



ADS Android application User Manual

For product support, visit: www.owon.com.hk/download

※:The illustrations, interface, icons and characters in the user manual may be slightly different from the actual product. Please refer to the actual product.

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Overview

The Android System Application User Manual primarily provides an overview of the system's built-in software. Users can quickly master the software's operation methods through this manual. It mainly includes: Application Center, Network Services, File Manager, Network Printer, Screen Recording, etc.

- Application Center: Allows software/system upgrades and adds language and function to instrument apps.
- Network Services: Connects to PC for corresponding operations.
- File Manager: Views file categories and enables remote management.
- Network Printer: Connects to printing devices to print saved images.
- Screen Recording: Enables video recording of current operations.
- Screen Capture: Takes screenshots of the current interface.
- Settings: Enables Bluetooth connection, WiFi module connection, and language switching and other function.
- USB Mouse/Keyboard: Allows direct operation on the instrument through these devices.

Note: If you need to use USB Bluetooth/WiFi module functions, to prevent module compatibility issues, please purchase these module devices from our company. USB mice and keyboards can be purchased separately and should be compatible with Android devices.

1.App Center

If the user needs to upgrade the software/system or add languages/functions to the instrument app, please contact the after-sales service personnel to obtain the upgrade files.

1. The following two methods can be used to access the application center interface.

(1) In the main interface of Android system,click **"App Center"** as shown in Figure 1-1.

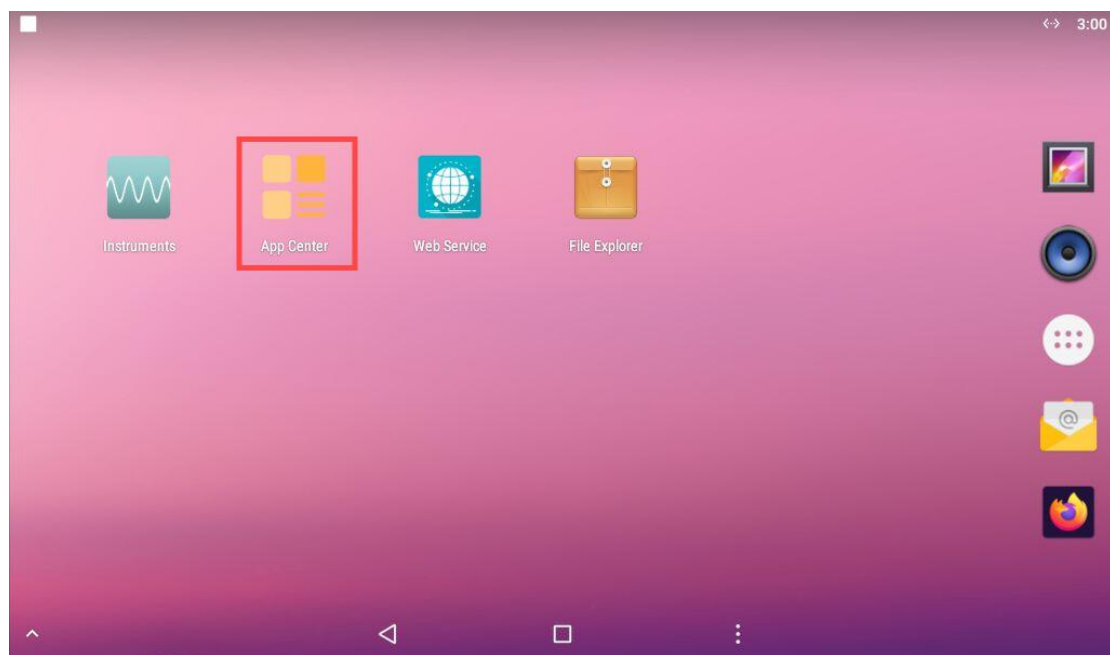


Figure 1-1

(2) Click **"App Drawer"** to enter System built-in application list to find **"App Center"**, as shown in Figure 1-2.

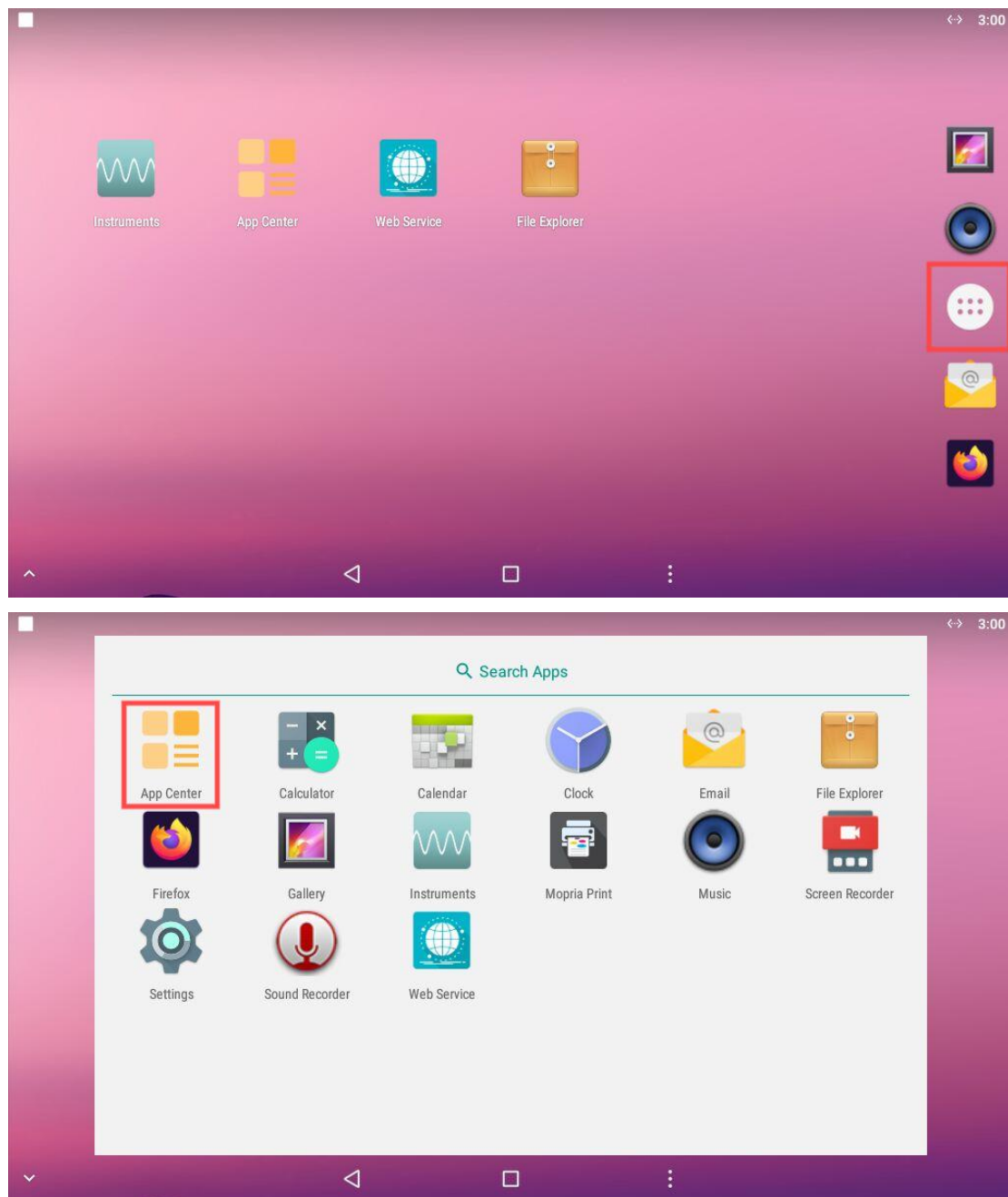
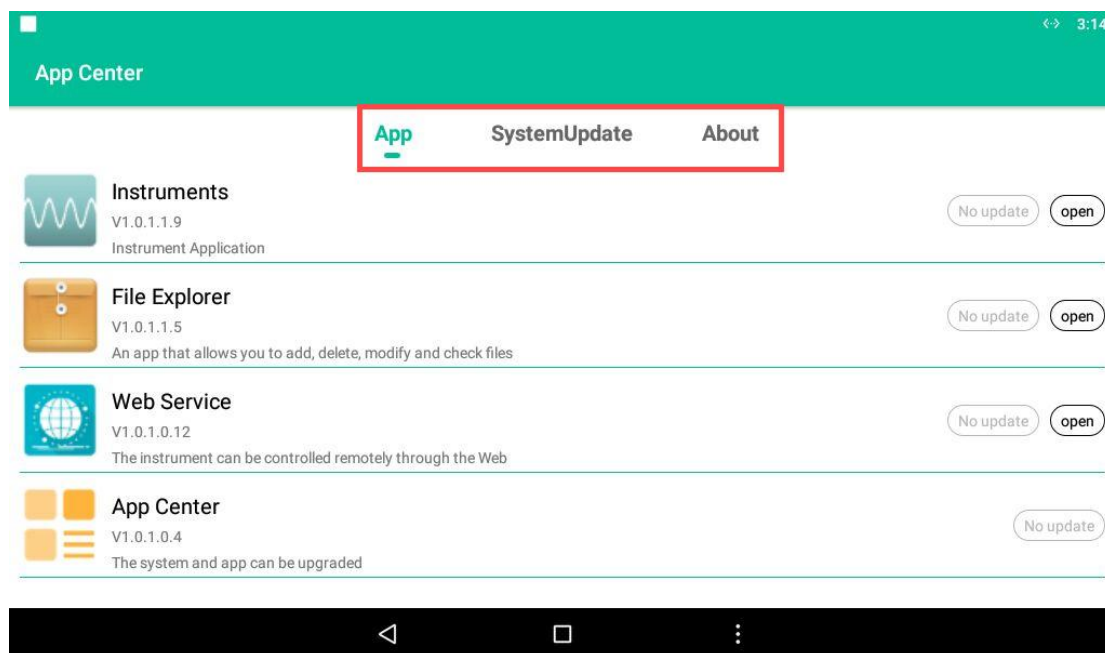


Figure 1-2

2. Enter "App Center" interface, includes **"App"**, **"SystemUpdate"** and **"About"**, as shown in the below figure.



How to upgrade the software

1. In the **"App"** directory of "App Center", click **"open"** the corresponding App can be opened, as shown in Figure 1-3.

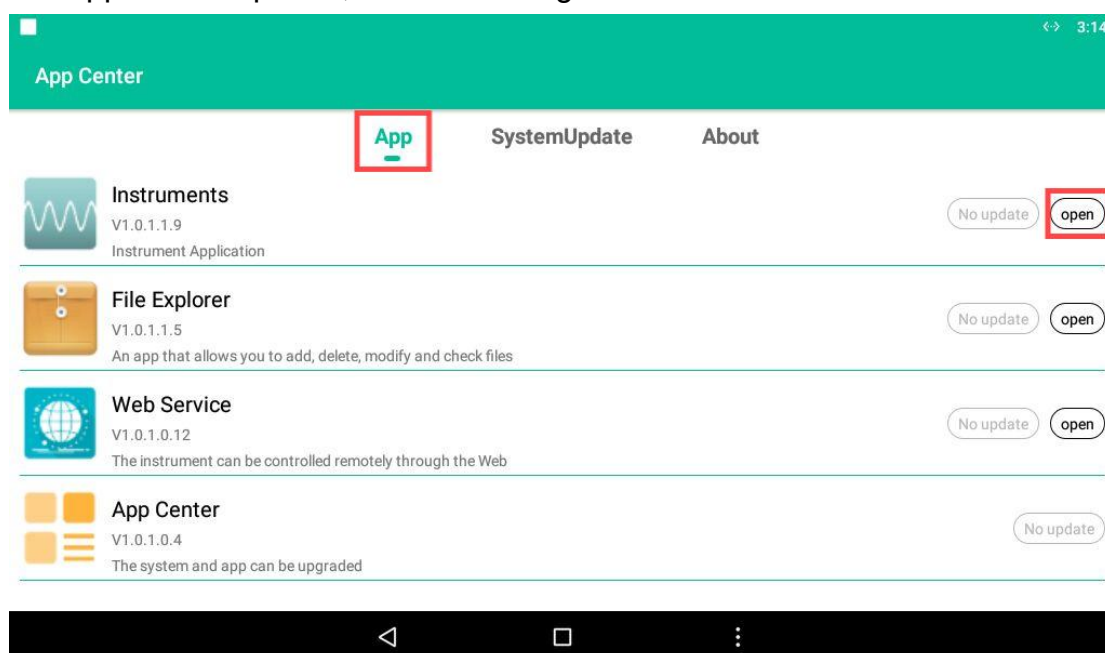


Figure 1-3

2. After inserting the USB disk, the App Center will check whether there is an App that can be upgraded on the USB disk. If there is an upgradeable App version, click **"update"** to update, as shown in Figure 1-4; if not, it will display "No update ", as shown in Figure 1-5.

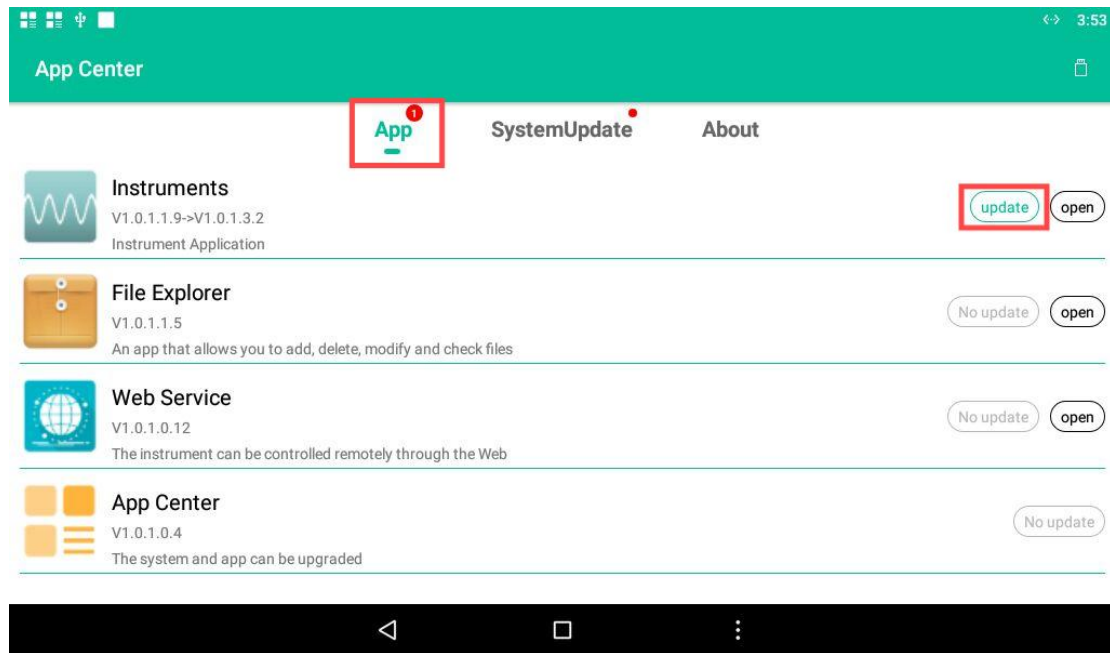


Figure 1-4

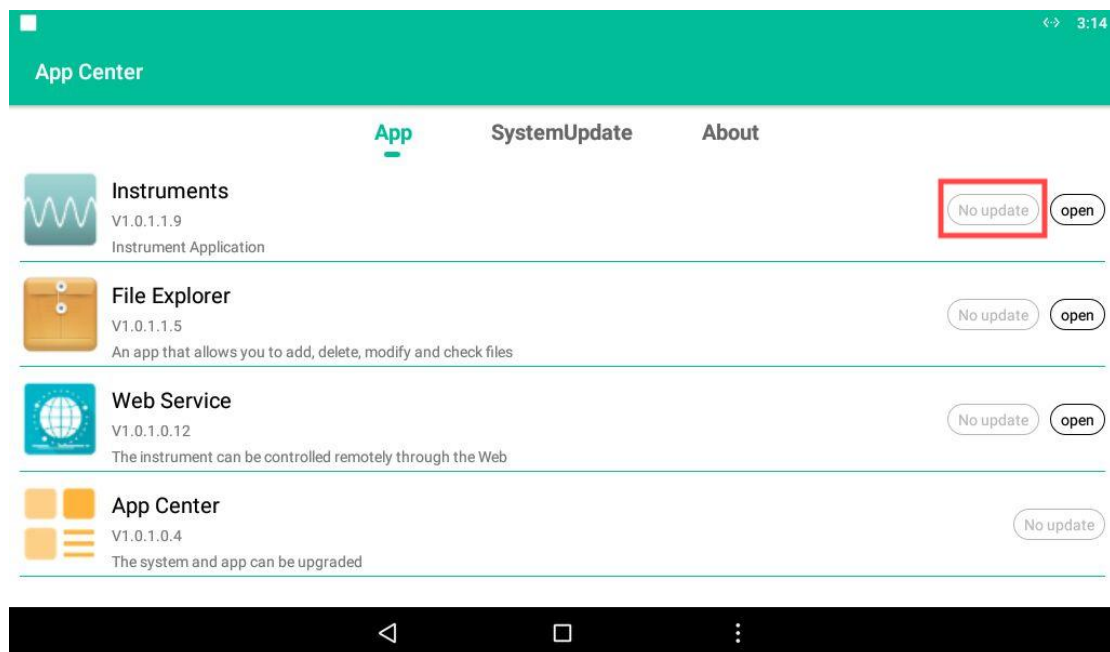
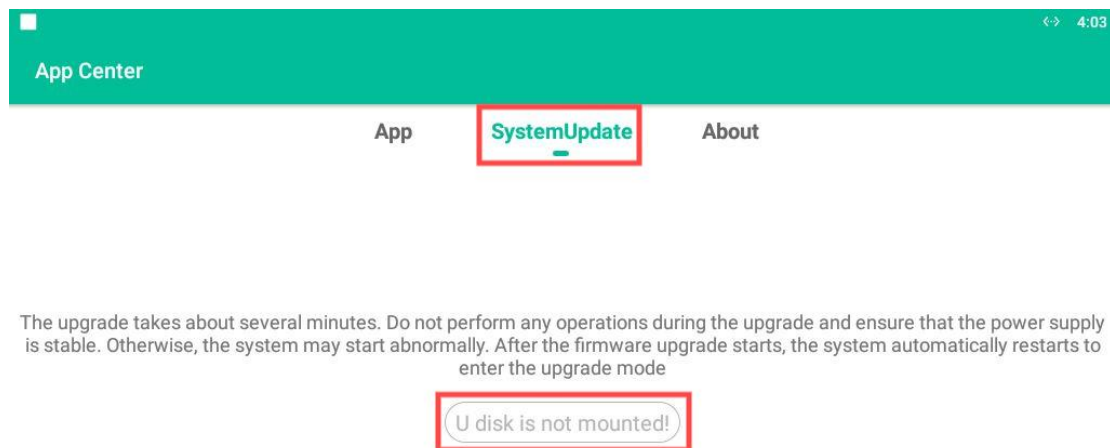


Figure 1-5

How to upgrade the system

1. In the "**System**" directory of "App Center", it needs to be plugged into a USB disk. If not, system interface as shown in the below figure.



2. After inserting USB disk, update package can be loaded if there is an update package in the USB disk; if not, will display "No update package found! ", as shown in Figure 1-6. If the update package in the USB disk cannot be upgraded, the system interface will prompt the corresponding reason, as shown in Figure 1-7.

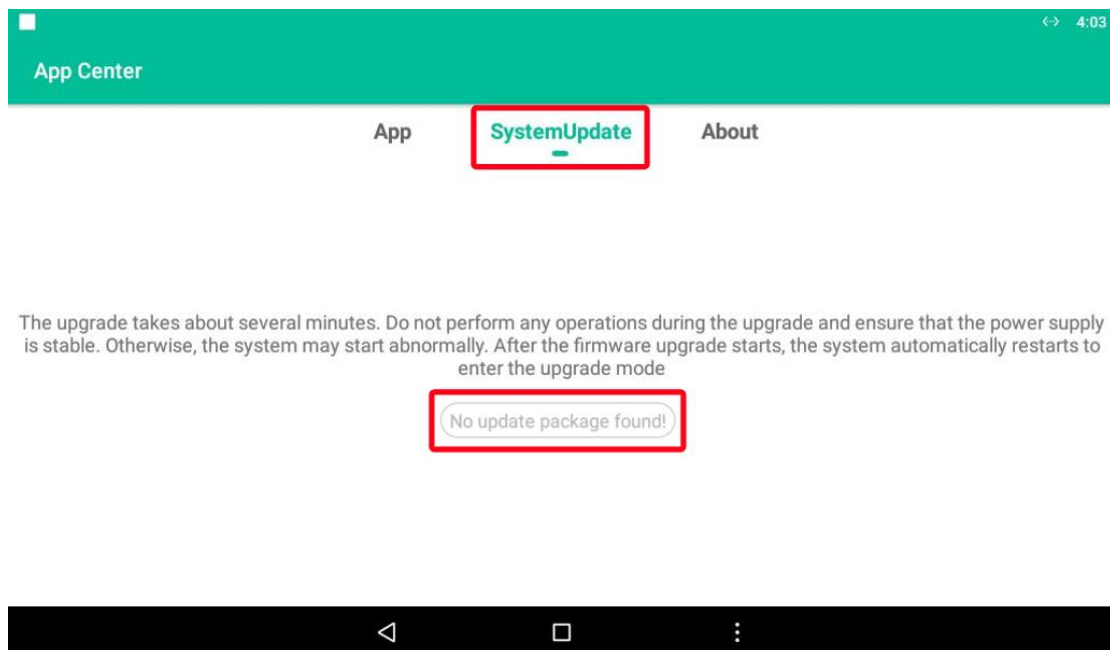


Figure 1-6

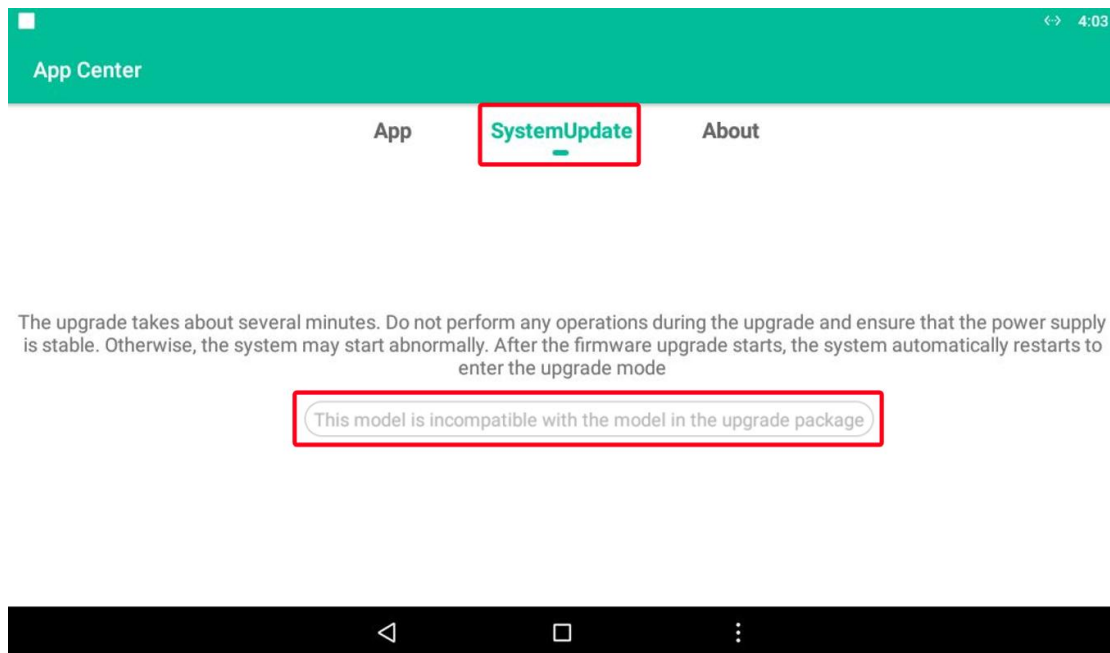


Figure 1-7

3. When the update package on the USB disk is updatable, can click "**Firmware update**" button, as shown in Figure 1-8, or drop down the status bar to see the upgrade prompt, click "**App Center**" prompt to upgrade, as shown in Figure 1-9. (Note: You cannot exit the App after clicking Upgrade, the system will be upgraded and restarted within a few minutes.)

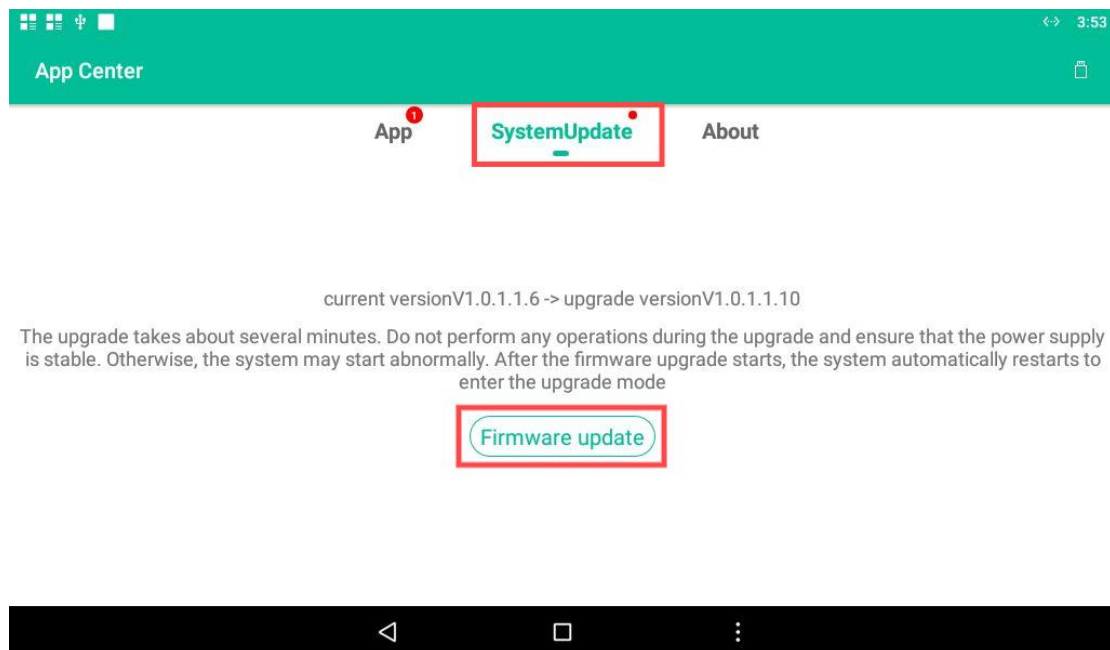


Figure 1-8

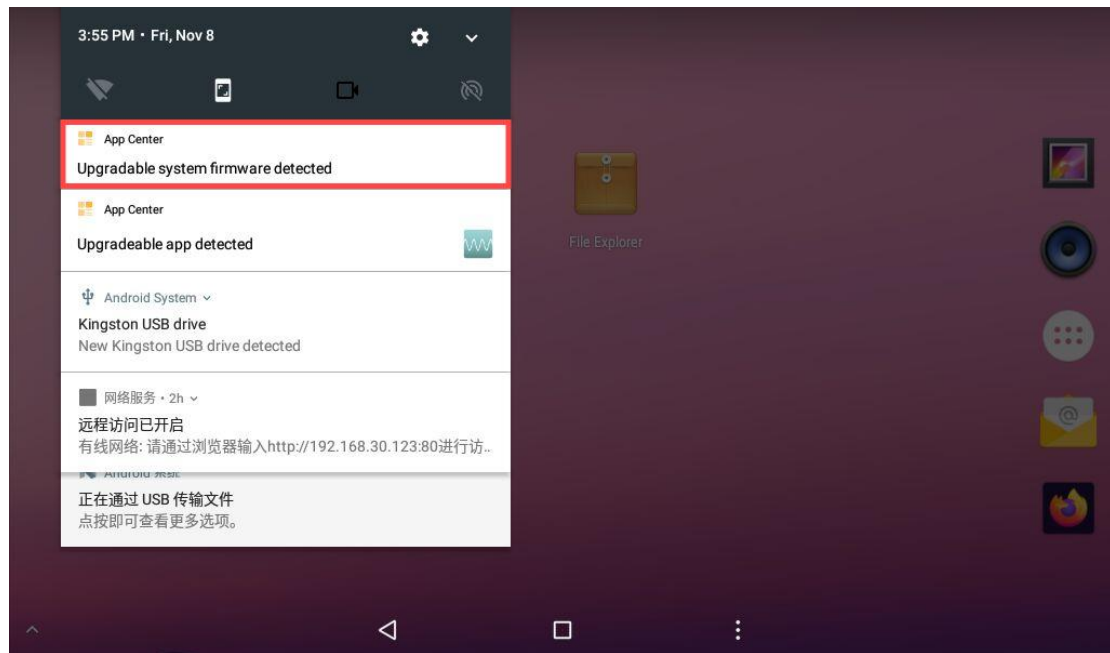
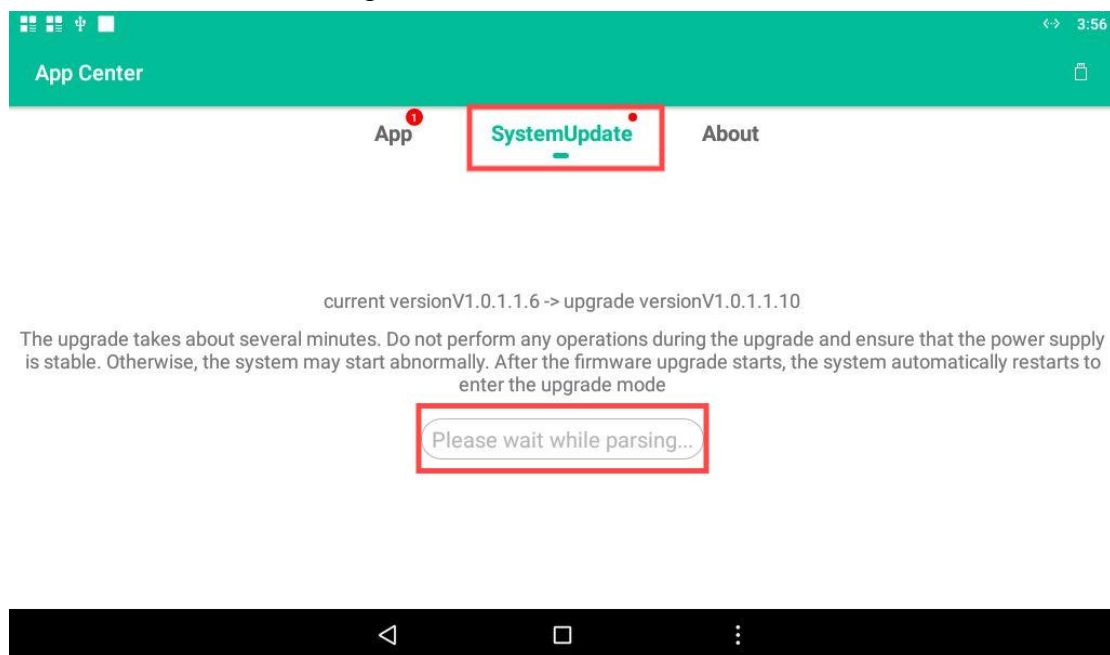
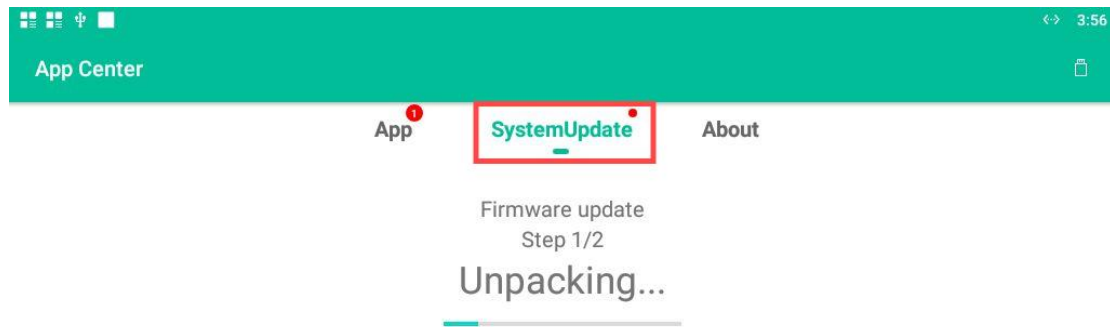


Figure 1-9

4. After clicking "**Firmware update**" button, the update package is parsed, as shown in the below figure.



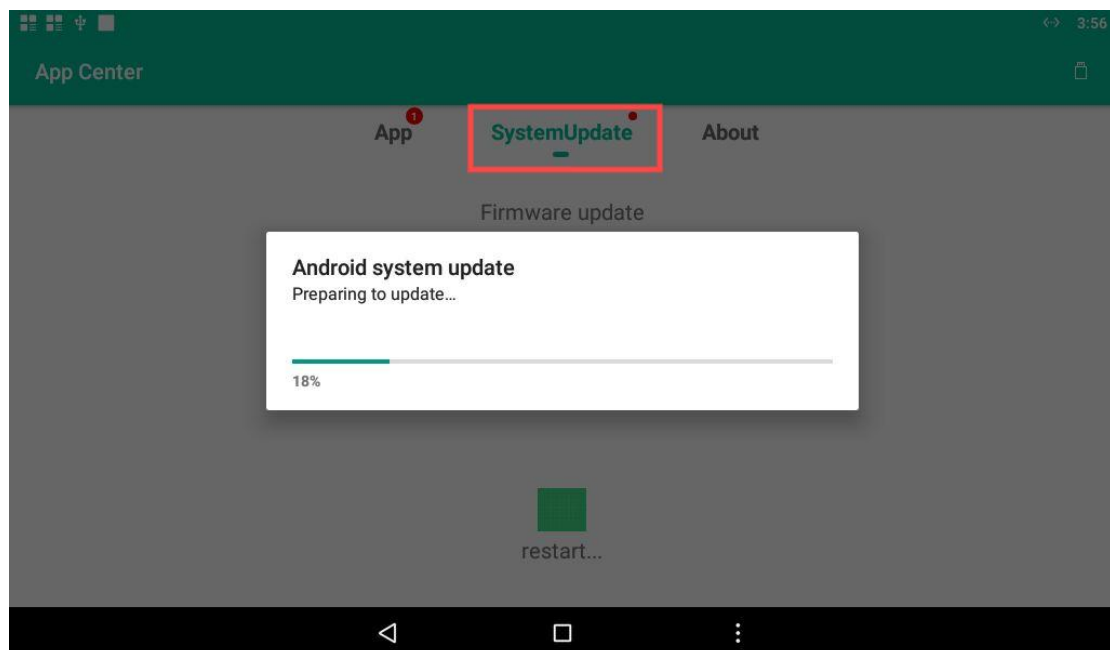
5. Enter the firmware upgrade unpacking step, as shown in the below figure.



The complete update takes about several minutes. Do not perform any operations during the update and ensure that the power supply is stable. Otherwise, the machine may start abnormally. After the firmware upgrade starts, the system automatically restarts to enter the upgrade mode.

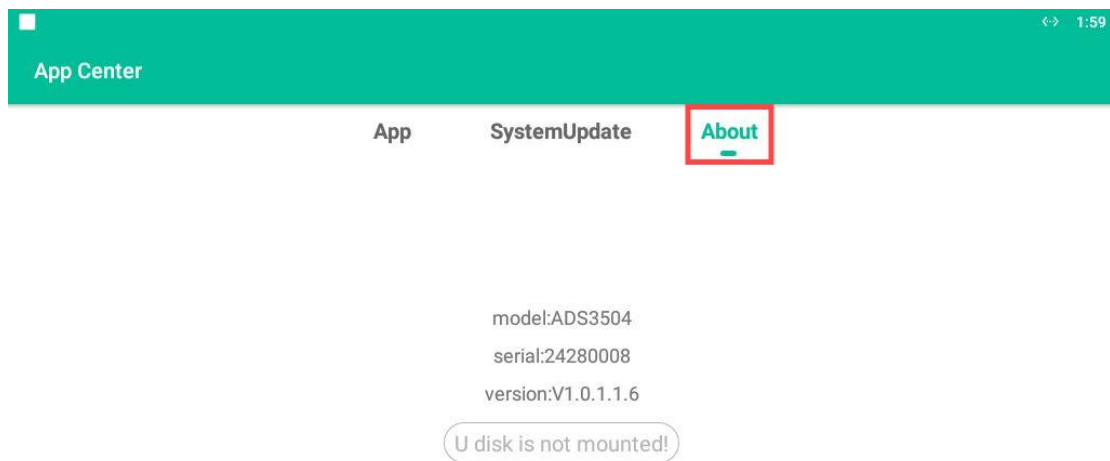


6. After the firmware upgrade package is unzipped, the system will automatically update and restart the instrument, as shown in the below figure. (Note: To upgrade the system, the APP that comes with the system will also be upgraded according to the update package.)



How to add language/function to the instrument app

1. In the "Application Center" interface, click on the "About" section to view the device model, serial, and version, as shown in the below figure.



2. Insert the USB drive to automatically detect if there is an upgradable license file. If there is no upgradable license file, refer to Figure 1-10; if there is an upgradable license file, refer to Figure 1-11.

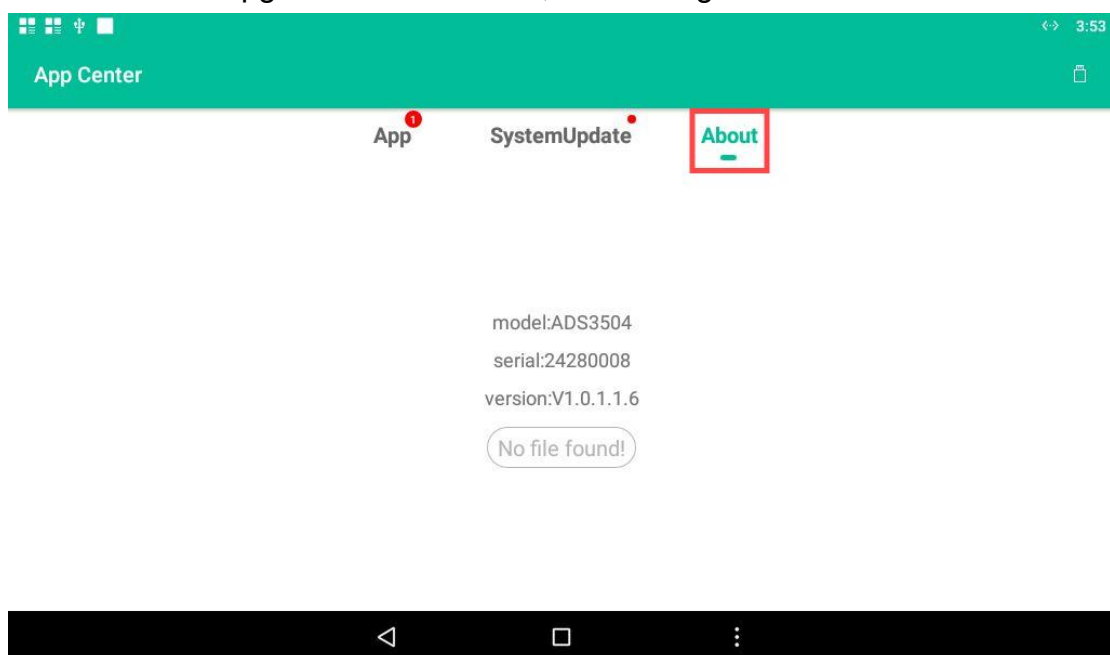


Figure 1-10

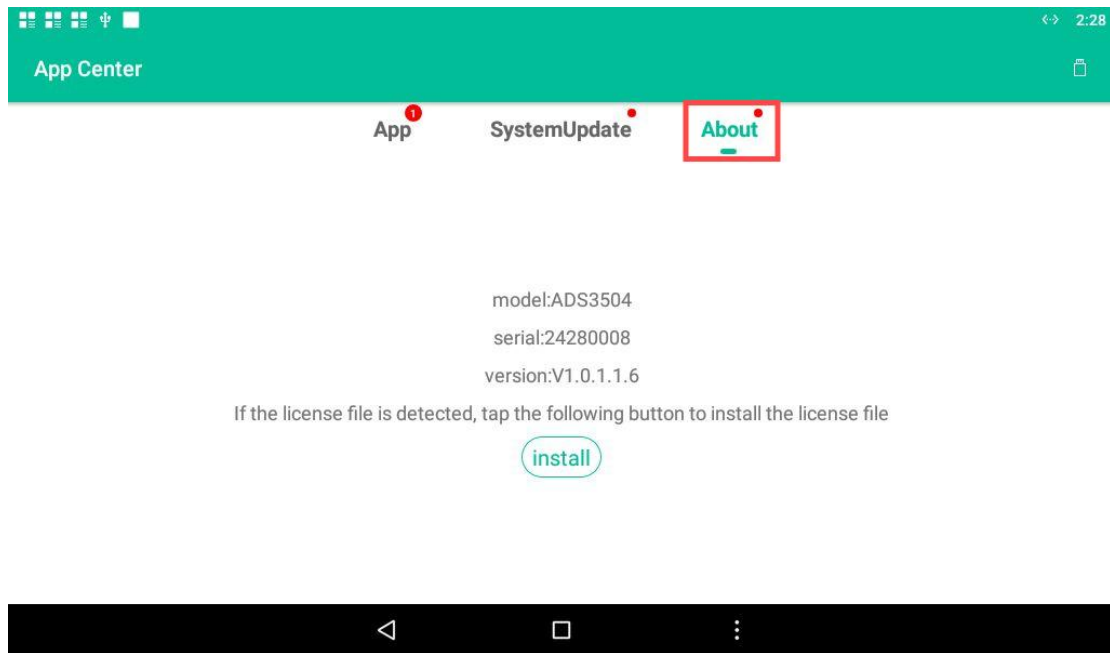
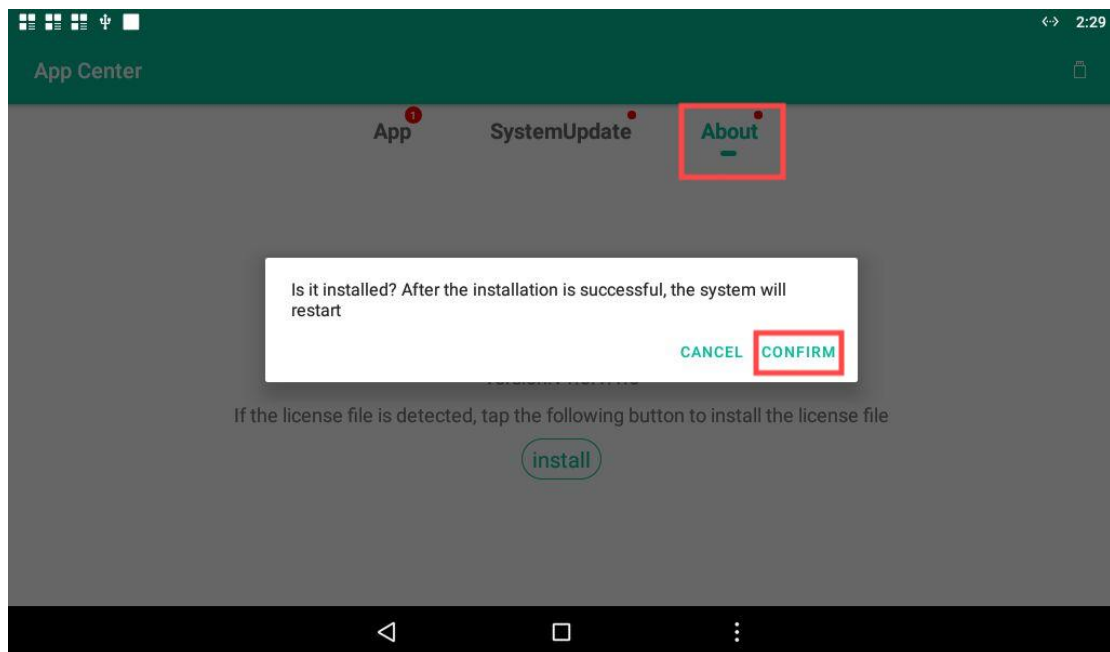


Figure 1-11

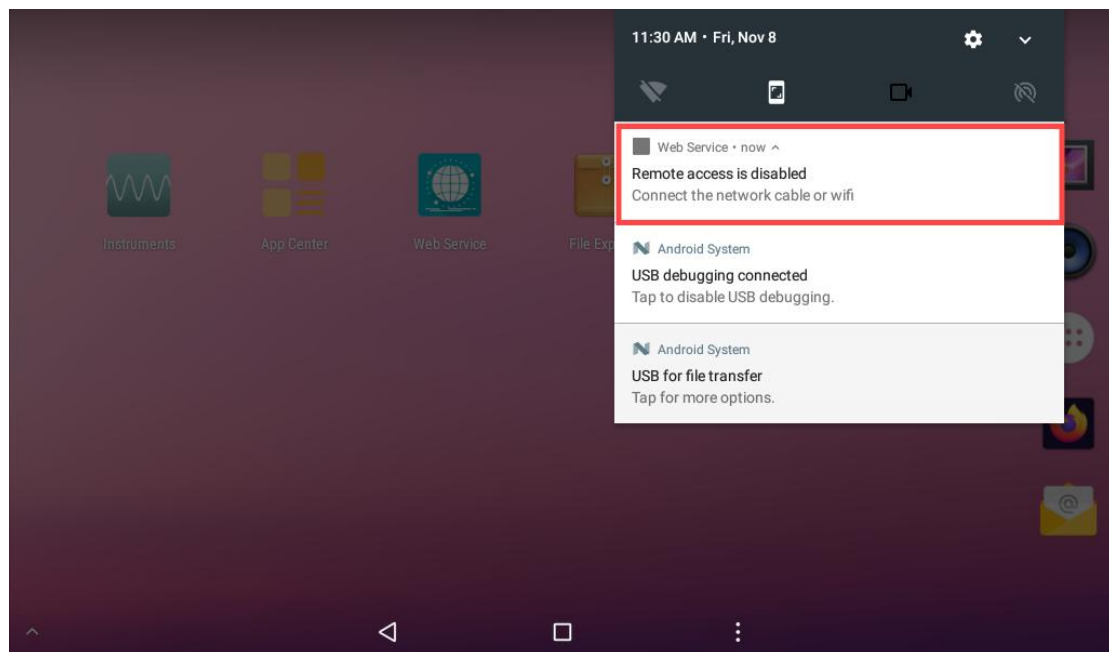
3. If an upgradeable file is available, click "install"; a prompt window will appear on the screen. Click "CONFIRM" and after the installation is complete, the system will automatically restart to complete the upgrade, as shown in the below figure.





2. Web Service

1. The program operates in the background upon machine startup, and when you access the notification bar, a network service notification confirming successful program initiation, as shown in the below figure.



2. The following two methods can be used to access the network service interface.
 - (1) If you want to use network service, can click **"Web Service"** APP directly as shown in Figure 2-1.

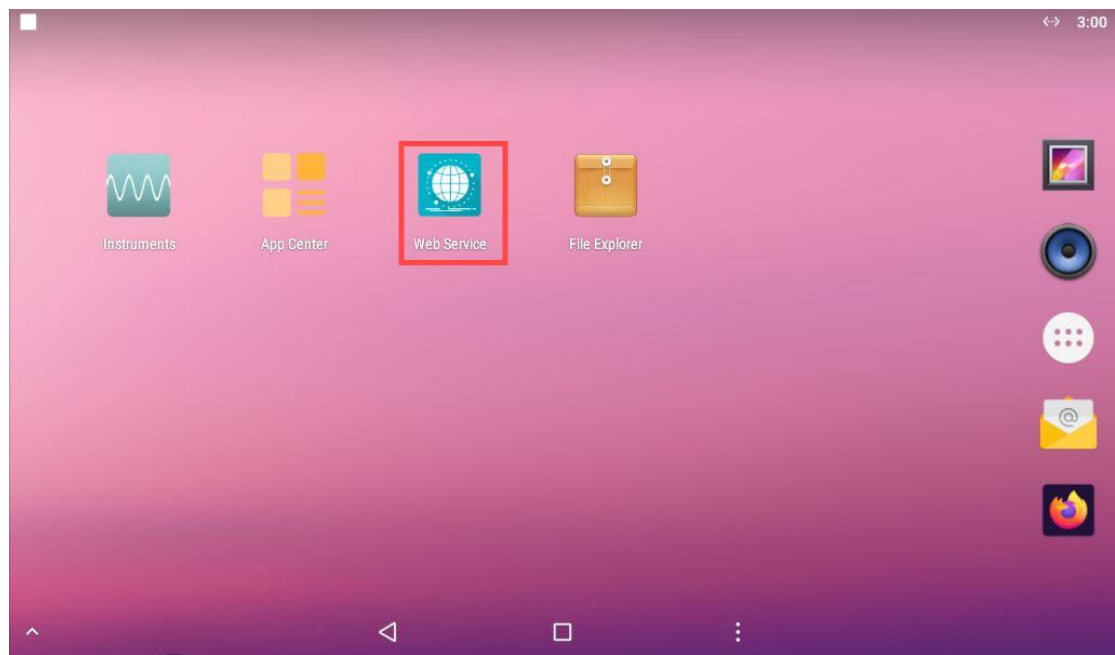
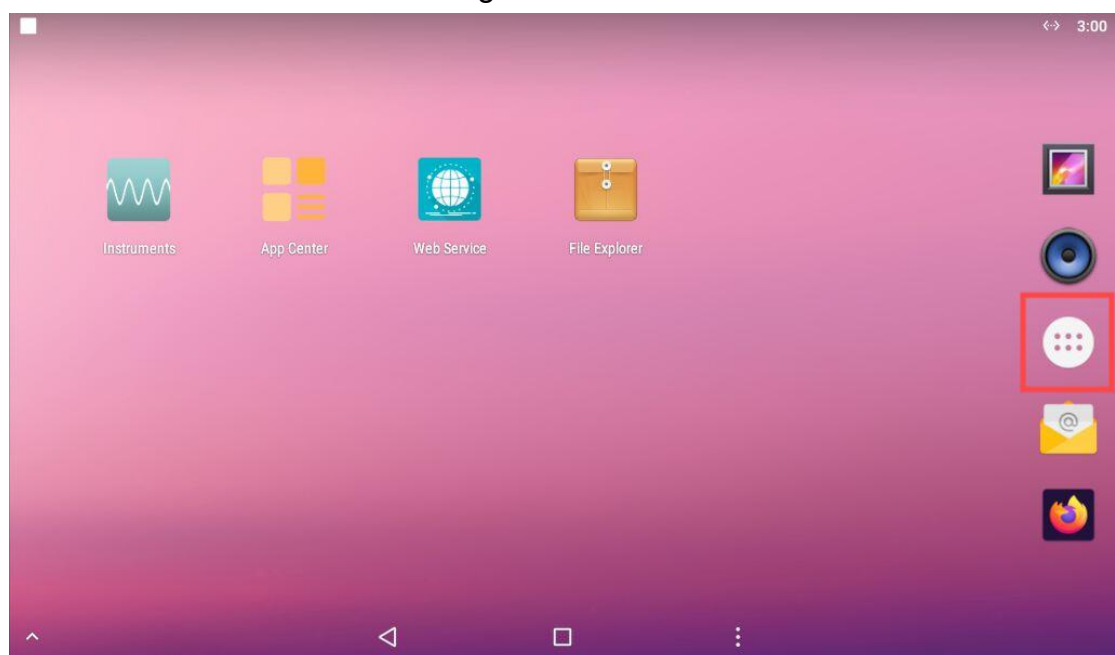


Figure 2-1

- (2) Click **"App Drawer"** to enter System built-in application list to find **"Web Service"** APP as shown in Figure 2-2.



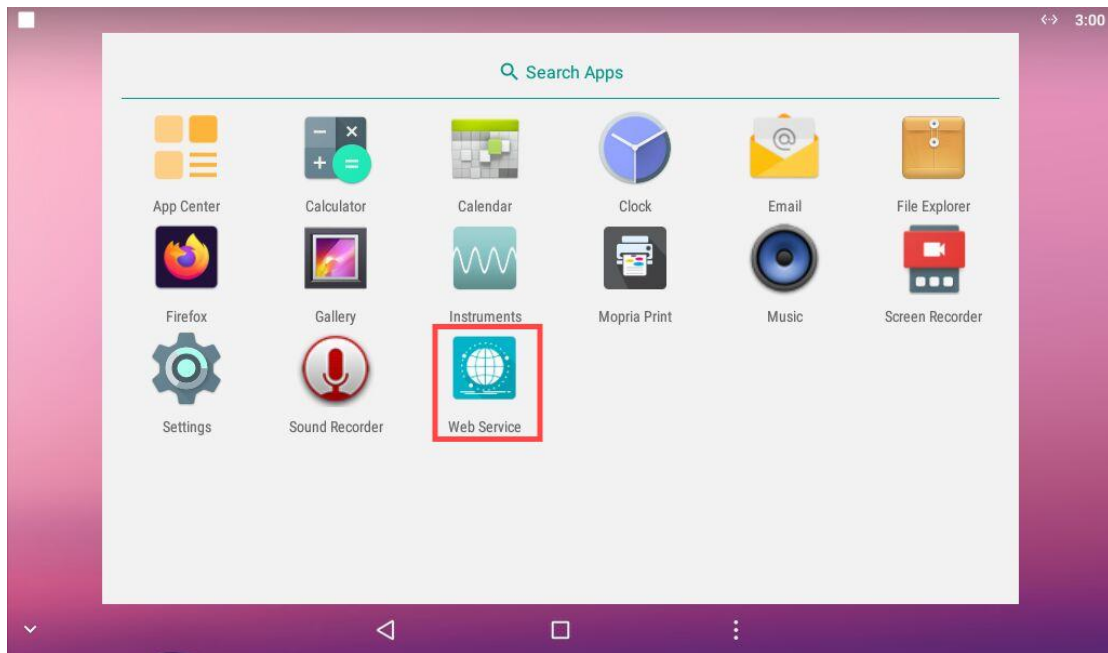


Figure 2-2

- (3) Enter "Web Service" interface, as shown in Figure 2-3. Network service can be performed by connecting to wired network or WiFi.

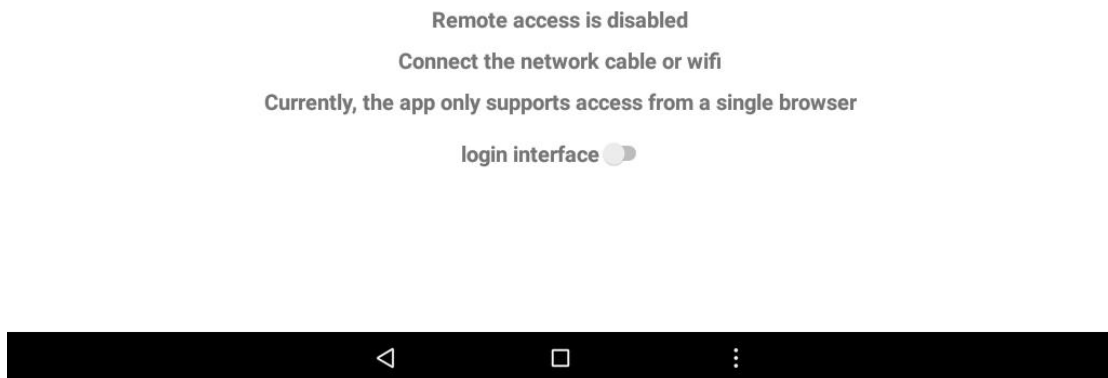


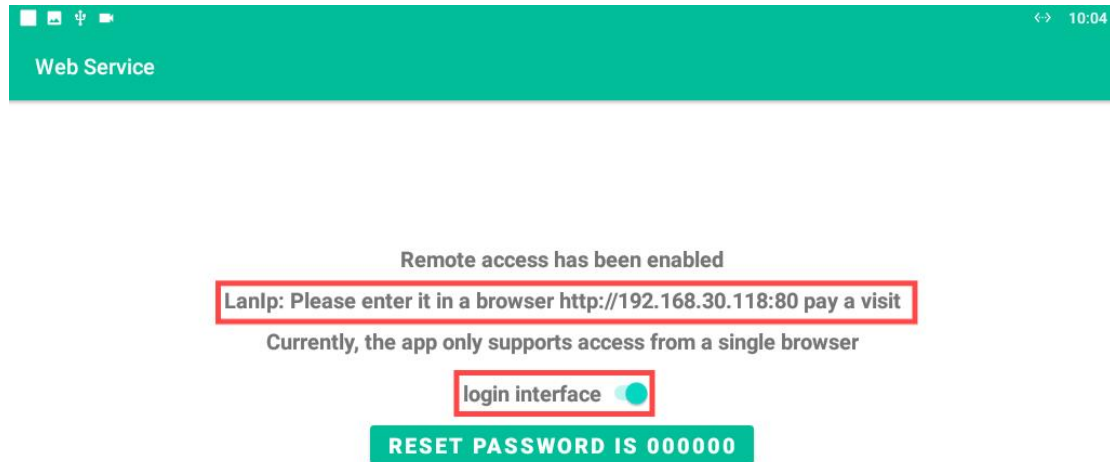
Figure 2-3

Note: When the login interface switch is highlighted, using the web service will redirect to the login screen. If the login interface is not enabled, using the web service will directly redirect to the control interface without requiring login.

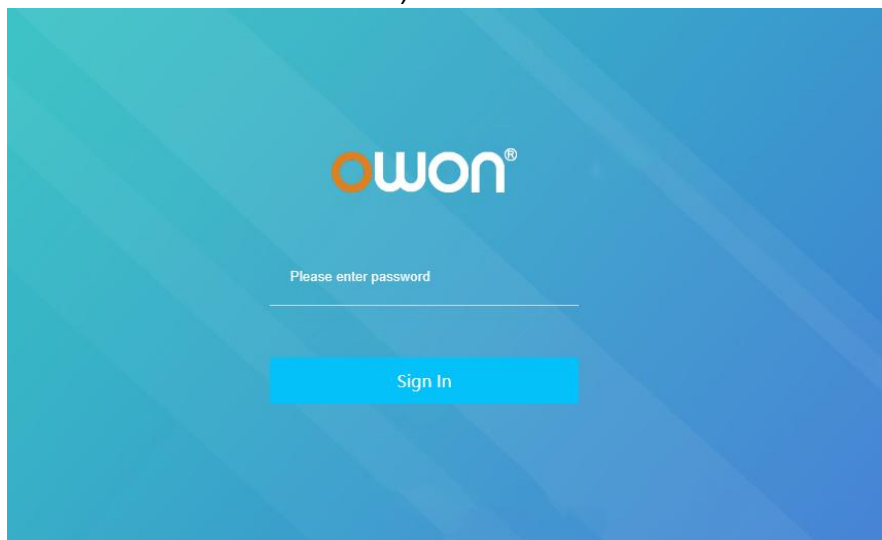
Use wired network to use Web Service

The following operations are described using the login interface as an example.

1. When connecting to the wired network for web service, you can see the website information in the network service interface,as shown in the below figure.



2. Enter the corresponding website in the browser to jump to the login screen, as shown in the below figure. Default password is 000000. (Note:The current program only supports single-user login. When you log in using this browser, other computers or browsers will be unable to log in unless you click on the exit or close button.)



3. After logging in, the PC side will jump to the "Web Control" page, as shown in Figure 2-4. The instrument network service interface will show that you are logged in, as shown in Figure 2-5.

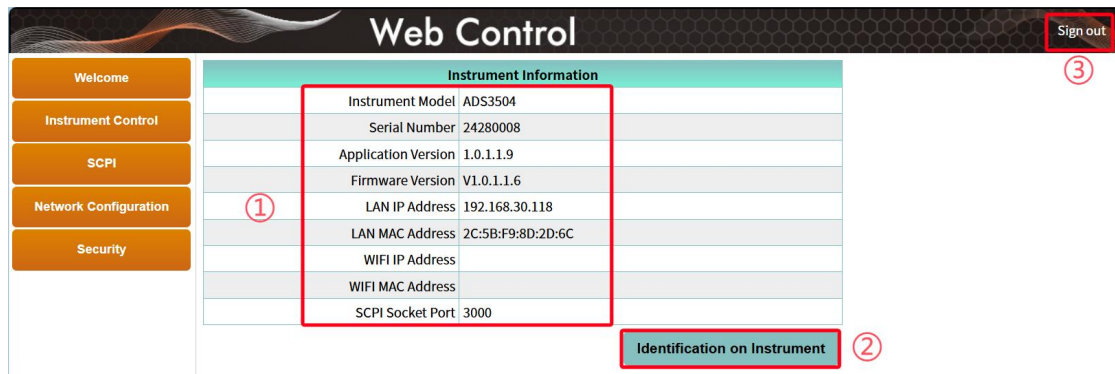
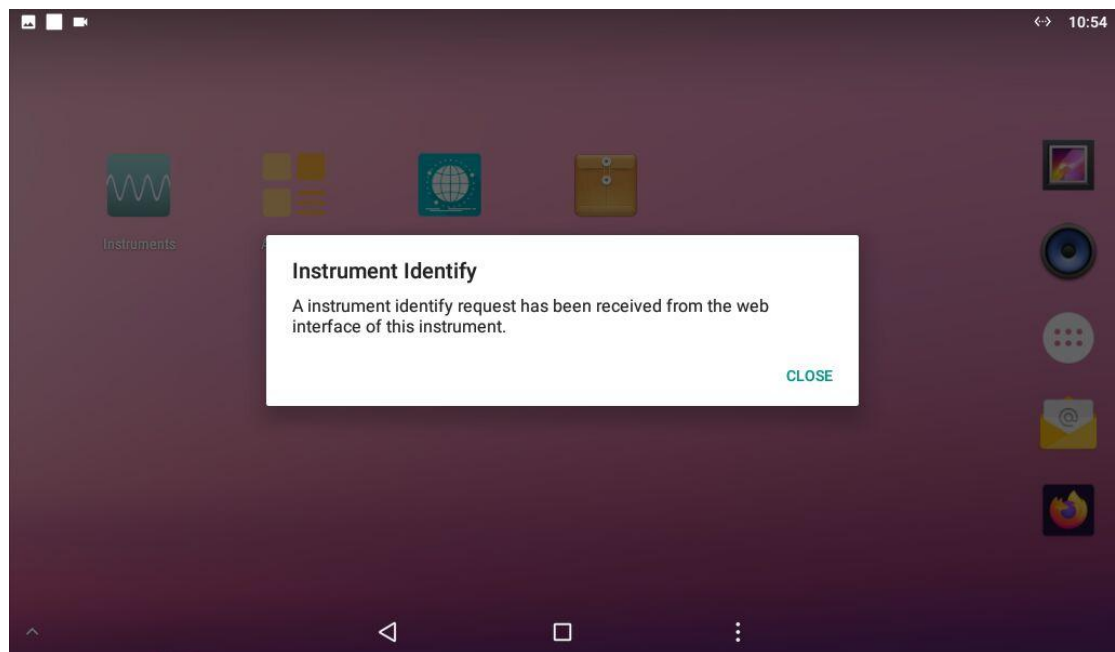


Figure 2-4

- Entering the "Web Control" page will default to the "Welcome" module.
- ① Represents various kinds of information within the machine.
- ② Click **"Identification on Instrument"** button, the machine will pop up a window and play a ringing for 3 seconds, as shown below.



- ③ Click **"Sign out"** button will perform the exit operation, and jump back to the login screen.

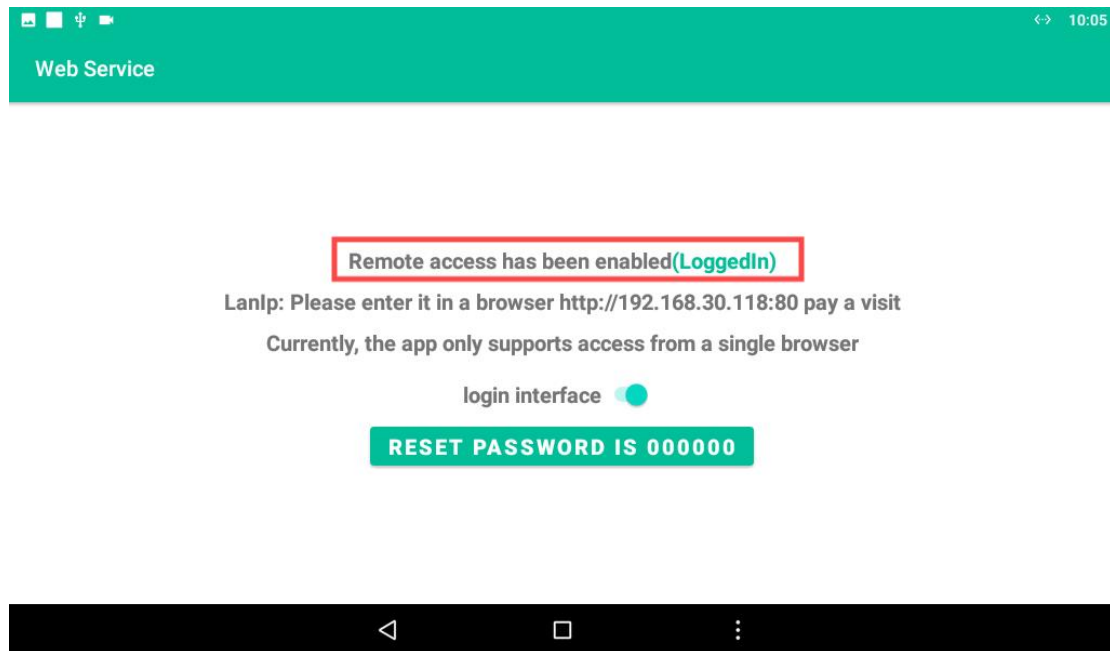


Figure 2-5

4. If you drop down the status bar in the main interface of the instrument, you will see such a notification, showing that remote access has been enabled and access is carried out in the LAN, as shown in the below figure.

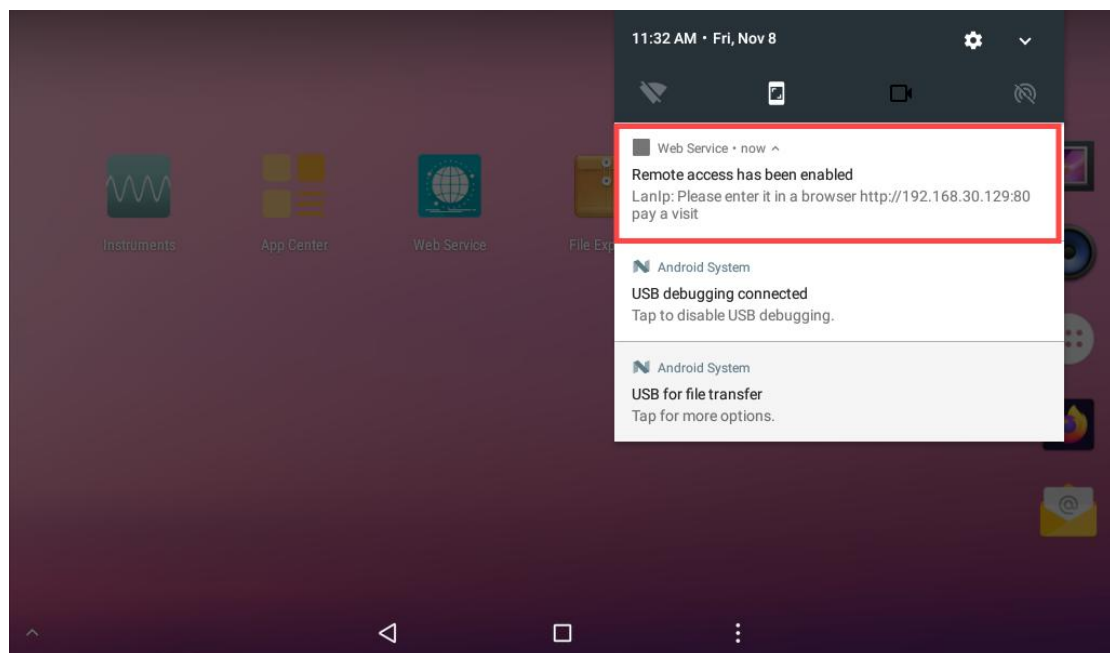


Figure 2-10

5. Click the **"Instrument Control"** button on the left to jump to the instrument control interface, as shown in Figure 2-6; the corresponding web service interface will be displayed **"(LoggedIn)(Viewing)"**, as shown in Figure 2-7.

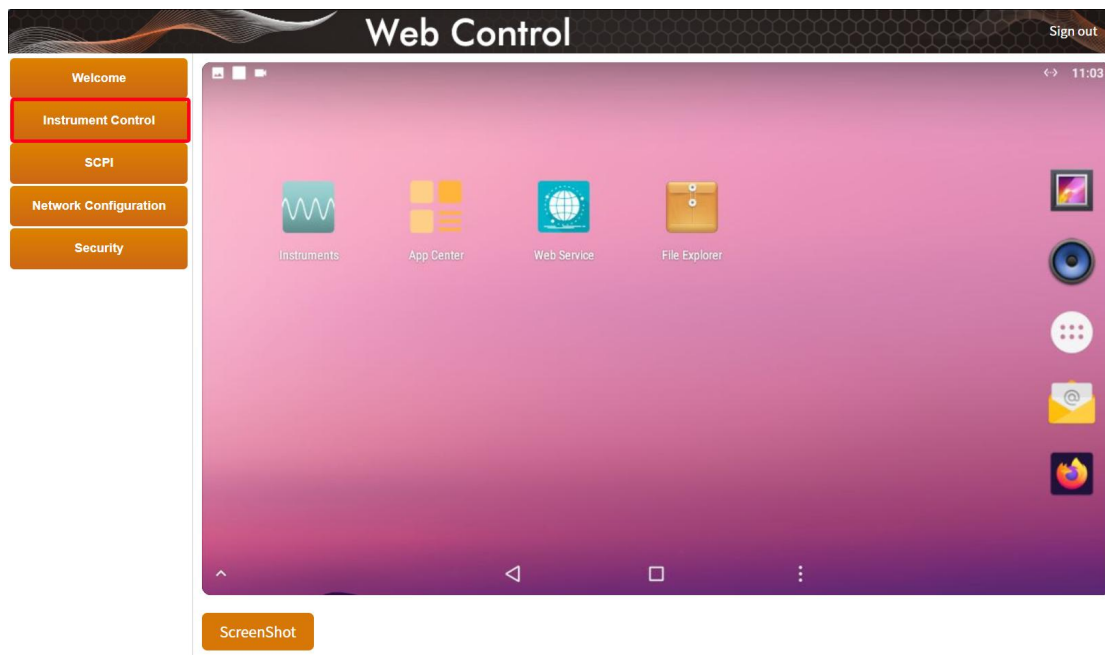


Figure 2-6

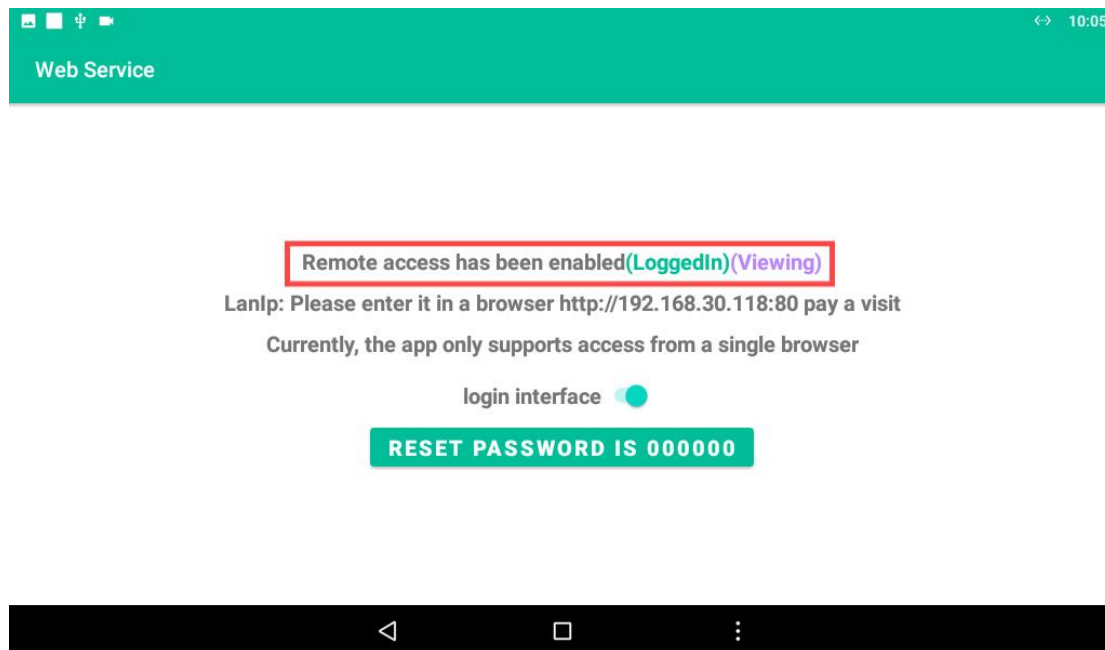


Figure 2-7

6. Click the **"SCPI"** button on the left to jump to the following interface, as shown in the below figure. Enter the SCPI Command in the Command Input Box, click **"Send"** to send the command, the instrument will receive the corresponding SCPI command, if the command has a return value, the corresponding return value will be displayed in the Response Box.

Web Control Sign out

Welcome
 Instrument Control
 SCPI
 Network Configuration
 Security

Command: Send Clear

Response:
 -> *IDN?
 < OWON,ADS3504,24280008,V1.0.1.1.6

7. Click the **"Network Configuration"** button on the left to jump to the following interface, as shown in the below figure. This interface is used to modify the IP address and other information of the current connection network. Click **"Apply"** to save the changes after filling in the information. (Note: You need to log in again after the modification, because the IP has been modified. In addition, after the modification is completed, it may not be accessible because of conflicts with other IP addresses or other circumstances.)

Web Control Sign out

Welcome
 Instrument Control
 SCPI
 Network Configuration
 Security

Lan Configuration

TCP/IP Mode: ☒ Auto (DHCP/Auto-IP) ☐ Static-IP

IP Address: . . .

Subnet Mask: . . .

Default Gateway: . . .

NDS 1: . . .

NDS 2: . . .

Apply

WIFI Configuration

TCP/IP Mode: ☒ Auto (DHCP/Auto-IP) ☐ Static-IP

IP Address: . . .

Subnet Mask: . . .

Default Gateway: . . .

NDS 1: . . .

NDS 2: . . .

Apply

8. Click the **"Security"** button on the left to jump to the following interface, as shown in the below figure. Enter the old password and the new password and click **"Apply"** to save the new password. The new password will take effect after logout (That is, if you do not exit, you can continue to perform other operations in this interface).

Web Control Sign out

Welcome
 Instrument Control
 SCPI
 Network Configuration
 Security

Password Configuration

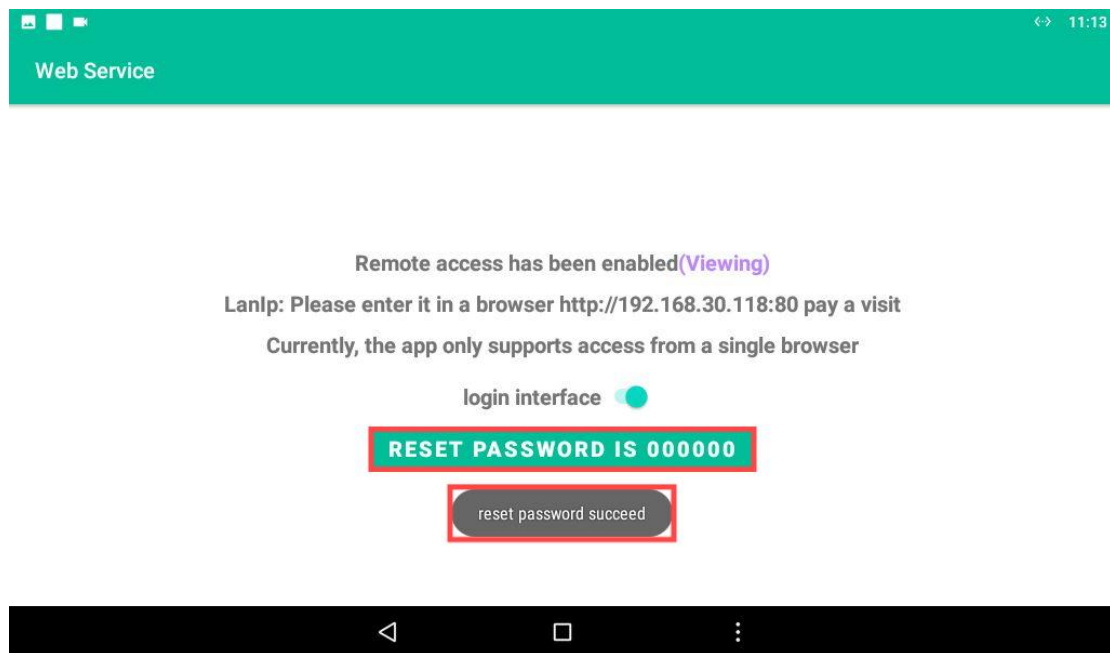
Old password:

New password:

Confirm password:

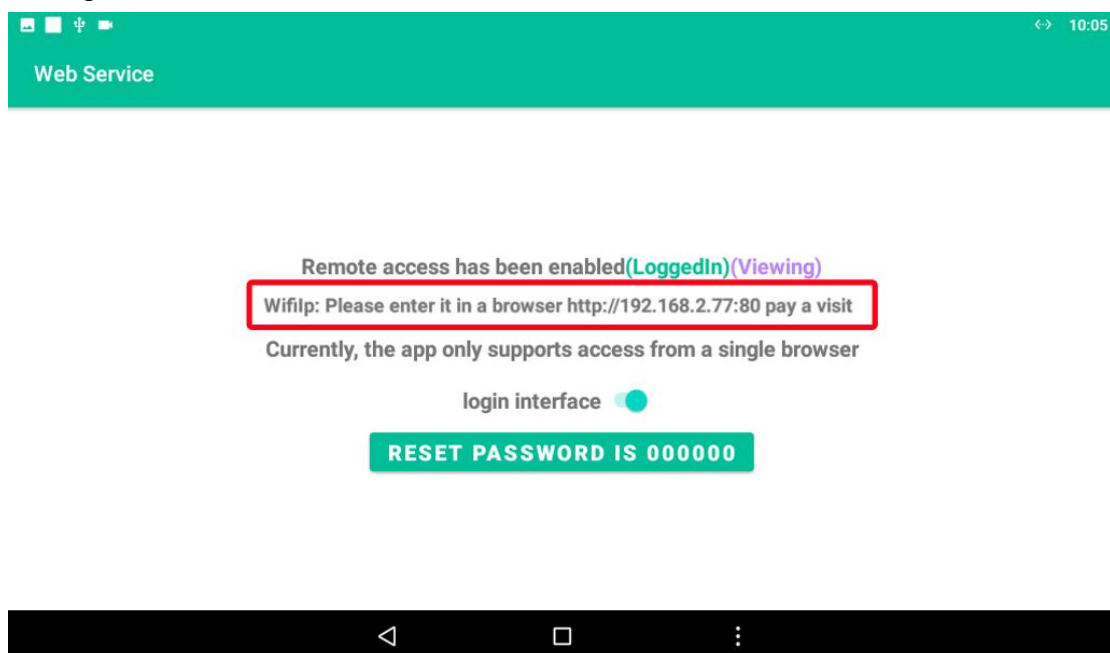
Apply

Note: If you forget your password, open the Web Service App and enter the interface, click **"RESET PASSWORD"** button, will reset the password to 000000, as shown below.



Use WiFi to access Web Service

1. Connect to WiFi and click **"Web Service"** App, as shown in the below figure.



2. After entering the corresponding website in the PC browser, please refer to P14 "Use wired network to use Web Service" for detailed operation.

3. File Explorer

1. The following two methods can be used to access the file explorer interface.

(1) Click **"File Explorer"** as shown in Figure 3-1.

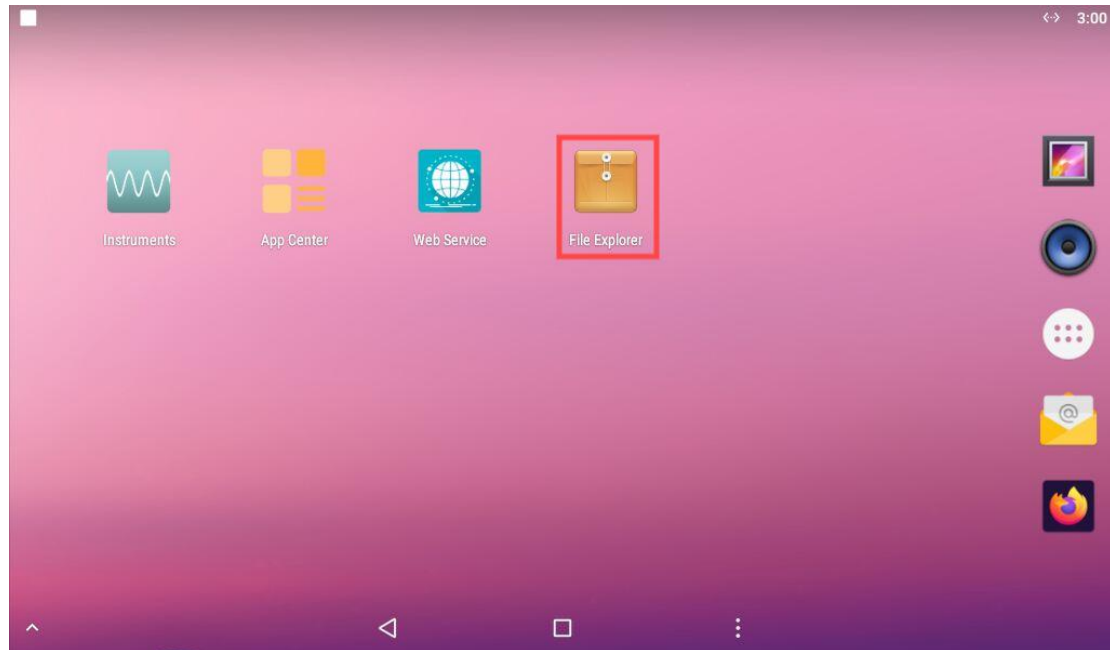
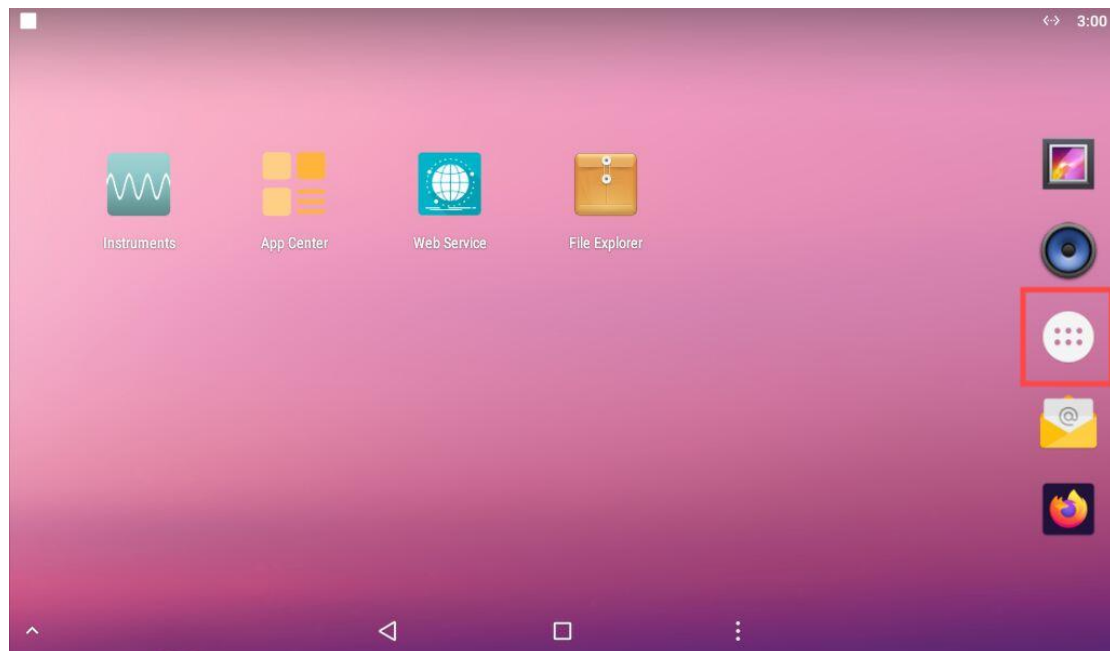


Figure 3-1

(2) Click **"App Drawer"** to enter System built-in application list to find **"File Explorer"**, as shown in Figure 3-2.



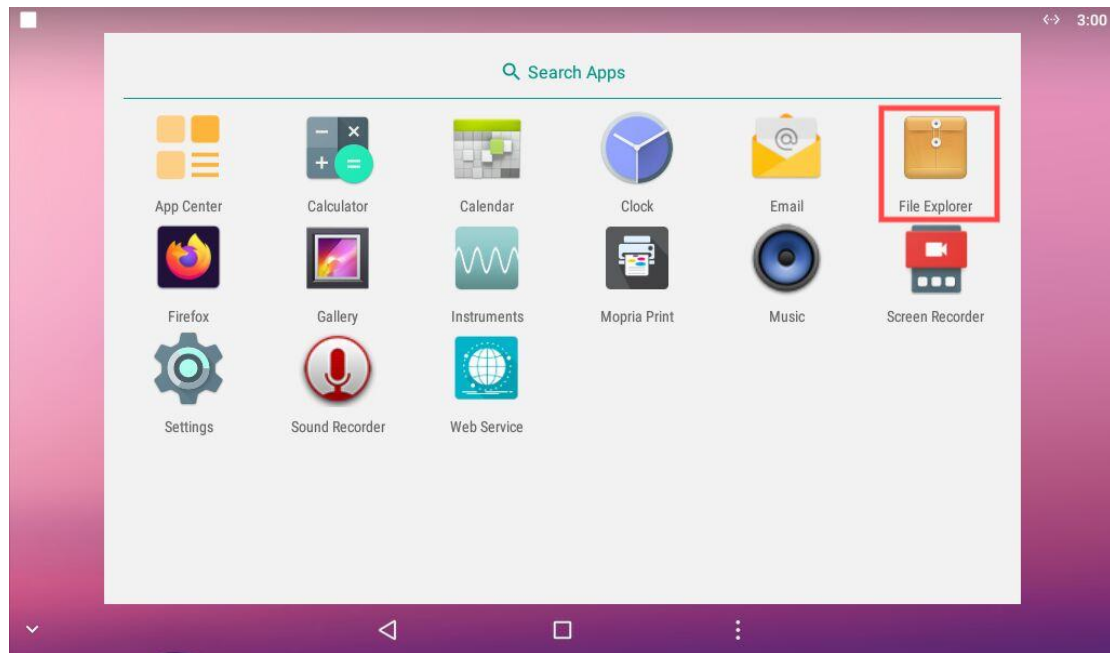
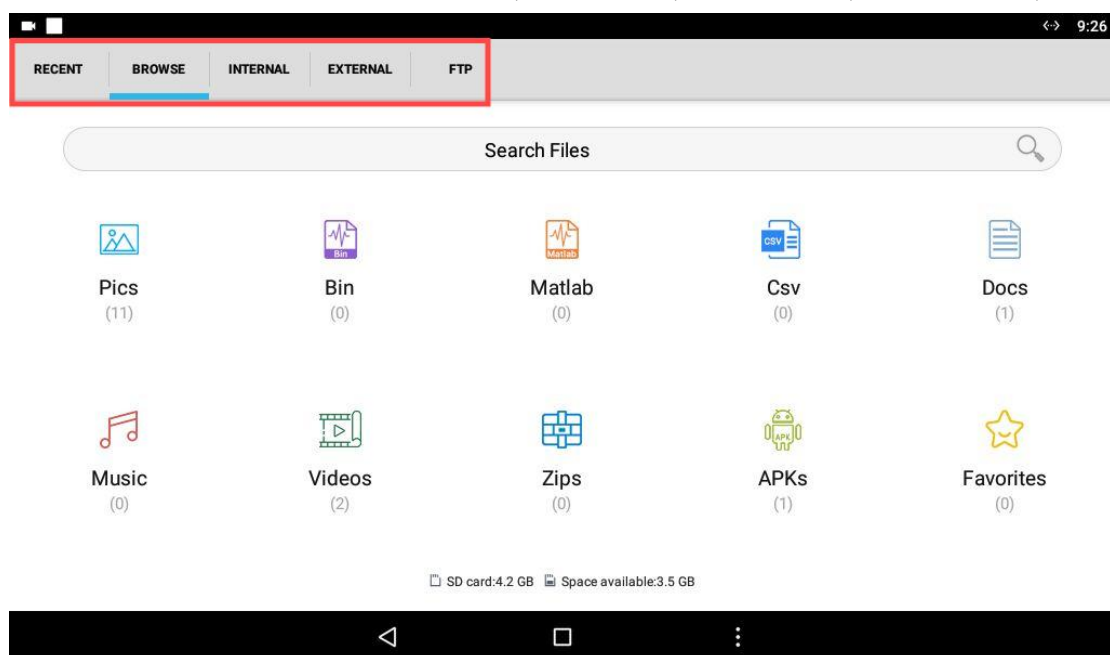


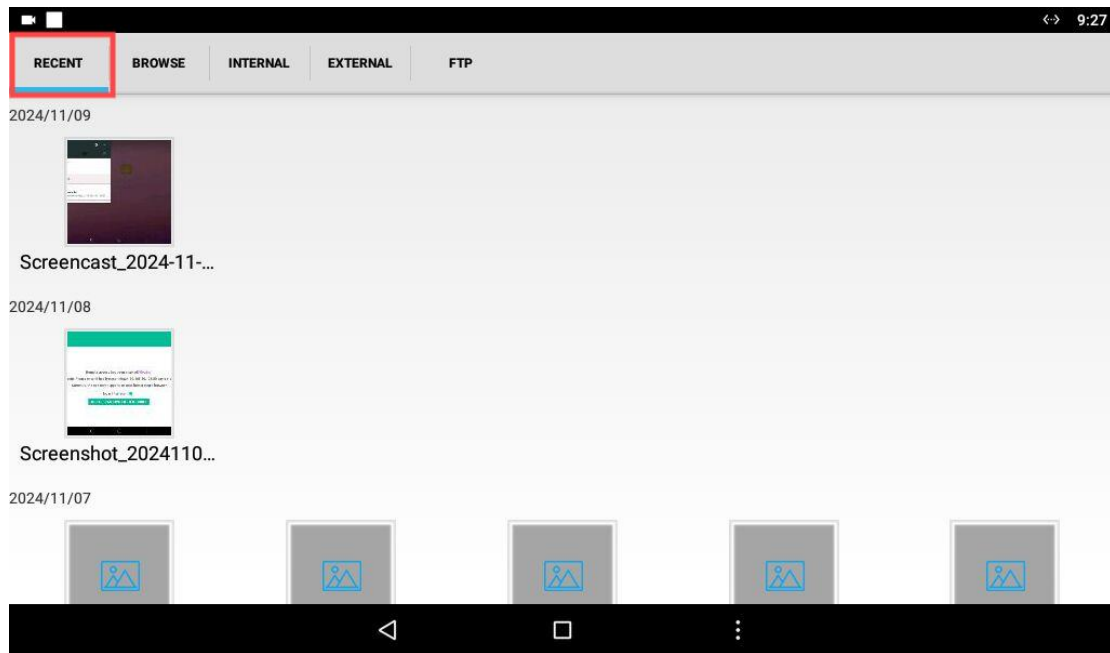
Figure 3-2

2. Enter **"File Explorer"** interface, as shown in the below figure. The interface includes five menus: RECENT, BROWSE, INTERNAL, EXTERNAL, FTP.



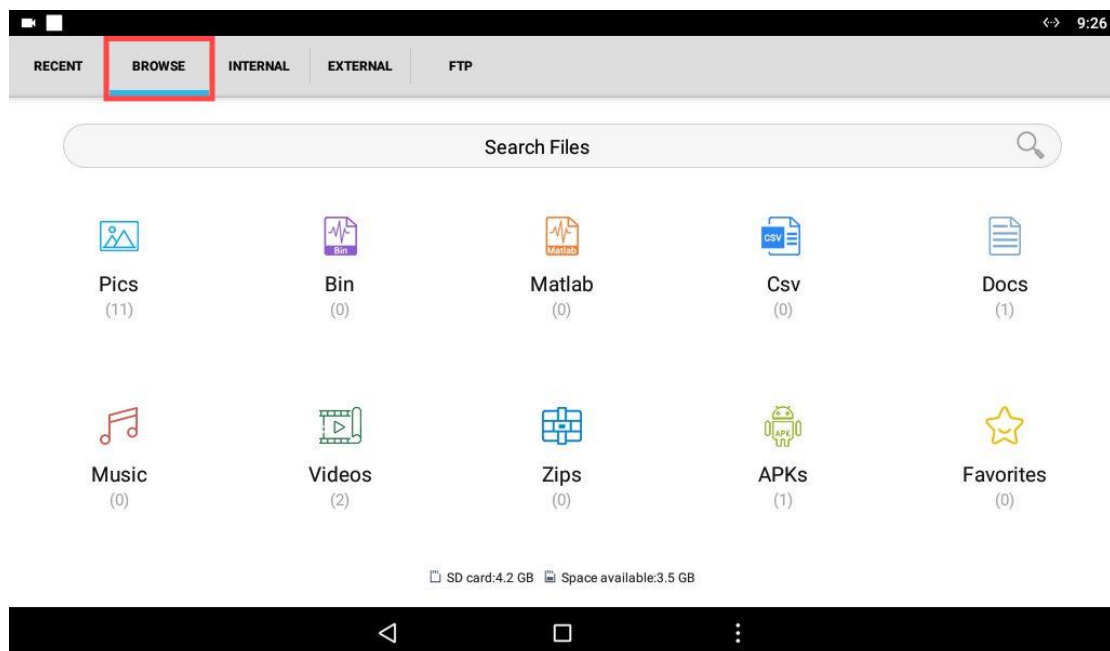
RECENT

1. Click **"RECENT"** directory, as shown in the below figure. You can see recent screenshots, files, and more.



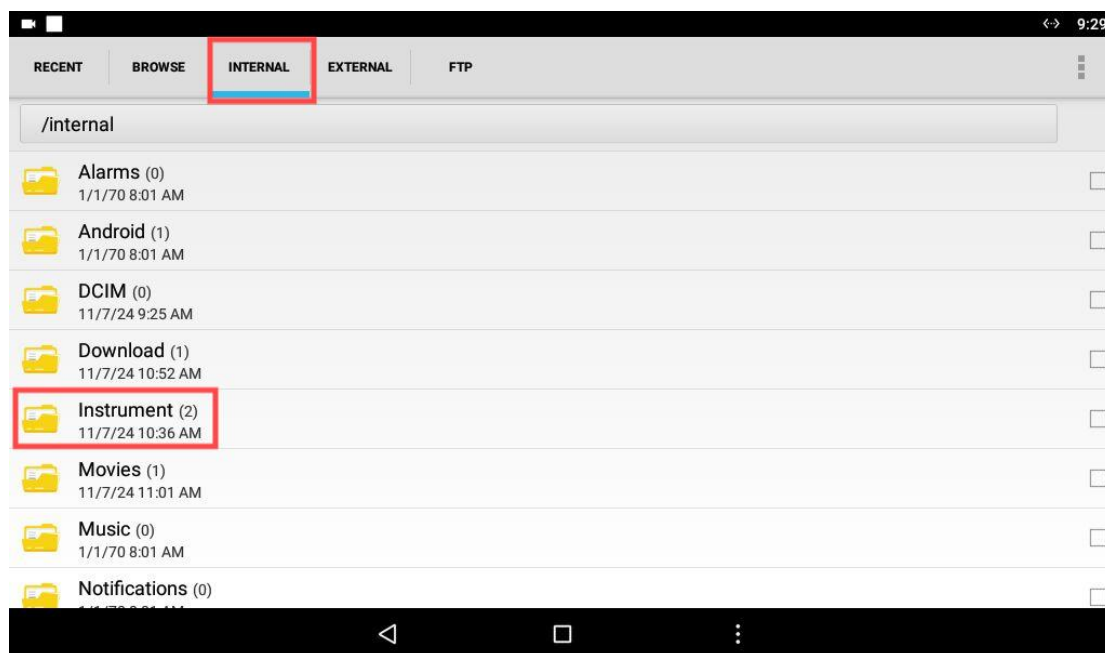
BROWSE

1. Click **"BROWSE"** directory, as shown in the below figure. There are 10 categories: Pics, Bin, Matlab, Csv, Docs, Music, Videos, Zips, APKs, Favorites. Click on the corresponding category to view the data.



INTERNAL

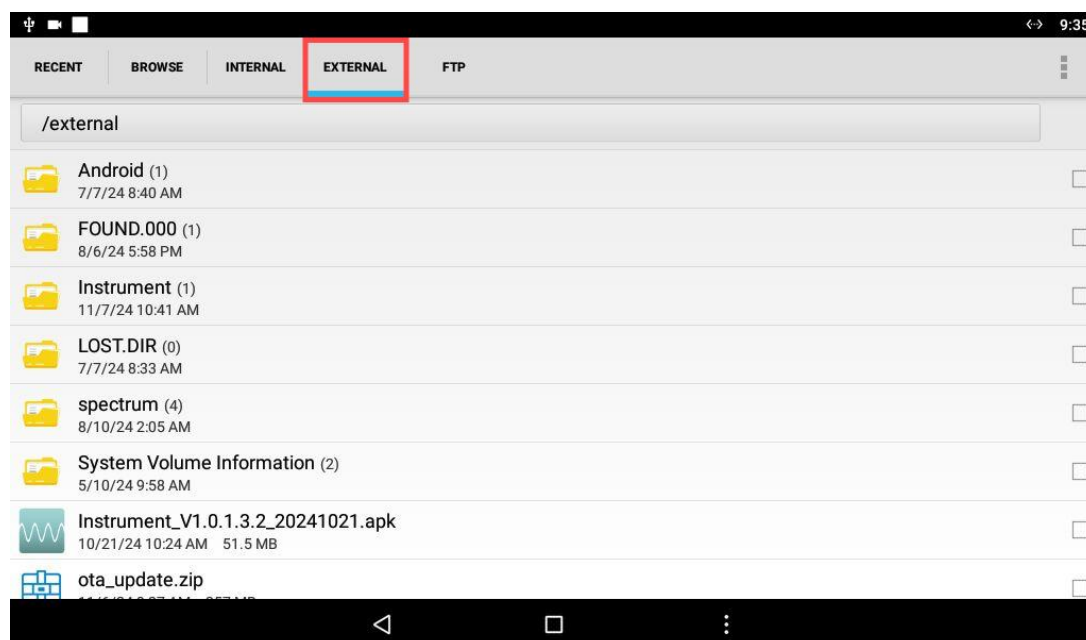
1. Click **"INTERNAL"** directory, as shown in the below figure.



Note:The "Instrument" directory is the directory where the oscilloscope stores the files.

EXTERNAL

1. After inserting the USB disk, click the "EXTERNAL" directory to display the file in the USB, as shown in the below figure.



How to view the images saved by the instrument

1. Click "Instruments" App, as shown in Figure 3-3, or click "App Drawer"

to enter System build-in application list to find "**Instruments**", as shown in Figure 3-4.

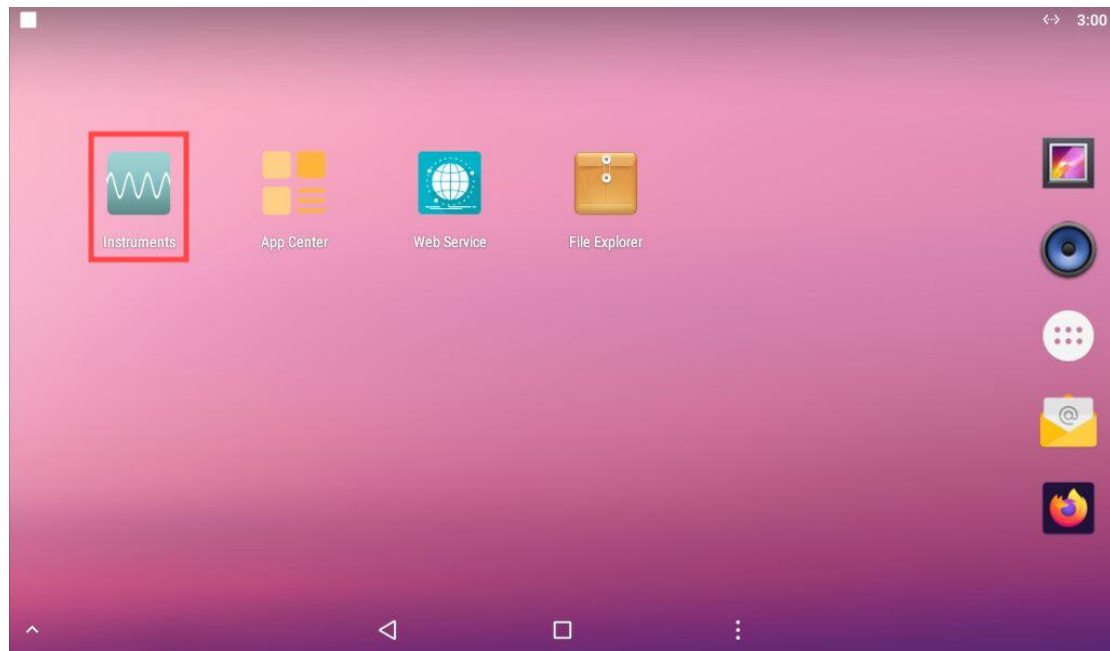
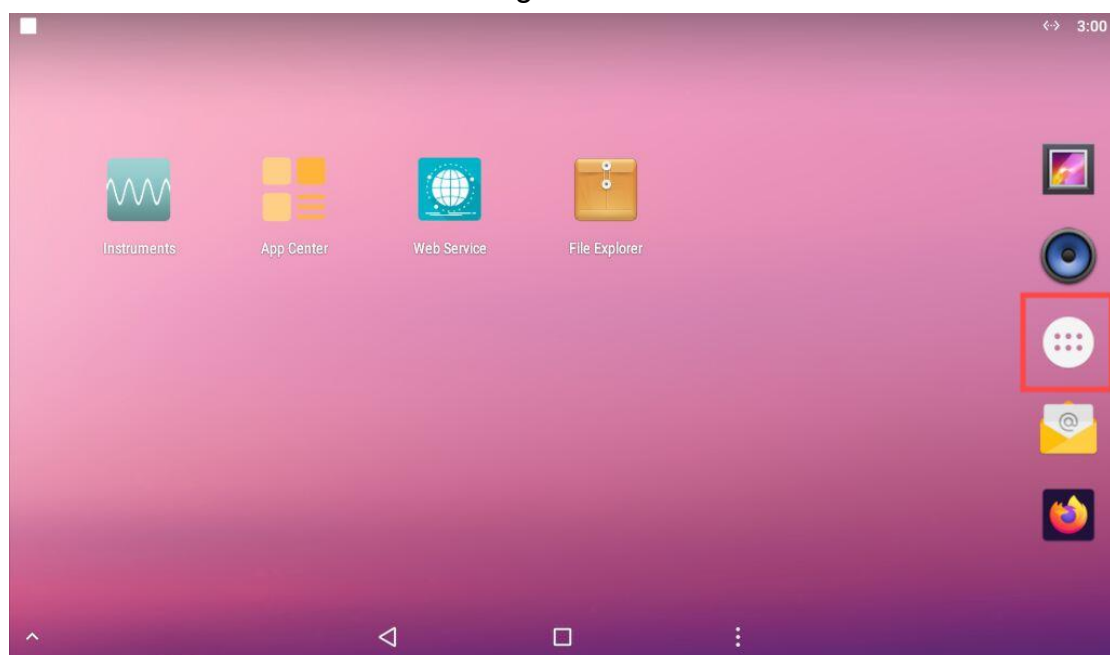


Figure 3-3



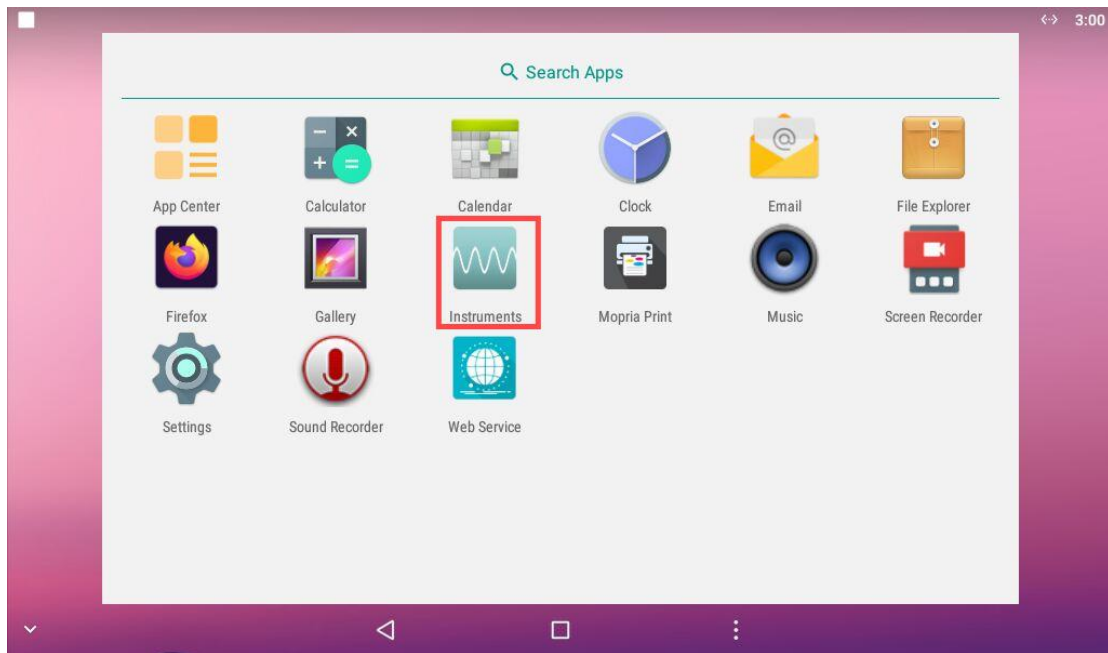
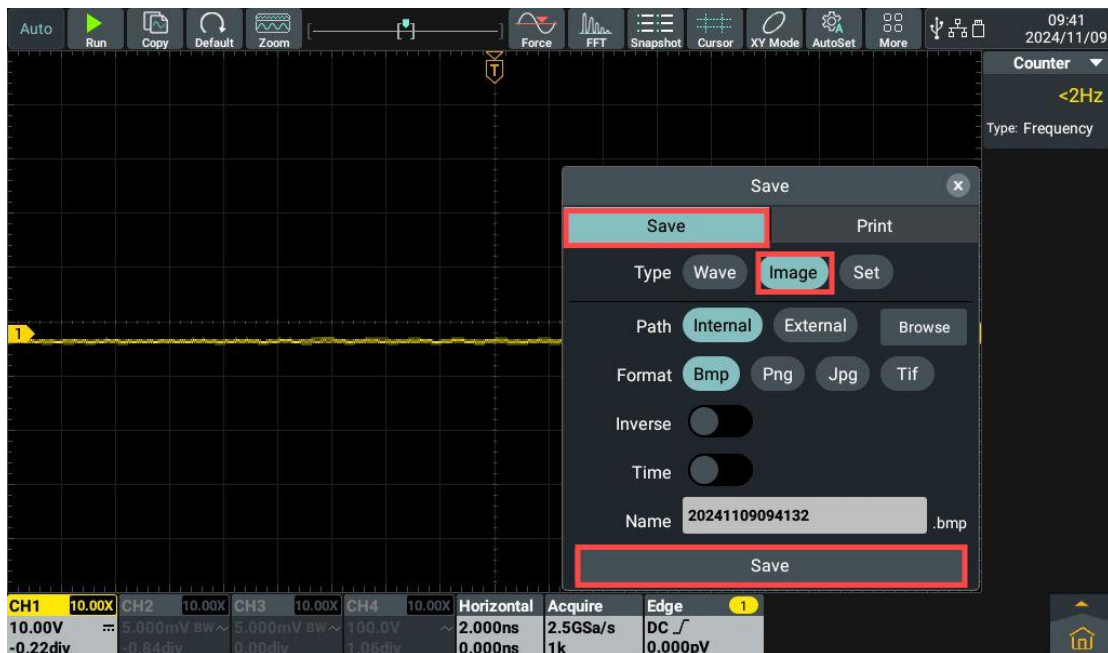
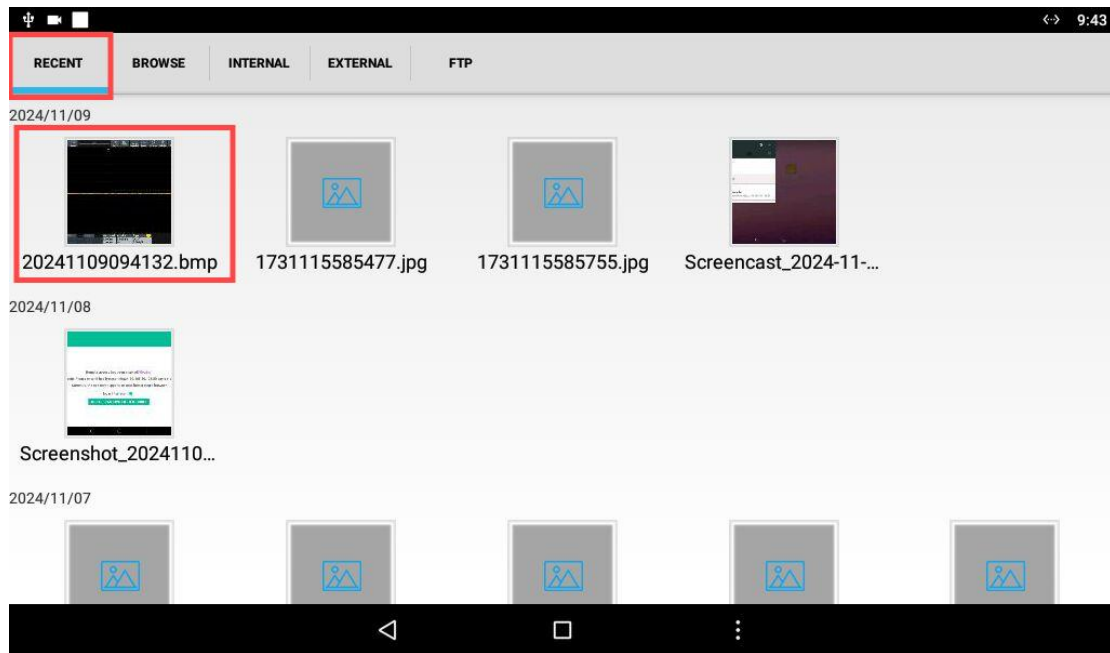


Figure 3-4

2. In the instrument interface, click " " to select Save function and then click "**Save**", type select "**Image**", click "**Save**" finally, the current picture of the instrument interface can be saved, as shown in the below figure.



3. Click "**File Explorer**", and then click "**RECENT**" directory, you can see the saved instrument picture, as shown in the below figure.



How do copy files to an external directory

1. Click **"INTERNAL"** directory, check **"Instrument"** file, click "📄" button, as shown in the below figure.



2. Click **"EXTERNAL"** directory, click **"Paste"**, as shown in Figure 3-5. The **"Instrument"** folder in the internal file is successfully copied to the external directory, as shown in Figure 3-6.

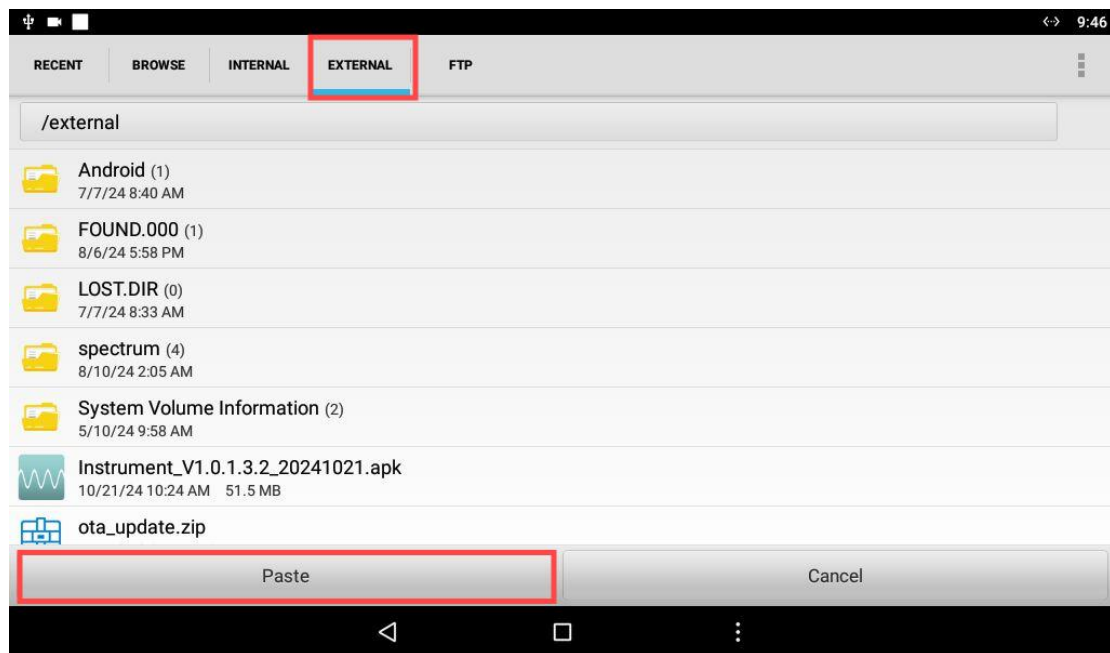


Figure 3-5

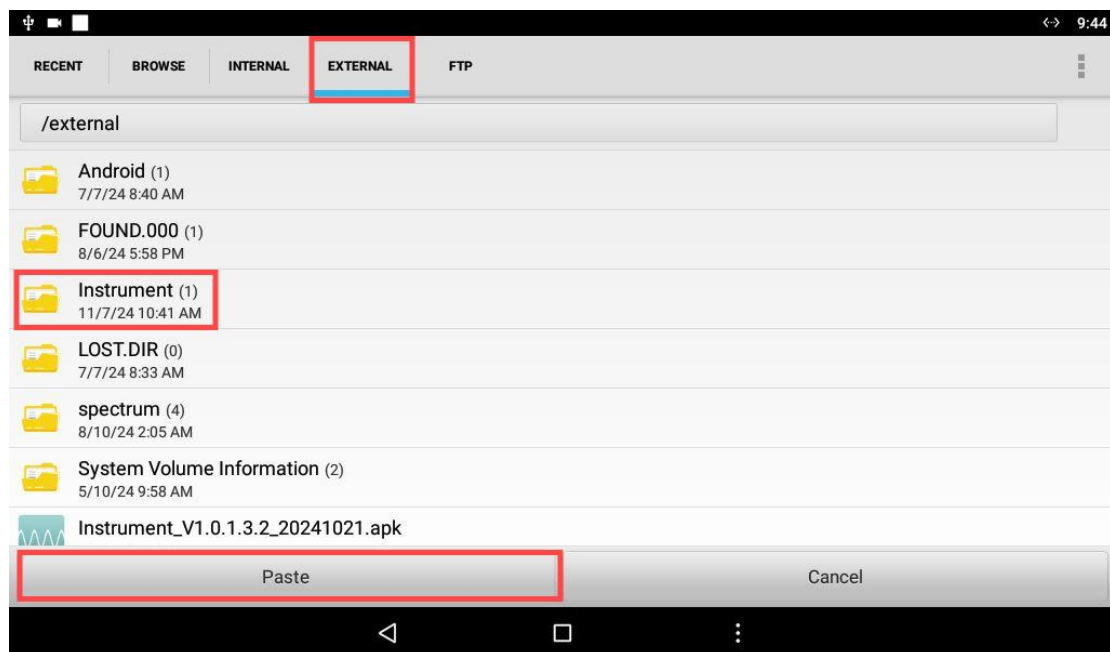
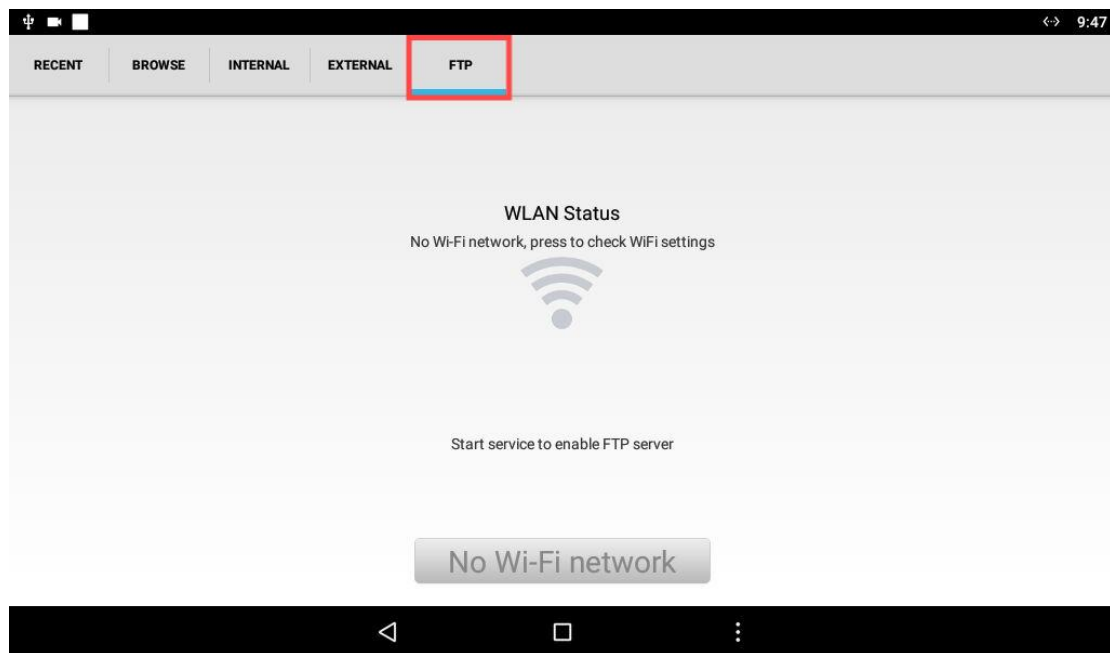


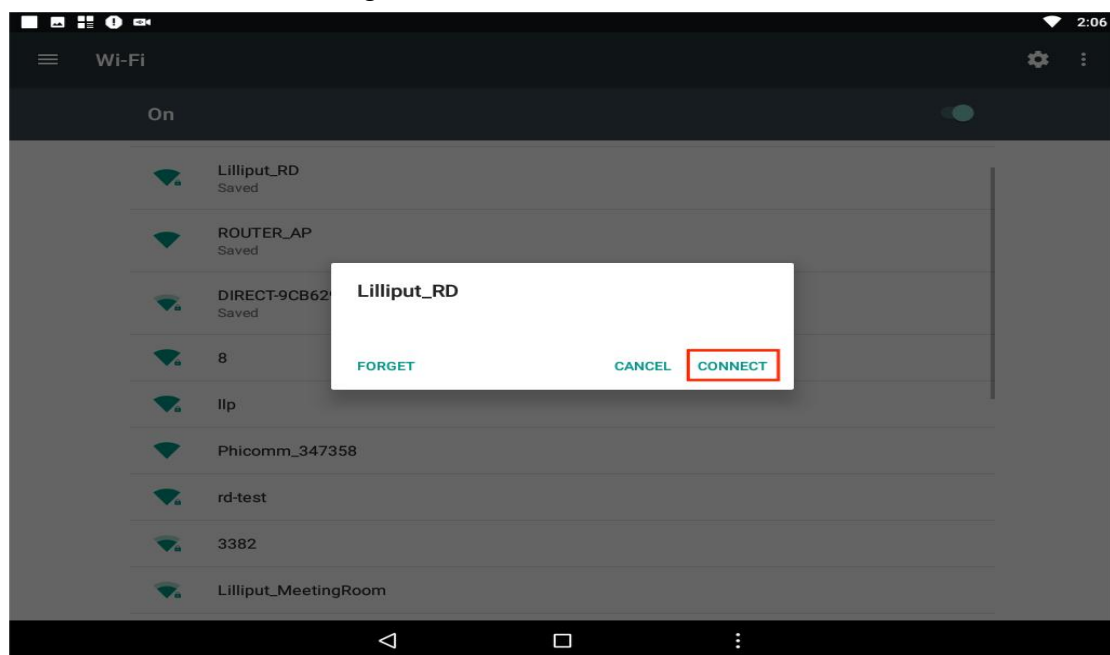
Figure 3-6

FTP

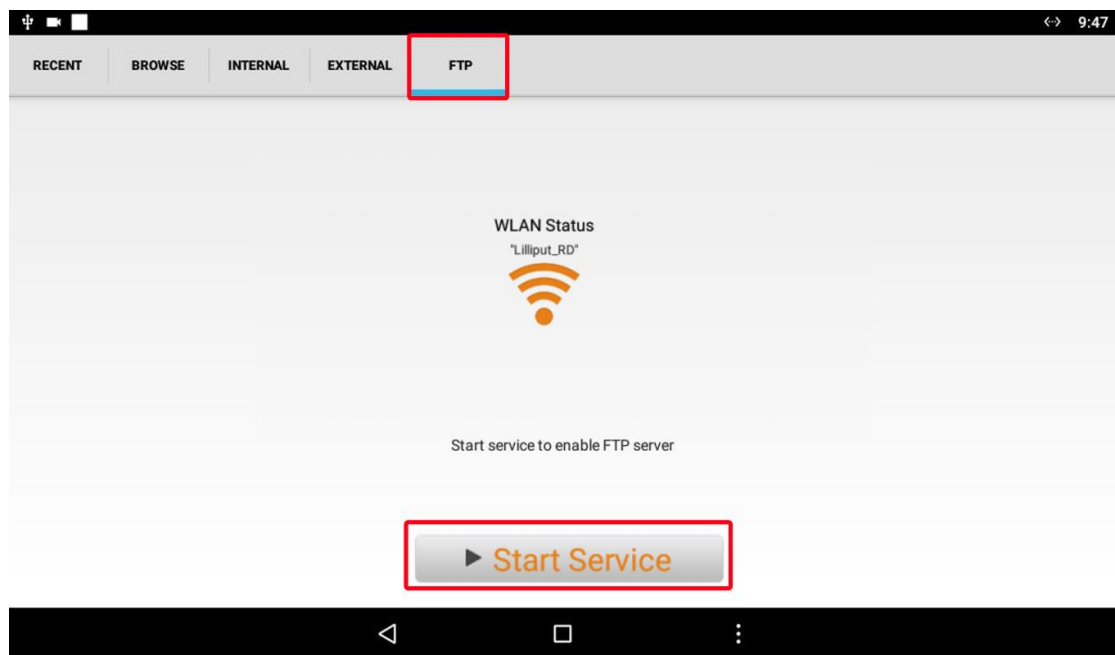
1. Click **"FTP"** directory, as shown in the below figure.



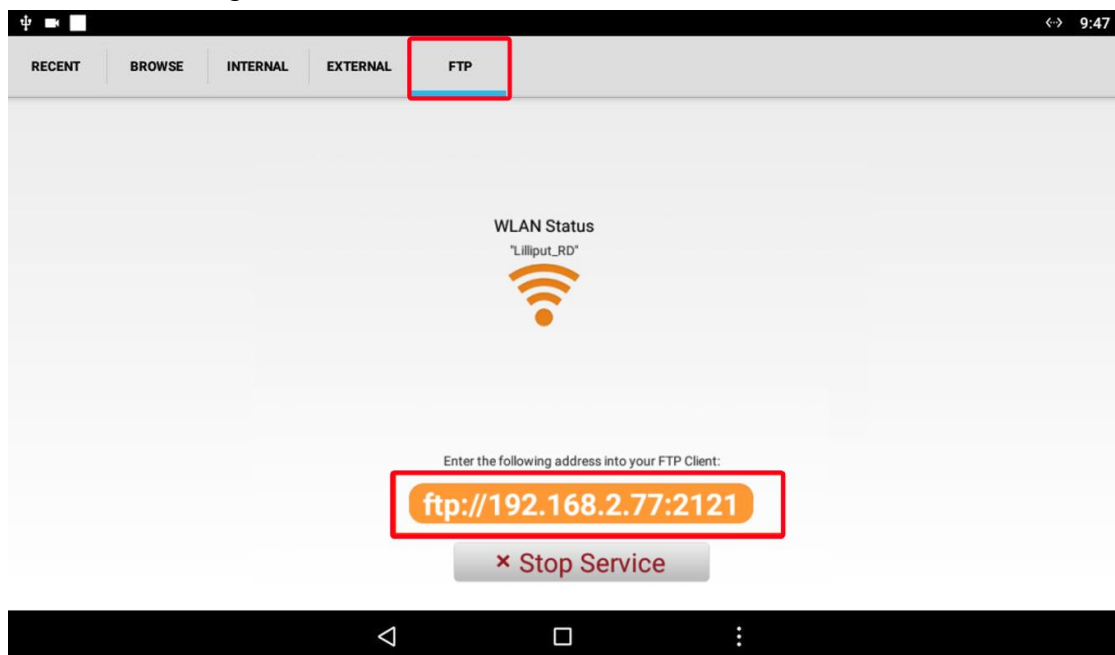
2. Click **"Wi-Fi"**, enter WLAN interface, select a network to connect, as shown in the below figure.



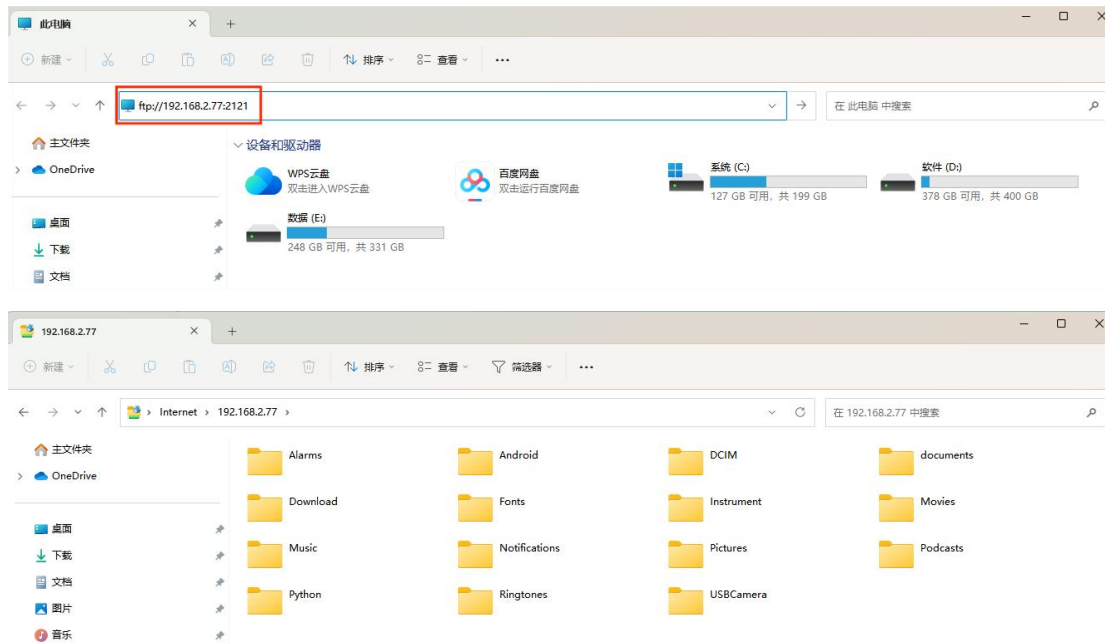
3. After the "WiFi" connection is successful, the FTP interface as shown in the below figure. Click **"Start Service"** to enable the FTP of instrument files on the computer side.



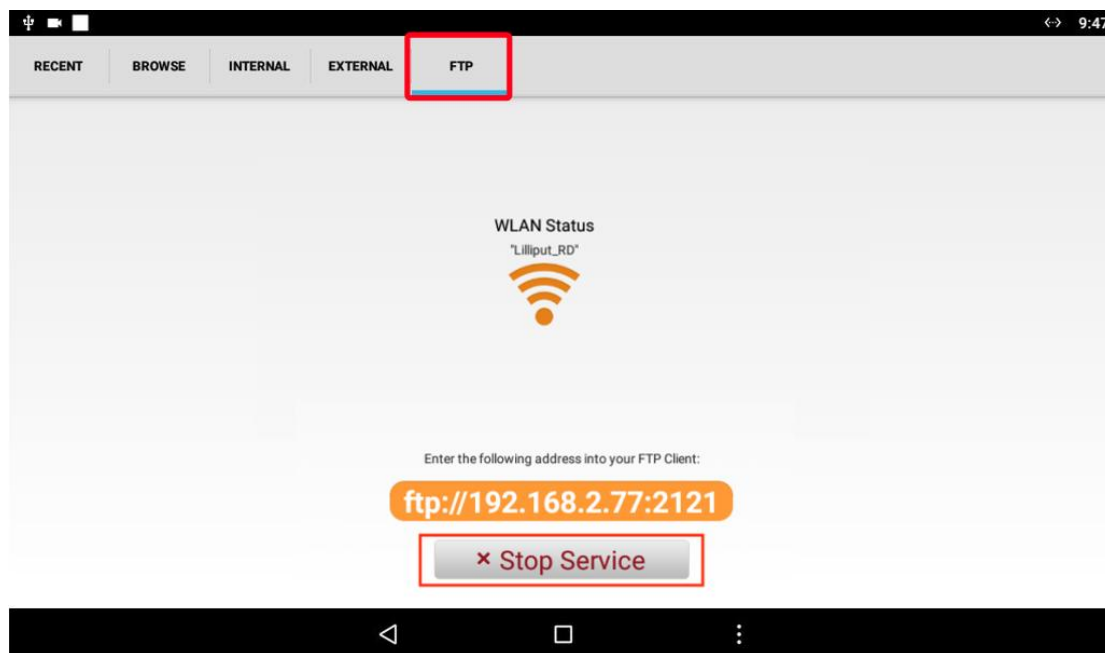
4. Enter the **"Start Service"** interface, you can see the address, as shown in the below figure.



5. Enter the address in **"My Computer"** as shown in the below figure. The result of the search is consistent with the folder in the internal directory of the file management on the instrument, as shown in the below figure. The folder can be operated on the computer, and the instrument will be changed accordingly.

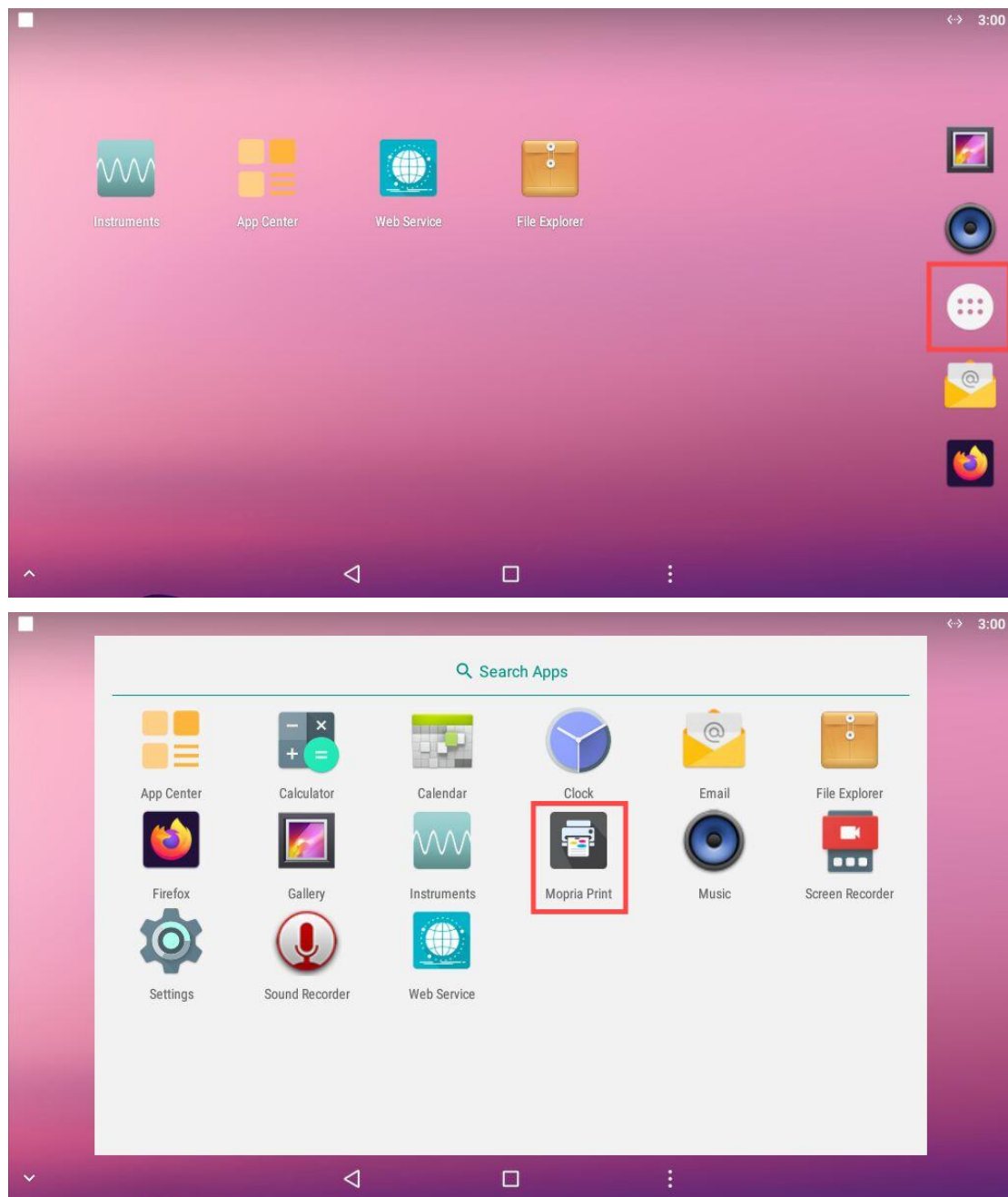


- After the operation is completed, click **"X Stop Service"** to end the FTP of instrument files on the computer side, as shown in the below figure.

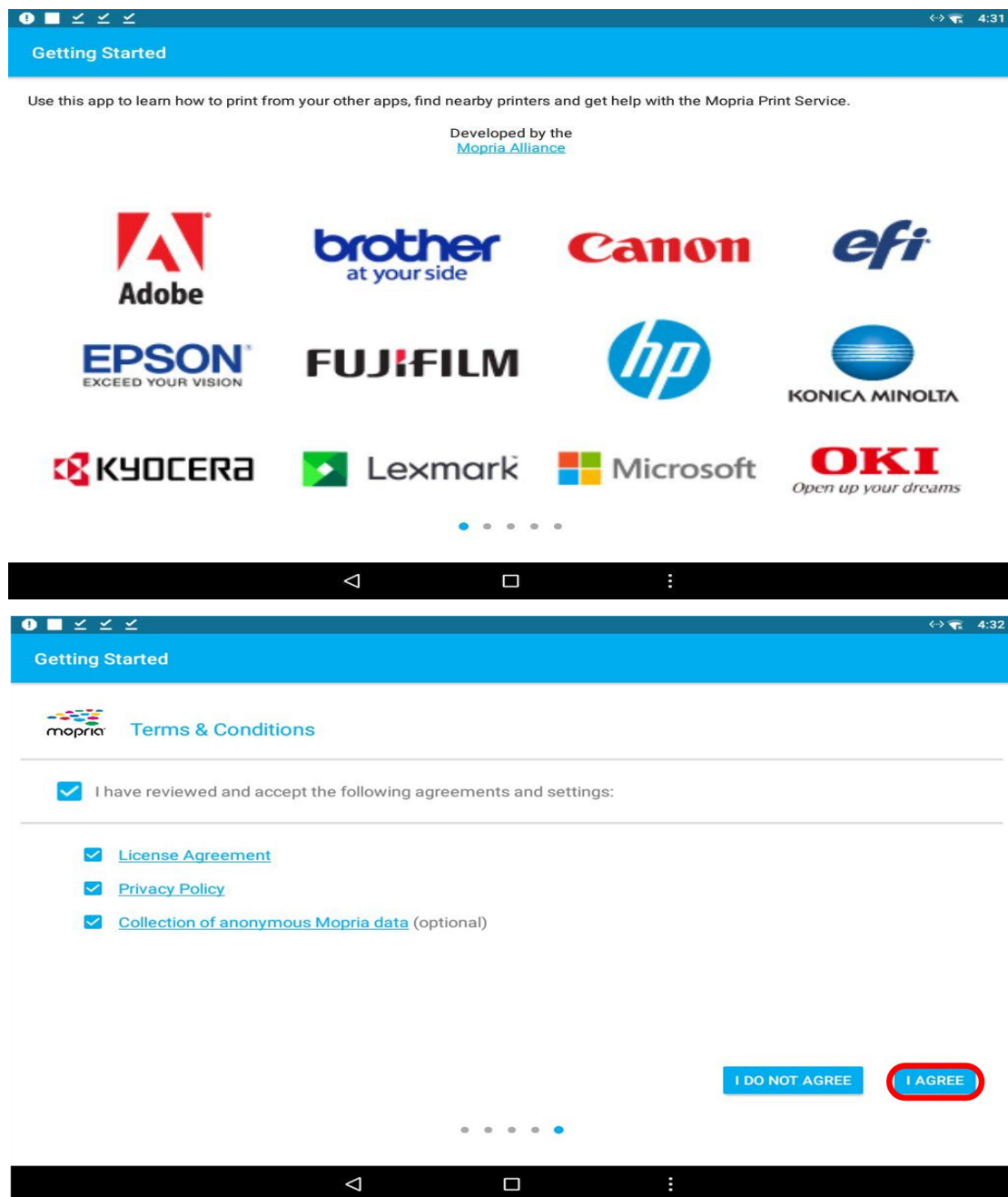


4. Mopria Print

- Click **"App Drawer"** to enter System built-in application list to find **"Mopria Print"** App, as shown in the below figure.



2. Open the printing App, scroll to the last page and check the license Agreement, Privacy Policy, click "**I AGREE**" can start using the app, as shown in the below figure.



3. After entering the printing app interface, click "**Enable Wi-Fi to see nearby printers**" to connect to the printer's Wi-Fi, as shown in Figure 4-1. Wi-Fi connection is successful, as shown in Figure 4-2.

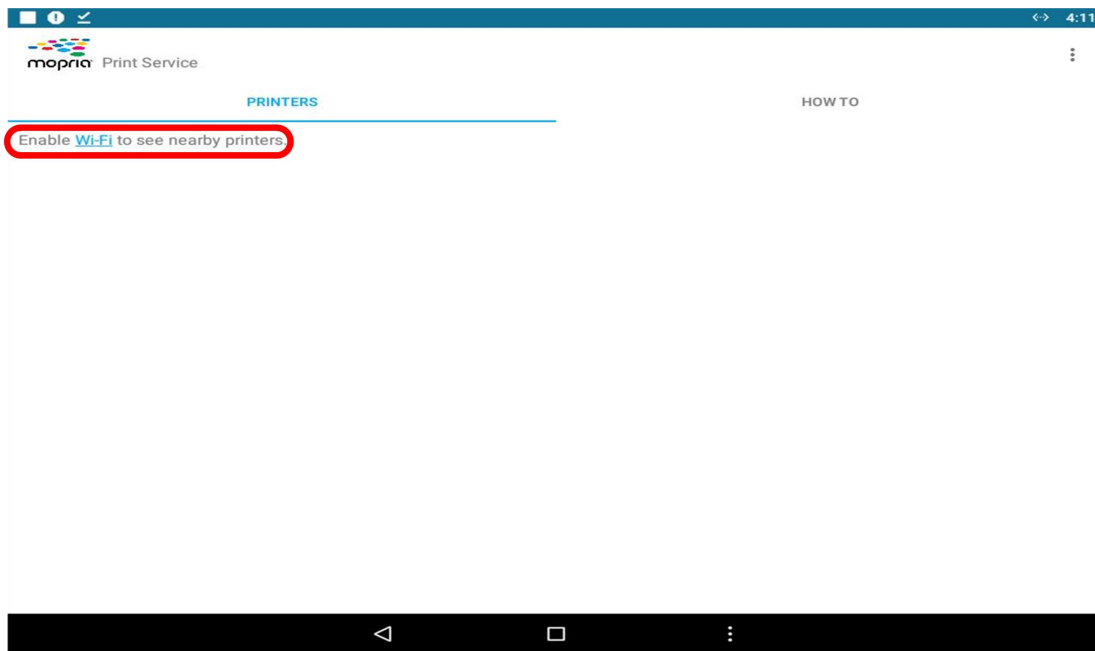


Figure 4-1

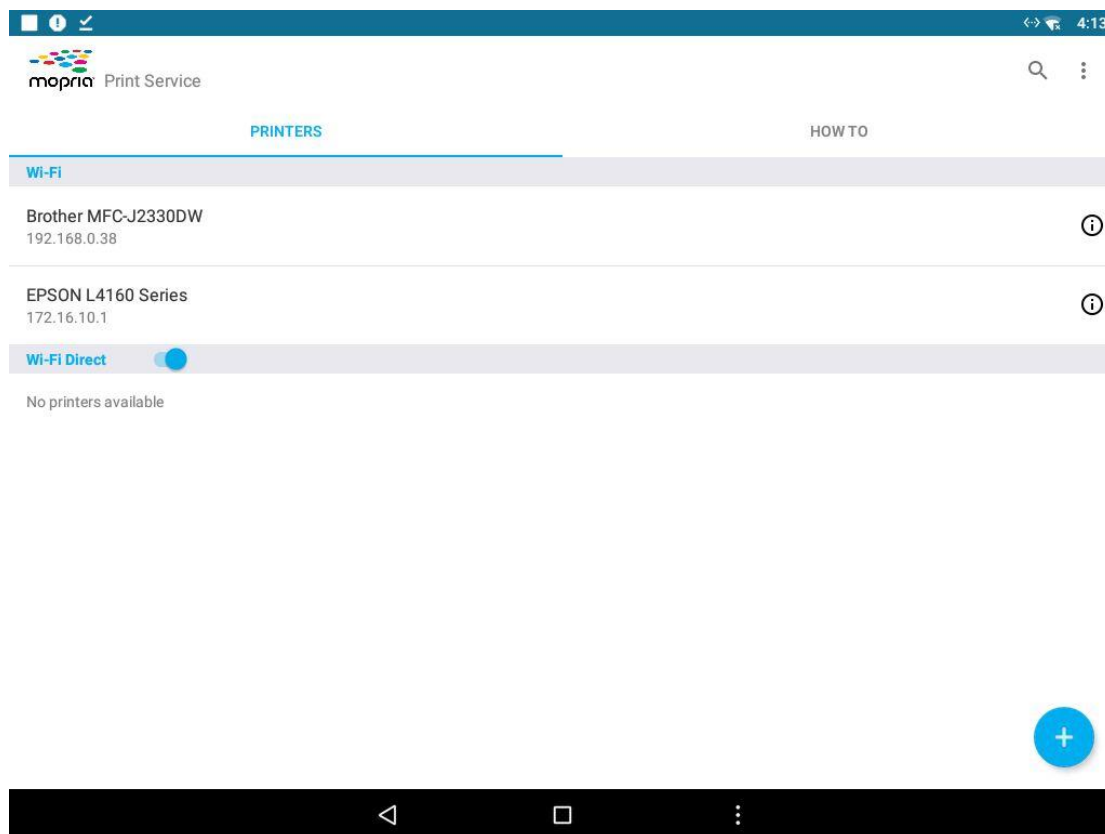
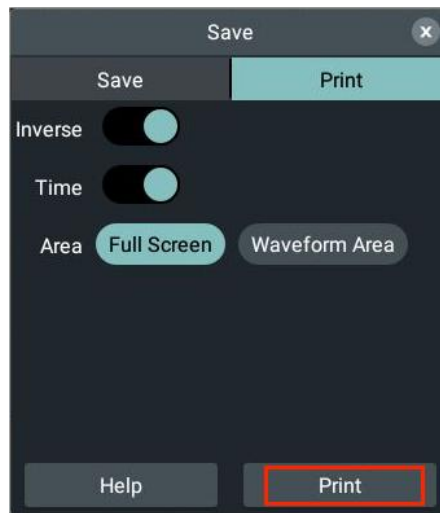
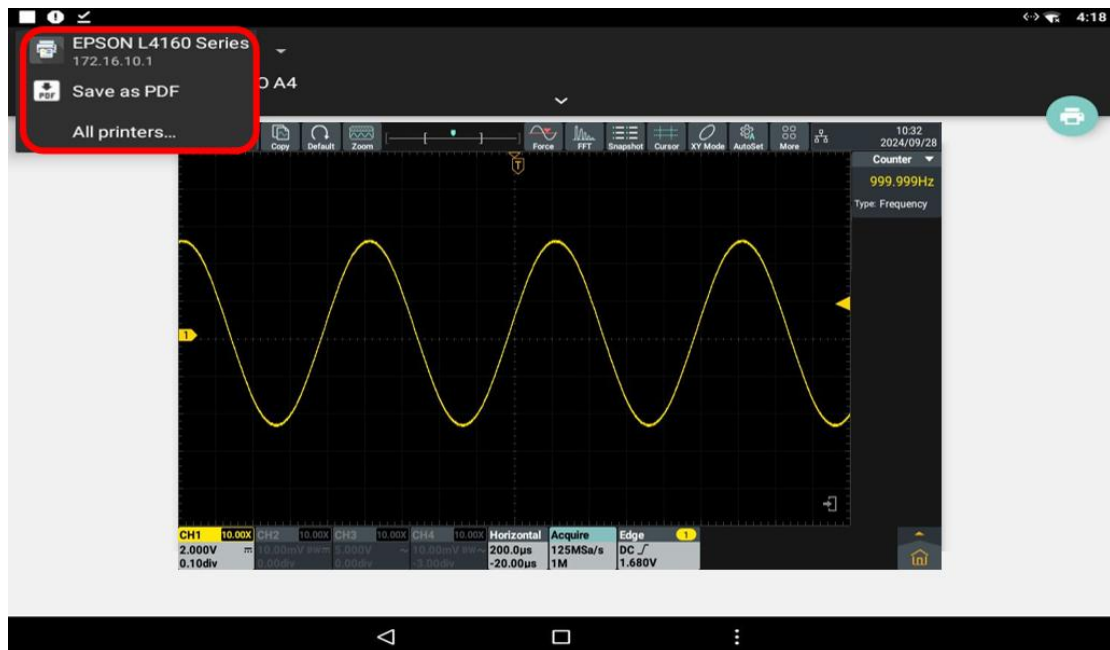


Figure 4-2

4. In the save function of the instrument, click **"Print"** button. In this lower menu, set the printing parameters. After setting the parameters, click **"Print"** to enter the printing interface, as shown in the below figure.



5. After connecting the printer to the instrument and setting the printing parameters, click **"Print"** button, the screen image of the currently selected area is printed, as shown in the below figure.



6. Click the printer drop-down box "EPSON L4160 Series 172.16.10.1", can set the number of Copies, Paper size, Color, Orientation, Two-sided, Pages. Click "🖨️" images can be printed, as shown in the below figure.

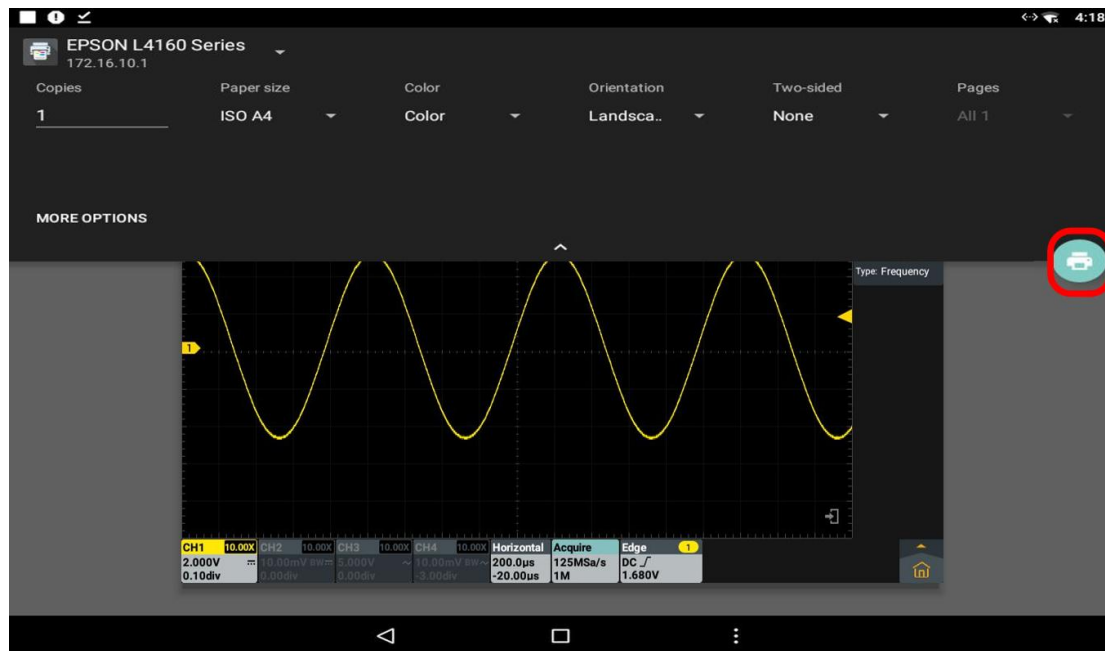


Figure 4-8

Note:

- Image printing can only be printed over a network connection, USB connection is not valid.
- When printing, turn off borderless printing in More options.
- If WIFI and network cable are connected at the same time, the printer may not be found, do not connect at the same time.
- The network printer requires the download of printer driver from files.owon.com.cn/software/APP/MopriaPrintService.apk. If the driver is incompatible with the printer, please contact the manufacturer and provide your own printer driver apk application.

5. Screen Recorder

1. Click "**App Drawer**" to enter System built-in application list to find "**Screen Recorder**" App as shown in Figure 5-1, or drop down the status bar click "" can start recorder, as shown in Figure 5-2.

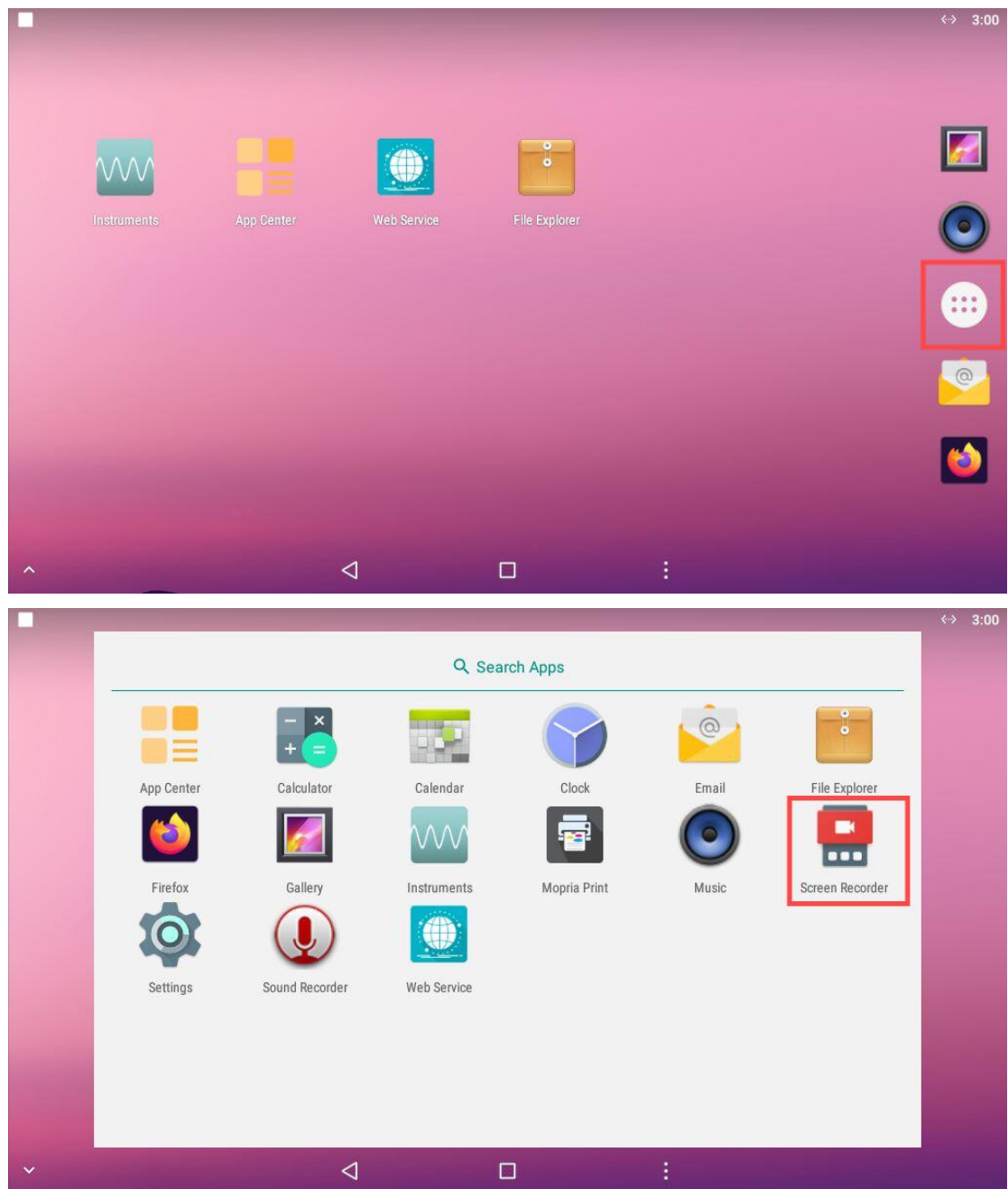


Figure 5-1

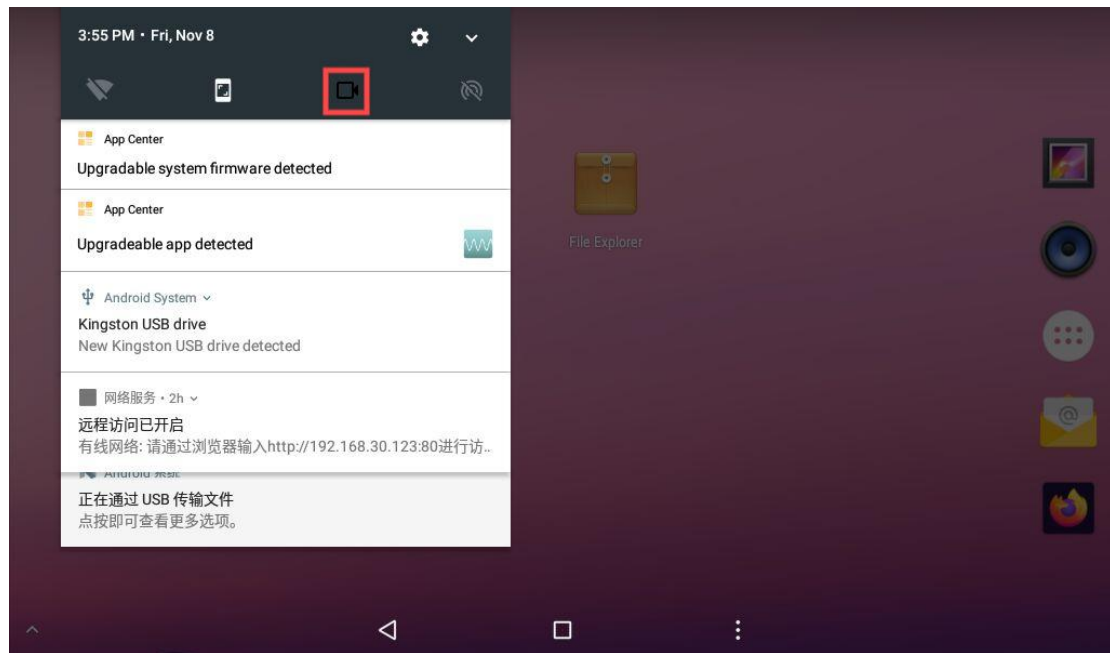
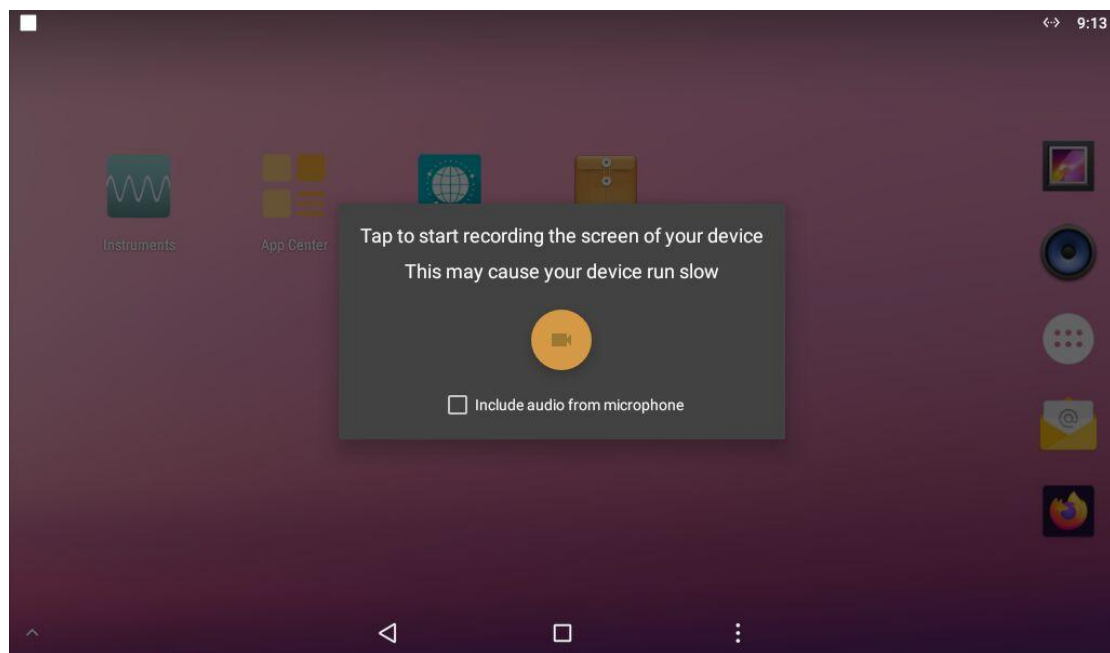
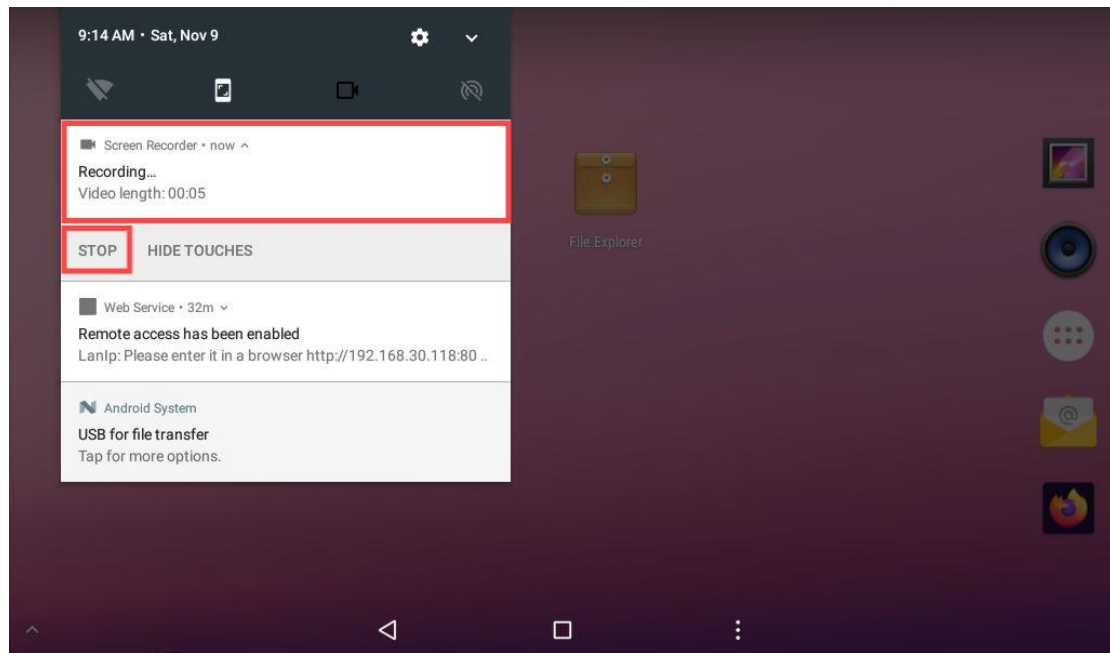


Figure 5-2

2. Enter "**Screen Recorder**" interface, click " " as shown in the below figure.

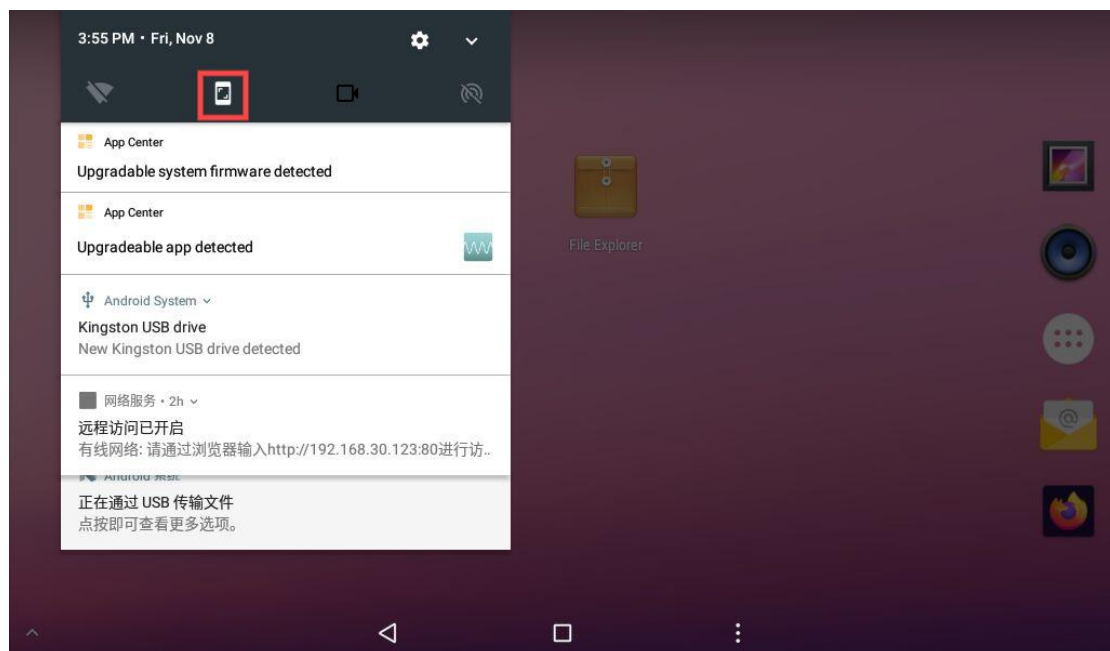


3. Drop down the status bar to see the screen recording time, click "**STOP**" to end the screen recording, as shown in the below figure.

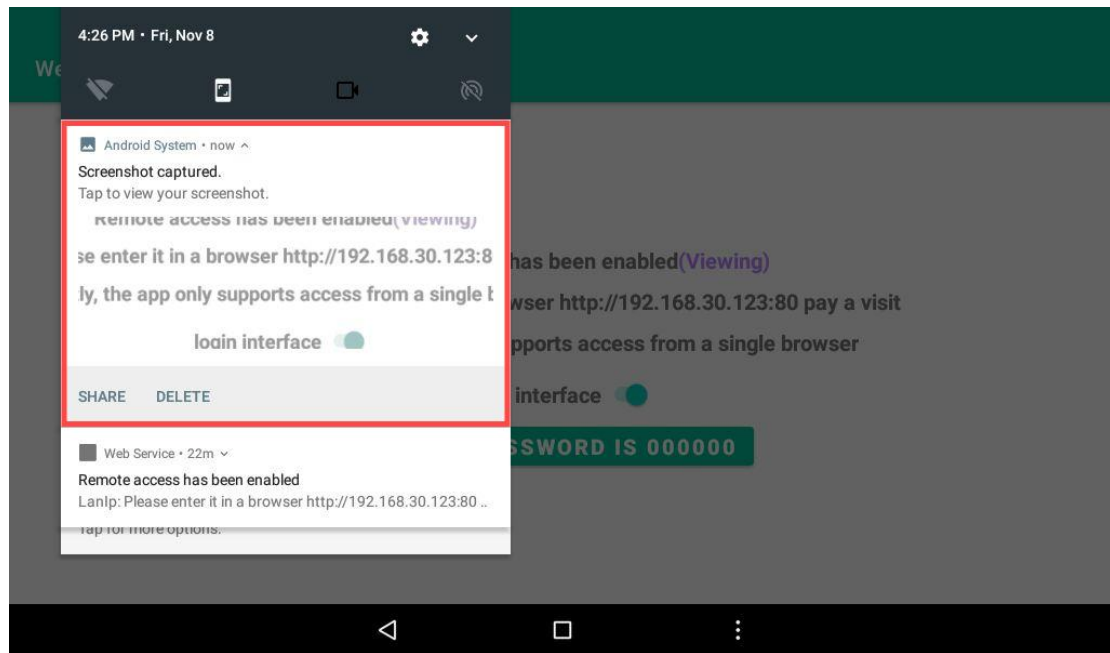


6. Screenshot

1. Drop down status bar and click "". It can take screenshots of the current display interface of the instrument, as shown in the below figure.



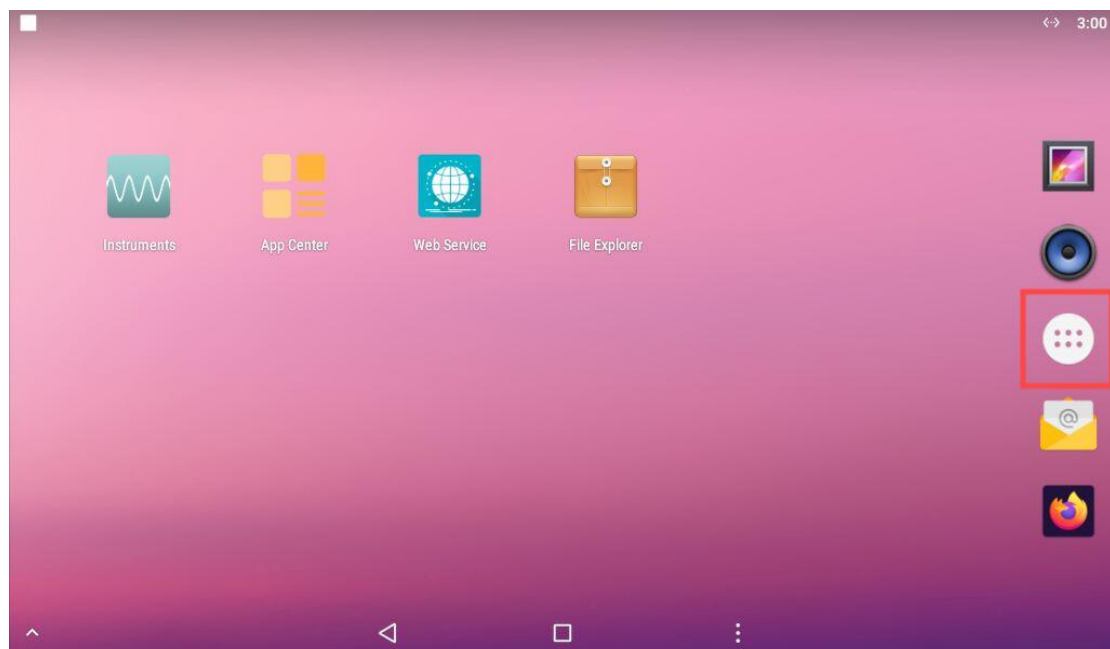
2. After the screenshot is complete, drop down the status bar to view the screenshot information, as shown in the below figure.

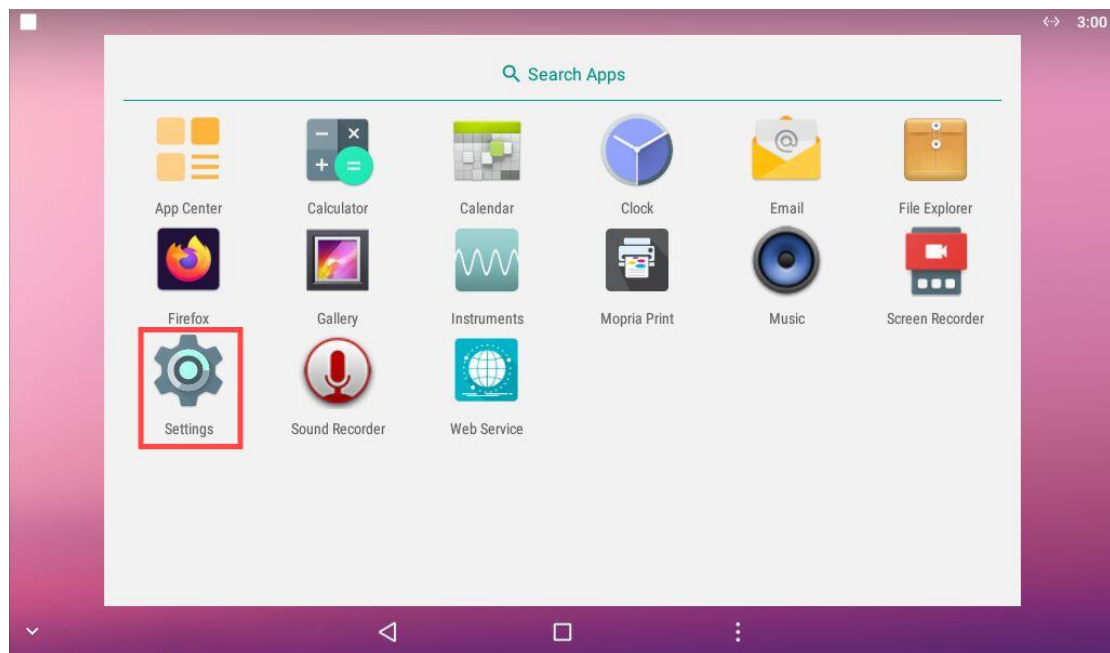


3. Click **"File Explore"**, can view the screenshot obtained.

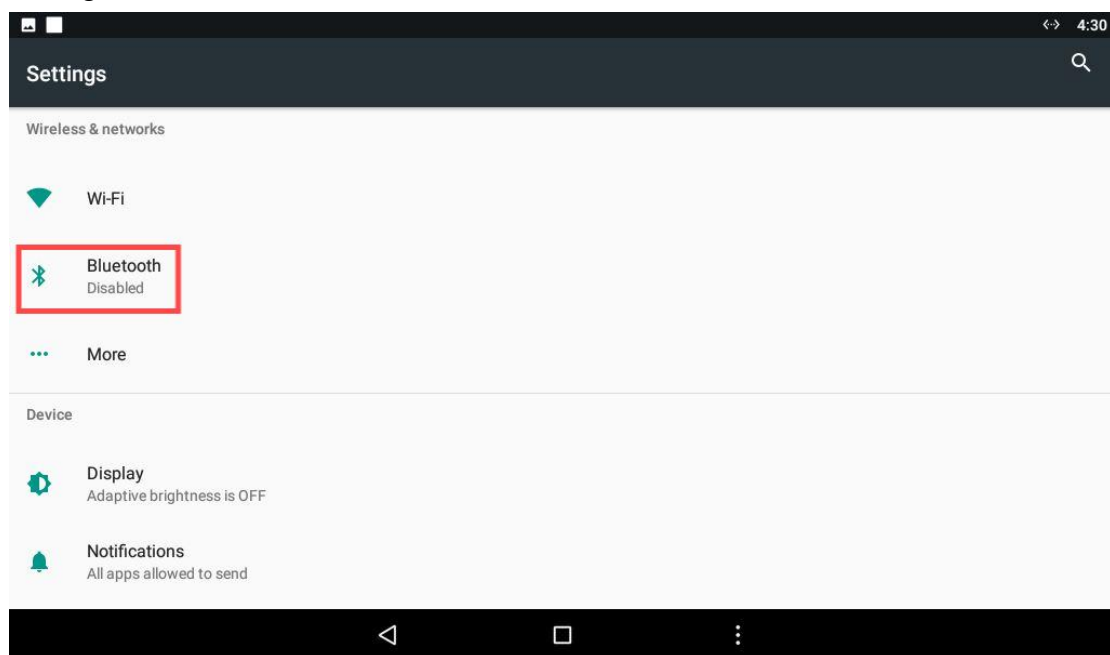
7. USB Bluetooth module

1. Click **"App Drawer"** to enter System built-in application list to find **"Settings"**, as shown in the below figure.

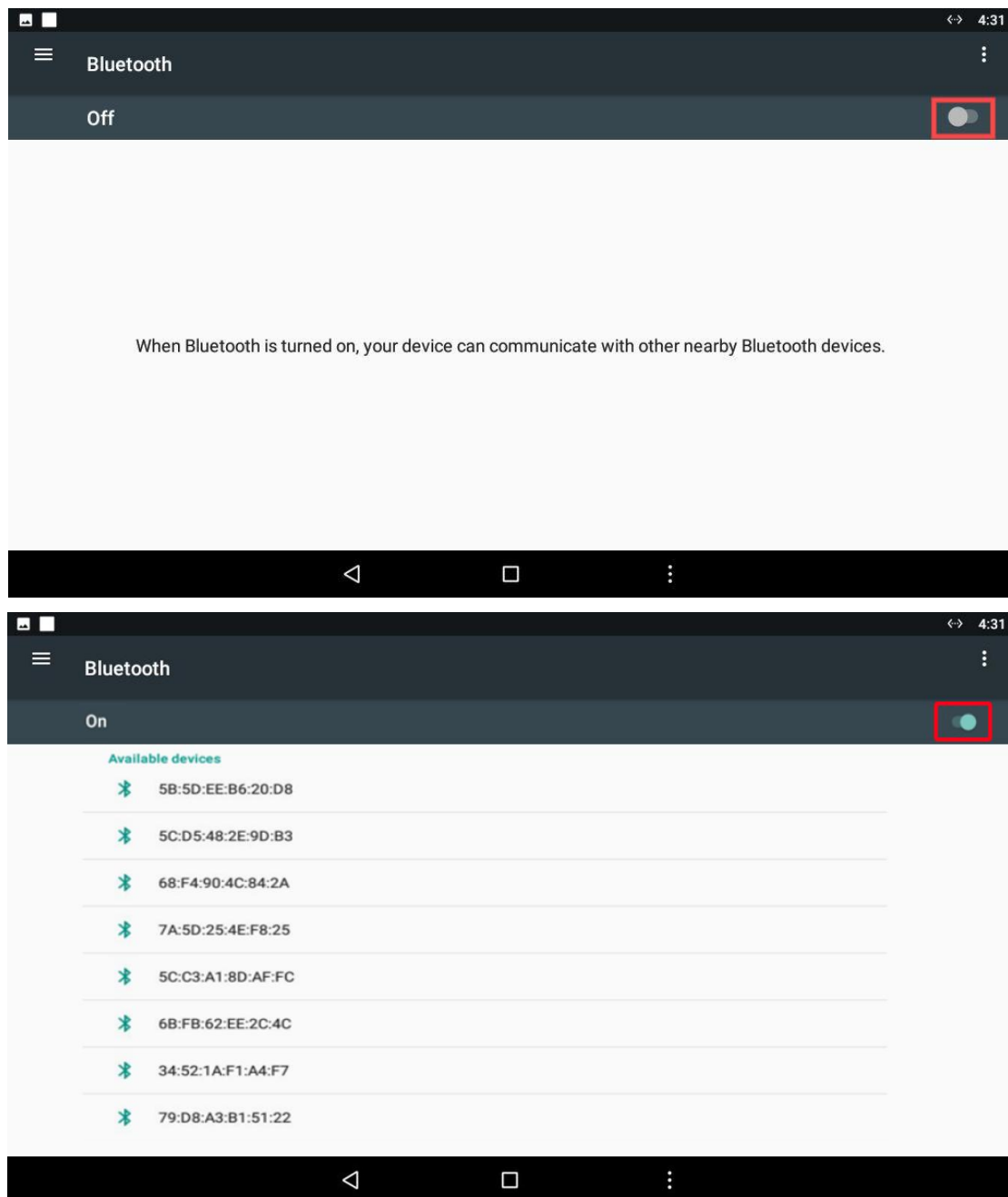




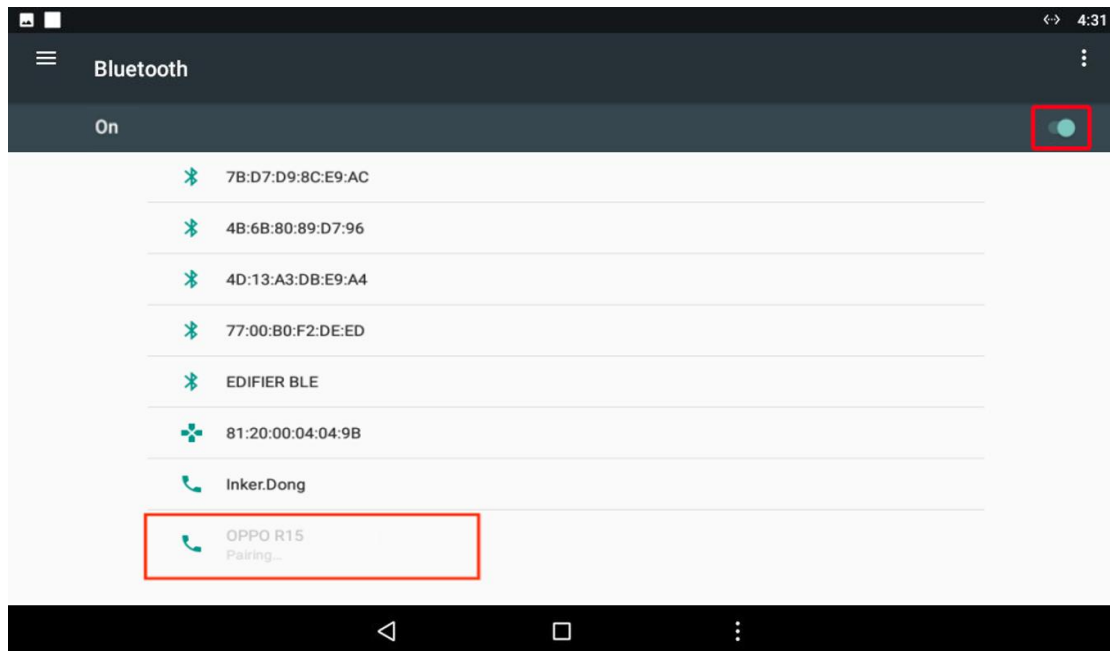
2. Enter "**Settings**" interface, click "**Bluetooth**", as shown in the below figure.



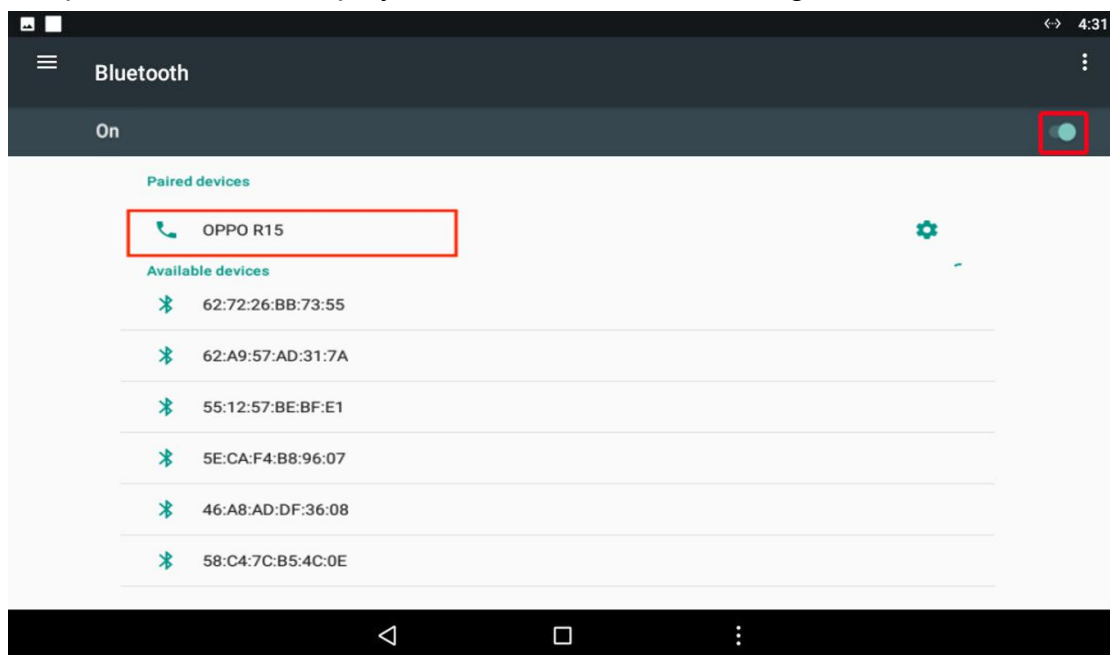
3. Enter "**Bluetooth**" interface, click the slide switch to turn on Bluetooth, and the system will automatically search for available Bluetooth nearby, as shown in the below figure.



4. In the "**Bluetooth**" interface, click the Bluetooth you want to connect, and the Bluetooth will enter the pairing state, as shown in the below figure.

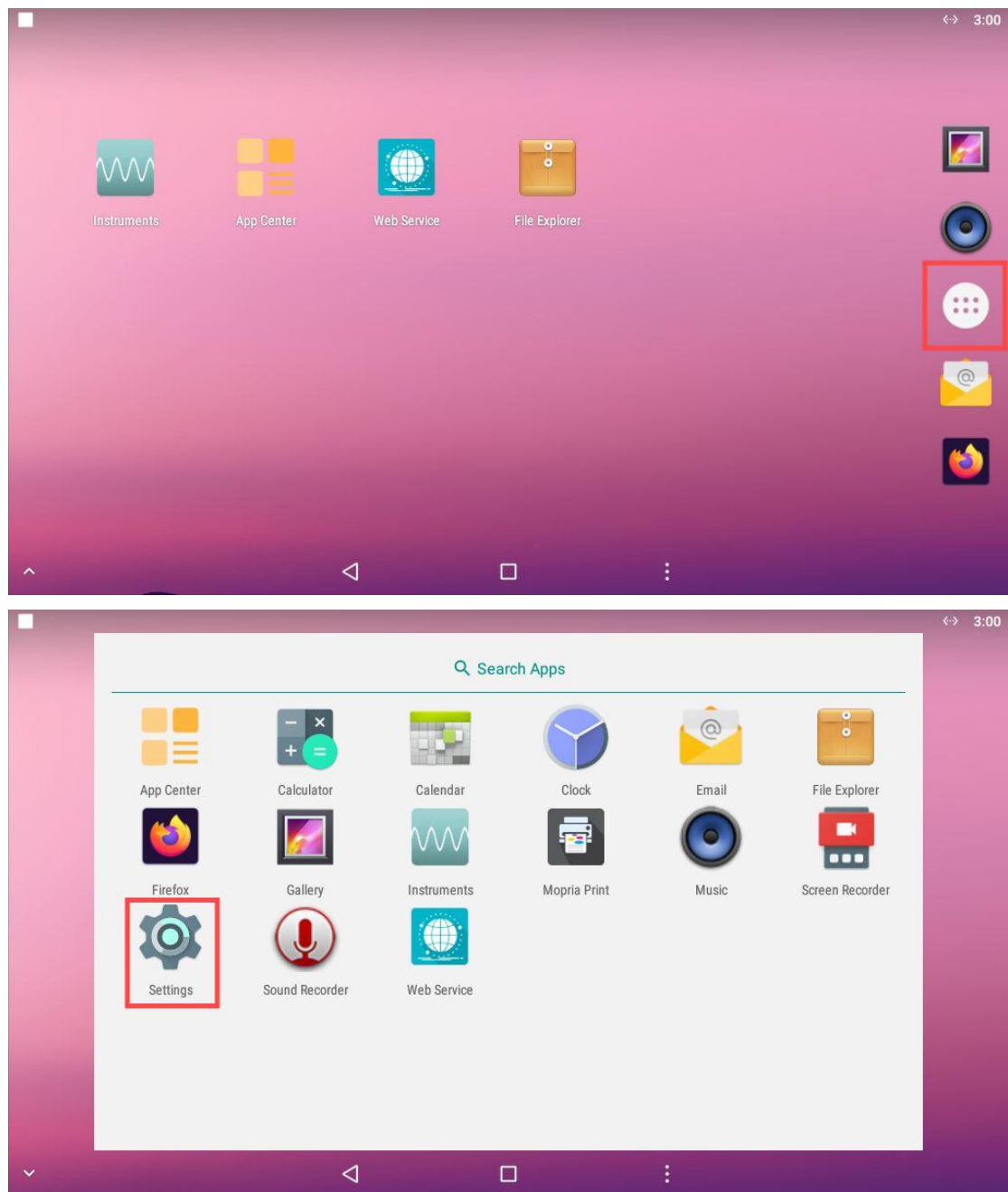


5. In the **"Bluetooth"** interface, Bluetooth pairing is successful, and the paired device is displayed, as shown in the below figure.

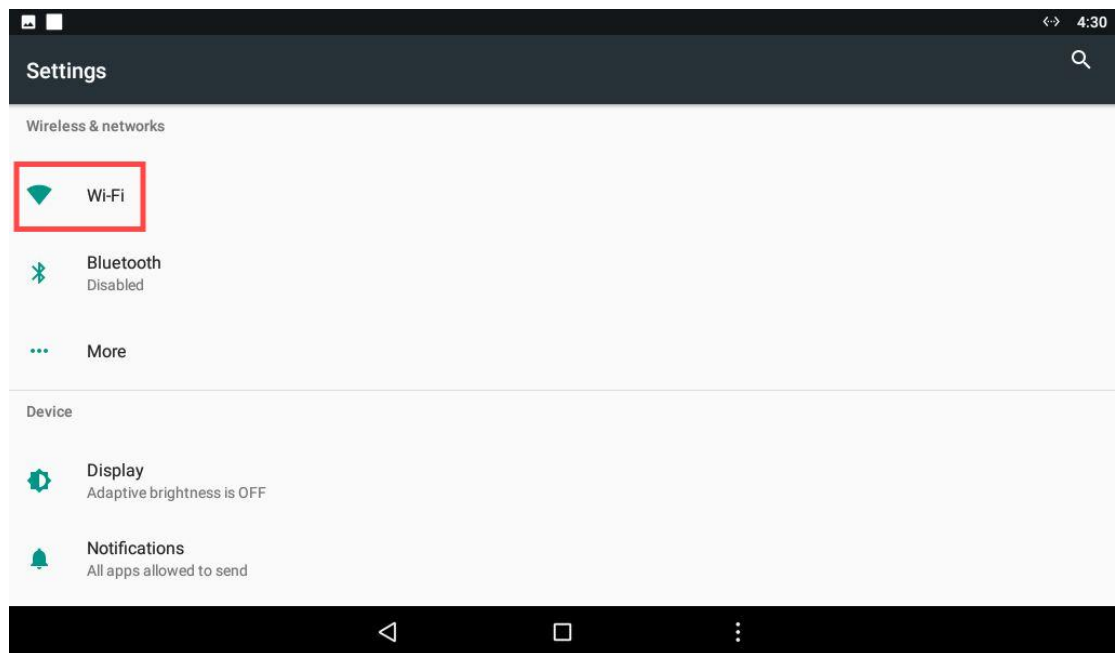


8. WiFi module

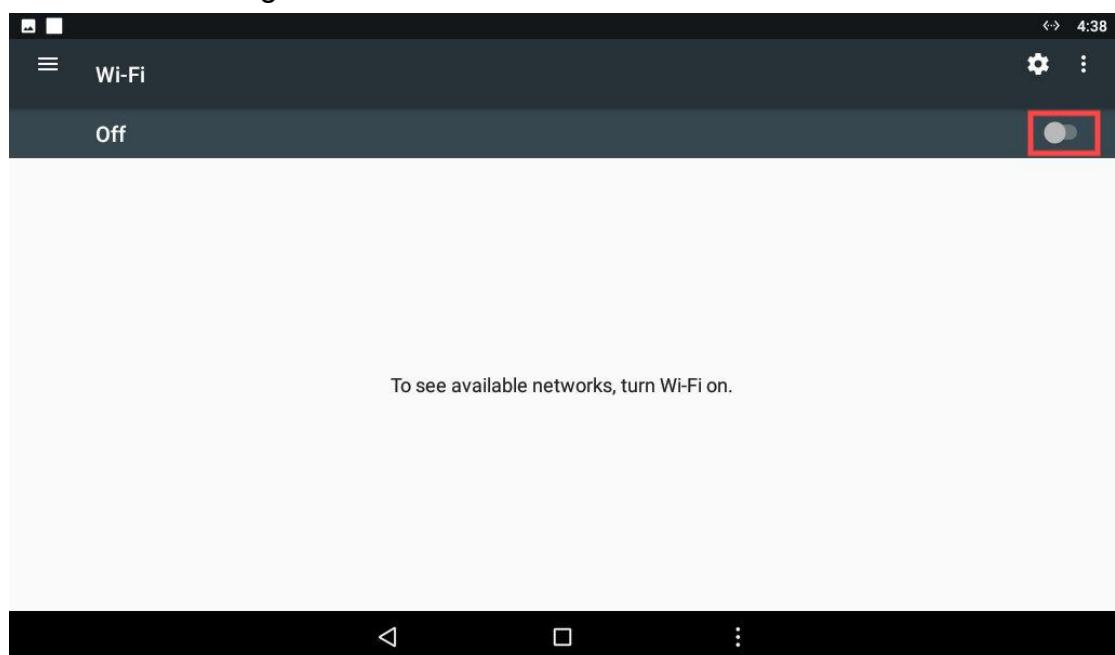
1. Click **"App Drawer"** to enter System built-in application list to find **"Settings"** App, as shown in the below figure.

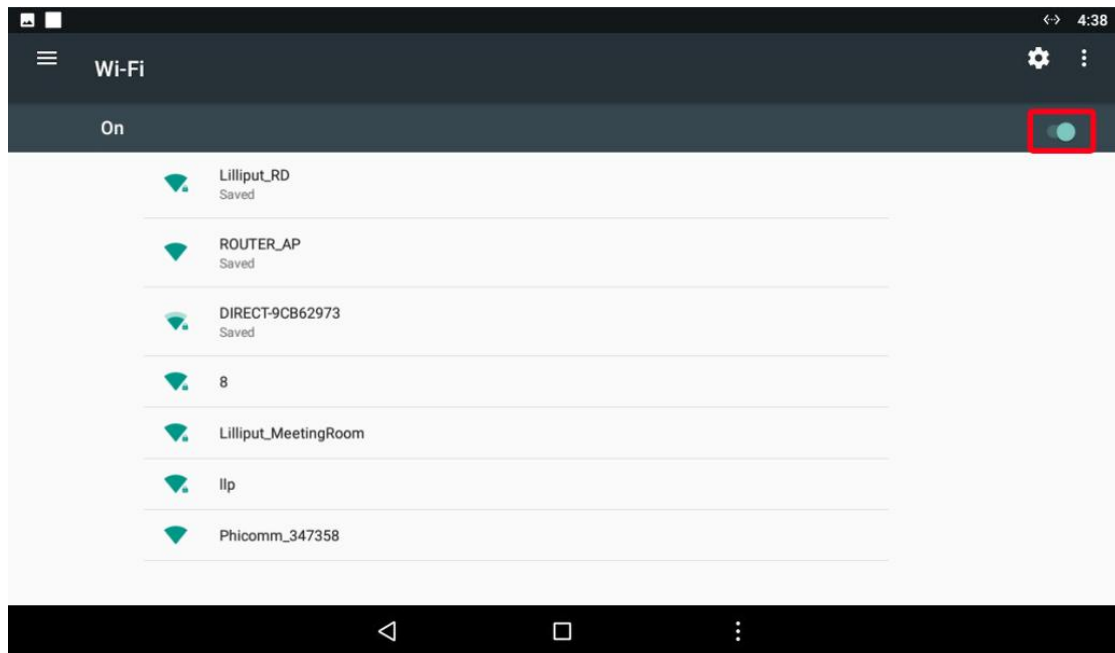


2. Enter "**Settings**" interface, click "**Wi-Fi**", as shown in the below figure.

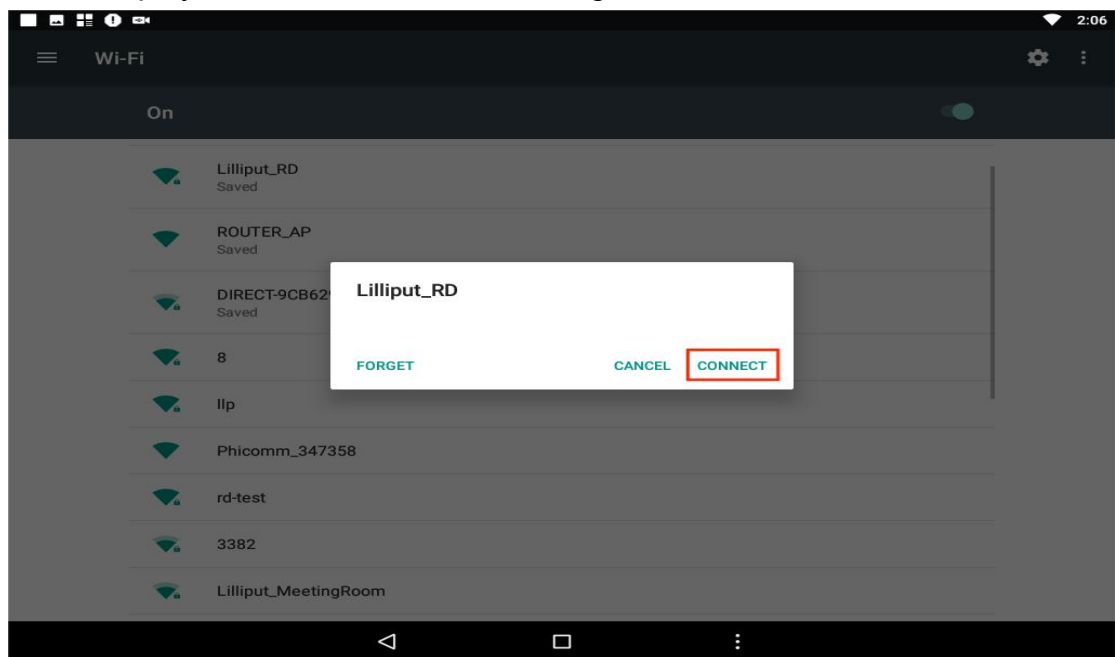


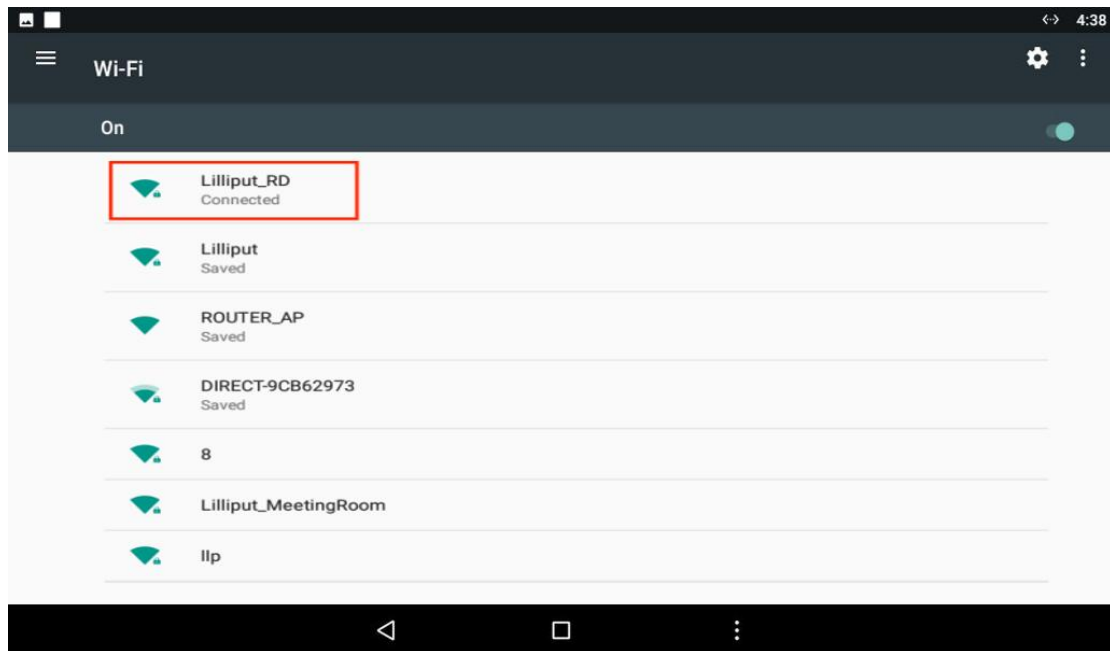
3. Enter "**Settings**" interface, click the slide switch to turn on WiFi, and the system will automatically search for nearby available networks, as shown in the below figure.





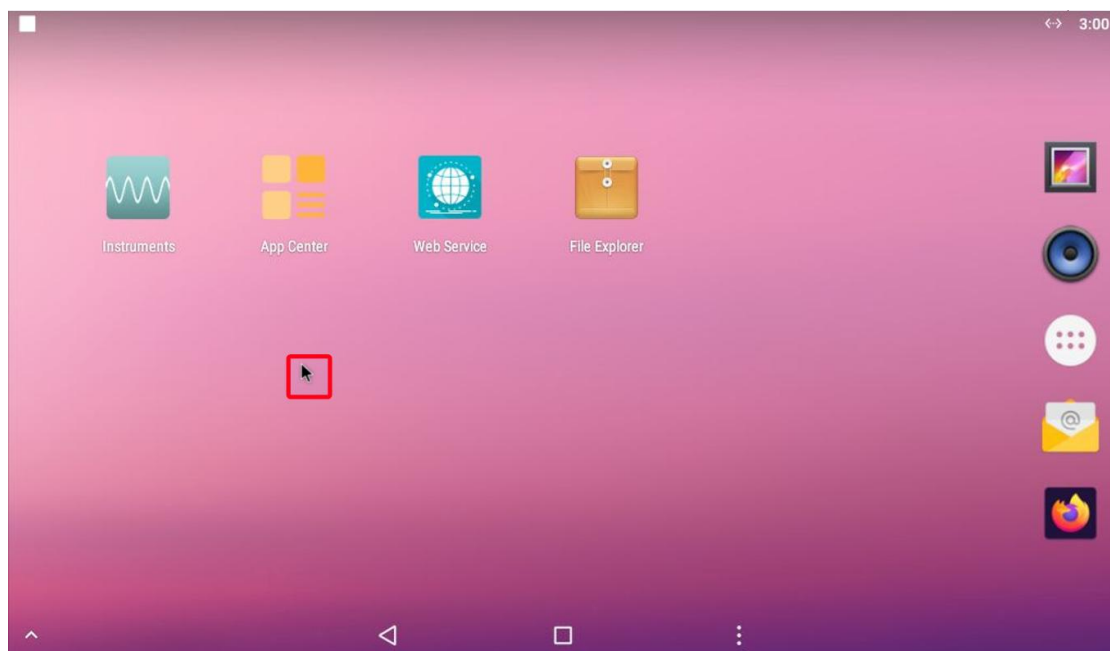
7. Select a network to connect, if the connection is successful, the connection is displayed, as shown in the below figure.





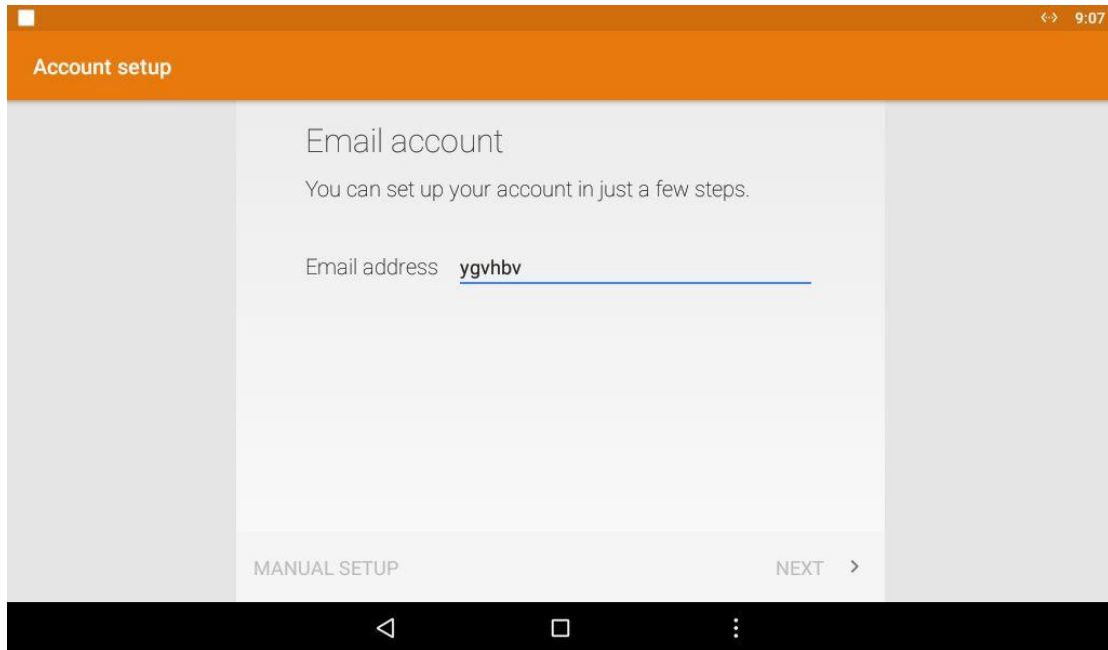
9. USB Mouse

1. When the USB mouse is inserted, the mouse chart will appear on the screen, as shown in the below figure. The mouse operation is the same as the PC side.



10. USB keyboard

1. When a USB keyboard is inserted, the keyboard can be used for input. For example, if you open Email, you can enter the content, as shown in the below figure.



Note: If you need to use the USB Bluetooth, WiFi module function, in order to prevent the incompatibility of the module, you need to purchase the module equipment from our company; among them, USB mouse, keyboard can be purchased compatible Android devices for use.