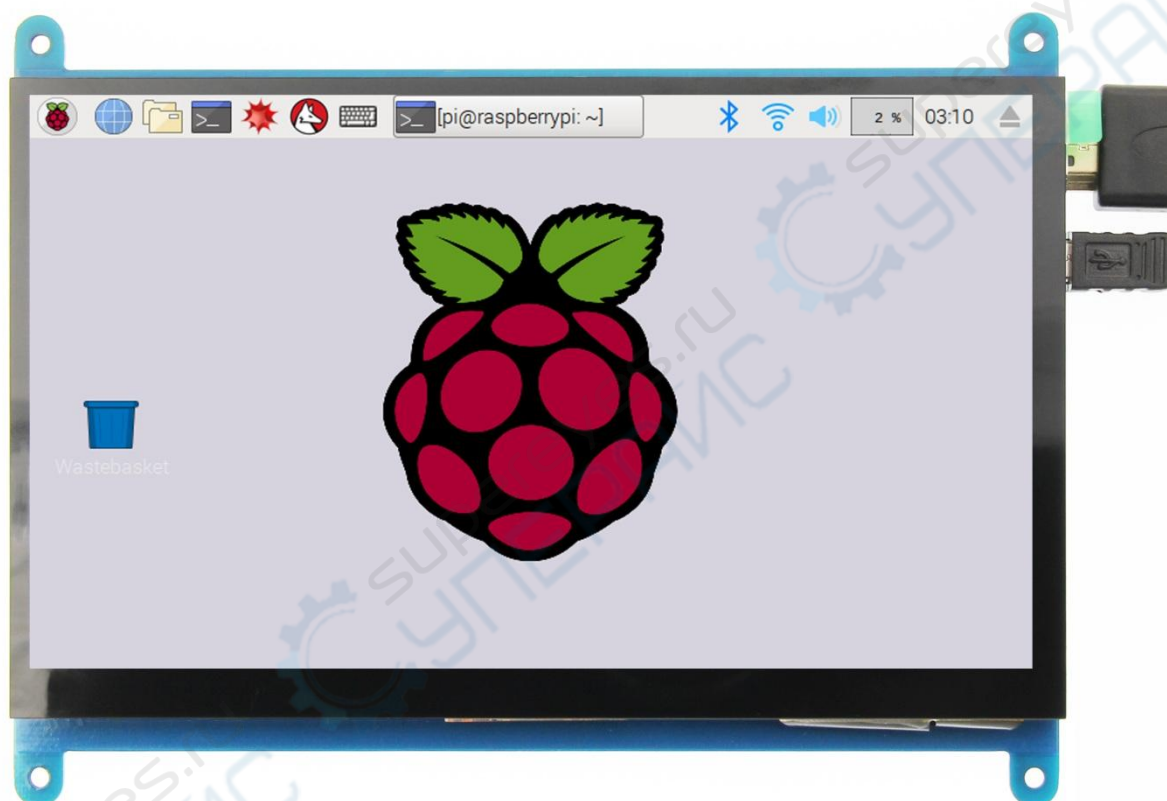# 7inch HDMI Display-B

User Manual

【product description】

◆ 7" standard display, 800 × 480 Hardware resolution, Up to 1920x1080 software configuration resolution.

◆ capacitive touch screen, maximum support 5 point touch

◆ support backlight control alone, the backlight can be turned off to save power

◆ support Raspberry Pi, BB Black, Banana Pi and other mainstream mini PC

◆ can be used as general-purpose-use HDMI monitor, for example: connect with a computer HDMI as the sub-display

◆ used as a raspberry pi display that supports Raspbian, Ubuntu, Kali-Linux, 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
◆ CE, RoHS certification

【Product Parameters】

◆ Size: 7.0 (inch)
◆ SKU: MPI7001
◆ Resolution: 800 × 480 (dots)
◆ Touch: five-point capacitive touch
◆ Dimensions: 164.9 * 124.27 (mm)
◆ Weight: 380 (g)

【Hardware Description】
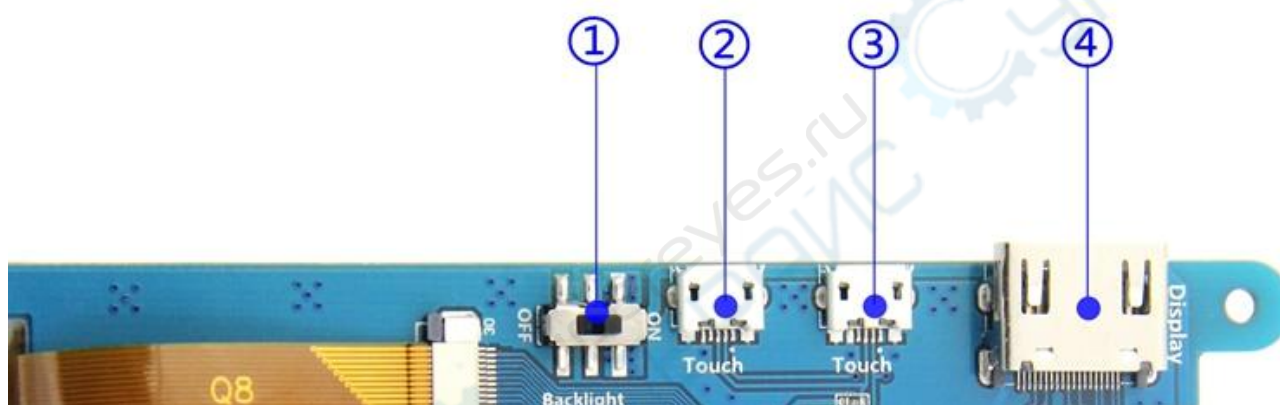
①Backlight Power switch: Controls the backlight turned on and off to save power.
②③USB Touch / power supply connector: For power supply and touch output, the functions of the both are the same, can just use one of them.
④HDMI interface: For connecting motherboard and LCD monitor to HDMI transmission.

【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 **Step 1** 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. Open the "**config.txt**" file (the "config.txt" file is located in /boot):

```
sudo nano /boot/config.txt
```

2. Add the statement in the "**config.txt**" file, press **Ctrl+X** to exit, press **Y** to save.

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

3. 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 1 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.