7inch IPS Display

7inch IPS LCD Display Module Product Manual

Please read this manual carefully to ensure safe operation of this product.

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1. Overview

1.1. Feature Description

- ✧ 7-inch DSI touchscreen with capacitive 5-point touch control
- ✧ IPS display panel with a hardware resolution of 720×1280
- ✧ Full-lamination process for clearer image quality
- ✧ Tempered glass touch cover with hardness up to 6H
- ✧ LCD driven via DSI interface, refresh rate up to 60Hz
- ✧ Software-controlled backlight brightness supported
- ✧ Metal back shell design with pure passive heat dissipation, IPS wide-view display

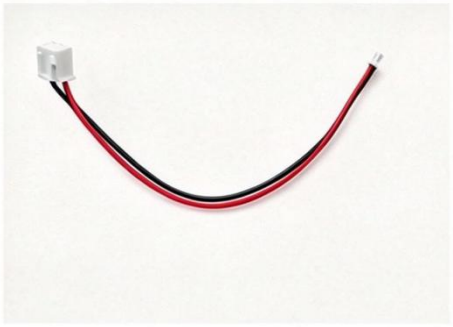
1.2. Product images and accessories



1 × Flexible Flat Cable (20 cm, for Raspberry Pi 5)



1 × Flexible Flat Cable (16 cm, for Raspberry Pi 4)



1×2-gauge DuPont wire



4 × screw

2. Parameter

2.1. LCD Panel Parameters

Item	Parameter	Unit
Screen Size	7	inch
Screen Type	IPS	-
Resolution	720*1280	pixels
Active Display Area	154.56*86.94	mm
Viewing Angle	170	deg
surface brightness	400	cd/m2
Backlight Type	LED	-
Operating Temperature	-20~60	℃
Storage Temperature	-30~70	℃

2.2. Dimensional Parameters

Item	Parameter	Unit
Module dimensions	189.32*120.24*14.89	mm

2.3. IC and Interface Parameters

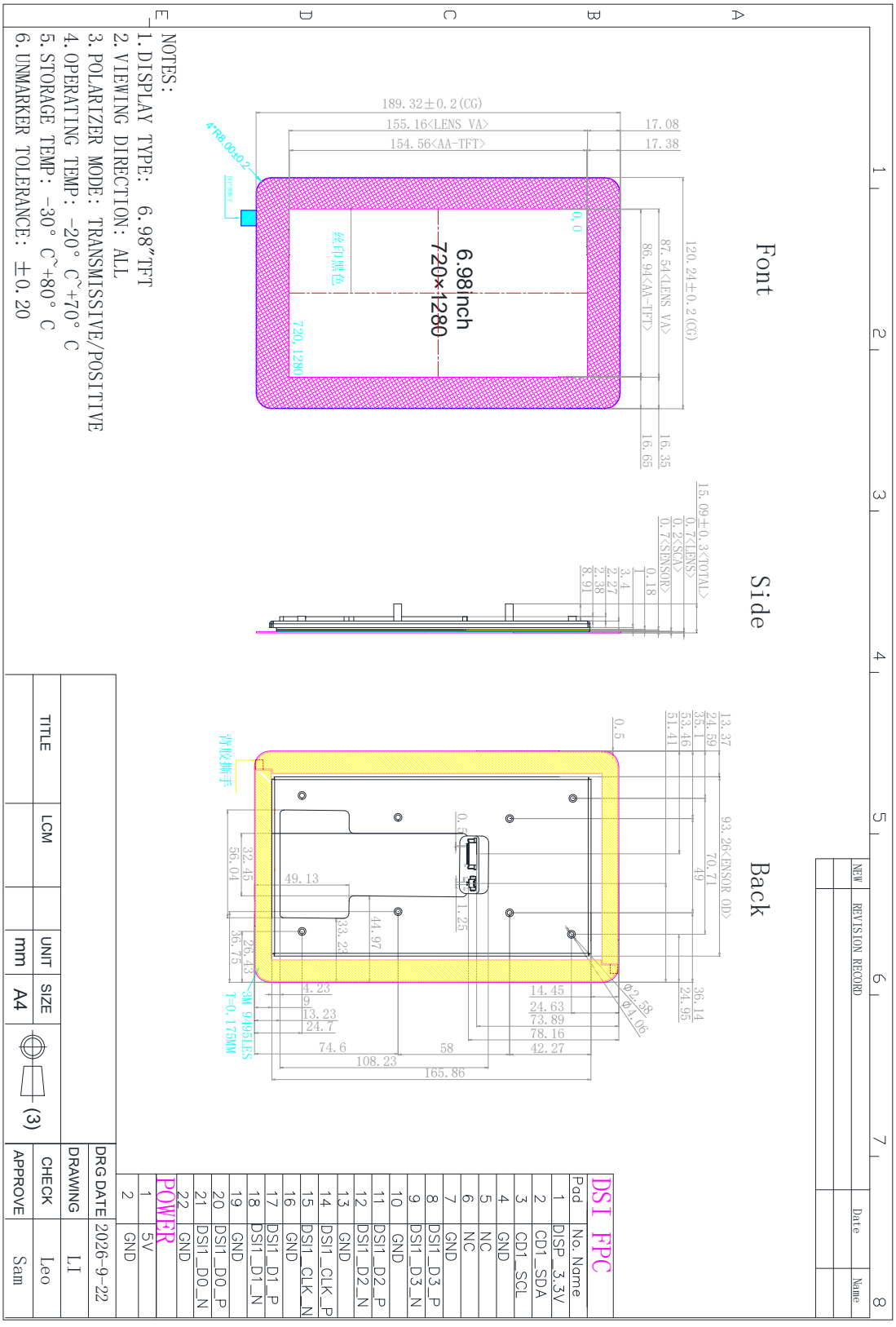
Item	Parameter	Unit
Video Input Interface	MIPI DSI	-
Power Interface	1.25 2P Cable	-

2.4. Other Parameters

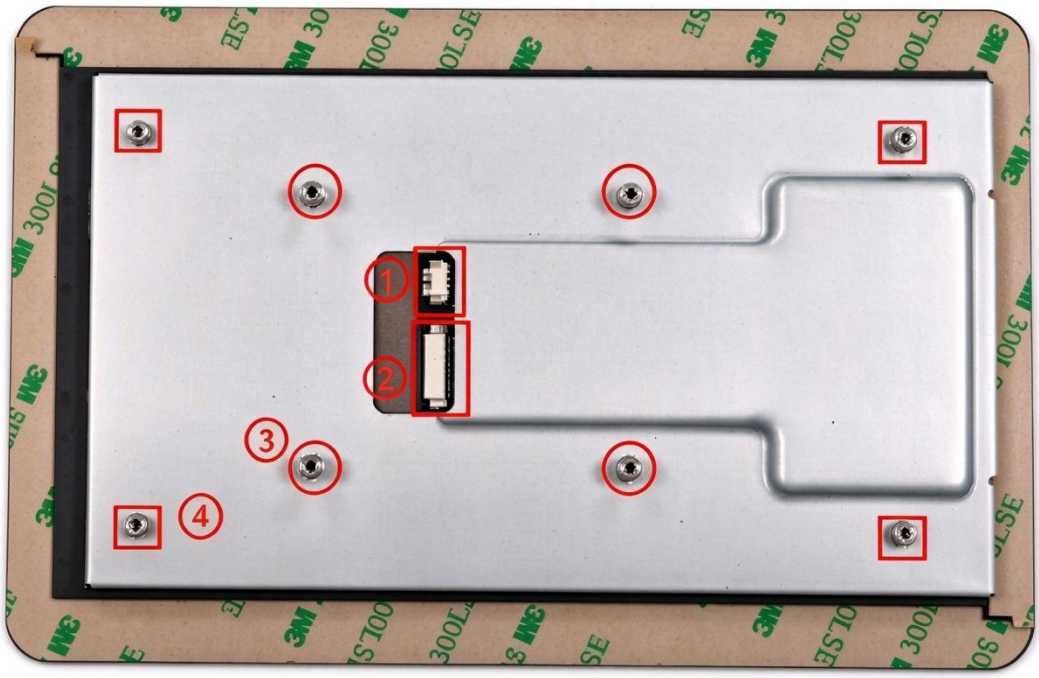
Item	Parameter	Unit
SKU	DSI720B	-
Supply Voltage	Backlight supply voltage: 5V Supply voltage for LCD and touch panel: 3.3V	V
Total Power (Max.)		W
Weight (including package)		g

3. Dimensional Drawing

3.1. Dimensional Drawing



4. Interface and Button Specifications



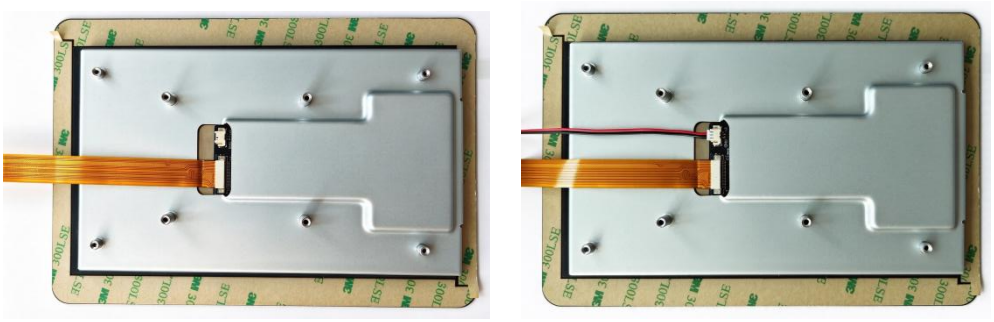
接口	Function Description
① POWER	Use a 2P 1.25 mm spacing cable and connect it to a Raspberry Pi device for power supply.
② DSI MIPI	For high-definition video input; use a 22P flexible ribbon cable to connect to the Raspberry Pi.
③ 4× Copper Standoffs	Secure the Raspberry Pi using M2.5 screws
④ 4× Copper Standoffs	For external fixation

5. Connection and Operation

5.1. Connection to Raspberry Pi

Raspberry Pi 4B:

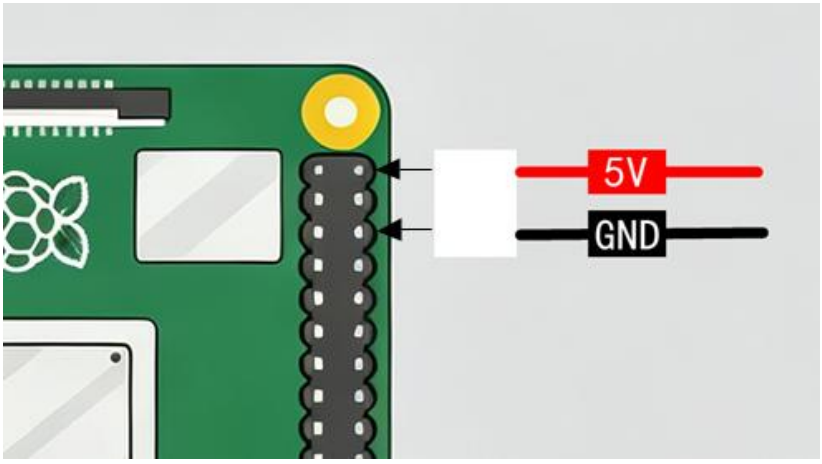
As shown in the figure, first connect the MIPI header cable and the power cable, then place the Raspberry Pi in position and tighten the screws to secure it; finally, connect the header cable and power cable to the Raspberry Pi.

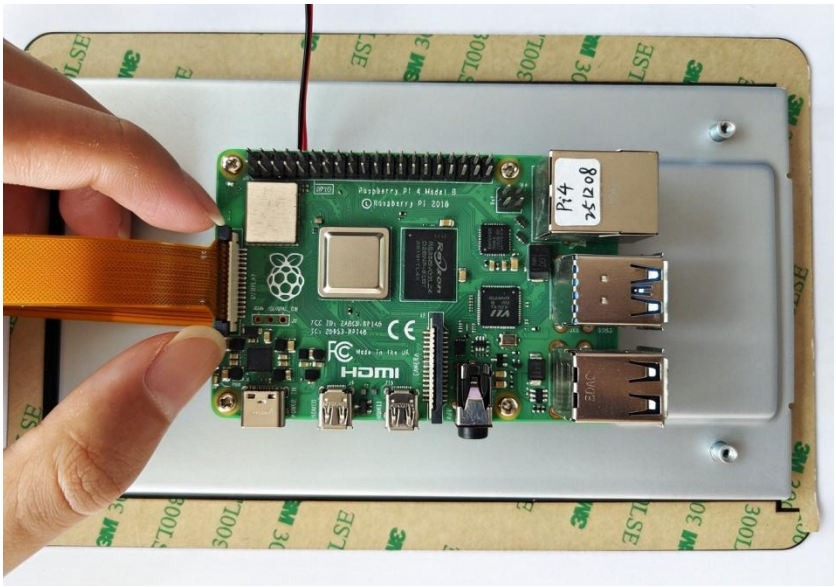


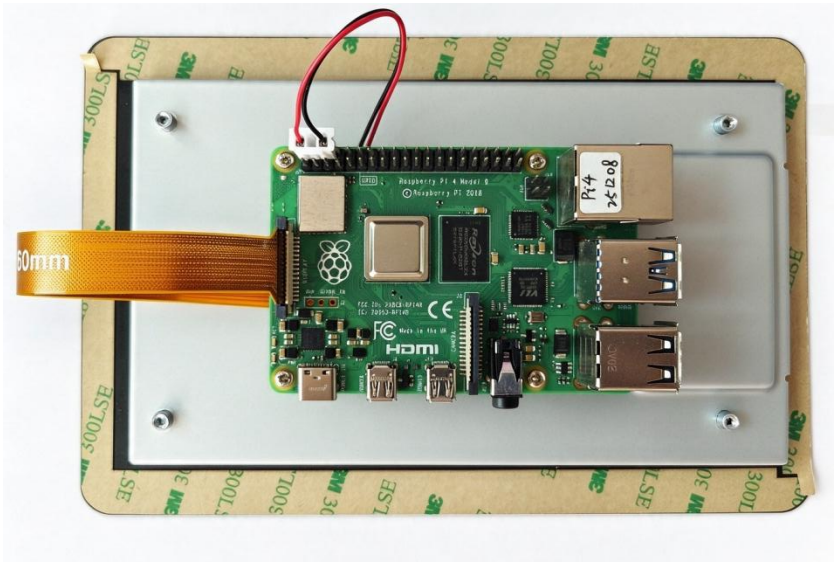
Connect the flex cable and power cable



Secure the Raspberry Pi



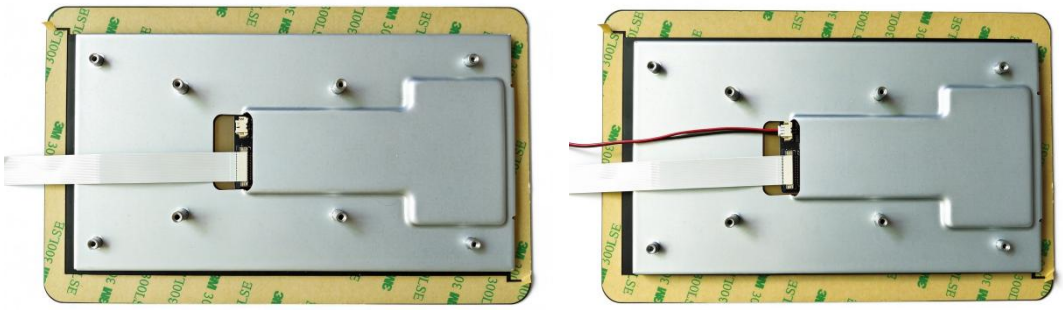




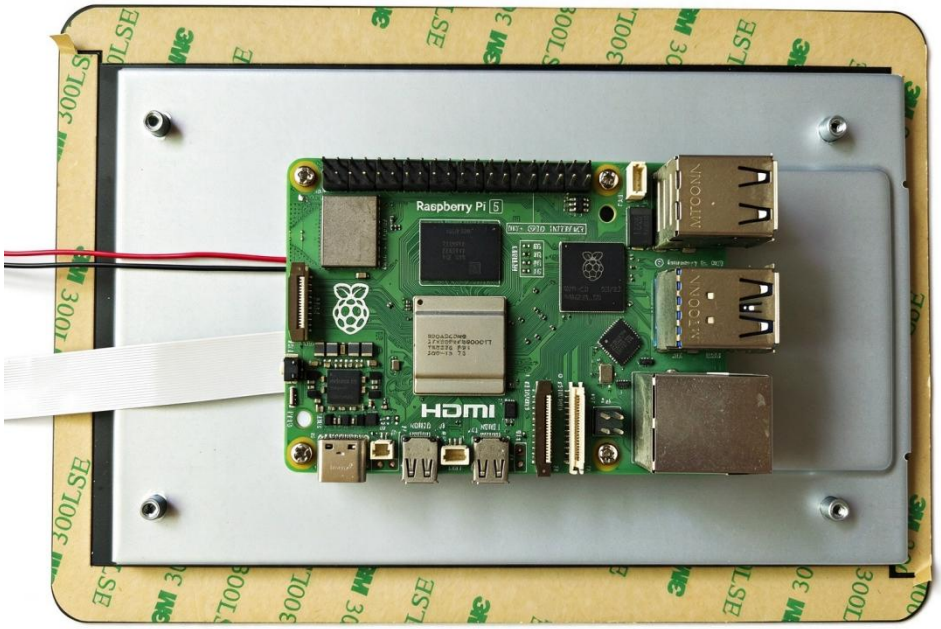
Connect the flex cable and power cable to the Raspberry Pi

Raspberry Pi 5:

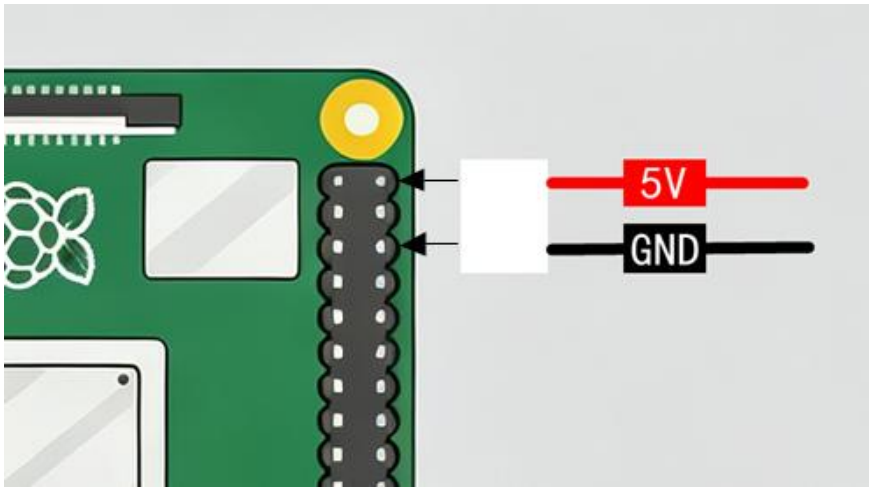
As shown in the figure, first connect the MIPI flex cable and power cable, then place the Raspberry Pi and secure it with screws, finally connect the flex cable and power cable to the Raspberry Pi.



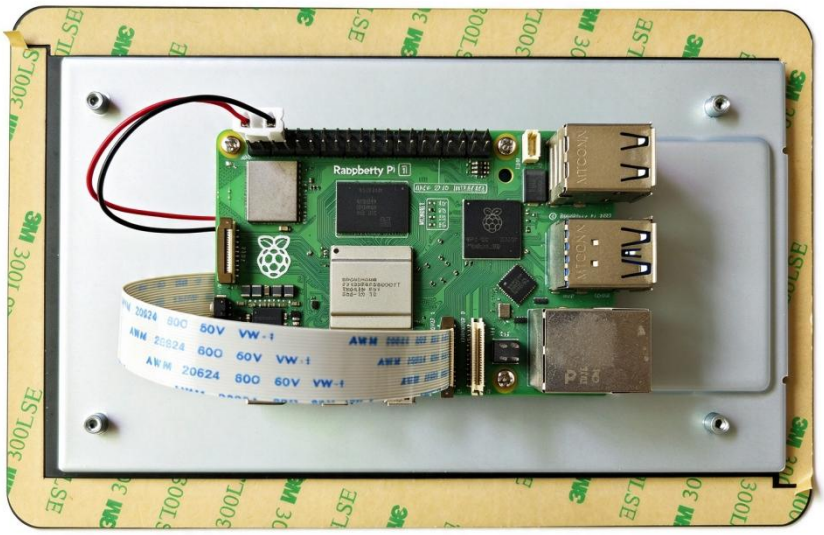
Connect the flex cable and power cable



Secure the Raspberry Pi







Connect the flex cable and power cable to the Raspberry Pi

5.2. Usage on Raspberry Pi

Step 1: Download and install Raspberry Pi Imager

Open your browser and visit the official website.: https://www.raspberrypi.com/software

Download the corresponding version according to your computer operating system

After the download is complete, install and launch Raspberry Pi Imager normally.

Step 2: Select Device

Click Choose Raspberry Pi Device on the software homepage

In the pop-up device list, scroll to the bottom and select No filtering (no filter, show all available images)

Note: After selecting No filtering, the software will not filter system images by Raspberry Pi model. You can see all operating system options, compatible with Raspberry Pi 4B/5 and other models.

Click Next.

Step 3: Select Operating System

Click Choose OS

Directly select the first option: Raspberry Pi OS (64-bit, with desktop) (officially recommended default 64-bit system)

Step 4: Select Storage (SD Card)

Insert the SD card into your computer card reader, click Choose Storage

Select your SD card from the list (⚠ Be sure to confirm the drive letter, do not select the wrong computer hard drive, as data will be erased)

Step 5: Customize System Settings (Optional, can be skipped directly)

After clicking Next, a custom settings window will pop up, where you can preset hostname, account password, WiFi, time zone, etc.

For beginners: You can directly click Next to use the default configuration.

Step 6: Start Flashing the Image

Confirm the pop-up prompt: All data on the SD card will be completely erased. Confirm that there is no important data on the SD card, then click Yes.

The software will automatically download the image, write it to the SD card and complete

verification. Do not unplug the card reader, disconnect the network or power off during the whole process.

Flashing + verification takes a few minutes, depending on the SD card read/write speed and network.

Step 7: Flashing Completed

The prompt Write Successful indicates that the image flashing and verification are completed.

Click Continue, safely eject the SD card, then you can insert the SD card into the Raspberry Pi and power it on.

Step 8: Modify config.txt

Open the config.txt file in the root directory of the SD card, add the following code to the end of config.txt, save the file, and safely eject the device.

```
dtoverlay=vc4-kms-v3d
dtoverlay=vc4-kms-dsi-ili9881-7inch
```

Step 9: Boot the Raspberry Pi

Insert the TF card into the Raspberry Pi and power it on. The display will normally work after about 30 seconds. Touch function can be used normally after the system starts.