

How to Modify the Display Direction

1、GPIO port type LCD Rotation Methods :

Apply to GPIO port LCD(2.4 inch,2.8 inch,3.2 inch,3.5 inch).

Execute command at terminal :

```
sudo nano /boot/config.txt
```

If using 2.4 inch/2.8 inch/3.2 inch LCD, please find" `dtoverlay=tft9341`" ,then add rotate parameter, and do as follows :

```
dtoverlay=tft9341:rotate=value
```

If using 3.5 inch LCD, please find" `dtoverlay=tft35a`" then add rotate parameter, and do as follows :

```
dtoverlay=tft35a:rotate=value
```

We take 3.5inch LCD for example:

For rotation of 0 degree(vertical screen), the corresponding value is:

```
dtoverlay=tft35a:rotate=0
```

For rotation of 90 degree(horizontal screen), the corresponding value is:

```
dtoverlay=tft35a:rotate=90
```

For rotation of 180 degree(vertical screen), the corresponding value is:

```
dtoverlay=tft35a:rotate=180
```

For rotation of 270 degree(horizontal screen), the corresponding value is:

```
dtoverlay=tft35a:rotate=270
```

Press Ctrl + X, select Y, save and exit.

2、HDMI port type LCD Rotation Methods :

This method just applies to the HDMI interface type LCD(such as 3.97inch, 4.3inch,5 inch,7 inch model B,7 inch model C,10.1 inch)

Execute command at terminal:

```
sudo nano /boot/config.txt
```

Find “display_rotate”, if there is not, please add it in

There are the meaning of parameter “display_rotate”

display_rotate	result
0	no rotation
1	rotate 90 degrees clockwise
2	rotate 180 degrees clockwise
3	rotate 270 degrees clockwise
0x10000	horizontal flip
0x20000	vertical flip

For rotation of 0 degree, the corresponding value is:

```
display_rotate=0
```

For rotation of 90degrees, the corresponding value is:

```
display_rotate=1
```

For rotation of 180 degrees, the corresponding value is:

```
display_rotate=2
```

For rotation of 270 degrees, the corresponding value is:

```
display_rotate=3
```

For horizontal flip display, the corresponding value is:

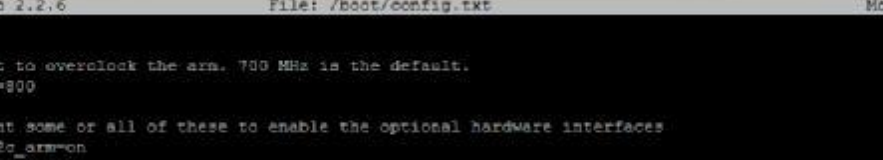
```
display_rotate=0x10000
```

For vertical flip display,the corresponding value is:

```
display_rotate=0x20000
```

Press Ctrl + X, select Y, save and exit.

As picture:



```
pi@raspberrypi ~
GNU nano 2.2.6 File: /boot/config.txt Modified

#uncomment to overclock the arm. 700 MHz is the default.
#arm_freq=800

# Uncomment some or all of these to enable the optional hardware interfaces
dtcparam=12g_ars=on
dtcparam=12s=on
dtcparam=spi=on
enable_uart=1
# Uncomment this to enable the lirc-rpi module
dtcparam=lirc-rpi

# Additional overlays and parameters are documented /boot/overlays/README

# Enable audio (loads snd_bcm2835)
dtcparam=audio=on
dtcparam=tft35a:rotate=270
dtcparam=ada7846,cs=1,penirq=17,penirq_pull=2,speed=1000000,keep_vref_on=1,swapky=1,pnms=255,xohms=60,xs
```

Section "InputClass"

Identifier "calibration"

MatchProduct "ADS7846 Touchscreen"

Option "Calibration" "3951 140 3998 261"

Option "SwapAxes" "0"

EndSection

For rotating 270 degrees to display, that is, display_rotate=3, the corresponding touch parameters are modified as:

```
Section "InputClass"
    Identifier      "calibration"
    MatchProduct    "ADS7846 Touchscreen"
    Option  "Calibration"      "3998 261 140 3951"
    Option  "SwapAxes"         "1"
EndSection/
```

When modified, restart to see the effect.

```
sudo reboot
```