ElecLab

7.4" HDMI Touchscreen Display

USER GUIDE

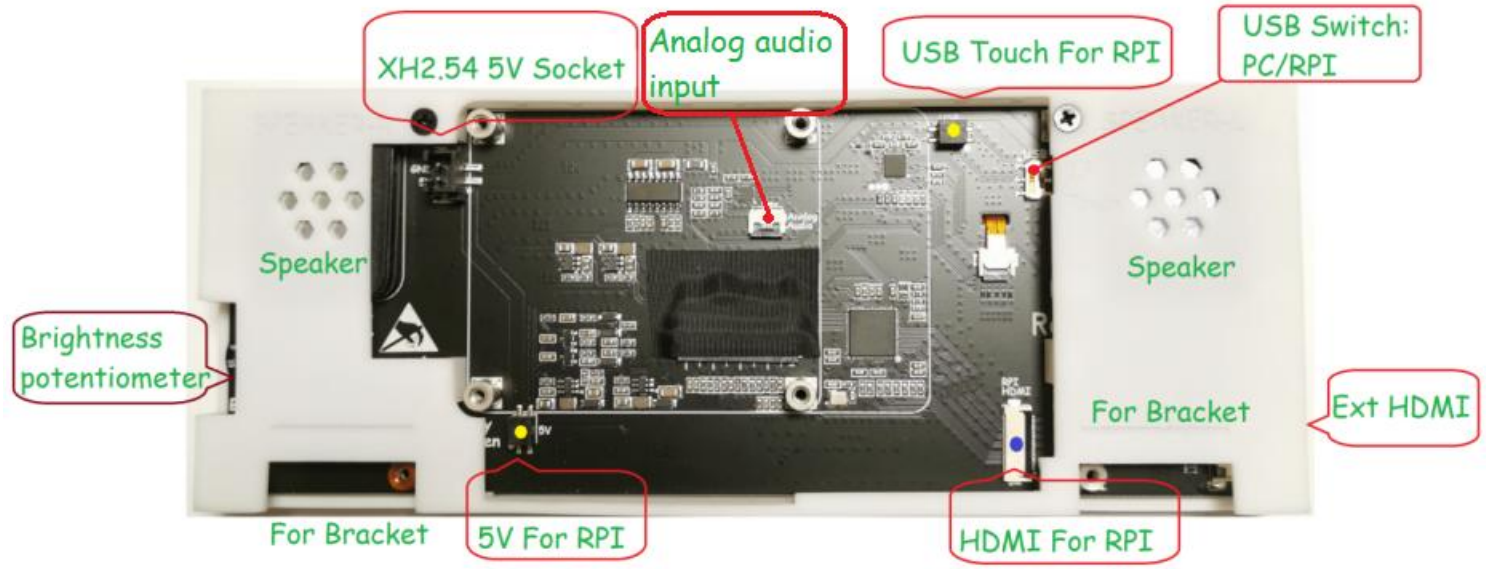
Users need to prepare a Raspberry Pi , a TF card above 8G, a power supply above 4A@5V, and a Buster or Bullseye system image.

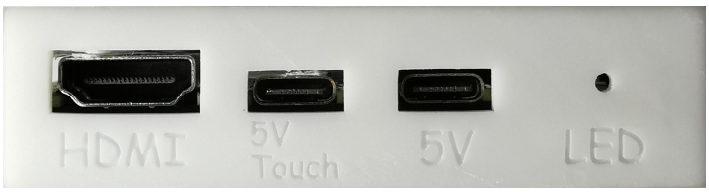
Any suggestions please contact us at ElecLab_US@163.com

Quick To Use

1. Install the 2 brackets to the bottom of the display case.
2. Plug RPI 4 HDMI FPC into Raspberry Pi 4。
3. Insert the FPC wire of the headphone PCB into the analog audio input FPC socket of the display screen, and the headphone plug into the Raspberry Pi. (Only analog audio can be used when the display is connected to the RPI.HDMI audio can be used when the display is connected to a PC.)
4. Fix the Raspberry Pi to the display with four M2.5x5 screws.
5. Use the RPI4 PWR Board, PI4 USB Board to connect Raspberry pi 4 to the display. For Raspberry Pi 1, 2, 3, Please use the RPI3 PWR Board and PI3 USB Board.
6. Insert a power supply above 5V4A into the type-c 5V socket.
7. Use the brightness potentiometer to adjust the brightness of the display.
8. The STL file for the 3D printed case and the dxf file for color acrylic cutting can be downloaded from the eleclab-rpi/7INCH4_HDMI_1280x400 project.

Function introduction





Detailed installation steps (Raspberry Pi 4 as an example)

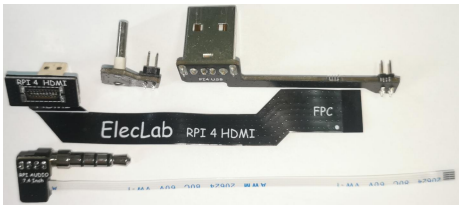
1. Prepare the following three components：

PRI4 TYPE-C board -> Display power supply to raspberry

PRI4 HDMI FPC cable -> Raspberry Pi HDMI output to display

PRI4 USB board -> Connect touch screen to Raspberry Pi

RPI AUDIO board -> Analog audio output to display



2. After burning Buster or Bullseye system into the TF card, edit the following in /boot/config.txt:

hdmi_force_hotplug=1

hdmi_group=2

hdmi_mode=87

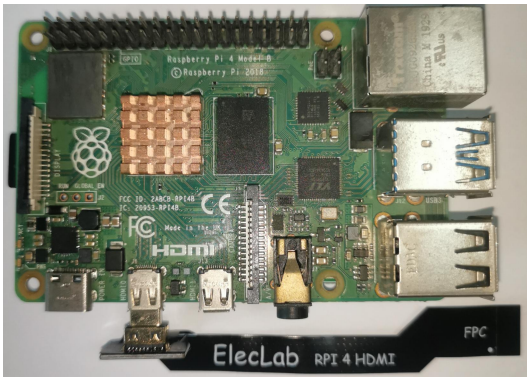
hdmi_ignore_edid=0xa5000080

hdmi_timings=1280 0 64 2 18 400 0 10 3 42 0 0 0 60 0 37330000 3

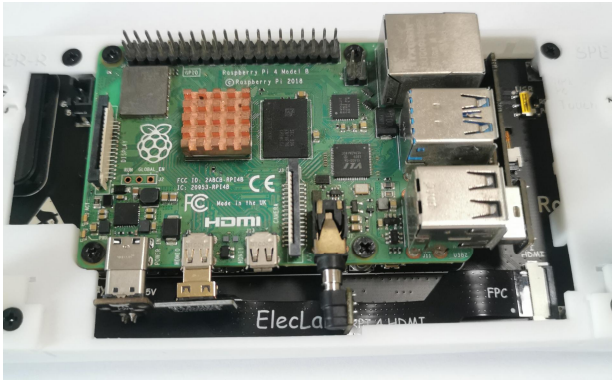
hdmi_drive=1

3. Insert the TF card into the RPI, then insert the RPI 4 HDMI FPC into the RPI. Insert the FPC wire of the headphone PCB into the display and the headphone plug into the RPI.

4. Use PRI4 TYPE-C board and PRI4 USB board to connect Raspberry Pi and display.



5. Install 2 brackets and fix them with M2.5x10 screws
6. Jump the USB Touch switch to the RPI position
7. insert the Type-C power cable to the display, And then start running.

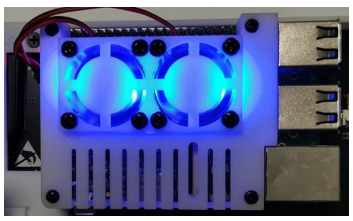


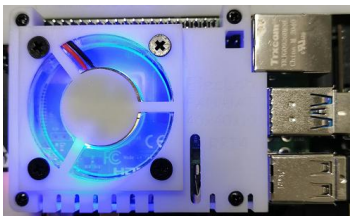
LED Description

1. When there is no HDMI signal, the LED indicator is red, the screen has no display and the backlight is turned off.
2. When there is an HDMI signal, the LED indicator is green, the backlight is turned on, and the screen is displayed normally.

XH2.54 2PIN 5V Socket Description

1. This display has 2 2PIN XH2.54 sockets and they can be used to supply power to the user's other boards. Please note that the total current should not exceed the safe output current of your 5V power adapter.
2. The XH2.54 socket can also be used to connect the cooling fan. There are STL files for 3D printing to support dual 2510 fans and 4020 fans. Users can download it from rpi_fan_case project.





Connect Computer

1. Remove the Raspberry Pi and related components
2. Flip the USB Touch switch to the PC position
3. Use an HDMI cable to connect the HDMI port of the display to the computer
4. Use a USB Tpec-c cable to connect the computer and the 5V+Touch interface of the display
5. Pay attention to the screen brightness and speaker output, they will exceed the maximum current output of the computer if they are turned on to the maximum. Turn the volume down below 40%.
6. If no display, please choose a refresh rate of 60Hz.

For example, as an AIDA64 display application