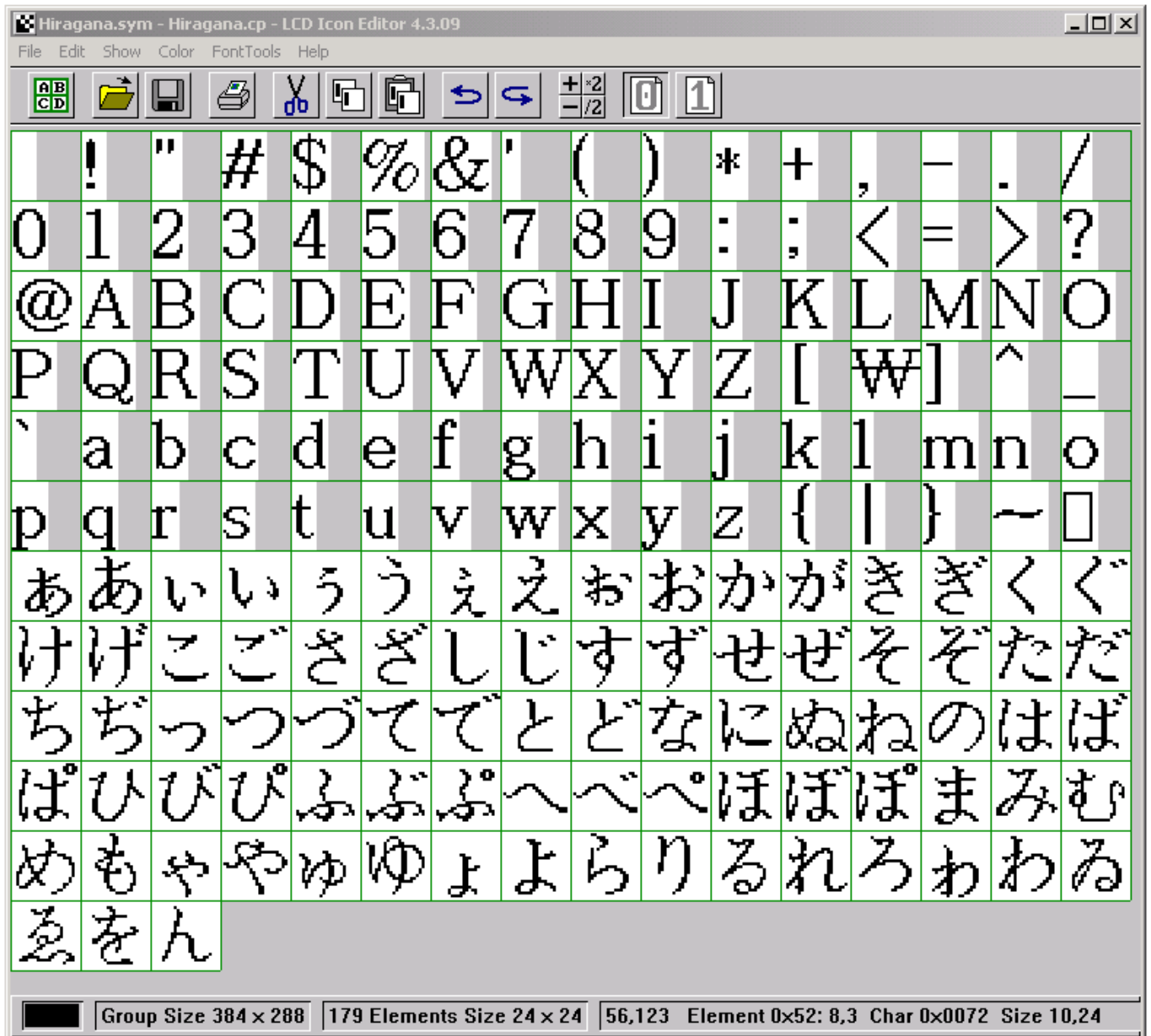
Repeat the insert of the Hiragana characters.

Now all the characters are turned 90° CCW, to turn them back...



Turn all the characters 90° CW to have them standing in normal position.

The Font should now look like this:



Your ASCII + Hiragana Code Page Font is ready for saving.



Press the Save All button in the Main window to save pixel data in the Hiragana.sym file, the Code Page data in Hiragana.cp file, and the font header in Hiragana.c.

How to convert Windows bitmaps to RamTex color format:

The conversion of digital pictures to RamTex format can be done in many different ways, this method is primarily for changing bitmaps to RamTex color of the same size but different color resolution.

This example assumes that the LCD Icon Editor is reset to defaults:

First set up the target color mode, here we assume 8 bit per color RGB.

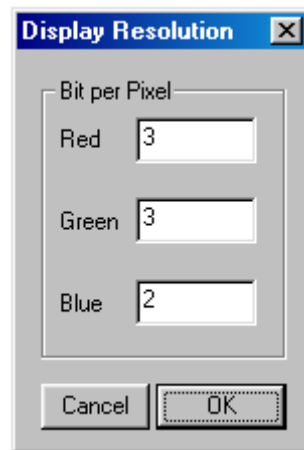
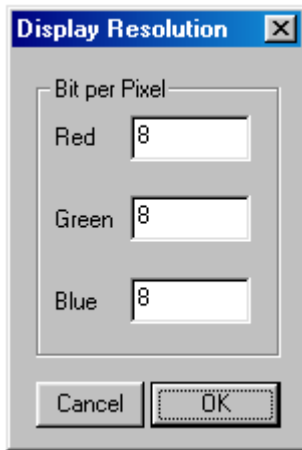


Color version of the LCD Icon Editor.

Press the leftmost button in the Main window to get the Symbol Data Format DialogBox:

The 'Symbol Data Format' dialog box is shown with a blue title bar and a close button. It contains several sections: 'Symbol' with 'Symbol Size' (X Size: 32, Y Size: 32), 'Saved Data Format' (RamTex Ver. 2 selected), 'User Data Organisation' (Least Significant Bit: Right, Byte Succession: Horizontal), 'Display Mode' (Color RGB 24 Bit per Pixel 16777216 Simultaneous Colors selected), 'Palette' (Symbol Palette and System Palette sections), 'Font' (Font, Element Count: 256, Column Count: 32), and 'Output Directory for Files' (Path to Files: c:\). There are buttons for 'New', 'Browse...', 'Cancel', and 'OK'.

Choose Open Bitmaps to Current Format to read the bitmaps into the format for the target display.



Press Change Display Color Resolution... to get the little Dialog Box and change 8 8 8 to 3 3 2.

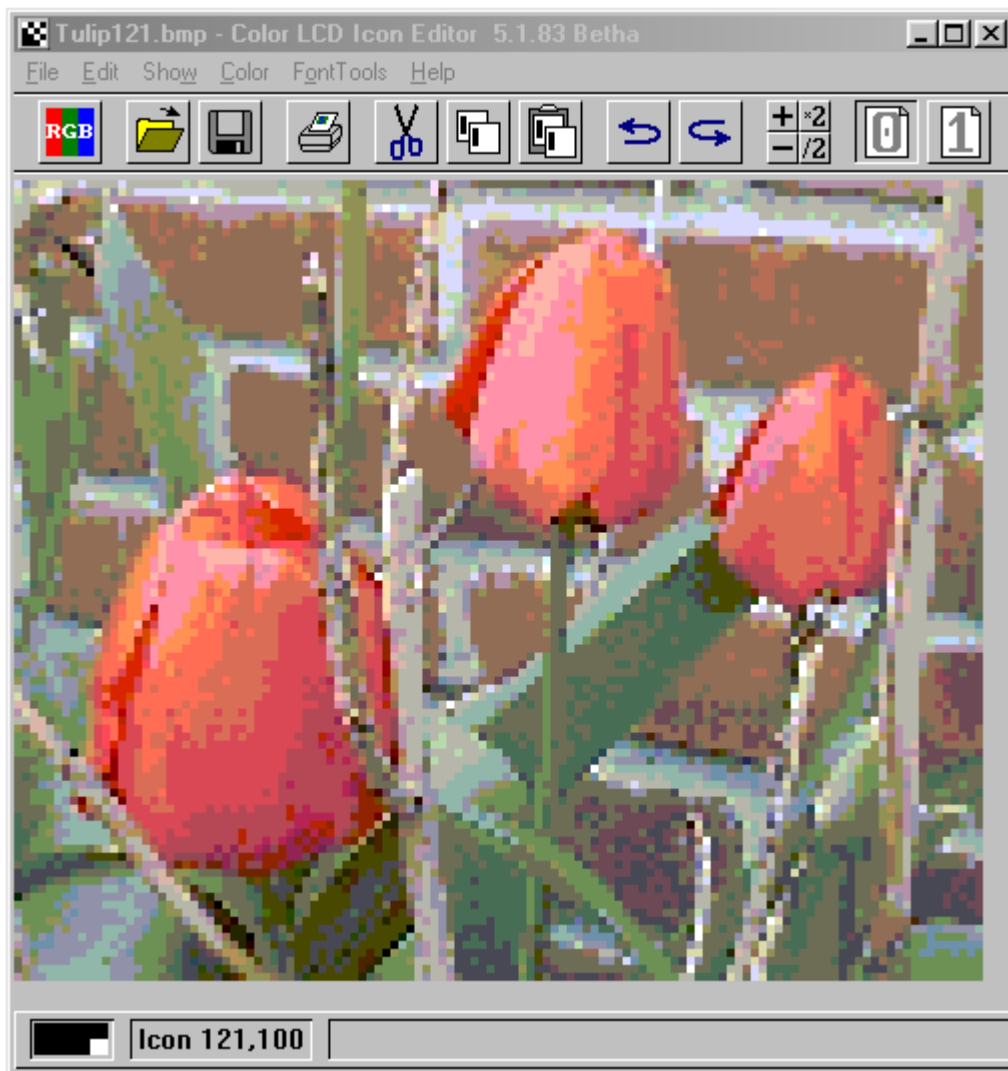
Finish setup by pressing OK and OK.



In the samples is a small bitmap Tulip121, we will now read this to the desired format.



Open the file Tulip121.bmp



You now have a picture with the right resolution.



Color version of the LCD Icon Editor.

Press the leftmost button in the Main window to get the Symbol Data Format DialogBox again:

Symbol Data Format

Symbol

Symbol Size
X Size pix Y Size pix

Saved Data Format

RamTex
☒ RamTex Ver. 2
☐ RamTex Ver. 1

User
☐ Binary
☐ C Source
☐ Windows Bitmap

User Data Organisation

Least Significant Bit
☐ Top ☒ Right
☐ Bottom ☐ Left

Byte Succession
☐ Vertical
☒ Horizontal

Symbol File Name

Font

☒ Font Element Count Column Count
☐ Support Different Sizes ->
☐ Use CodePage File Name

Output Directory for Files

Path to Files

Display Mode

☐ Black & White
☐ Gray Level
☐ Gray Palette
☒ Color RGB 8 Bit per Pixel 256 Simultaneous Colors
☐ Color Palette

☐ Disable Color to B/W Conversion Dialogbox
☒ Open Bitmaps to Current Format

Palette

Symbol Palette

File Name

System Palette

☐ Use System Palette System Palette Size

File Name

Choose Saved Data Format as RamTex Ver. 2 to get the right format and the New button in Symbol File Name to get the right file type. Press OK.

Your picture is ready for saving.



Press the Save All button in the Main window to save the pixel data in the Tulip121.sym file.

How to resize Bitmaps or RamTex pictures to new size in color format:

The conversion of digital pictures to RamTex format can be done in many different ways, this method is for changing pictures like bitmaps or RamTex to any other size.

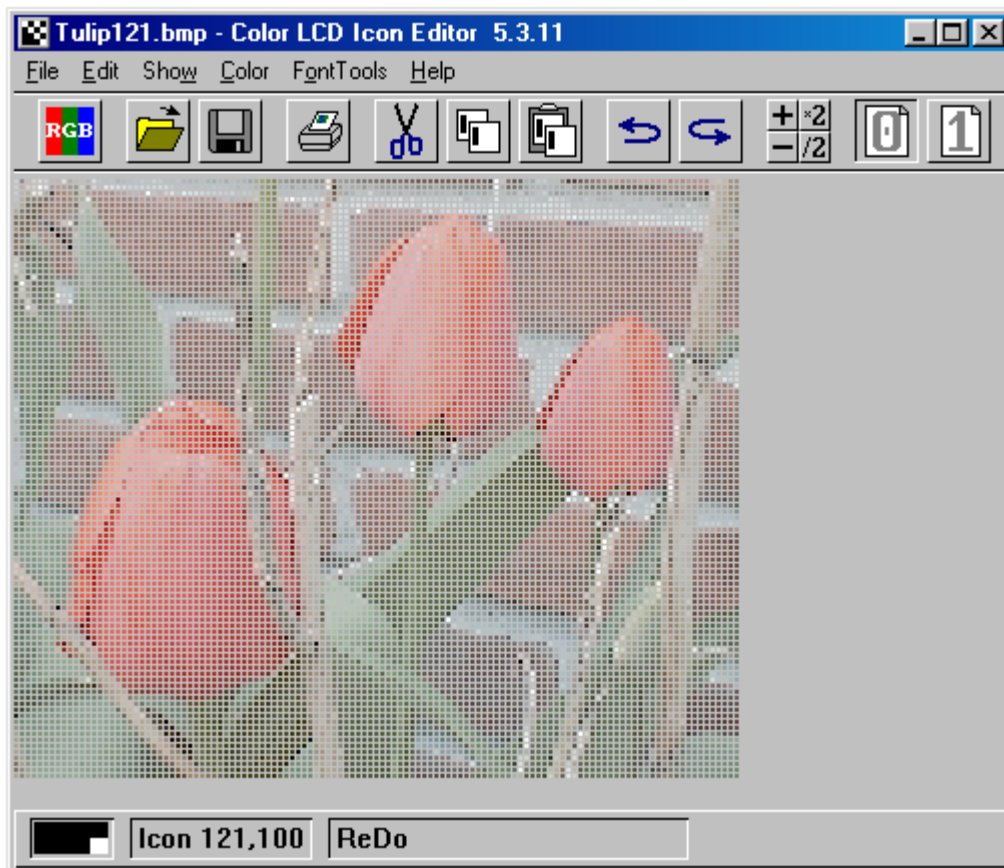
This example assumes that the LCD Icon Editor is reset to defaults:



In the samples is a small bitmap Tulip121, we will now read this to the desired format.



Open the file Tulip121.bmp



This is the original bitmap 121x100, we will now resize it to 40x33.



Cut it to the Clip Board.



Color version of the LCD Icon Editor.

Press the leftmost button in the Main window to get the Symbol Data Format Dialog Box:

Symbol Data Format

Symbol

Symbol Size
 X Size pix Y Size pix

Saved Data Format

RamTex
☐ RamTex Ver. 2
☐ RamTex Ver. 1

User
☐ Binary
☐ C Source
☒ Windows Bitmap

User Data Organisation

Least Significant Bit
☐ Top ☒ Right
☐ Bottom ☐ Left

Byte Succession
☐ Vertical
☒ Horizontal

Symbol File Name

Font

☐ Font Element Count Column Count
☐ Support Different Sizes ->
☐ Use CodePage File Name

Output Directory for Files

Path to Files

Display Mode

☐ Black & White
☐ Gray Level
☐ Gray Palette
☒ Color RGB 24 Bit per Pixel 16777216 Simultaneous Colors
☐ Color Palette

☐ Disable Color to B/W Conversion Dialogbox
☐ Open Bitmaps to Current Format

Palette

Symbol Palette

File Name

System Palette

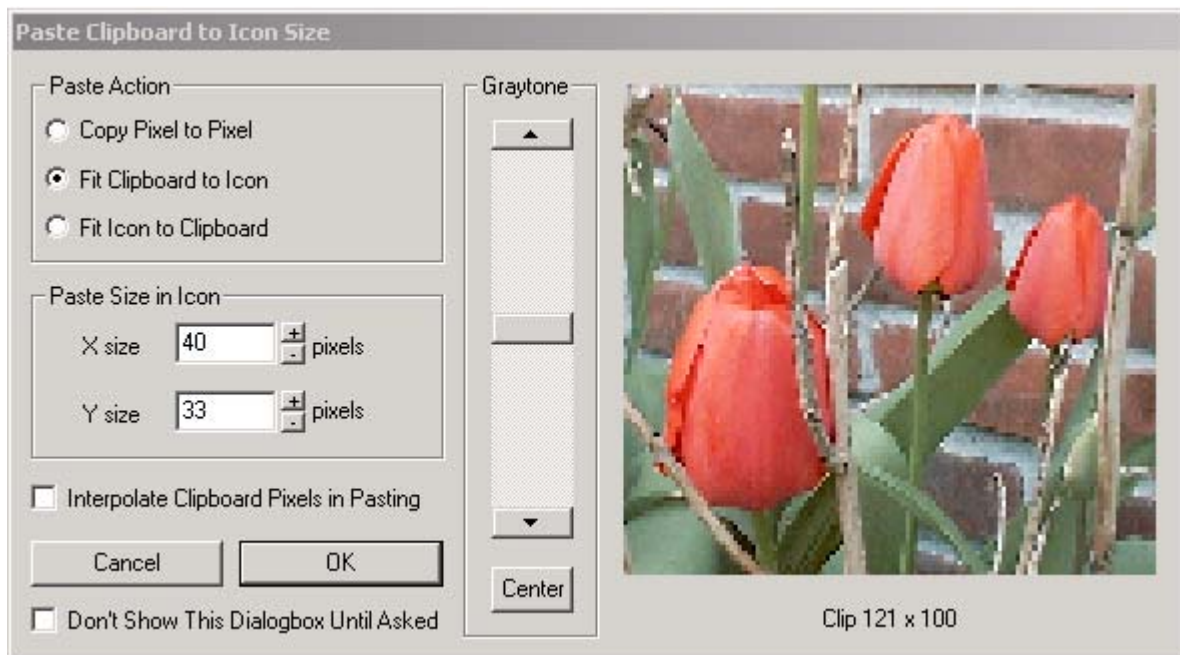
☐ Use System Palette System Palette Size

File Name

Change the Symbol Size to 40 * 33 and give the Symbol a new File Name. OK.



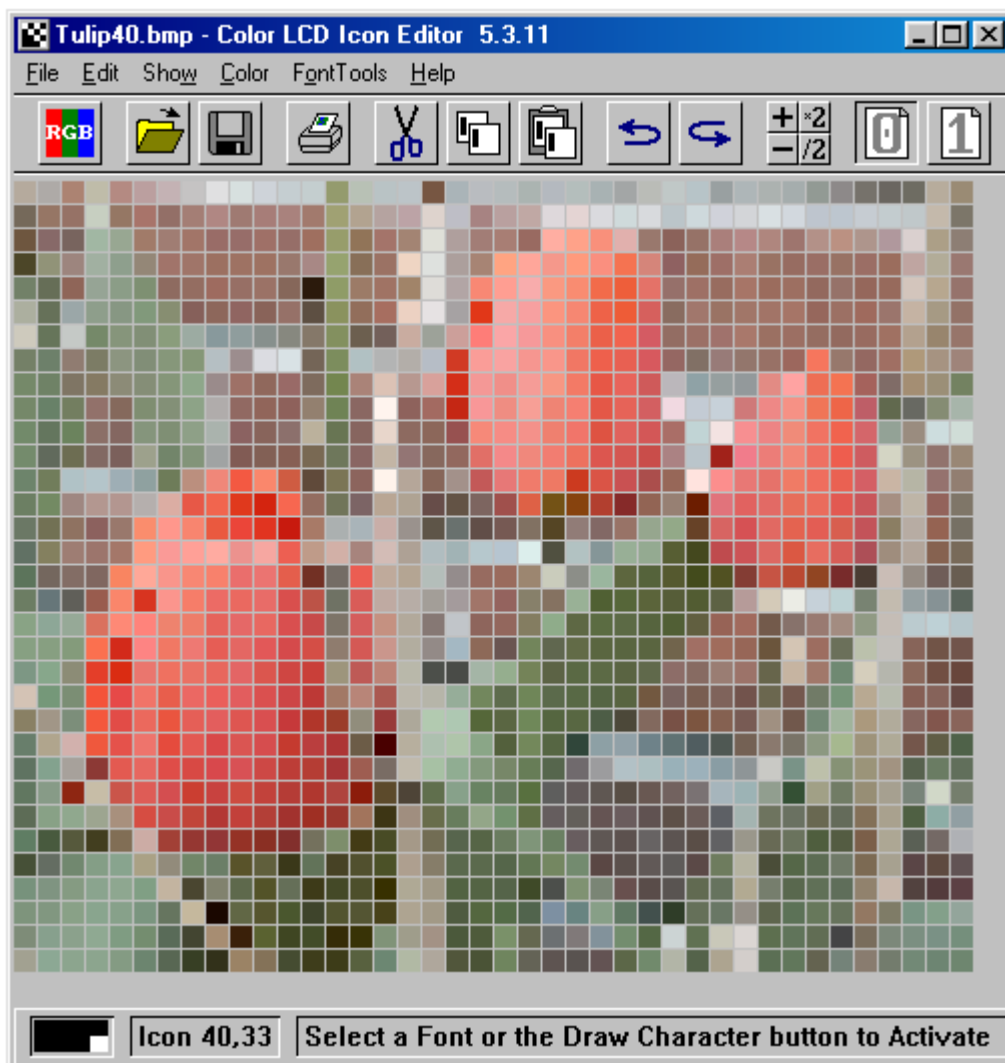
Paste the picture back to the Icon Editor.



Tick Fit Clipboard to Icon.



Press the *2 twice to see the picture better.



Your picture now looks like this:



and it is ready for saving.



Press the Save All button in the Main window to save the pixel data in the Tulip40.bmp file.

How to remove perspective from icons:

The conversion of digital photos to icons have to be done in two steps.

First read the photo into Paint or Internet Explorer, and save it again as a bitmap.

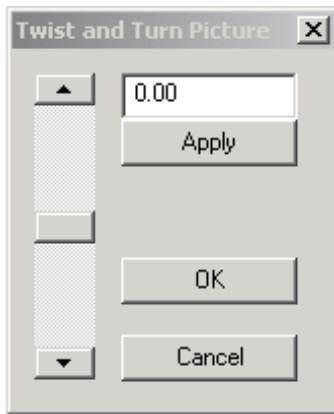
Then use the LCD Icon Editor:



Read the file PostBox.bmp, and in the menu Show - Show Pixel Grid remove the grid.



Press Tilt Left Side of Icon.



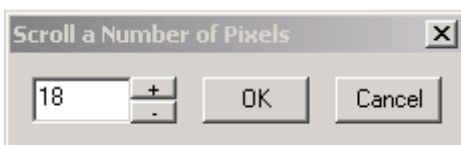
Use the cursor to put an alignment cross on the lower left side of the postbox, and then move the scrollbar to make left side vertical.



Do likewise with the other 3 sides.

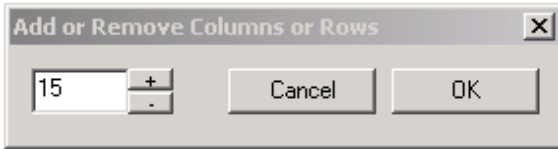


To get clean edges scroll picture and remove pixels.



Right click scroll, and input the number of pixels to scroll.





Right click remove, and input the number of pixels to remove.



Your postbox it is now ready for saving.



Press the Save All button in the Main window to save the pixel data in the New.sym file.

How to move characters around in a font:

Single characters can be copied and pasted when you are in the Show as Element mode.

This example assumes that the LCD Icon Editor is reset to defaults, or:



Black pen is selected.

First we get a font.



Monochrome version of the LCD Icon Editor.



Color version of the LCD Icon Editor.

Press the leftmost button in the Main window to get the Symbol Setup DialogBox:

Symbol Data Format [X]

Symbol

Symbol Size
 X Size pix Y Size pix

Saved Data Format

RamTex
☒ RamTex Ver. 2
☐ RamTex Ver. 1

User
☐ Binary
☐ C Source
☐ Windows Bitmap

User Data Organisation

Least Significant Bit
☐ Top ☒ Right
☐ Bottom ☐ Left

Byte Succession
☐ Vertical
☒ Horizontal

Symbol File Name **New**

Font

☒ Font Element Count Column Count

☐ Support Different Sizes ->

☐ Use CodePage File Name **New**

Output Directory for Files

Path to Files **Browse...**

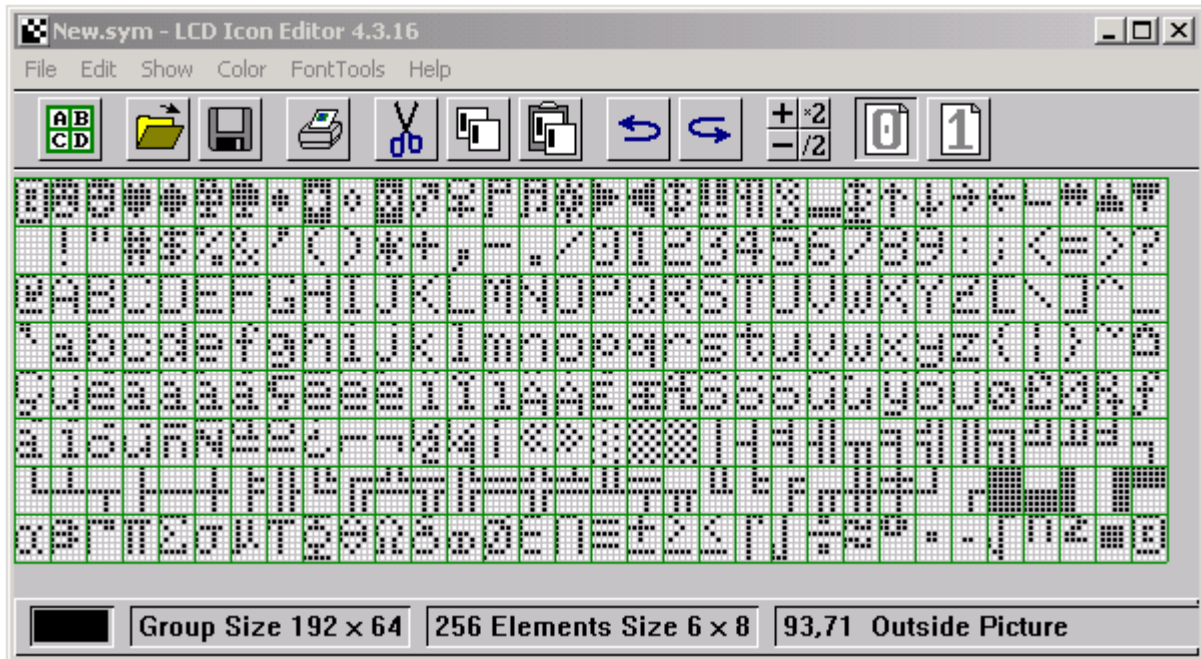
Cancel **OK**

Select Font, and OK.

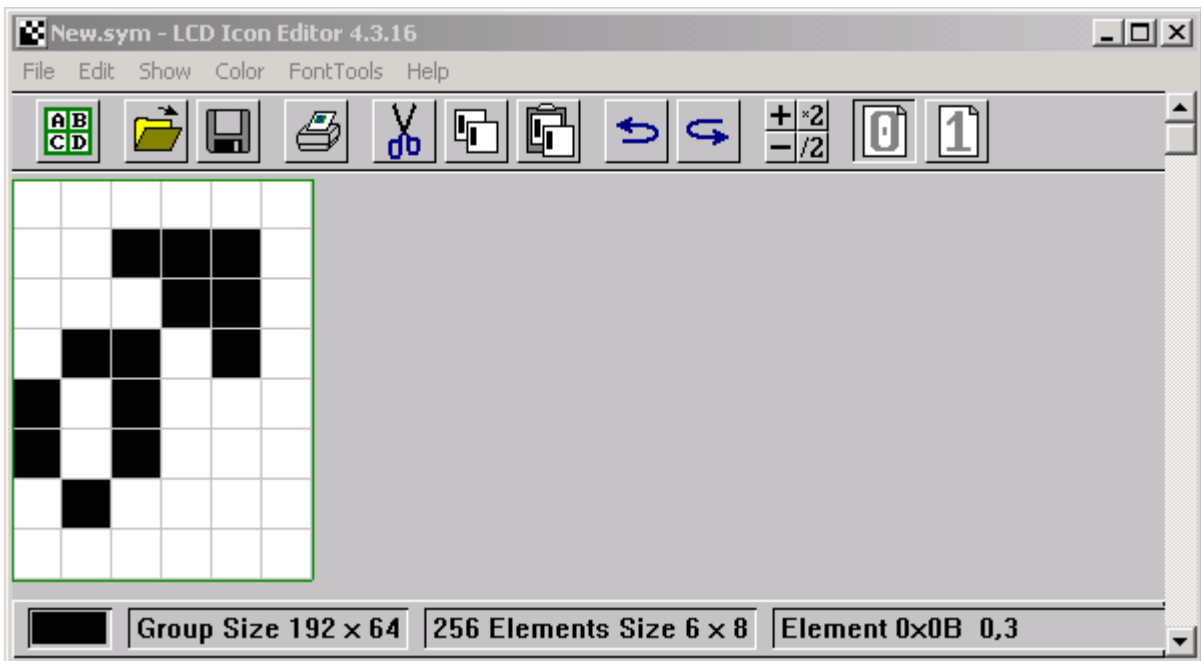


Press the Draw a Whole Font button in Font View, to draw the font in the Main window.

Warning: This may infringe the copyright of the font designer, please check your licence.

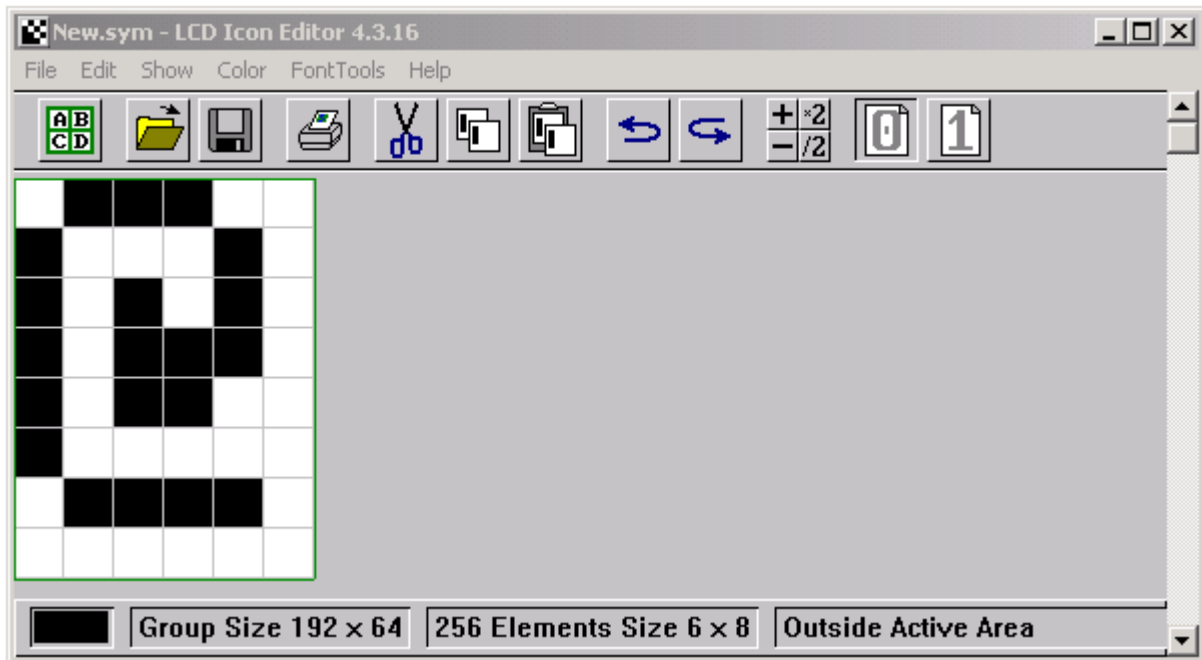


Right click the mouse on the character you want to move, here we use 0x0B.

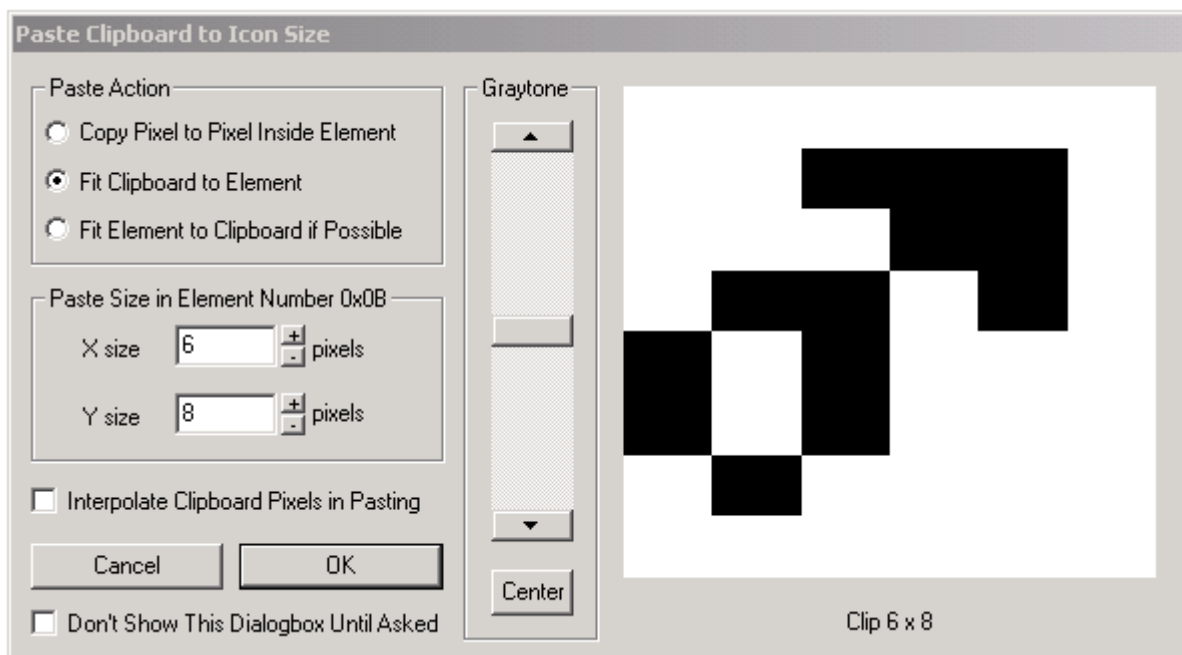


Cut the picture to the clipboard.

Right click the mouse to see the whole font, and right click you want to copy the character to, here we use 0x40.

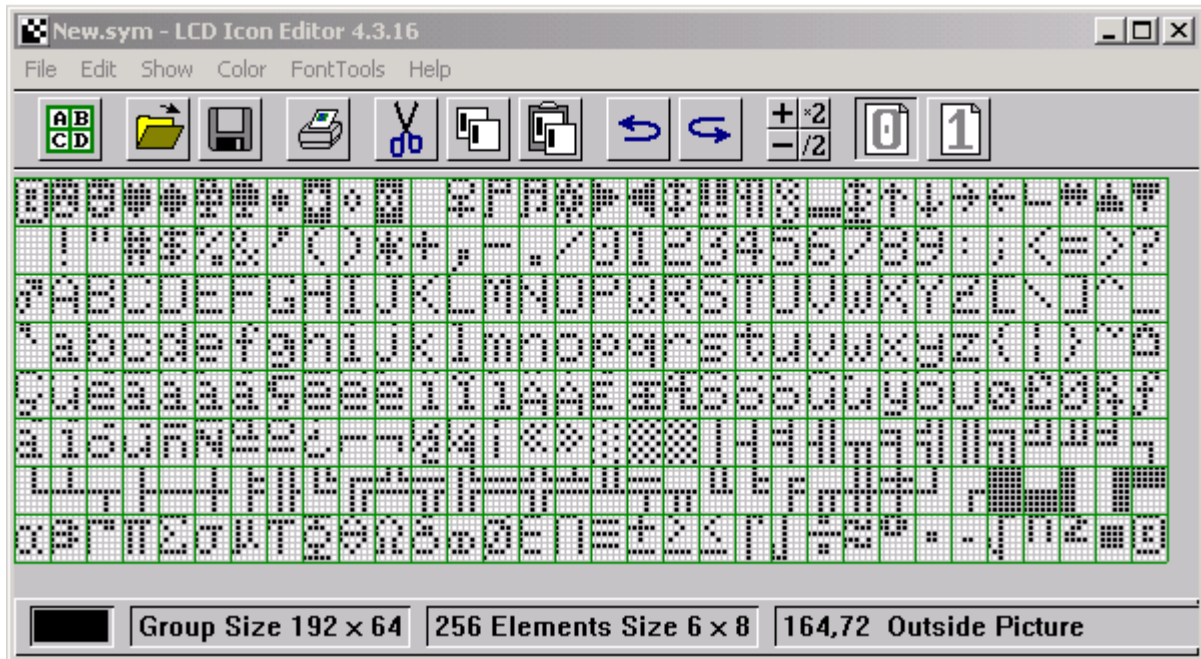


Press paste to insert the 0x0B character.



Press OK to insert.

Right click the main window to get back to the whole font.



Your font it is now ready for saving.



Press the Save All button in the Main window to save the pixel data in the New.sym file.

How to reuse parts of a symbol:

In Show as Icon mode editing, mirroring and scrolling is possible within a frame with the Edit Inside Frame tool.

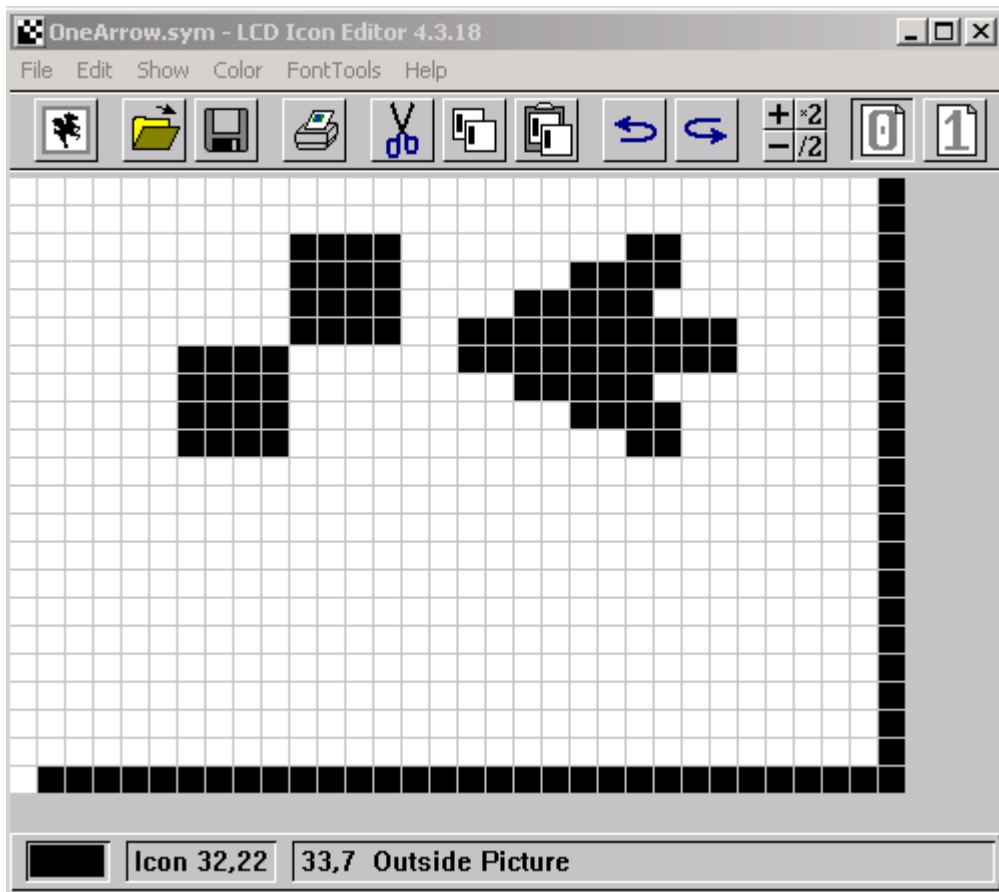
This example assumes that the LCD Icon Editor is reset to defaults.



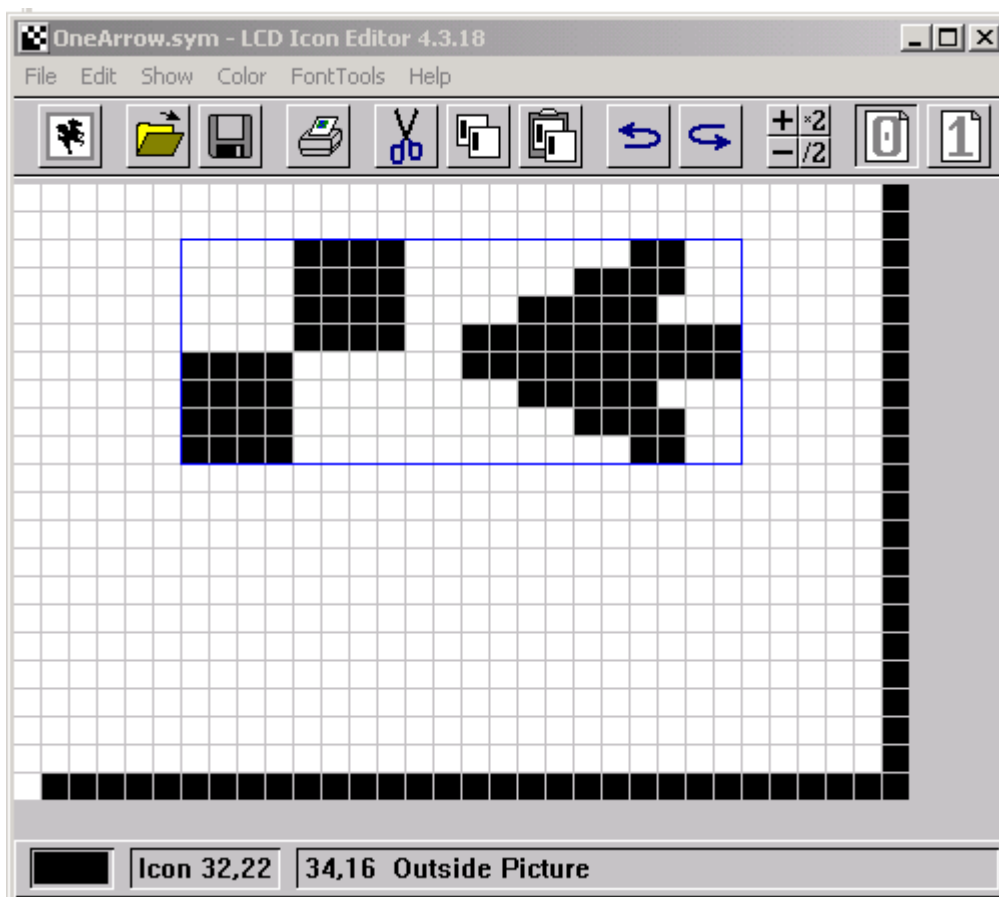
Open the file OneArrow.sym.



Press x2 and/or + a couple of times to get a better view.

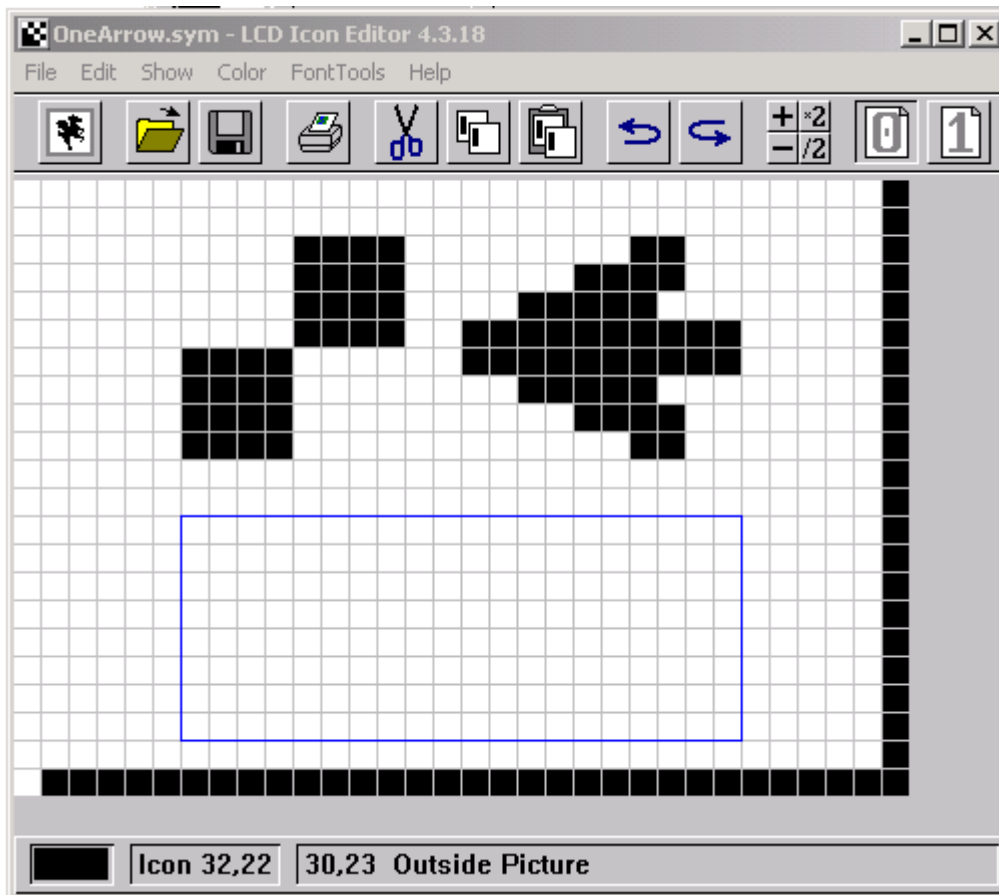


Press the Edit Inside Frame, and draw a blue rectangle around the pare you want to reuse.

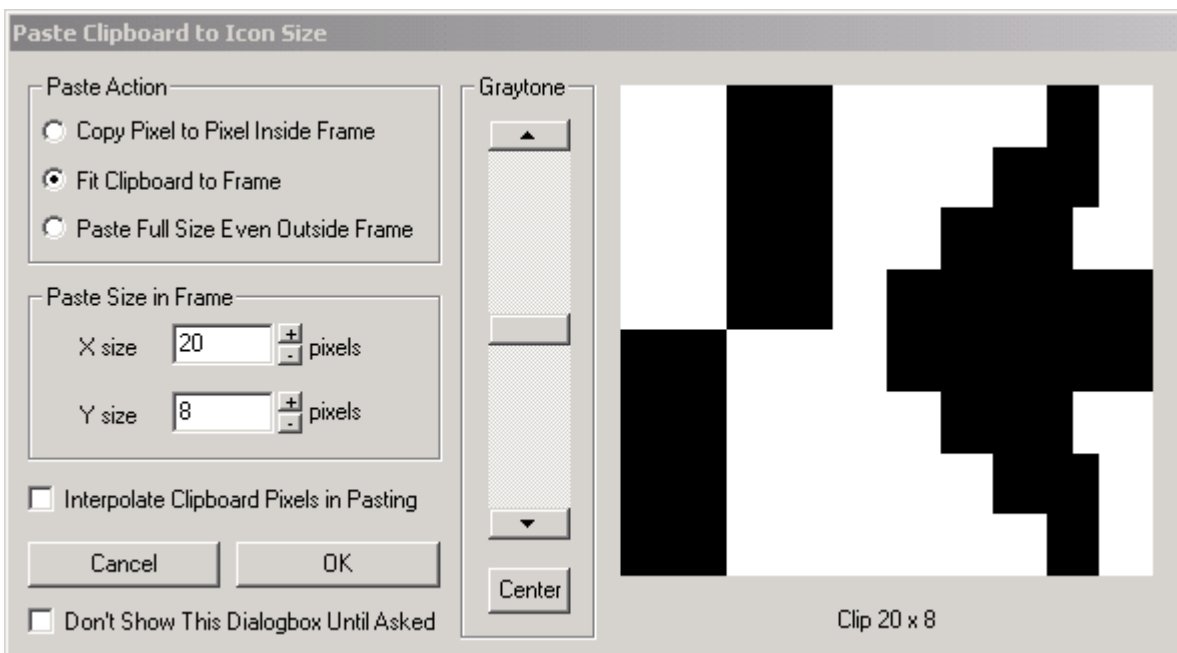




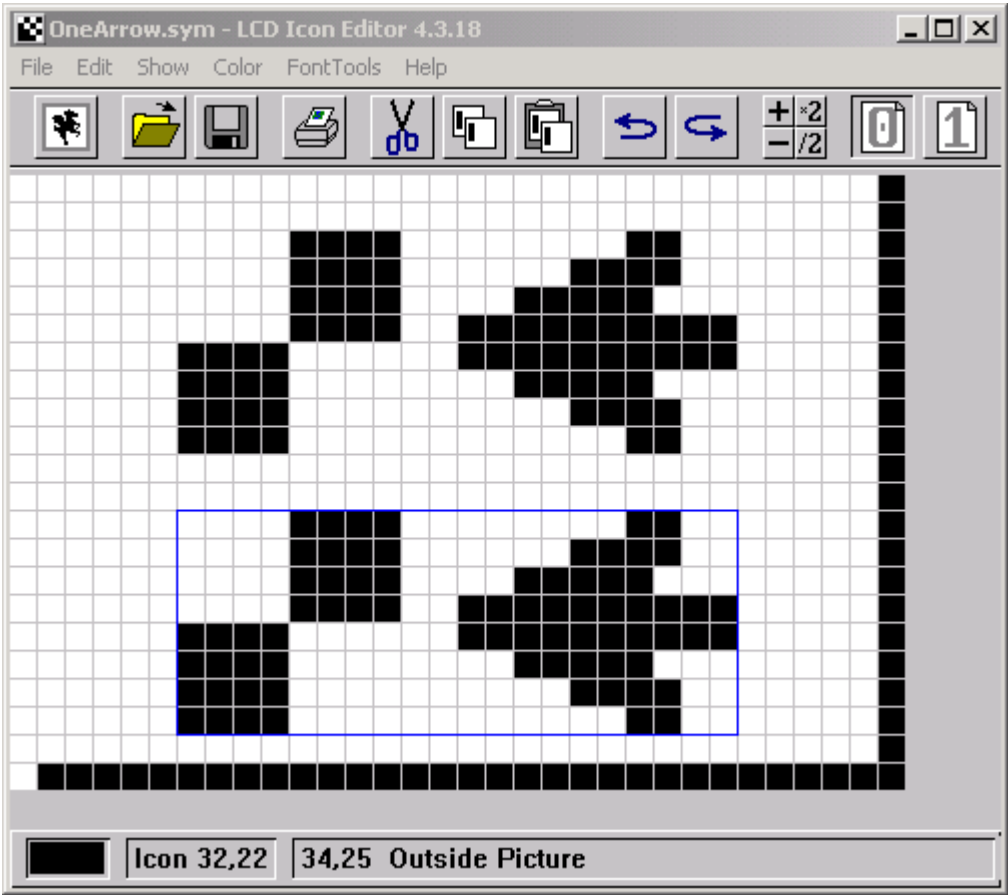
Copy the selected source part to the clipboard, and draw a frame around the target part.



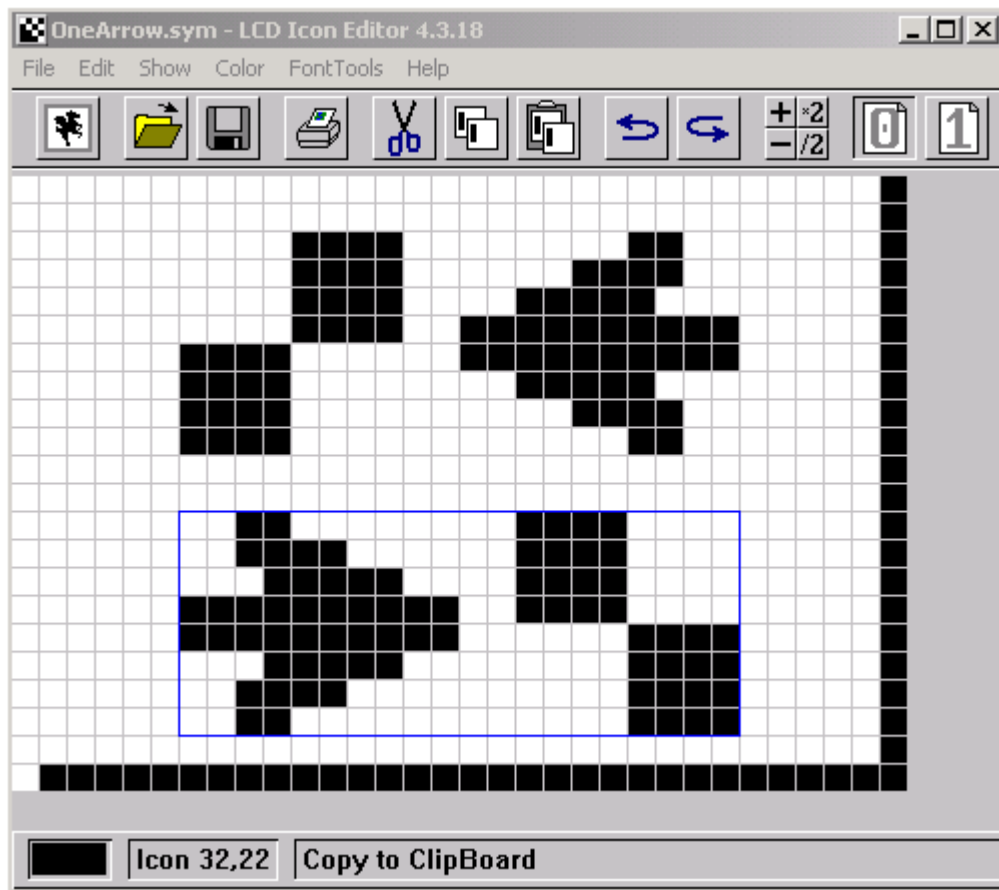
Press paste.



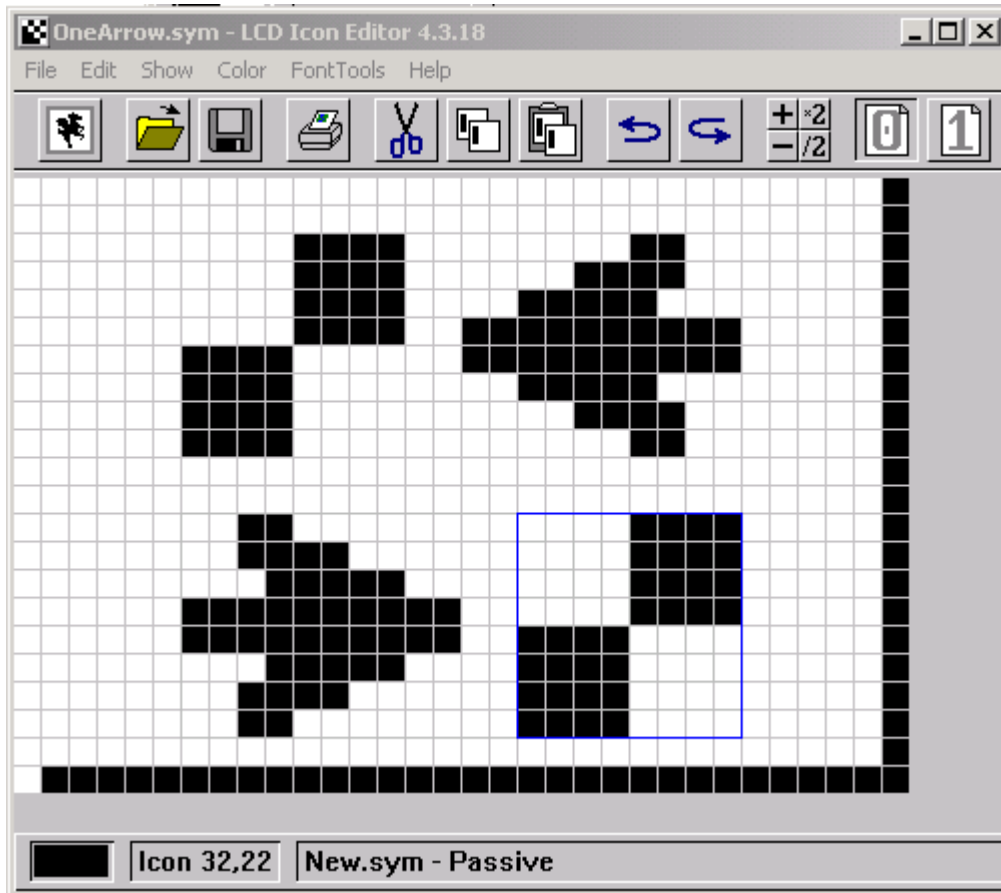
Press OK to paste



Press Mirror Vertical to make the arrow point the other way.



Put a new frame around the squares, and press Scroll Left four times to change the squares back to the original.



Press the File - Save Pixel File As... in the Main menu to save the pixel data as TwoArrow.sym file.

Introduction to the LCD Icon Editor windows:

The LCD Icon Editor can work in 2 picture modes.

- Icon mode, where you create a single picture like a button symbol or a logo, and
- Group mode, where you draw a lot of small pictures like the characters and symbols in a font.

The two working modes have identical data file formats for the individual symbols, the Group data file just have a number of symbols, and a header with information for the Group as a whole.

The Color version can work in 3 different color modes

- Monochrome with Black or White in the pixel data,
- Color based on a Palette with palette pointers in the pixel data, and finally
- Color with Red Green Blue values in the pixel data.

The LCD Icon Editor is built around a Main window and 5 (7 for color) auxiliary windows:

- Main for seeing and working with the Symbol or Group you are creating.
- Pixel View and Swap View for watching the 2 data sets as they would look on the target display.
- ToolBox with buttons for tools and functions.
- Font View to see the source font and the font tools.
- CodePage View to see the look-up table for Symbols in the Main window.

- Palette shows available colors based on palette size. Only in Color version.
- Rainbow shows possible colors based on color resolution. Only in Color version.

Main Window:



The Main window with the menu, the tool bar, the status bar and the pixel grid is for working with single or groups of pixels in the icon. The LCD Icon Editor can work with two data sets simultaneously i.e. both data sets are loaded, and you can swap between them, but you can only see one at a time in the Main window. If you choose to work with a group of icons instead of only one, this window can show either the whole group or one single element.

The Main window operates in two different modes, icon or group. The maximum picture size is 1600 x 1200 pixels. It shows the active data set, the other is in the Swap View.

- In Icon mode you set up a working area you will be drawing the Symbol on. In Icon mode this is the area, that will end up in your data files.
- In Group mode the picture is subdivided into a number of Elements, and these can be manipulated separately or together. In Group mode you set up the size of the Elements, and the number of Elements. In Group mode the whole group ends up in your data file. In Group mode you can see the whole group or one single element. You swap with the red and green buttons in the toolbox or by Right Mouse Click on the Element you want to see, this defines the active Element. One of the Elements will be the active element even in Group display mode, it will be indicated by a red frame. Cut, copy and paste operate on the chosen element only in Group mode. If you need to cut or paste the whole group it is done in the Show Group as Icon mode activated with the button with the black frame.

The LCD Icon Editor can operate with two separate data files simultaneously, mostly to facilitate cut and paste between icons.

The Status Bar operates slightly different in the two modes.

- In Icon mode there are 3 fields:
 - ◆ Color of the drawing tool, and in color mode a little field with the background color.
 - ◆ Icon size.
 - ◆ Cursor co-ordinates or button help.
- In Group mode there are 4 fields:
 - ◆ Color of the drawing tool, and in color mode a little field with the background color.
 - ◆ The size of the whole Group
 - ◆ The number and maximum size of the Elements.
 - ◆ Cursor position information or button help. The Cursor information are:
 - ◇ Co-ordinates in the Group.
 - ◇ Element number.
 - ◇ Co-ordinates in the Element.
 - ◇ Size of the Element if Elements can have different sizes.

If you are working with one element at the time you can swap between showing one element and showing the whole group with the right mouse button.

If you are working with one element at the time and only use the Show Group for checking alignment and general appearance, you may prefer to Disable Mouse Operations in Group Mode (to avoid damaging the Elements you have finished with a wayward mouse click).

The Main window shows your work as single pixels on a grid. The picture can be organised either as a single icon or a group. If you choose to work with a group of elements instead of only one icon, this window can show either the whole group or one single element. In Group mode elements are distinguished from whole icons by a green frame around the element.

Cursor shape:



The cursor shows the current tool selection.

Tool Bar:



Set up shows the drawing mode, when pressed you get a dialog box for setting up of new Symbol or Font.



Open file, if color files are opened in Black & White mode, a grayness dialog box pops up to allow you to set how dark the picture shall be.



Save files, depending on the present set up, all relevant files in this mode are saved.



Print. The whole drawing area is printed, so even if you view only one character, the whole font is printed.



Edit tools: Cut or Copy to the Clip Board, or Insert from the Clip Board. If color pictures are opened in Black & White mode, a grayness dialog box pops up.



Undo and Redo for regretting actions, and regretting the regret.



Step to next or previous character when editing characters



Pixel size in the Main window. The four small buttons give +1, -1, x2, and /2.



Change between the two data sets.

Mode Indication in Tool Bar:

The leftmost button for Set up shows the drawing mode, these have the following meaning:

Black & White:



Single icon, monochrome symbol in B&W version.



Group of elements to make a font of monochrome symbols in B&W version.

Color:



Single icon, monochrome symbol in color version.



Group of elements to make a font of monochrome symbols in color version.



Single icon, Palette based color symbol in color version.



Group of elements to make a font of Palette based color symbols in color version.

Single icon, Red Green Blue based color symbol in color version.

Group of elements to make a font of Red Green Blue based color symbols in color version.

Pixel View window:



To give you an idea of how your icon is going to look on the target display there is a Pixel View window, where the Icon or Group is drawn in screen pixel size. This window shows the active data set.

In Group Mode the whole group is shown, and clicking an Element with the left mouse button chooses the element. When you work in Show Element mode in the Main window, this one of the ways to change Element, the other is right mouse click on the Element in the Main window. The Element data for the presently chosen Element is written in the status bar in the Main window. In Show Element mode in the Main window, the chosen Element will flash in Pixel View.

The pixel size can be set in the Pixel Size +1 -1 *2 /2 in the Pixel View window menu. It is not possible to set the pixel view to the exactly same size as the target display, only 1, 2, 3.... PC pixels per LCD pixel.

In Monochrome mode can Pixel View can show the Symbols in the actual colors of the target display. The pixel color in Monochrome mode can be set in the Color Show Monochrome Colors in Pixel View and Color Edit Black & White LCD Colors menu.

If you work with one single element in a group, this window still shows all the elements, and left clicking on an element brings it up in the main window. If you work with the whole group this click sets a pointer to the element for use in the cursor help, and for swapping with the green buttons in the toolbox.

Swap View:



The Swap View shows your non-working area in a small size and in color to give you an idea of how your icon will look on the target display. Swap View is for comparison of two icons, does not blink the chosen element in Group Mode, and is not supposed to react to mouse input. Swap View is very passive, and it shows the non-active dataset.

The pixel size can be set in the Pixel Size +1 -1 *2 /2 in the Swap View window menu. It is not possible to set the pixel view to the exactly same size as the target display, only 1, 2, 3.... PC pixels per LCD pixel.

ToolBox:



Tools for working on the active data set. The Toolbox contains the most commonly used functions, they are selected normally with the left mouse button, a few of the tools can work in several modes, modes are changed with the right mouse button.



Edit functions: Cut, copy, paste and undo.



Brush functions: Black, white or toggle pen. Edit in frame.



Draw pixels, the frame of ellipses and rectangles. Flood fill.



Draw lines, ellipses, rectangles or characters.



Pixel tools: Insert and delete columns and rows of pixels.



CodePage tools: Insert or delete elements or character strings in fonts



CodePage tools: Make CodePage indexes with the mouse or from a text file. Edit and Check CodePage.



Select single icon, element or group display. Enable mouse in Groups



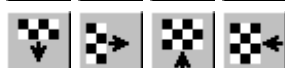
Scroll an icon, all elements in a group, or only one element depending on display selection in the main window.



Mirror an icon, all elements in a group, or only one element depending on display selection in the main window.



Rotate and shrink or expand an icon, or all elements in a group.



Shrink or expand the size of an icon or single element, or all elements in a group at the right or bottom border.



Twist one edge of the icon by squeezing one corner.



Squeeze the icon horizontal or vertical.
Turn icon clockwise or counterclockwise.

Font View:



Font View shows buttons for font and character tools, and it shows the presently selected font. When you choose Font and Character input mode with the F character button in the Tool Box, or click a button in Font View, Font mode becomes active.

You can either input characters using the keyboard or by clicking the appropriate symbol in the Font View with the mouse.

The name and size of the present font is written in the window header. If you don't want to see the font, just set size to 0 with the + and - button.

The Font mode is always active when you use the built-in small fixed fonts, the True Type fonts in your Windows installation, or load and use your own fonts.

Fonts are drawing tools just like lines or ellipses, the only difference is that the build in fonts also have a background.




















All fonts except the one marked OEM is ANSI compatible.

Characters are drawn at the caret position in the chosen colour with or without background of the opposite colour. If the colour is toggle, opposite is not toggle, and the background is left unchanged.

The caret can be positioned with the mouse, or by the cursor.

There is a little group of fixed fonts, that is always available, and there is one scaleable font at the time. The choice of scaleable fonts depends on the actual Windows installation, and it can differ quite a lot.

Font Tools:

	Paint Background. Black characters get white background and visa versa.
	Fixed characters OEM 6x8 8x8 8x8fat 8x16, all are compatible with IBM's Nordic code page.
	
	
	
	Fixed characters ANSI 6x8 8x8 8x8fat 8x16, all are compatible with Windows Western code page.
	
	
	
	Characters imported from fonts generated with the LCD Icon Editor or Adobe BDF.
	New TrueType, opens a common dialog box for choosing one of the fonts in your Windows installation.
	TrueType, shows the already selected font, the upper 128 are different depending on the selected country.
	Unicode shows the 65536 possible characters of Unicode. The number of defined characters differ from font to font.
	Squeeze TrueType. This function cut off pixels in top and bottom to squeeze the symbol into the available space.
	Draw a Whole Font, only active in Font mode. It draws the number of characters visible in the Font View.
	Draw a Code Page Font, only active in Font mode. It draws the number of characters visible in the Code Page View.
	Size of displayed font in Font View, this size has no relation to the size drawn in the Main window.
	
	

Build-in Fonts:



The LCD Icon editor has eight build-in fonts. The four with O are OEM fonts compatible with the Nordic code page in DOS. The four with A are ANSI fonts compatible with the Western European code page in Windows. The pB button is for toggling whether you want paint the background when you are writing

text in the icon. The ABCDEFGHI button generates a new font based on the font you are using. The 134DEFSigmaDeltaOmega button generates a new font based on the Code Page you are using.

Imported Fonts:



You can import fonts generated by the LCD Icon Editor or the Adobe Glyph Bitmap Distribution Format, and use them for writing text in your icons or generating new fonts. The ABCDEFGHI button generates a new font based on the font you are using. The 134DEFSigmaDeltaOmega button generates a new font based on the Code Page you are using.

TrueType Fonts:



The T button is for selecting the current TrueType font, and the N button is for changing to a new TT font. When drawing a font based on a TT font the TT font is converted to a bitmapped font, and the elements will be of different size. The TT font operates with 3 widths, “underhang” “black part” and “overhang”. This makes it possible to write characters, that overlap in the X direction like this:

Coffee

From the “underhang” “black part” and “overhang” data you can calculate a “Total Width” of the TT character and a “Advance Caret” information to know where to place the next character.

The Icon Editor and RamTex data formats operate with only one Element width. So when you use the Font - Draw A Whole Font option to make a copy of a TT font, the Element width is based on the largest of the “Advance Caret” and “Total Width” of the TT font information to keep the whole character inside the element, and avoid invisible characters disappearing. This means that when you use the new font later, you will get larger spacing between the characters than if you wrote directly with the TT font. This problem is of course worst for italic TT fonts.

Coffee

Coffee

This example shows a 24pt Times New Roman used directly on the first line, and converted to Group file and loaded as font on the second line. To get the best results you will have to edit the width of each character in Show Element mode. The easiest way to gain access to the properties of a single element is to click it with the right mouse button in Show Group mode.

CodePage:



CodePage shows the look-up table for Symbols in the Main window. The window is only visible when the program is in Group or Font mode, and the font use the CodePage.

The CodePage and Range system is for removing unused characters and symbols without changing the original character codes or symbol numbers. The CodePage and the Delete Elements works together to facilitate the generation of CodePage Fonts from a whole font.

An example:

If you want to make a font with only decimal point and numbers like this “**.0123456789**” first Draw a Whole Font with CodePage enabled, then Delete Elements from the **NULL** char to - delete the / and delete from : to the end. This generates 2 CodePage ranges, one with the decimal point, and one with the numbers:

Start 0x002E	End 0x002E	Base 0x0000
Start 0x0030	End 0x0039	Base 0x0001

Palette:



Only in Color version.

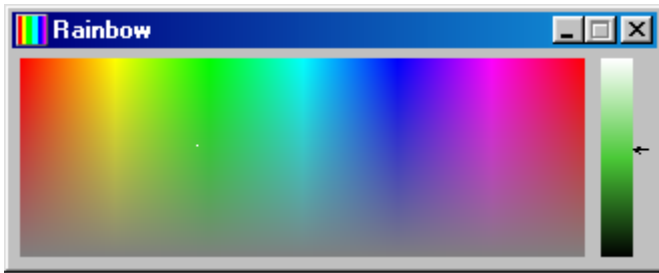
Palette shows available colors based on palette size and Color Resolution R,G,B in Setup of Symbol or Font, colors are chosen by a left mouse click on any of the color buttons. When the program is in palette mode this all the colors that it is possible to have simultaneously. In RGB mode it is just a collection of colors for the tool. The color for the active button can be changed by a left mouse click in the Rainbow window. The color of any button can be changed by a right mouse click on a Color Button, this does not activate the button.

Rainbow:

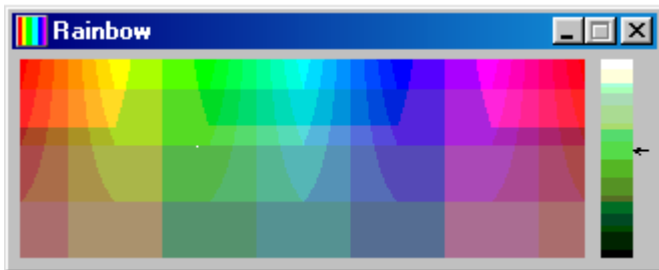


Only in Color version.

Rainbow shows possible colors based on color resolution. The appearance of the Rainbow window is highly dependant on the resolution of the 3 basic colors, see Color Resolution R,G,B in Setup of Symbol or Font. With many bits resolution the Rainbow is nice and smooth, with only a few bits resolution, the Rainbow splits up in many small irregular color fields. The window is only visible when the program is in RGB mode or New Symbol or Font Setup where it is only active when editing Palette. Colors for drawing can be changed by a left mouse click anywhere in the Rainbow window. The big color field has Hue horizontally and Saturation vertically, the chosen Hue and Saturation is used in the small window to make colors of different Intensity. To make it easier to find the choice of Hue and Saturation again, there is one pixel blinking where you clicked the last time. To make it easier to find Intensity again, there is an arrow where you clicked the last time.



Rainbow with Color Resolution R,G,B = 8,8,8



Rainbow with Color Resolution R,G,B = 2,3,3

Warnings, Features & Known BUGS:

Size and position of the windows are normally stored in the setup file *lcdicon4.ini* for B&W or *lcdicon5.ini* for color. If you change screen size some windows may end up outside the new screen, use the maximise button to get them all back, or reset to default in the help menu.

The Cursor and the Caret are shared windows resources and may not always be under the complete control of the program that owns them. This has several peculiar effects: When the LCD Icon Editor is in font mode and one of the auxiliary windows has input focus the caret may disappear from the main window, but keyboard input works as usual. The cursors used to indicate the active drawing tool may be wrong until you move them, or turn up in other programs.

Before calling Technical Support:

The set up of the LCD Icon Editor is saved to an INI file: *lcdicon4.ini* for B&W or *lcdicon5.ini* for color in the Windows directory. All kinds of strange behaviour can arise from a corrupted INI file, or one belonging to another version of the LCD Icon Editor, so if you suddenly get problems with the program, try the emergency exit = **Reset to Defaults and Exit**, this normally helps, else try deleting the INI file and running the LCD Icon Editor again. Remember to have your registration number ready, for if there is no INI file the Icon Editor assumes that it is a new installation.

Sometimes the program is completely impossible to work with or crashes after a short while, we believe that it is caused by a corrupted *LcdIconEdit.exe* or *ColorLcdIconEdit.exe* file, and our best advise is for you to download a new version of the program file.

Calling Technical Support:

You do not have to wait until you find an error to call. If you think something is missing, or just downright silly, do call.

Technical Support:

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