7inch HDMI LCD (C)

User Manual

CONTENT

INTRODUCTION

1024×600, 7inch Capacitive Touch Screen LCD, HDMI interface, supports various systems

- 7inch IPS screen, 1024x600 hardware resolution
- Capacitive touch control
- Supports popular mini PCs such as Raspberry Pi, BB Black, as well as general desktop computers
- When works with Raspberry Pi, supports Raspbian/Ubuntu/Kali/Retropie/WIN10 IOT, driver free
- When work as a computer monitor, supports Windows 10/8.1/8/7, five-points touch, and driver free
- Backlight can be turned off to lower power consumption

HOW TO USE

WORKING WITH PC

This product supports Windows 10/8.1/8/7 OS. For the Windows 10/8.1/8 OS, the touch screen supports multi-touch up to 5 points. For some Window 7 OS, the touch screen supports single touch only.

CONNECTION

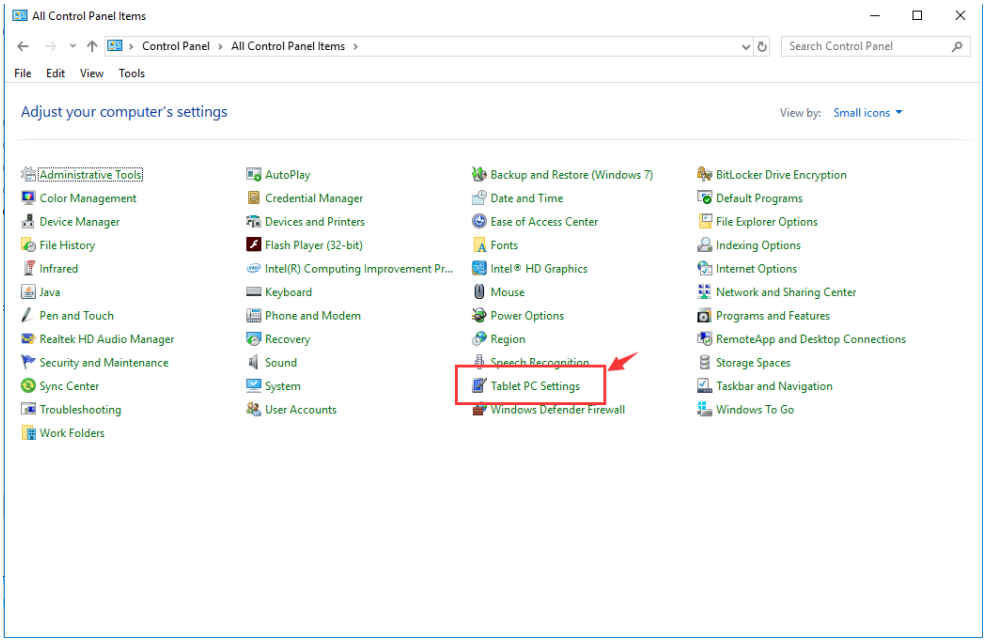
1. Turn on the "backlight" switch
2. Connect USB Port of LCD to USB Port of PC
3. Connect HDMI Port of LCD to HDMI Port of PC.

【Note】 Please first connect the USB Ports then connect the HDMI Port).

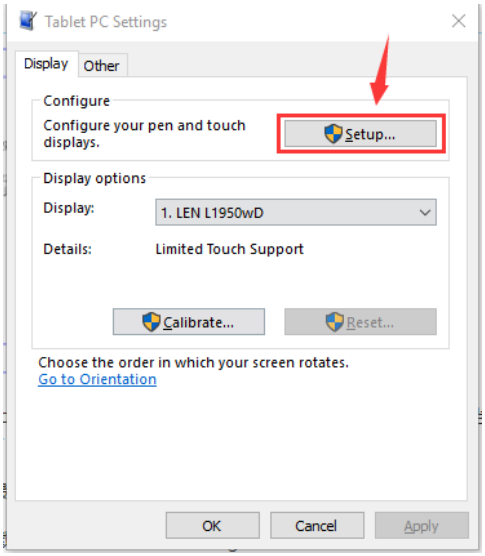
CONFIGURE THE TOUCH DISPLAY

As we know, the touch screen connected is set to control the main display by default, sometimes we need to make the touch to control other display than the main display if we set the touch screen as second display. Herein we show you how to configure it.

1. Open Tablet PC Settings from Control Panel



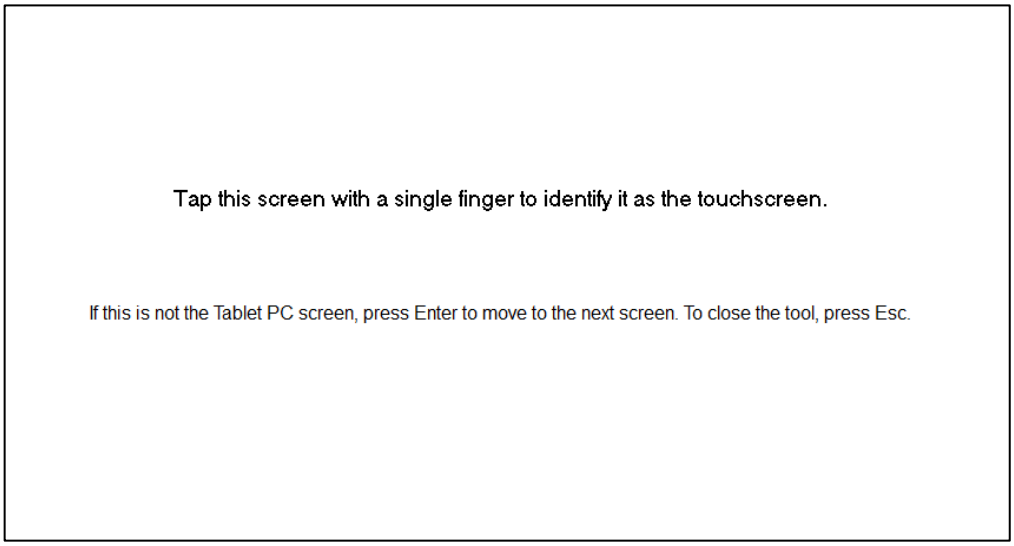
2. Open the Tablet PC Settings, and click Setup...:



Following the hint to finish setting:

hints:

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 toll, press Esc.*



For example:

I connect a big size display and one touch screen to my PC (Windows 10), the big display is recognized as display 1 (the main display), the touch screen is recognized as display 2 (the second display). Before tablet setting, the touch screen controls the main display if I touch it. Now I want to make the touch screen to control itself-the second display.

So, I click Setup…, the hint appears on display 1 and display 2 is white. I press Enter, the hint turns to display 2 and display 1 is white. I tap the center of the touch screen (display 2). The setting is finish, and now if I tap the touch screen, I can control the display 2 with the touch screen instead of main display.

WORKING WITH RASPBERRY PI

When working with Raspberry Pi, you should set the resolution of the LCD manually, or else the LCD screen will not work.

1. Turn on the "backlight" switch
2. Connect the HDMI Port of LCD to HDMI Port of Pi
3. Connect USB Port of LCD to USB Port of PC
4. Download the Raspbian image from Raspberry Pi website.
5. Write the image to a TF card and append the following lines to the config.txt file which locates in the root of your TF card:

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

You must make sure that there are no spaces on either side of the equal sign.

6. Save and connect the TF card to your Pi then power up.

【Note】

1) Make sure you have appended configure lines as above. Or the LCD could not work properly. If the LCD work in abnormal states for long time, it may destroy.

2) There is a potentiometer on the backside of LCD, at your first use, you had better adjust it for best display effect.

ROTATION

Display Rotating

1. To rotating the display, you can append this statement to the config file

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

2. Reboot the Raspberry Pi

```
sudo reboot
```

Touch Rotating

Note: To rotate the touch, you can re-compile the kernel as well. There is an example for reference (use 7inch HDMI LCD (C).)

- Re-Compilation Method

Another way, you can set the libinput.

1. Install libinput

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

   For Ubuntu-Mate OS, you need to install **xserver-xorg-input-libinput-hwe-16.04** instead.

2. create an xorg.conf.d folder

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

3. copy file 40-libinput-conf to the folder which we created

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

4. Append a statement to touchscreen part of the file as below:

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

5. save and reboot your Pi

```
sudo reboot
```

After completing these steps. The LCD could rotate 90 degree both display and touch.

【Note】

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

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

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

IMAGES

For BB Black and BananaPi/ BananaPi Pro, we provide test image. The LCD could only work with this image.

- BB Black
  - 7inch HDMI LCD (C) Angstrom image
- BananaPi/BananaPi Pro
  - 7inch HDMI LCD (C) Raspian image
  - 7inch HDMI LCD (C) Lubuntu image

NOTE

Some users may find that if they didn't set the config file at first time, then after modifying it and reboot their pi, the LCD will flicker and has ghost problem. In this case, please power off the LCD and put it aside for several hours.（wait for the flickering and ghost disappear）, and test it again. (please make sure you have set the corresponding resolution as the guide below before using). And you can also adjust the potentiometer on the backside for properly display