



# 7inch HDMI LCD (B)

## User Manual



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## OVERVIRE

7inch HDMI LCD (B) has 800x480 resolution, capacitive touch control, HDMI display supports various systems.

## FEATURES

- 800×480 high resolution
- Capacitive touch control
- Supports popular mini-PCs like Raspberry Pi, BB Black, etc.
- When working with Raspberry Pi, supports Raspbian, Ubuntu, WIN10 IoT, single touch, and driver free
- When working with other mini-PCs, driver is required and should be developed by users
- Not only for mini-PCs, it can work as a computer monitor just like any other general HDMI screen
- When works 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.

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### CONNECTION

1. Turn on the "backlight" switch
2. Connect the LCD to your PC
  - USB Port of LCD connect to USB Port of PC;
  - HDMI Port of LCD connect to HDMI Port of PC. (Please first connect the USB Ports then connect the HDMI Port).

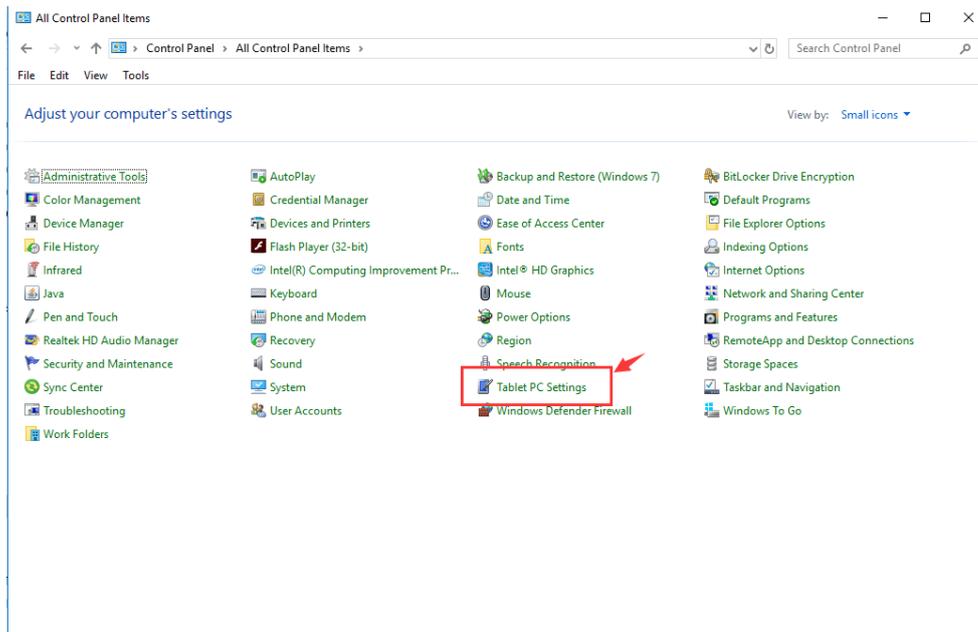
A new touch drive will be recognized by Windows and you can use the LCD as a human interface device. When multiple displays are detected by your PC.

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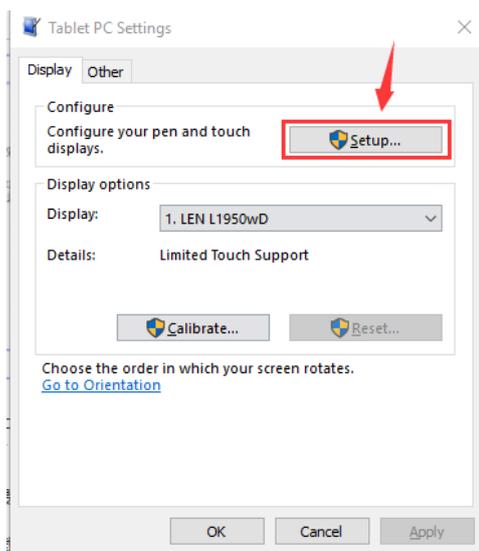
### CONFIGURE THE TOUCH DISPLAY

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



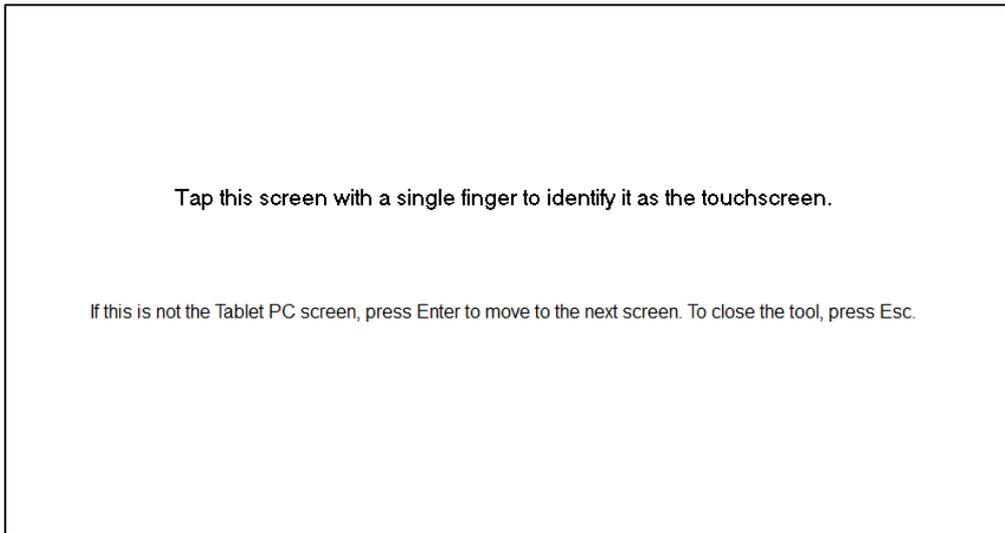
## 2. Open the Tablet PC Settings, and click Setup...:



## 3. 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.

## WORKIGN 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. For more detail information, please read the following section.

1. Turn on the "backlight" switch
2. Connect the LCD to your Pi
  - HDMI Port of LCD -> HDMI Port of Pi;
  - USB Port of LCD -> USB Port of Pi;
3. Download the Raspbian image from Raspberry Pi web site.
4. Write the image to a TF card
5. Append the following lines to the config.txt file which is located in the root of

your TF card:

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

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

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## 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
```

```
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  ^C 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. 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"