

如何修改显示方向和触摸

(HDMI-电阻触摸)

一、HDMI 接口型 LCD 旋转显示方法：

(适用于 HDMI 接口型 LCD (如 3.5 寸 (MPI3508), 5 寸 (MPI5008)), GPIO 接口型不适用)

1) 打开 `config.txt` 文件在树莓派中执行命令：

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

2) 找到 “`display_rotate`” 参数项，如果没有该项则添加进去，具体参数含义如下：

如需旋转 0 度，则对应值为：

```
display_rotate=0
```

如需旋转 90 度，则对应值为：

```
display_rotate=1
```

如需旋转 180 度，则对应值为：

```
display_rotate=2
```

如需旋转 270 度，则对应值为：

```
display_rotate=3
```

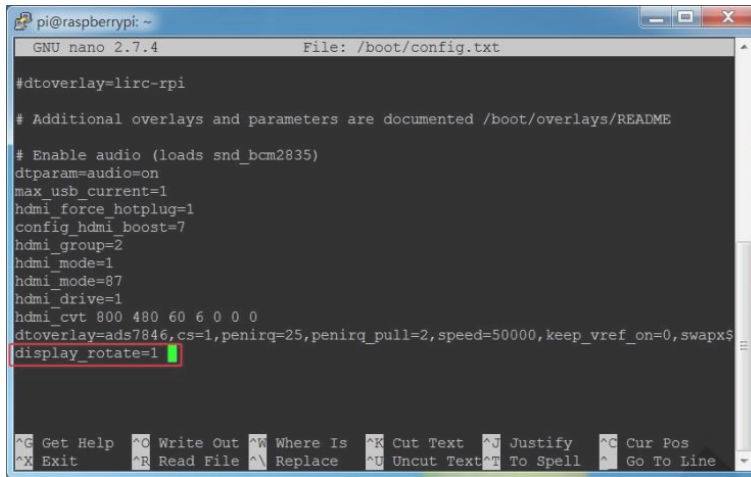
如需水平翻转显示，则对应值为：

```
display_rotate=0x10000
```

如需垂直翻转显示，则对应值为：

```
display_rotate=0x20000
```

按键盘 **Ctrl+X**, 退出;



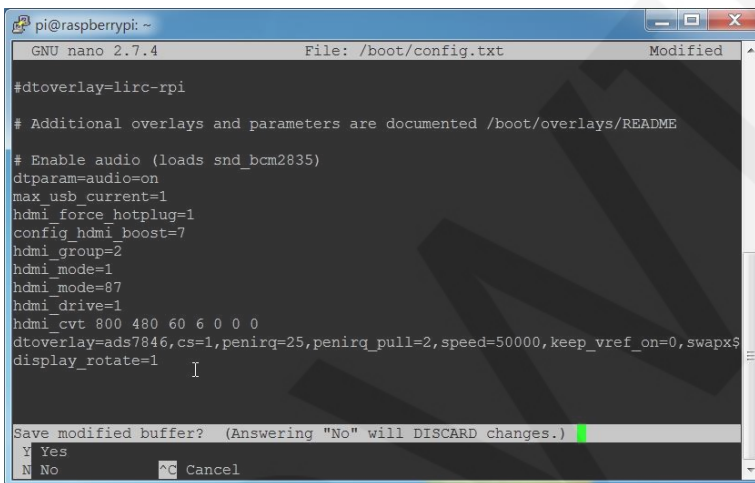
```
pi@raspberrypi: ~
GNU nano 2.7.4 File: /boot/config.txt

#dtoverlay=lirc-rpi

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

# Enable audio (loads snd_bcm2835)
dtparam=audio=on
max_usb_current=1
hdmi_force_hotplug=1
config_hdmi_boost=7
hdmi_group=2
hdmi_mode=1
hdmi_mode=87
hdmi_drive=1
hdmi_cvt 800 480 60 6 0 0 0
dtoverlay=ads7846,cs=1,penirq=25,penirq_pull=2,speed=50000,keep_vref_on=0,swapx$
display_rotate=1
```

按 **Y**, 确认保存;



```
pi@raspberrypi: ~
GNU nano 2.7.4 File: /boot/config.txt Modified

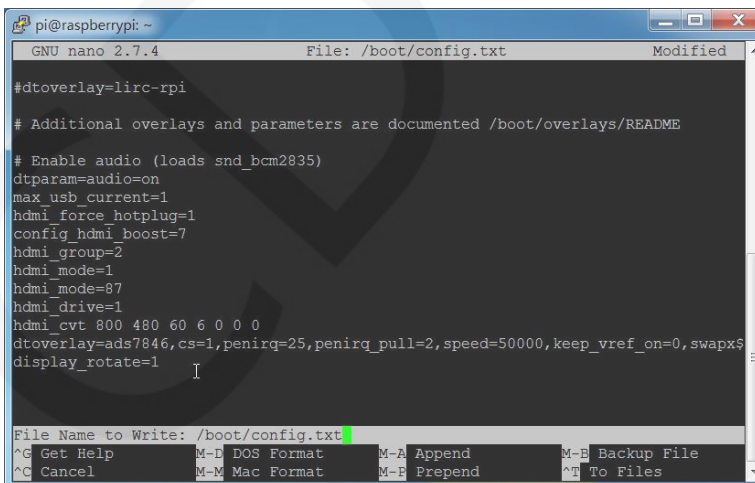
#dtoverlay=lirc-rpi

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

# Enable audio (loads snd_bcm2835)
dtparam=audio=on
max_usb_current=1
hdmi_force_hotplug=1
config_hdmi_boost=7
hdmi_group=2
hdmi_mode=1
hdmi_mode=87
hdmi_drive=1
hdmi_cvt 800 480 60 6 0 0 0
dtoverlay=ads7846,cs=1,penirq=25,penirq_pull=2,speed=50000,keep_vref_on=0,swapx$
display_rotate=1

Save modified buffer? (Answering "No" will DISCARD changes.)
Y Yes
N No ^C Cancel
```

按 **Enter**, 确认保存文件名;



```
pi@raspberrypi: ~
GNU nano 2.7.4 File: /boot/config.txt Modified

#dtoverlay=lirc-rpi

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

# Enable audio (loads snd_bcm2835)
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hdmi_drive=1
hdmi_cvt 800 480 60 6 0 0 0
dtoverlay=ads7846,cs=1,penirq=25,penirq_pull=2,speed=50000,keep_vref_on=0,swapx$
display_rotate=1

File Name to Write: /boot/config.txt
```

3) 重启树莓派即可生效

```
sudo reboot
```

二、修改电阻触摸参数

当显示方向改变后还需要通过修改 `99-calibration.conf` 文件,对触摸进行设置,在树莓派中执行命令:

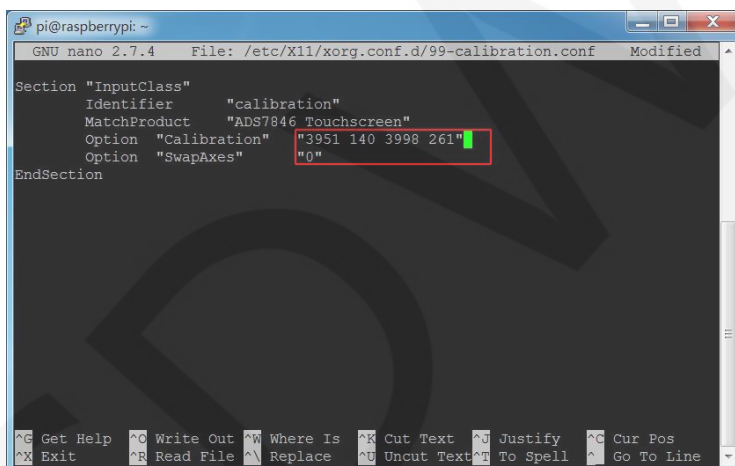
```
sudo nano /etc/X11/xorg.conf.d/99-calibration.conf
```

以 5inch HDMI Display (MPI5008) 为例:

如需旋转 180 度显示,即 `rotate=2`,对应触摸参数修改为:

```
Section "InputClass"
    Identifier      "calibration"
    MatchProduct   "ADS7846 Touchscreen"
    Option         "Calibration"    "3951 140 3998 261"
    Option         "SwapAxes"       "0"
EndSection
```

如图所示:



保存之后,重启树莓派即可生效

```
sudo reboot
```

(下图是旋转角度与电阻触摸参数之间的关系)

旋转角度与电阻触摸参数的关系 (HDMI-电阻触摸)		
种类 \ 角度	3.5 寸 (MPI3508)	5 寸 (MPI5008)
display_rotate=0	"3945 233 3939 183" "1" (默认方向)	"140 3951 261 3998 " "0" (默认方向)
display_rotate=1	"3939 183 233 3945" "0"	"261 3998 3951 140" "1"
display_rotate=2	"233 3945 183 3939" "1"	"3951 140 3998 261" "0"
display_rotate=3	"183 3939 3945 233" "0"	"3998 261 140 3951" "1"