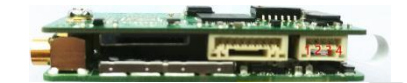# How to config network parameters and Pair the Module

This document is only using for Flylink AV .

Flylink AV : RAK553(TX) and RAK554(RX).
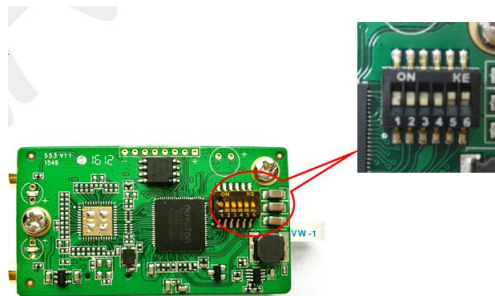
RAK5610 is same with RAK554 including firmware and Hardware.

1 RAK554 PIN Definition

Pin	Name	Description	Remark
1	VDDIN	12V VCC	12V power input
2	VDDIN	12V VCC	12V power input
3	GND	GND	GND
4	GND	GND	GND

2 RAK554 Dip switch definition

There are 6 group Dial-up in the module . ON direction is showing low-level ,marked as 0.
When The Dial-up is on the opposite direcetion ,that is showing high-level,marked as 1 .
The dial-up flag order is 1-6,marked as sw1-6.
The function definition is followed   :

Sw6	Sw5	Band	Channel	Band
1	1	4	149	5745
1	0	1	48	5240
0	1	1	36	5180
0	0	4	165	5825

The default band is Band4. That is to say channel 149.

Sw1 is using for WPS function . If you want to use this function , you need do the following steps.

Step1 : Whatever the SW1 level , set SW1 into low-level more than 1 second .
Step2 : Then Set SW1 into high-level .
Step3 : The Wifi light will blink.that is showing you have step into the WPS mode.

After power on the module,please scan the AP :   FS_5G_AP_xxxxxx or **Flylink_xxxxxx**(**please make sure your smartphone supporting 5G SSID**) .   X means MAC address.

3 How to change SSID and PSK

RAK553 will work as **OPEN** network .if you have to change the SSID and PSK .please following the steps strictly. Note: Once you change the network parameters, you have to make a new connection with Transmitter. Please reference the **PART 5**.

Step 1 : Power on RAK553.

Step 2: Waiting for the Blue LED turn on and that means the restart completed .

Step 3: Scan and connect the AP with your 5G WIFI device ,such as phone,pad ,or PC .

Step 4: Open broswer and input the following HTTP command in the address bar and Enter . you need to input the user and password which both are admin. If you get the "value":"0" , that means the configuration succeed.

HTTP Command: **Encryption** :

192.168.100.1/param.cgi?action=update&group=wifi&ap_ssid=RAK_5G_AP_XXXXX%20%23=BR ING&ap_auth_mode=WPA2PSK&ap_encrypt_type=AES&ap_auth_key=RAK12345

Function:

Change the network to **WAP2** encryption and a new **SSID** .

Key point(Red words) :

IP address : 192.168.100.1. Must be 192.168.100.1!

SSID : RAK_5G_AP_XXXXX. Change to what you want ,such as ***SMD_5G_AP_CC566A***. we can only support the following chars. but we suggest you'd sue the letters and numbers .

./abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ_-+=&1234567890@[]?%#

PSK : RAK12345. Change to what you want ,such as ***1234567890*** . the length must be in the range from 8 char to 32 char. we can only support the following chars.

./abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ_-+=&1234567890@[]?%#

Note: please don't change any other words !

HTTP Command:**Open** :

192.168.100.1/param.cgi?action=update&group=wifi&ap_ssid=RAK_5G_AP_XXXXX%20%23=BR ING&ap_auth_mode=OPEN&ap_encrypt_type=NONE

Function:

Change the network to **OPEN** mode and a new **SSID** .

Key point(Red words) :

IP address : 192.168.100.1. Must be 192.168.100.1!

SSID : RAK_5G_AP_XXXXX. Change to what you want ,such as ***SMD_5G_AP_CC566A***. we can only support the following chars.but we suggest you'd sue the letters and numbers .

./abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ_-+=&1234567890@[]?%#

Note: please don't change any other words !

4 Example

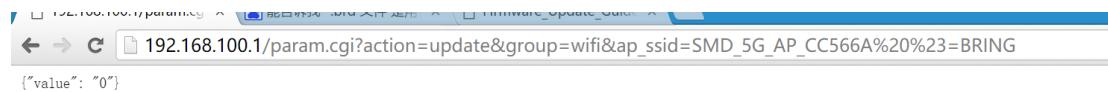Change the network to **OPEN** mode and a new **SSID: *SMD_5G_AP_CC566A*** .

Command:

192.168.100.1/param.cgi?action=update&group=wifi&ap_ssid=SMD_5G_AP_CC566A%20%23=BRING&ap_auth_mode=OPEN&ap_encrypt_type=NONE

Input the command in Broswer and input the user and password with admin.

HTTP Successful Return:

{"value": "0"}

5 Make new Pair

Step1 : Power on RAK553 waiting the board blink or lighting more than 10 seconds .

Step2 : Power on RAK554(RX) and waiting for blue LED turn on . Toggle Receiver's DIP switch PIN1 to Low-Level more than 1 second and then Toggle to High-Level .The blue LED will be quick flashing. The Receiver have run into WPS Pair mode .

Step3 : Same operation with Step2 on the Receiver .

Step4 : Waiting for the Transmitter blue LED turn on more then 10 seconds. That means the configuration have completed .

6 Enclosure

Android APP: https://www.pgyer.com/camsight

IOS APP : Search in APPLE STORE with camsight sport and install.

Document Center：

www.rakwireless.com/en/download

wiki.rakwireless.com/doku.php

Support Center：

supporten.rakwireless.com/

Website：

www.rakwireless.com

APP SDK Source code(rakvideo)：

www.github.com/rakwireless