## MKS TFT pictures&logos 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 text and 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.





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- 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).

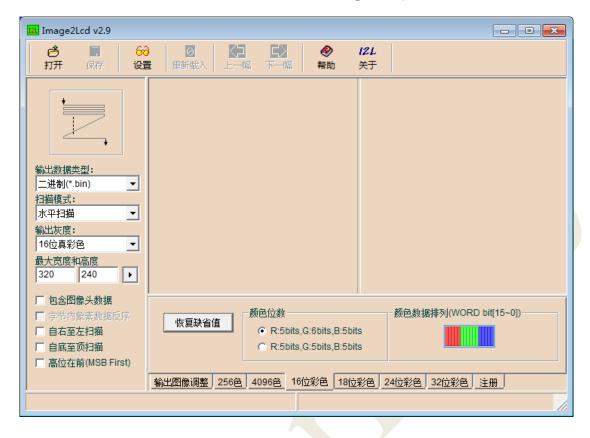
# Steps:

- 1. Image customization.
- a. Install the "Image2Lcd" tool that we provide.
- b. Follow the following operation for each picture:

Open the Image2Lcd software and set as below:

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

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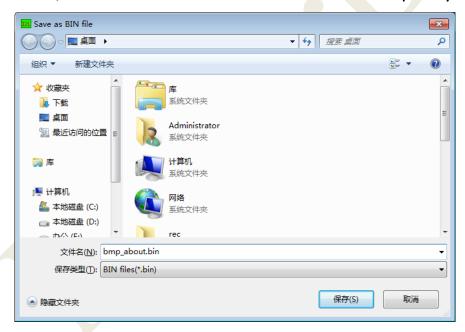
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it:



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.

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### 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

4. 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:0xFFFFFF

(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

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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 upgrade automatically.

## **Appendix 1**

Photo name

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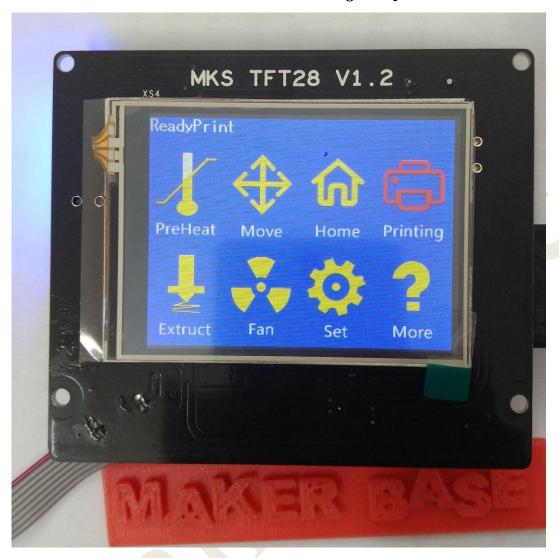
1. logo: bmp\_logo.bin



# 2. "Ready Print" interface:

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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:

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Add: bmp_Add.bin			Dec: bmp_Dec.bin
Preheat target  Heatbed: bmp_bed.bin  Extruder1: bmp_extru1.bin  Extruder 2: bmp_extru2.bin	Stepper:  1°C: bmp_step1_degree.bin  5°C: bmp_step5_degree.bin  10 °C: bmp_step10_degree.bin	Close: bmp_speed0.bin	Back: bmp_return.bin

### 4. Extruder Interface

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Material in: bmp_in.bin			Material out: bmp_out.bin
Extruder: 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: Slow: bmp_speed_slow.bin normal:bmp_speed_normal. bin high:bmp_speed_high.bin	Back: bmp_return.bin

## 5. Move Interface

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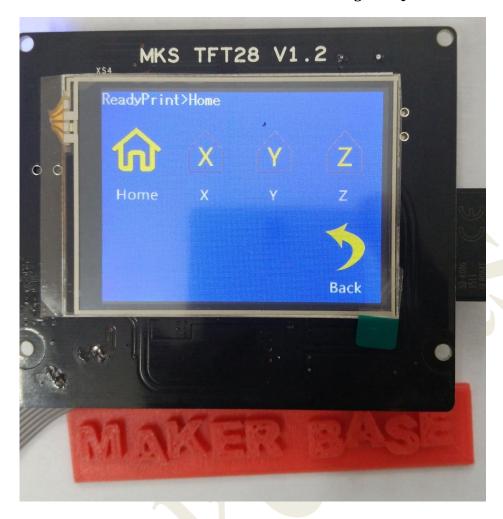


	A 1		Stepper:
X+:	Y+:	Z+:	0.1mm: bmp_step_move0_1.bin
bmp_xAdd.bin	bmp_yAdd.bin	bmp_zAdd.bin	1mm: bmp_step_move1.bin
			10mm: bmp_step_move10.bin
X-:	Y-:	Z-:	Back:
bmp_xDec.bin	bmp_yDec.bin	bmp_zDec.bin	bmp_return.bin

## 6. Home Interface:

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Home:	X:	Y:	Z:
bmp_zeroA.bin	bmp_zeroX.bin	bmp_zeroY.bin	bmp_zeroZ.bin
			Back:
			bmp_return.bin

## 7. Fan Interface

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Add: bmp_Add.bin			Dec: bmp_Dec.bin
Full Speed:	Half Speed	Close:	Back:
bmp_speed255.bin	bmp_speed127.bin	bmp_speed0.bin	bmp_return.bin

# 8. Setting Interface

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File Sys:	Calibration:	Machine Type:	Connection: bmp_connect.bin
bmp_fileSys.bin	bmp_adj.bin	bmp_machine.bin	
Wifi: bmp_wifi.bin	Language: bmp_lang.bin	About: bmp_about.bin	Back: bmp_return.bin

# 9. File system Interface

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

# **10.** Machine Type Interface

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Normal: Unelected:bmp_norm.bin Selected:bmp_norm_sel.bin	Delta: Unselected:bmp_delta.bin Selected: bmp_delta_sel.bin	
		Back: bmp_return.bin

# **11.**Connecting Interface

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9600:	115200:	250000:	
Unselected:bmp_baud9600	Unselected:bmp_baud	Unselected	
.bin	115200.bin	bmp_baud250000.bin	
Selected:bmp_baud9600_s	Selected:bmp_baud11	Selected:bmp_baud2	
el.bin	5200 _sel.bin	50000_sel.bin	
			Back:
			bmp_return.bin

## 12.Language Interface

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ı	Chinese: Unselected:bmp_simple.bin Selected:bmp_simple_sel.bin	English: Unselected: bmp_en.bin Selected:bmp_en_sel.bin	
		4	Back: bmp_return.bin

## 13. More Interface

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custom1:	custom2:	custom3:	custom4:
bmp_custom1.bin	bmp_custom2.bin	bmp_custom3.bin	bmp_custom4.bin
custom5:	custom6:	custom7: bmp_custom7.bin	Back:
bmp_custom5.bin	bmp_custom6.bin		bmp_return.bin



# 13. "File System" Interface

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

## **14.Printing Interface**

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			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

# **15.Option Interface**

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Pause: bmp_pause.bin			Stop: bmp_stop.bin
Temperature: bmp_temp.bin	Speed:	Fan:	Back:
	bmp_speed.bin	bmp_fan.bin	bmp_return.bin

## 16. Pause Interface

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Resume: bmp_resume.bin			Stop: bmp_stop.bin
Extruder: bmp_extruct.bin	Move: bmp_mov.bin	Fan: bmp_fan.bin	Temperature: bmp_temp.bin

# 18. Speed interface

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Add: bmp_Add.bin	10		Dec: bmp_Dec.bin
Move: Unselected:bmp_mov.bin Selected: bmp_mov_sel.bin	Extruder: 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

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Blue	0xFF0000
Green	0x00FF00
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
Light yellow  Deep green  Deep red  Deep blue  Deep yellow  Black	0x80FFFF 0x008000 0x000080 0x800000 0x008080 0x000000

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