MKS TFT picture&logo Customization Manual

Here is the way to customize the picture and logo on the touch screen interface.

- 1.Creating range:
- a. Button images (see picture: "1")(including textand icon).
- b. Background color of screen(see picture : "3", default Black).
- c. Color of text on button (see picture: "4", default white).
- d. Background color of buttons (see picture: "5", default dark blue).
- e. Color of text . (see picture: "6" ,default white).
- f. Text color of file name, (see picture:"7",default white). We suggest the same color with button .
- g. Button defaults 3D effect ,that will turn up white border around it.





web: osoyoo.com

Data: https://github.com/makerbase-mks/



2. Button image size, 16bpp, wide =78 pixels, high =104 pixels.

3. Logo image size, 16bpp, wide =320 pixels, high =240 pixels.

4. The custom image must be named after the appendix (see

Appendix 1).

5. The color value is 16 binary, according to the 3 primary colors of

blue, green, red order (see Appendix 2).

6. Sopport creating more function on "more" (7 buttons max).

Steps:

- 1. Image customization.
- a. Install the "Image2Lcd" tool that we provide.

Data: https://github.com/makerbase-mks/

b. Follow the following operation for each picture:

Open the Image2Lcd software and set as below:

🔟 Image2Lcd v2.9		
👌 🔳 🙀 打开 保存 👸	図 ○ ○ I2L 置 重新载入 上一幅 下一幅 帮助 关于	
輸出数据类型: 二进制(*.bin) 扫描模式: 水平扫描 输出灰度: 16位真彩色 载大宽度和高度 320 240		
 □ 包含图像头数据 □ 字节内象素数据反序 □ 自右至左扫描 □ 自底至顶扫描 □ 高位在前(MSB First) 	恢复缺省值	D
	<u>輸出图像调整</u> 256色 4096色 16位彩色 18位彩色 24位彩色 32位彩色 注册	

Prepare ".bmp" format image, using the Image2Lcd to open it:

Image2Lcd v2.9		
 ・ ・	図 ← → ● 重新载入 上一幅 下一幅 帮助	IZL 关于
 輸出裁据类型: 二进制(*bin) ▼ 扫描模式: 水平扫描 ▼ 輸出友度: 10位真彩色 ▼ 最大宽度和高度 320 240 ★ 		
 ① 包含國際头数据 「 字节内象素数据反序 「 自右至左扫描 「 自底至顶扫描 「 高位在前(MSB First) 	恢复缺省值 「 R:5bits,G:6bits,B:5bit C R:5bits,G:5bits,B:5bit	·颜色数据排列(WORD bit[15~0]) ts ts
	輸出图像调整 256色 4096色 16位彩色 18位	彩色 24位彩色 32位彩色 注册
制入图像: pmp_test.bmp (.	(8,104) 和田图像:(/	8,104)

Then, save the file with the name which we specify.



c. Create a folder "mks_pic" in the root directory of SD card, and put all the .bin files into it.

2. Screen background color customization

Find "cfg_background_color" in "mks _config.txt" ,then change the color value behind the colon you need, and save.

As follow:

>cfg_background_color:0xFF0015

3. Color of title text customization

Find " cfg_title_color" in "mks _config.txt" ,then change the color value behind the colon you need , and save.

As follow:

>cfg_title_color:0xFFFFFF

 Background color such as temperature state customization
 Find " cfg_state_background_color" in "mks _config.txt" ,then change the color value behind the colon you need , and save.

As follow:

>cfg_state_background_color:0x800000

5. Color of text such as temperature state customization

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Find " cfg_state_text_color" in "mks _config.txt" ,then change the color value behind the colon you need , and save.

As follow:

>cfg_state_text_color:0xFFFFFF

6. Customize the color of filename button in "file system" interface.

Find " cfg_filename_color " ,then change the color value behind the colon you need , and save

As follow:

>cfg_filename_color:0xFFFFF

(The creating of other buttons and text is also the same)

7. Function button settings on the "more" menu:

a. Find "moreitem_pic_cnt", then change the numbers value

behind the colon you need , and save.(7 buttons max)

As follow:

>moreitem_pic_cnt:0

 b. Adjust the command line behind the colon of "moreitem_button1_cmd", and take it as your first function

button. Each command must make interval with a semicolon ";" . The whole button command lines will end up with newline. But total characters for the command can not exceed 200.

As follow:

```
>moreitem_button1_cmd:G28 X;
```

```
>moreitem_button2_cmd:G28 X;
```

c. Other 6 buttons' creating are the same way.

8.Creating 3D effect on buttons

```
Modify value behind colon of "cfg_BUTTON_3D_effects" ,1 is yes.
0 is no .
```

As follow:

>cfg_BUTTON_3D_effects:0

9. Copy file "mks_config.txt" and "mks_pic" to SD card root directory, insert SD card into MKS TFT, power on , then it will upgradeautomatically.

Appendix 1

Photo name

web: osoyoo.com

Data: https://github.com/makerbase-mks/

1. logo: bmp_logo.bin



2. "Ready Print" interface:

web: osoyoo.com

Data: <u>https://github.com/makerbase-mks/</u>



预热(PreHeat):	移动(Move):	回零(Home):	打印 (printing):
bmp_preHeat.bin	bmp_mov.bin	bmp_zero.bin	bmp_printing.bin
挤出(extruder):	风扇(Fan):	设置(Set):	更多(More):
bmp_extruct.bin	bmp_fan.bin	bmp_set.bin	bmp_more.bin

3. PreHeat Interface:



Add(增加): bmp_Add.bin			Dec(减少): bmp_Dec.bin
Preheat target Heatbed (热床): bmp_bed.bin Extruder1 (喷头1): bmp_extru1.bin Extruder 2 (喷头2):	Stepper: 1℃: bmp_step1_degree.bin 5℃: bmp_step5_degree.bin 10 ℃: bmp_step10_degree.bin	Close(关闭): bmp_speed0.bin	Back(返回): bmp_return.bin
bmp_extru2.bin			

4. Extruder Interface



Material in (进料): bmp in.bin			Material out(退 料):
• =			bmp_out.bin
Extruder(挤出机): E1:bmp_extru1.bin E2:bmp_extru2.bin	Stepper: 1mm:bmp_step1_mm.bin 5mm:bmp_step5_mm.bin 10mm:bmp_step10_mm.bin	Speed (变速):Slow(慢 速):bmp_speed_slow.binNorma(常速):bmp_speed_normal.binHigh (高速):bmp_speed_high.bin	Back(返回): bmp_return.bin

5. Move Interface



			Stepper:
X+:	Y+:	Z+:	0.1mm: bmp_step_move0_1.bin
bmp_xAdd.bin	bmp_yAdd.bin	bmp_zAdd.bin	1mm: bmp_step_move1.bin
			10mm: bmp_step_move10.bin
X-: bmp_xDec.bin	Y-: bmp_yDec.bin	Z-: bmp_zDec.bin	Back: bmp_return.bin

6. Home Interface:



Home(归零):	X:	Y:	Z:
bmp_zeroA.bin	bmp_zeroX.bin	bmp_zeroY.bin	bmp_zeroZ.bin
			Back(返回): bmp_return.bin

7. Fan Interface



Add(增加): bmp_Add.bin			Dec(减少): bmp_Dec.bin
Full Speed(全速):	Half Speed(高速)	Close(关闭):	Back(返回):
bmp_speed255.bin	bmp_speed127.bin	bmp_speed0.bin	bmp_return.bin

8. Setting Interface



File Sys (文件系 统): bmp_fileSys.bin	Calibration(触屏纠正): bmp_adj.bin	Wifi: bmp_wifi.bin	Connection(连接): bmp_connect.bin
About:	Leveling(调平)	Motor OFF(关闭电机)	Back(返回):
bmp_about.bin	bmp_function1	bmp_function2	bmp_return.bin

9. File system Interface



SD selection:	U-disk(U 盘):	
Unselect: bmp_sd.bin	Unselected bmp_usb.bin	
Selected: bmp_sd_sel.bin	Selected :bmp_usb_sel.bin	
		Back(返回):
		bmp_return.bin

10.Connecting Interface



			250000:
9600:	57600:	115200:	Unselected
Unselected:bmp_baud9600	Unselected:bmp_baud	Unselected:bmp_bau	bmp_baud25000
.bin	57600.bin	d115200.bin	0.bin
Selected:bmp_baud9600_s	Selected:bmp_baud57	Selected:bmp_baud1	Selected:bmp_b
el.bin	600_sel.bin	15200 _sel.bin	aud250000_sel.b
			in
			Back(返回):
			bmp_return.bin

11.More Interface

Ready			
	5		v1.0
Mo	re More	More M	ore 132_L
			MKS TF
Мо	re More	More B	a c k
custom1: bmp_custom1.bin	custom2: bmp_custom2.bin	custom3: bmp_custom3.bin	custom4: bmp_custom4.bin
custom5: bmp_custom5.bin	custom6: bmp_custom6.bin	custom7: bmp_custom7.bin	Back(返回): bmp_return.bin

11."File System" Interface



File:bmp_file.bin Directory: bmp_dir.bin			
	page up:	page down:	Back:
	bmp_pageUp.bin	bmp_pageDown.bin	bmp_return.bin

```
Data: <u>https://github.com/makerbase-mks/</u>
```

12. Printing Interface



			Option: bmp_menu.bin
E1: bmp_extru1_no_ words.bin	E2: bmp_extru2_no_ words.bin	bed: bmp_bed_no_words. bin	Fan: bmp_fan_no_words.bin Fan move: bmp_fan_move.bin

13.Option Interface

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Data: https://github.com/makerbase-mks/



Pause(暂停): bmp_pause.bin			Stop(停止): bmp_stop.bin
Temperature(温度):	Speed(变速):	Fan(风扇):	Back(返回):
bmp_temp.bin	bmp_speed.bin	bmp_fan.bin	bmp_return.bin

14. Pause Interface



Resume(恢复): bmp_resume.bin			Stop 停止: bmp_stop.bin
Extruder(挤出机): bmp_extruct.bin	Move(移动): bmp_mov.bin	Fan(风扇): bmp_fan.bin	Temperature (温 度): bmp_temp.bin

18. Speed interface



Add(增加): bmp_Add.bin			Dec(减少): bmp_Dec.bin
Move(移动): Unselected:bmp_mov.bin Selected: bmp_mov_sel.bin	Extruder(挤出机): Unselected: bmp_extruct.bin Selected: bmp_extruct_sel.bin	Stepper: 1mm: bmp_step1_mm.bin 5mm: bmp_step5_mm.bin 10mm: bmp_step10_mm.bin	Back: bmp_return.bin

Appendix 2

Hexadecimal value for the Common Colors

Blue	0xFF0000
Green	0x00FF00

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Data: <u>https://github.com/makerbase-mks/</u>

Red	0x0000FF
yellow	0x00FFFF
Light blue	0xFF8080
Light green	0x80FF80
Light red	0x8080FF
Cyan	0xFFFF00
Light Cyan	0xFFFF80
Light yellow	0x80FFFF
Deep green	0x008000
Deep red	0x000080
Deep blue	0x800000
Deep yellow	0x008080
Black	0x000000
White	OxFFFFF