How to rotate the display and touch

For **HDMI capacitive screen**

This method is only suitable for HDMI capacitive screen, not suitable for GPIO resistive screen.

➤ **How to rotate display direction:**

1. Add the statement in the "**config.txt**" file (the "config.txt" file is located in /boot):

display_rotate=1   #0: 0; 1: 90; 2: 180; 3: 270

2. Restart the **Raspberry Pi** after saving

sudo reboot

➤ **How to rotate Touch direction:**

After the display is rotated, the touch needs to be modified.

1. Install libinput

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

2. Create the xorg.conf. D directory in /etc/x11 / below (if the directory already exists, this will proceed directly to step 3)

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

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

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

4. Edit "/etc/X11/xorg.conf.d/40-libinput.conf"

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

Find a part of the touchscreen, add the following statement inside, press **Ctrl+X** to exit, press **Y** to save.

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

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

Match on all types of devices but tablet devices and joysticks
Section "InputClass"
        Identifier "libinput pointer catchall"
        MatchIsPointer "on"
        MatchDevicePath "/dev/input/event*"
        Driver "libinput"
EndSection

Section "InputClass"
        Identifier "libinput keyboard catchall"
        MatchIsKeyboard "on"
        MatchDevicePath "/dev/input/event*"
        Driver "libinput"
EndSection

Section "InputClass"
        Identifier "libinput touchpad catchall"
        MatchIsTouchpad "on"
        MatchDevicePath "/dev/input/event*"
        Driver "libinput"
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. Restar your **Raspberry Pi**

```
sudo reboot
```

Complete the above steps for a 90 degree rotation.

Note:

0 degrees of rotation parameters: Option "CalibrationMatrix" "1 0 0 0 1 0 0 0 1"

90 degrees of rotation parameters: Option "CalibrationMatrix" "0 1 0 0-1 1 0 0 1"

180 degrees of rotation parameters: Option "CalibrationMatrix" "1 0 0-1 1 0 0 1"

270 degrees of rotation parameters: Option "CalibrationMatrix" "0-1 1 1 0 0 0 0 1"