

SK C11

Quick Start



Know Your "SK C11"

This manual introduces the preparation for signing into the system and common functions of SK C11.

Software Environment Requirements

Client Computer OS: no requirements

Web Browser: Google chrome Browser (recommended)

LAN Ethernet Configuration: Static IP address(set Admin ' s PC to fixed IP address)

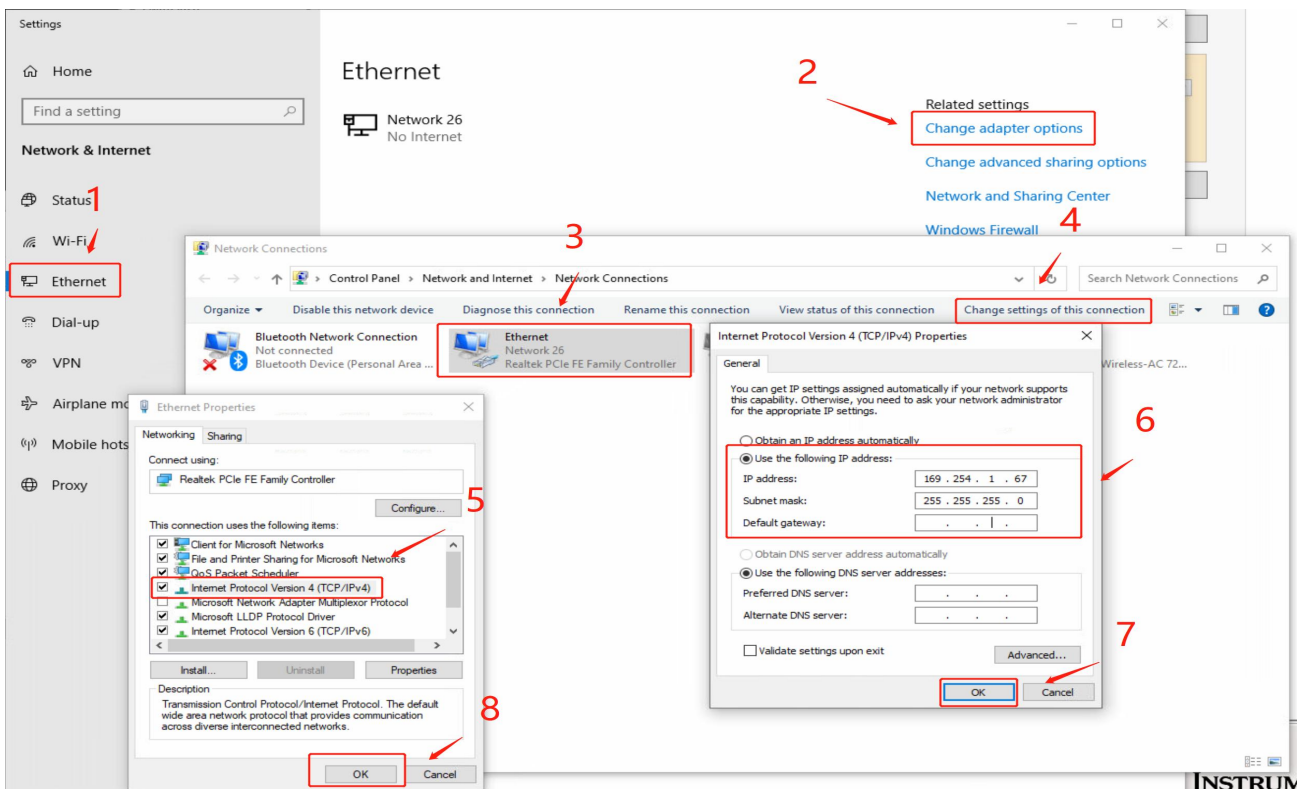
IP address: 169.254.1.x (1<x<100)

Subnet mask : 255.255.0.0

Gateway : leave blank

Operation steps

Step 1: Configure the Ethernet by opening Settings of Windows, then going to Network & Internet.



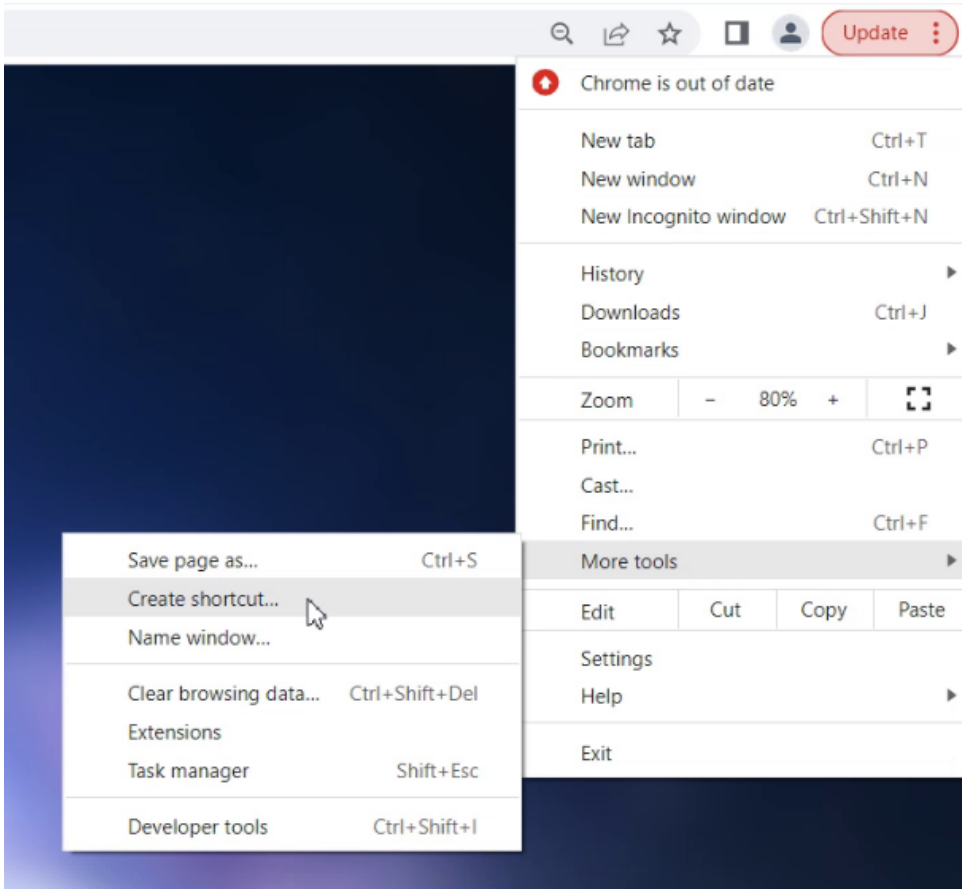
Step 2: login into the system by connecting to the IP address through Chrome browser.

<http://169.254.1.1>

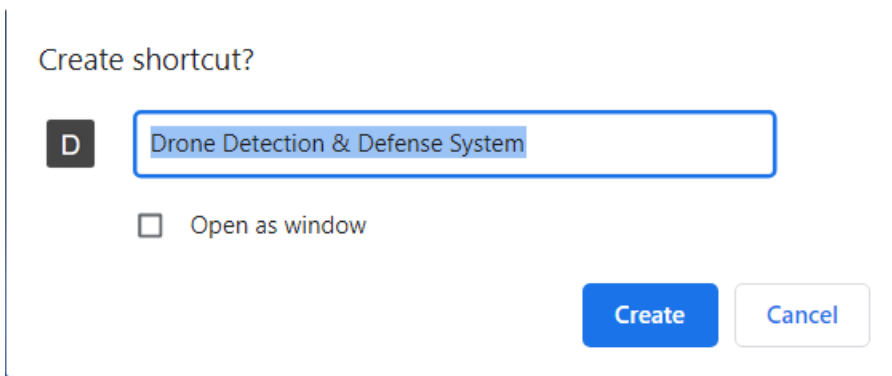
Then the system will automatically jump to the login page and enter the initial user name and password on the login page (see page 13)

Create Shortcut

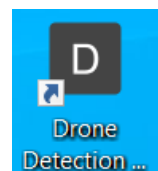
Step 1: on the login page, click on the 3 dots icon on the upper right of the , and select More tools and Create shortcut.

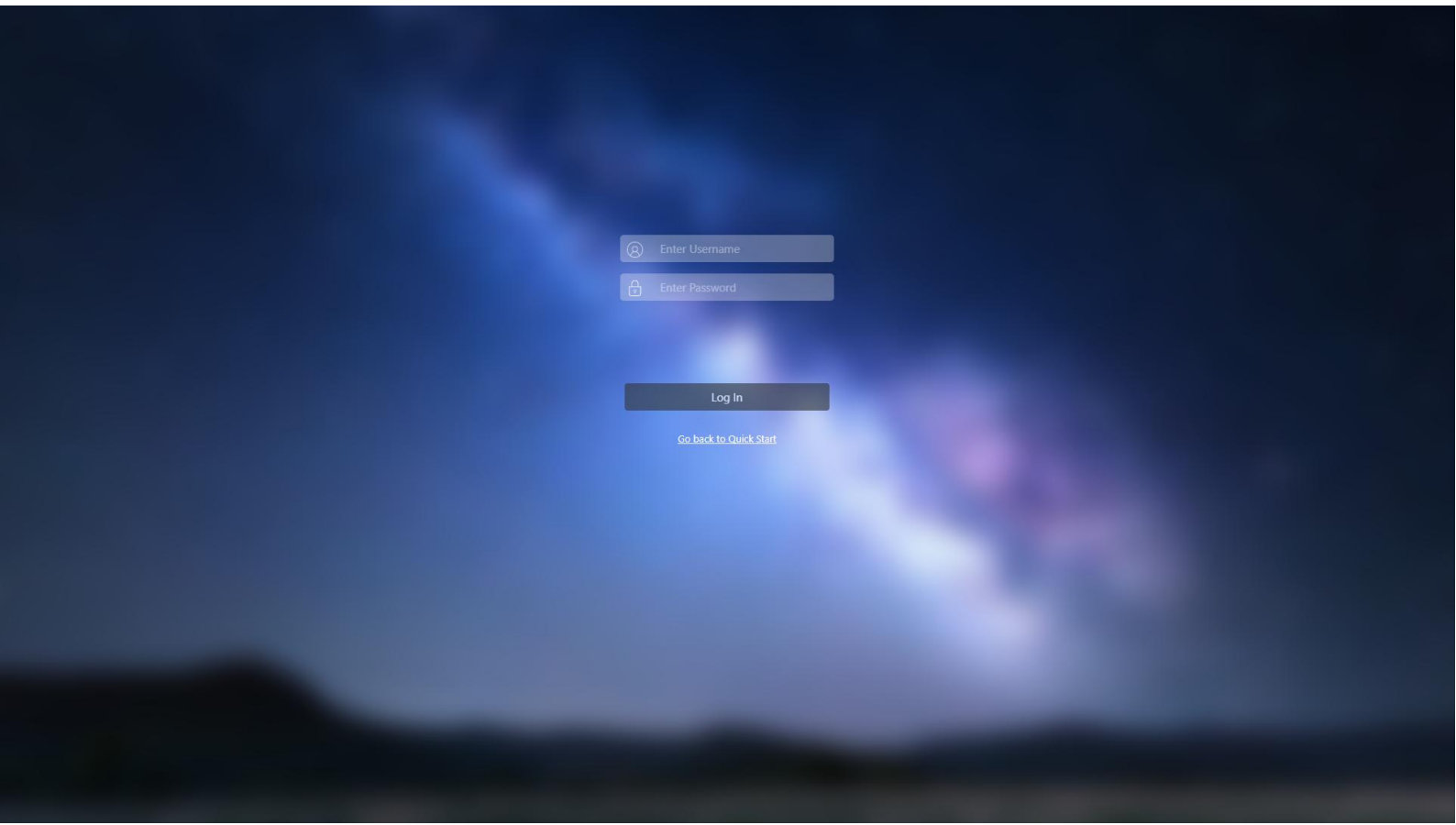


Step 2: Click Create to create a shortcut. The shortcut name can be customized.



Step 3: Create a shortcut on the desktop of the PC.





After the home page is loaded enter the username and password.

role	username	initial password
standard user	user	123456
admin	admin	123456

The Difference Between Admin and Standard User

Two user accounts are set when the equipment is delivered: admin, and standard user.

The two accounts get different permissions. When using the equipment for the first time, it is important to know the differences to avoid unnecessary trouble.

Admin: 1. Access to and check status of different functionalities

2. analyze data
3. create or delete general user accounts
4. reconfigure the system
5. have all accesses a standard user has.

standard user: only to view detection targets and perform defense.

System Status

SF1310012113

Normal

Auto Defense

Management: Normal SoM: Normal MCU: Normal
GPS PPS: Normal Engine: Normal Compass: 177°
Detecting Frequencies: 2.4GHz, 5.8GHz Disk Usage: 4.3G/434.1G System Version: V3.9.4
IP: 172.17.172.17

System Status Details

GPS 23,22,15,15
CPU 50°C GPU 46.5°C Memory 19%
CPU 30.9% GPU 16.8% Uptime 1Hour
Power Option: Performance High Frequency Frequency: 2265MHz
Disk IO
Disk 1 ↑ 0.0% ↓ 2.0%
Network Usage
Network 1 ↑ 0% ↓ 0%
Network 2 ↑ 0.2% ↓ 24.4%
Network 3 ↑ 0.002% ↓ 0.001%
Network 4 ↑ 0% ↓ 0%
Network 5 ↑ 0.006% ↓ 0.006%
Network 6 ↑ 0% ↓ 0%
Network 7 ↑ 0% ↓ 0%

System Reboot

System Shutdown

System Status

Detection
Wideband Defense
Reports
Data Analysis
My Settings
Users & Roles
System Settings
Log Out

System Status

SF1310012113

Normal

Auto Defense

System Status

Detection
Wideband Defense
Reports
Log Out

Admin

Standard User

Check Equipment Status

Check Equipment Status (Admin)

Check Equipment Status after login.

To check:

1、 If the equipment operates normally, blue **Normal** displays. When the equipment has serious fault, red **Abnormal** displays. Contact our after-sales support team for remote assistance on abnormal status (PS: MCU. When the subsystem turns red, the whole system status will display red abnormal).

2、 The compass functions normal when it is between 0-359 ° . Contact our after-sales support team if it shows - 1 ° . False compass may lead to inaccurate direction finding.

3、 When PPS displays red, check the installation location. The equipment might be blocked or covered or set indoors. The PPS does not affect the equipment performing but positioning. Moving it to an open space on the roof ensures positioning function.

4、 When the system is too slow, check the System Status Details for the temperature and usage of CPU and/or GPU, operating status, and the remaining memory. Contact our after-sales support team if the temperatue or usage of CPU and/or GPU is too high and/or the remaining memory is too low, and by which the system performance is affected.

If the statuses are all normal, the equipment is functioning well. Rest assured.

The screenshot displays the 'System Status' interface for device SF1310012113. At the top, the overall status is 'Normal' (highlighted in a red box) with an 'Auto Defense' button. Below this, several subsystems are listed: Management: Normal, SoM: Normal, MCU: Normal, GPS PPS: Normal (highlighted in a red box), Engine: Normal, and Compass: 176° (highlighted in a red box). Further down, 'System Status Details' shows GPS coordinates (23,21,20,18), CPU temperature (46.5°C), GPU temperature (45°C), Memory usage (19%), CPU usage (26.3%), GPU usage (0%), and Uptime (1Hour). At the bottom, there are buttons for 'System Reboot' and 'System Shutdown'. A right-hand sidebar contains navigation options: System Status, Detection, Wideband Defense, Reports, Data Analysis, My Settings, Users & Roles, System Settings, and Log Out.

Detection of a target

Identification of the probe targets

After the equipment status check is completed, open the UAV to understand the identification status of the detection target

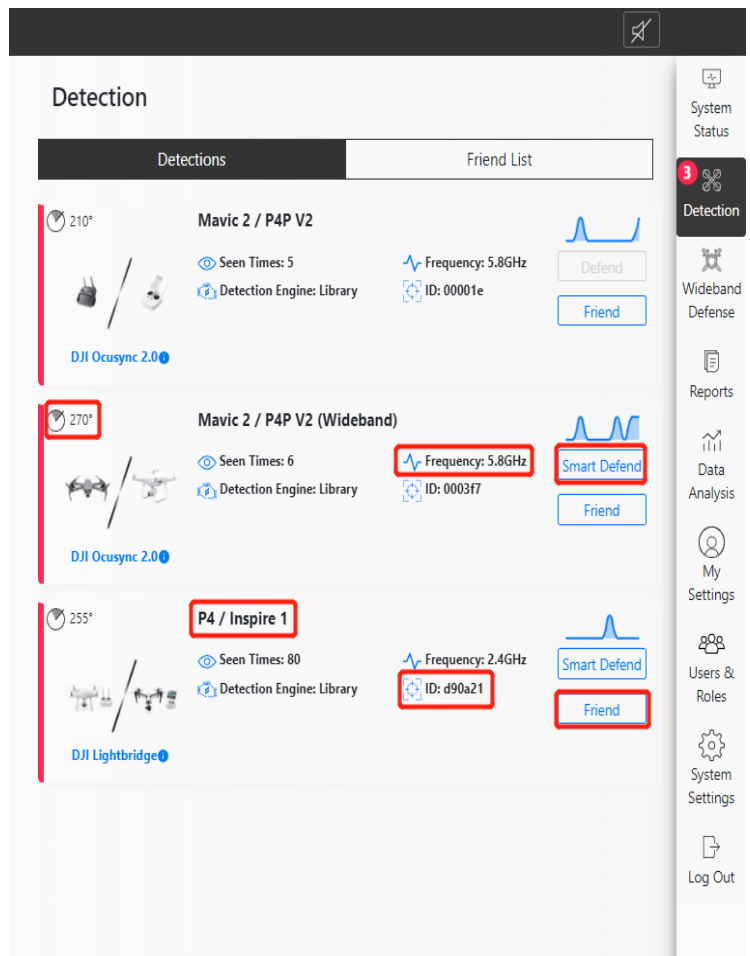
1、 After the system detects the UAV, it sounds an alarm. The sound can be muted by toggling the sound icon in the upper right corner of the GUI.

2、 When the UAV is detected, these parameters can be found: **UAV direction, model, status, frequency, defense options, electronic fingerprint and whitelist status.** When the parameters are normal, it indicates that the target UAV is positively detected. These parameters tells the UAV ' s status, direction, manufacturer. Choose

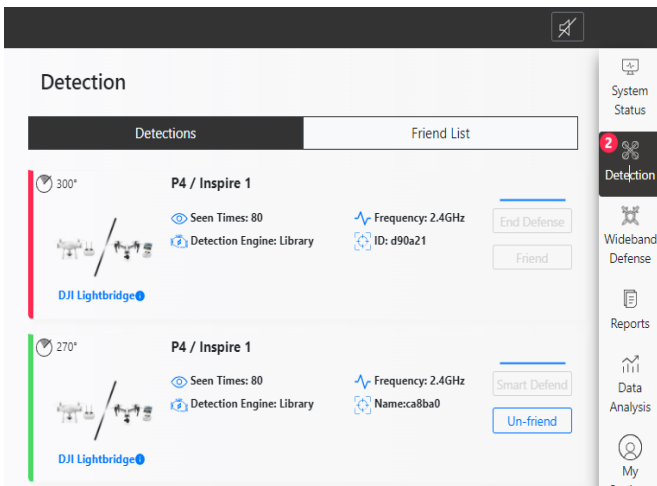
Wideband Defense to mitigate multiple UAVS, and Smart Defense to individual UAV . Smart Defense is only available for **Decrypted** UAVs.

(**Mavic 2's ID can be obtained once the UAV is detected; Phantom 4's ID can only be obtained after the RC is detected.**)

3、 If the Friend button is active for a detected UAV, that indicates the UAV is not in the whitelist yet and can be added to. Click Friend button add friend UAVs to the whitelist (**more information about whitelist can be found on page 10**). All detected UAVs which are excluded from the whitelist are intruders. A **Decrypted** UAV can be mitigated by Smart Defense method which has no interference to the environment; If the UAV ' s status is **Detected**, **Wideband Defense** can be used.

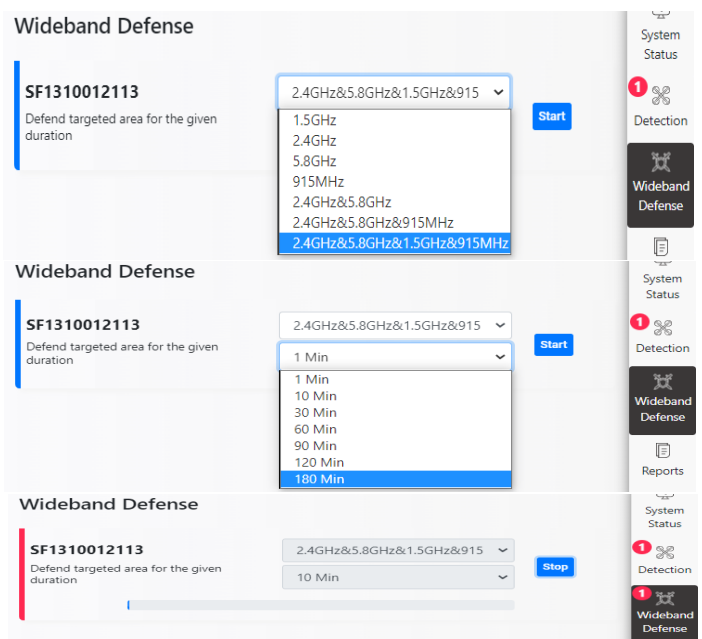


Defense



1. **Smart defense:** After confirming that the target is not in the whitelist, when the defense button is intelligent defense, click the intelligent defense in the target bar. As you can see in the detection list, the system will show that the target is in defense. When there is no need to strike, you can click to terminate the defense

2. **Wideband Defense:** If a UAV 's status is Detected, it can be defended with Wideband Defense method. Go to Wideband Defense page by clicking Wideband Defense menu item, choose Drive Off (2.4GHz&5.8GHz z&915MHz) or Forced Landing(2.4GHz&5.8GHz& 1.5GHz&915MHz), set the desired defending time, then click Start button to perform defense. The defense stops when the progress bar ends The Stop button is used to stop the defense ahead of time.

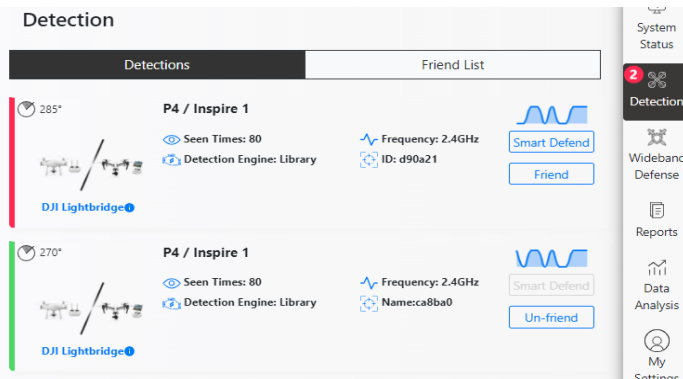


Drive off: if the communication signal of the remote control is cut off, the UAV's emergency mode will be triggered, and the UAV will return to the takeoff point by relying on the navigation signal, so as to drive off the UAV

Forced landing: when the UAV is cut off from the remote control communication signal and navigation signal, it will trigger the emergency mode of forced landing, then the target enters into the forced landing.

Note: Defense by forced landing will affect the surrounding navigation equipment, please use carefully.

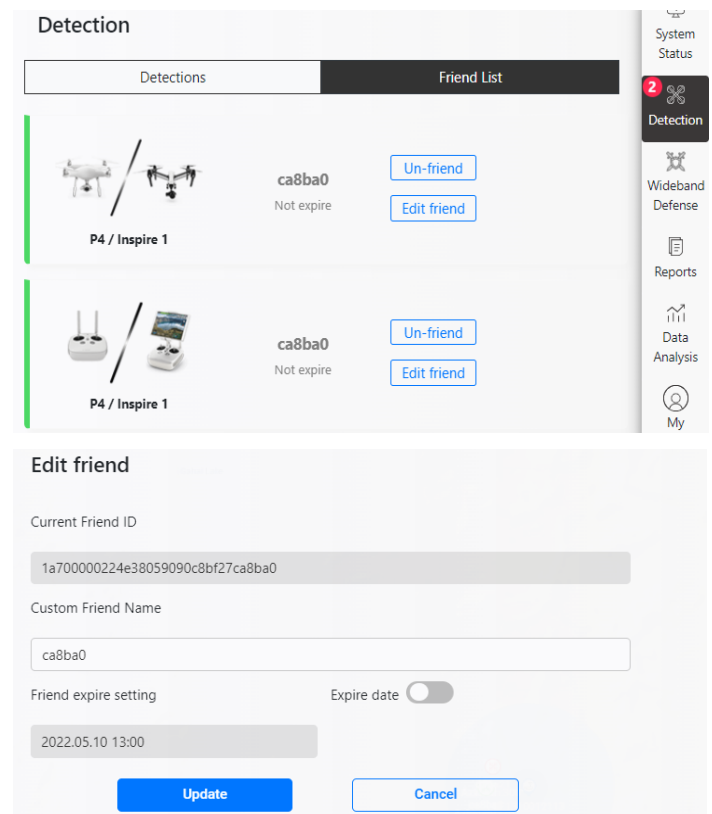
Add To Whitelist/Blacklist



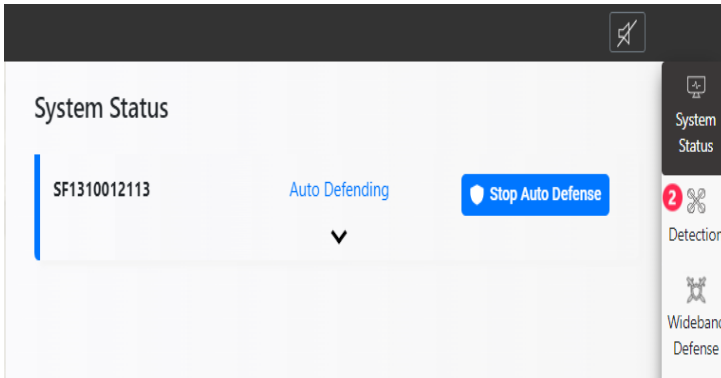
1. **Add To Whitelist:** after a UAV is detected, it can be added to the whitelist by clicking the Friend button. If successful, the UAV turns green, and the status change to Whitelist. To delete the UAV from whitelist, just click Remove button.

2. **Edit Whitelist:** configure a UAV in the whitelist by clicking Edit Friend button. For a newly added UAV, the remote control is separated from the UAV. When the remote control or UAV is detected separately, they can also be added to whitelist. Click Un-Friend button on the right side of the whitelisted UAV to remove the UAV. Click Edit Friend button to set more details for the whitelisted UAV.

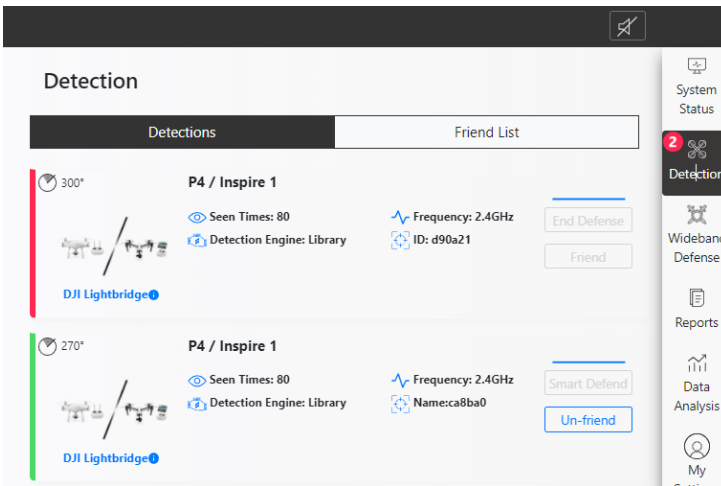
UAVs can be easily distinguished by giving them unique names. It's very helpful when there are many in-house UAVs. It is easy to find out the ownership if multiple whitelisted UAVs are turned on at the same time. By default, a whitelisted UAV never expires. For temporarily added UAVs, the expiration can be changed. For example, if a UAV is allowed to operate in the controlled area for only one day, the expiration can be set to 1 day, and then the UAV will be identified as blacklisted when it is detected afterwards.



Auto Defense



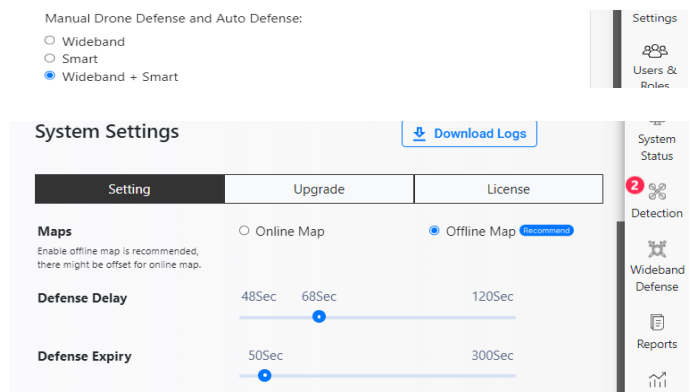
1、 The Auto Defense button can be found in the system status bar. When the system detects the UAV if Auto Defense is on, the system status will be displayed as In Automatic Defense. Auto defense can be stopped by clicking the button Stop Auto Defense.



1、 In the detection list, the system identifies and marks friend UAVs and foe UAVs. If the UAV is not in the whitelist, the system will turn on auto defense; if the UAV is in the whitelist, it will be marked in green, and the system will not defend it.

3、 After turning on the Auto Defense, set up the configuration by clicking the **System Configuration** in the menu bar.

4、 With **Wideband Defense** turned on, the system will start auto defense once the UAV is detected. The **Defense Interval** sets the number of seconds that the auto defense will suspend between two auto defenses. (the continuous defense will affect power amplifier 's performance and thus will affect the defense); the **Defense Duration** sets the number of seconds of each defense. These two parameters can be set according to the needs.



More Information

More information can be found from SK C11 User Manual.