



## 5.0 Inch HDMI Touch Screen for the Raspberry Pi **User Guide**

Document Date: 1th Sep 2016

Document Author: Island ([island@elecrow.com](mailto:island@elecrow.com))

West of F-building 8th floor, Fusen industry park , Gushu Hangcheng road ,Bao'an Ave,Shenzhen city, China

E-mail: [wilson@elecrow.com](mailto:wilson@elecrow.com)

## 1. Product Overview

This is a 5-inch screen for the raspberry pi/beaglebone black which are specific open source products. Compared with other touch screen,its advantages is listed below:

- 1, a larger screen: 5-inch screen magnification of 480 \* 800 resolution.
- 2, support for multi-system.
- 3, support the 2nd generation Raspberry Pi model B Raspbian system.
- 4, support for Raspberry Pi B / B + Pidora, Raspbian, Arclinux, XBMc system.
- 5, support beaglebone black Angstorm, Android4.2.2.
- 6, compatible with raspberry pi 3.
- 7, HDMI input, faster, smoother transmission.
- 8, cross-platform support, support Raspberry Pi, Beaglebone, follow-fly, support more platforms.

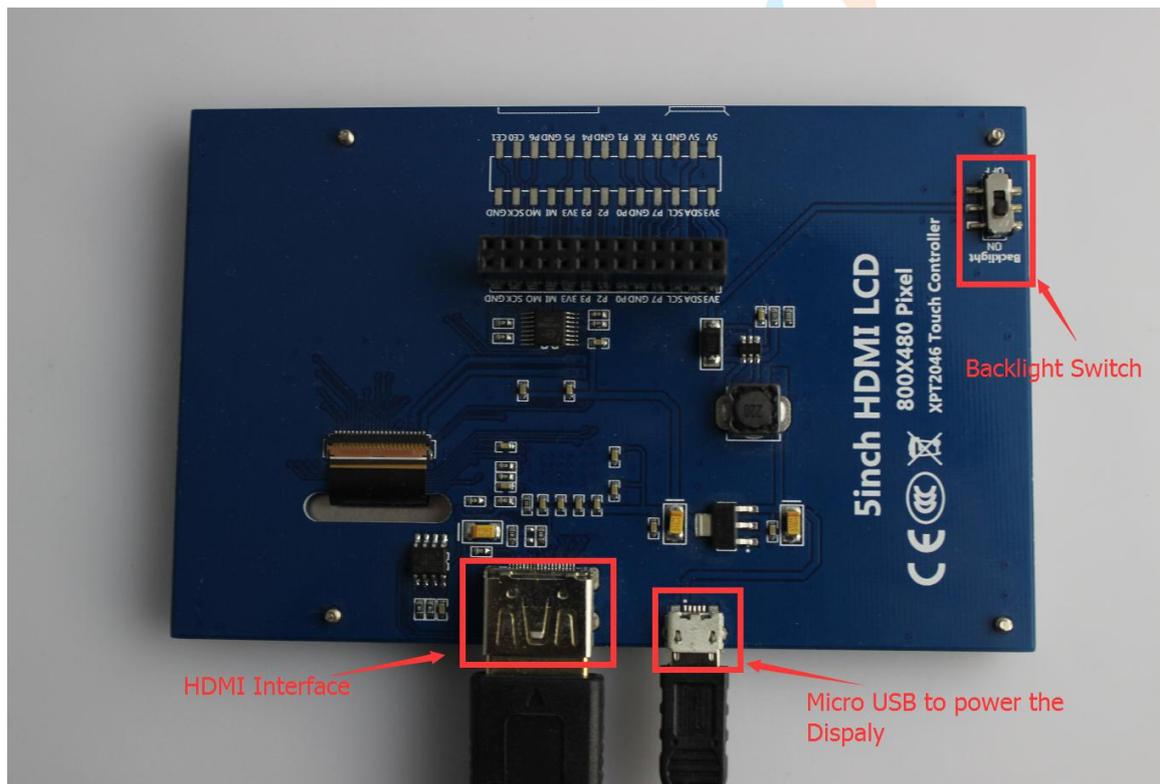
## 2. List of supported operating systems

Display only	Display+touchscreen
<ol style="list-style-type: none"> <li>1. Pidora</li> <li>2. Raspbian</li> <li>3. AtchLinux</li> <li>4. XBMC for Raspberry Pi</li> </ol>	<ol style="list-style-type: none"> <li>1. Pidora</li> <li>2. Raspbian</li> </ol>

## 3. LCD module parameters

5 Inch LCD Module parameter			
Driver element	a-si TFT active matrix	Resolution desinition	800x480
Display color	16.7M	Interface	Digital,parallel 8bit RGB
Visual area(mm)	154.08(W)X85.92(H)	Dot pitch(mm)	0.0642(W)X0.179(H)
Visual angle(U/D/LR)	50/70/70/70	Brightness (cd/m2)	400
Contrast	500:1	Response time(ms)	White to Black:10 Black to White:15
Operating temperature	-20~70	Pannel power	0.226W

#### 4. Introduction and hardware connection



To ensure proper use, please in strict accordance with the following connections, and be not reversed.

##### 4.1 Display Connections

- 1) Turn the Backlight Switch to the ON side
- 2) HDMI cord connected to the HDMI port

West of F-building 8th floor, Fusen industry park , Gushu Hangcheng road ,Bao'an Ave,Shenzhen city, China

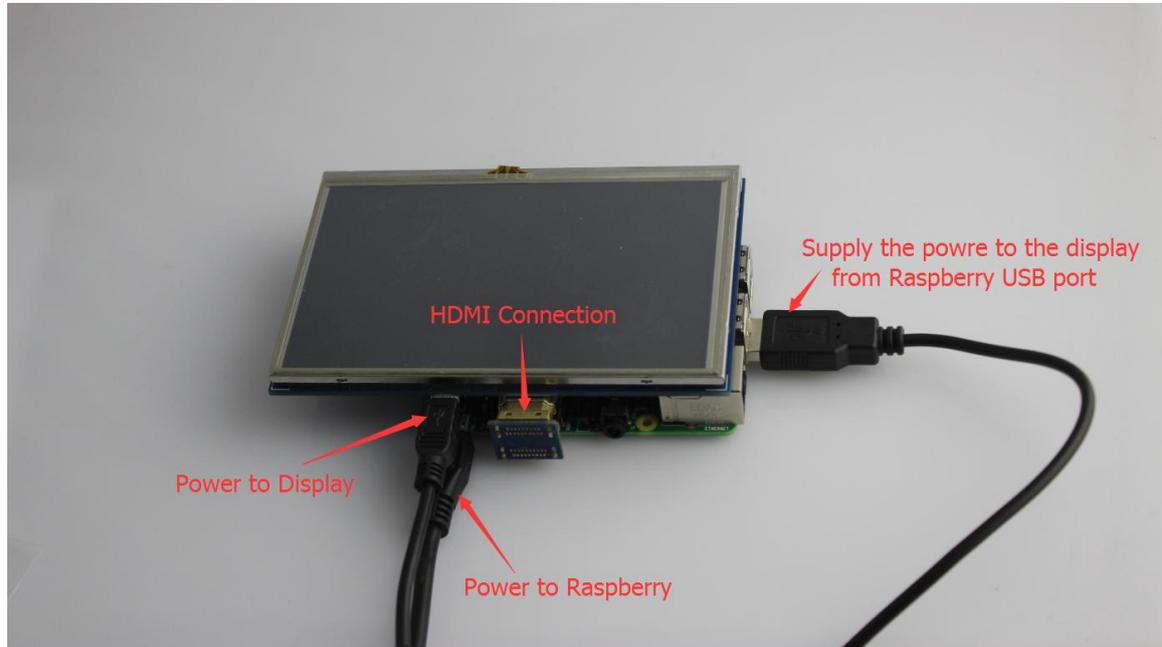
E-mail: [wilson@elecrow.com](mailto:wilson@elecrow.com)

3) Mini USB powered to screen

4.2 Raspberry pi connections

1) Plug the display into the device then connect. .

2) Connection method is as showed in the following picture:



## 5. System Mirror Installation Instructions

5.1 Raspberry Pi Raspbian system installation method

1) Download the mirror file of Raspbian system that we have provided for you.

5 Inch Display Configured system for B+ 2B:

<https://www.dropbox.com/s/2ym7k6p76rmz5m5/5%20inch%20configured%20system%20for%20B%2B2B.zip?dl=0>

5 Inch Display Configured system for 3B:

<https://www.dropbox.com/s/kpd5nuyhaqcxlbm/5%20inch%20configured%20system%20for%20RPI3.zip?dl=0>

2) Download link for driver:

5 inch display driver for RPI B+2B

<https://www.dropbox.com/s/n6zdfkhj1b0fmk4/5%20inch%20dispaly%20driver%20for%20RPI%20B%2B%2B.zip?dl=0>

5 inch display driver for RPI 3B

<https://www.dropbox.com/s/l31dyb8jruiyd1/5%20inch%20dispaly%20driver%20for%20RPI%203B.zip?dl=0>

3) Prepare the software tool: Panasonic\_SDFormatter and Win32DiskImager

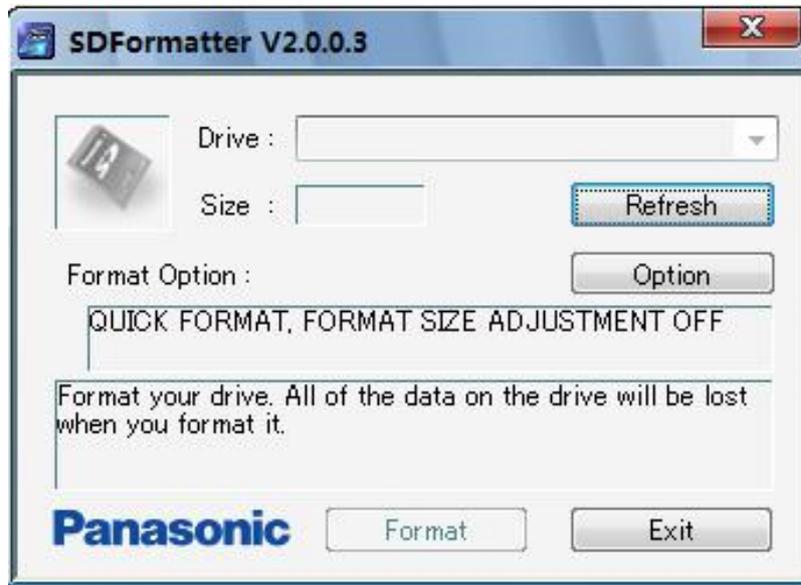
Panasonic\_SDFormatter download site:

[https://www.sdcard.org/downloads/formatter\\_4/index.html](https://www.sdcard.org/downloads/formatter_4/index.html)

West of F-building 8th floor, Fusen industry park , Gushu Hangcheng road ,Bao'an Ave,Shenzhen city, China

E-mail: [wilson@elecrow.com](mailto:wilson@elecrow.com)

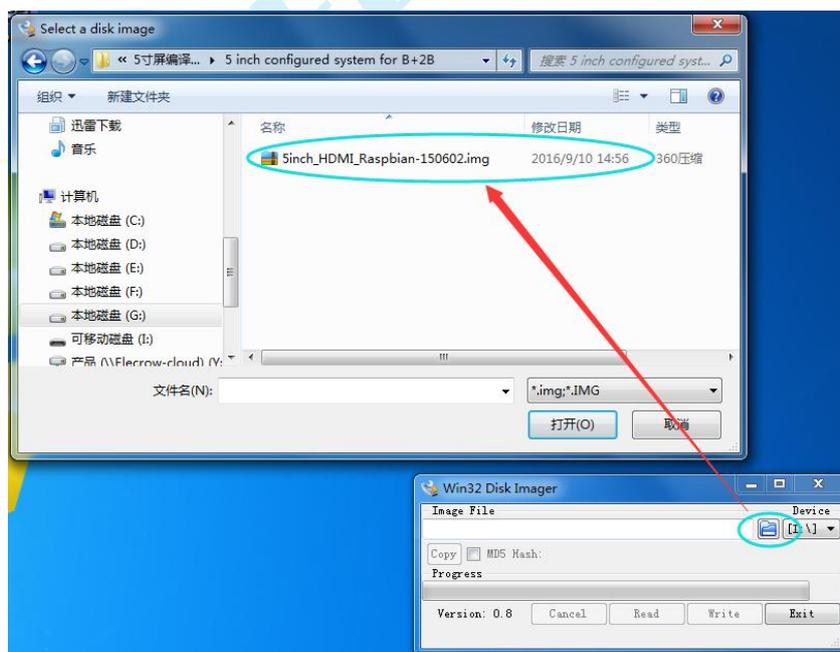
4) First you need to format the TF card with Panasonic\_SDFormatter:  
 Insert the TF card into computer USB port with a TF card reader, open the Panasonic\_SDFormatter, If the computer's external memory is only a TF card, the TF card is selected by default, click the "option "



Choose the "on", then click the "OK", finally click "format"

**Note: If you want to load a Raspberry Pi B + / 2B system, the storage of TF card can not be lower than 8G. raspberry pi 3 system is preferably 16G.**

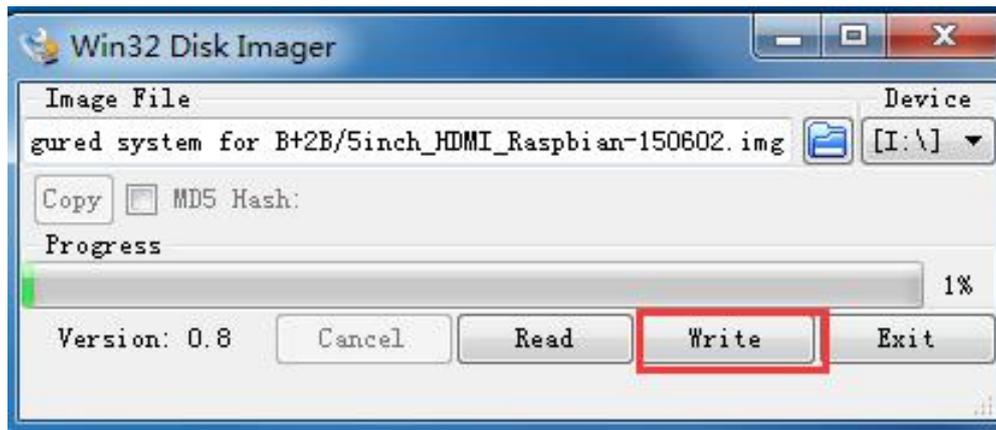
5) Open the Win32DiskImager.exe software, choose the system image prepared



Then click [write] to burn the system file. (File extension is ".img")

West of F-building 8th floor, Fusen industry park , Gushu Hangcheng road ,Bao'an Ave,Shenzhen city, China

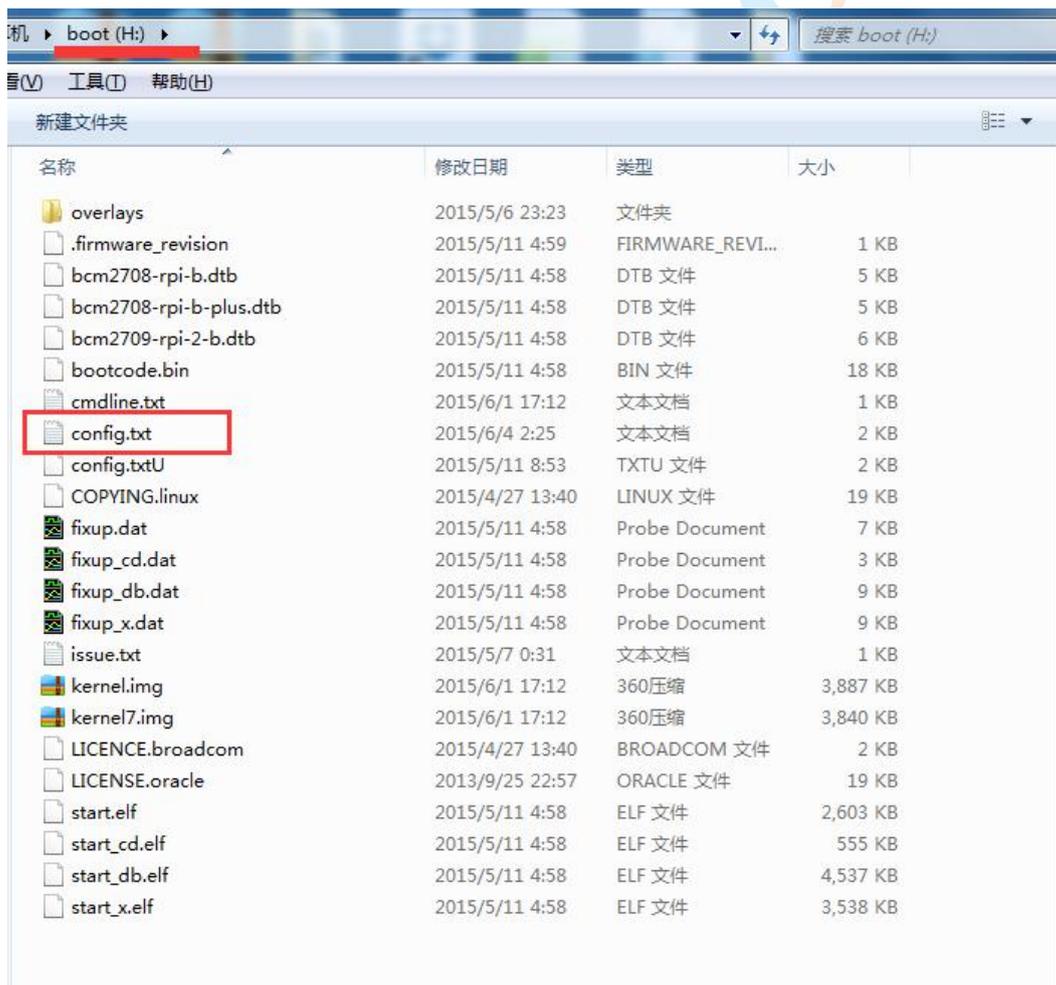
E-mail: [wilson@elecrow.com](mailto:wilson@elecrow.com)



6) Save the file, pull out the TF card.

7) Connect the cord, insure the connection correct, insert the TF card into the Raspberry Pi, and it can be used after power supply.

**Note: When using the Raspberry Pi B / B +, If you do not use the touch screen function, you can just download the latest official firmware. Then found "config.txt" file after the successful installation, replace the following files to the contents of folder file:**



# uncomment if hdmi display is not detected and composite is being output

West of F-building 8th floor, Fusen industry park , Gushu Hangcheng road ,Bao'an Ave,Shenzhen city, China

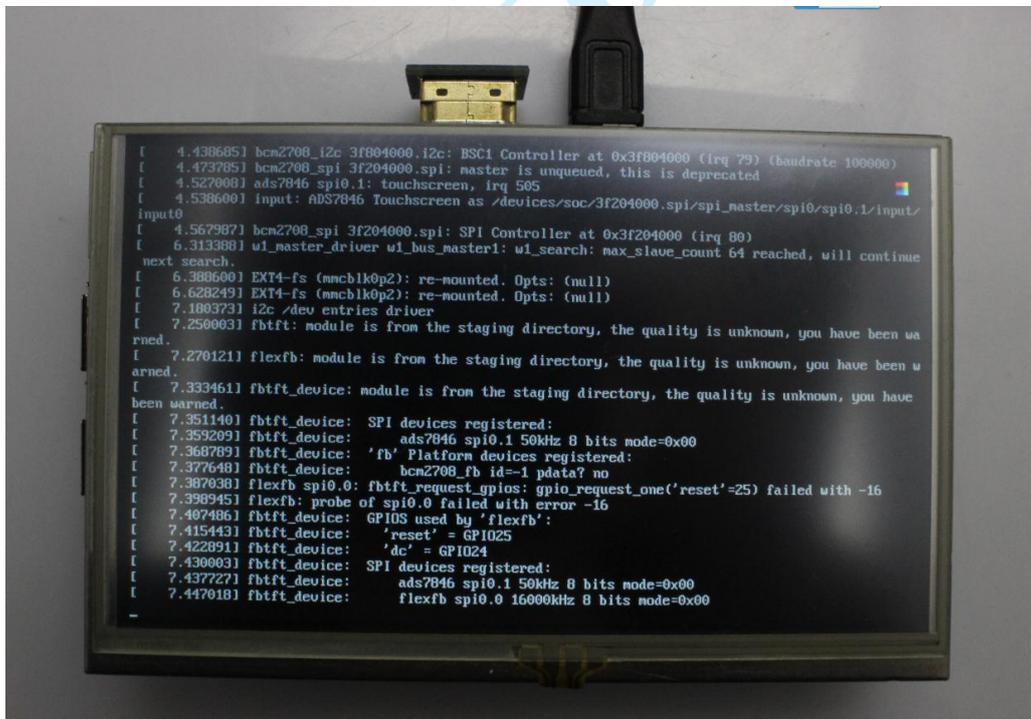
E-mail: [wilson@elecrow.com](mailto:wilson@elecrow.com)

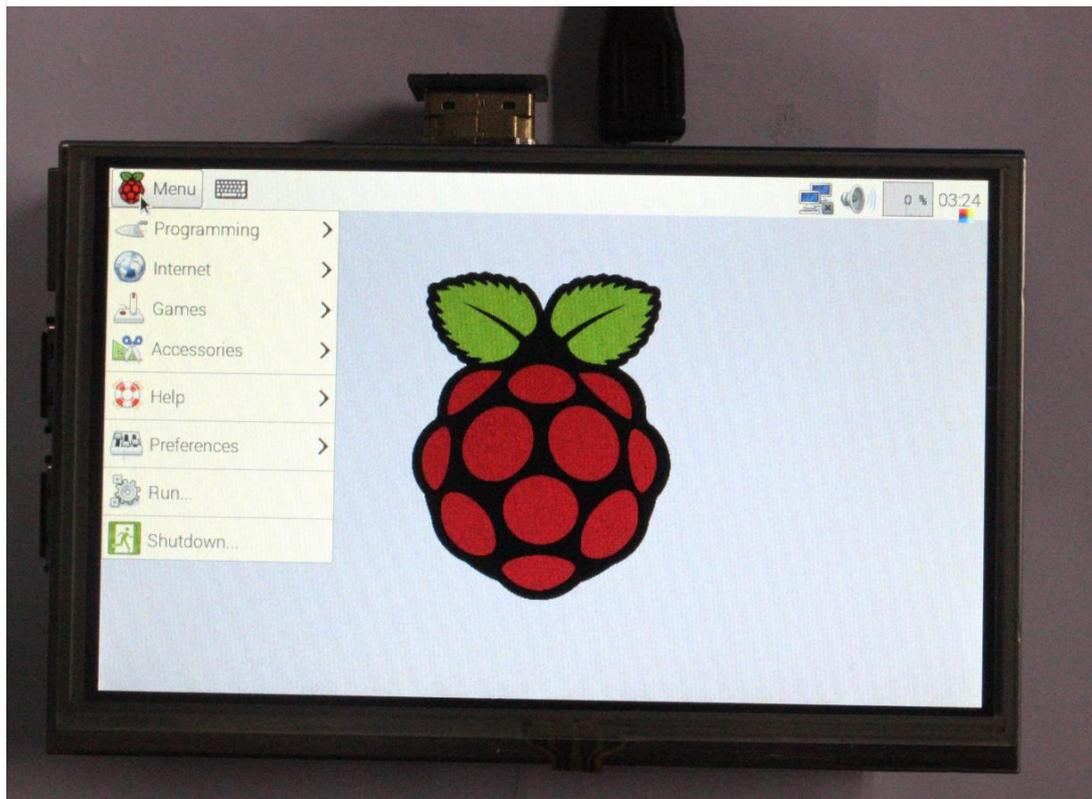
```

hdmi_force_hotplug=1
# uncomment to force a specific HDMI mode (here we are forcing 800x480!)
hdmi_group=2
hdmi_mode=1
hdmi_mode=87
hdmi_cvt 800 480 60 6 0 0 0
# uncomment to force a HDMI mode rather than DVI. This can make audio work in
# DMT (computer monitor) modes
#hdmi_drive=2
# uncomment to increase signal to HDMI, if you have interference, blanking, or
# no display
#config_hdmi_boost=4
# uncomment for composite PAL
#sdtv_mode=2
#Eleduino 5.0 Inch Hdmi Touch Screen for the Raspberry Pi User Guide
#uncomment to overclock the arm. 700 MHz is the default.
#arm_freq=800
# for more options see http://elinux.org/RPi_config.txt
start_x=1
gpu_mem=128

```

8) Insert the SD card to Raspberry SD card holder and reboot the Raspberry.





5.2 Also you can configure the driver to your own system. The method like as bellow:

- 1) According to the previous link, download the corresponding driver.
- 2) Transfer the driver file to your Raspberry.
- 3) `sudo raspi-config`

Enable Boot to Desktop/Scratch -> Desktop Log in as user 'pi' at the graphical desktop

Input:

```
tar xvf LCD-show-150602.tar.gz //If you use Raspberry 3B thatyou should change the name of  
the driver
```

```
cd LCD-show
```

```
sudo ./LCD5-show
```

Then reboot, you will enjoy the touch function and wish you have a fun.

## 6. Contact Information

For Technical Support: [island@elecroe.com](mailto:island@elecroe.com)

For Sales Support: [Order@elecrow.com](mailto:Order@elecrow.com)

Website: [www.elecrow.com](http://www.elecrow.com)