

3.5 inch Resistive Touch Screen LCD



Specification:

Size: 3.5 inch

Resolution: 480*320

Display Port : SPI

Display Panel: TFT

Touch Screen Type: Resistive

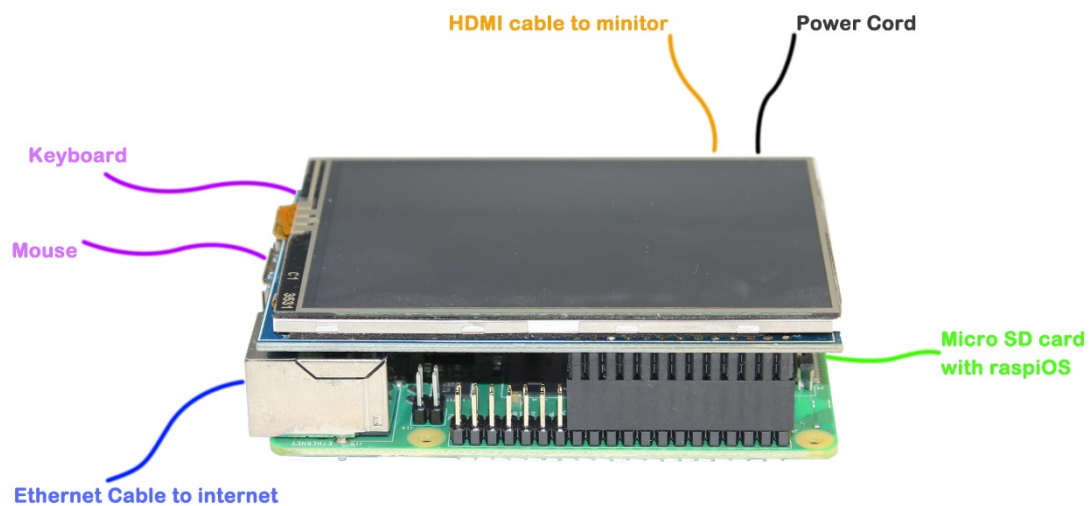
Touch Screen Controller: XPT2046

Application: all versions of Raspberry Pi , Ubuntu,Kali Linux

How to Use

Hardware Connection

1. Install 3.5 inch LCD into Raspberry Pi main board through the **JPIO** connector (**J8**).
2. Insert the micro SD card with raspiOS into the card slot.
3. Connect Raspberry Pi main board to the internet by ethernet cable.
4. Connect keyboard and mouse to the main board through USB port.
5. Connect the main board to a HDMI monitor through micro HDMI cable by port HDMI0.
6. Connect 5V3A power cord to Raspberry Pi type C power port.



Drive Installing

1. Power on raspberry Pi and boot into the RaspOS
2. Open the terminal Console
3. Download and install the driver using the commands below.

```
git clone https://github.com/goodfft/LCD-show.git
```

```
chmod -R 755 LCD-show
```

```
cd LCD-show
```

```
sudo ./LCD35-show
```

Rotate display direction

Using the commands below to rotate 90 degrees, (' 90 ' can be changed to 0, 90, 180 and 270, respectively representing rotation angles of 0 degrees, 90 degrees, 180 degrees, 270 degrees)

```
cd LCD-show/
```

```
sudo ./rotate.sh 90
```

Calibration

If you need to calibrate the LCD , follow the steps below:

1. Copy and install calibrator tool, commands are as below:

```
cp LCD-show/xinput-calibrator_0.7.5-1_armhf.deb ~/
```

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

2. Install X service , commands are as below

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

```
sudo cp -rf /usr/share/X11/xorg.conf.d/10-evdev.conf /usr/share/X11/xorg.conf.d/45-  
evdev.conf
```

```
sudo reboot
```

3. Running calibrator and finish calibration

```
DISPLAY=:0.0 xinput_calibrator
```

Or select Menu -> Preferences -> Calibrate Touchscreen.

After running these commands, there will be a prompt for four-point calibration shown in the LCD screen. Click the points one by one to finish the touch calibration. Then, the new calibration data will be displayed in the terminal, as shows below. Please get these data for future use.

```
pi@raspberrypi:~ $ DISPLAY=:0.0 xinput_calibrator  
Calibrating EVDEV driver for "ADS7846 Touchscreen" id=10  
    current calibration values (from XInput): min_x=3423, max_x=1752 and min  
_y=3922, max_y=198  
  
Doing dynamic recalibration:  
    Setting calibration data: 3448, 1516, 3934, 179  
    --> Making the calibration permanent <--  
    copy the snippet below into '/etc/X11/xorg.conf.d/99-calibration.conf' (/usr/s  
hare/X11/xorg.conf.d/ in some distro's)  
Section "InputClass"  
    Identifier      "calibration"  
    MatchProduct   "ADS7846 Touchscreen"  
    Option "Calibration" "3448 1516 3934 179"  
    Option "SwapAxes" "0"  
EndSection  
pi@raspberrypi:~ $
```

4. Save modification

```
pi@raspberrypi: ~  
GNU nano 3.2 /etc/X11/xorg.conf.d/99-calibration.conf  
^  
Section "InputClass"  
    Identifier      "calibration"  
    MatchProduct   "ADS7846 Touchscreen"  
    Option "Calibration" "227 3936 3880 268"  
    Option "SwapAxes" "1"  
EndSection  
[ Read 7 lines ]  
^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
```

Press the keys Ctrl+X, and select the option Y to save the modification.

The modification will be valid after rebooting the system. Enter the following command for system reboot:

5. `sudo reboot`