

7inch HDMI LCD (C)

7-inch HDMI display, with a resolution of 1024×600 and a capacitive touch panel, which supports Raspberry Pi and can also be used as a computer monitor.

Features

- 7-inch IPS screen with a hardware resolution of 1024×600.
- 5-points capacitive touch control.
- Using with Raspberry Pi, it supports Raspbian / Ubuntu / Kali / RetroPie and WIN10 IoT, no need to install any drivers.
- Using as a computer monitor, it supports Windows 10 / 8.1 / 8 / 7, five-point touch, no need to install any drivers.
- Support backlight control, more power saving.

Instructions

Working with PC

This LCD can support Windows 7/8 / 8.1 / 10 system.

How to use:

- 1) Turn on the backlight switch on the back of the LCD.
- 2) Connect the Touch interface of the LCD to the USB interface of the PC. Wait for a while, the windows will automatically recognize the touch function.
- 3) Connect the HDMI interface of the LCD to the HDMI interface of the PC.

Note: When the computer is connected to several different displays at the same time, only this LCD can be used to control the cursor on the main display, so we recommended to set this LCD as the main display.

Working with Raspberry Pi

This LCD can support Raspbian / Ubuntu / Kali / RetroPie and WIN10 IoT systems. When the LCD works on systems such as Raspberry Pi, the resolution must be set manually, otherwise, it will cause abnormal display. There is no such problem when the LCD works on the PC version of Windows.

Please download the latest version of the image on the [Raspberry Pi official website](#).

- 1) Download the compressed file to the PC, and unzip it to get the .img file.
- 2) Connect the TF card to the PC, use SDFormatter.exe software to format the TF card.
- 3) Open the Win32DiskImager.exe software, select the system image downloaded in step 1, and click 'Write' to write the system image.
- 4) After the image has finished writing, open the config.txt file in the root directory of the TF card, add the following code at the end of config.txt, then save and quit the TF card safely.

```
max_usb_current=1
hdmi_group=2
hdmi_mode=87
hdmi_cvt 1024 600 60 6 0 0 0
```

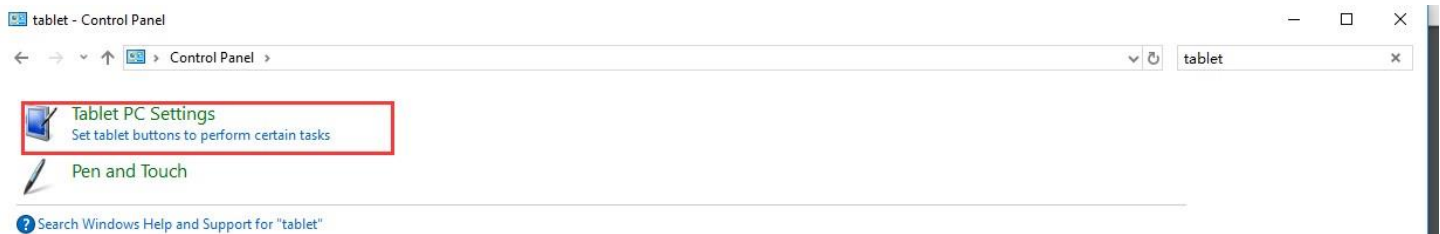
```
hdmi_drive=1
```

- 5) Insert the TF card into the Raspberry Pi
- 6) Turn on the backlight switch on the back of the LCD.
- 7) Connect the Touch interface of the LCD to the USB interface of the Raspberry Pi.
- 8) Connect the HDMI interface of the LCD to the HDMI interface of the Raspberry Pi, power on the Raspberry Pi, and wait for a few seconds until the LCD displays normally.

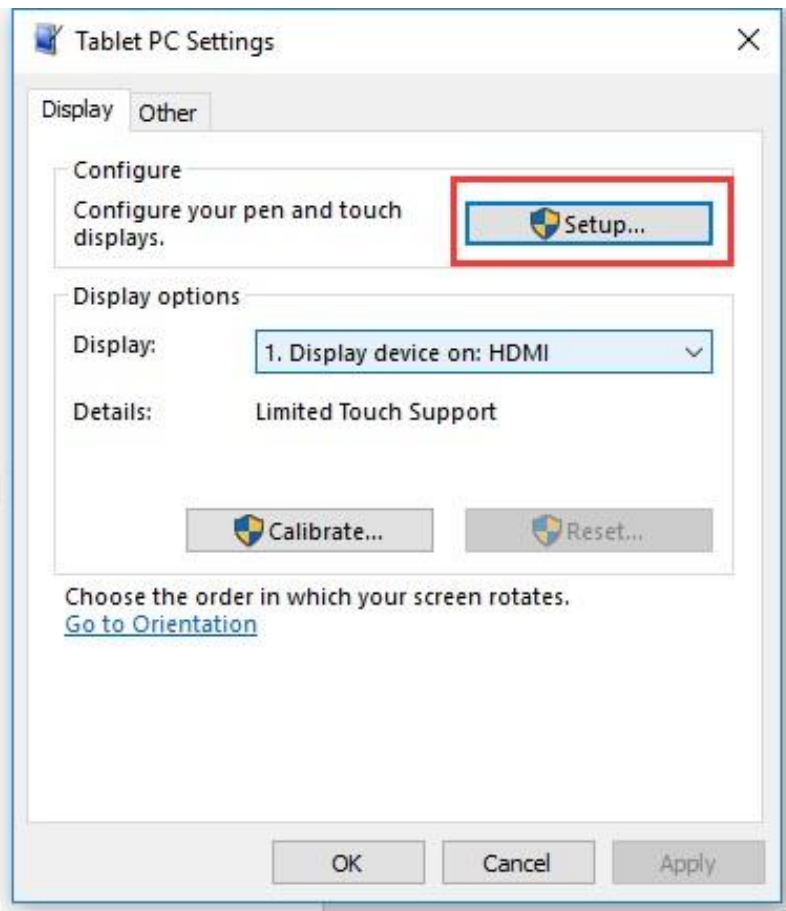
Touch Settings on Win 10 PC

Some users want to connect more than one display to their PC. Here we talk about how to setting the touch to make the touchscreen control its screen separately.

- Connect touchscreen to PC. Here we use a standard PC monitor and connect a 7inch HDMI LCD (C) for example. We make the monitor as the main screen and the touchscreen as a secondary screen.
- By default, The touchscreen can only control the cursor on the main screen. Here we set it to control the secondary screen.
- Open Control Panel and search Tablet PC setting on the control panel and open the tool.



- Click button "Setup..." to set the touchscreen



- After clicking the setup you can find that it is prompt on your first screen with white color background and other screens are white.

Tap this screen with a single finger to identify it as the touchscreen.

If this is not the Tablet PC screen, press Enter to move to the next screen. To close the tool, press Esc.

- If we want the touch of the touchscreen to control the desktop of the touchscreen itself. Just press Enter key to pass the first screen. And the second screen, when you find that the black text is displayed on the touchscreen, just touch the center of the touchscreen to finish this setting.

- After this setting, the touch on the screen will just control this touchscreen even though it is not the main screen.

Note:

1 If the first screen and the second screen are touchscreens as well, you can touch them when the text is displayed on the screens. Then you can find that all the touchscreen can work.

2 This method is just tested on win 10 PC.

Rotation(Working with Raspberry Pi)

Display Rotating

Add this statement in the config.txt file (the config file is located in the root directory of the TF card, which is named /boot):

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

Note: For Raspberry Pi 4, you need to comment out dtoverlay=vc4-fkms-V3D.

```
#dtoverlay=vc4-fkms-V3D.
```

And then restart the Raspberry Pi after saving.

```
sudo reboot
```

Touch Rotating

After the display is rotated, the position of touch is incorrect because the touch doesn't change with the display angle. So the touch also needs to be modified.

1.Install libinput.

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

If the system you installed is Ubuntu or Jetson Nano. The installation code is:

```
sudo apt install xserver-xorg-input-synaptics
```

2.Create the xorg.conf.d directory under /etc/X11/ (if the directory already exists, proceed directly to step 3).

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

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

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

4.Edit this file.

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

Find the part of the touchscreen, add the following statement inside, and then save the file.

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

Similar to the picture below:

```
pi@raspberrypi: ~
GNU nano 2.7.4 File: /etc/X11//xorg.conf.d/40-libinput.conf
EndSection

Section "InputClass"
    Identifier "libinput touchscreen catchall"
    MatchIsTouchscreen "on"
    Option "CalibrationMatrix" "0 1 0 -1 0 1 0 0 1"
    MatchDevicePath "/dev/input/event*"
    Driver "libinput"
EndSection

Section "InputClass"
    Identifier "libinput tablet catchall"
    MatchIsTablet "on"
    MatchDevicePath "/dev/input/event*"
    Driver "libinput"
EndSection

^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit ^R Read File ^\ Replace ^U Uncut Text ^T To Spell ^_ Go To Line
```

5. Restart the Raspberry Pi.

```
sudo reboot
```

Note:

90 degree rotation: Option "CalibrationMatrix" "0 1 0 -1 0 1 0 0 1"

180 degree rotation: Option "CalibrationMatrix" "-1 0 1 0 -1 1 0 0 1"

270 degree rotation: Option "CalibrationMatrix" "0 -1 1 1 0 0 0 0 1"

About the version

Rev3.1 version

- The Rev3.1 version mainly changes the touch chip of the Rev2.2 version from GT811 to GT911. The touch effect is better, and the anti-interference ability is enhanced at the same time.
- This version is fully compatible with Rev2.1 and Rev2.2, and users can replace it with confidence.

Rev2.2 version

- Rev2.2 version mainly adds VCOM adjustable potentiometer and related circuits of electromagnetic compatibility on the basis of Rev2.1.
- This version is fully compatible with the Rev2.1 version, and users can replace it with confidence.

Rev2.1 version:

- Upgrade to IPS screen, with the larger viewing angle and the clearer display effect, I believe you will like it.
- Use standard HID protocol, you can transplant your own system conveniently.

- Using with Raspberry Pi, it supports Raspbian / Ubuntu / Kali / Retropie and WIN10 IoT, single touch, no need to install any drivers.
- Using as a computer monitor, it supports Windows 10 / 8.1 / 8 / 7, five-point touch, no need to install any drivers.

Rev1.1 version:

- Using private HID protocol, it is difficult to transplant to your own system
- Using with Raspberry Pi, you need to install a driver when the display connects to Raspbian or Ubuntu systems. and it doesn't support Kali, Retropie, and Windows 10 IoT.

Resources

- [7inch HDMI LCD \(C\) User Manual](#)

Software

- [Panasonic SDFormatter](#)
- [Win32DiskImager](#)
- [PuTTY](#)

Backlight Control

Note: We don't recommend you to do any hardware modification, which may damage LCD if you are not good at it. So be careful when you following this manual

- [PWM control brightness of LCD](#)

External guides

- [Woring with Volumio](#)

3D Drawings

- [7inch HDMI LCD B/C Drawings](#)

LCD Panel Dimension

- [7inch HDMI LCD \(C\) panel dimension](#)

Certification

- [CE RoHS](#)

Assembly tutorial

- [Assembly tutorial with 7inch HDMI LCD \(C\) \(with bicolor case\)](#)