

Operating Instructions



For 10.1 Inch HDMI IPS LCD Monitor



The 7 Inch HDMI Monitor is packaged with a power adapter, HDMI cable and remote control. It adopts the IPS display and can be applied to Raspberry Pi.

This guide includes:

- Features --- P1
- Control --- P2
- Raspberry Pi Installation --- P3
- Instructions on Monitor Settings for Raspberry Pi --- P7
 - Issue 1: Wrong Resolution --- P7
 - Issue 2: No Sound from the Monitor under Raspbian --- P11
- Free Support --- P14

Features

Screen: 10.1 Inch IPS LCD Screen

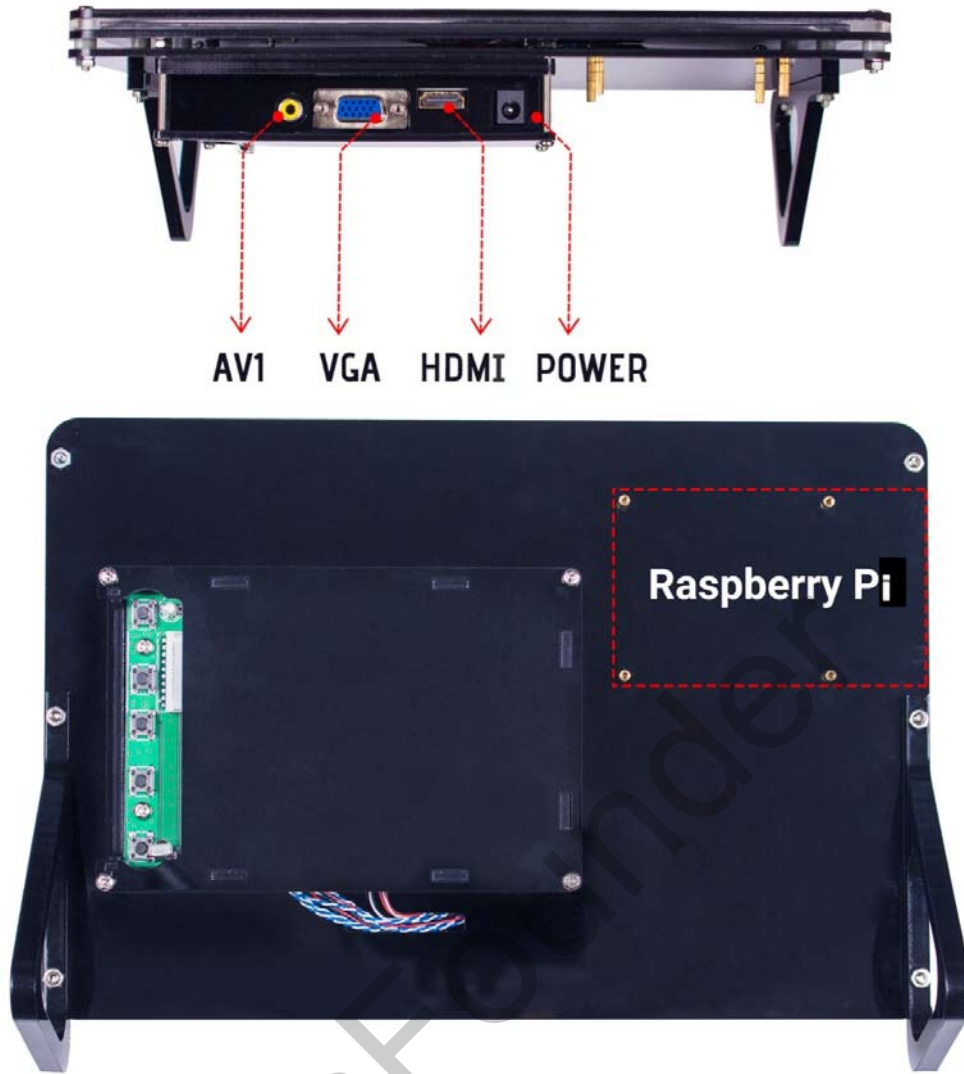
Resolution: 1280*800 (16:10)

Input Signal: VGA, AV, HDMI

Power: DC12V

Consumption: 10W

Operate mode: Key operation and remote control

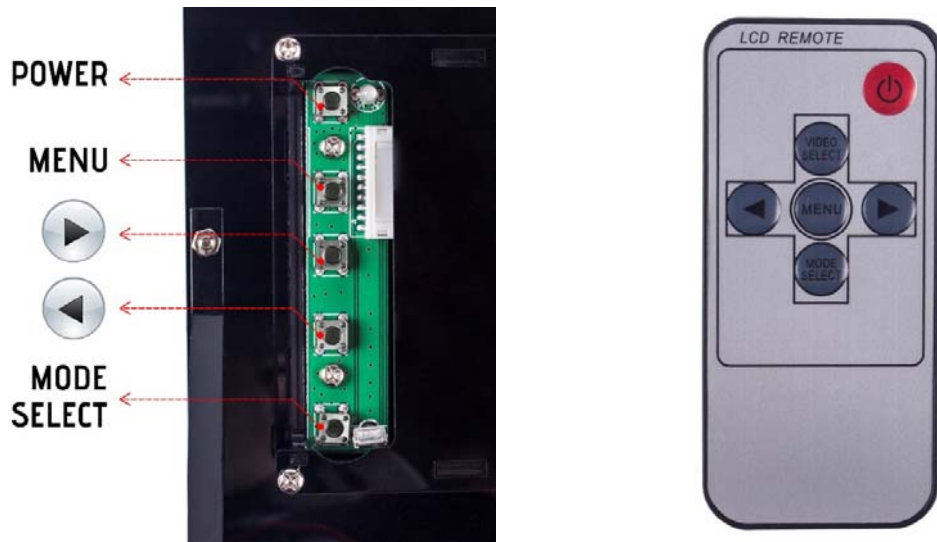


Control

Monitor and Remote Control Keys

Key	On Monitor	Under MENU
	ON/OFF	
	Open the menu	Confirm
	Volume	Down/Increase
	Color Mode	Up/Decrease
(remote)	Select a mode	Return

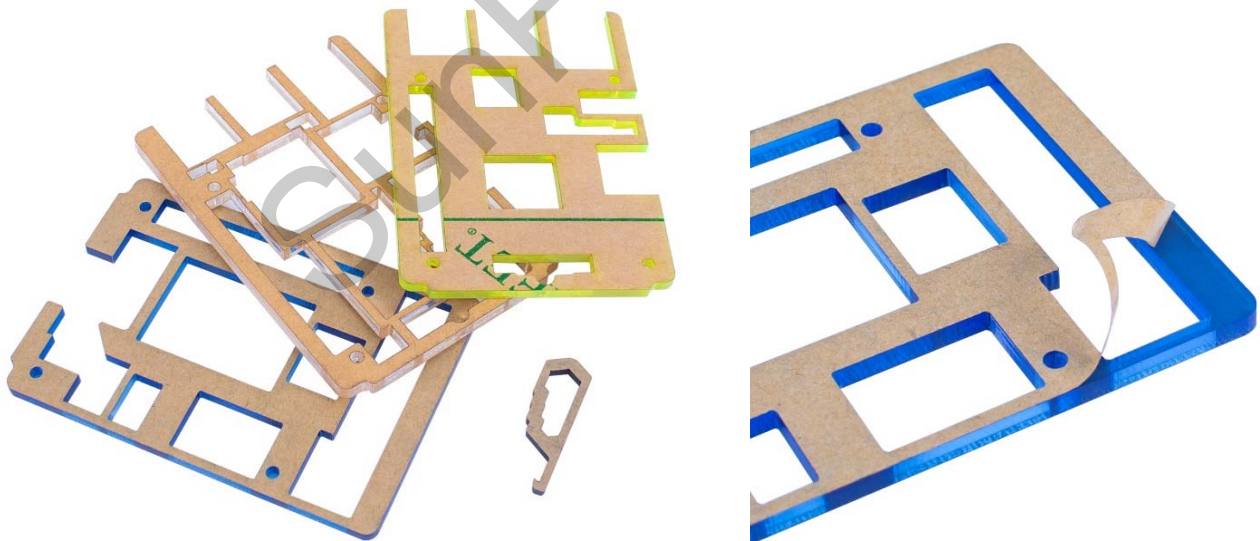
Note: Under MENU, there are functions: [Color](#), [Adjust](#), [OSD](#), [Function](#), [Sound](#) and [Exit](#). And under MODE SELECT, you can select AV1, AV2 (*the jack is set inside so **unavailable***), VGA, and HDMI.



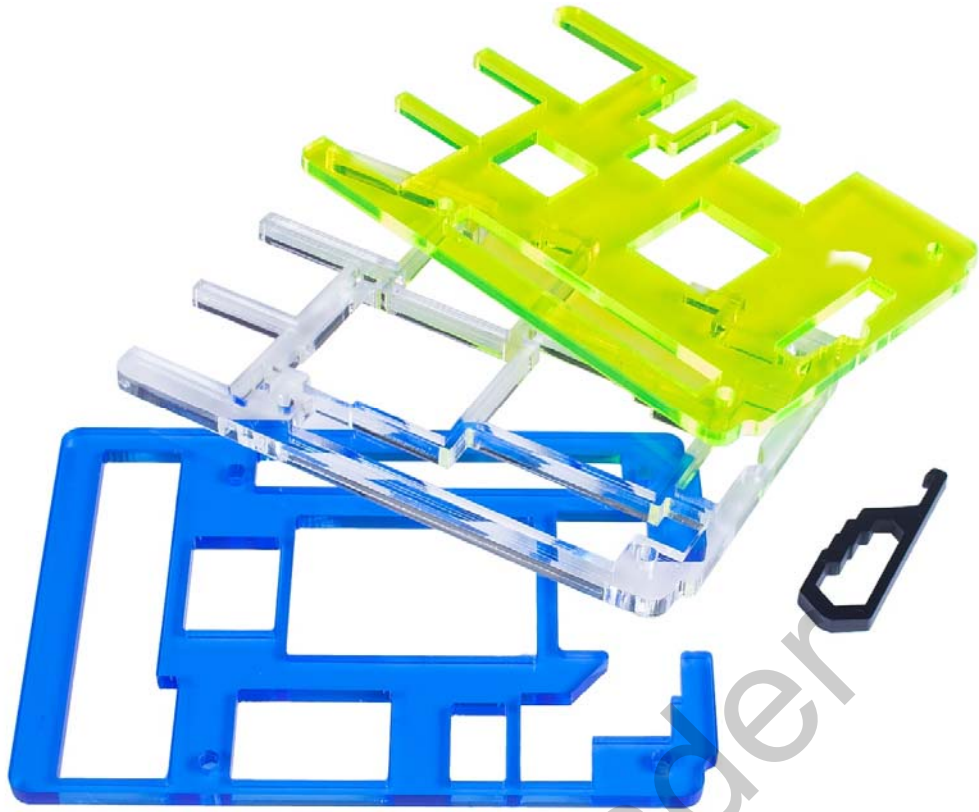
Raspberry Pi Installation

You'll see 4 sets of acrylic plates in the package, as shown in the left figure below. The three **bigger** ones are to protect the Raspberry Pi (suitable for model B+, 2 model B and 3 model B), and the much **smaller** one is an SD card removing assistant.

To protect the plates, sticker is added to both sides. To unveil the real face of the acrylics, you need to remove these "masks". Raise the edge of the stick on a plate, preferably with your finger nail because a knife may scratch the acrylic and leave a scar. Then pull the sticker – be careful when pulling since the acrylic may be very vulnerable and easy to break, especially the middle thinner part of the white transparent set.



After removing all the stickers, you can see the colorful acrylics then!



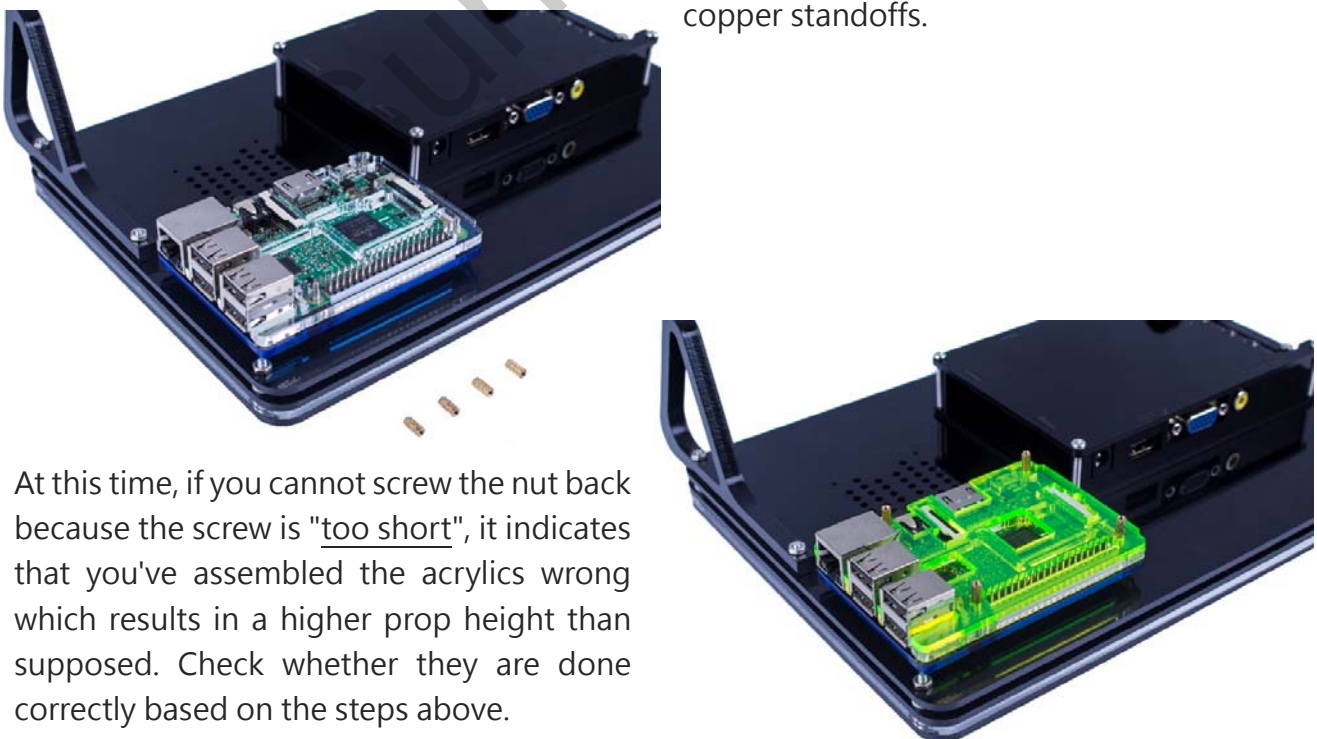
Next, turn the monitor upside down, unscrew the 4 copper standoffs on the back. Note that you should just take out the four ones at the top, and leave the rest 4 ones unmoved. If you've loosened the latter, remember to tighten them.



After removing the 4 standoffs on top, make sure the 4 ones at bottom are **tightened**, and then place the **blue** acrylic inside. Pay attention to the direction: place the acrylic with the **opening** at your **right** side (the buttons side, see the **red** arrow below) for the **SD card**. Also the long slot should be placed at the **top of the monitor** which is to leave the room for pin tips underneath the board (**green** arrow). So now put the Raspberry Pi on the acrylic. You're suggested to plug in the **SD card before fixing**, or else it will be tricky to do so after installation is done. Accordingly, note that pins at the monitor top and SD card at the buttons side.

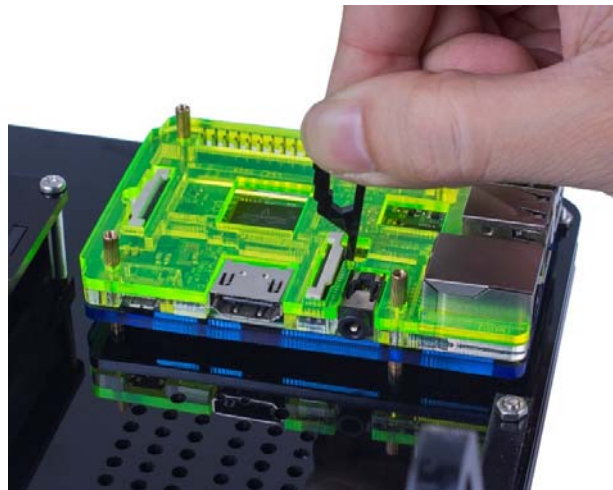


Then cover the **transparent** acrylic plate. As aforementioned, the middle parts are thin and fragile, so when placing, **BE GENTLE!** Otherwise they may be broken. After that, place the **yellow-green** acrylic inside and screw back the 4 copper standoffs.



At this time, if you cannot screw the nut back because the screw is "too short", it indicates that you've assembled the acrylics wrong which results in a higher prop height than supposed. Check whether they are done correctly based on the steps above.

So now the assembly is done! You should notice the small hook-shape acrylic, which is to remove the **SD card** and also can be used to hook the **FFC connector** of CSI/DSI.



So it's all done!



Before any operations, please read the following instructions carefully.

Instructions on Monitor Settings for Raspberry Pi

Step 1: Connect Raspberry Pi

Plug the TF memory card with the Raspbian system burnt into the Raspberry Pi. Then connect the display and the power of the Raspberry Pi.

Step 2: Select HDMI mode

After boot up, if the screen shows no signal and turn black, press the bottom MODE SELECT button and select the HDMI mode. The screen will then display the homepage.

During the use, if you have problems about resolution and sound, check the following guide.

- Issue 1: Wrong Resolution

If you encounter the difficulties in reading too small characters or incomplete display, that would be wrong resolution. Here let's see how to solve this resolution issue.

- Solution

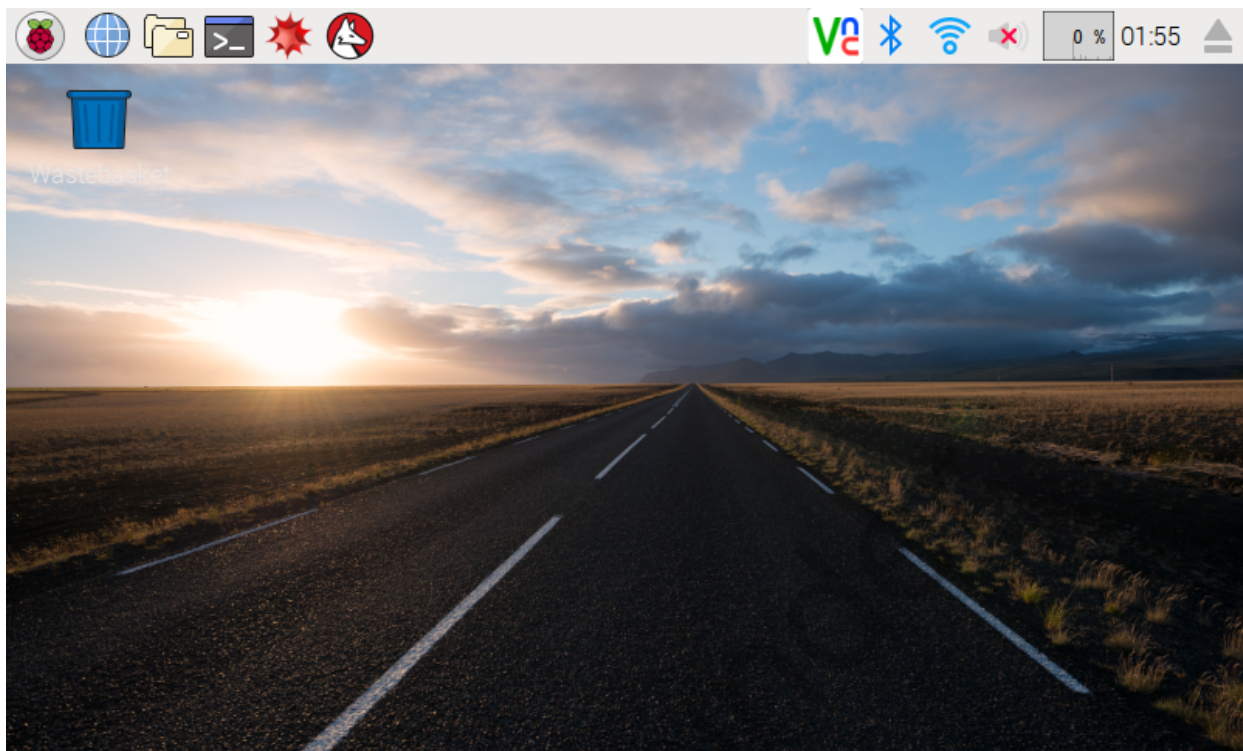
To solve issue, here we should adjust the screen display and modify the `/boot/config.txt` file. Take the following procedures.

Step 1: Open config.txt

You need to edit the config.txt file to adjust the solution. There are two methods to open it for editing.

Method A (highly recommended)

First, you need a USB mouse and a USB keyboard connected to your Raspberry Pi. After your Raspberry Pi is booted up, it should display a GUI as follows:



Click on the black icon, which represents terminal, on the top left:

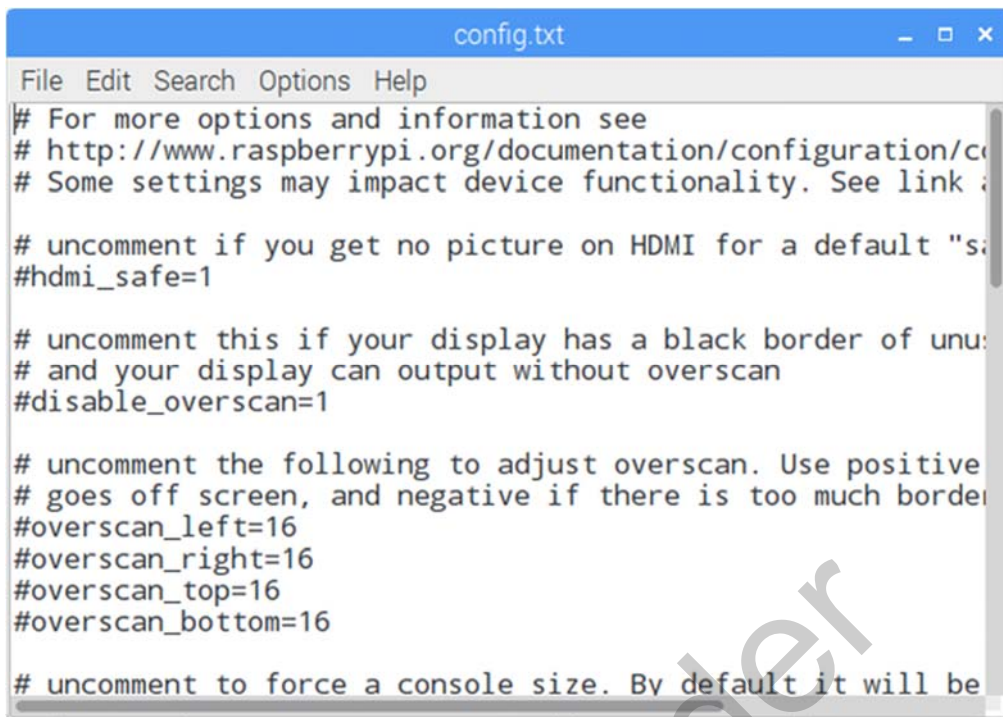


A terminal now pops up. Then type in commands:

```
sudo leafpad /boot/config.txt
```

Press **Enter** to confirm.

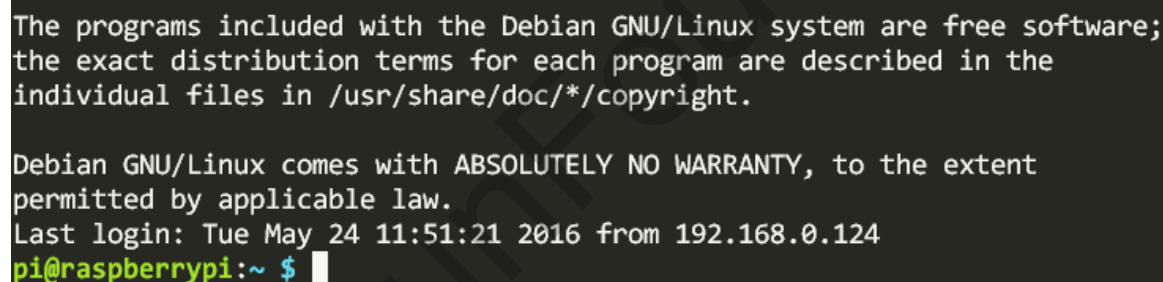
A window of leafpad editor shows up:



```
config.txt
File Edit Search Options Help
# For more options and information see
# http://www.raspberrypi.org/documentation/configuration/c
# Some settings may impact device functionality. See link
#
# uncomment if you get no picture on HDMI for a default "sa
#hdmi_safe=1
#
# uncomment this if your display has a black border of unu
# and your display can output without overscan
#disable_overscan=1
#
# uncomment the following to adjust overscan. Use positive
# goes off screen, and negative if there is too much border
#overscan_left=16
#overscan_right=16
#overscan_top=16
#overscan_bottom=16
#
# uncomment to force a console size. By default it will be
```

Then move on to the next step for editing.

If your Raspberry Pi is booted up to a CLI like this:



```
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue May 24 11:51:21 2016 from 192.168.0.124
pi@raspberrypi:~ $
```

Just type in:

```
sudo nano /boot/config.txt
```

And a nano editor will appear. Use your arrow keys on the keyboard to move the cursor, not by the mouse, and go to the next step for editing. Remember to save with **Ctrl + O** and exit the editor with **Ctrl + X** after you finish editing.

Method B (not for NOOBS)

First prepare a computer running on Windows, Mac or Linux, and a TF card on which the Raspbian system has been burnt. Plug the TF card into the computer with a card reader.

Now, open `/boot` and find the `config.txt` file. If your computer runs on Windows, DO NOT open the file by Microsoft Word (also better not to use Notepad) in case of format issues. You are advised to use other edit tools like Notepad++.

Method C

Log in to Raspberry Pi remotely.

Then run the command to edit *config.txt*

```
sudo nano /boot/config.txt
```

And a nano editor will appear. Use your arrow keys on the keyboard to move the cursor, not by the mouse, and go to the next step for editing. Remember to save with **Ctrl + O** and exit the editor with **Ctrl + X** after you finish editing.

Step 2: Modify /boot/config.txt

In either way, now the file *config.txt* is opened.

- 1) Define a custom CVT mode. Add the following lines below `#hdmi_force_hotplug=1`.

```
hdmi_cvt=1024 600 60 3 0 0 0
```

`hdmi_cvt= <width> <height> <framerate> <aspect> <margins> <interlace> <rb>`

Value	Default	Description
width	(required)	width in pixels
height	(required)	height in pixels
framerate	(required)	framerate in Hz
aspect	3	aspect ratio 1=4:3, 2=14:9, 3=16:9, 4=5:4, 5=16:10, 6=15:9
margins	0	0=margins disabled, 1=margins enabled
interlace	0	0=progressive, 1=interlaced
rb	0	0=normal, 1=reduced blanking

- 2) Find the following lines (If there is a "#" mark at the beginning of any of the three lines, which means they are commented, delete the "#" mark to uncomment it). The asterisk "*" represents the value.

```
hdmi_group=*  
hdmi_mode=*  
hdmi_drive=*
```

- 3) Modify the value, like this:

```
hdmi_group=2  
hdmi_mode=87  
....  
hdmi_drive=2
```

`hdmi_group=2` means DMT (Display Monitor Timings; the standard typically used by monitors)

`hdmi_mode=87` indicates the custom CVT mode as defined above.

`hdmi_drive=2` selects the Normal HDMI mode.

For more details about configuring *config.txt*, refer to Raspberry Pi official website: go through **HELP->DOCUMENTATION->CONFIGURATION->config.txt**.

After the modification is done, save and exit.

4) Reboot, or boot up the Raspberry Pi, you should see better display.

- Issue 2: No Sound from the Monitor under Raspbian

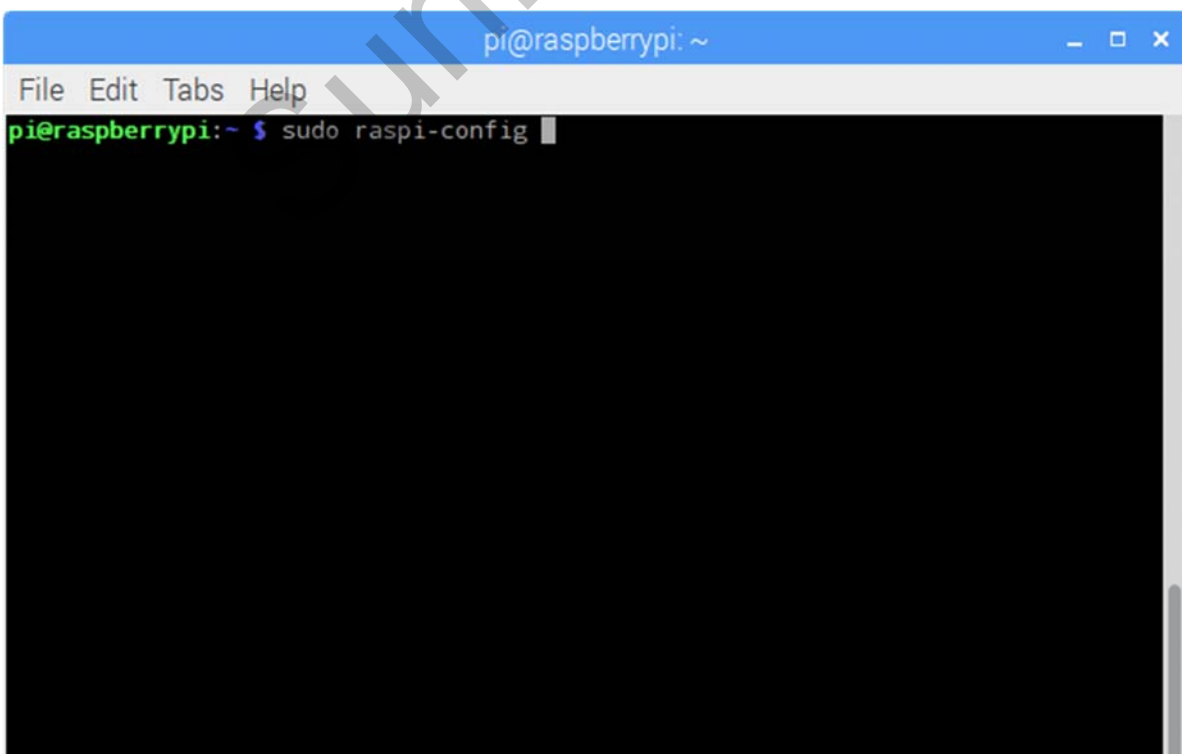
- Solution

If the monitor makes no sound under Raspbian, you may try going to **raspi-config** -> **Advanced Options** and select **Force HDMI**.

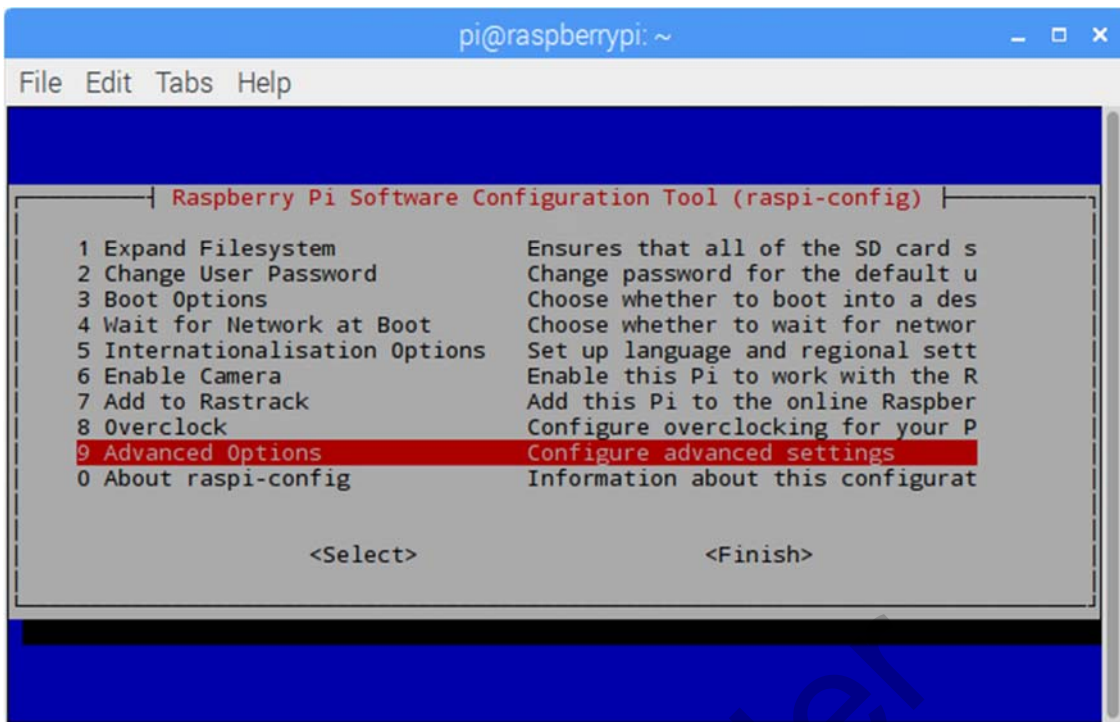
Click on the black icon, which represents terminal, on the top left:



A terminal now pops up. Run `sudo raspi-config`:

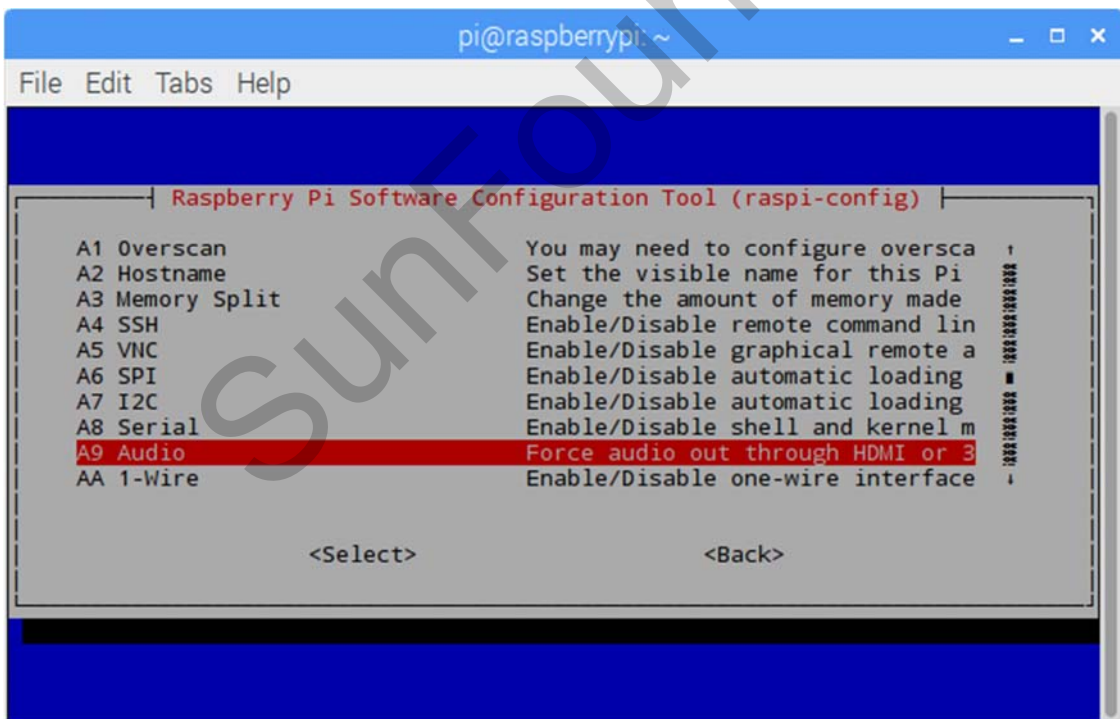


Select **Advanced Options** by pressing the up/down arrow key:



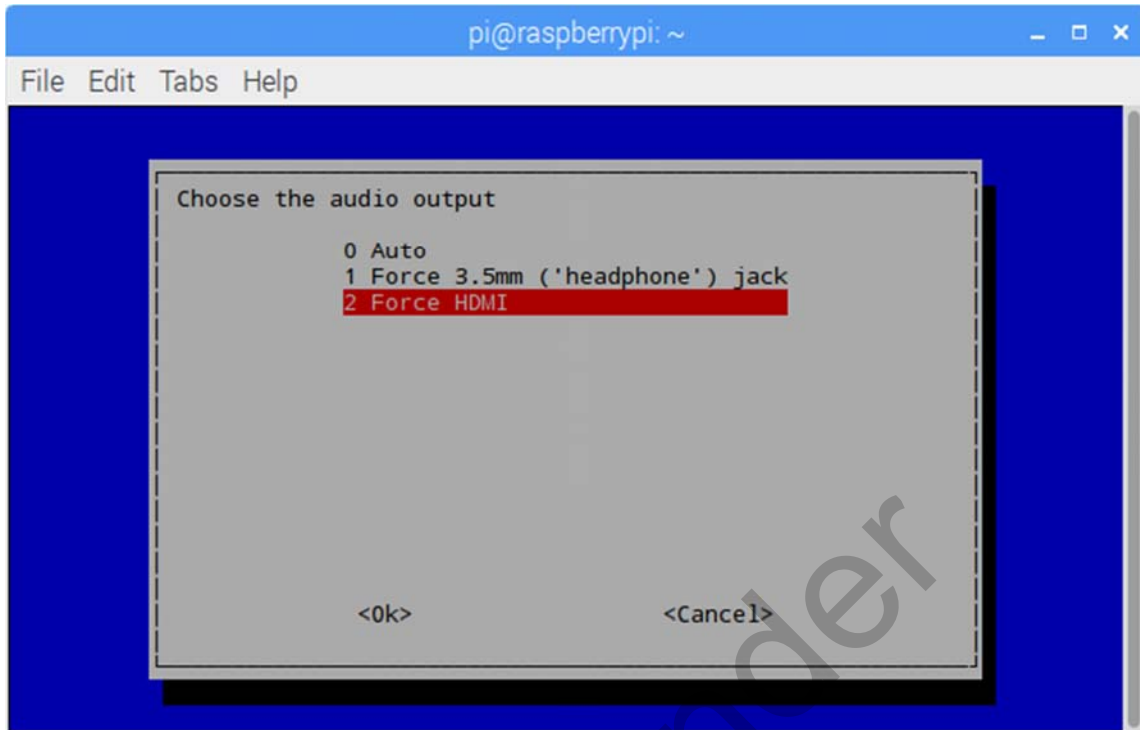
Press Enter.

Next, on the pop-up window, select **Audio** in the same way:



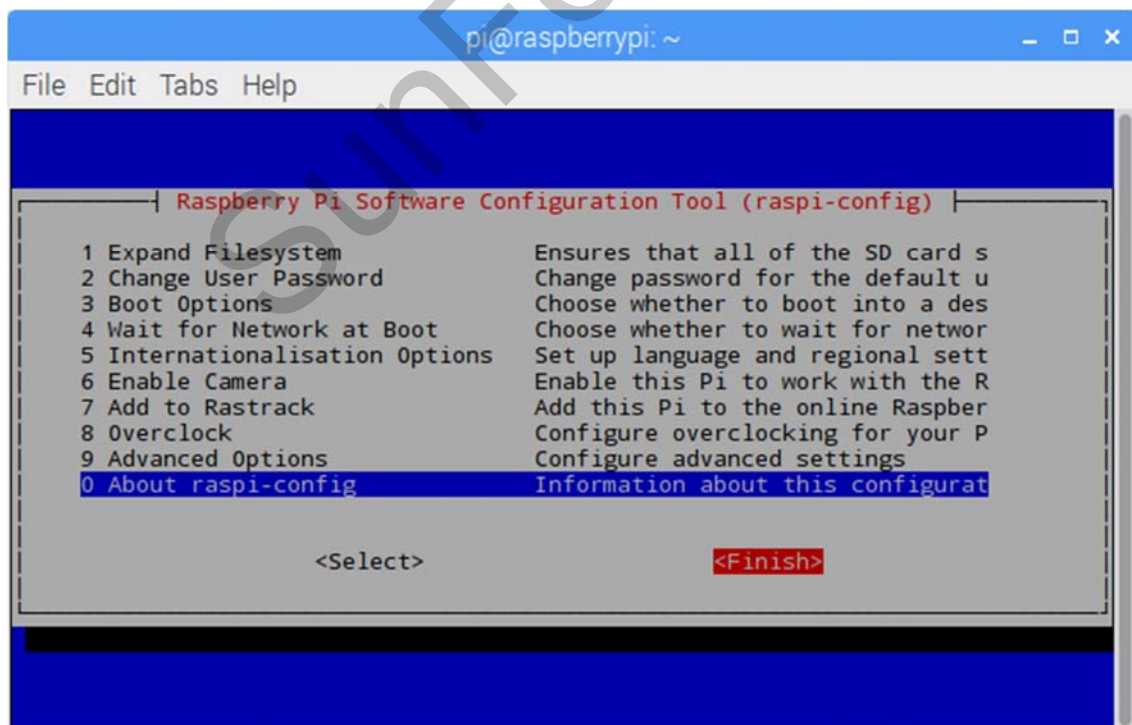
Press Enter.

On the window **Choose the audio output**, select **Force HDMI**:



Press Enter.

Then return to the main menu and select **Finish** with the left/right key and press **Enter** to confirm and exit.



Now the speaker of the monitor should make sounds. Try to play a video on YouTube!

Note: If it still make no sounds, you may need to raise the volume of the monitor and Raspberry Pi.

Free Support



If you have any **TECHNICAL** questions, add a topic under **FORUM** section on our website and we'll reply as soon as possible.



For **NON-TECH** questions like order and shipment issues, please **send an email to service@sunfounder.com**. You're also welcomed to share your projects on FORUM.

Copyright Notice

All contents including but not limited to texts, images, and code in this manual are owned by the SunFounder Company. You should only use it for personal study, investigation, enjoyment, or other non-commercial or nonprofit purposes, under the related regulations and copyrights laws, without infringing the legal rights of the author and relevant right holders. For any individual or organization that uses these for commercial profit without permission, the Company reserves the right to take legal action.

SunFounder