

RAK Video Module APP

User Manual v1.2

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1. Overview

The document is using for user manual of RAK Video module (RAK5206 and RAK5270).

Please note the module' s Part No.The other module can not use the document.Or use at your own risk .

RAKWIRELESS

2. Install APP

2.1 Install IOS APP

You can download IOS APP at the App Store through searching for **RakVideo** or scan QR CODE to download.



2.2 Install Android APP

Android APP download : <http://www.pgryer.com/rakvideotest> .

Open the link or scan the QR code via PC or mobile phone, then click install to download the APP. as figure 2.1 and figure 2.2.



Figure 2.1 Android APP

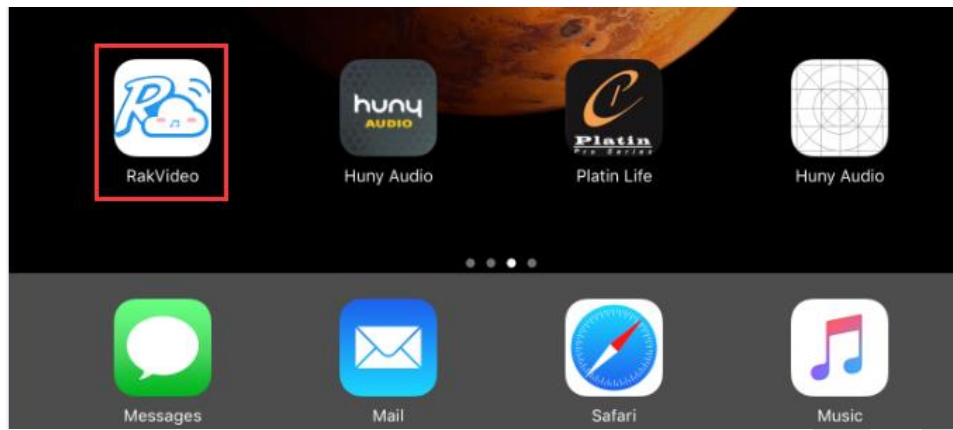


Figure 2.2 APP INSTALL

3. Configure the network mode

3.1 AP mode

Module	SSID Naming rules	SSID Examples	Work Band
RAK5206	LTH_ the last 3bytes of MAC	LTH_670B5C	2.4GHz
RAK5270	LTH_5G_AP_ the last 3bytes of MAC	LTH_5G_AP_670B5C	5.8GHz

Note: if you use RAK5270, please make sure your smart phone supporting 5.8GHz WIFI.

The following example with RAK5270: :

3.1.1 Mobile phone connect to Module 's AP.

- After power on and wait for 30 seconds, the module create softap.

If you can scan the SSID , please connect the softap with smart phone. As figure 3.1.

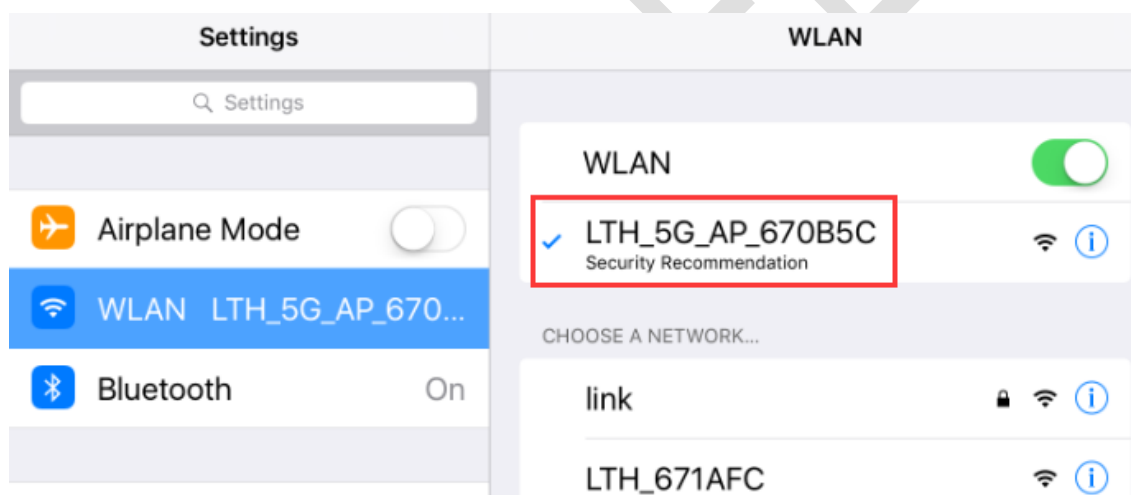


Figure 3.1

- After power on and wait for 30 seconds, the module will not create softap. please check the module' s Blue LED.

- ✖ If the blue LED is blink slowly, that means the module have connected to a router .you have to run into the factory reset mode to return to softap.
- ✖ If the blue LED is ight all the time , pls power off and power on the module , and check the following items.

- 1) Please check your smart phone supporting 5.8GHz WIFI or not ;
- 2) The power supplier is enough or not .please make sure the power supplier taking **5V@1.5A or 12V@1A** capacity;
- 3) Please the RED LED(power LED) light or not ;if not , the module have damaged.
- 4) Please check the antenna connecting or not.

If you check the items above ,please power on the module and if you can not scan the SSID ,please [Contact us](#) .

3.1.2 Play video in local

- After phone join to the AP, open the RakVideo.
- RAKVideo scan new device: 670B5C(this name depend on the SSID to distinguish the different device), and the icon becomes new color, as figure 3.2.

If there is no new device ,please execute the following steps.

1.Check whether the phone is successfully connected to the module's AP.

2.click refresh icon in the top right corner.

- Click the device have been scanned(as figure 3.2) -> select the video decode format(Only use for android phone,the default is software decode, and the hardware decode have Compatibility problems; the apple can only support hardware decode) -> select video stream format(H.264 is default;MJPEG will occupy a lot of bandwidth.RAK5270 can not support MJPEG) -> Input the Password(default code : **admin**) (as figure 3.3 and 3.4) -> Click Connect to play video, as figure 3.5.

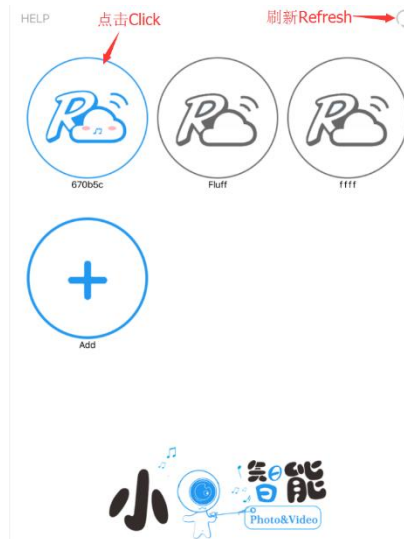


Figure 3.2 scan new device

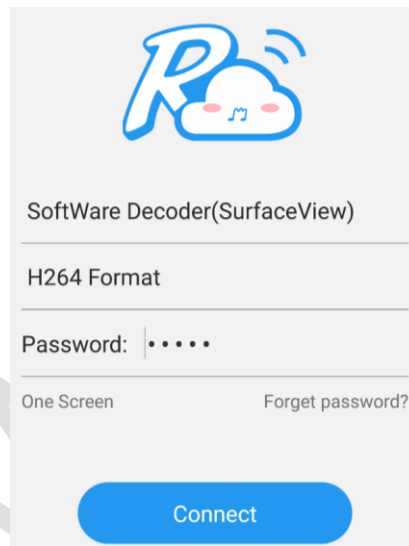


Figure 3.3 Android configure itmes

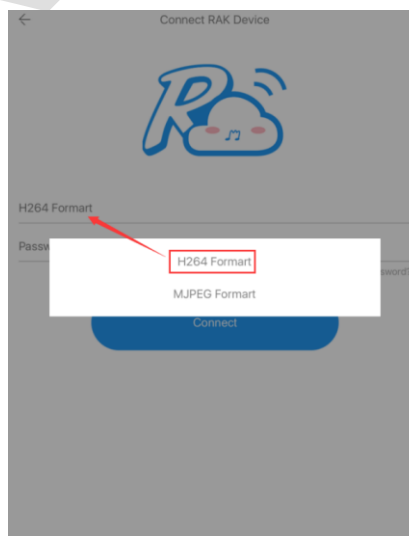


Figure 3.4 apple configure itmes

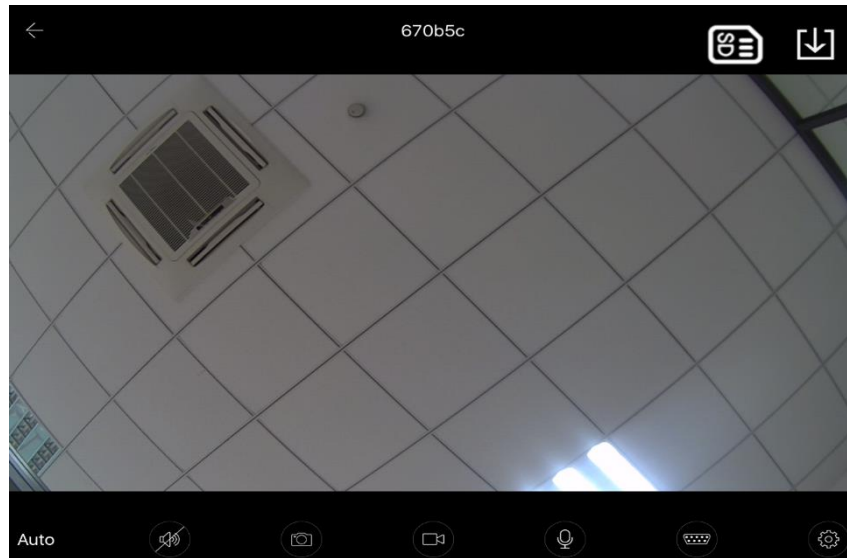


Figure 3.5 Play Video

3.1.3 Play UI

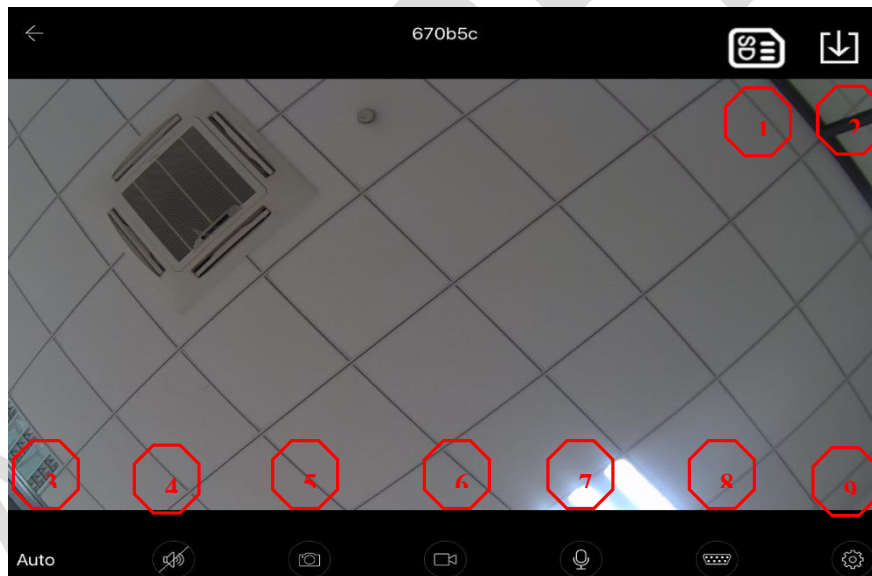
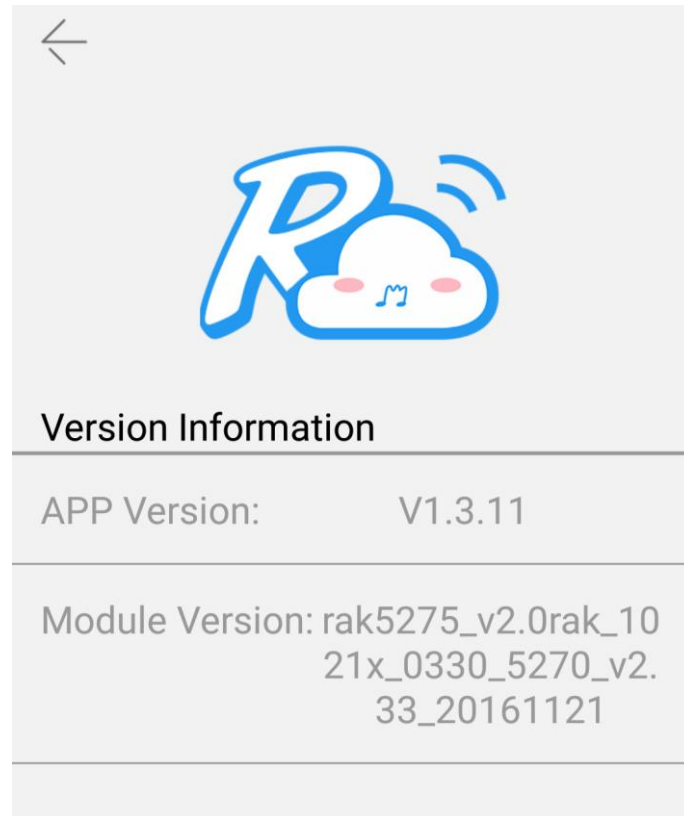


Figure 3.6 Play UI

- | | |
|---|--------------------------------|
| ① D card record | ⑤ Take photo in phone |
| ② Local photo and recording video | ⑥ Recording in phone |
| ③ Select resolution. Default resolution:
720P(local mode) and auto(remote mode). | ⑦ Talkback with module |
| ④ Smart phone play audio or mute. | ⑧ Serial port for transparent. |
| | ⑨ Setting |

3.1.4 Settging page

Check the module' s firmware version through the setting page.



3.2 STA mode--Connnet the router

3.2.1 Softap Configure

- After the module power on ,make sure the phone connect to module AP. Then open rakvideo to configure.
- Click the " + " icon, as Figure 3.7 -> Local RAK Device, as Figure 3.7 -> APConfig.

HELP

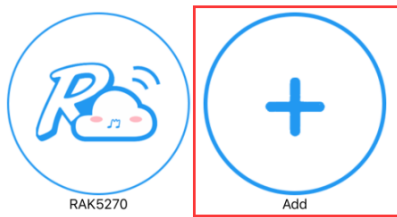


Figure 3.7 add icon

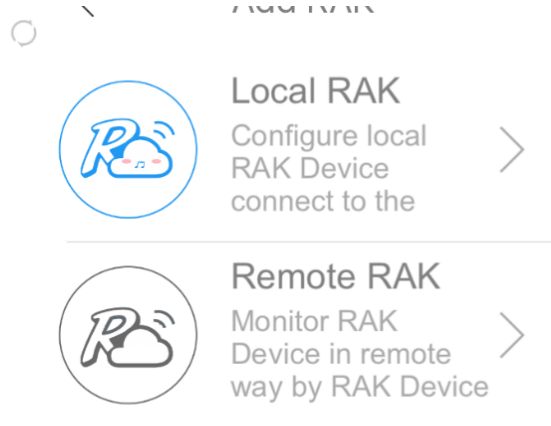


Figure 3.8 Local config

Click label 1 icon to scan the SSID nearby(about 3 seconds) → select the router' s SSID (Manual-Inputing is allowed. RAK5270 muse be 5G SSID ,or the connection will be failed)(figure 3.9) → Input the password of the Wi-Fi network(figure 3.10) → Click the "NEXT" .

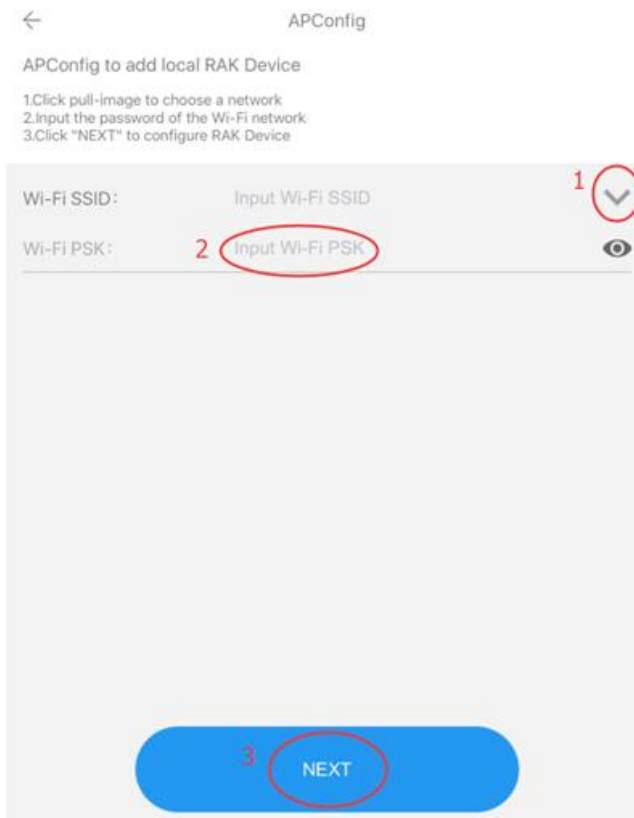


Figure 3.9 scan WIFI SSID

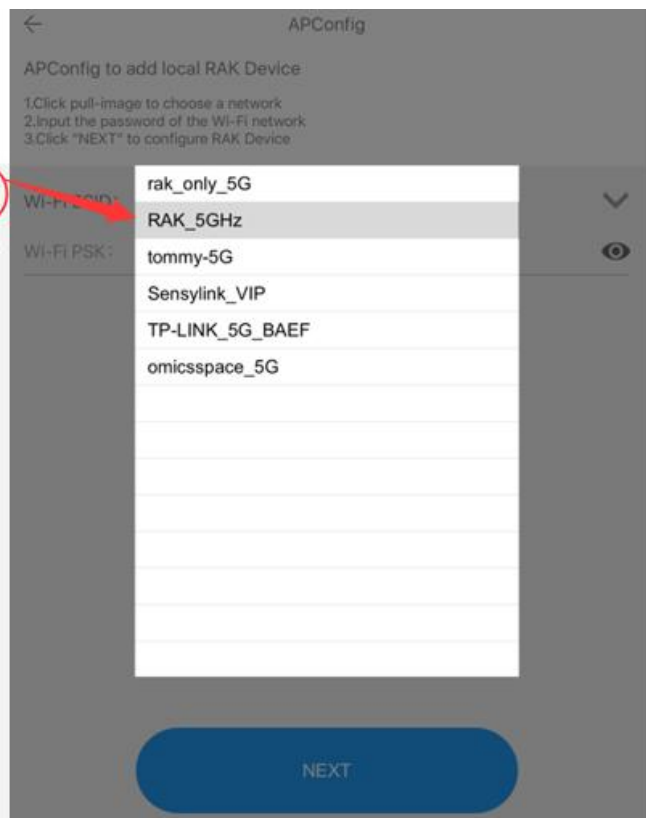


Figure 3.10 input password

- Follow the steps on the APP to click NEXT., as figure 3.11.

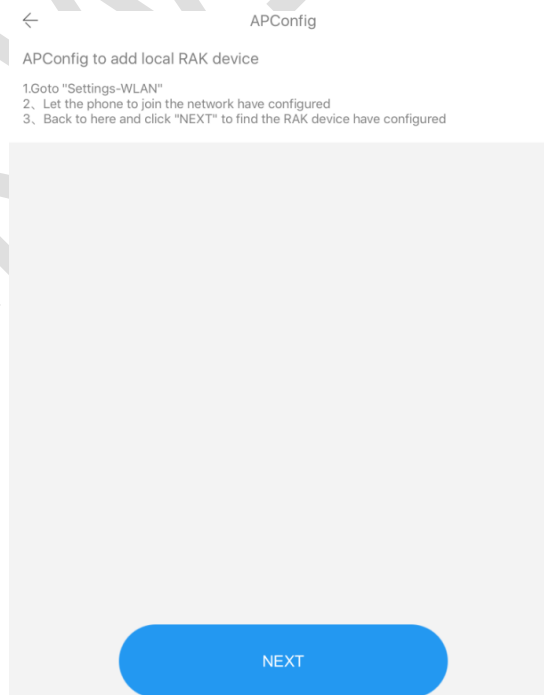


Figure 3.11 NEXT

- According to the reminder , connect the router which the module connected(RAK_5GHz ,as Figure 3.10 shown),then click “NEXT” , as figure 3.12.

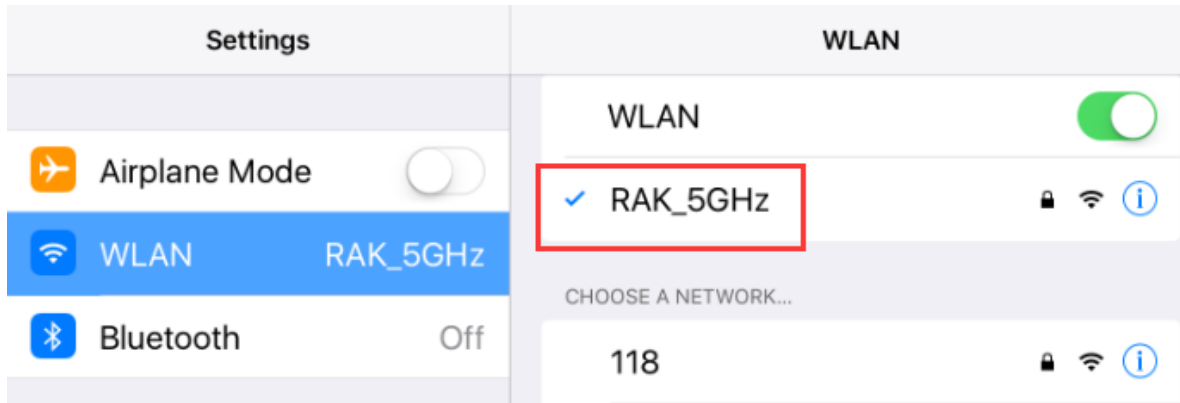


figure 3.12 connect router

- Return to APP , and click NEXT. You should enter a name for you RAK module.such as RAK5270 , as Figure 3.13. After that, it will automatically jump to the home page, and you will see that the module has been added successfully , as Figure 3.14.

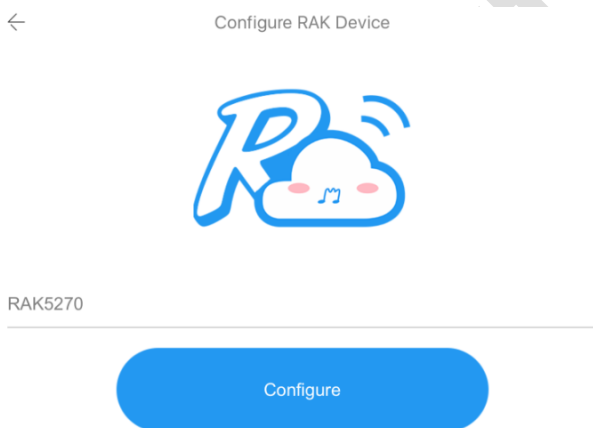


Figure 3.13 Name the device

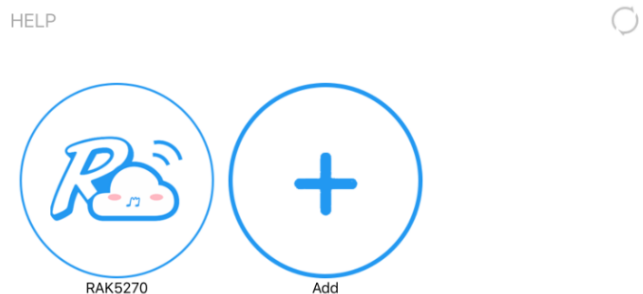


Figure 3.14 New device

- Click the device icon, enter the password you can play the video(reference the Part [3.1.2 Play video in local](#) for the detailed steps), as Figure 3.15.The first time you click to play the video, you need to enter the password. The password will be saved, once again enter do not have to enter a password.

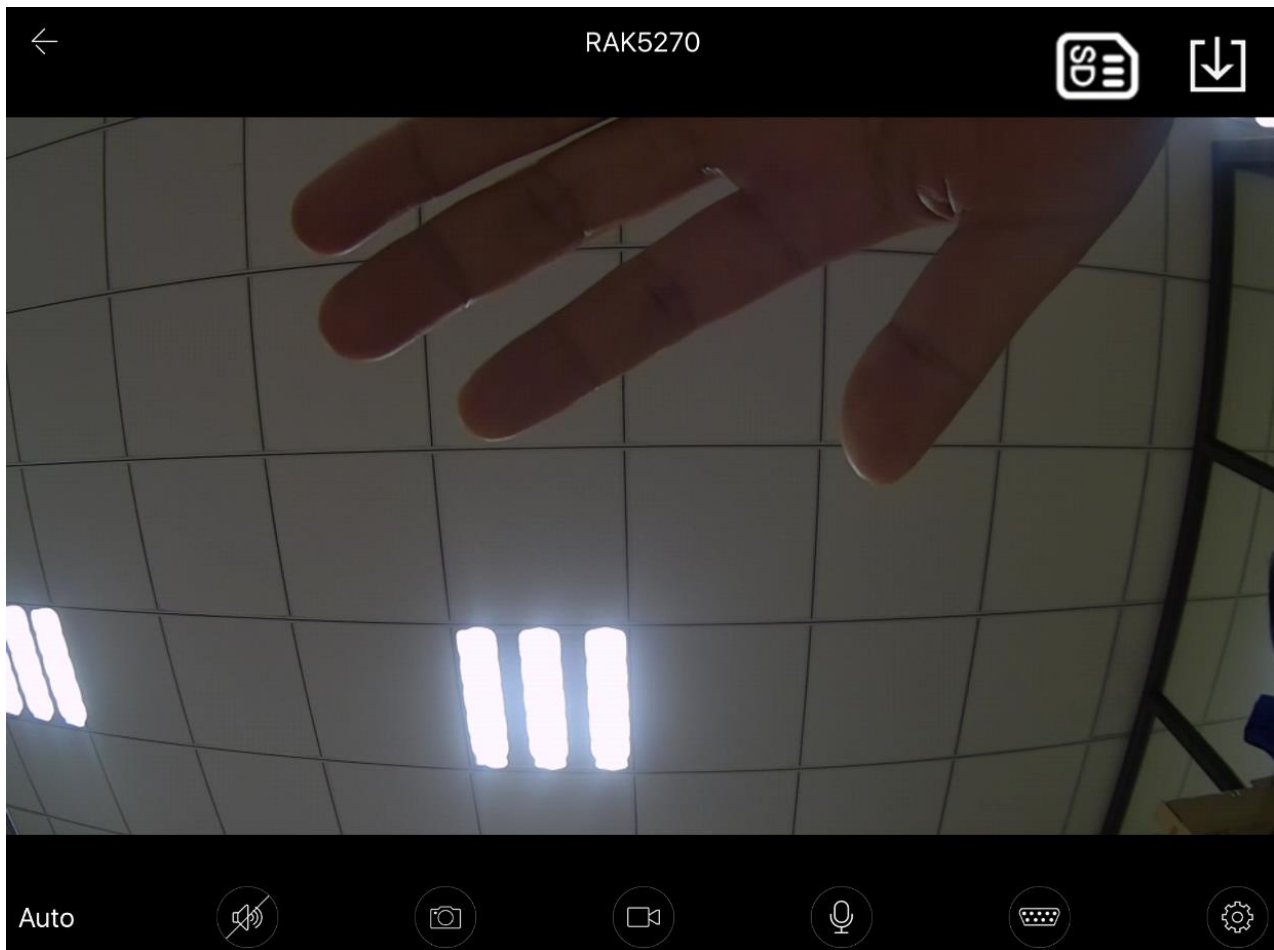


Figure 3.15 play video in STA mode

3.2.2 Easyconfig configuration

Note:

- 1, we can not support this mode.
- 2, Now RAK5270 does not support this function, here with RAK5206 module as an example.
 - After the product started,make sure the phone connect to a network,the phone APP begin to configure.
 - Click the "Add" icon→ Local RAK Device,→ Easyconfig,as figure 3.16. WiFi password will automatically add in, click the "NEXT"

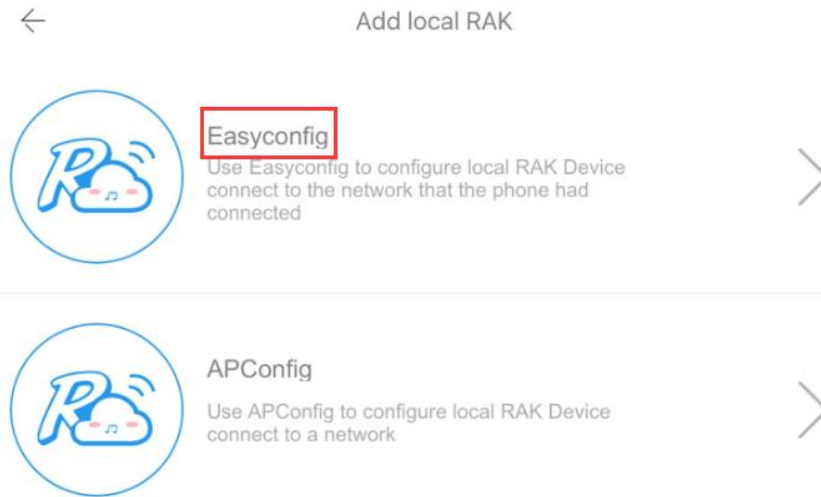
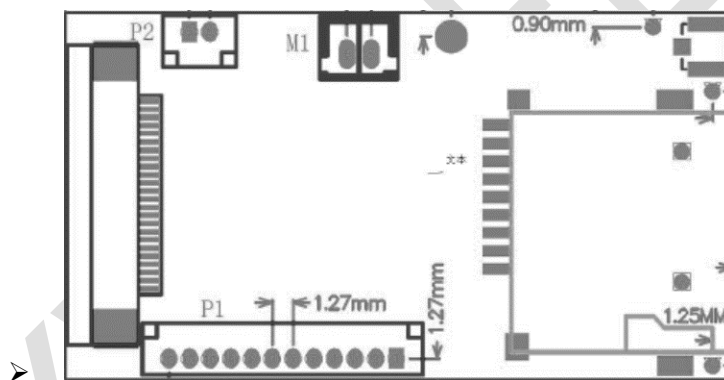


Figure 3.16 easyconfig mode

- Press the module's Easyconfig pin to connect the ground for less than 3s:
PIN5 of P1 connector is Easyconfig PIN. please get more information from datasheet.



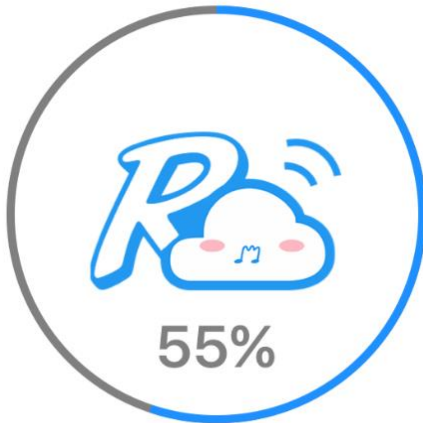
P1

Pin	Name	Description	Remark
1	VDD_5V	DC 5V	Input range:3.6V~5.5V (500mA)
2	HUR_TXD/RMII_TXD1	Serial port. Send Data	Complete serial pass-through Interface. [Here the order of the pin is the version of the hardware V1.1, V1.1 before the version (including the V1.1 version) in which the order of the two pins is reversed]
3	HUR_RXD/RMII_TXD0	Serial port. Receive Data	
4	GND	Power ground	
5	GPD3/RMII_MDIO	GPIO	

the module's status light will blink quickly, then click "Next" to configure, as figure 3.17.



Connect to RAK Device,



← Configure RAK Device



rak

Configure

Figure 3.17 config processing

Figure 3.18 config successfully

- You should enter a name for you RAK module. Here to demonstrate the name of the input is rak. After that, it will automatically jump to the home page, and you will see that the module has been added successfully , as figure 3.19.

HELP



rak



Add

Figure 3.19 new device

- Click the device icon, enter the password you can watch the video.

3.2.3 play remote video

P Scenario 1: play your device's video

- Use the method above to configure the module to a router that can connect to the network.
- Choose to use the 4G network or connect to another router, you can remotely watch the video, as figure 3.20. Remote home page icon is gray, as picture 2.1.2.13.

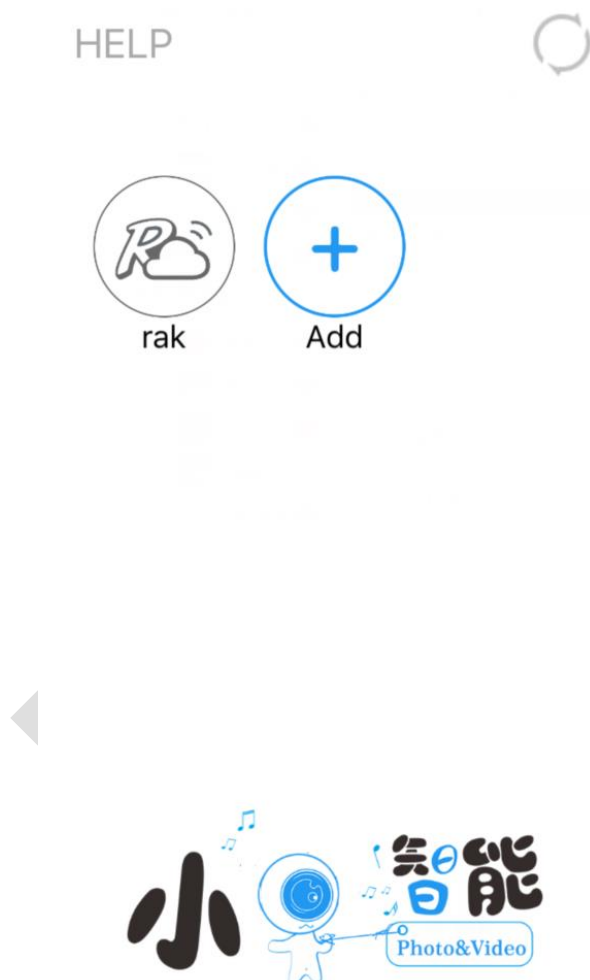


figure 3.20 remote device



figure 3.21 remote video

P Scenario 2: Remote viewing of your device's video

- Use the method above to configure the module to a router that can connect to the network.
- In the home page, press the device icon 3s, you can manage the device, as . After copying the device ID, you need to tell the customer II the ID and name of the device 2, as picture 2.1.2.16.

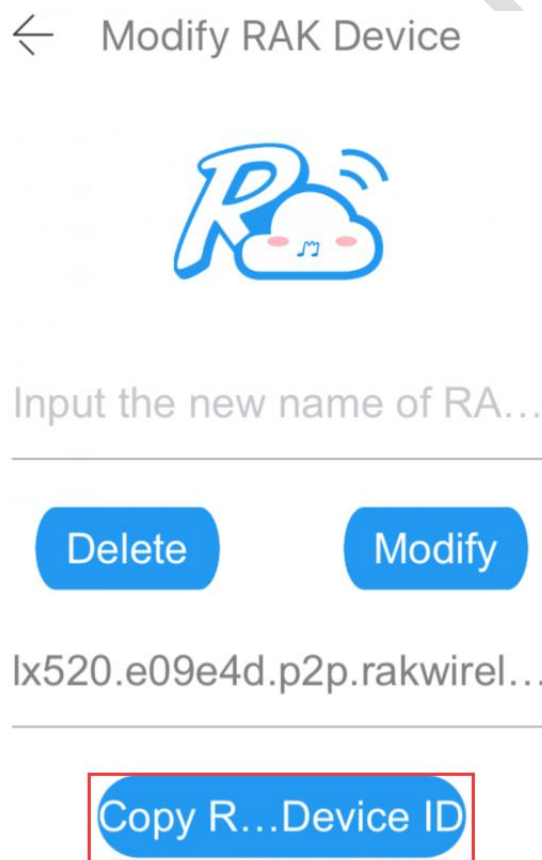


figure 3.22 share device ID

- Customer II opens the RakVideo APP, Click the "Add" icon → Remote RAK Device → Enter the device ID and name, as figure 3.23 → Click "Add" button, After successful addition, it will automatically jump to the home page and display the device.

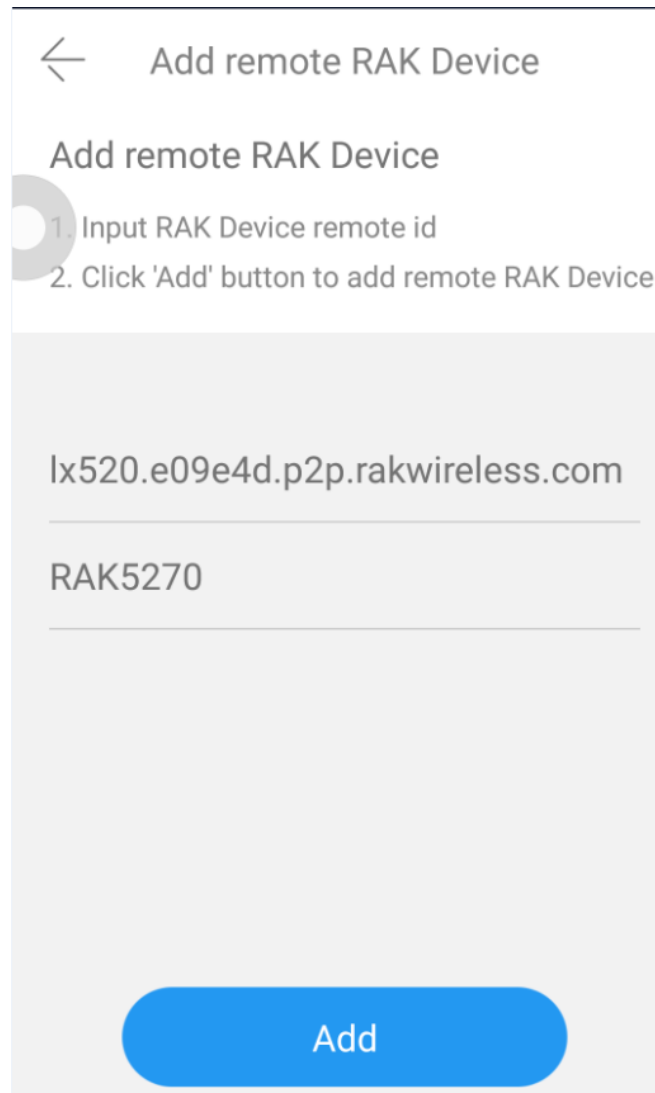


figure 3.21 add remote device

- Click the device icon, enter the password you can watch the video.

3.3 Reset to Factory mode

If you need to connect to other router or you forget the password , or even you input the wrong password or ssid to the module , you have to use the factory reset function to make the module run into AP mode .

3.3.1 RAK5206 operation manual

PIN5 of P1 connector is Easyconfig / factory reset mode . the definition pin is followed. And please get the detailed information from datasheet .

If PIN5 connect Ground (GND) less than 3 seconds, it is Easyconfig mode . if the time more than 5seconds , the module run into factory reset mode .

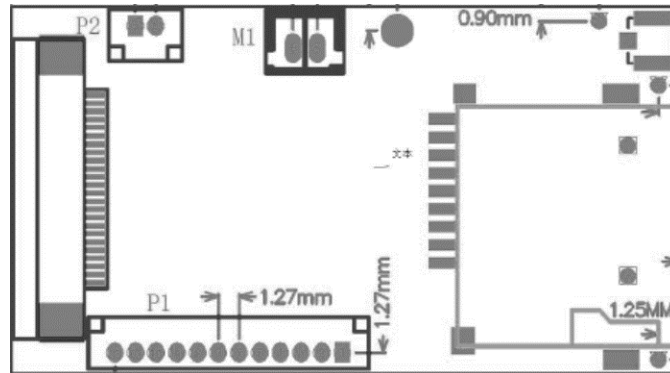


figure3.24 P1 connector

P1

Pin	Name	Description	Remark
1	VDD_5V	DC 5V	Input range:3.6V~5.5V (500mA)
2	HUR_TXD/RMII_TXD1	Serial port. Send Data	Complete serial pass-through Interface. .[Here the order of the pin is the version of the hardware V1.1, V1.1 before the version (including the V1.1 version) in which the order of the two pins is reversed]
3	HUR_RXD/RMII_TXD0	Serial port. Receive Data	
4	GND	Power ground	
5	GPD3/RMII_MDIO	GPIO	

figure3.25 P1 definition

If PIN5 connect GND more than 5s, the blue LED will be darken and then the module will reboot again . break off the PIN5 and GND , the module will work with softap mode and the module' s password will be reset **admin**. Repeat the steps above again .

3.3.2 RAK5270 operation manual

PIN6 is factory reset mode PIN. the defination pin is followed. And please get the detailed information from datasheet .



Figure 3.26 connector

PIN	Name	Description
1,8	DGND	GND
6	Config PIN(factory reset)	Run into factory soft-AP mode when setting this PIN to low level more than 5 seconds.
2,3,4,5,7	NC	Reserved

If PIN6 connect GND more than 5s, the blue LED will burn out and then the module will reboot again . break off the PIN6 and GND , the module will work with softap mode and the module' s password will be reset **admin**. Repeat the steps above again .

4. Contact information

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RAK

5. Revision&History

Revision	Modification content	Author	Data
V1.0	Initial Draft		2016-09-18
V1.1	1. Modify the document format, 2. update the APP picture 3. add RAK5270 module content 4. remove the hardware connection part 5. Add an “Easyconfig ” configuration method 6. Add a method to share a remote video	lampo	2016-11-22
V1.2	1. fixed some mistake. 2. add the factory reset operation manual	lampo	2016-11-22