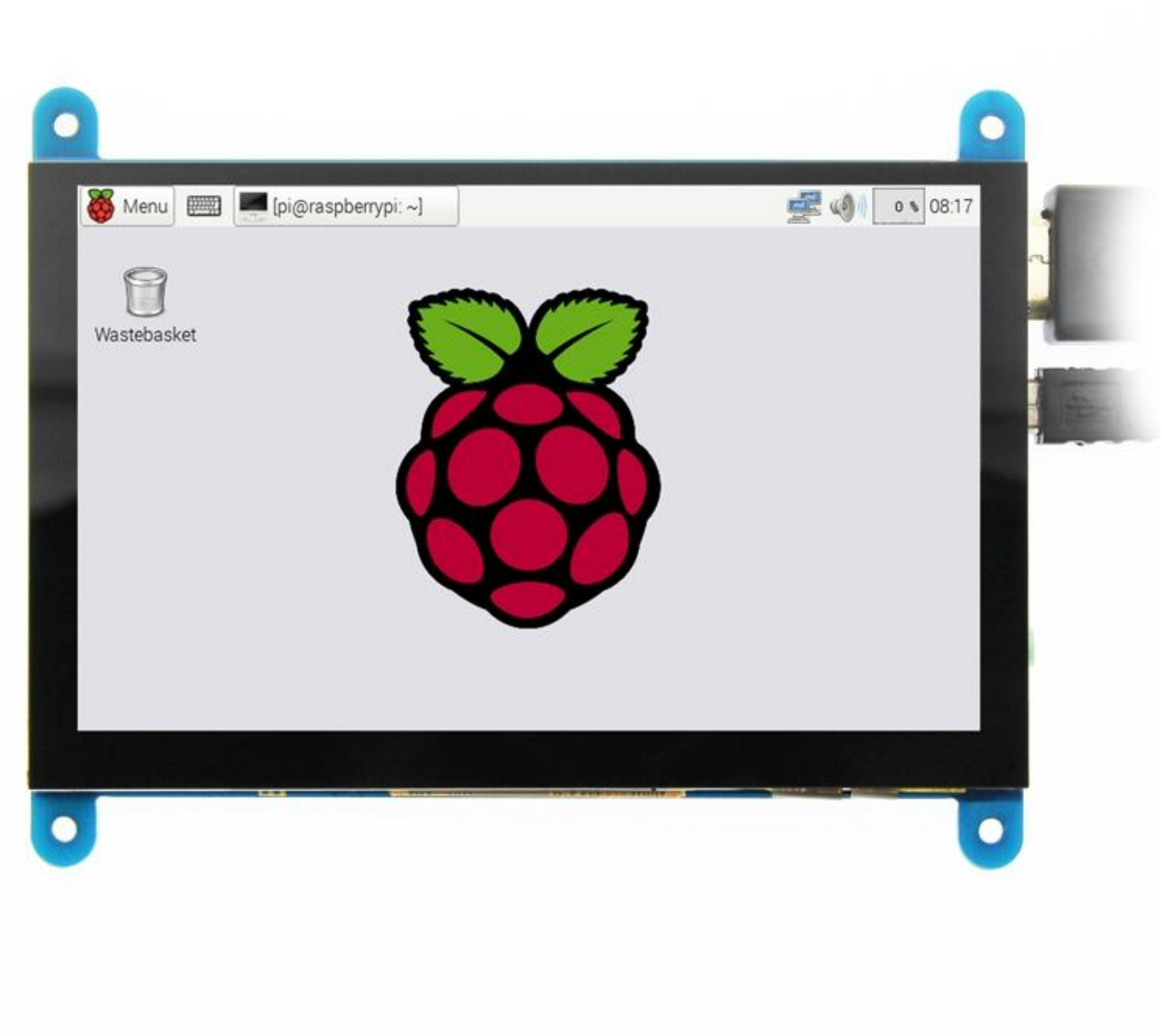
5 inch HDMI Display-B

User Manual



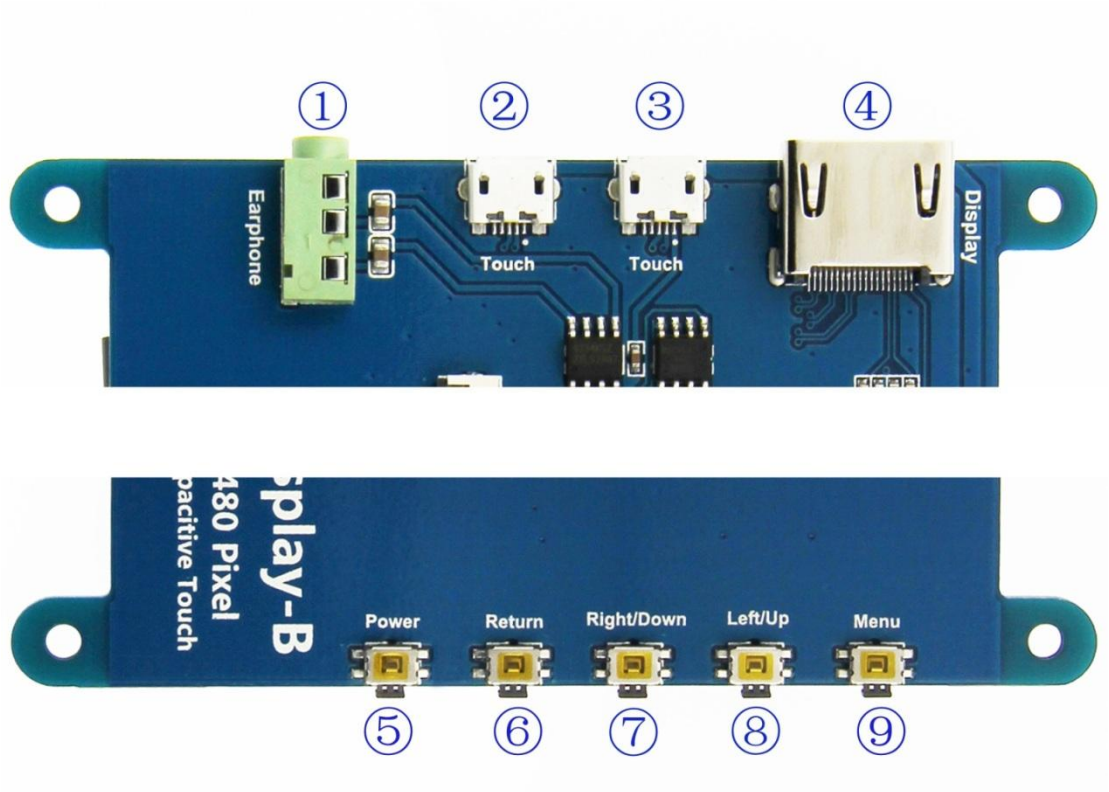
【product description】

- **5**" standard display, 800x480 resolution，maximum HDMI resolution 1920X1080 is supported
- Capacitive touch screen, support **5** point touch maximum
- Built-in OSD menu adjustment function (adjustable Contrast/ Brightness/Saturation, etc.)
- It is compatible with mainstream mini PC such as **Raspberry Pi**, **BB Black**, **Banana Pi**
- It can also be used as a general-purpose HDMI display, connecting computers, TV boxes, Microsoft Xbox360, SONY PS4, Nintendo Switch and so on
- Used as a **Raspberry Pi** display that supports **Raspbian**, **Ubuntu**, **Kodi**, **Win10 IOT**, single-touch, free drive
- Work as a PC monitor, support **Win7**, **Win8**, **Win10** system **5** point touch (**XP** and older version system: single-point touch), free drive
- Support HDMI audio output
- **CE**, **RoHS** certification

【Product Parameters】

- Size: 5.0 (inch)
- SKU: MPI5001
- Resolution: 800 × 480 (dots)
- Touch: 5 point capacitive touch
- Audio output: support
- Dimensions: 121.11*95.24(mm)
- Weight: 248 (g)

【Hardware Description】



① Earphone: 3.5mm Audio output interface
②&③ Touch: USB connector (For power supply and touch output, the functions of the both are the same, can just use one of them)
④ Display: HDMI interface (For connecting motherboard and LCD monitor)
⑤ Power: Controls the backlight turned on and off to save power
⑥ Return: Return (Only valid in the OSD Settings menu)
⑦ Right/Down: Direction Right/Down （Backlight shortcut key）
⑧ Left/Up: Direction Left/Up （Backlight shortcut key）
⑨ Menu: Open the OSD / Select key (Only valid in the OSD Settings menu)

【How to use with Raspbian/Ubuntu Mate/Win10 IoT Core System】

◆ Step 1, Install Raspbian official image

1) Download the latest image from the official download.

2) Install the system according to the official tutorial steps.

◆ Step 2, modify the "config.txt"

After the programming of **Step1** is completed, open the **config.txt** file of Micro SD Card root directory and add the following code at the end of the file, save and eject Micro SD Card safely:

```
max_usb_current=1
hdmi_force_hotplug=1
config_hdmi_boost=7
hdmi_group=2
hdmi_mode=1
hdmi_mode=87
hdmi_drive=1
hdmi_cvt 800 480 60 6 0 0 0
```

◆ Step 3, Insert the Micro SD Card to **Raspberry Pi**, connect the **Raspberry Pi** and LCD by HDMI cable; connect USB cable to one of the four USB ports of **Raspberry Pi**, and connect the other end of the USB cable to the USB port of the LCD; then supply power to **Raspberry Pi**; after that if the display and touch both are OK, it means drive successfully (please use the full 2A for power supply).

➢ **How to rotate display direction:**

1. Add the statement in the "**config.txt**" file (the "config.txt" file is located in /boot):

```
display_rotate=1          #0: 0; 1: 90; 2: 180; 3: 270
```

2. Restart the **Raspberry Pi** after saving.

```
sudo reboot
```

➢ How to rotate Touch direction:

After the display is rotated, the touch needs to be modified.

1. Install libinput

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

2. Create the xorg.conf. D directory in /etc/x11 / below (if the directory already exists, this will proceed directly to step 3)

```
sudo mkdir /etc/X11/xorg.conf.d
```

3. Copy the file "40-libinput.conf" to the directory you just created.

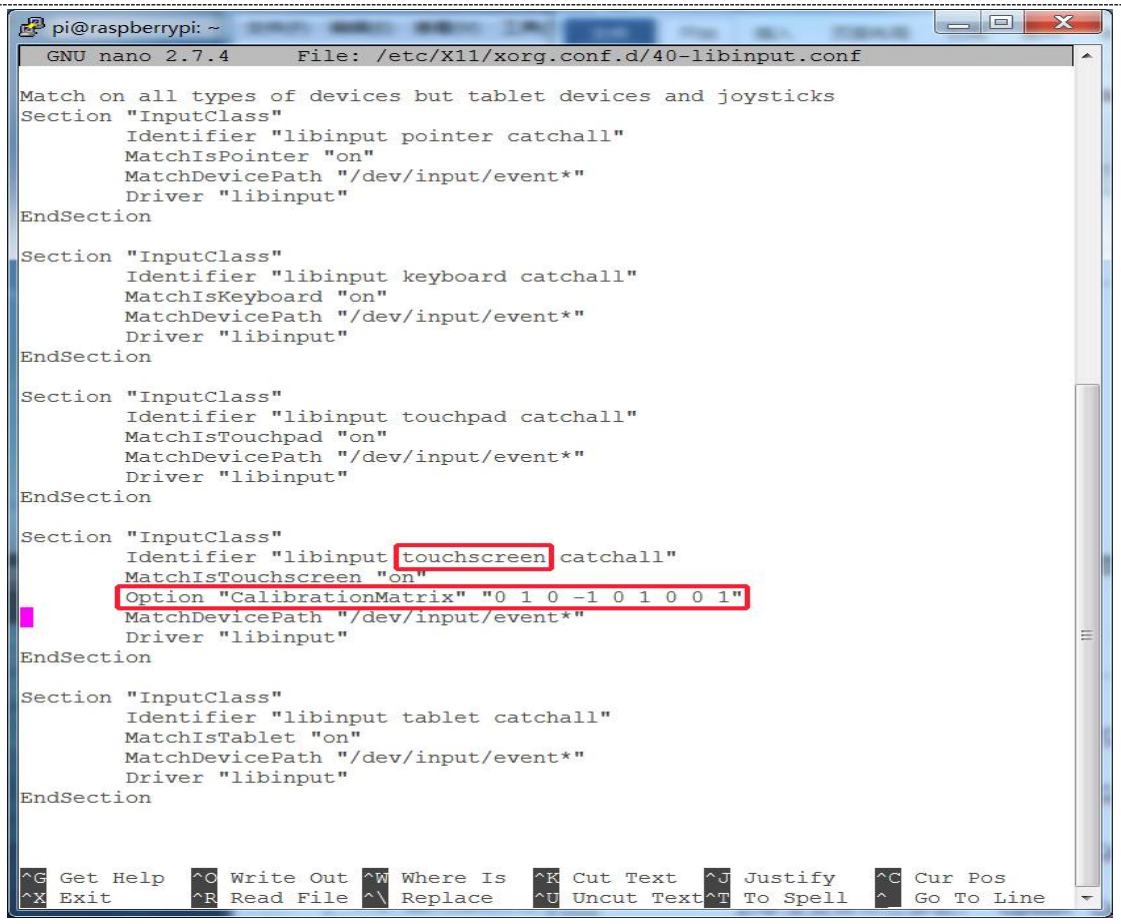
```
sudo cp /usr/share/X11/xorg.conf.d/40-libinput.conf /etc/X11/xorg.conf.d/
```

4. Edit "/etc/X11/xorg.conf.d/40-libinput.conf"

```
sudo nano /etc/X11/xorg.conf.d/40-libinput.conf
```

Find a part of the touchscreen, add the following statement inside, press **Ctrl+X** to exit, press **Y** to save.

```
Option "CalibrationMatrix" "0 1 0 -1 0 1 0 0 1"
```



5. Restar your **Raspberry Pi**

```
sudo reboot
```

Complete the above steps for a 90 degree rotation.

Note:

0 degrees of rotation parameters: Option "CalibrationMatrix" "1 0 0 0 1 0 0 0 1"

90 degrees of rotation parameters: Option "CalibrationMatrix" "0 1 0 0-1 1 0 0 1"

180 degrees of rotation parameters: Option "CalibrationMatrix" "1 0 0-1 1 0 0 1"

270 degrees of rotation parameters: Option "CalibrationMatrix" "0-1 1 1 0 0 0 0 1"

【How to use as PC monitor】

- connect the computer HDMI output signal to the LCD HDMI interface by using the HDMI cable
- Connect the LCD's USB Touch interface (Either of the two MicroUSB) to the USB port of the device
- If there are several monitors, please unplug other monitor connectors first, and use LCD as the only monitor for testing.