

如何校准电阻触摸屏

(只适用于电阻触摸屏，电容触摸屏不适用)

1、安装 Xinput，在树莓派中执行下面的命令代码

(注意：本次安装需要树莓派连接网络)

方法 1(推荐使用)：

直接在线安装 (32 位/64 位系统都一样)：

```
sudo apt-get install xinput-calibrator
```

```
pi@raspberrypi:~$ sudo apt-get install xinput-calibrator
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  xinput-calibrator
0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 43.9 kB of archives.
After this operation, 173 kB of additional disk space will be used.
Get:1 http://deb.debian.org/debian bookworm/main arm64 xinput-calibrator arm64 0.7.5+git20140201-1+b2 [43.9 kB]
Fetched 43.9 kB in 2s (20.0 kB/s)
Selecting previously unselected package xinput-calibrator.
(Reading database ... 128440 files and directories currently installed.)
Preparing to unpack ../xinput-calibrator_0.7.5+git20140201-1+b2_arm64.deb ...
Unpacking xinput-calibrator (0.7.5+git20140201-1+b2) ...
Setting up xinput-calibrator (0.7.5+git20140201-1+b2) ...
Processing triggers for mailcap (3.70+nmul) ...
Processing triggers for desktop-file-utils (0.26-1) ...
Processing triggers for gnome-menus (3.36.0-1.1) ...
Processing triggers for man-db (2.11.2-2) ...
pi@raspberrypi:~$
```

方法 2：

```
sudo rm -rf LCD-show
git clone https://github.com/goodtft/LCD-show.git
chmod -R 755 LCD-show
cd LCD-show/
```

如果是 32 位系统，请执行：

```
sudo dpkg -i -B xinput-calibrator_0.7.5-1_armhf.deb
```

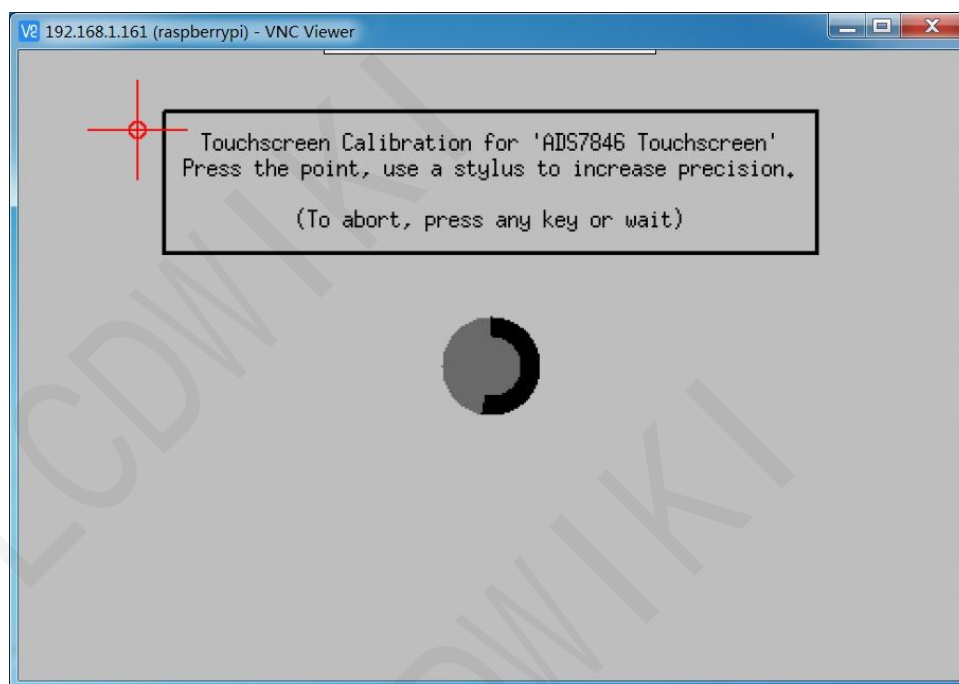
如果是 64 位系统，请执行：

```
sudo dpkg -i -B xinput-calibrator_0.7.5+git20140201-1+b2_arm64.deb
```

2、执行触摸校准命令

```
DISPLAY=:0.0 xinput_calibrator
```

此时屏幕会弹出触摸校准界面，依次用触摸笔点击四个校准点完成校准



校准完成后会显示新的触摸参数，（LCD 种类不同，校准次数不同，参数也会有所区别），如下图所示：

```
pi@raspberrypi: ~/LCD-show
Preparing to unpack xinput-calibrator 0.7.5-1 armhf.deb ...
Unpacking xinput-calibrator (0.7.5+git20140201-1) ...
Setting up xinput-calibrator (0.7.5+git20140201-1) ...
Processing triggers for man-db (2.7.6.1-2) ...
Processing triggers for gnome-menus (3.13.3-9) ...
Processing triggers for desktop-file-utils (0.23-1) ...
Processing triggers for mime-support (3.60) ...
pi@raspberrypi:~/LCD-show $ DISPLAY=:0.0 xinput_calibrator
Calibrating EVDEV driver for "ADS7846 Touchscreen" id=6
current calibration values (from XInput): min_x=140, max_x=3951 and min_y=261, max_y=3998

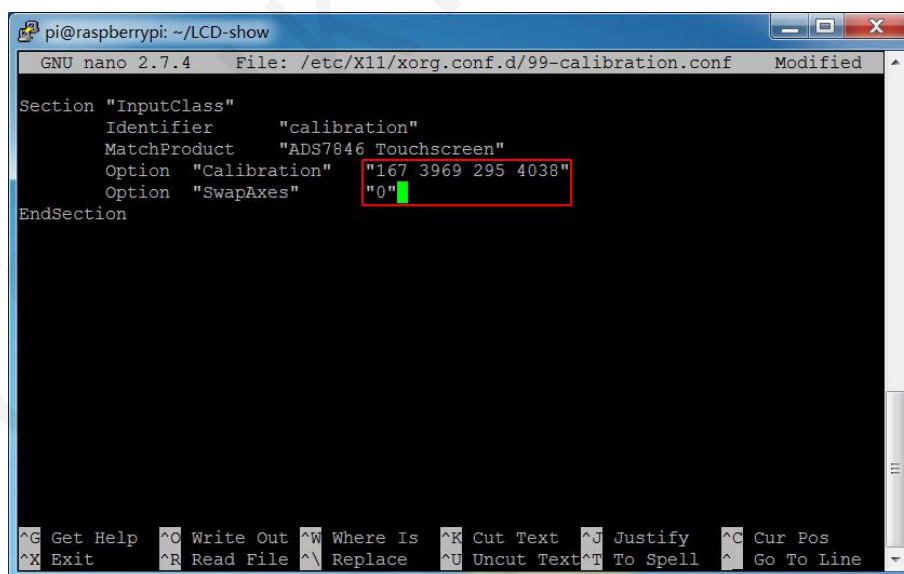
Doing dynamic recalibration:
Setting calibration data: 167, 3969, 295, 4038
--> Making the calibration permanent <--
copy the snippet below into '/etc/X11/xorg.conf.d/99-calibration.conf' (/usr/share/X11/xorg.conf.d/ in some distro's)
Section "InputClass"
    Identifier      "calibration"
    MatchProduct    "ADS7846 Touchscreen"
    Option "Calibration" "167 3969 295 4038"
    Option "SwapAxes" "0"
EndSection
pi@raspberrypi:~/LCD-show $
```

3、修改校准后的触摸参数并保存

3.1 执行下面的命令代码，打开 `99-calibration.conf` 文件

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

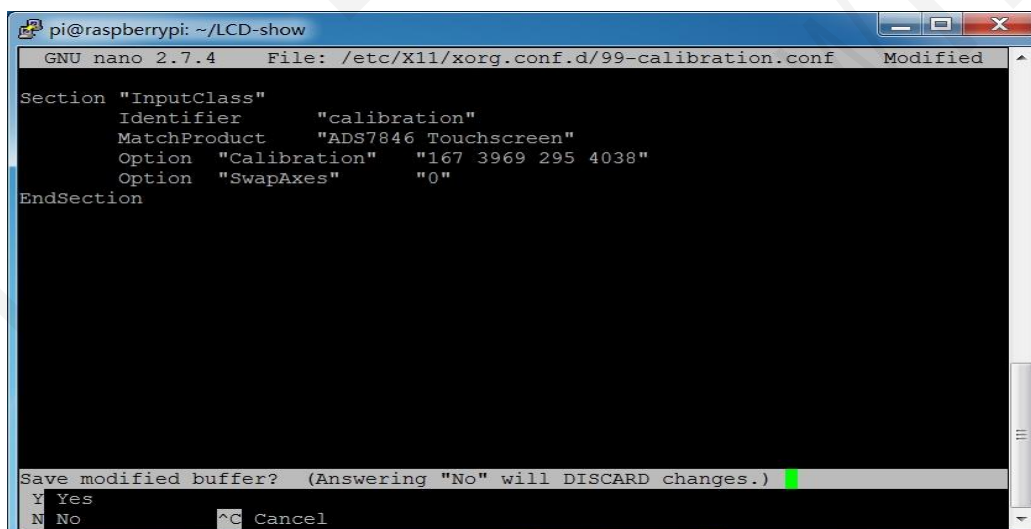
3.2 将校准后的触摸参数保存在 `99-calibration.conf` 文件中 按 `Ctrl+X` 键，退出；



```
pi@raspberrypi: ~/LCD-show
GNU nano 2.7.4 File: /etc/X11/xorg.conf.d/99-calibration.conf Modified
Section "InputClass"
    Identifier      "calibration"
    MatchProduct   "ADS7846 Touchscreen"
    Option "Calibration" "167 3969 295 4038"
    Option "SwapAxes" "0"
EndSection

^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text   ^J Justify   ^C Cur Pos
^X Exit      ^R Read File  ^\ Replace   ^U Uncut Text ^T To Spell  ^_ Go To Line
```

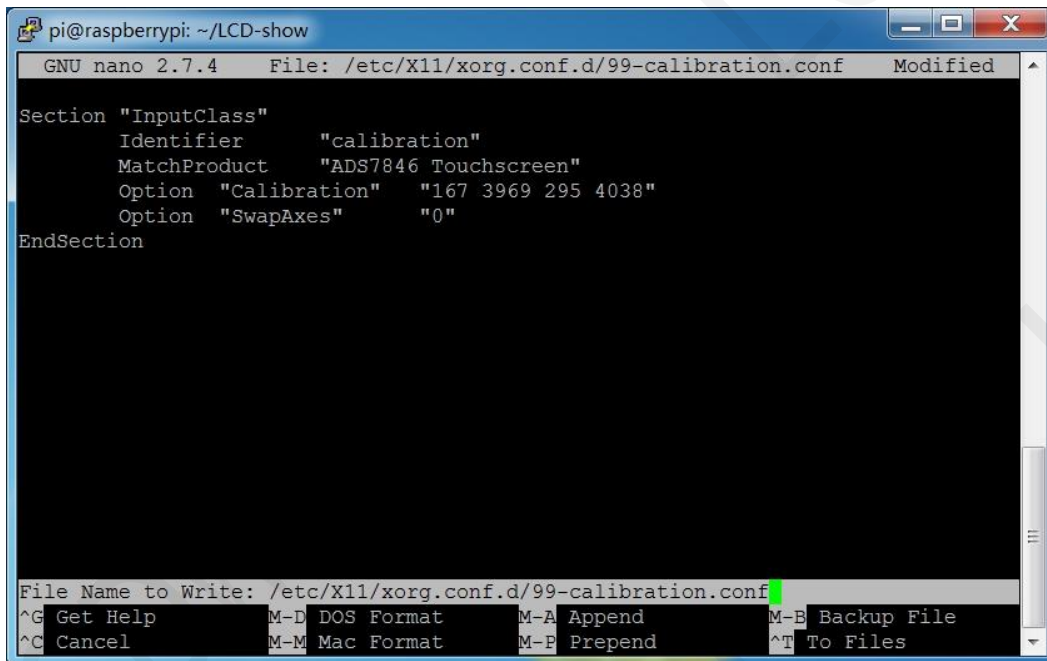
3.3 按 `Y` 键，确认保存；



```
pi@raspberrypi: ~/LCD-show
GNU nano 2.7.4 File: /etc/X11/xorg.conf.d/99-calibration.conf Modified
Section "InputClass"
    Identifier      "calibration"
    MatchProduct   "ADS7846 Touchscreen"
    Option "Calibration" "167 3969 295 4038"
    Option "SwapAxes" "0"
EndSection

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

3.4 按 Enter 键，确认保存文件名；



```
pi@raspberrypi: ~/LCD-show
GNU nano 2.7.4 File: /etc/X11/xorg.conf.d/99-calibration.conf Modified
Section "InputClass"
    Identifier      "calibration"
    MatchProduct   "ADS7846 Touchscreen"
    Option "Calibration" "167 3969 295 4038"
    Option "SwapAxes" "0"
EndSection
File Name to Write: /etc/X11/xorg.conf.d/99-calibration.conf
^G Get Help      M-D DOS Format  M-A Append     M-B Backup File
^C Cancel        M-M Mac Format  M-P Prepend    ^T To Files
```

3.5 重新启动树莓派

```
sudo reboot
```