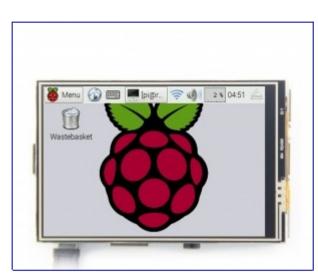
## 3.5inch RPi Display

语言选择(Other languages): 中文 English

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#### **Product Pictures**







#### **Features**

- 320×480 resolution
- Resistive touch control
- Supports any revision of Raspberry Pi (directly-pluggable)
- Compatible with Raspberry Pi A, B, A+, B+, 2B, 3B, 3B+,4B versions
- Drivers provided (works with your own Raspbian/Ubuntu directly)
- Size perfectly fits the Pi
- · High quality immersion gold surface plating
- Supports Raspbian system, ubuntu system ,kali Linux system

## **Key Parameters**

_	
SKU	MPI3501
LCD Type	TFT
LCD Interface	SPI(Fmax:32MHz)
Touch Screen Type	Resistive
Touch Screen Controller	XPT2046
Colors	65536
Driver IC	ILI9486
Backlight	LED
Resolution	320*480 (Pixel)
Backlight Current	120ma
Power Dissipation	0.13A*5V
Operating Temp. (°C)	-20~60
Active Area	48.96x73.44(mm)
Product Size	85.42*55.60(mm)
Package Size	118*72*34 (mm)
Rough Weight(Package containing)	75 (g)

### Interface

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, 12, 13, 15, 16	NC	NC	
6, 9, 14, 20, 25	GND	Ground	
11	TP_IRQ	Touch Panel interrupt, low level while the Touch Panel detects touching	
18	LCD_RS	Instruction/Data Register selection	
19	LCD_SI / TP_SI	SPI data input of LCD/Touch Panel	
21	TP_SO	SPI data output of Touch Panel	
22	RST	Reset	
23	LCD_SCK / TP_SCK	SPI clock of LCD/Touch Panel	
24	LCD_CS	LCD chip selection, low active	
26	TP_CS	Touch Panel chip selection, low active	

## **Driver Installation**

This LCD Module need install driver first.

#### 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

#### Step 3: Open terminal(SSH) and install the driver on RaspberryPi

(tested on RaspberryPi 3B+,3B,2B,2B+,1B,ZERO)

#### Run:

```
sudo rm -rf LCD-show
git clone <u>https://github.com/goodtft/LCD-show.git</u>
chmod -R 755 LCD-show
cd LCD-show/
sudo ./LCD35-show
```

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 LCD-show/
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:

#### How to rotate the display direction

This method only applies to the **Raspberry Pi** series of display screens, other display screens do not apply.

• **Method 1**, If the driver is not installed, execute the following command (Raspberry Pi needs to connected to the Internet):

```
sudo rm -rf LCD-show git clone <a href="https://github.com/goodtft/LCD-show.git">https://github.com/goodtft/LCD-show.git</a> chmod -R 755 LCD-show cd LCD-show/ sudo ./XXX-show 90
```

After execution, the driver will be installed. The system will automatically restart, and the display screen will rotate 90 degrees to display and touch normally.

('XXX-show' can be changed to the corresponding driver, and '90' can be changed to 0, 90, 180 and 270, respectively representing rotation angles of 0 degrees, 90 degrees, 180 degrees, 270 degrees)

• **Method 2**, If the driver is already installed, execute the following command:

```
cd LCD-show/
sudo ./rotate.sh 90
```

After execution, the system will automatically restart, and the display screen will rotate 90 degrees to display and touch normally.

('90' can be changed to 0, 90, 180 and 270, respectively representing rotation angles of 0 degrees, 90 degrees, 180 degrees, 270 degrees)

If the rotate.sh prompt cannot be found, use Method 1 to install the latest drivers

#### **Download Resources**

- Document
- 1. How to install the LCD driver V1.2
- 2. How to install matchbox-keyboard
- 3. How to calibrate the resistance touch screen-V1.2
- 4. How to use Raspberry Pi(Download, Format, Burn, SSH, PuTTy)-V1.0.pdf
- 5. How to change display direction-GPIO-Resistive Touch-V1.2
- 6. MPI3501-3.5inch-RPi-Display-User-Manual-V1.0
- Driver download

download::<u>LCD-show.tar.gz</u>

#### Images download

If you have difficulty installing the driver, or if you still can't use the display properly after installing the driver,

Please Try our Configned images for tested.

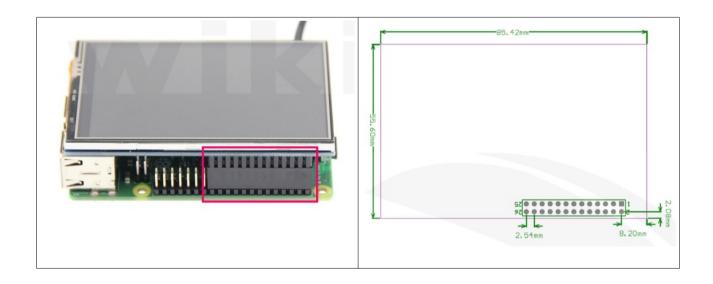
Just need download and write the image into the TF card. DO NOT need any driver installation steps.

Image Name	Version	Support	Password		Download
Raspbian	2020-05-	PI4/PI3B+/	user:pi	<b>≫</b> Baidu	MPI3501-3.5inch-2020-05-

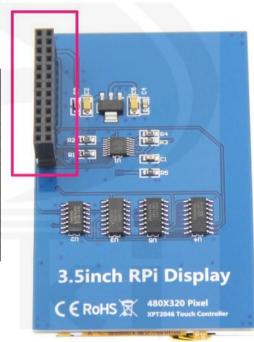
raspios ZERO/	PI3/	password:r aspberry	Yun:	27-raspios-buster.7z Fetch Code: n5zl	
	PI2/PI1/ ZERO/ ZERO W		Mega:	MPI3501-3.5inch-2020-05- 27-raspios-buster.7z	
Ubuntu Mat 4.2	Mate:18.0	PI3B+,PI3,	user:pi password:r aspberry	Baidu Yun:	MPI3501-3.5inch-Ubuntu- 18.04.2.7z Fetch Code: mxjx
	4.2 PI2	PI2		Mega:	MPI3501-3.5inch-Ubuntu- 18.04.2.7z
Kali Linux RaspberryPi 2020.2	2020 2h	PI4B,PI3B+	user: kali password: kali	Baidu Yun:	MPI3501-3.5inch-kali-linux- 2020.2b Fetch Code: vqt3
	,PI3,P	,PI3,PI2		Mega:	MPI3501-3.5inch-kali-linux- 2020.2b

- MD5 of Image
- Software
- 1. Panasonic SDFormatter
- 2. Win32DiskImager
- 3. PuTTY

Source: www.lcdwiki.com



					7
Description	Pin	NO.	NO.	Pin	Description
Power input(5V)	5V	2	1	3.3V	NC
Power input(5V)	5V	4	3	SDA	NC
Power GND	GND	6	5	SCL	NC
NC	TX	8	7	P7	NC
NC	RX	10	9	GND	Power GND
NC	P1	12	11	P0	NC
Power GND	GND	14	13	P2	NC
NC	P4	16	15	P3	NC
NC	P5	18	17	3.3V	NC
Power GND	GND	20	19	MI	TP SPI Bus input(MOSI)
TP Interrupt	IRQ	22	21	MO	TP SPI Bus output(MISO)
NC	CE0	24	23	SCK	TP SPI Bus Clock(SCLK)
TP Chip Sellect	TCS	26	25	GND	Power GND



# How to use with Raspbian & Ubuntu Mate \ \step 1, Install Raspbian or UbuntuMate official image

- 1) Download from the official website: <a href="https://www.raspberrypi.org/downloads/">https://www.raspberrypi.org/downloads/</a>
- Or <a href="https://ubuntu-mate.org/download/">https://ubuntu-mate.org/download/</a>
- 2) Format TF card by SDFormatter
- 3) Burn the official image into TF card by using Win32DiskImager

## Step 2,Install Driver Method 1: online installation (Raspberry Pineed to connect to the Internet)

- 1) Log onto the Raspberry Pi by PuttySSH (User: p i; Password: raspberry)
- 2) Execute the following command (you can click the right mouse button to paste after copied in Putty)

```
sudo rm -rf LCD-show
git clone https://github.com/goodtft/LCD-show.git
chmod -R 755 LCD-show
cd LCD-show/
sudo ./LCD35-show
```

- 3) Wait for a moment after executing, you can use the corresponding raspberry LCD.
- 1)Extract from the companion DVD or Download from the following address <a href="http://www.lcdwiki.com/res/RaspDriver/LCD-show.tar.gz">http://www.lcdwiki.com/res/RaspDriver/LCD-show.tar.gz</a>
- 2)Copy the LCD-show.tar.gz drive to the Raspberry Pi system root directory

(Suggestion: Copy the LCD-show.tar.gz driver directly to Micro SD card after completion of Step 1, or copy by SFTP or other methods for remote copy)

3)Unzip and extract drive files as the following command:

```
cd /boot
sudo tar zxvf LCD-show.tar.gz
cd LCD-show/
sudo ./LCD35-sh
```

Source: cdn.awsli.com.br