



# QY-RK3288 Android Test Manual

V1.0

2017/11/23

Zhejiang Qiyang Intelligent Technology Co., Ltd

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## Version History

Date	Version	Description	Editor
2017-10-16	V1.0	Initial version OS : Android5.1.1, kernal 3.10.0 Hardware : QY-RK3288 Rev.A	Hech

## Preface

RK3288 is a high performance platform, which has strong multithreading operational capability, graphics capability and hardware decoding capability. It supports Android 5.1.1. Its application domain involves: industrial control, data acquisition, information communication, medical equipment, video monitoring, vehicular entertainment and so on.

QY-RK3288 board level supports infrared, Bluetooth 4.0, dual-band WiFi, 4K\*2K HD output and rich peripheral extension interfaces, so, it meets some high performance situations like DIY smart living room, smart kitchen, background music and smart home center control. QY-RK3288 supports 4K HD output and H.265 hardware decoder, it could build high definition indoor outdoor advertising machine.

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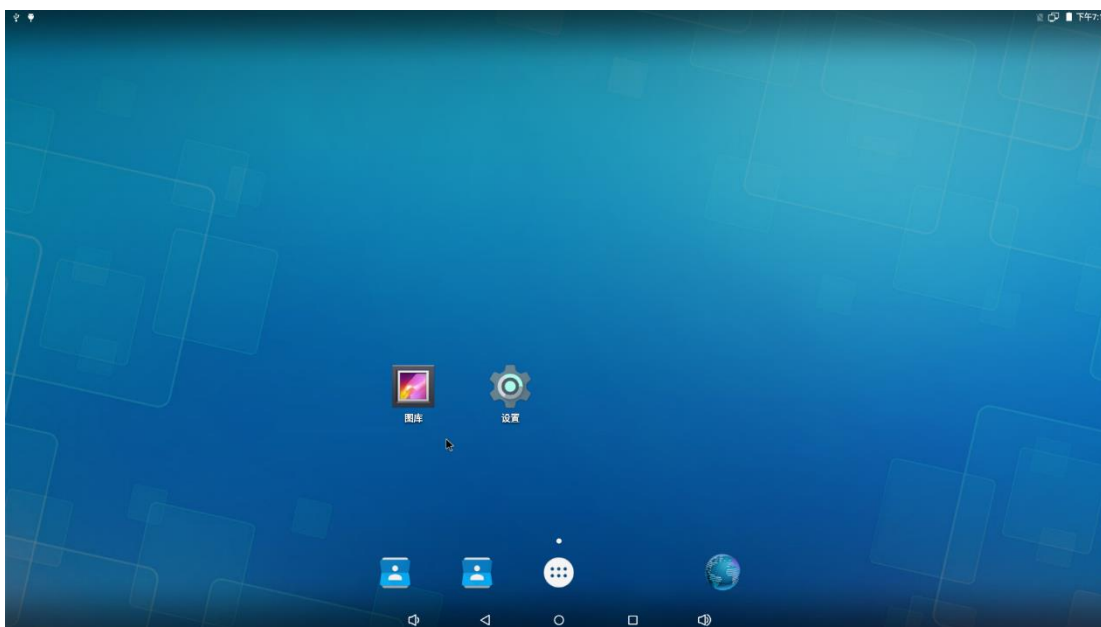
## 1、Preparation

### 1.1 Install Android OS

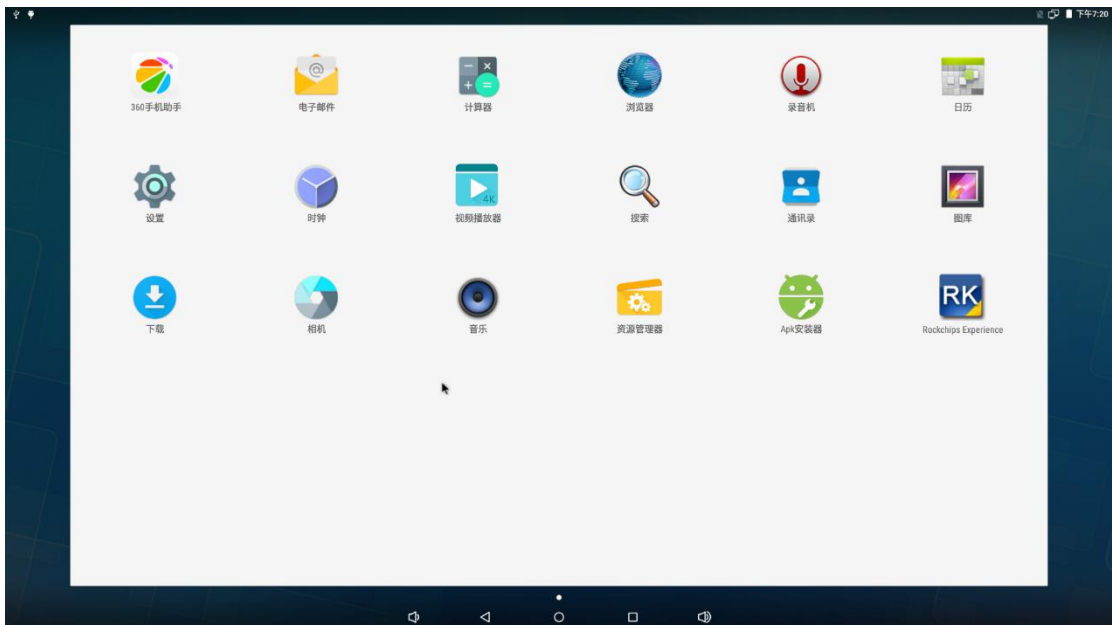
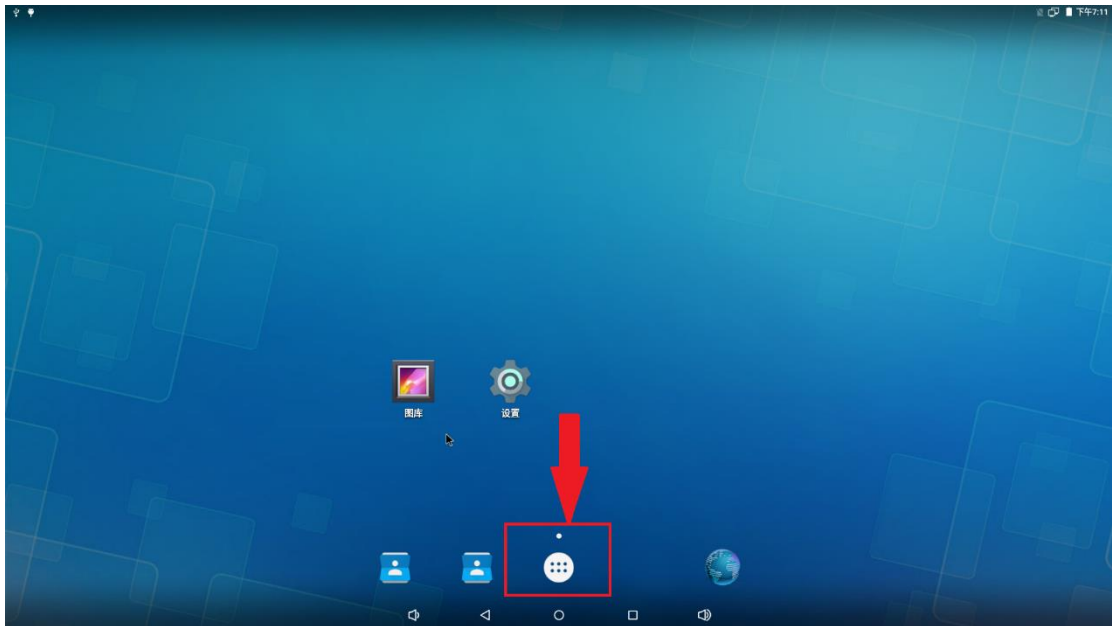
For installation method, please refer to: *QY-RK3288 Android Burning Manual*

### 1.2 Main Interface Explanation

- After installation of Android OS, for the first time boot, when the simple setup as per system prompt completes, you could enter Android system main interface.

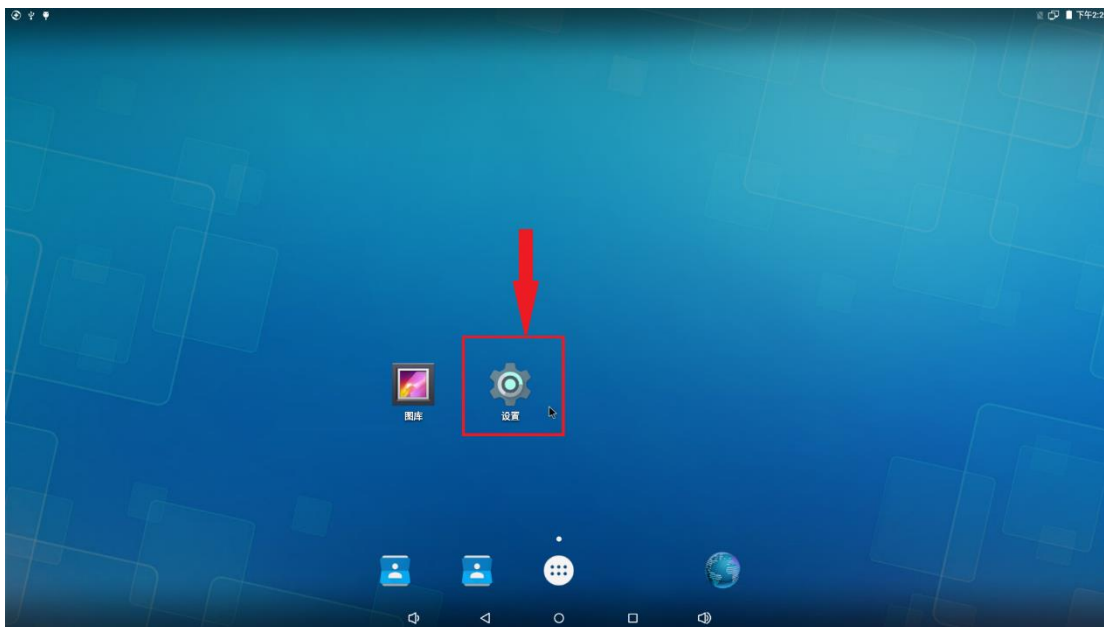


- Click the middle MENU button as below, you could enter MENU interface:

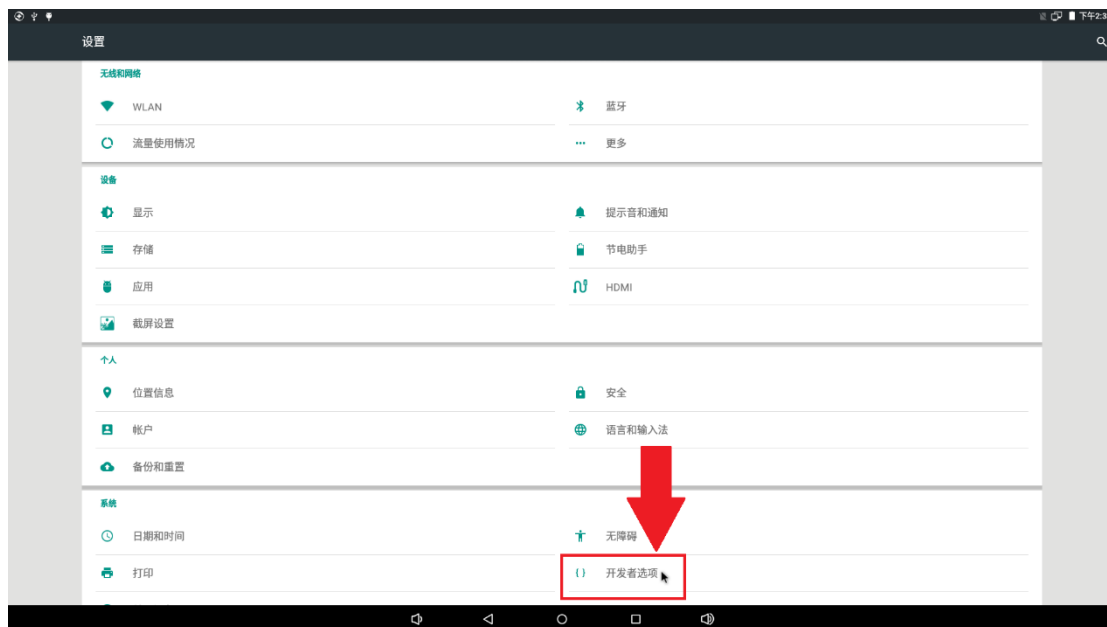


## 2.Open USB Debug

- Click “SETUP” program in MENU interface to enter SETUP list interface



Click USB:



- Click ‘Connect to PC’:

Any question, please send E-mail:[supports@qiyangtech.com](mailto:supports@qiyangtech.com)

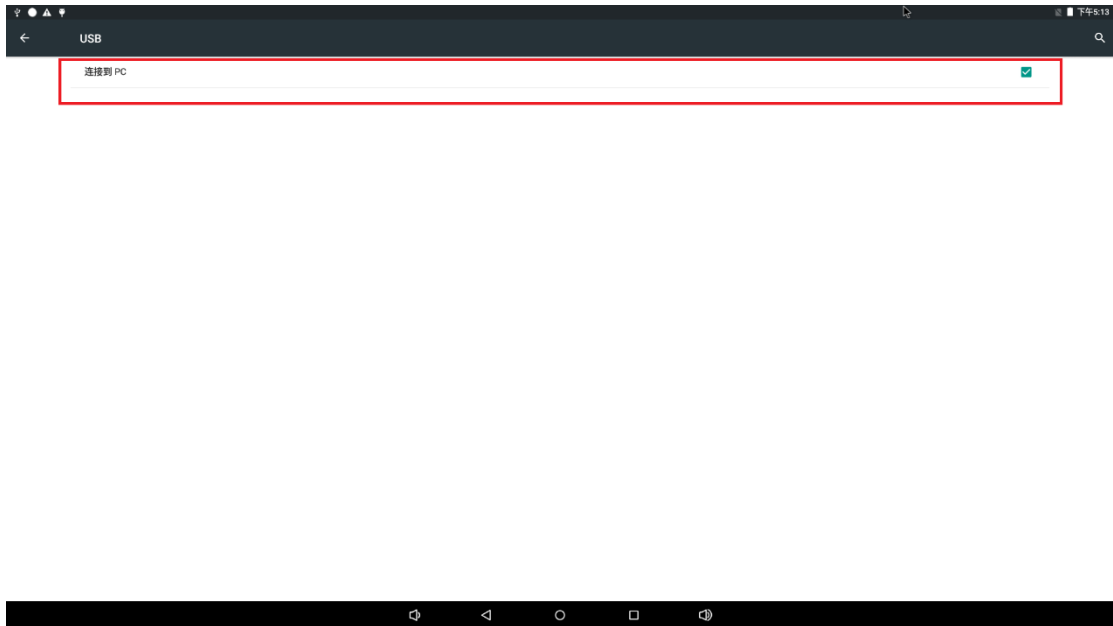
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Website:<http://www.qiytech.com>

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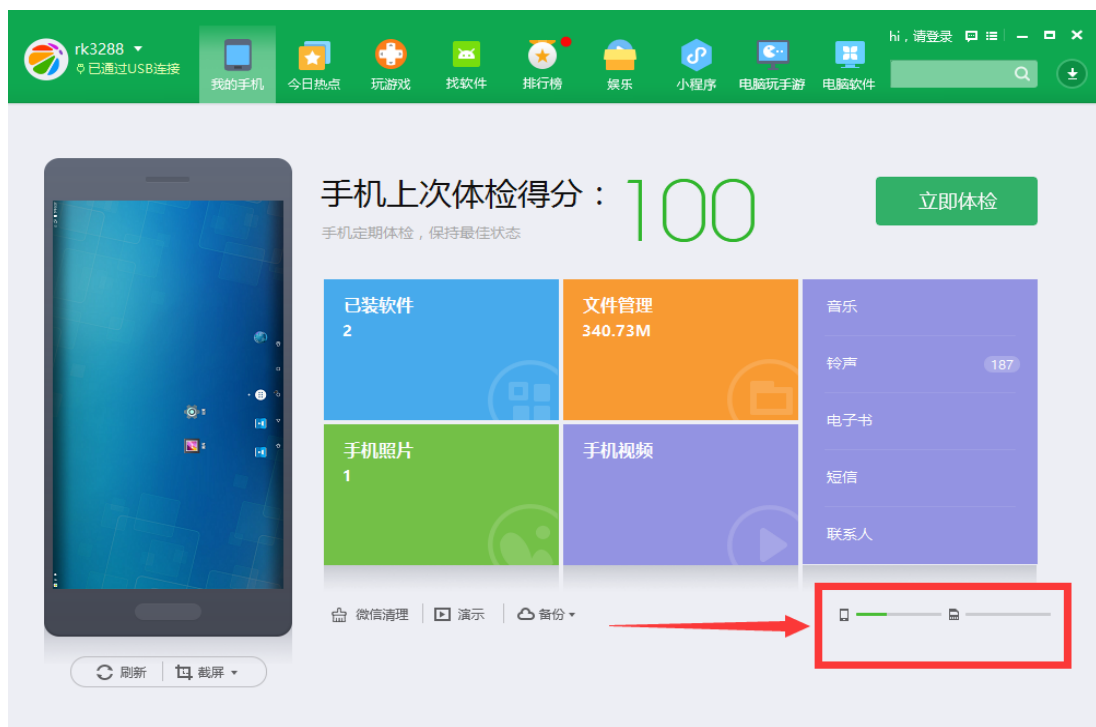


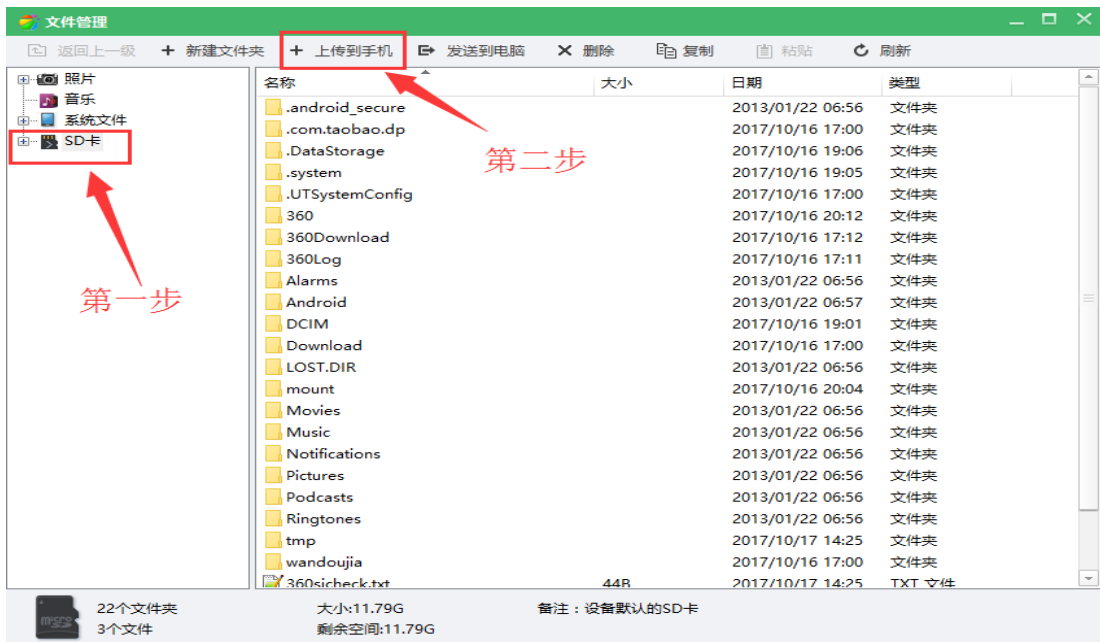
- So far, you open USB debug successfully. Connect work desktop to the board by USB OTG and open phone helper in desktop, like 360 phone assistant.



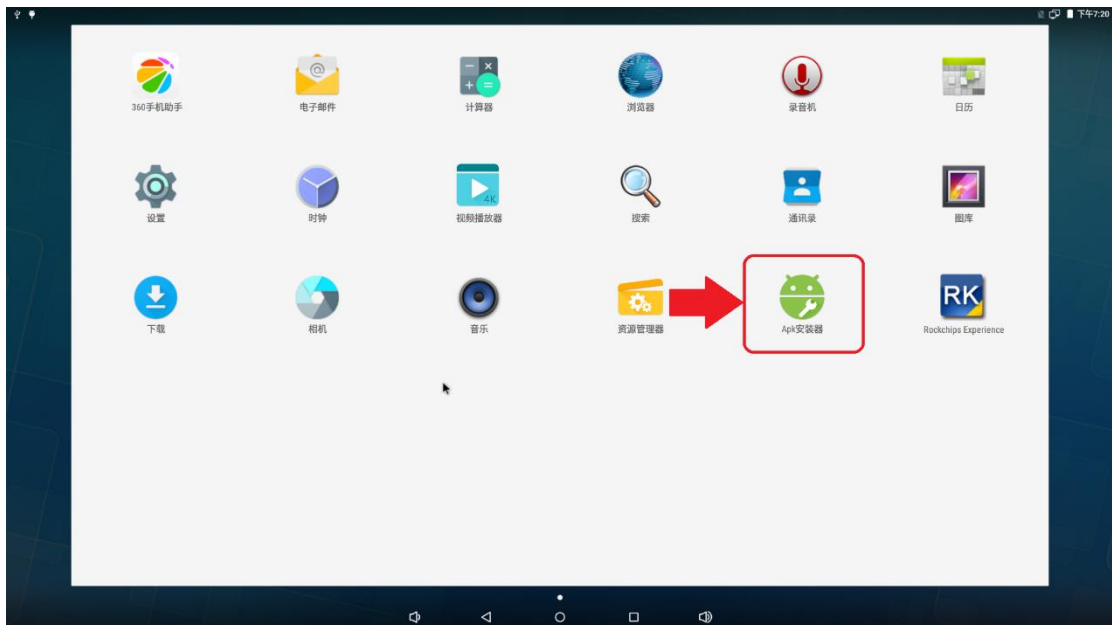
### 3. Serial Port

- The board provides 5-CH serial ports, one of these is DEBUG serial port, device node is /dev/ttyS0~4 in sequence, the corresponding board bit number is J42, J41, J44, J40, J43 respectively, J44 is debug serial port.
- Open phone storage by phone assistant in work desktop, copy “Serial.apk” to the board

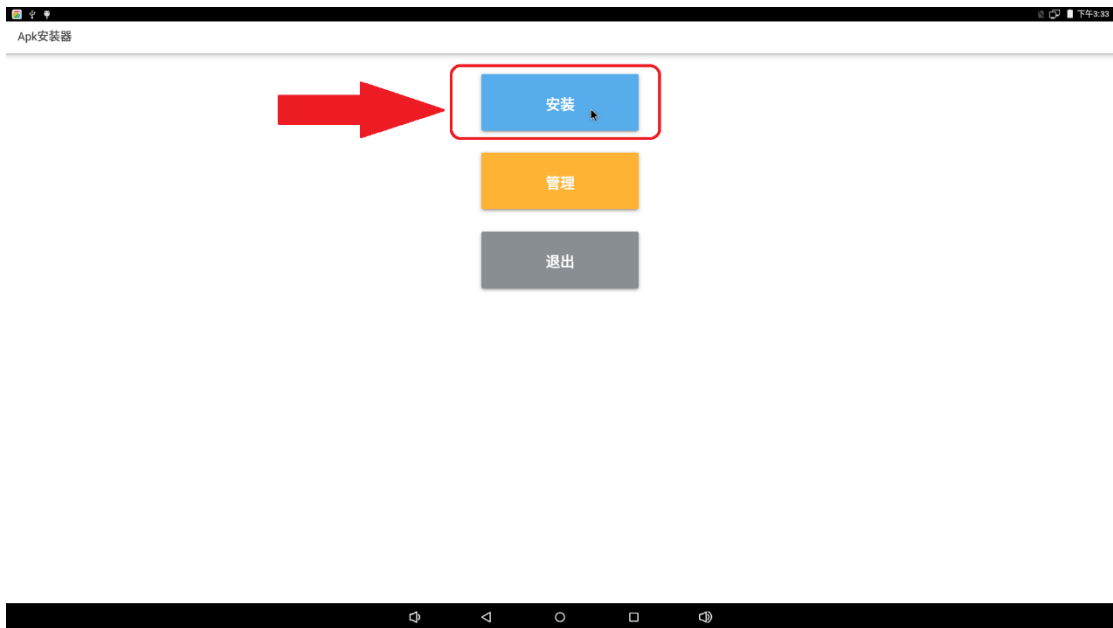




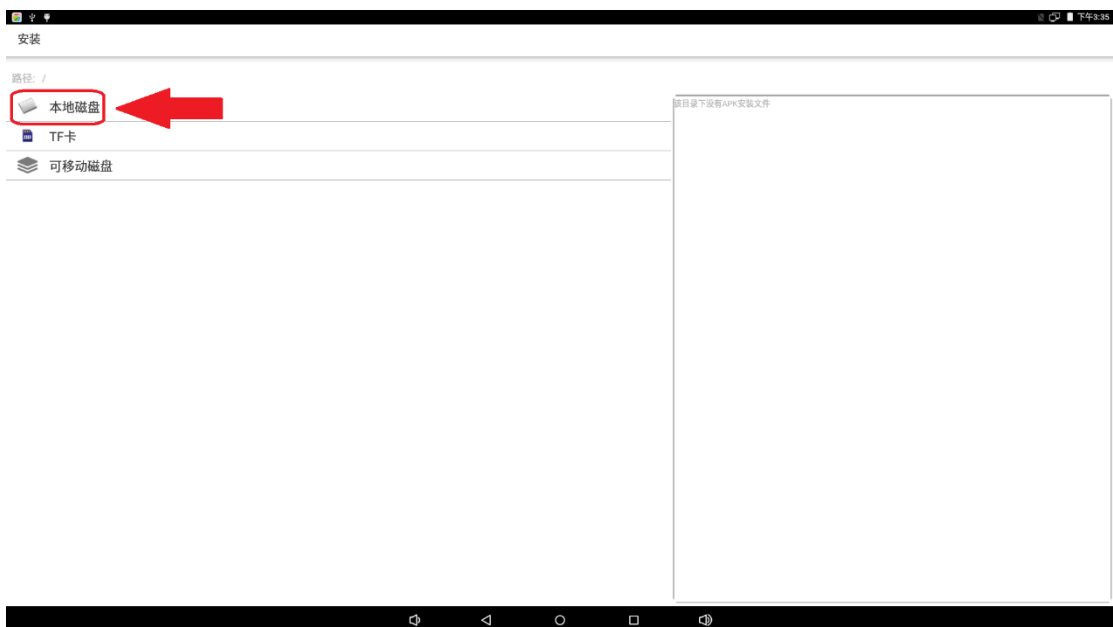
- Click “Apk Installer” in MENU interface of the board:



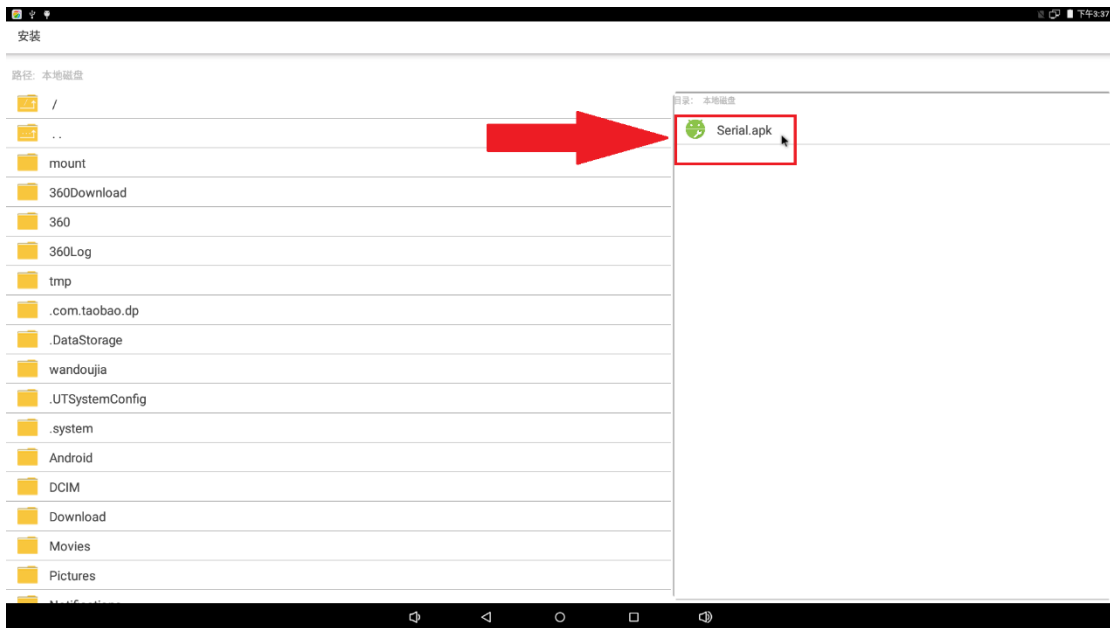
- Click “Install”:



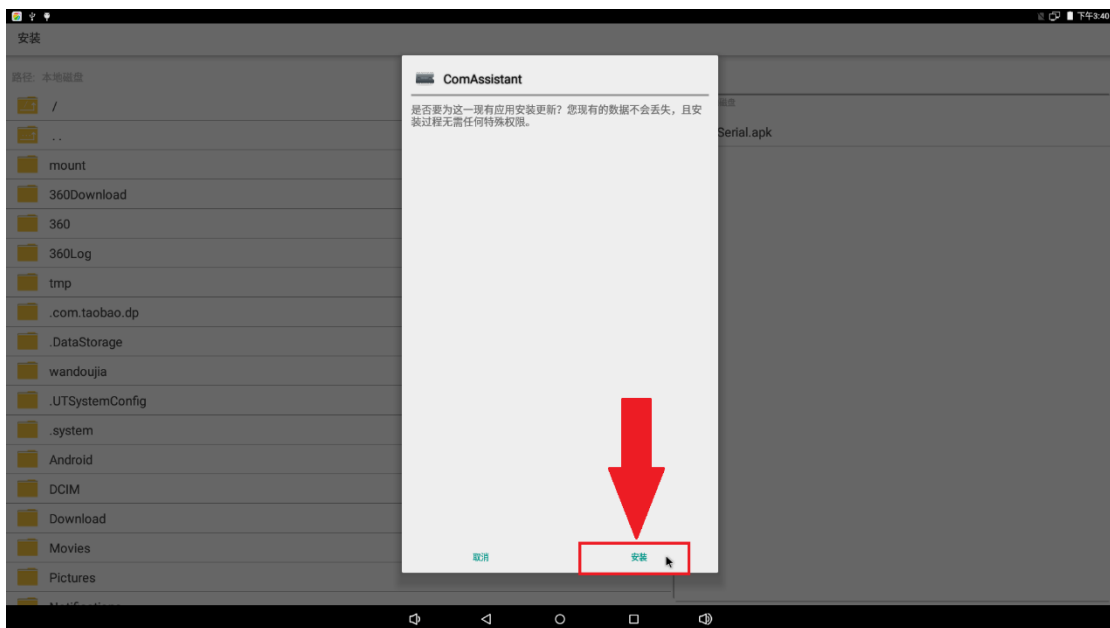
- Click “Local disk”:



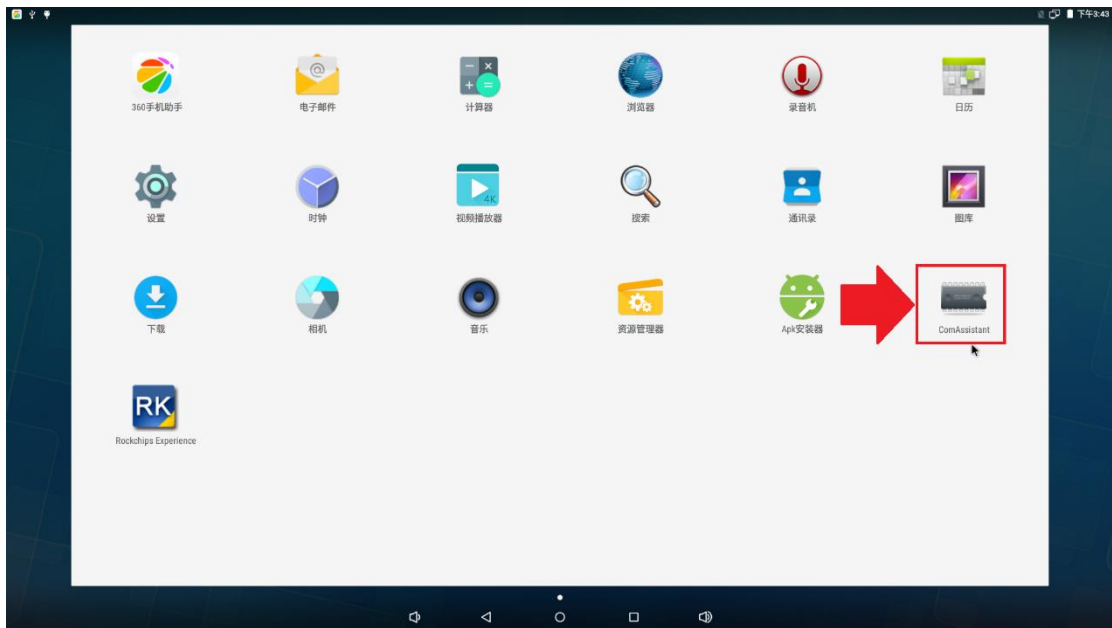
- Click “Serial.apk”:



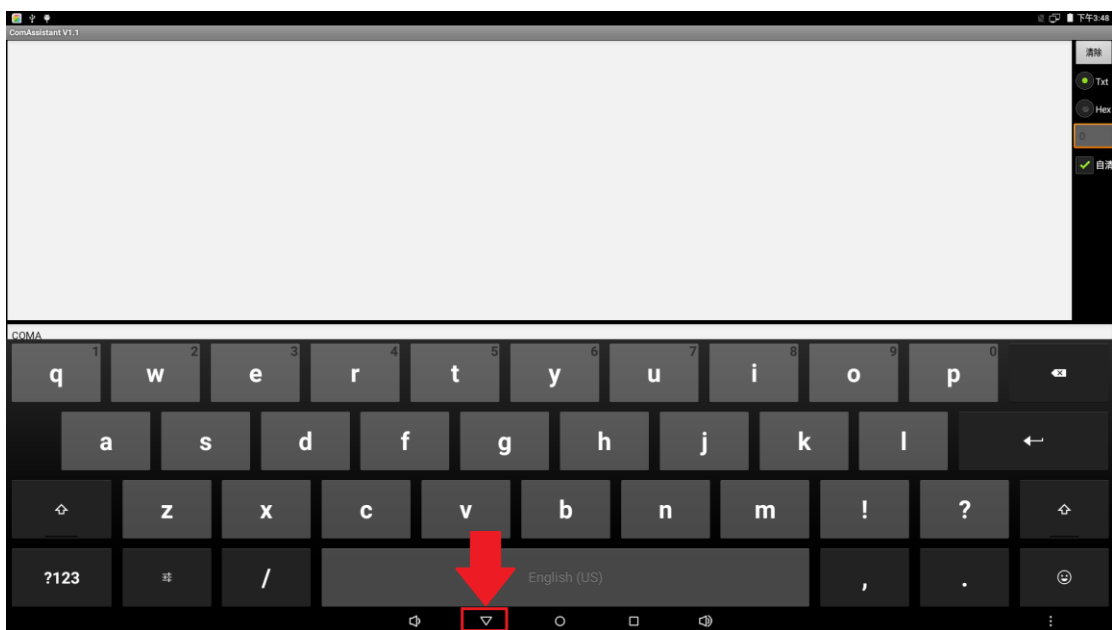
- Click "Install":



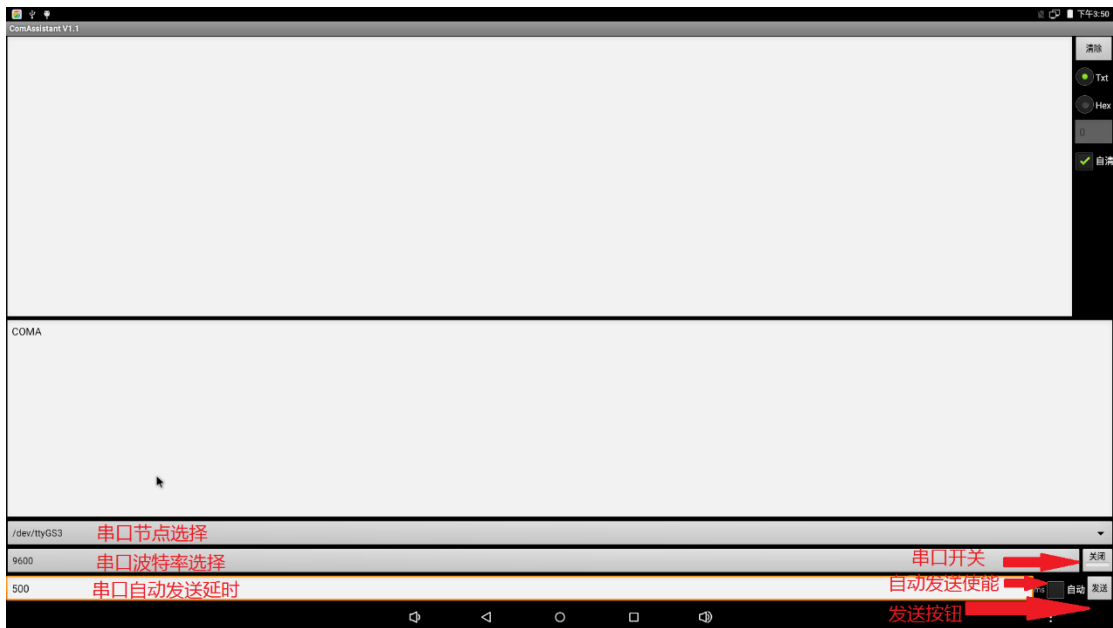
- It could be directly opened after the installation finishes, or, you could click "ComAssistant" in MENU interface:



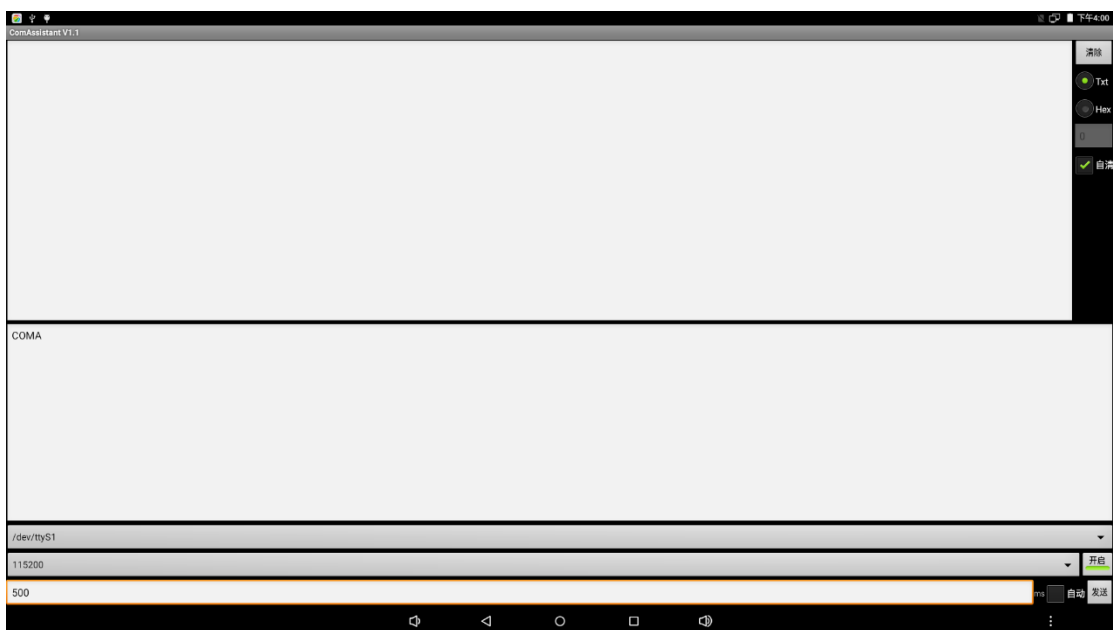
- The default is edit pattern after open software, you could edit and input content, also, you could click RETURN button to exit EDIT pattern



- Configure serial port parameters

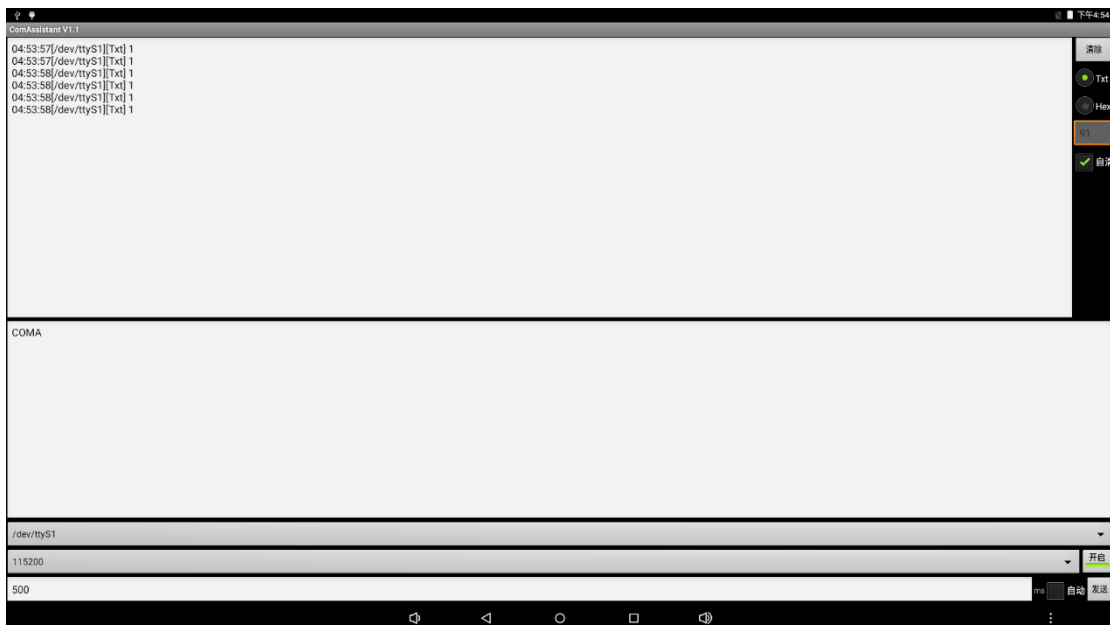
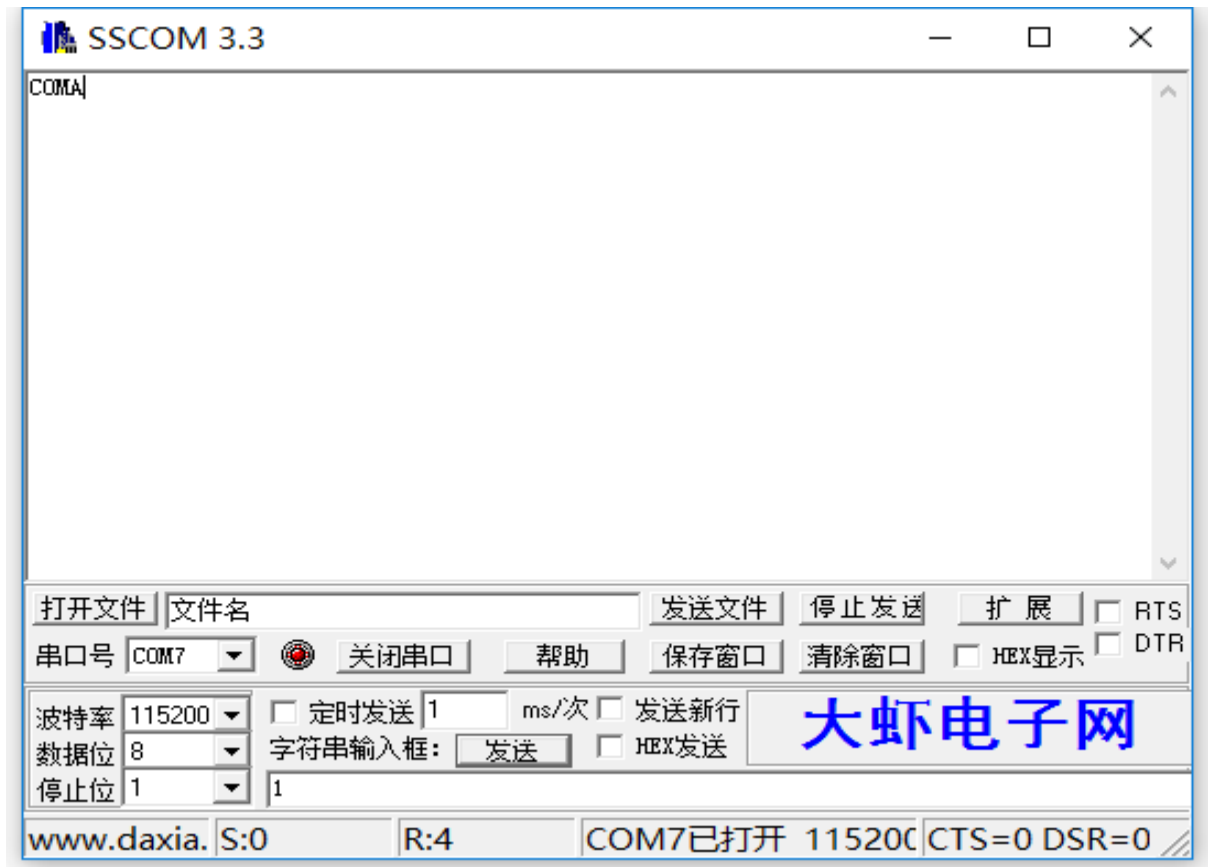


- Here we take Serial port 1 as an example, choose /dev/ttyS1, baud rate 115200, turn on serial port switch



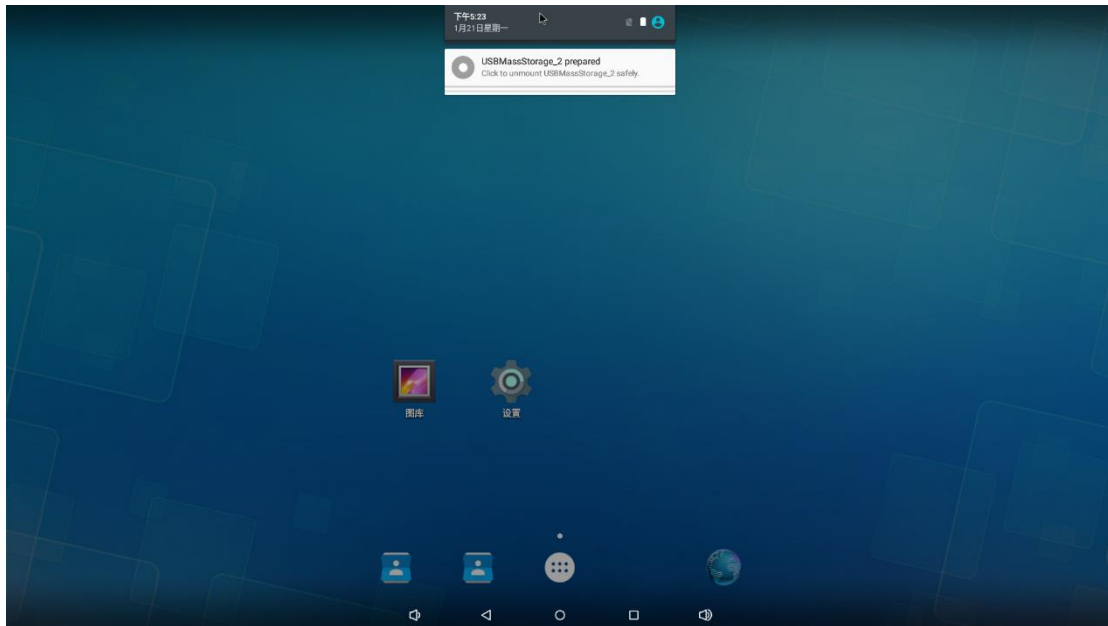
- Connect J41 of the board to work desktop, open serial port tool in desktop, setup the same baud rate as above and send 1 data, then you could see the board receives data; when the board sends COMA data, you could then the desktop receives data.



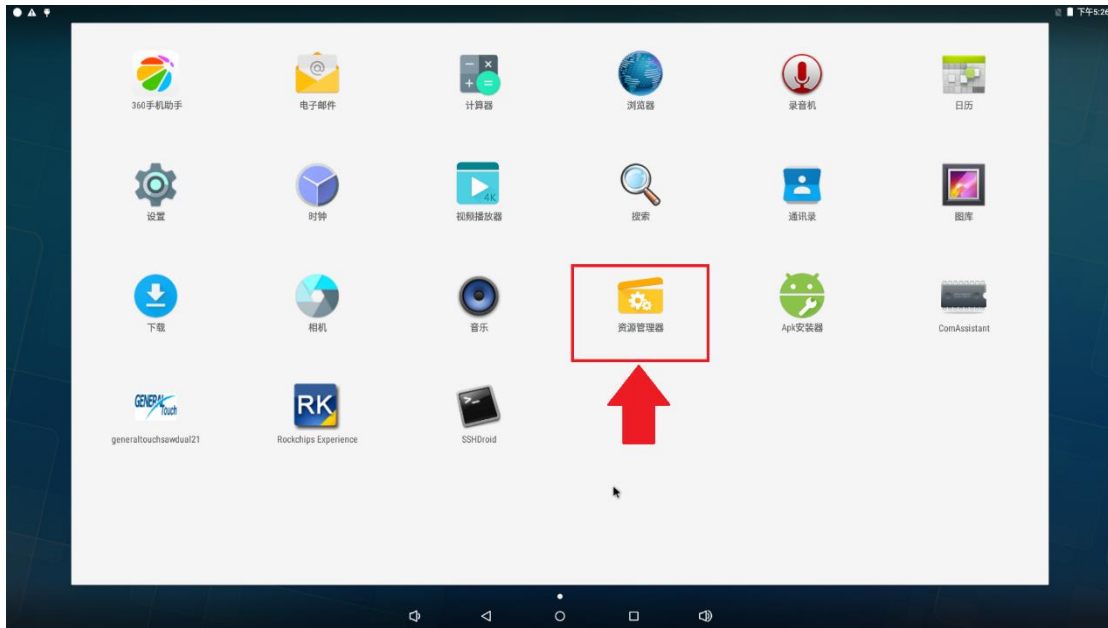


## 4、USB Flash Disk

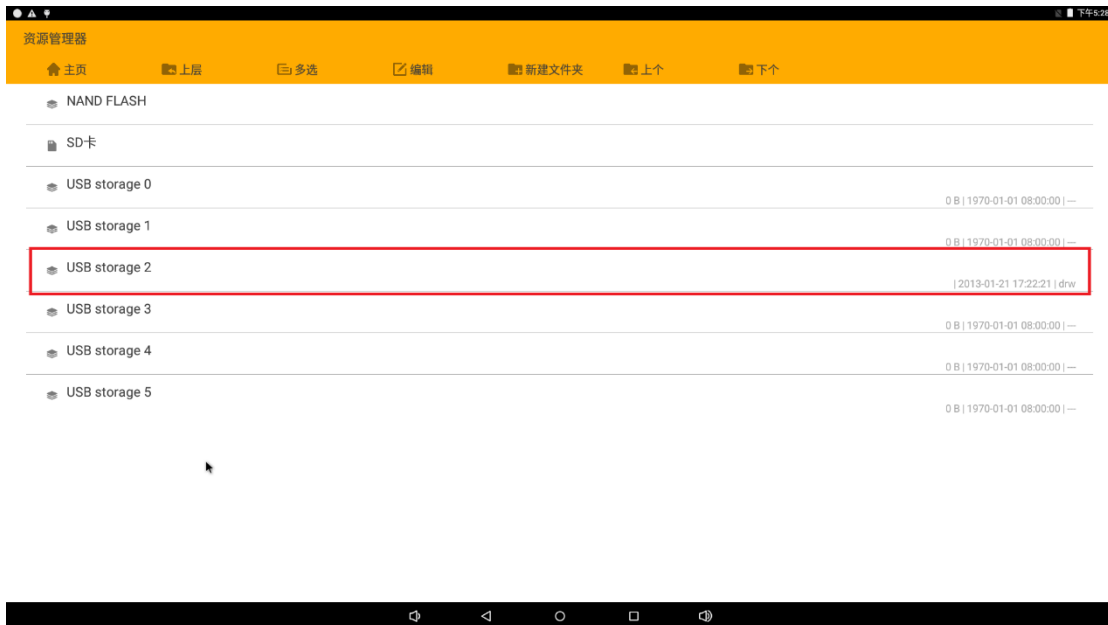
- Insert USB flash disk, Android system automatically identify equipment, click the upper side of the MENU interface. You shall get the notification , here you can see [USBMassStroage\_2\_prepared]:



- Open Device Manager in Menu Interface:



- Find out the folder USB Storage 2, then enter:

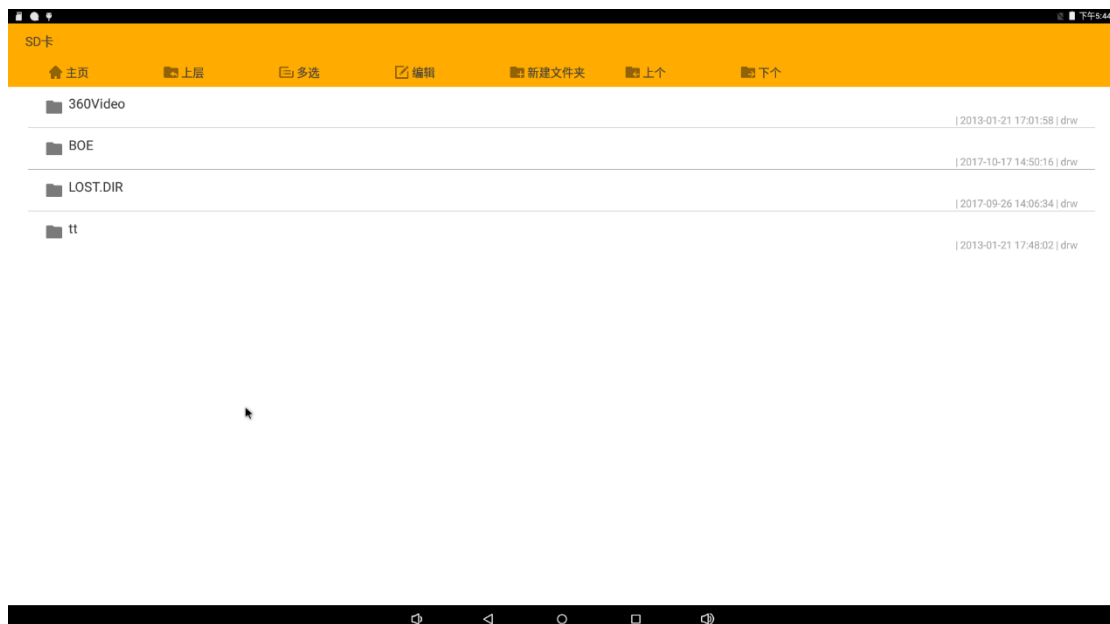


- Find out [udisk0] folder, then enter , you can see the content from the USB Flash Disk.



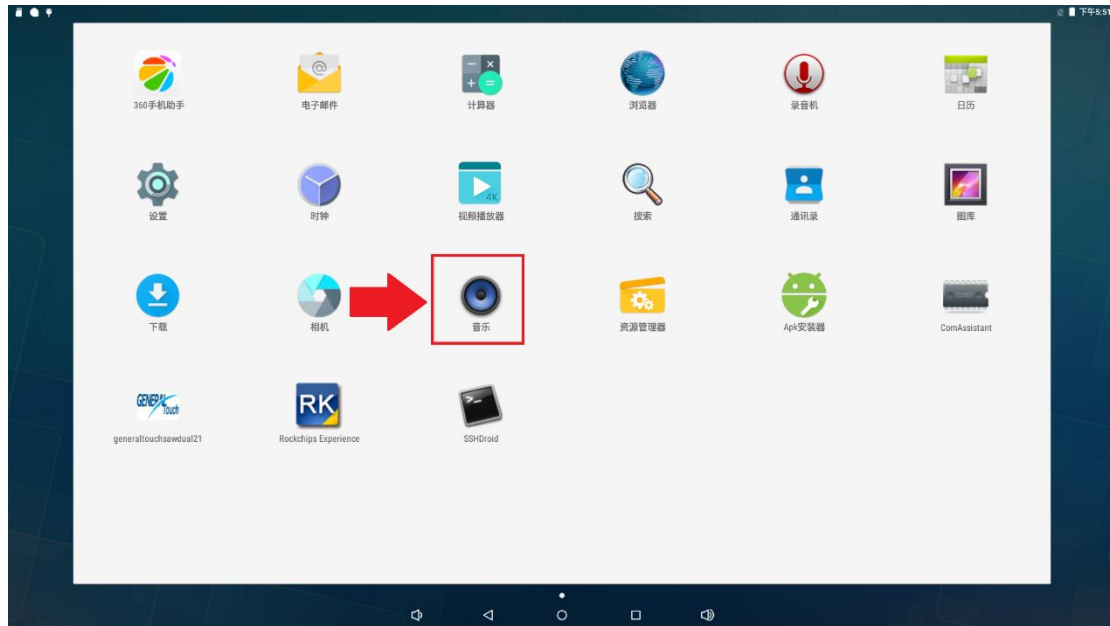
## 5.SD Card

- Usage method is the same as USB flash disk, please notice the SD card file name is "extsd". Step: File Manager → storage → SD Card:



## 6.Play audio

- Put audio file into USB flash disk or SD card, recognize it as multimedia equipment, open “Music” player in MENU interface:



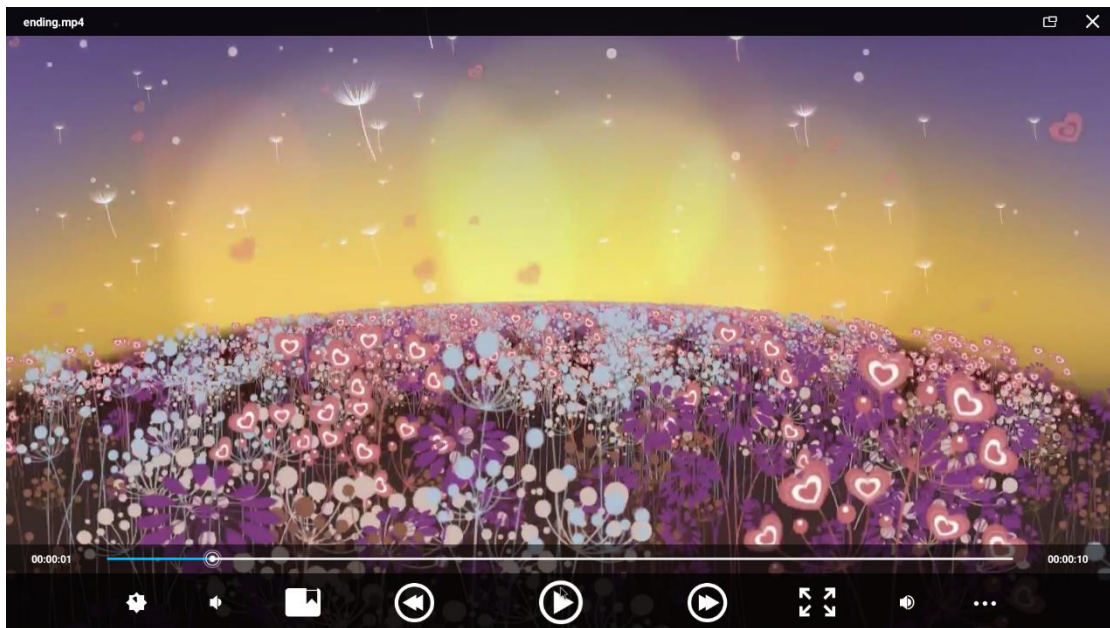
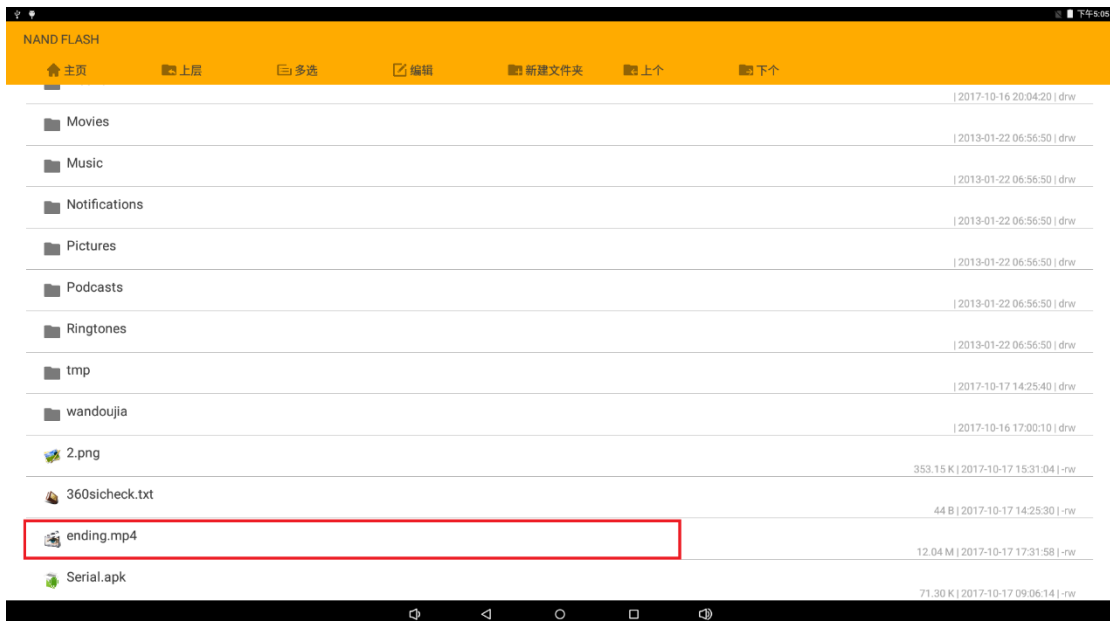
- Click “Songs”, then choose the audio to play:



- Play interface could carry on regular play control

## 7. Play Video

- Put video file into USB flash disk or SD card, or transfer file to the board by Phone Assistant, find the corresponding file and click video, then the video could be playing:



- Video play interface could carry on regular play control.

## 8. Adjust Volume

- ”Click “SETUP” in MENU interface to get into SETUP list interface, then click

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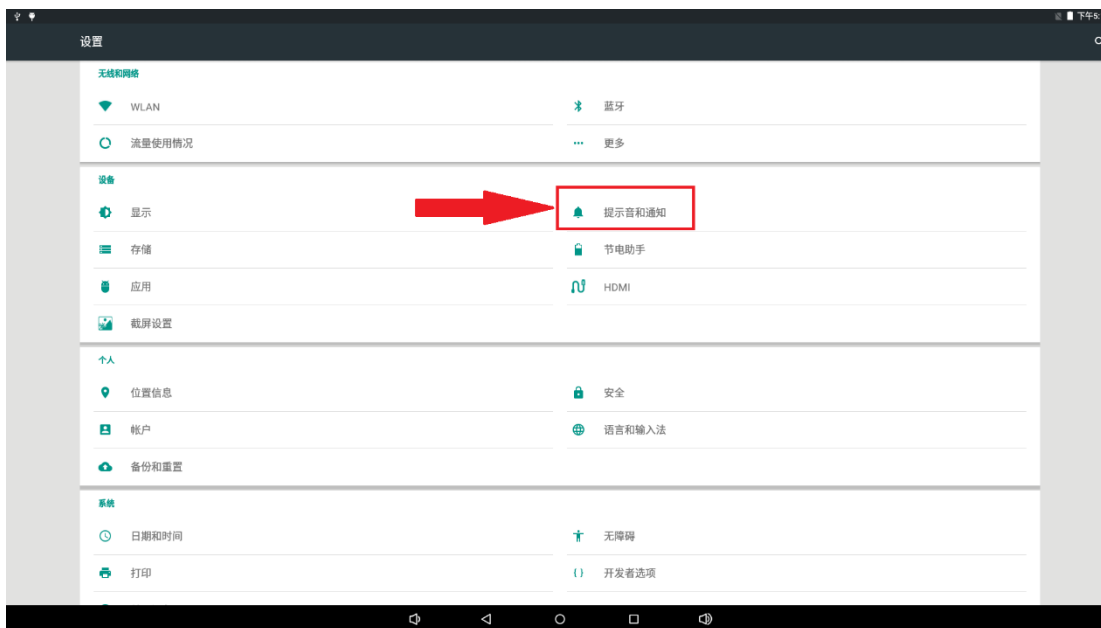
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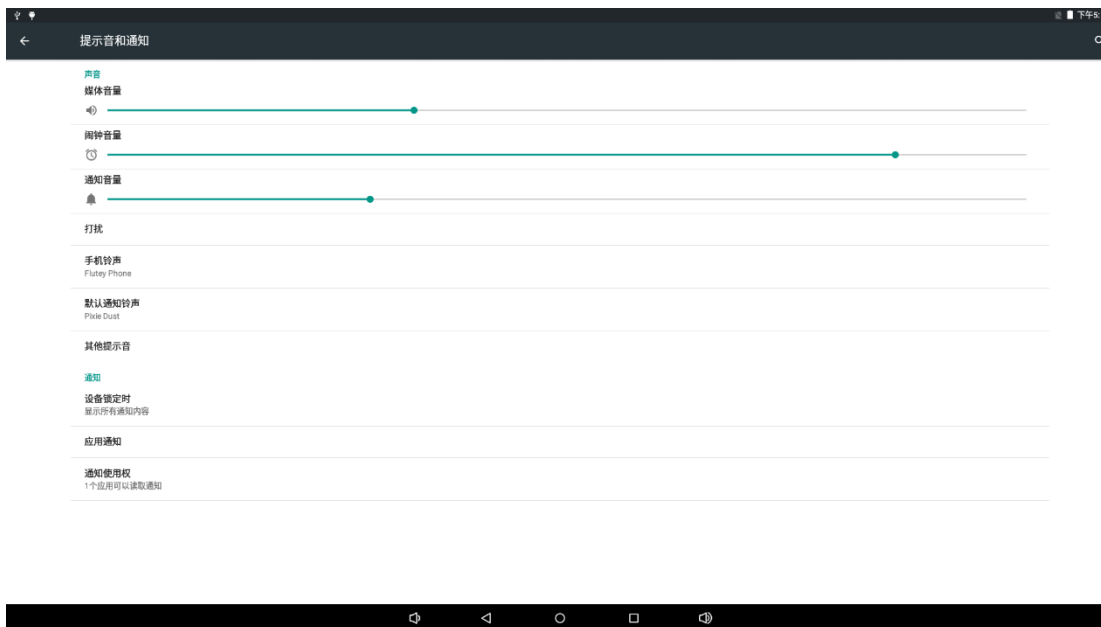
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“Prompt notes and Notifications”



- Now, all kinds of volumes could be adjusted

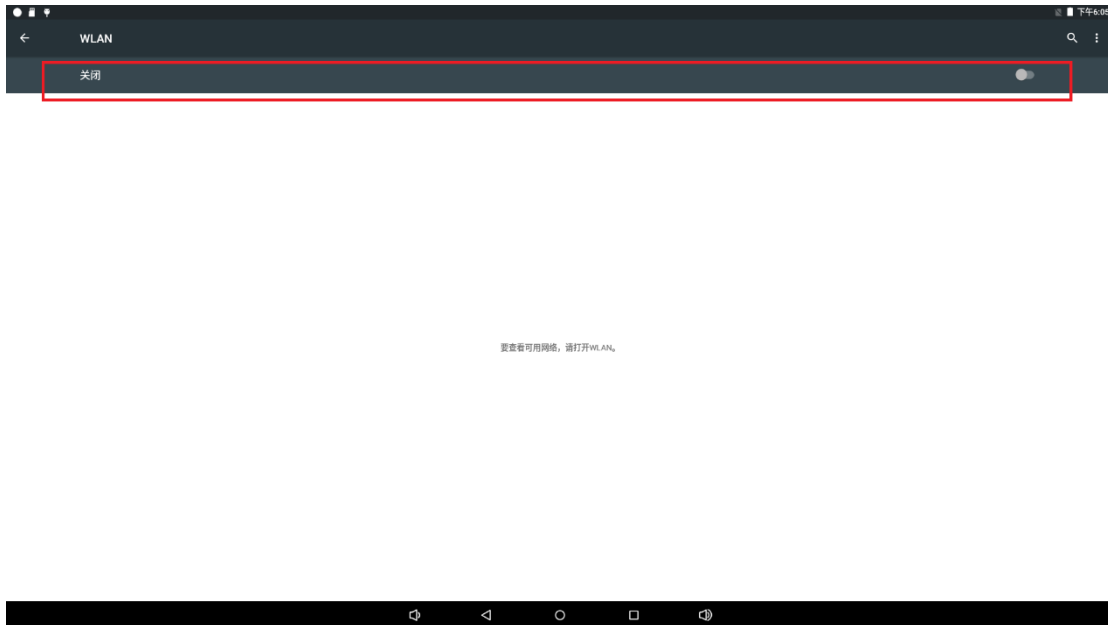


## 9. WiFi

- Default WIFI module: AP6212. Connect to WIFI antenna. Power on, boot

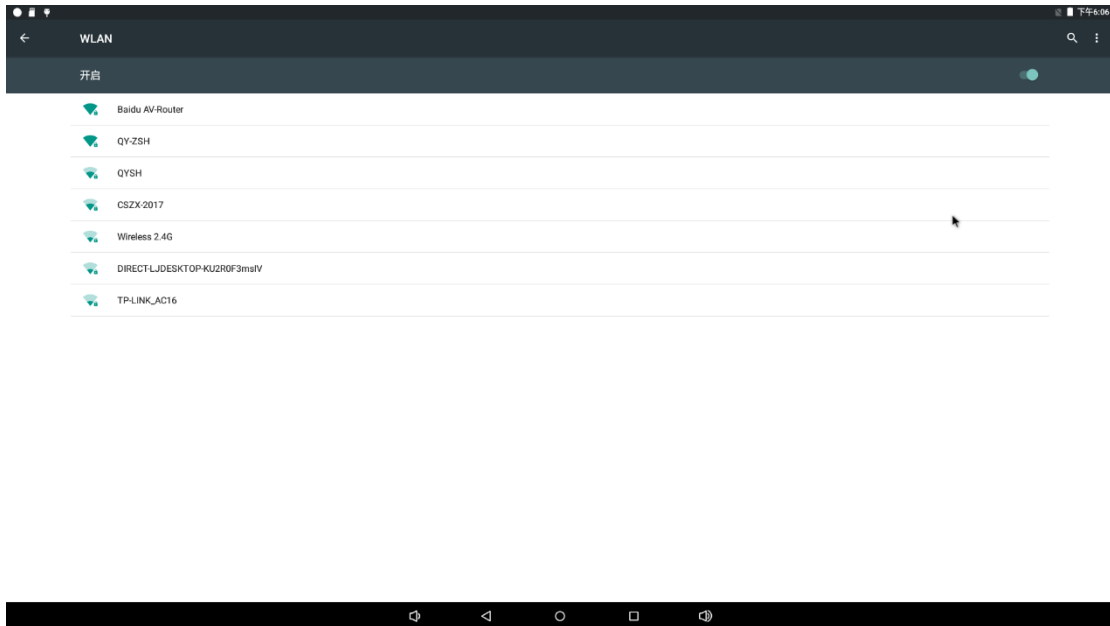


Android system. Click “Setting” program in Menu interface, click “WLAN”:

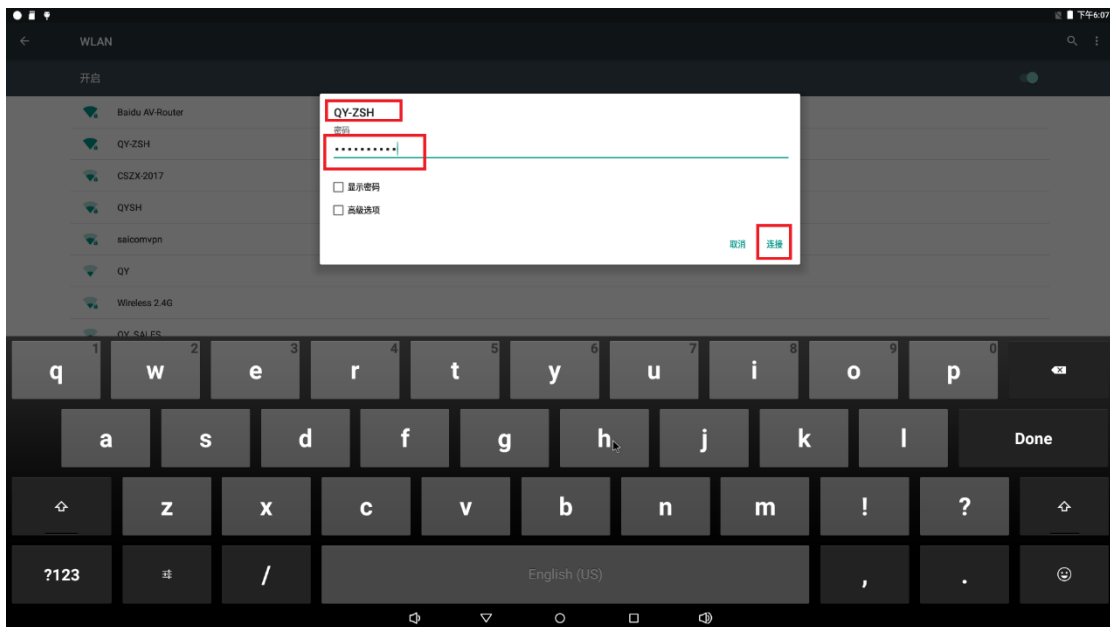


## 9.1 WiFi Wireless Internet

- Access “Wi-Fi”, open Wi-Fi, then you could see WIFI hotspot list:



- Take “QY-ZSH” SSID as an example. Click “QY-ZSH”, input WIFI password to connect with credentials:

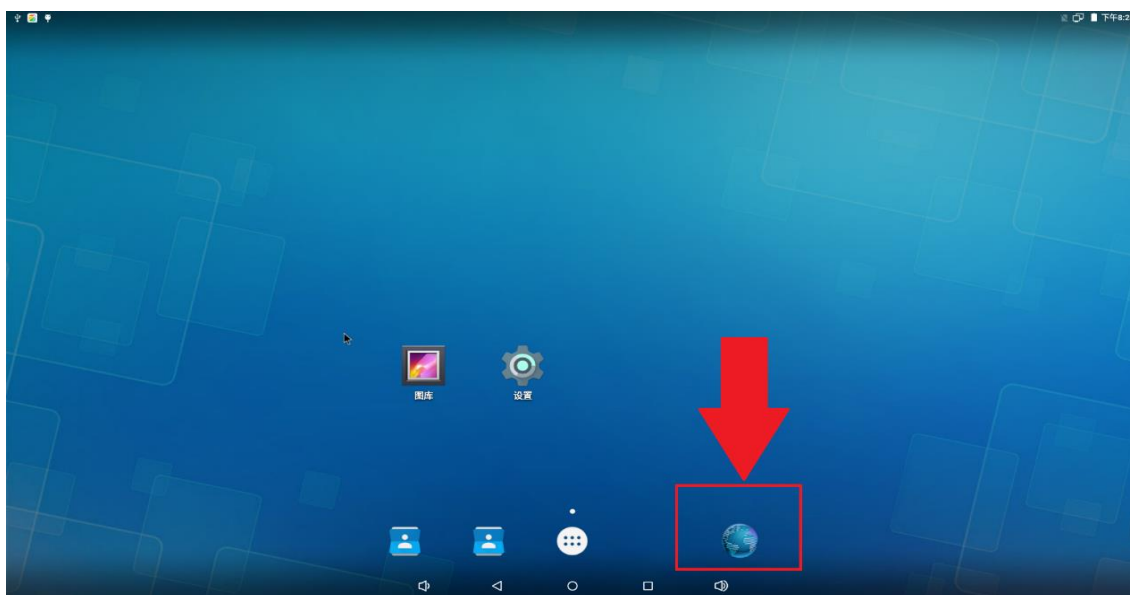


- After verification passes and connection succeeds, top right corner of screen will

show wifi signal icon:



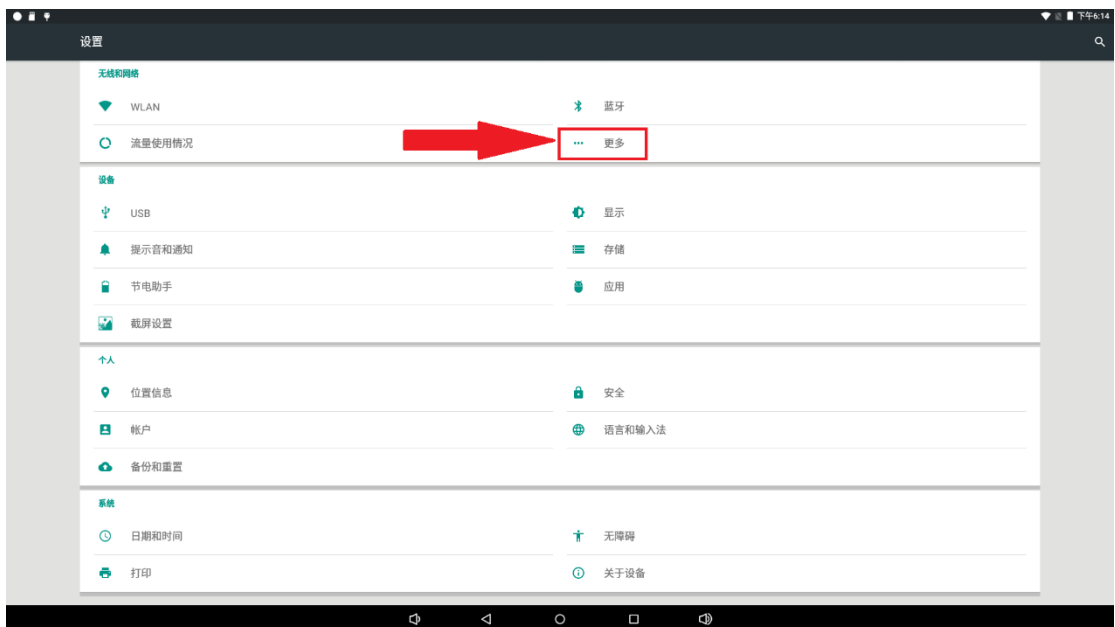
● Open MENU interface's "Browser", test wifi internet:



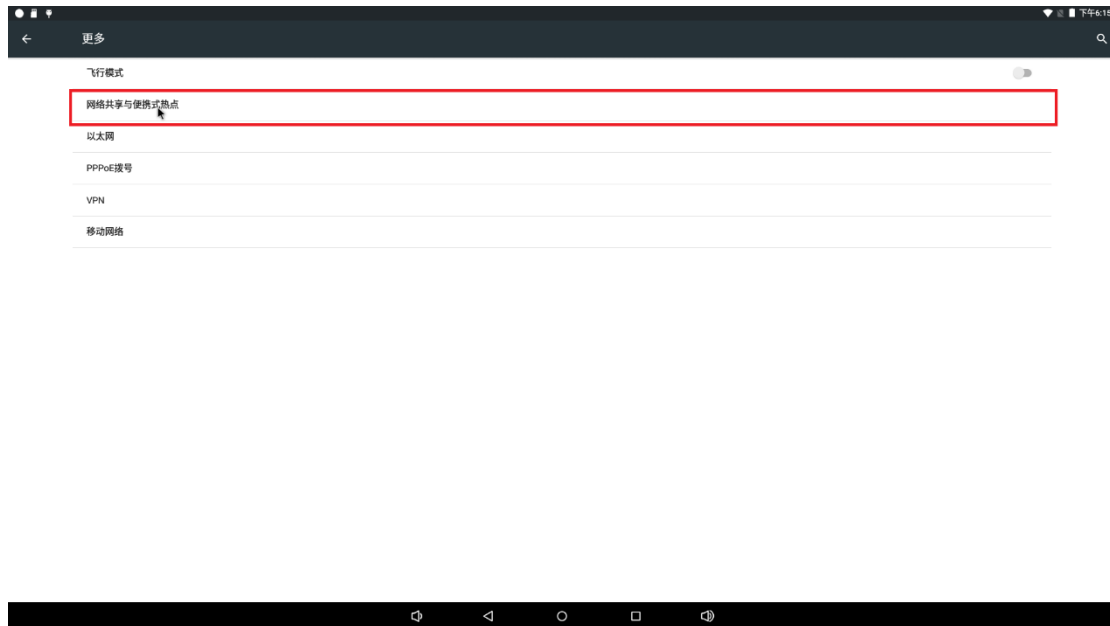


## 9.2 Wifi Hotspot SETUP

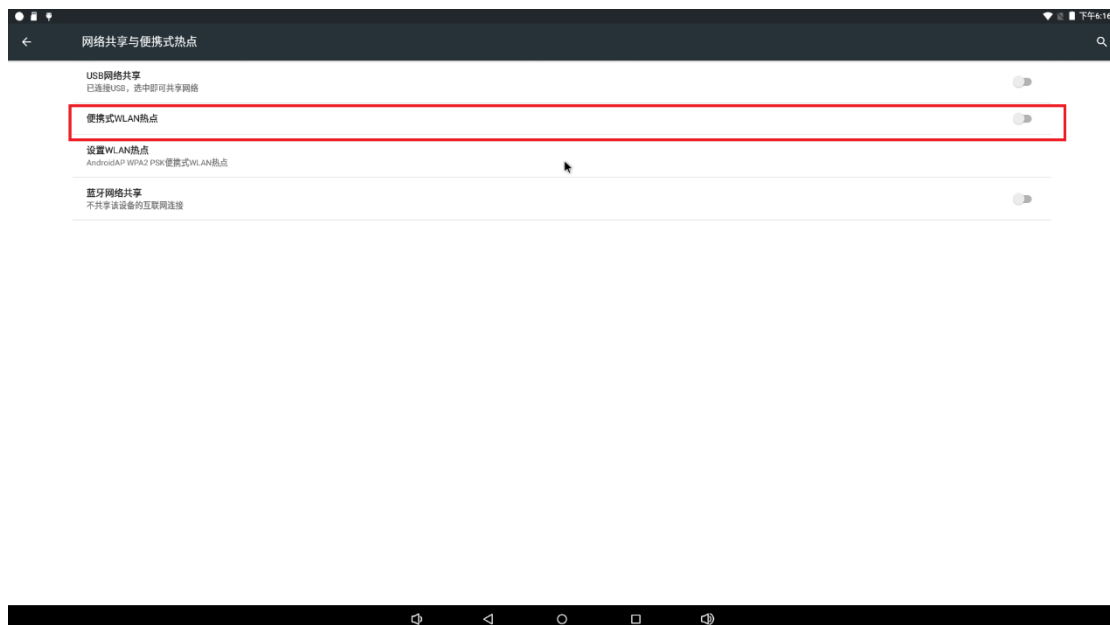
- Click “Settings” in MENU interface, find “More”, enter



- Click “Tethering&portable hotspot”, enter

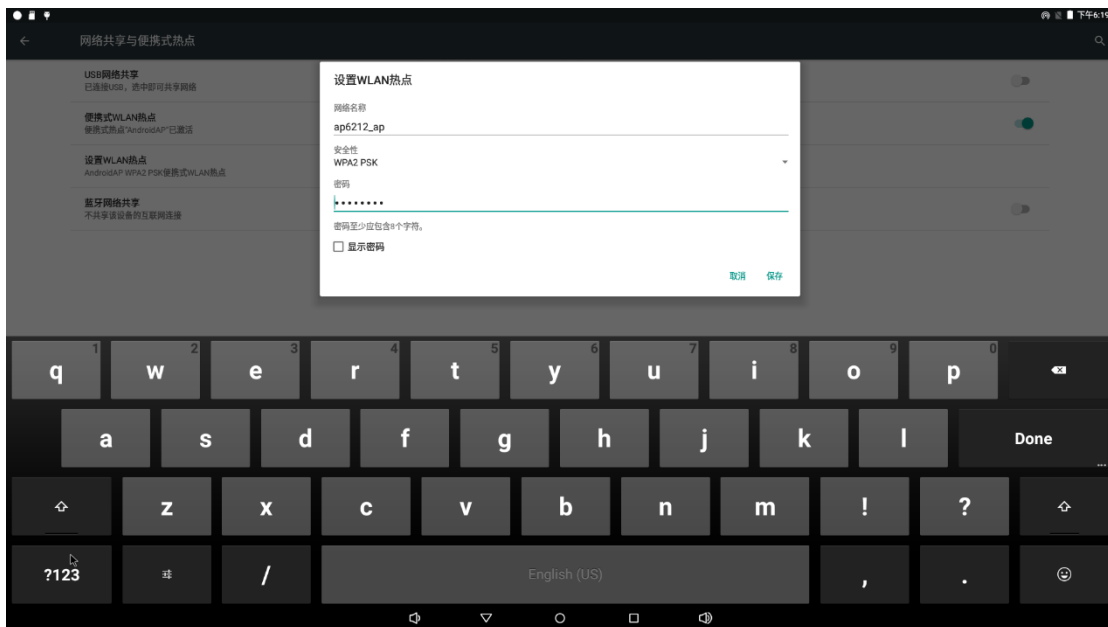
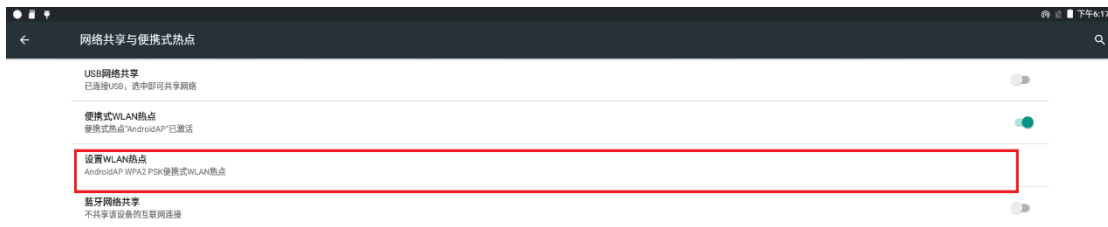


- Tick “Portable Wi-Fi hotspot”, then click “Set up Wi-Fi hotspot”:

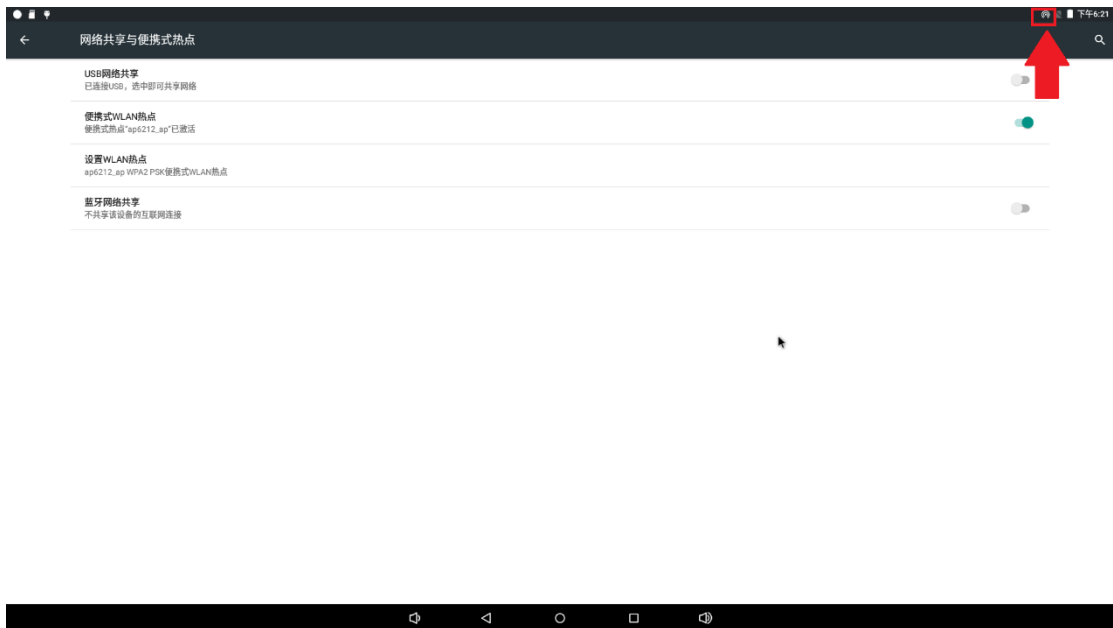


- Click ‘Setting WLAN Hotspot’, can set SSID, security and hotspot could be set.

After setup, click “save”:



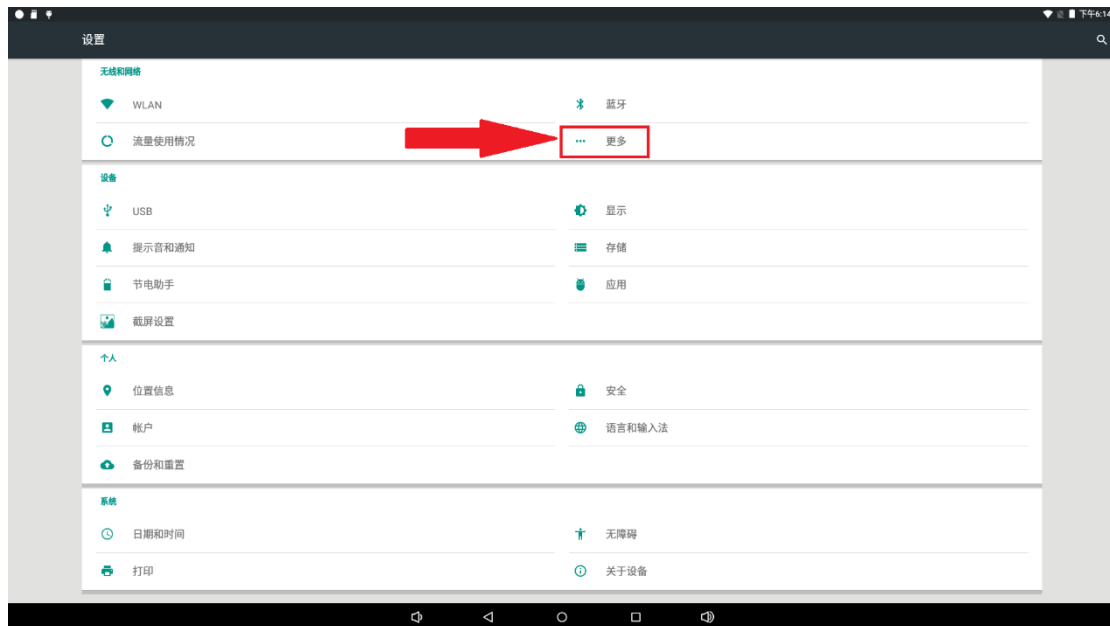
- After setup, left corner in screen will show hotspot icon:



- Then, you can use phone to search and connect this hotspot:

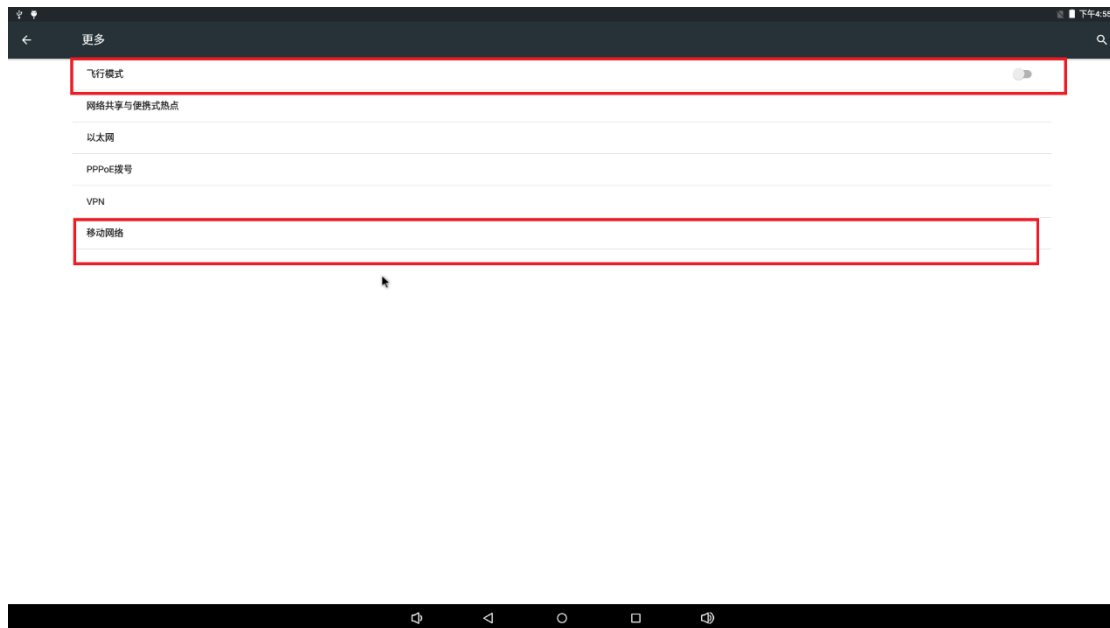
## 10. 3/4G Module

- This Android system supports our company standard 3/4G module acquiescently. Power the board off, connect 3/4G module and SIM card, power the board on and start Android OS. Click “Settings” in MENU interface, find “More”:

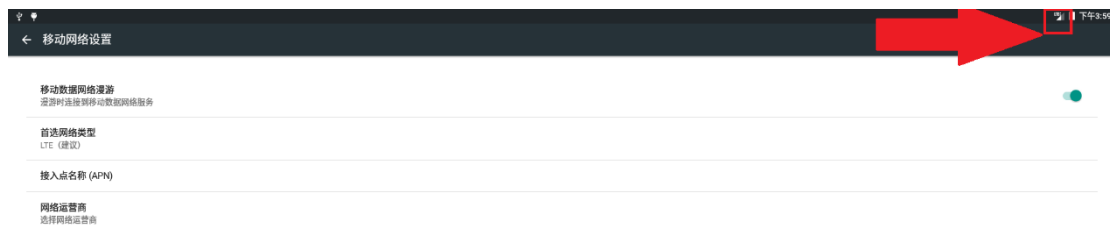


- Enter “More”, unmark “flight mode”, click “mobile data”:





- Tick “enable network data”, after system dial-up succeeds, right top corner in screen show 3/4G signal, it could be tested by opening browser:

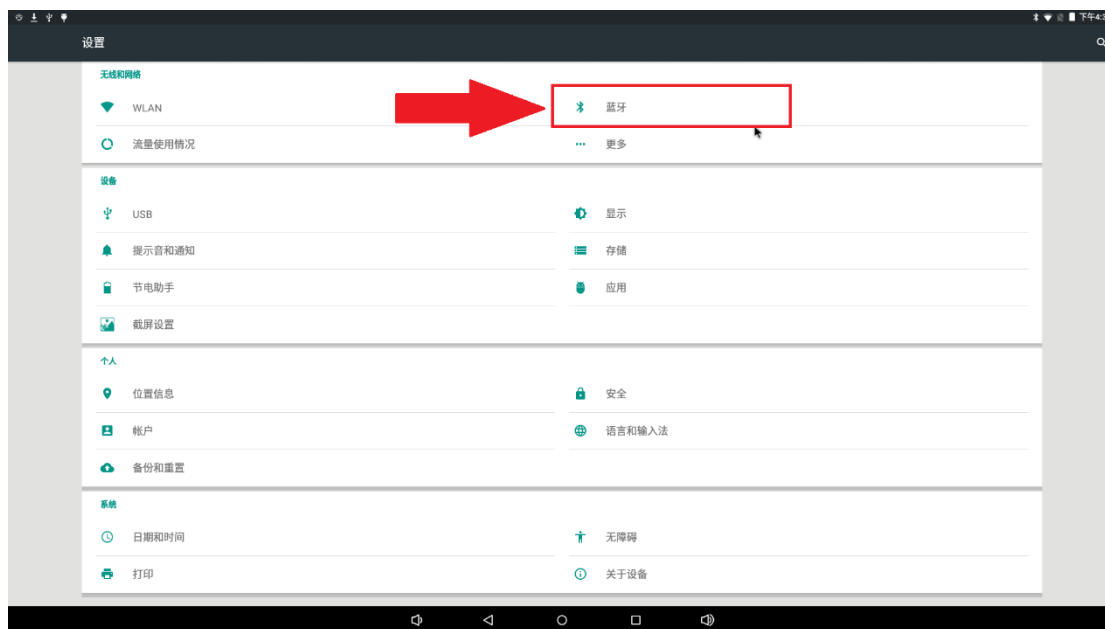




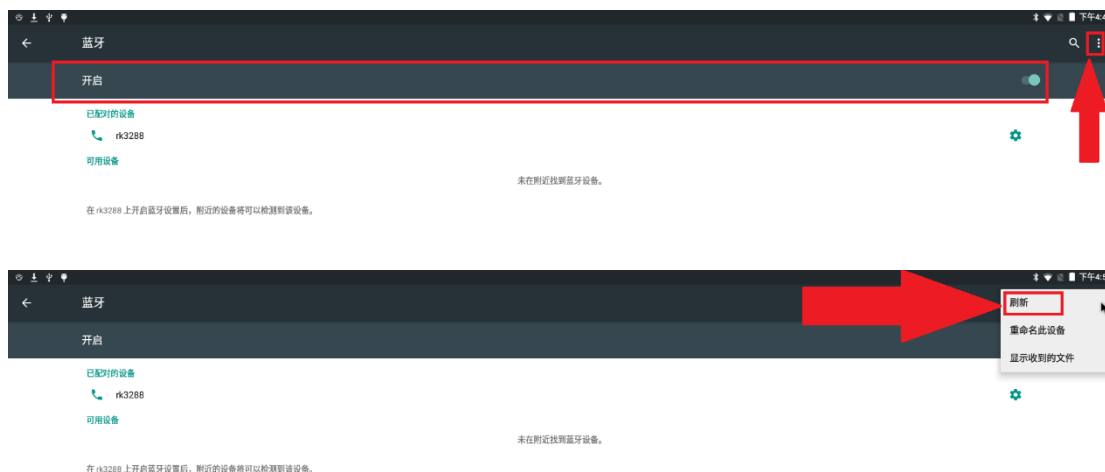
## 11. Bluetooth

### 11.1 Bluetooth Pairing

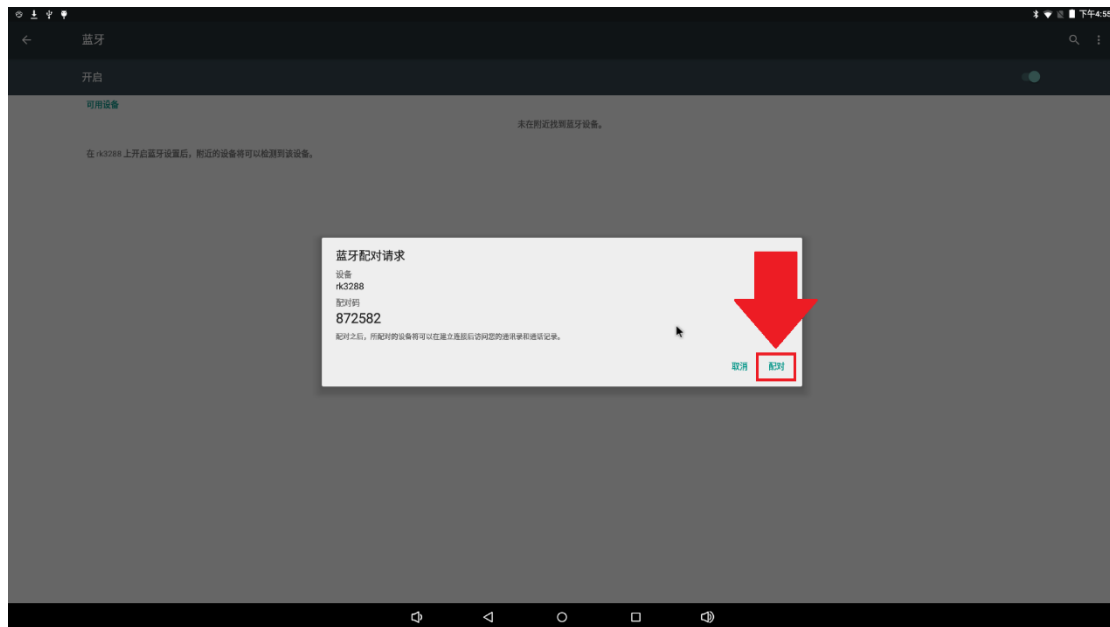
- Click “Setting” in MENU interface, find “Bluetooth”, enter:



- Open Bluetooth, system will search Bluetooth device nearby automatically, if it cannot be found, click “SEARCH FOR DEVICES” to search again:



- Click “RK3288”, device visible, so it could be searched by nearby Bluetooth device, match succeeds, shows Connected.

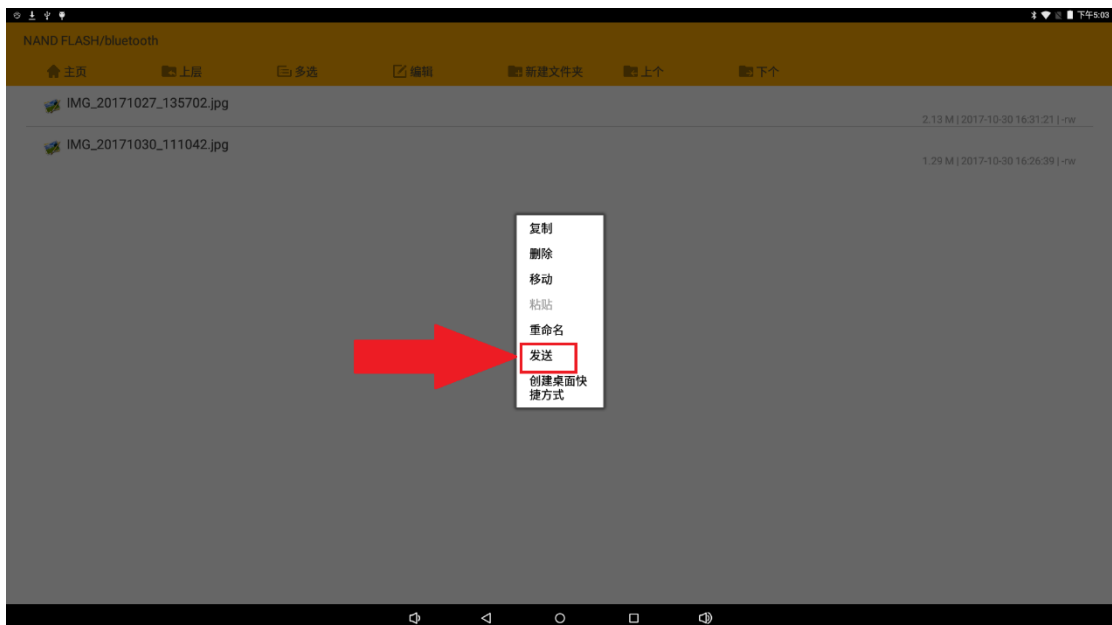


## 11.2 Transfer File By Bluetooth

- After successfully match, long press the file needed to be transferred, then click “share” icon at the right top corner, choose “bluetooth”:



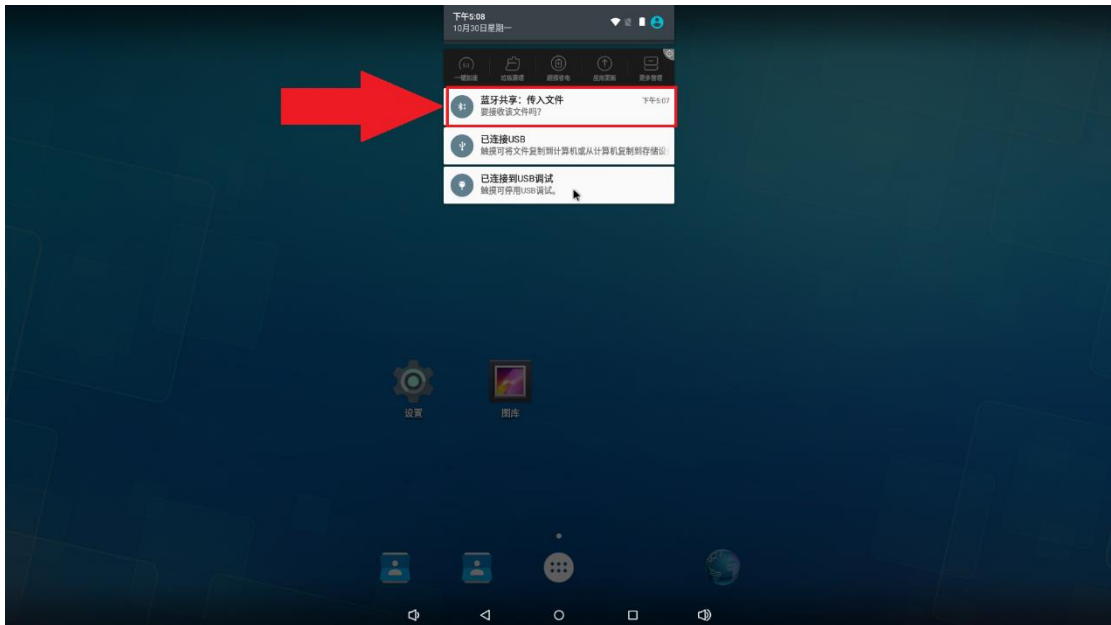
- Choose the bluetooth device that has been paired.



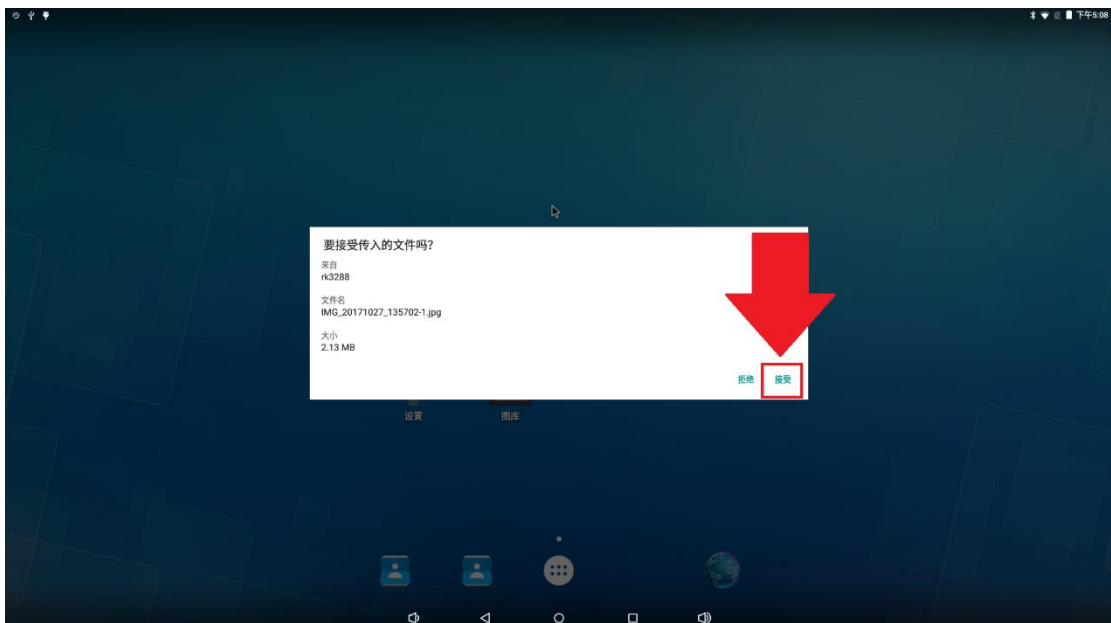
- After selection, the file starts to transmit:

### 11.3 Use Bluetooth To Receive Files

- Match the devices according to the Chapter 11.1, send the matched devices to this machine. The screen will receive the temporary hint information. Thus, slip the screen from up to down, you will see the files to receive.

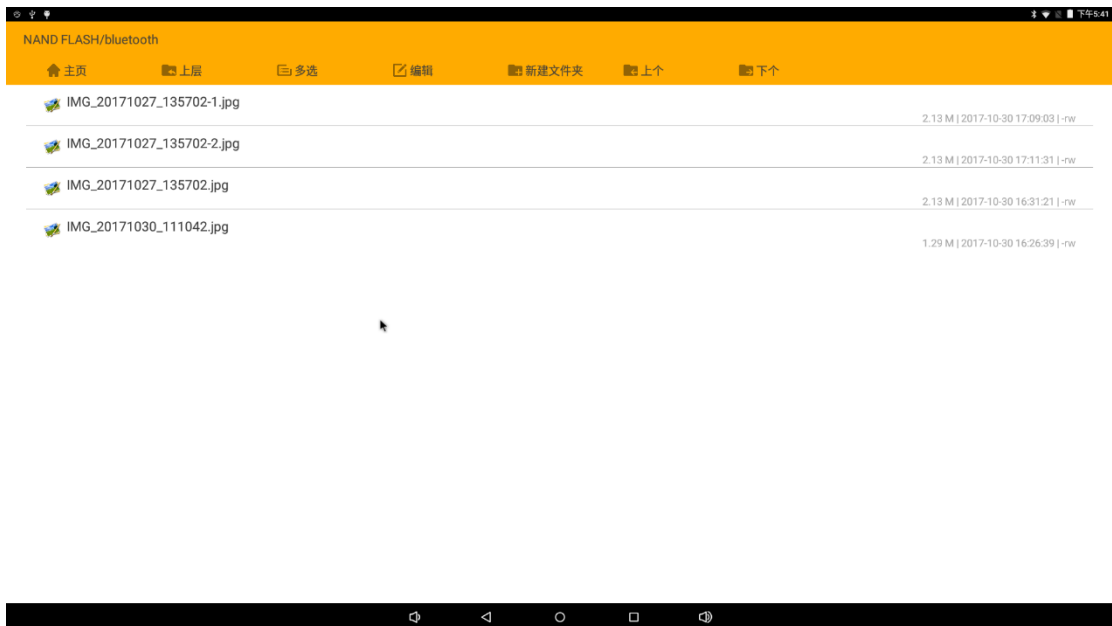


- Click to receive the files.



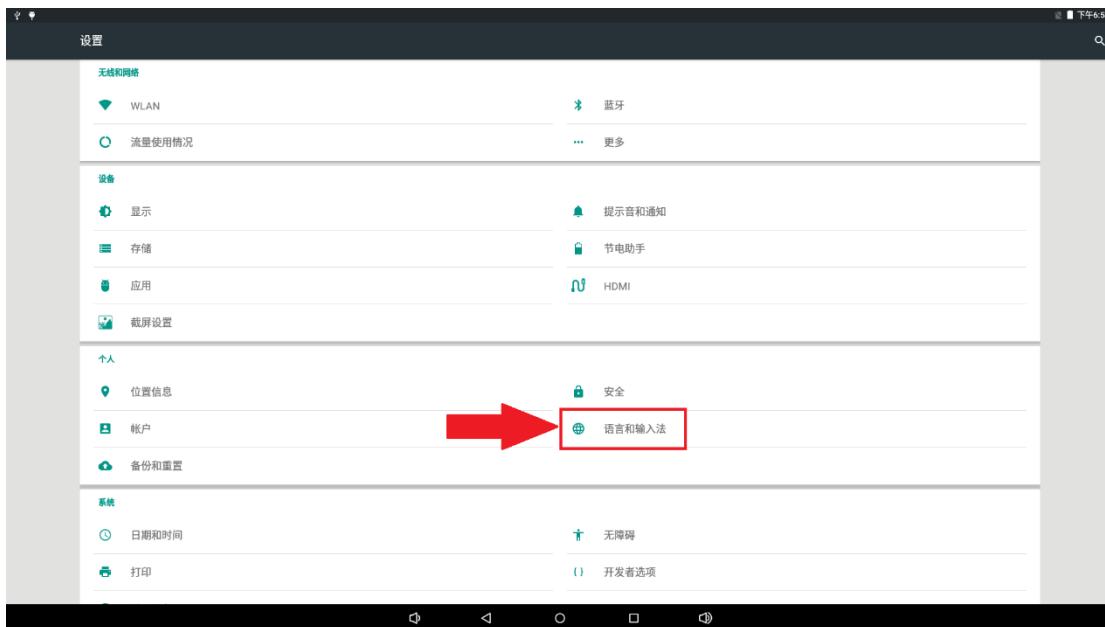
- After finishing, you can check from the "Device Manger"-NAND

FLASH”-“Bluetooth”. The absolute path [/mnt/internal\_sd/bluetooth/].



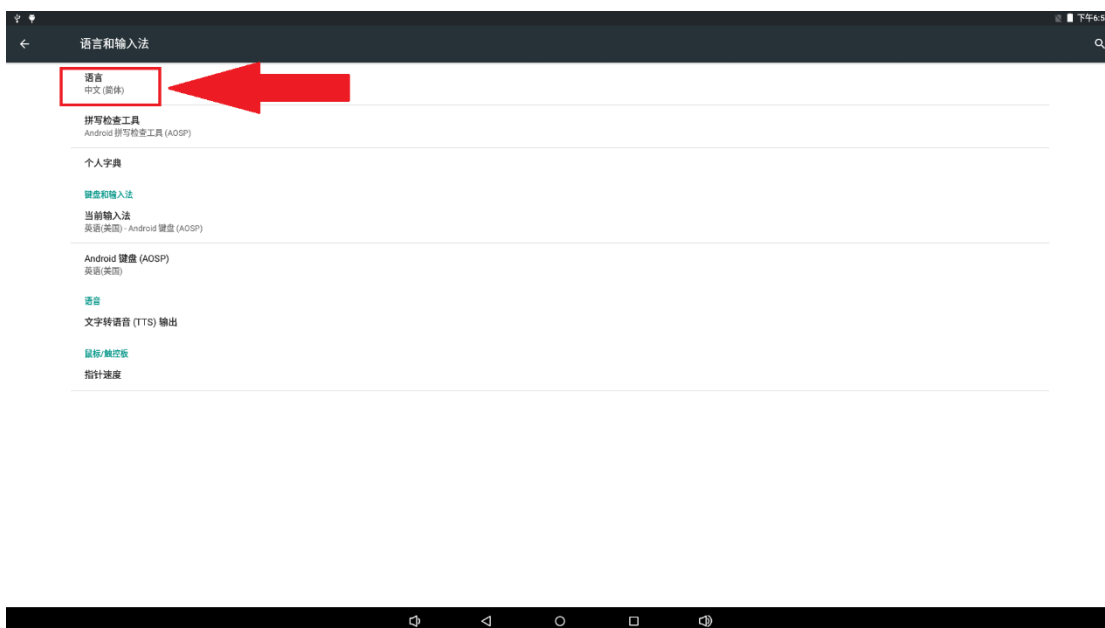
## 12、 Language and input method SETUP

- Click “SETUP” in MENU interface, find “language and input method”, enter:



### 11.1. Language SETUP

- Click “language”, choose system language as required:

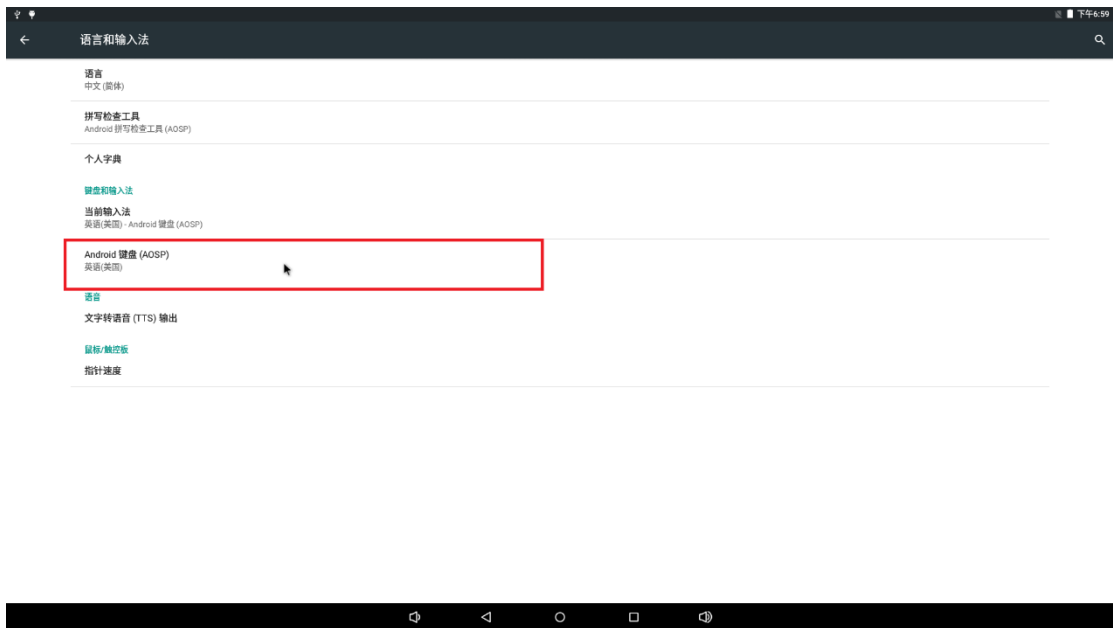






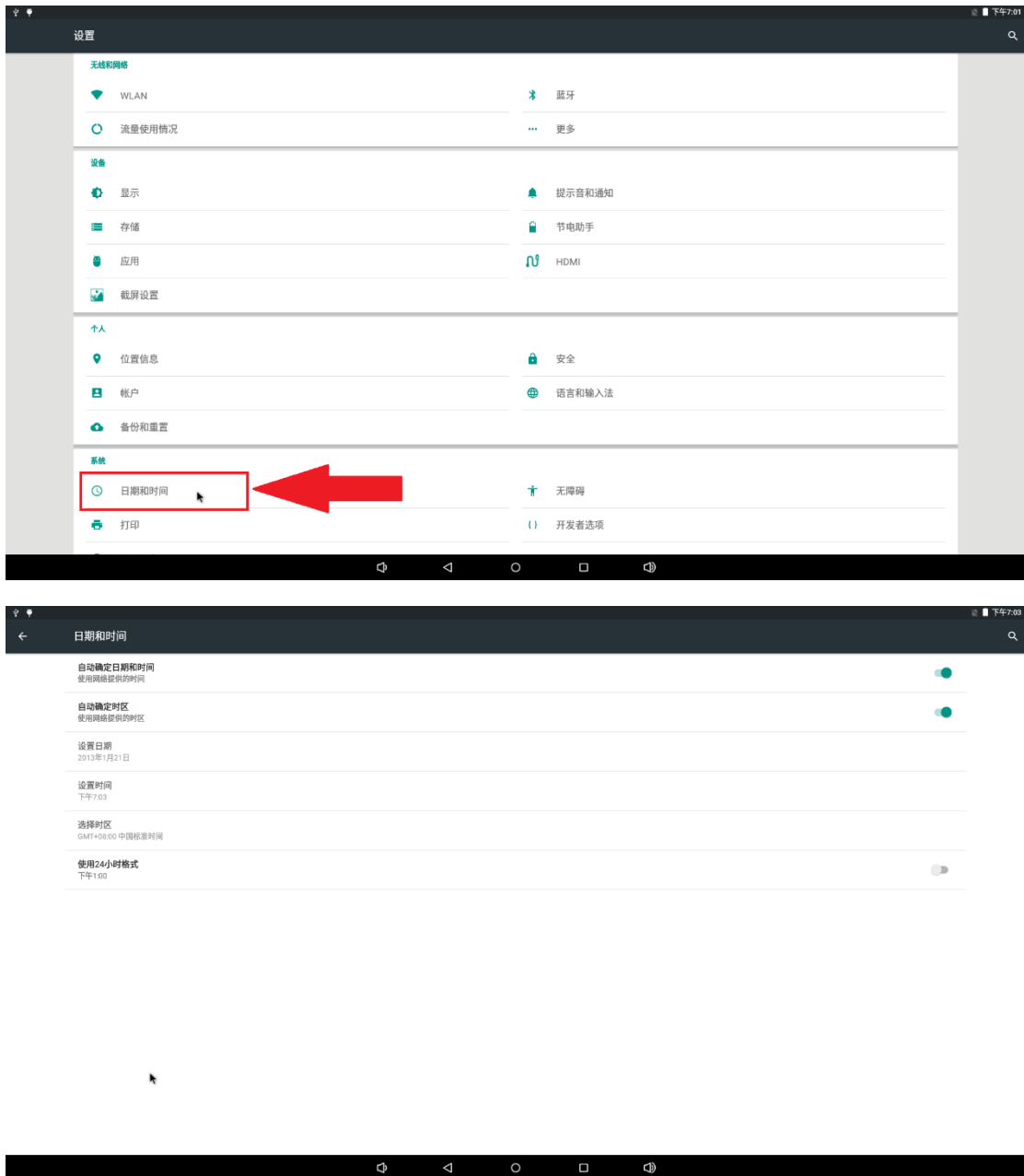
## 11.2 Input method setup

- System only supports English input method acquiescently. You could download input method by application store, then enter “Language & input”, choose input method to setup:



### 13. System Time Setup

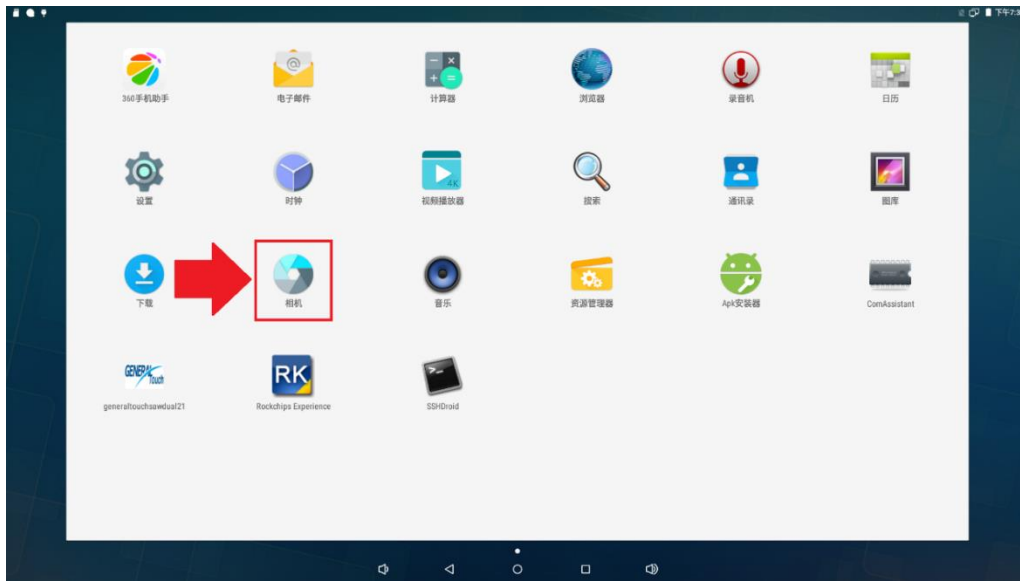
- Click “SETUP” in MENU interface, find “date and time”, enter:



- Default tick under the condition of valid network connection, automatically acquire time from internet, automatically set time zone. You can also manually set

the date time and its format, etc.

## 14. Camera



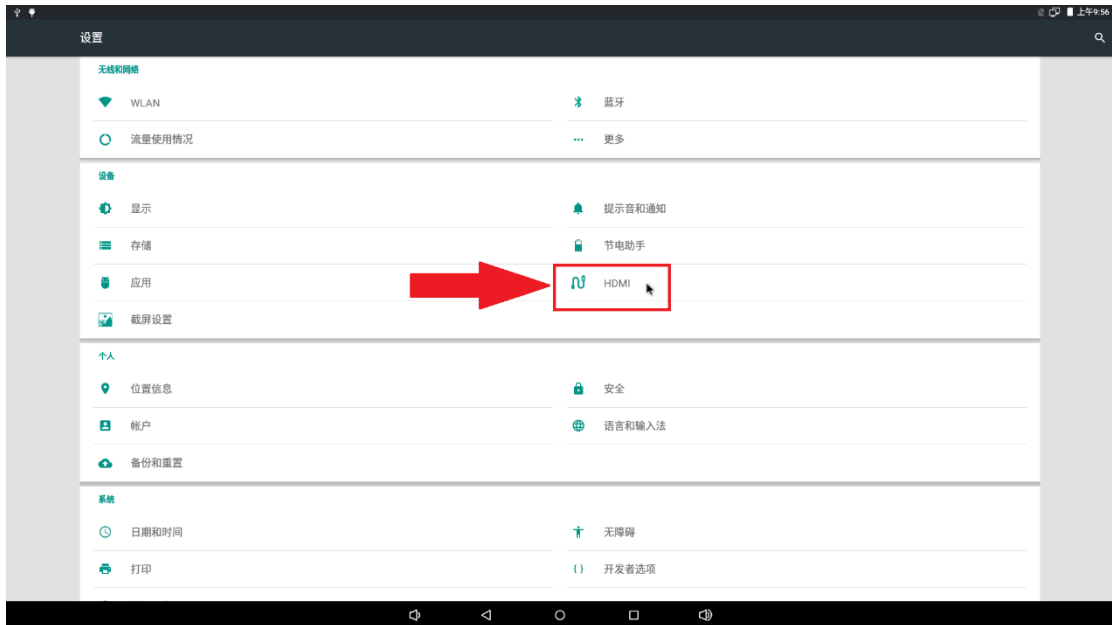
- Then you shall see the real time picture from the camera captured, take picture by camera button.



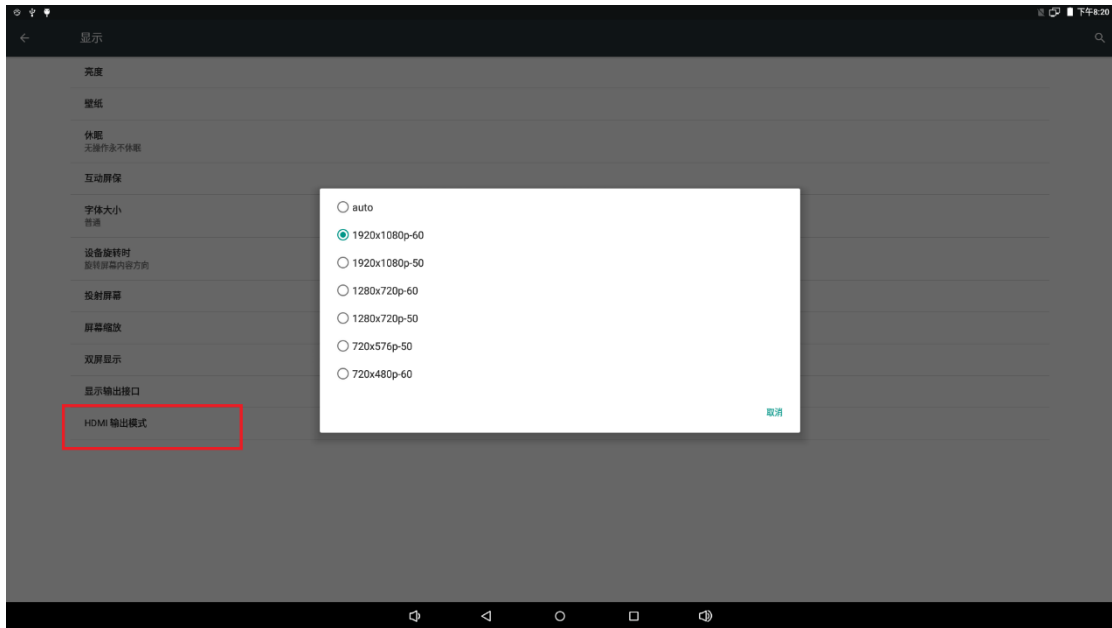
## 15. HDMI

**Notice: While HDMI screen shows normally, it shall lead the LVDS in flower show.**

- Click “SETUP” in MENU interface, find “HDMI”, enter



- Can choose HDMI output mode, set resolution.



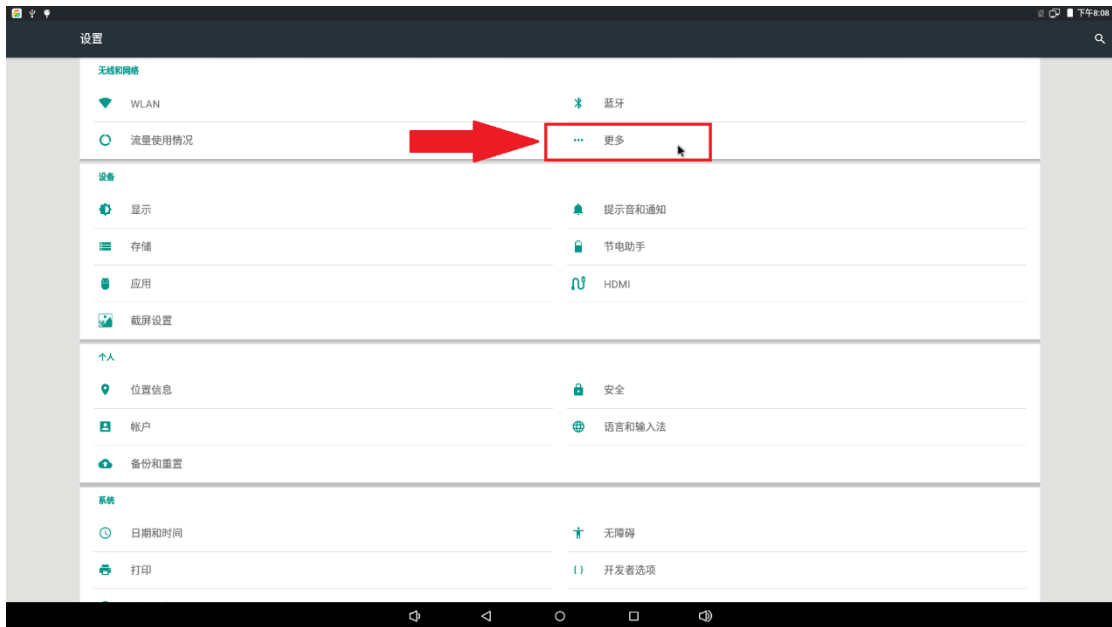
## 16. GPIO

Not finished.

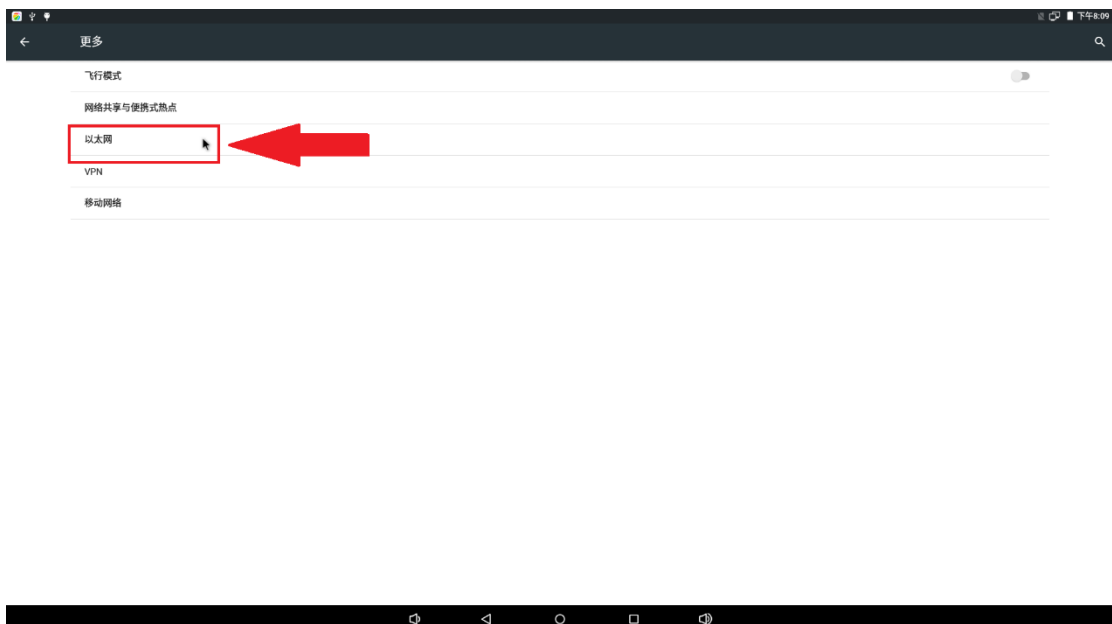


## 17. Ethernet

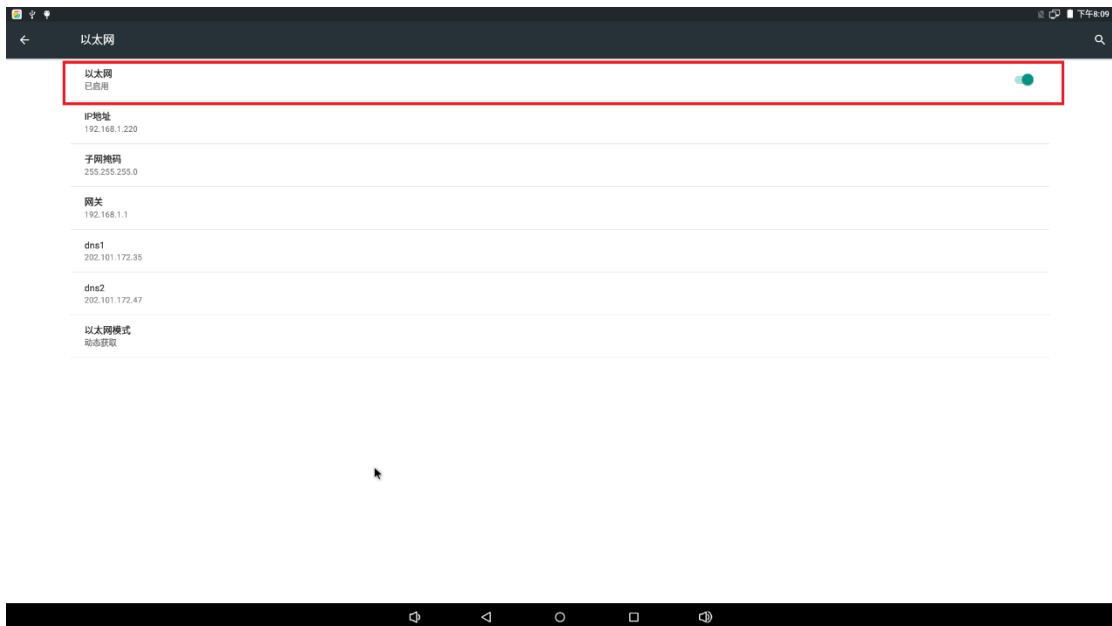
- Click “SETUP” in MENU interface, find “MORE”, enter:



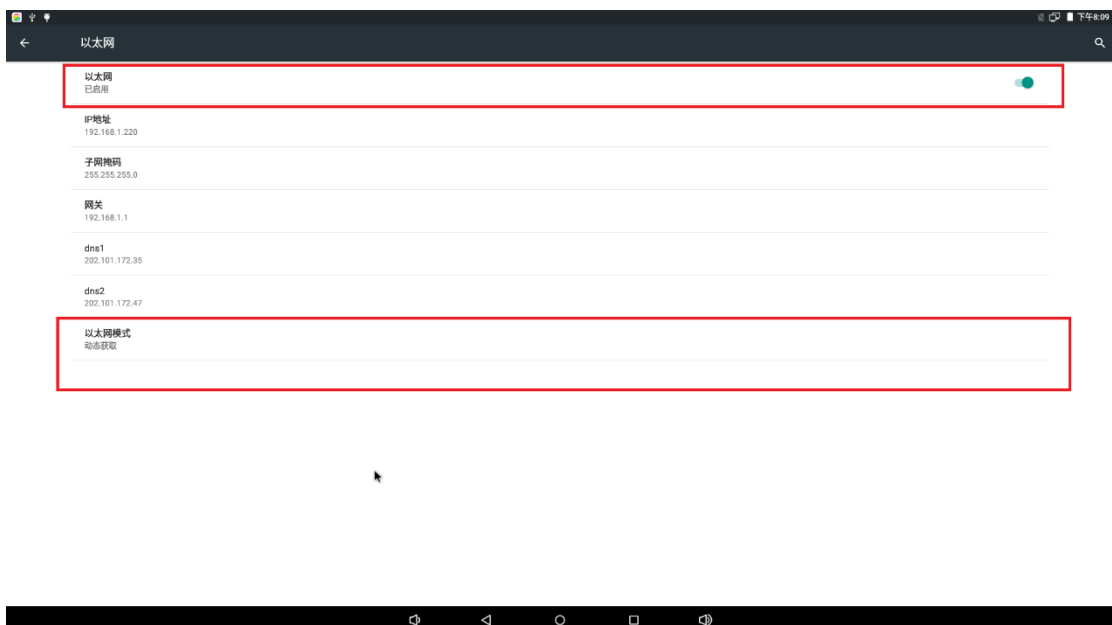
- Click “Ethernet”

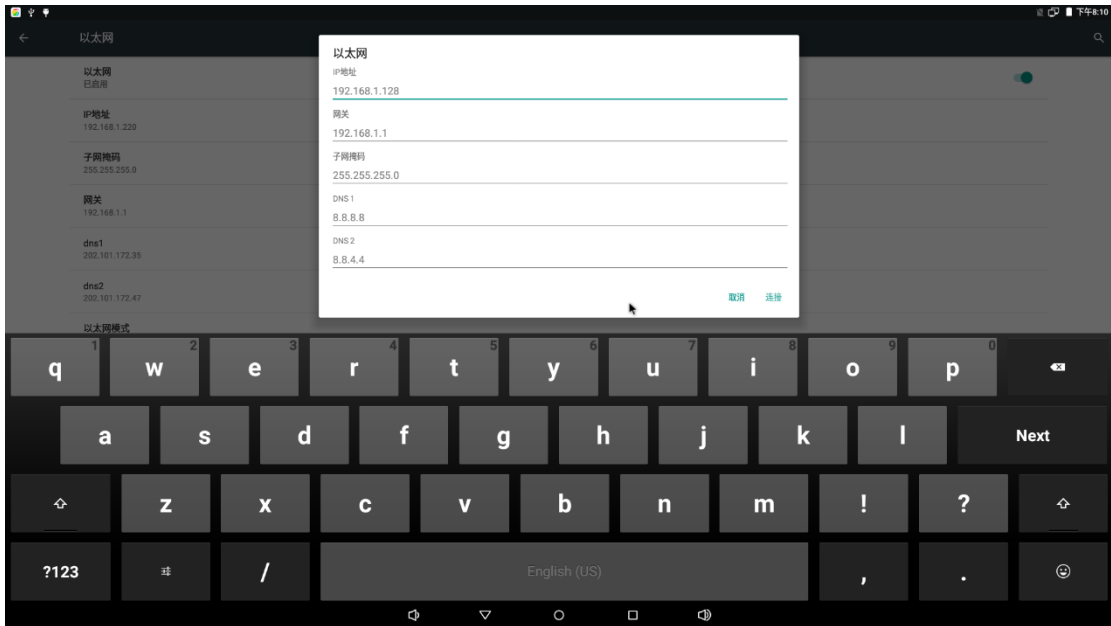


- Default is Ethernet startup, if NOT, please click startup:

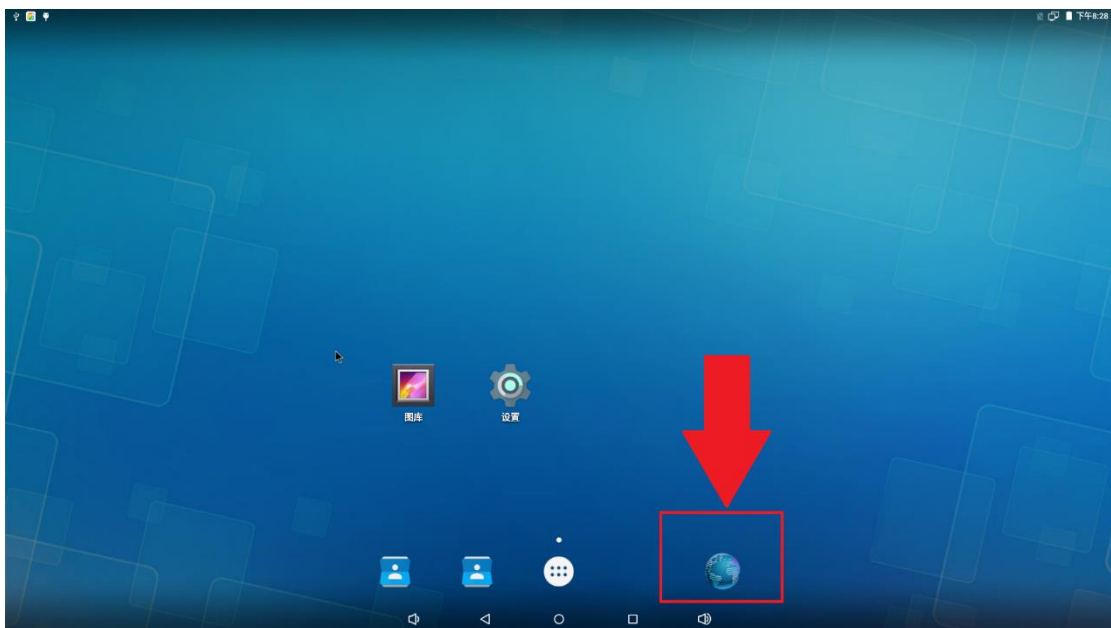


- Default is dynamic acquisition, if you need static acquisition, click “Ethernet mode”





- Open browser in MENU interface, test the network





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