# 3.5 Inch 480x320 TFT Display with Touch Screen for Raspberry Pi

From Elecrow

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## **Description**

It is the cutest, little display for the Raspberry Pi. It features a 3.5" display with 480x320 16-bit color pixels and a resistive touch overlay. It's designed to fit nicely not only to the Pi Model A or B but also works perfectly fine with the Model B+.

Model:RPA03510R (http://www.elecrow.com/35-inch-480x320-tft-display-with-touch-screen-for-raspberry-pi-p-1385.html)



### **Features**

- 480x320 resolution
- Universal 3.5" Display for the Raspberry Pi
- Compatible with Raspberry Pi A, B, A+, B+, and Pi2 versions
- Powered not only from your computer, but also from your portable power
- Adapt for Raspbian system

## **Specifications**

■ LCD Type:TFT

- LCD Interface:SPI
- Touch Screen Type:Resistive
- Touch Screen Controller:XPT2046
- Colors:65536
- Backlight:LED
- Resolution:480\*320 (Pixel)

#### **Interface Function**

PIN NO.	SYMBOL	DESCRIPTION
1, 17	3.3V	Power positive (3.3V power input)
2, 4	5V	Power positive (5V power input)
3, 5, 7, 8, 10, 11, 12, 13, 15, 16, 18, 24	NC	NC
6, 9, 14, 20, 25	GND	Ground
19	TP_SI	SPI data input of Touch Panel
21	TP_SO	SPI data output of Touch Panel
22	TP_IRQ	Touch Panel interrupt, low level while the Touch Panel detects touching
23	TP_SCK	SPI clock of Touch Panel
26	TP_CS	Touch Panel chip selection, low active

## Usage

When users connect the Raspberry Pi to use, they need to configure the official system. Or you can also burn the configured system image directly.

Tips: Basic for Raspbian Jessie with PIXEL (2017-04-10-raspbian-jessie.img)

#### Step 1: Download the Raspbian IMG

https://www.raspberrypi.org/downloads/raspbian/

#### **Step 2: Burn the system image**

If you don't know how to do that, you can refer to the Raspberry Pi office tutorial (https://www.raspberrypi.org/documentation/installation/installing-images/README.md)

#### Step 3: Open terminal and Download the driver on RPI

#### Run:

git clone https://github.com/Elecrow-keen/Elecrow-LCD35.git

#### Step 4: Install driver

#### Run:

cd Elecrow-LCD35

sudo ./Elecrow-LCD35

Wait A Few Minutes, when the system reboot ok, you can see that.



## **Touch screen calibration**

- This LCD can be calibrated using a program called xinput\_calibrator
- Install it with the commands:

```
cd Elecrow-LCD35
sudo dpkg -i -B xinput-calibrator_0.7.5-1_armhf.deb
```

- Click the **Men** button on the task bar, choose **Preference** -> **Calibrate Touchscreen**.
- Finish the touch calibration following the prompts. Maybe rebooting is required to make calibration active.
- You can create a 99-calibration.conf file to save the touch parameters (not necessary if file exists).

```
/ect/X11/xorg.conf.d/99-calibration.conf
```

■ Save the touch parameters (may differ depending on LCD) to 99-calibration.conf, as shown in the picture:

```
Section "InputClass"

Identifier "calibration"

MatchProduct "ADS7846 Touchscreen"

Option "Calibration" "208 3905 288 3910"

Option "SwapAxes" "0"

EndSection
```

## **Install Soft Keyboard**

■ Install the reference link: https://github.com/Elecrow-keen/Elecrow-LCD5/wiki/How-to-Install-Soft-Keyboard

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