TFT 35/28/24 screen customize

- Convention

If the customer needs to customize the display picture of the touch screen , the following should be observed:

 Custom Logo image size is specified as: TFT35: Width = 480 pixels, height = 320 pixels. TFT28/TFT24: Width = 320 pixels, height = 240 pixels.



 2. Custom button image size is specified as: TFT35: Width = 95 pixels, height = 95 pixels. TFT28/TFT24: Width = 70 pixels, height = 70 pixels.



3. The custom image must be given a specific name. (detailed in firmware"icon_list.inc"file). the first "X_ICON (HEAT)" means need a "Heat.bmp" file, the second "X_ICON (MOVE)" means need a "Move.bm" file, etc...

	EXPLORER	C icon_list.inc × C boot.c
	OPEN EDITORS	1 /**
	▲ BIGTREETOUCH †?) 🎦 🖒 🗊	<pre>2 * Icon Keywords Generation</pre>
		3 * Usage: X_ICON(VALUE)
	C Language.c	4 * 'VALUE' is the keyword name without the 'ICON_'
	C Language.n	
1	C Language.inc	6 * Description: <u>https://en.wikipedia.org/wiki/X_Macro</u>
	C utf8_decode.c	
	C utf8_decode.h	8 X_ICON (HEAT)
	♦ UI	9 X_ICON (MOVE)
	▶ Vfs	
1	C boot.c	$12 \times TCON (EXTRUCE)$
	C boot.h	$12 \times 1000 (EAN)$
	C coordinate.c	14 X ICON (SETTINGS)
	C coordinate.h	15 X ICON (LEVELING)
	C extend c	16 X_ICON (INC)
	C extend h	17 X_ICON (DEC)
		18 X_ICON (NOZZLE)
		19 X_ICON (BED)
	C flashStore.h	20 X_ICON (1_DEGFEE)
	C icon_list.inc 1	21 X_ICON (5_DEGREE)
	C interfaceCmd.c	22 X_ICON (10_DEGREE)
	C interfaceCmd.h	23 X_ICON (STOP)
	C LCD_Encoder.c	24×1000 (M TNC)
	C LCD_Encoder.h	$26 \times TCON (Y TNC)$
	C parseACK.c	$27 \times ICON (Z INC)$
	C parseACK.h	28 X ICON (01 MM)
	▶ Fatfs	29 X_ICON (1_MM)
	▲ Hal	30 X_ICON (10_MM)
	STM32 USB Host Library	31 X_ICON (X_DEC)
	STM32 USB OTG Driver	32 X_ICON (Y_DEC)
	<pre></pre>	33 X_ICON (Z_DEC)

二、 Steps

We need to use the drawing tool to modify the desired image, such as Photoshop. There are two formats for our custom images:

I .Boot Logo image size is 480 x 320(for TFT35)/320 x 240(for TFT28/TFT24) pixels, named Logo, picture format is BMP. Button image size is 95 x 95(for TFT35)/70 x 70(for TFT28/TFT24) pixels, see appendix for corresponding name , picture format is BMP. Example in making logo picture with Photoshop as below.

II .Open PS, Ctrl+N, create a new canvas, modify the width and height of the canvas to the number we need. Then confirm it.

New					×
	<u>N</u> ame:	Untitled-1			ОК
Preset:	Custom		-		Reset
	Sįze;			-	Save Preset
	Width:	480	Pixels	-	Delete Preset
	<u>H</u> eight:	320	Pixels	-	
	Resolution:	72	Pixels/Inch	-	
	Color <u>M</u> ode:	RGB Color 🔹	8 bit	-	
Backgrour	nd <u>C</u> ontents:	White		-	Image Size:
🙁 Advan	iced				450.0K
	Color Pr <u>o</u> file:	sRGB IEC61966-2.1 👻			
Pi <u>x</u> el A	Aspect Ratio:	Square Pixels		•	

III.Directly drag the logo image into the PS.



 $IV.\ensuremath{\mathsf{Use}}$ the "Shift +Alt" on the Key Board to ajust the proportion and position.



 $V\,.\ensuremath{\mathsf{Next}}$ save the picture which we modified before to the Format of "BMP", Then named it of" Logo .bmp

Save As				×
保存在 (L)	: 🚺 bmp	- G 🖉 🖻	• •	
最近访问的位置	1	没有与搜索条件匹配的项。		
计算机				
1.324	文件名(图):	Logo. bmp	-	保存(2)
	<u>F</u> ormat:	BMP (*. BMP;*. RLE;*. DIB)	-	取消
Sa Sa	ve Options ve:	As a Copy Notes Alpha Channels Spot Colors Layers		
Co	lor:	Use Proof Setup: Working CMYK		
	Thumbnail	Use Lower Case Extension		
4	File must be sav	ed as a copy with this selection,		
ВМР	Options			×
	File Forma Windows OS/2	t O Can	K .cel	

VI.We need to Create a new folder called "TFT35(TFT24/TFT28)/bmp" in the SD card, next copy all picture you modified on the previous process to the folder "TFT35(TFT24/TFT28)/bmp", then put the SD card into the TFT screen and reset, the

Advanced Modes

Depth 1 Bit 4 Bit 8 Bit 16 Bit 24 Bit 32 Bit

Compress (RLE)

🔲 Flip row order



system inside will be upgraded automatically, Finally, the it will be finished.