



# **Raspberry PI Developer Board**

## **Model: XPI-S905X3**

### **User's Guide**



Thank you for purchasing this Geniatech product.

.Before using it, be sure to read the precautions contained in this User's Guide.

.Keep the User's Guide in a safe place for future reference.

.For the most up-to-date information about this product, visit official website at

<http://www.geniatech.com>

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# **1. Safety Information**

Read and understand all instructions before using this product. If damage is caused by failure to follow the instructions, the warranty does not apply.

## **1.1 Warning**

To reduce the risk of electric shock, DO NOT remove the cover (or back).

DO NOT attempt to repair the product, this could lead to the risk of injury, damage to the product .

To reduce the risk of fire or electric shock, keep this product away from exposed direct sunlight, naked flames or heat, large amounts of moisture, dust, and sand.

FCC Note (for U.S.A)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on.

The user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.
- This class B digital product meets all requirements of the Canadian Interference - Causing Equipment Regulations.

## **1.2 Precautions**

Important Safety Instructions

Read these operating instructions carefully before using the unit. Follow all the safety instructions listed below.

Keep these operating instructions handy for future reference.

1.2.1 Read these instructions.

1.2.2 Keep these instructions.

1.2.3 Heed all warnings.

1.2.4 Follow all instructions.

1.2.5 DO NOT use this apparatus near water.

1.2.6 DO NOT clean with any chemical detergent. Clean only with a dry cloth.

1.2.7 DO NOT block any ventilation openings. Install in accordance with the manufacturer's instructions.

1.2.8 DO NOT install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.

1.2.9 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where it exits the apparatus.

1.2.10 Only use attachments/accessories specified by the manufacturer.

1.2.11 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

1.2.12 Unplug this apparatus during lightning storms or when unused for long period of time.

1.2.13 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

### **1.3 Handling Cautions**

1.3.1 DO NOT expose this apparatus to dripping or splashing. Do not put objects filled with liquids, such as vases on the apparatus.

1.3.2 To turn this apparatus off completely, you must pull the power plug out of the wall socket. Consequently, the power plug must be easily and readily accessible at all times.

1.3.3 DO NOT plug multiple electric devices into the same wall socket. Overloading a socket can cause it to overheat, resulting in a fire.

1.3.4 Before connecting other components to this player, be sure to turn them off.

1.3.5 If the product makes an abnormal noise or produces a burning smell or smoke, turn off the power switch immediately and disconnect the power plug from the wall outlet. Then, contact the nearest customer service center for technical assistance. Do not use the product. Using the product as it is may cause a fire or an electric shock.

## **2. Introduction**

### **2.1 Package Contents**

Raspberry PI Developer Board - XPI-S905X3

User's Guide

HDMI Cable

Optional Remote Controller

2.4G wireless Remote Controller

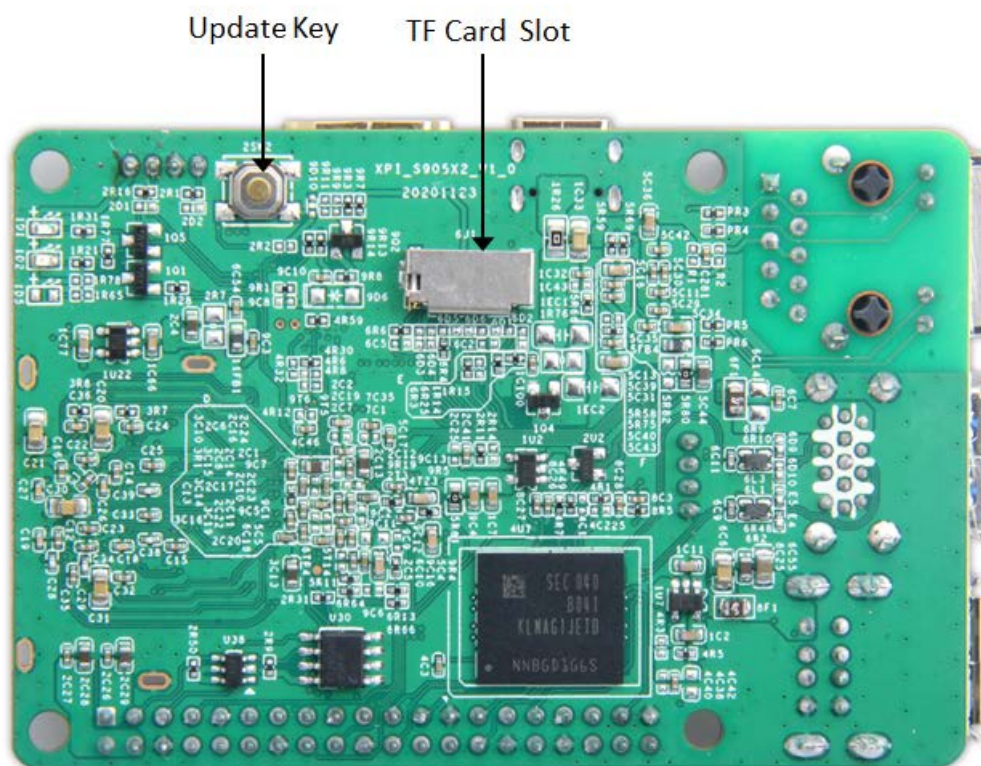
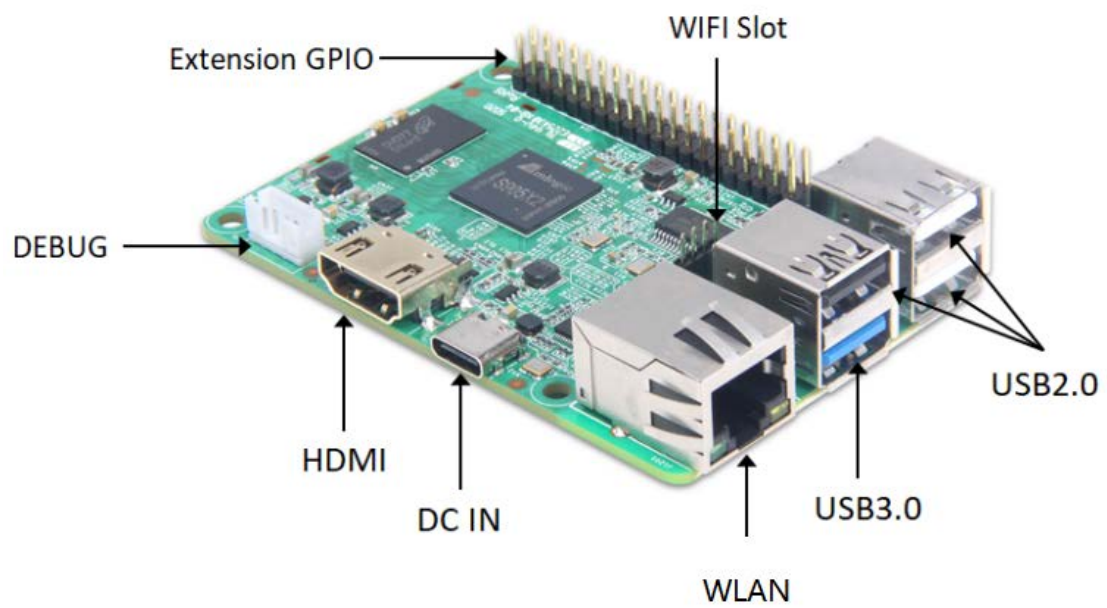
USB wire/wireless Mouse & Keyboard

Power Adapter, Input: AC100 ~ 240V, 50/60Hz, Output: 5V/2A

### **2.2 Product Features**

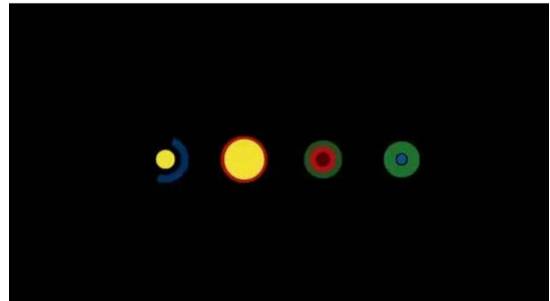
- Android 9.0 OS
- Quad Core ARM Cortex-A55 CPU, G31 MP2 GPU, frequency is 2.0GHz, RAM is 2G, built in 8G EMMC.
- Support 4k2k video local media playback from Micro SD card or USB HDD
- Built in IEEE 802.11ac/n/a/g/b WI-FI module , Wi-Fi frequency range is 2.4G&5.8G
- RJ45: Integrated IEEE 802.3 10/100/1000M Ethernet MAC controller with RGMII interface
- HDMI video output, connect to HDTV for HD video playback
- 3\*USB2.0, 1\*USB3.0, 1\*HDMI Out, 1\*Micro USB, 1\*UART, 1\* Extension GPIO interface
- Support USB mouse and keyboard operation
- Support simple BT remote control with mouse function
- Support external USB Tuner Dongle

## 2.3 Interface Introduction

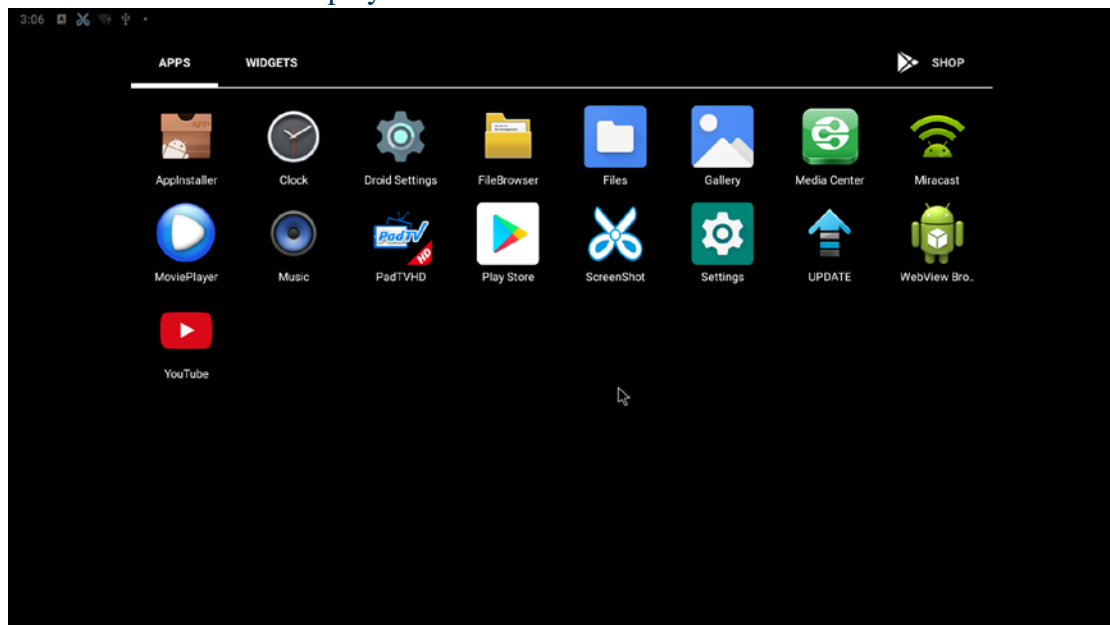


## 2.4 Power Up


2.4.1 After power up, the TV will first show Android logo, Then four circles loading. When finished, it will go to Home screen.



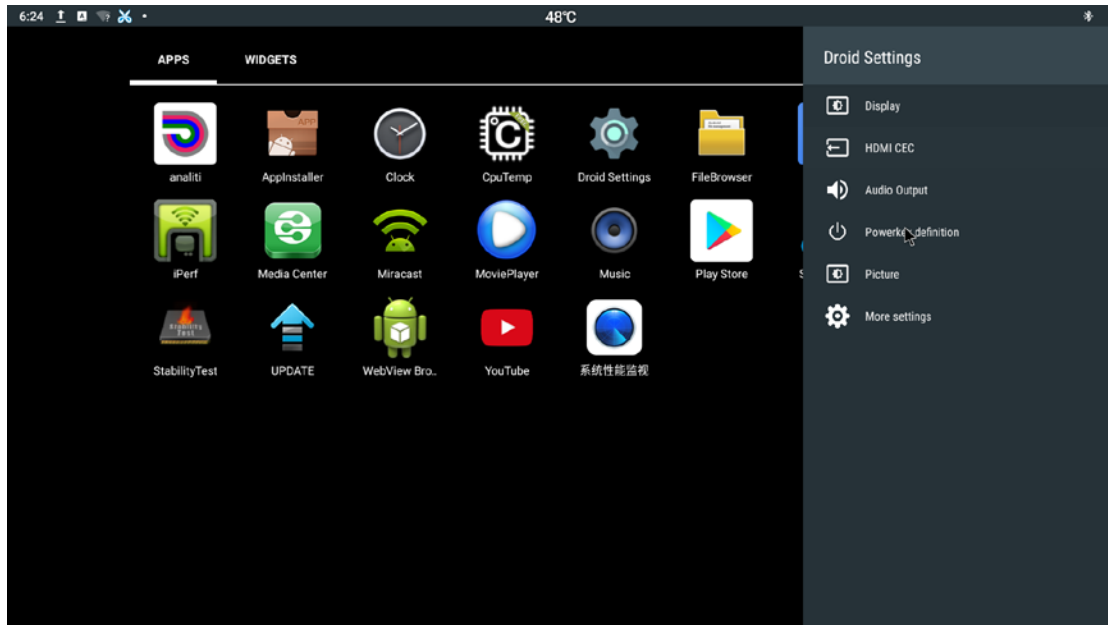
2.4.2 Home Screen display.



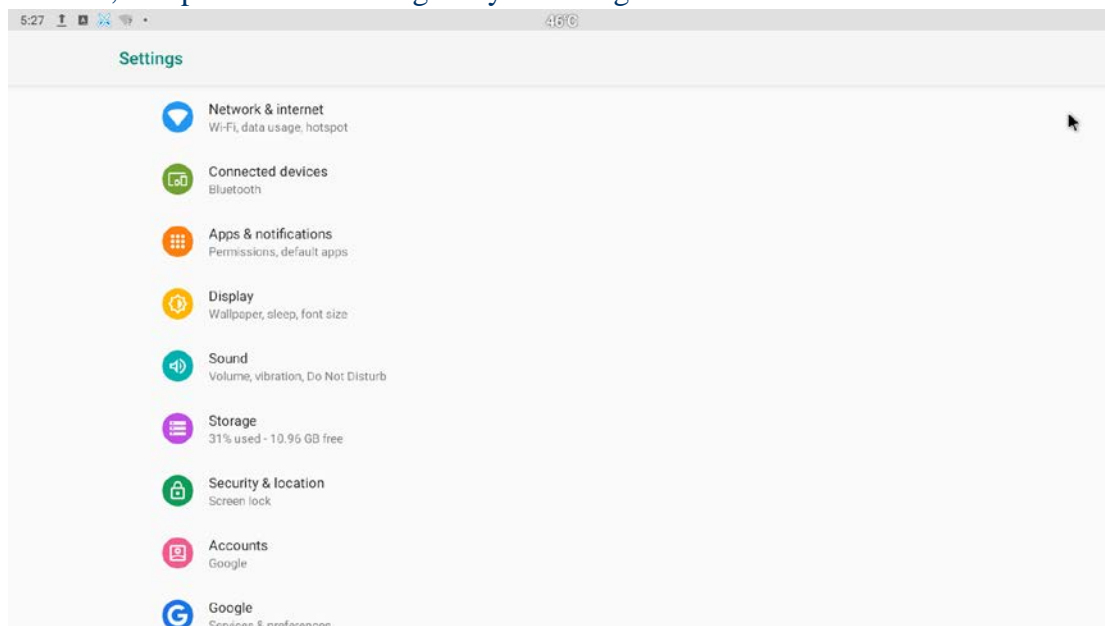
## 3. Settings

Select  icon, you can choose the button 'Display', 'HDMI CEC', 'Audio Output', 'Powerker definition', 'Picture' as your needs.





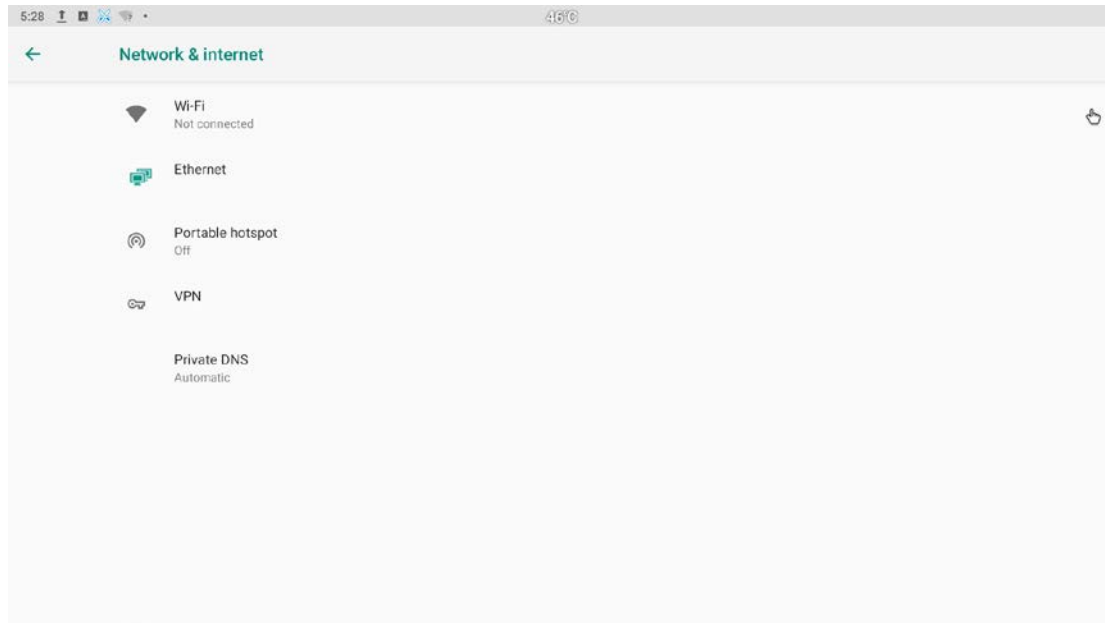
If not, then press 'More settings' key to setting. Shown as bellow.



## 3.1 WiFi

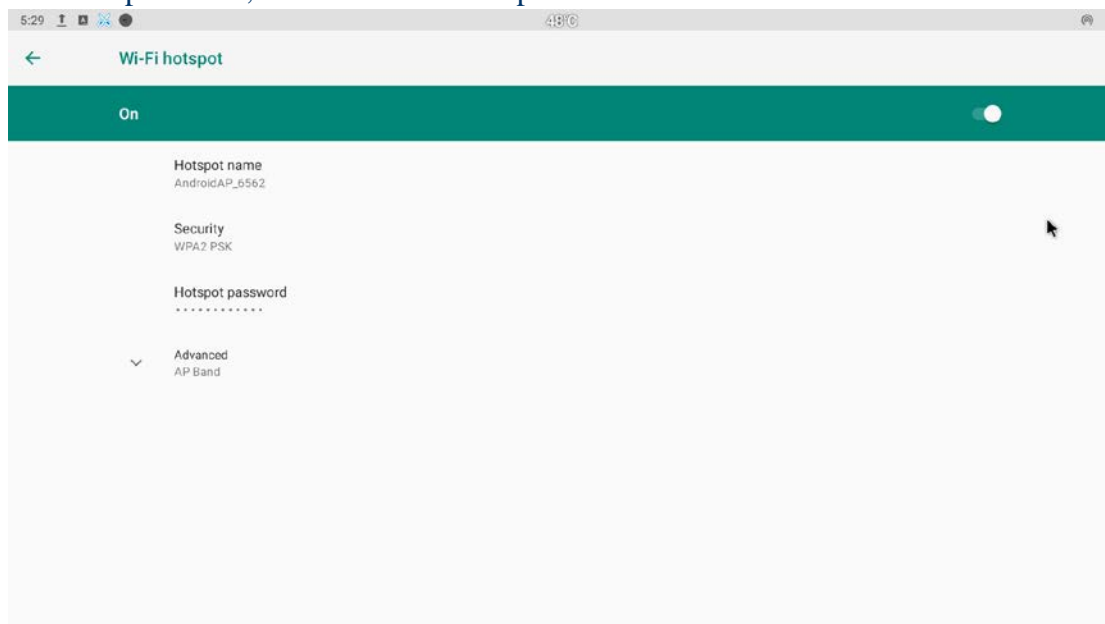
3.1.1 It will automatically scan ambient WiFi networks when select "ON". Connect an available WiFi network. If connect a secured WiFi network, corresponding password will be input firstly. Or fail to connect and need reset password. Once build up the connection with a certain WiFi network successfully, XPI-S905X3 will connect this WiFi network automatically when restart. Note: If factory reset, the password of WiFi network have to be reset.





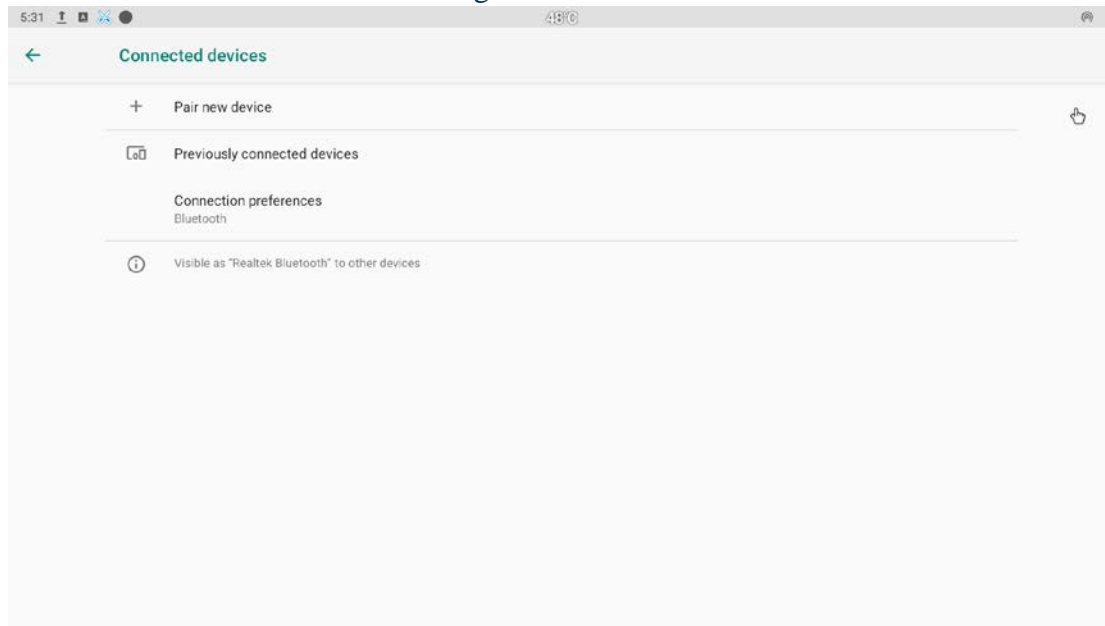
### 3.1.2 WiFi Hotspot

If you want to share WIFI with your friends, you can set the Portable hotspot here, set the wi-fi password, and turn on the hotspot switch for transmission.



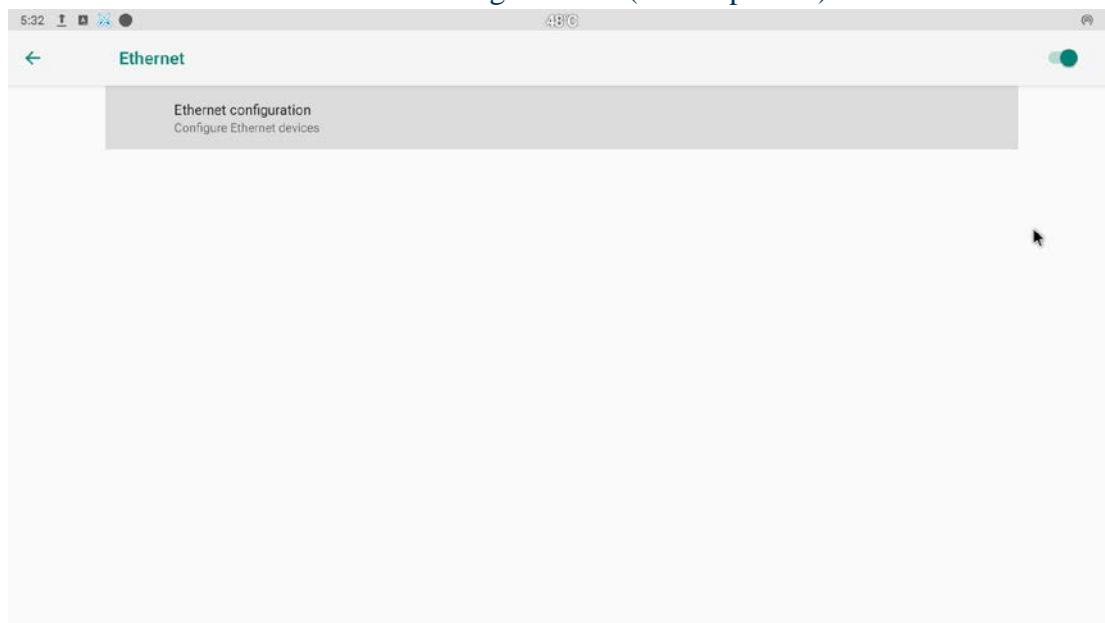
## 3.2 Bluetooth

### Connected devices--Bluetooth setting



## 3.3 Ethernet

### Network&internet---Ethernet---Setting Interface(shown picture)



## 3.4 Sound

Select  icon, then press 'More settings', and find the sound button

### 3.4.1 Media Volumes and Alarm volume

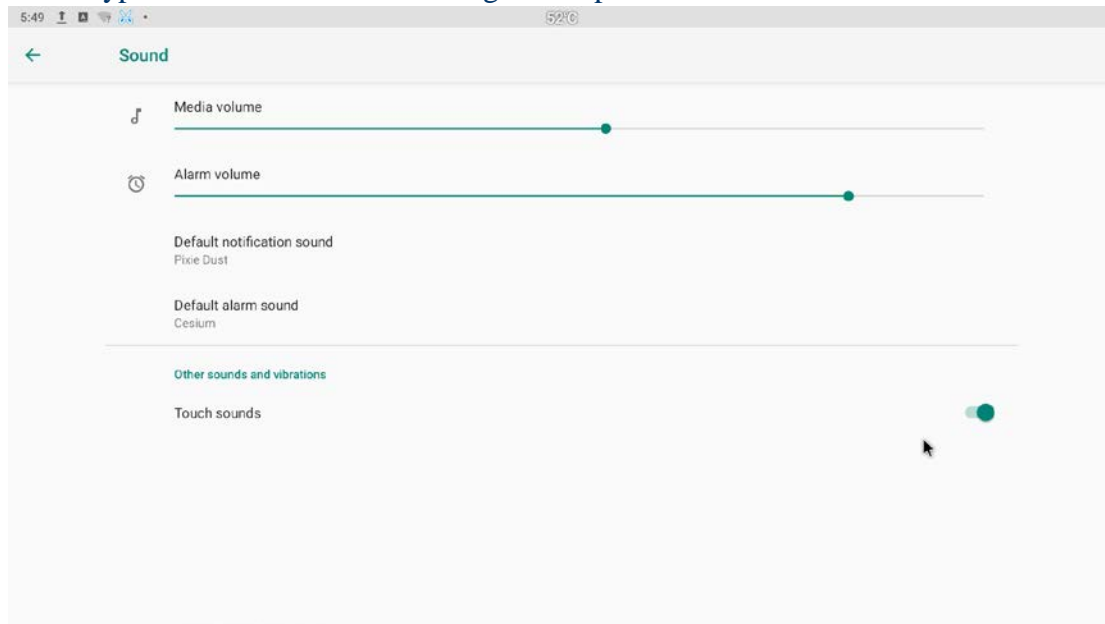
Increase or decrease sound volumes

### 3.4.2 Touch Sounds

If enable Touch sound, sound will be heard while move remote controller.

### 3.4.3 Default notification sound and Default alarm sound

The type of the sound can be setting in this part.

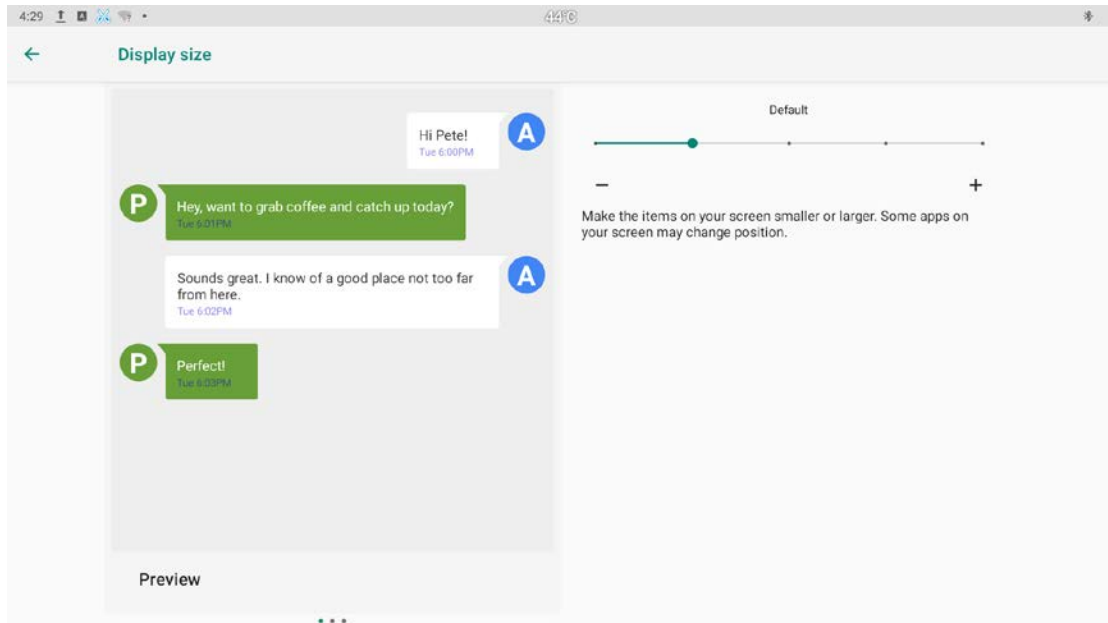


## 3.5 Display

Select  icon, then press 'More settings', and find the Display button

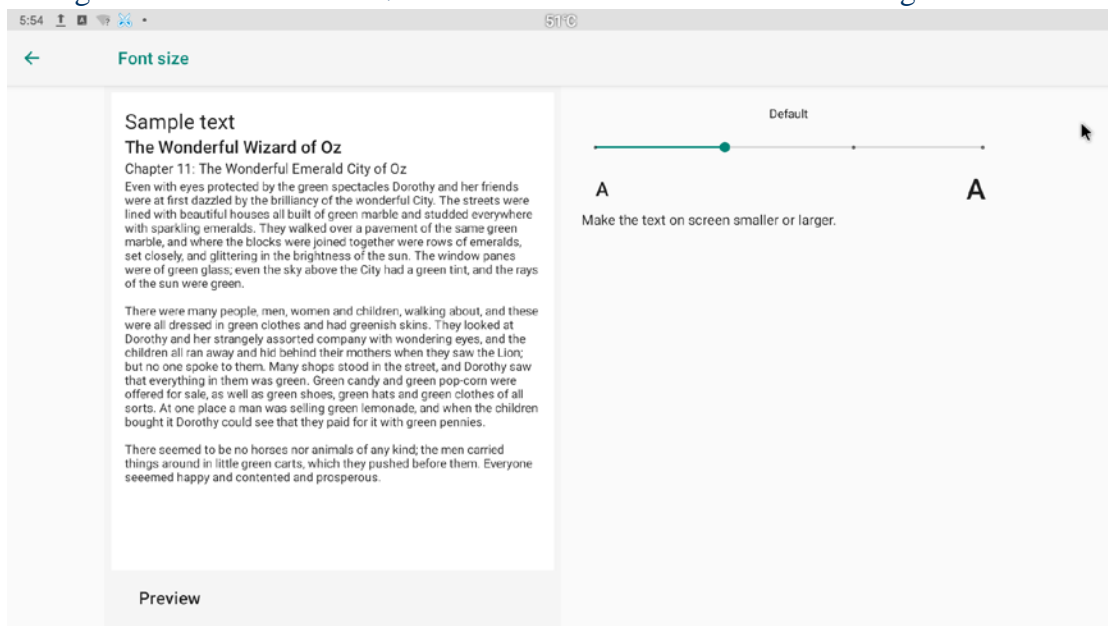
### 3.5.1 Display size

make the items on your screen smaller or larger. Some apps on your screen may change position.



### 3.5.2 Font size

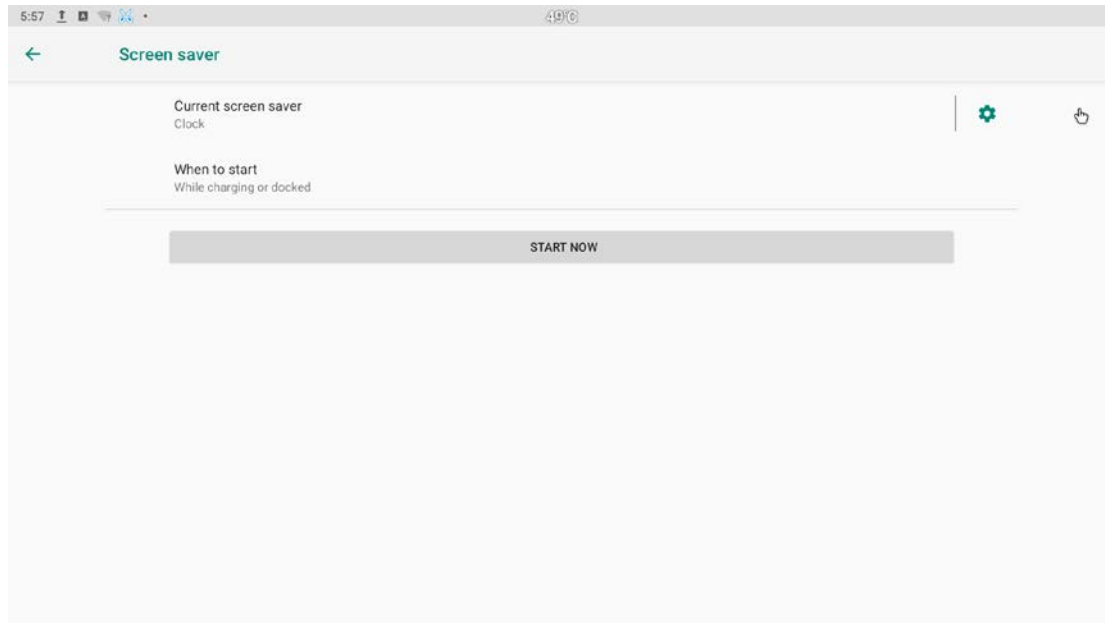
Change the font size of OSD., Make the text on screen smaller or larger



## 3.6 Screen saver

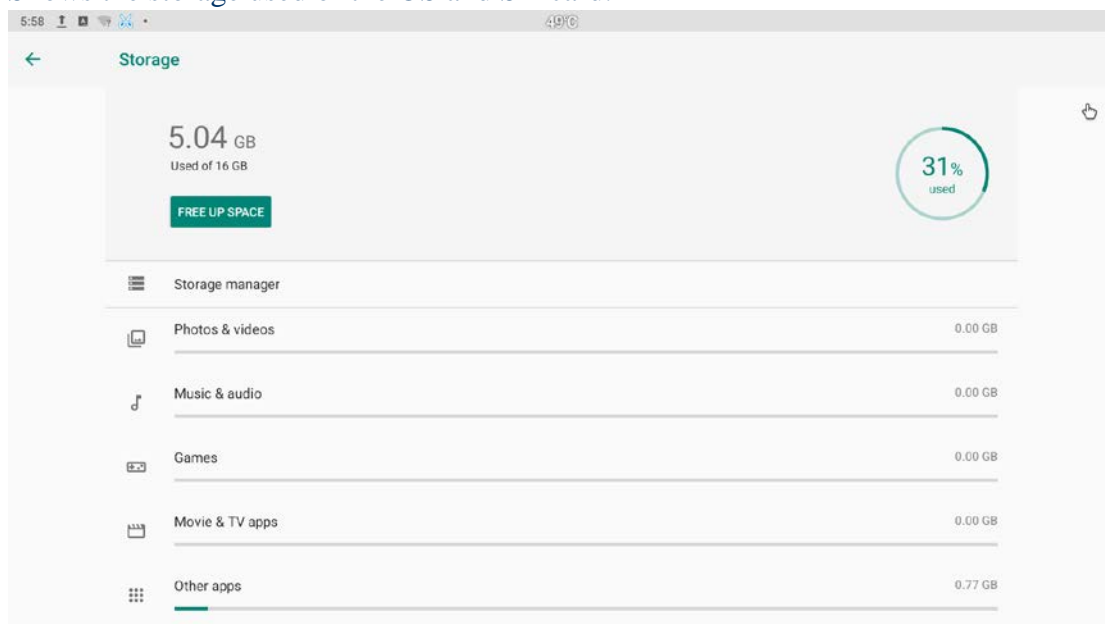
Select , then press 'More settings' --- 'Display' --- 'Screen saver'.

Interface Settings: can set the clock, color, theme, page photos.



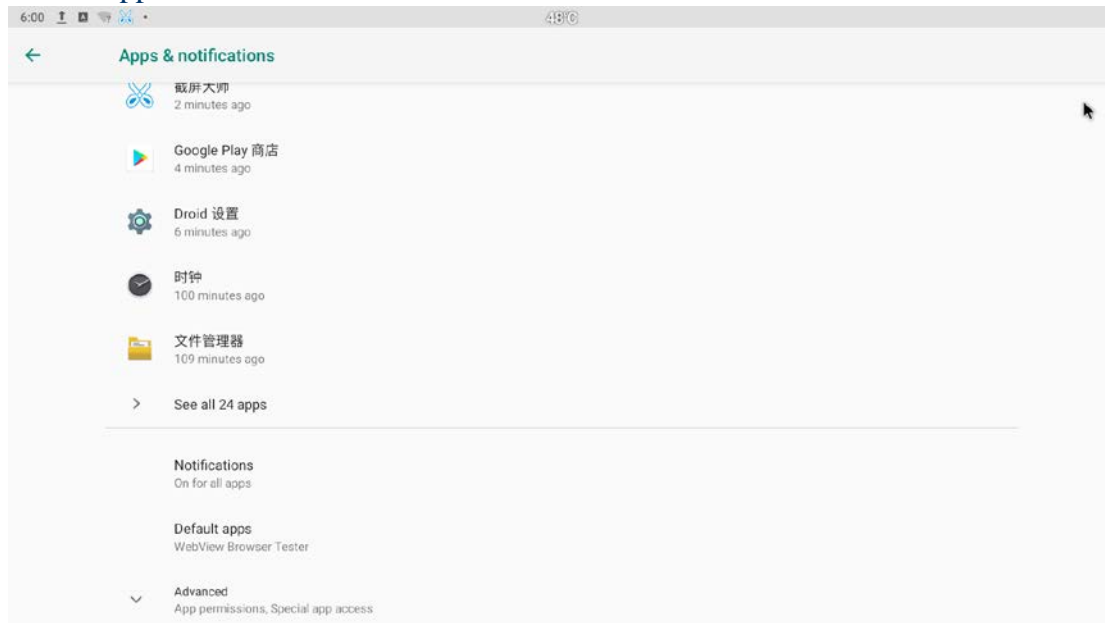
### 3.7 Storage

Shows the storage used of the OS and SD card.



### 3.8 Apps

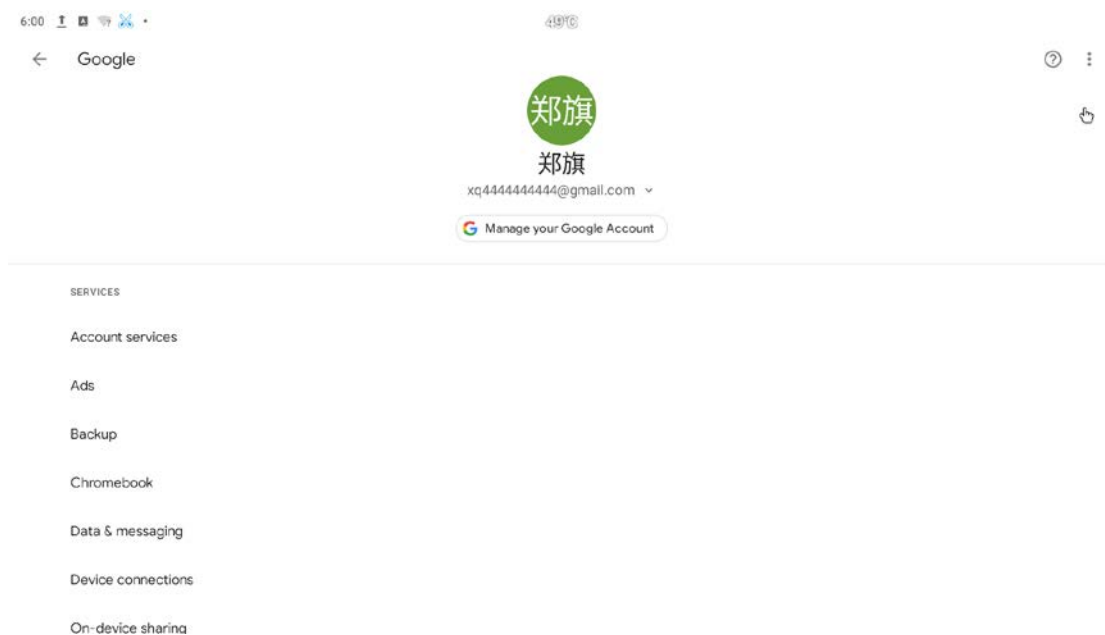
List all apps installed.




You can choose an application and force to shut down the app, uninstall the app, clear user data, move to SD card and clear cache data.

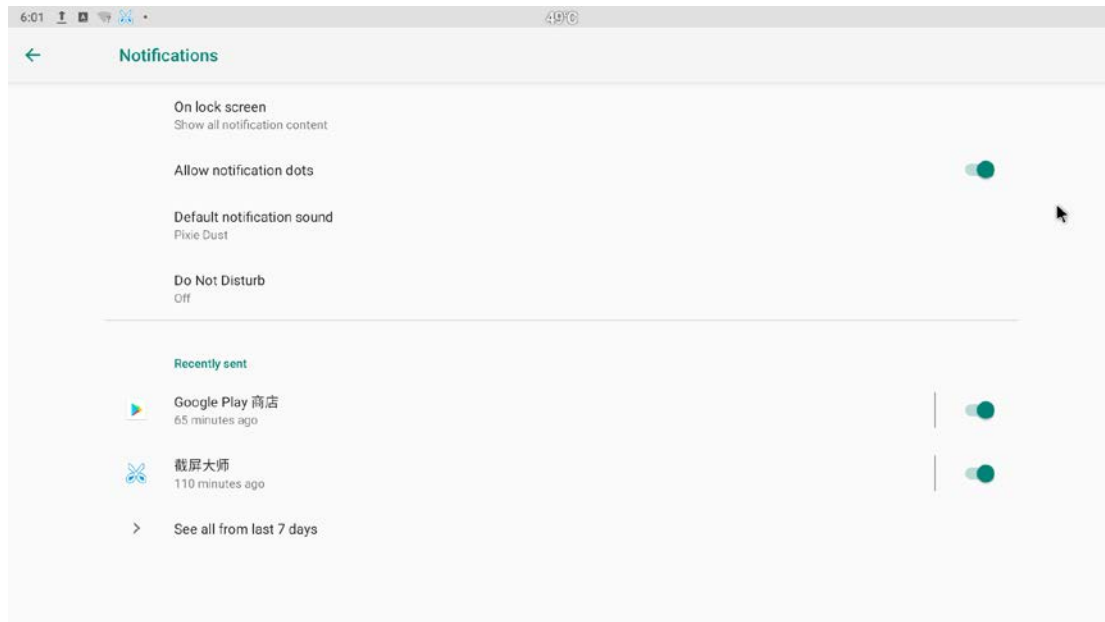
### 3.9 Google

Select  icon, then press 'More settings', and find the Google button.



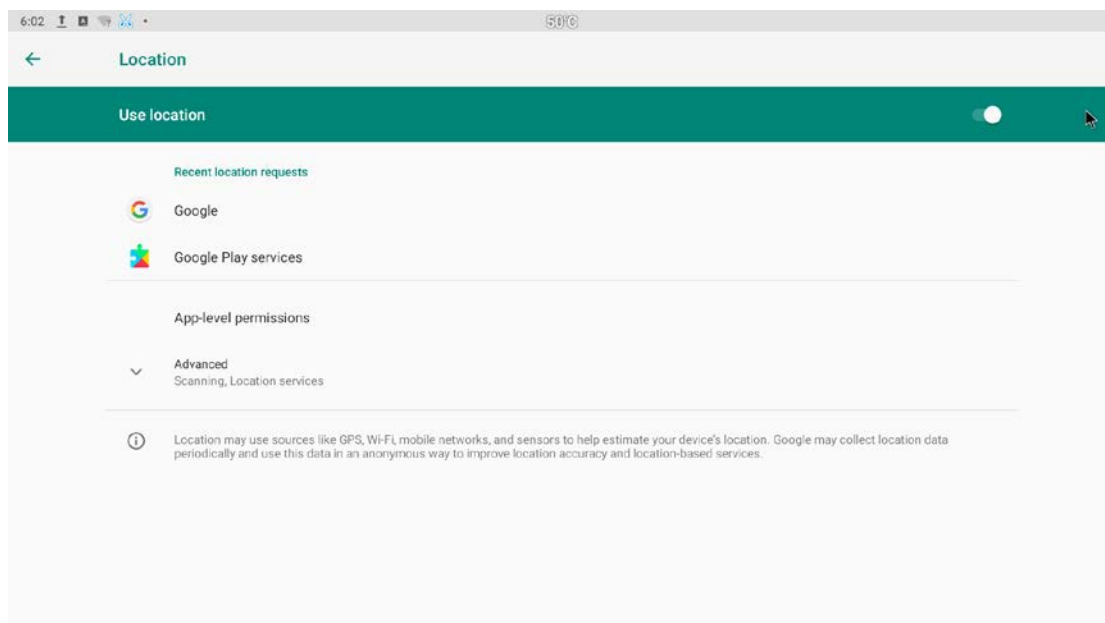
### 3.10 Apps & Notifications

Select  icon, then press 'More settings', and find the 'Apps & Notifications' button.




### 3.11 Location

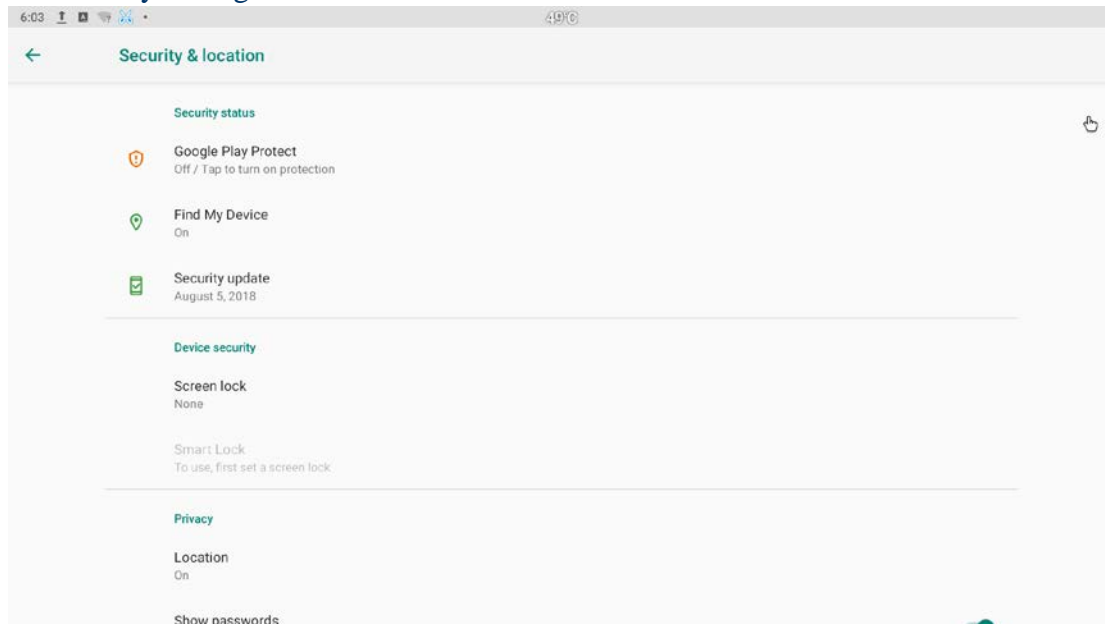
Select  icon, then press 'More settings', Security & Location ---Location .






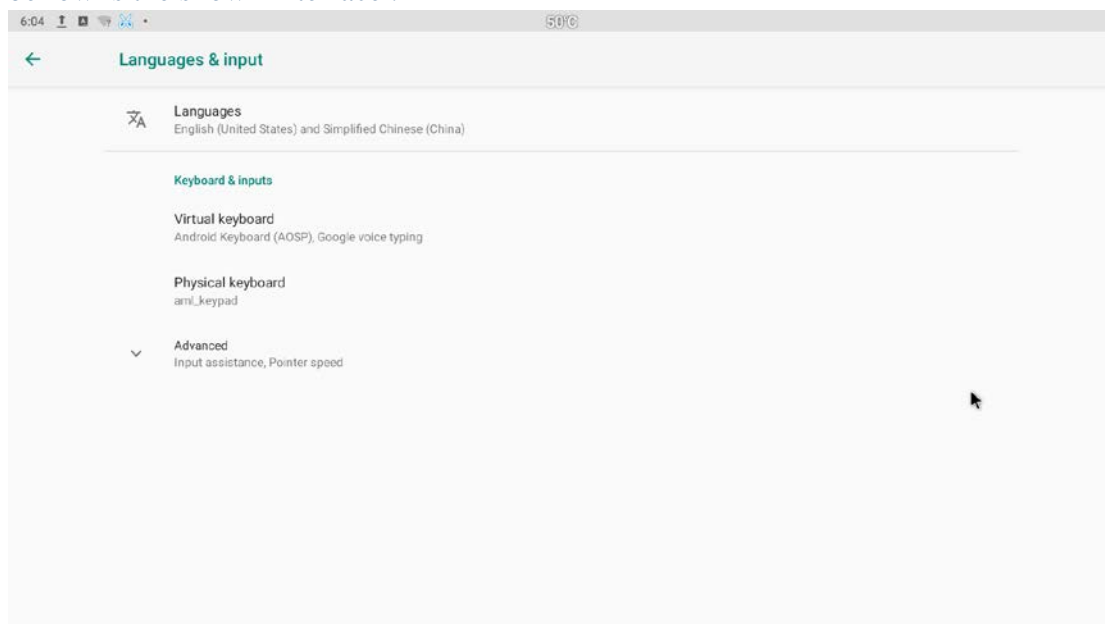
### 3.12 Security

Select  icon, then press 'More settings', find the 'Security & Location' button and the security setting interface will be shown.



### 3.13 Language & input

Select  icon, then press 'More settings', 'System' --- 'Languages & input' --- below is the shown interface .

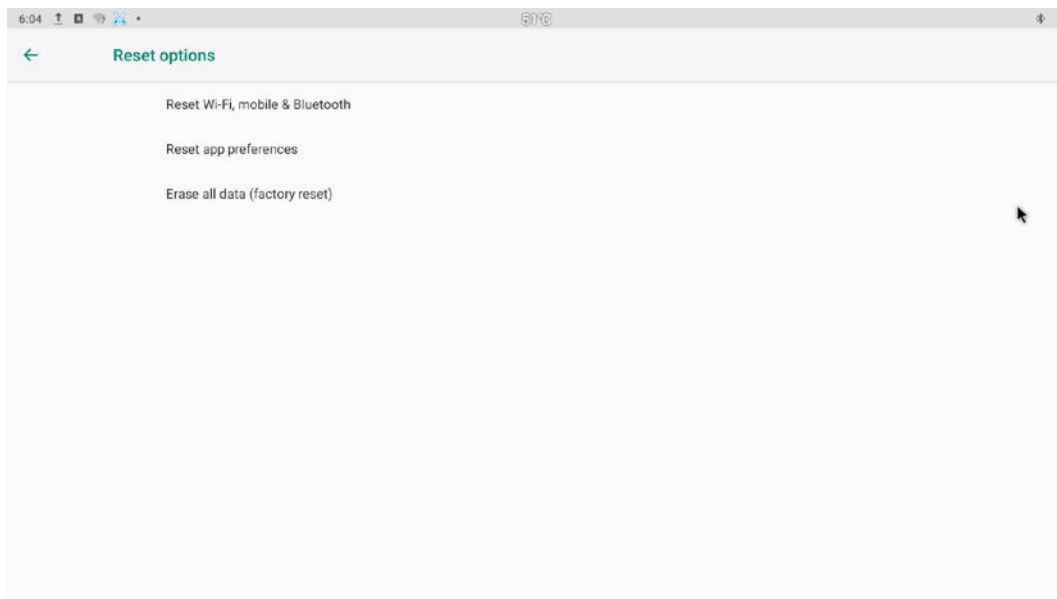


Change OSD language and input method.

The default input method is android standard keyboard.

### 3.14 Reset

Select  icon, then press 'More settings', 'System' --- 'Reset options' --- bellow is the shown interface .



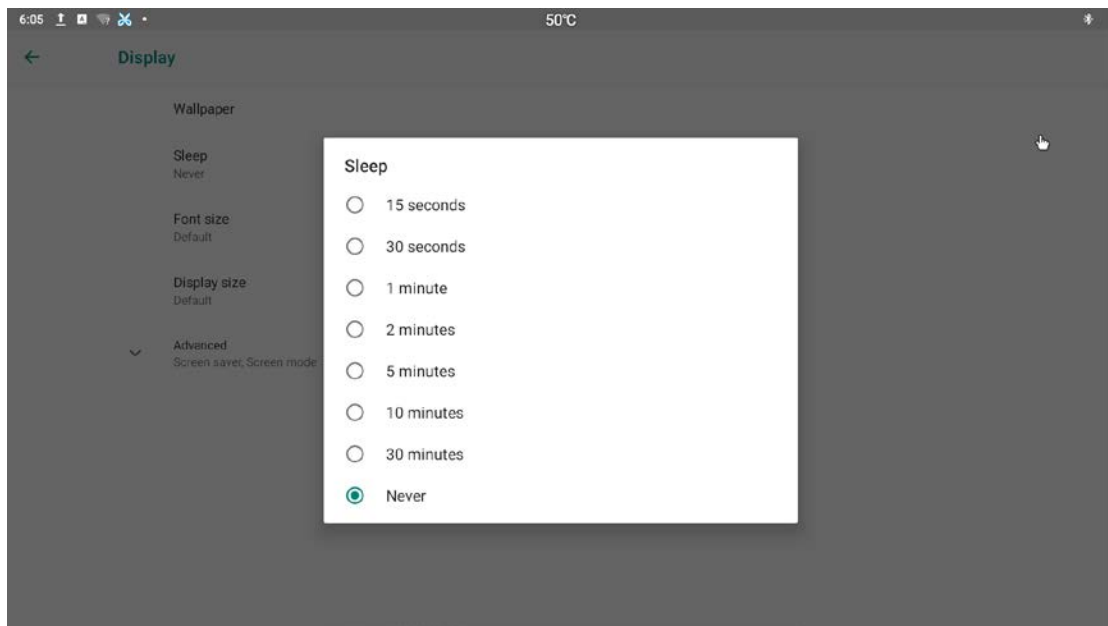
Factory data rest:

You can reset all the settings and apps to factory default.

Note: You might want to backup important data before resetting the box. Once you choose to rest to factory default, all data/apps will be deleted.

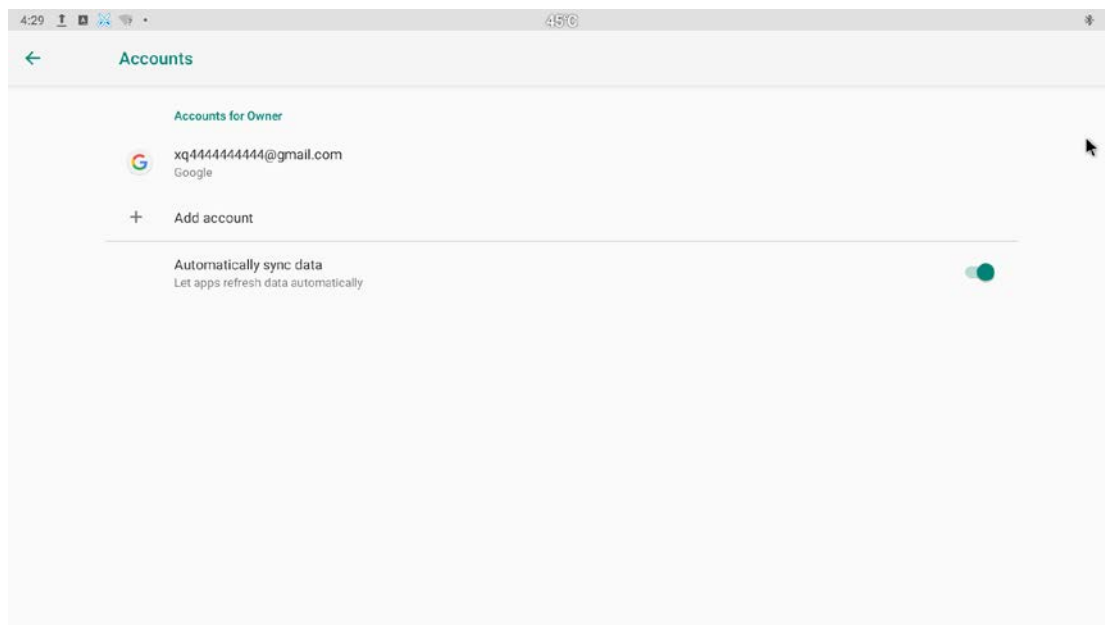
### 3.15 Sleep

'Display' --- 'Sleep'. You can select the Sleep time of the product. There are 8 options for sleep time. The shortest is 'Never' and the longest is 30 minutes.




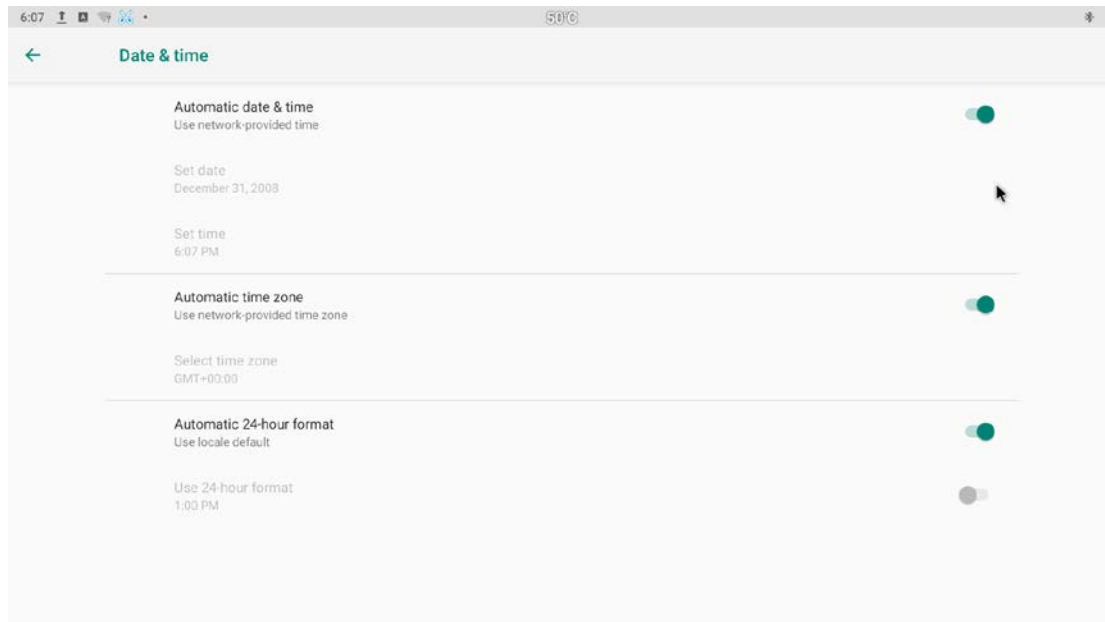
### 3.16 Account

Select  icon, then press 'More settings', find the Accounts button.



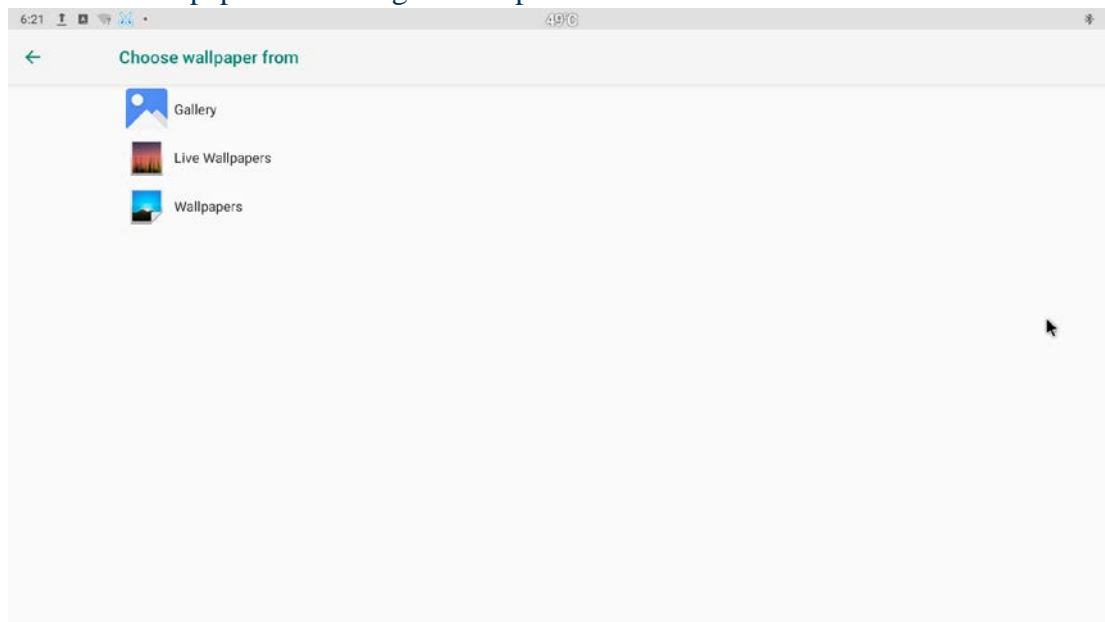
### 3.17 Date & time

Select  icon, then press 'More settings', 'System' --- 'Date&time' --- bellow is the shown interface .



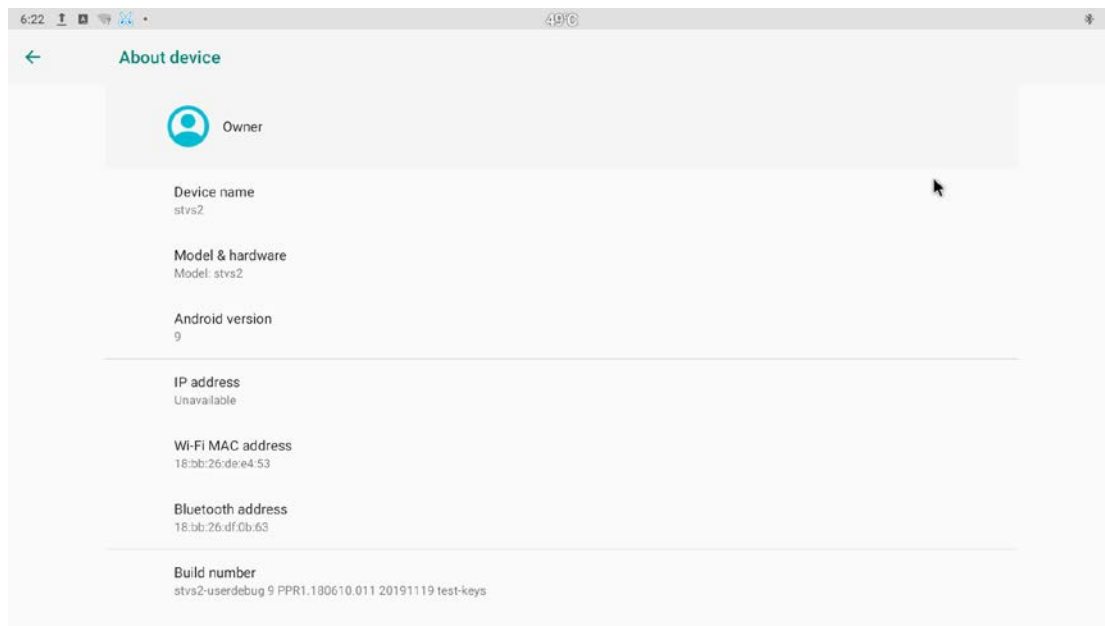
### 3.18 Wallpaper

'Display' --- 'Wallpaper'. "Users can choose wallpaper photos from albums and historical wallpapers according to their preferences.



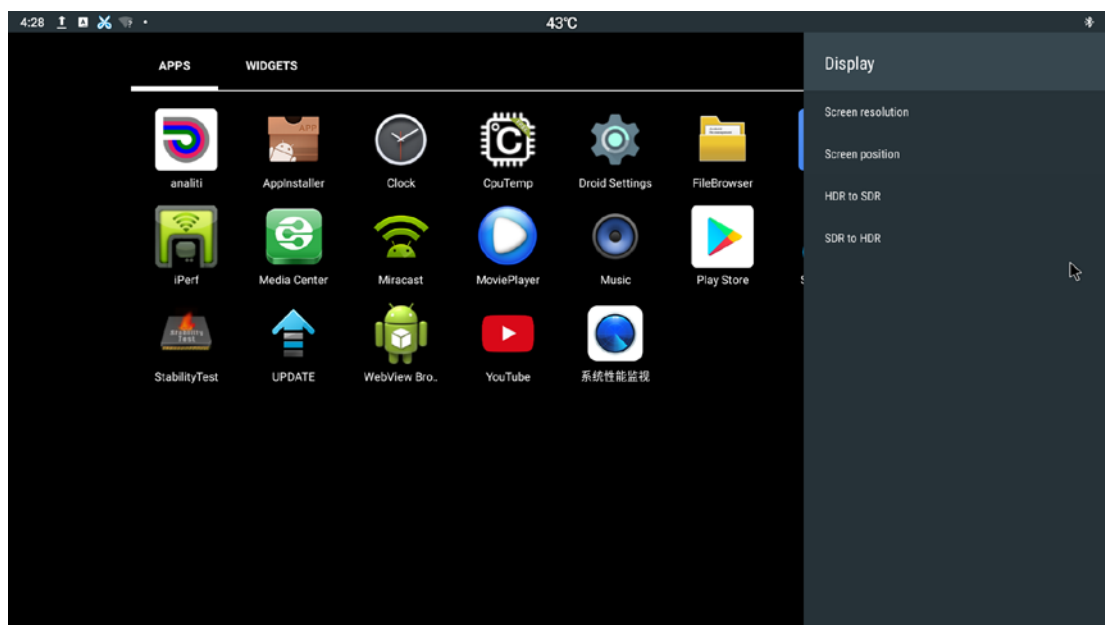
### 3.19 About device.

Select , then press 'More settings' --- 'System' --- 'About device'




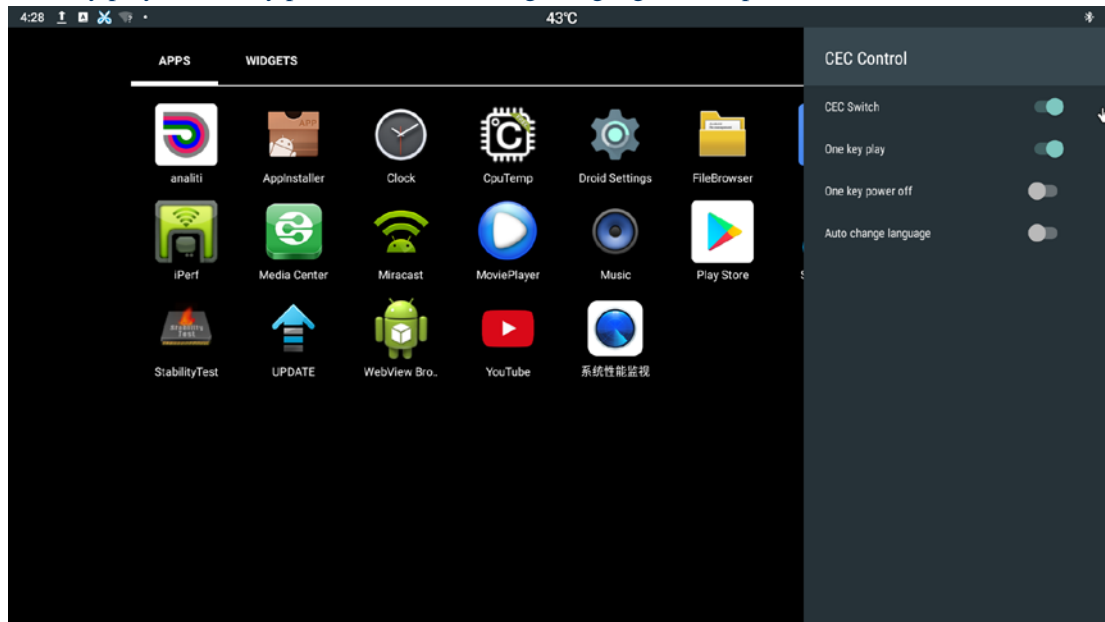
### 3.20 Display Setting

Select , you can choose the button 'Display'. User can set the screen position, display resolution, HDR to SDR, SDR to HDR in this part.



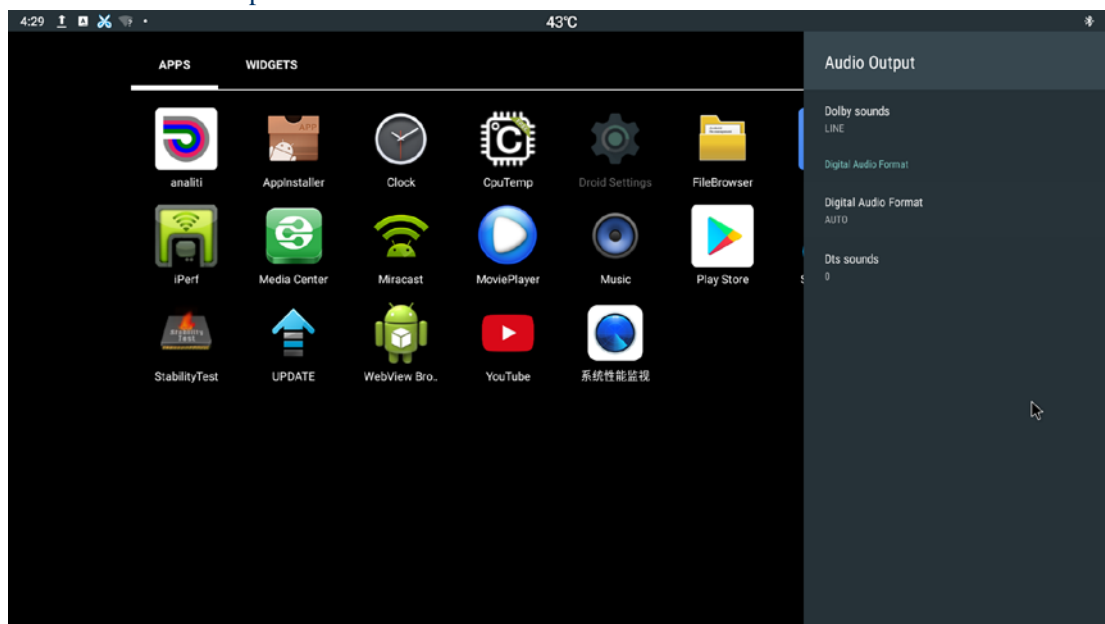
### 3.21 HDMI CEC

Select  icon, you can choose the button 'HDMI CEC'. User can set the CEC Switch, One key play, One key power off, Auto change language in this part.



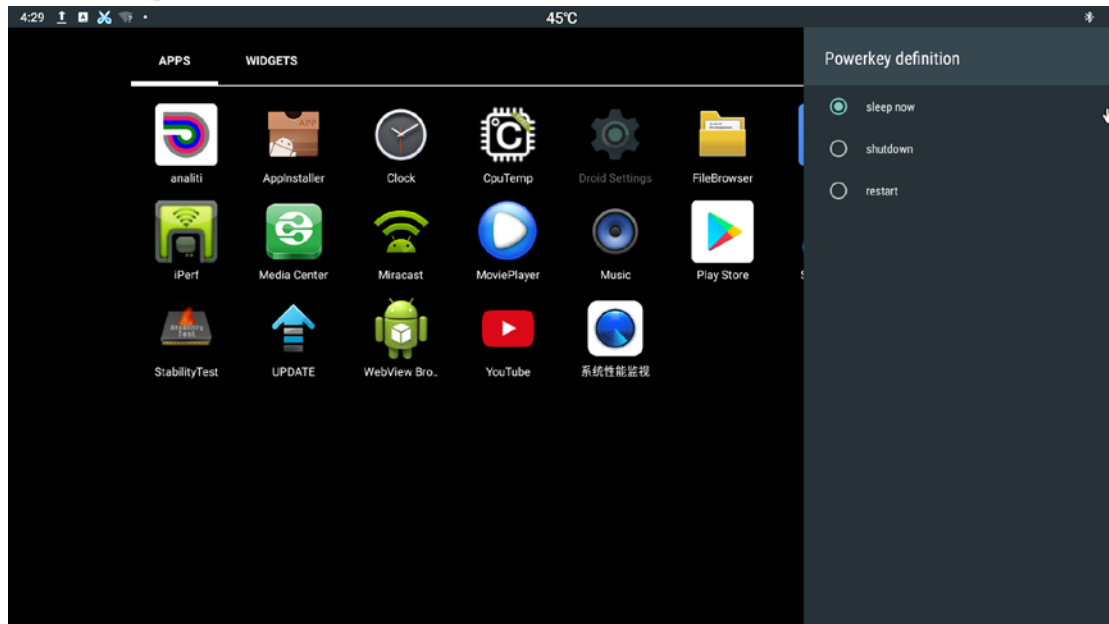
### 3.22 Audio Output

Select  icon, you can choose the button 'Audio Output'. User can set the Dolby and Audio Format in this part.




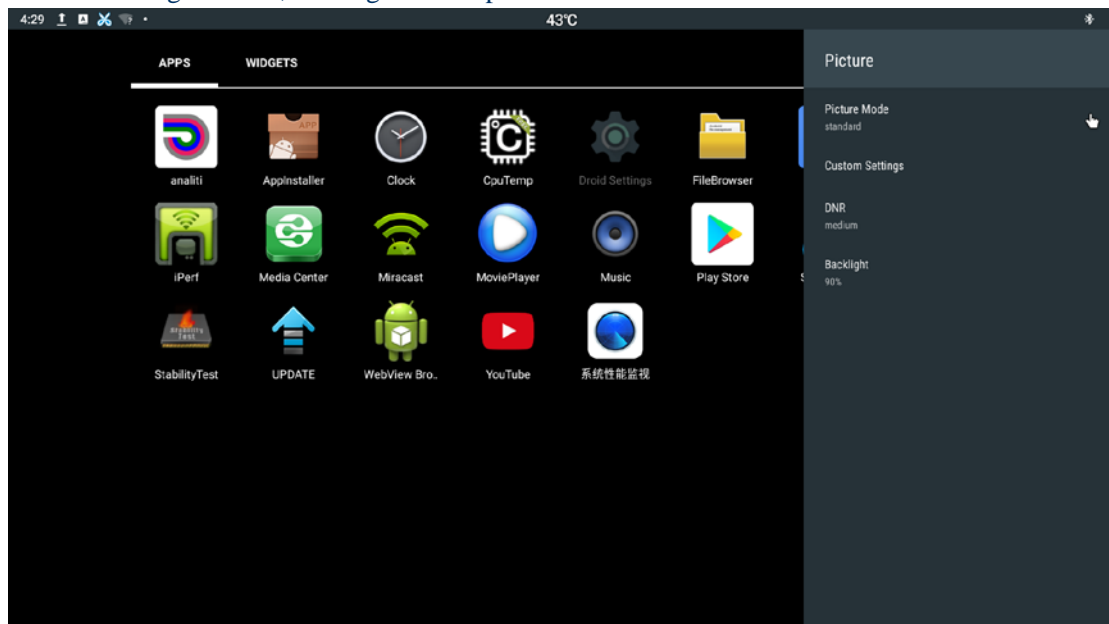
### 3.23 Powerker definition

Select  icon, you can choose the button 'Powerker definition'. User can set the power mode in this part.



### 3.24 Picture

Select  icon, you can choose the button 'Picture'. User can set the Picture mode, Custom Settings, DNR, Backlight in this part.





## **4. Apps Install & Uninstall**

On XPI-S905X3, you can install apps from Android Market over the Internet or other sources, such as other online sources, the internal storage and the USB storage device and SD card that you have mounted onto XPI-S905X3.

You also can manage apps on XPI-S905X3 and SD card, install/uninstall apps, stop running apps, or select other options.

## **5. Firmware Update**

You can download newest firmware from Geniatech Official website:

[www.geniatech.com](http://www.geniatech.com)

## **6. Trouble Shooting/FAQ**

### **6.1 No Picture**

Refer to the TV user manual for how to select the correct video input channel.

### **6.2 USB Content cannot be read**

- . The format of USB storage device is not supported
- . The supported memory size is 64G maximum.
- . Make sure that this player supports these files.

### **6.3 Remote Controller cannot respond quickly to the pressing of keys**

Make sure that batteries have enough power.

### **6.4 The firmware updating is not complete after a long time**

If you update the firmware over the online service, it may take a long time to download the firmware update files from the server. To save your time, update the firmware through the SD card.

## **7. Repairs**

If you contact us to repair your player, an administration fee may be charged if either:

An engineer is called out to your home at your request and there is no defect in the product.

You bring the unit to a repair center and there is no defect in the product.

We will provide you with the amount of the administration fee before we make a home visit or begin any work on your player.  
We recommend you read this manual thoroughly, search for a solution on line at [www.geniatech.com](http://www.geniatech.com), or contact Geniatech Customer Care before seeking to repair your player.

## 8.Specification

CPU	Quad Core ARM Cortex-A55 CPU up to @ 2.0GHz
GPU	ARM G31 MP2 GPU up to 450MHz
RAM	2G(1GB Optional)
ROM	8G EMMC (Optional 16G/32G)
OS	Android 9.0
USB	USB 2.0*3 and USB3.0*1
HDMI	V2.0
DC Input	5.0V-2A
MicroSD Slot	Max: 64G
Video Output	HDMI/BT
Audio Output	HDMI/BT
LAN	Integrated IEEE 802.3 10/100/1000M Ethernet MAC controller with RGMII interface
Wi-Fi	IEEE 802.11ac/n/a/g/b 2.4G /5.8G
BT	Optional
Audio Decoder	Supports MP3,AAC,WMA,RM,FLAC,Ogg and programmable with 7.1/5.1 down-mixing Low-power VAD Built-in serial digital audio SPDIF/IEC958 input/output and PCM input/output, 3 built-in TDM/PCM/I2S ports with TDM/PCM mode up to 384kHz x 32bits x 16ch or 96kHz x 32- bits x 32ch and I2S mode up to 384kHz x 32bits x 16ch Supports concurrent dual audio stereo channel output with combination of analog+PCM or I2S+PCM
Video/Picture Decoder	VP9 Profile-2 up to 4Kx2K@60fps H.265 HEVC MP-10@L5.1 up to 4Kx2K@60fps AVS2-P2 Profile up to 4Kx2K@60fps H.264 AVC HP@L5.1 up to 4Kx2K@30fps MPEG-4 ASP@L5 up to 1080P@60fps (ISO-14496) WMV/VC-1 SP/MP/AP up to 1080P@60fps AVS-P16(AVS+) /AVS-P2 JiZhun Profile up to 1080P@60fps MPEG-2 MP/HL up to 1080P@60fps (ISO-13818) MPEG-1 MP/HL up to 1080P@60fps (ISO-11172)

RealVideo 8/9/10 up to 1080P@60fps

Multiple language and multiple format sub-title video support

MJPEG and JPEG unlimited pixel resolution decoding (ISO/IEC-10918)

Supports JPEG thumbnail, scaling, rotation and transition effects

Supports \*.mkv,\*.wmv,\*.mpg, \*.mpeg, \*.dat, \*.avi, \*.mov, \*.iso, \*.mp4, \*.rm and \*.jpg file formats

Size                      85\*56 mm

## 9.Trademark Notice



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