# 4inch HDMI Display-C User Manual



#### **[**Product Description **]**

- 4"standard display,800×480 resolution
- IPS,fast response,wide viewing Angle,color restore true
- With resistive touch screen, support touch control
- Support backlight control, Brightness variation
- Support standard HDMI interface input, compatible with and can be directly inserted with Raspberry Pi(3rd,2nd,and 1st generation)
- Can be used as general-purpose-use HDMI monitor, for example: connect with a computer HDMI as the sub-display (resolution need to be able to force output for 800x480)
- ◆ No IO resources needed for display only(Raspberry Pi uses IO resources for touch)
- CE,RoHS certification

#### [Product Parameters]

- Size: 4.0(inch)
- ◆ SKU: DS20226
- Display Mode:IPS
- Resolution: 800×480(dots)
- Touch: 4-wire resistive touch
- Dimensions:143\*134\*51(mm)
- Weight: 127(g)

#### [Hardware Description]



- Hardware capabilities
  - ① **3.5mm Headphone Jack:** Output audio signal
  - 2 HDMI:Used to connect the main board and LCD display for HDMI transmission

- ③ Micro USB: Get 5V Power from USB, If ⑤-13\*2 Pin Socket has been connected, that this USB interface can be No Connect.
- ④ **Backlight adjustment button**:Short press backlight change 10%,long press a few seconds to close backlight;short press to open backlight
- ⑤ 13\*2 Pin Socket:Get+5V Power from raspberry Pi to LCD,at the same time transfer touch signal back to Raspberry Pi.

Pin	Name	Description
1、17	3.3V	Power supply +3.3V
2,4	5V	Power supply +5V
3、5、7、8、10、 11、12、13、15、 16、18、24	NC	NC
6, 9, 14, 20, 25	GND	GND
19	TP_SI	SPI data input of touch panel
21	TP_S0	SPI data output of touch pane
22	TP_IRQ	The touch panel s interrupted and the low level is detected when the touch panel is pressed down
23	TP_SCK	Touch the SPI clock signal of the pane
26	TP_CS	Touch panel select signal, low level select touch panel

# 13\*2 Pin Socket interface definition

## [Dimensions]



## [Connect with Raspberry Pi]

1)Connect The LCD 13\*2 Pin socket to Raspberry Pi as the Picture show



2)Connect The LCD and Raspberry Pi with the HDMI adapter



### [How to use with Raspbian]

#### Step 1,Install Raspbian official image

Download from the official website: <u>https://www.raspberrypi.org/downloads/</u>
Format Micro SD card by **SDFormatter** Burn the official image into Micro SD card by using **Win32DiskImager**.

## Step 2,Install Driver

Method 1:online installation (Raspberry Pi need to connect to the Internet) 1)Log onto the Raspberry Pi by Putty SSH(User:pi;Password:raspberry)

2)Execute the following command (you can click the right mouse button to paste after copied in Putty)

git clone https://github.com/goodtft/LCD-show.git chmod -R755 LCD-show cd LCD-show/ sudo ./MPI4008-show

3)Wait for a moment after executing, you can use the LCD.

## Method 2:offline installation

 Download from the web site or copy the "Icd-show.tar.gz" drive from the CD-ROM to the root directory of the Raspbery Pi system card; <u>http://www.lcdwiki.com/res/RaspDriver/LCD-show.tar.gz</u> (Suggestion:copy flash driver directly to Micro SD card after completion of Step 1)

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

cd /boot sudo tar zxvf LCD-show.tar.gz cd LCD-show/ sudo ./MPI4008-show

3)Wait for a moment after executing, you can use the LCD.

## [How to use with Ubuntu、Kali and RetroPie]

- Step 1,Install Ubuntu,Kali or RetroPie official image 1)Download from the official website: Ubuntu: <u>https://ubuntu-mate.org/raspbery-pi/</u> Kali: <u>https://www.offensive-security.com/kali-linux-arm-images/</u> RetroPie : https://retropie.org.uk/download/
  - 2)Format Micro SD card by SDFormatter

3)Burn the official image into Micro SD card by using Win32DiskImager.

## Step 2,Install Driver

Due to system differences, **Ubuntu,Kali,RetroPie** are temporarily unable to install drivers online Only the offline installation method can be used.

1)Download the corresponding version of driver **LCD-show.tar.gz**" from the website to the root directory of Micro SD card of raspberry PI system

(Note:if the version does not match, the LCD may not display properly):

http://www.lcdwiki.com/4inch HDMI Display-C#Download Resources

(After the completion of the recommended **step 1**, copy the driver directly into the Micro SD card root directory)

2)Unzip and install the driver using the following command:

cd /boot sudo tar zxvf LCD-show.tar.gz cd LCD-show/ sudo ./MPI4008-show

3)After the command is executed, the system will restart and the LCD will work normally

#### [How to use Raspberry Pi quickly]

 If you find it difficult to install the driver in the previous step, or if the display is abnormal, please use our pre-installed driver image

1)Download and installthe driver image file from the website:

http://www.lcdwiki.com/4inch HDMI Display-C#Download Resources

2)Format Micro SD card by SDFormatter

3)Burn the official image into Micro SD card by using Win32DiskImager .

4) Insert Micro SD card, connect LCD, start Raspberry Pi, and it will work normally.

#### [How to use as PC monitor]

- Connected the computer HDMI output to the LCD HDMI interface by HDMI cable.
- Power to Micro USB interface
- If you have multiple monitors, please pul the other displayer, and make this LCD as the only displayer for testing.
- As computer monitors, the touch function will not be available.