

User Guides

Windows PC

This product supports Windows 10/8.1/8/7 OS. :

- 1) Connect the TOUCH interface of LCD to the USB interface of PC. Waiting for a moment, The touch will be recognized by Windows automatically
- 2) Connect the HDMI interface of LCD to the HDMI port of PC

Note 1: If multi-screen are connected to one PC at the same time, you can only control the cursor by this LCD, so please set the LCD as the main screen.

Some of PC supply full power to the LCD, in this case, you can connect an external power adapter to the power interface of the LCD.

Raspberry Pi

Supports Raspbian/Ubuntu mate/Windows 10 IoT Core

When working with Raspberry Pi, you should set the resolution of the LCD by yourself, or else the LCD screen will not work. For more detail information, please read the following section.

Download the Raspbian image from [Raspberry Pi website](#). Write the image to a TF card and append the following lines to the config.txt file which is located in the root of your TF card:

- 1) Unzip the archive to get the .img file.
- 2) Insert the TF card to PC and format the TF card by [File:Panasonic SDFormatter.zip](#) software.
- 3) Open the [File:Win32DiskImager.zip](#) software and select the image file unzipped and click write to writing it.
- 4) After writing, modify config.txt file and append the following lines to the config.txt. The file is located in BOOT directory of the TF card.

```
max_usb_current=1
hdmi_group=2
hdmi_mode=87
hdmi_cvt 1024 600 60 6 0 0 0
```

- 5) Connect the Touch interface of the LCD to the USB port of Raspberry Pi.
- 6) Connect the HDMI interface of the LCD to the HDMI port of the RaspberryPi.
- 7) Power on the Raspberry Pi. (You can adjust the brightness of the LCD by the OSM menu, whose control buttons are on the side fo the LCD)

Others

Turn off power saving

Sometime you may want to keep the LCD display all the time, in this case, you need to turn off the power saving of Raspberry Pi.

Modify lightdm.conf

```
sudo nano /etc/lightdm/lightdm.conf
```

Find the [SeatDefaults] Option and the line that "xserver-command", change it from

```
#xserver-command=X
```

to

```
xserver-command=X -s 0 -dpms
```

- -s
- dpms

Reboot

```
sudo reboot
```

Turn on/ off display

You can turn on/off display by the follow commands

```
vcgencmd display_power 0  
vcgencmd display_power 1
```

Rotation(Working with Raspberry Pi)

Display Rotating

Add this statement in the config.txt file (the config file is located in the root directory of the TF card, which is named /boot):

```
display_rotate=1 #1: 90 ; 2: 180 ; 3: 270
```

Note: For Raspberry Pi 4, you need to comment out dtoverlay=vc4-fkms-V3D.

```
#dtoverlay=vc4-fkms-V3D.
```

And then restart the Raspberry Pi after saving.

```
sudo reboot
```

Touch Rotating

After the display is rotated, the position of touch is incorrect because the touch doesn't change with the display angle. So the touch also needs to be modified.

1.Install libinput.

```
sudo apt-get install xserver-xorg-input-libinput
```

If the system you installed is Ubuntu or Jetson Nano. The installation code is:

```
sudo apt install xserver-xorg-input-synaptics
```

2.Create the xorg.conf.d directory under /etc/X11/ (if the directory already exists, proceed directly to step 3).

```
sudo mkdir /etc/X11/xorg.conf.d
```

3.Copy the 40-libinput-conf file to the directory you created just now.

```
sudo cp /usr/share/X11/xorg.conf.d/40-libinput.conf /etc/X11/xorg.conf.d/
```

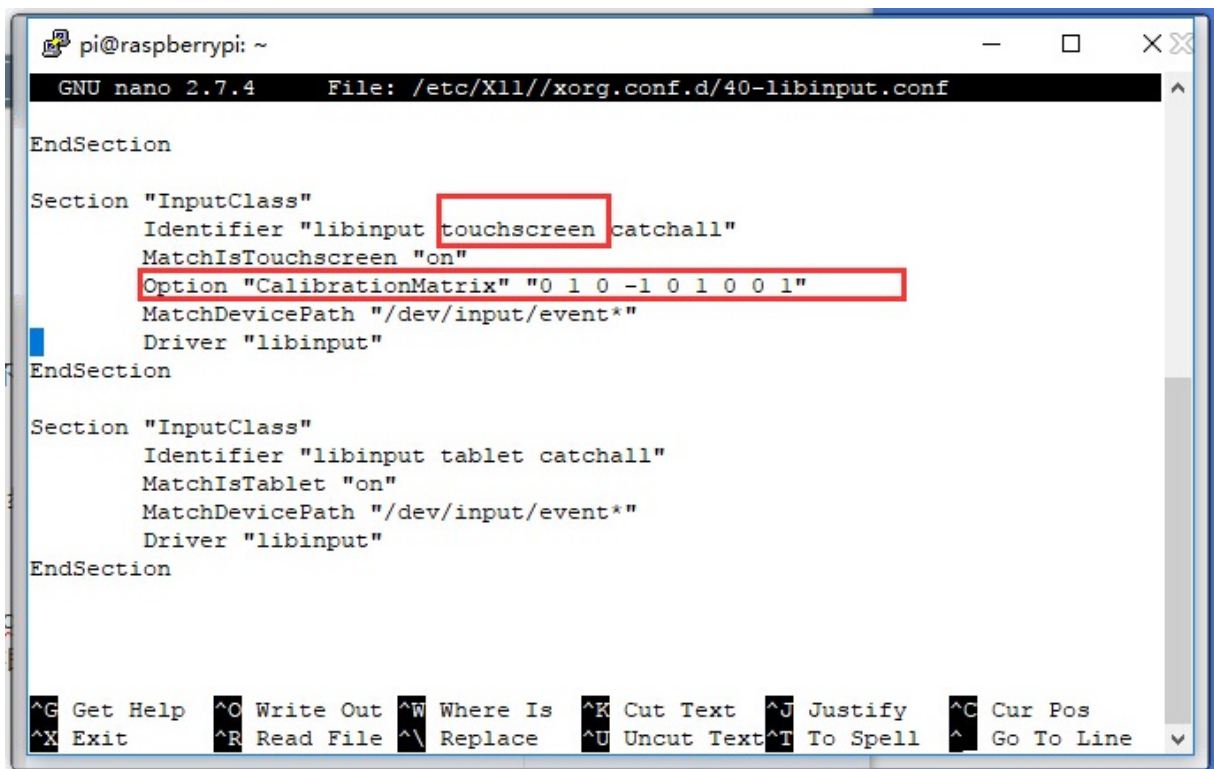
4.Edit this file.

```
sudo nano /etc/X11/xorg.conf.d/40-libinput.conf
```

Find the part of the touchscreen, add the following statement inside, and then save the file.

```
Option "CalibrationMatrix" "0 1 0 -1 0 1 0 0 1"
```

Similar to the picture below:



```
pi@raspberrypi: ~
GNU nano 2.7.4 File: /etc/X11/xorg.conf.d/40-libinput.conf

EndSection

Section "InputClass"
    Identifier "libinput touchscreen catchall"
    MatchIsTouchscreen "on"
    Option "CalibrationMatrix" "0 1 0 -1 0 1 0 0 1"
    MatchDevicePath "/dev/input/event*"
    Driver "libinput"
EndSection

Section "InputClass"
    Identifier "libinput tablet catchall"
    MatchIsTablet "on"
    MatchDevicePath "/dev/input/event*"
    Driver "libinput"
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
```

5. save and reboot your Pi

```
sudo reboot
```

After completing these steps. The LCD could rotate 90 degrees both display and touch function.

Note:

90 degree: Option "CalibrationMatrix" "0 1 0 -1 0 1 0 0 1"

180 degree: Option "CalibrationMatrix" "-1 0 1 0 -1 1 0 0 1"

270 degree: Option "CalibrationMatrix" "0 -1 1 1 0 0 0 0 1"