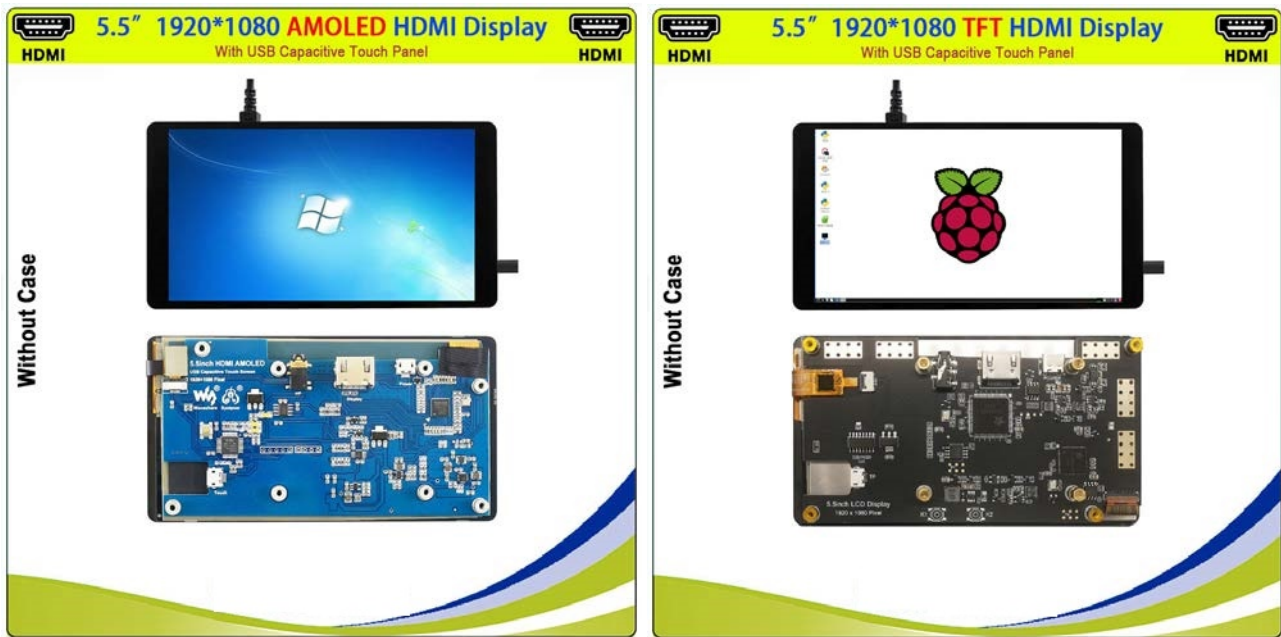


HDMI SERIES DISPLAY

SUR19201080H055A

AMOLED / LCD MODULE USER MANUAL



HDMI Series Display Selection Guide

PRODUCT: TFT TOUCH MODULE

MODEL NO.: SUR19201080H055A

SUPPLIER:

DATE: Jul 15, 2019

SPECIFICATION

Revision: 0.0

SUR19201080H055A

This module uses ROHS material


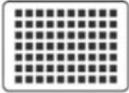
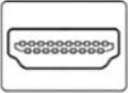

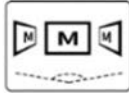





H055A1-AMOLED

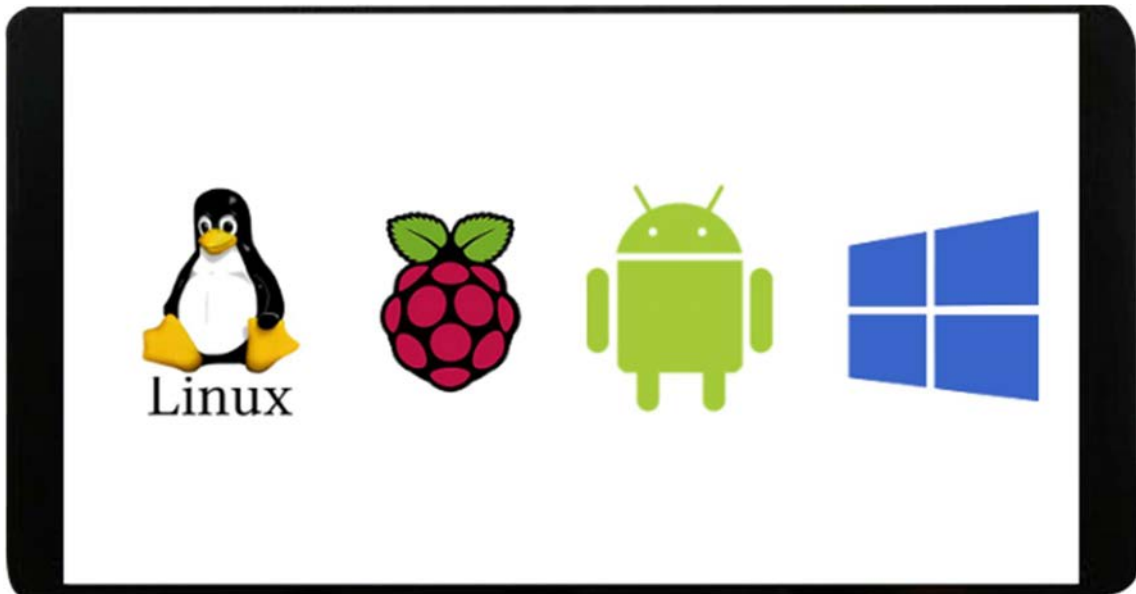
H055A2-TFT LCD

<i>WRITTEN BY</i>	<i>CHECKED BY</i>	<i>APPROVED BY</i>
<i>Jason</i>	<i>Eric</i>	<i>Henry</i>

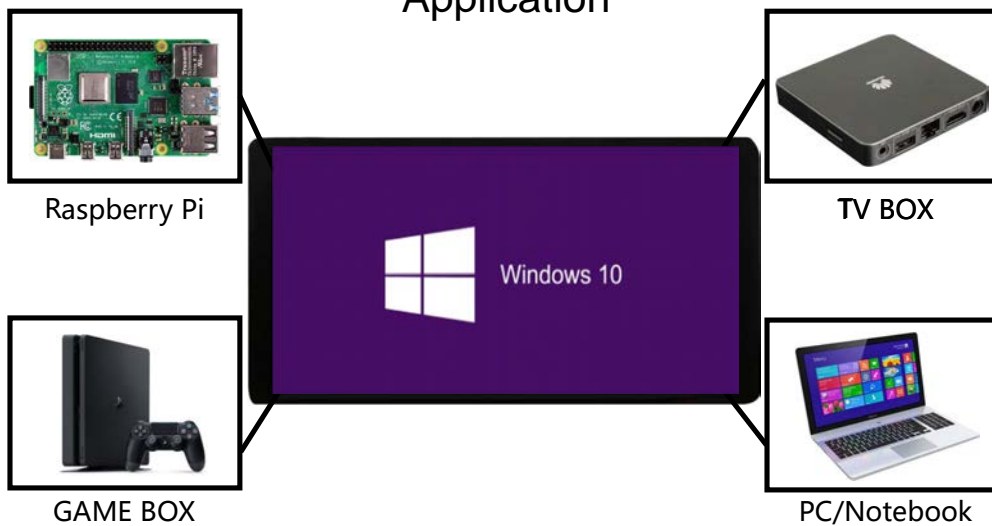
5.5 inch HDMI AMOLED/LCD Series

Part A: Hardware Introduce

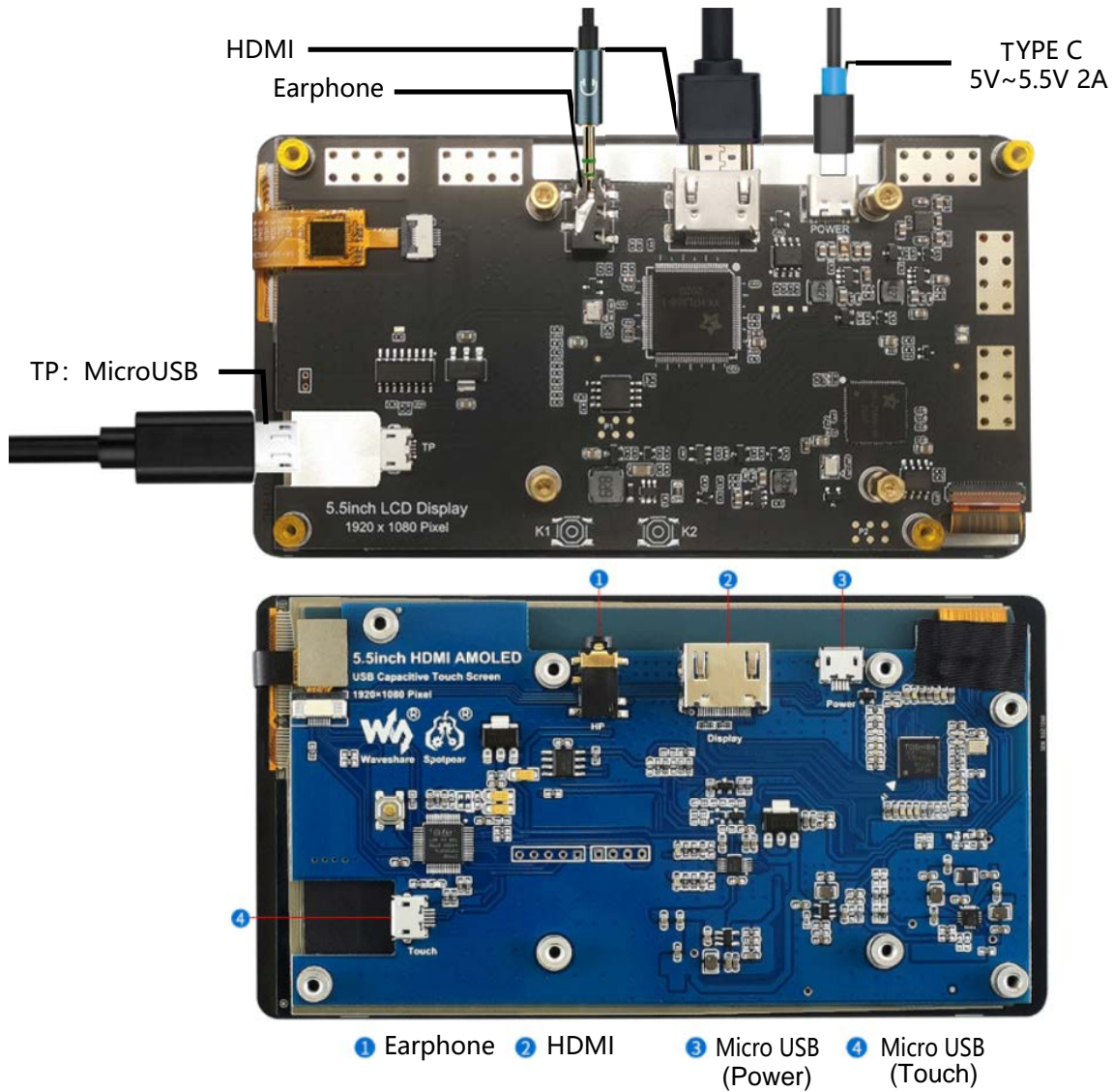
<p>Size</p>  <p>5.5inch</p>	<p>Resolution</p>  <p>1920*1080</p>	<p>Display Interface</p>  <p>HDMI</p>	<p>Screen Type</p>  <p>LCD Display</p>	<p>Viewing Angle</p>  <p>160°</p>
<p>Touch Type</p>  <p>Capacitive touch</p>	<p>Touch Points</p>  <p>Five Points</p>	<p>Touch Interface</p>  <p>USB</p>	<p>Touch Panel</p>  <p>Tempered</p>	<p>Audio Output</p>  <p>3.5mm Earphone jack</p>



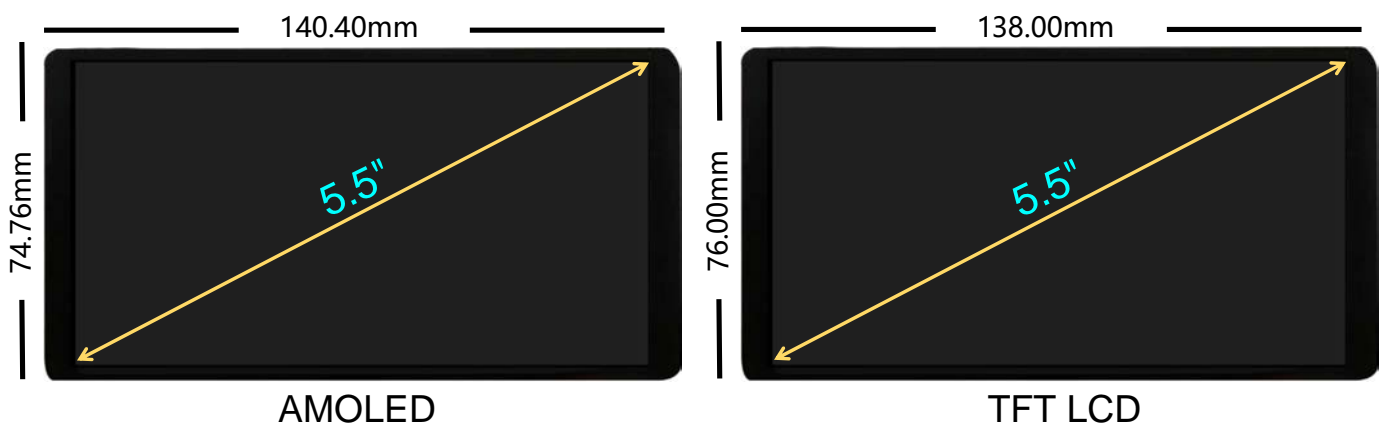
Application



Interface



Outline Size



Part B: How to use it?

FEATURES

- 5.5 inch AMOLED/LCD, 1920x1080 resolution.
- Toughened glass capacitive touch panel, 6H hardness.
- Supports popular mini PCs such as Raspberry Pi, as well as general desktop computers.
- When works with Raspberry Pi, supports Raspbian/Ubuntu/Kali/RetroPie, driver free.
- When works as a computer monitor, supports Windows 10/8.1/8/7, five-points touch, and driver free.
- 3.5mm audio jack, supports HDMI audio output.
- M2.5 screw holes for easy mounting.

HOW TO USE IT

WORKING WITH WINDOWS PC

When working with PC, 5.5 inch HDMI AMOLED/LCD can supports Windows 7/ 8/ 8.1 /10 OS.

1. Connect Touch interface of LCD to one USB port of PC
2. Connect HDMI Interface of LCD to HDMI port of PC

Note: You can connect 3.5mm earphone to LCD for audio output

【Note】

-The touch screen controls the main display by default, therefore, we recommend you to set the 5.5 inch HDMI AMOLED as main displays.

-Sometimes, USB ports of PC has not enough power to power 5.5inch HDMI AMOLED/LCD, in this case, you can connect external 5V/2A power adapter to DC interface of LCD.

-If the LCD cannot display normally after connecting, please restart your PC and check again.

WORKING WITH RASPBERRY PI

When working with Raspberry Pi, 5.5 inch HDMI AMOLED can support various systems like Raspbian, Ubuntu Mate and so on. Herein we take Raspbain as example.

Raspberry Pi cannot recognized and adapted to resolution of LCD plugged, therefore, we need to set the resolution of Raspbian manually.

1. Download Raspbian image from Raspberry Pi website
2. Write the image to your TF card. (TF card need to be formatted)

3. Open config.txt file which located in root directory of SD card and add the statements below to end of the file

```
max_framebuffer_height=1920
max_usb_current=1
config_hdmi_boost=10
hdmi_group=2
hdmi_force_hotplug=1
hdmi_mode=87
hdmi_timings=1080 1 26 4 50 1920 1 8 2 6 0 0 0 60 0 135580000 3
```

4. Save and eject the SD card. Plug the card to your Raspberry Pi
5. Connect Touch interface of LCD to one USB port of Raspberry Pi
6. Connect HDMI interface of LCD to HDMI interface of Raspberry Pi
7. Power on Raspberry Pi

Note: The LCD is vertically display by default. You can refer to [Orientation Setting](#) to change the orientation.

SCREEN SAVER

AMOLED screen has advantages of high contrast, wide color range, wide view angle and so on. However, it is easy to face burn-in problem if displaying same content for long time.

As we test, the AMOLED cannot be restored if it display same static image for 168 hours because of burn-in problem.

In this case, we recommend you to set screen saver and do not let the AMOLED display same static image for long time (cannot longer than 1h).

You can install screen saver with command below:

```
sudo apt-get install xscreensaver
```

ORIENTATION SETTING

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

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

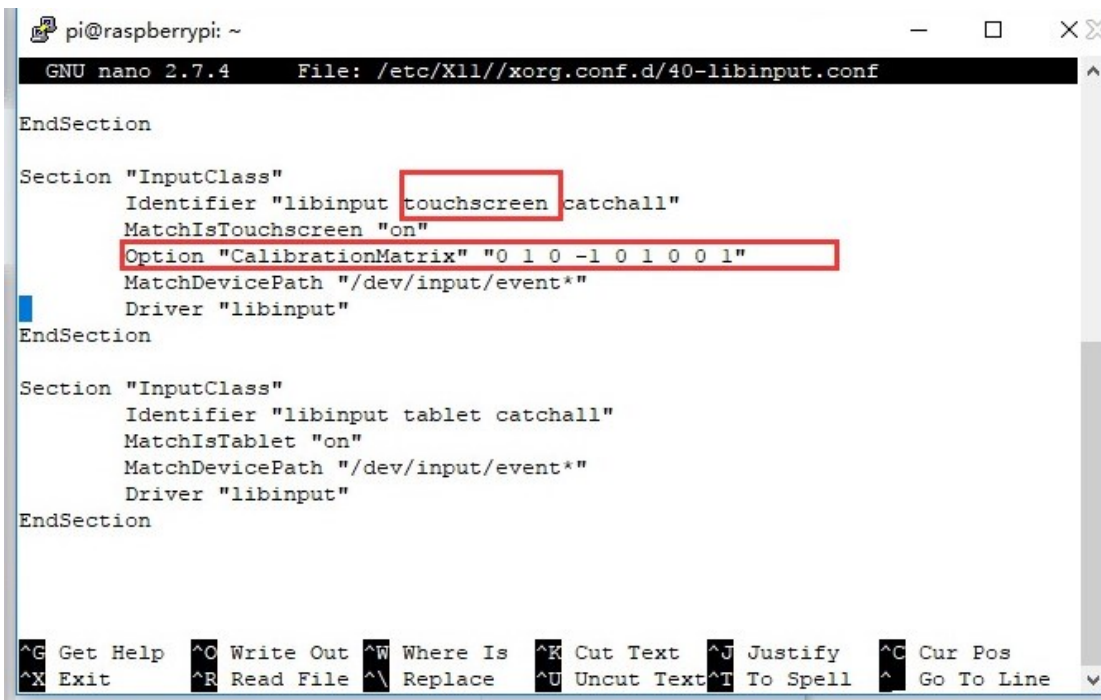
```
sudo cp /usr/share/X11/xorg.conf.d/40-libinput.conf /etc/X11/xorg.conf.d/
```

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
```



```
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
```

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"