CHCNAV H12 User Manual

Attention:

If not obey the instruction to operate, it might cause financial loss and light injury or heavy injury.

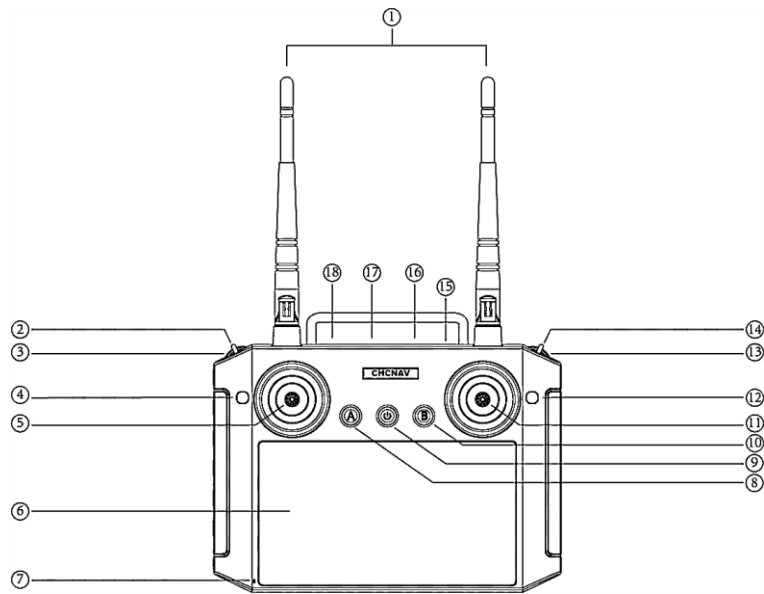## 一、 Introduction

1 、 Product Characteristics

H12 series adopts GaoTongXiaolong 625 processor, equipped with Android embedded system, advanced SDR technology, and super protocol stack, so that the image is clearer, lower delay, far distance, stronger anti-interference, to which aircraft, robots, industrial control equipment can be applied.

2、Main usage and Applicationrange   1

It is used for remote control operation of helicopter, fixed wing, multi-rotor wing, car, ship and other video image transmission (with optional camera), data transmission, and control of UAV flight
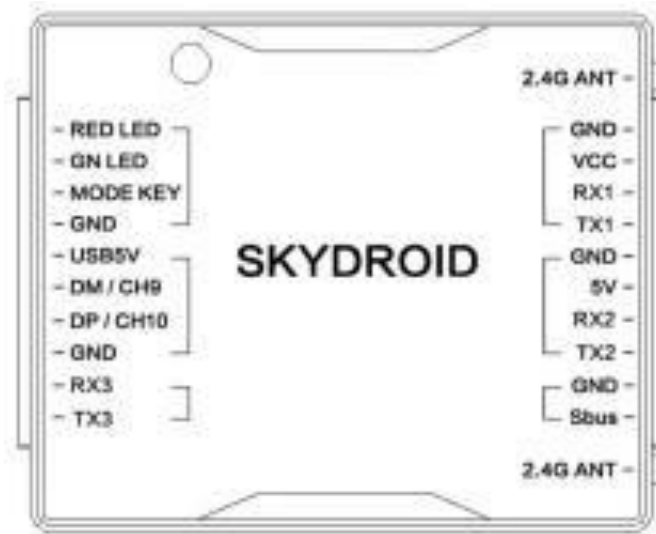
3、 Introduction on RC letters

Remote Controller

Long press the power button for 4 seconds to open the remote controller.

No.	Remark	No.	Remark
1	2.4G 3dB Antenna	10	Pump Switch B
2	Mode E Switch	11	Rotor X2、Y2
3	Dial G	12	Button D
4	Return C	13	Dial H
5	Rotor X1、Y1	14	AB Point Setting F
6	5.5 inch Screen	15	Speaker
7	MIC □ Port	16	SIM Card Slot
8	Multi-function Switch A	17	Charging Port
9	Power Switch	18	PPM Output

Receiver

Name	Description	Name	Description
RED LED	Red Led	2.4 ANT	Antenna
GN LED	Green LED	GND	Camera interface
MODE KEY	Mode Key	VCC	
GND	GND	RX1	
USB 5V	USB Upgrade Interface	TX1	
DM/CH9		GND	Data Transfer Interface /CBUS
DP/CH10		5V	
GND		RX2	
RX3	Expansion Interface	TX2	
TX3		GND	SBUS
		SBUS	
		2.4G ANT	Antenna

Receiver Status light	Receiver Status
Solid Green light	Communication is good
Green light Slow flash	Disconnect from remote controller
Green light Quick flash	Frequency matching mode
Solid Red light	C.Bus mode
Red light Slow flash	Upgrading
Red light Quick flash	Self-check failed,please try again or return factory

4、Environment Condition
（1） Environment temperature:-10°C~+55°Co
（2） Stock temperature：-25°C～+70°C。
（3） Relativehumidity：Notexceed85%。
（4） Atmospheric pressure:86kPa~106kPao

(5) The use site is not allowed to have explosive dangerous medium, the surrounding medium should not contain corrosive metal and the gas that damage the insulation and conductive medium, not allowed to be full of water vapor and seriousmold.

(6) The place of use should be equipped with facilities to prevent rain, snow, wind, sand andash.

5、Working Condition
  Power and Charging:

H12 series has a built-in integrated rechargeable lithium battery, compatible with the market standard Micro USB interface, and a power adapter of 5V specification (such as USB charger for digital products like mobile phones and cameras) for charging.

In case of smoke, odor and night leakage when charging, please do not continue to charge , and please transfer it to factory for maintenance.

Please do not charge the product in the area where the baby touches, to avoid the risk of electric shock.Do not charge the product at an environment above 60°C.

 6、Safety
   Warning:
Freshman please pay special attention to the following safety matters:
Do not fly when you are tired, drunk or in poor physical condition.
Do not fly in rain, strong wind and other bad weather!
It is forbidden to fly near high voltage lines, communication base stations, or places where people gather or move.
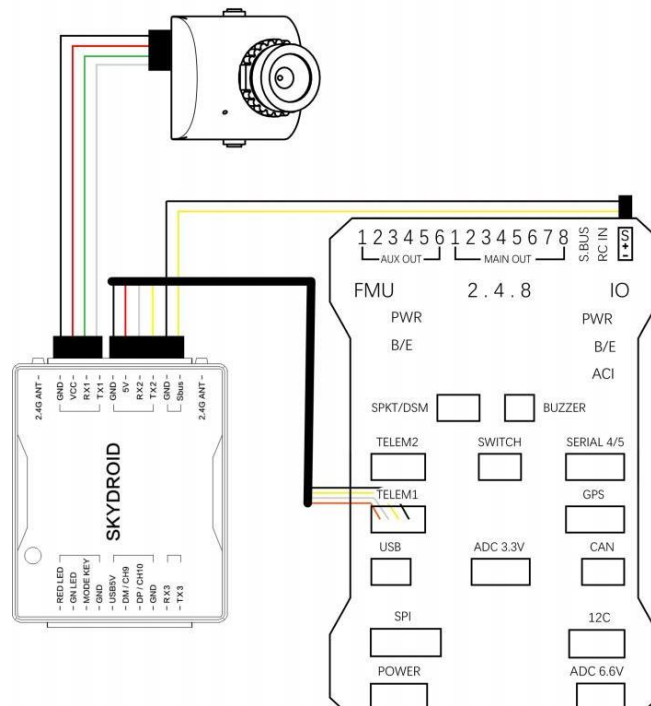Do not fly in airports and other places where it is forbidden to fly!
It is forbidden to fly in crowded places, parking areas or other areas where property loss or personal injury may be caused. Before flight,please check whether the transceiving and receiving system and the aircraft are normal.
Please use a guaranteed professional charger to charge the battery.
The antenna of this product is a fragile part, avoid excessive damage under stress.
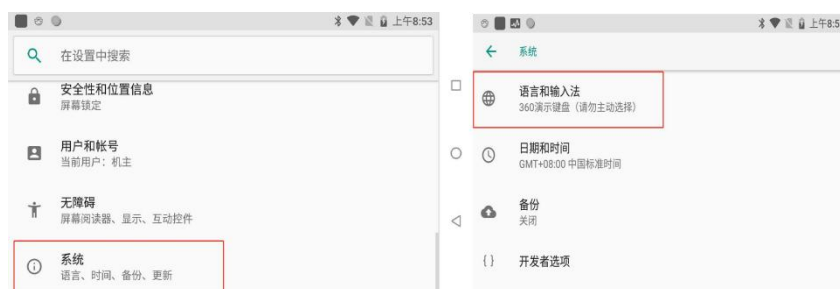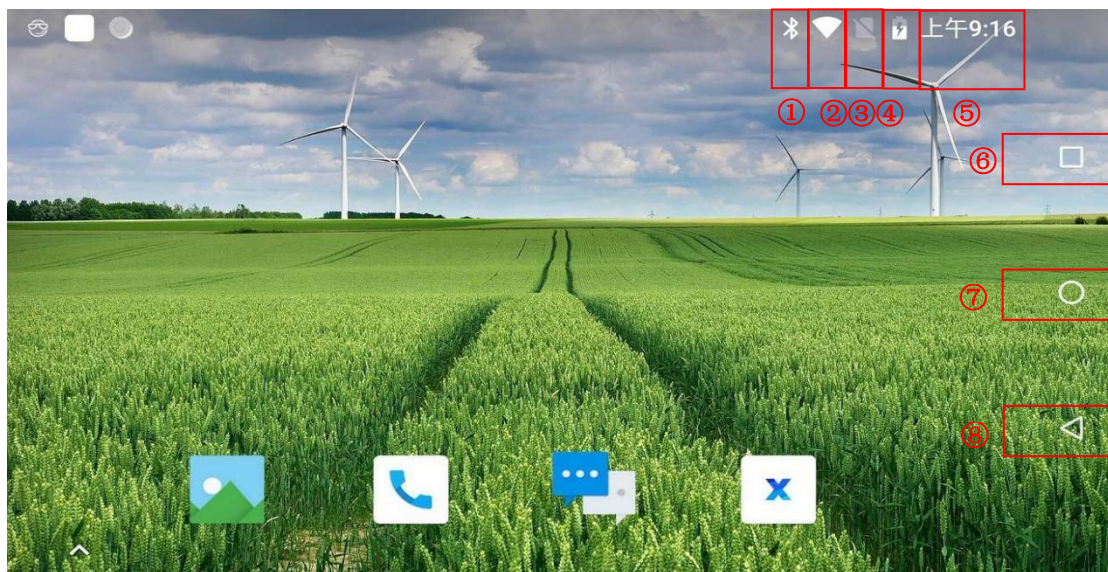
二、 **Usage and Operation**

1、Pre check and preparation

① Check whether the remote control power is sufficient before use.

② Before use, please check whether the antenna is placed as required to obtain the best effect.

③ Please make sure the firmware has been upgraded to the latest version for the first use.

④ users should ensure that they are not drunk, and under the influence of drugs operation.
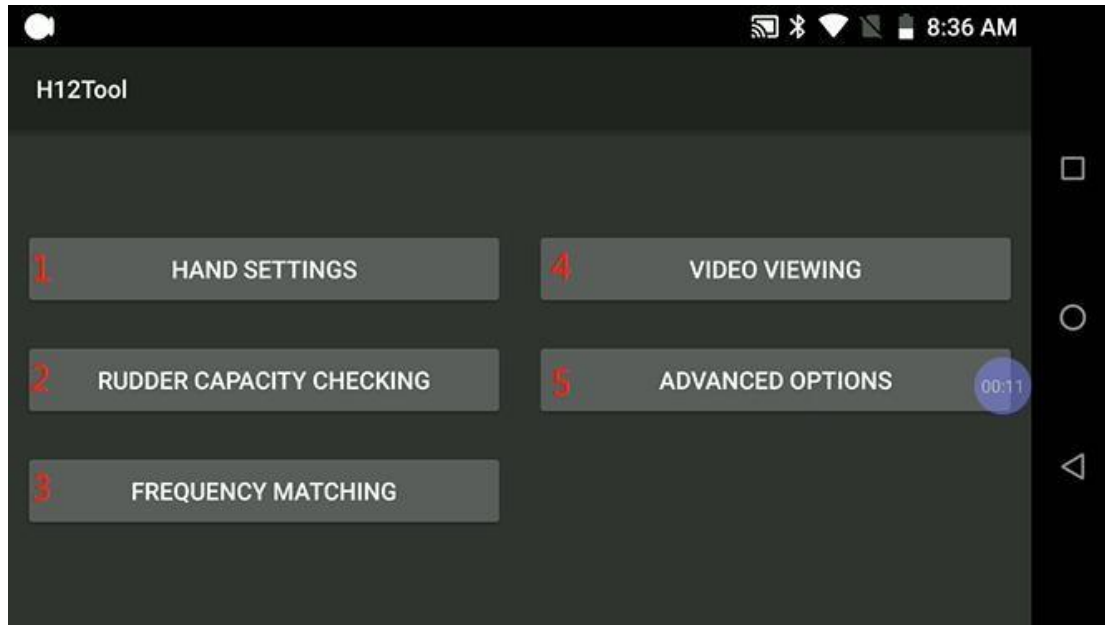
2、Usage steps

Click Setting--Click System--Click Languages & input to change the language

Status bar

（1） Bluetooth openingprompt
（2） WIFISignal
（3） SIM card prompt window (the picture shows the state without SIM cardinserted)
（4） Power display (charging status in thepicture)
（5） Timedisplay
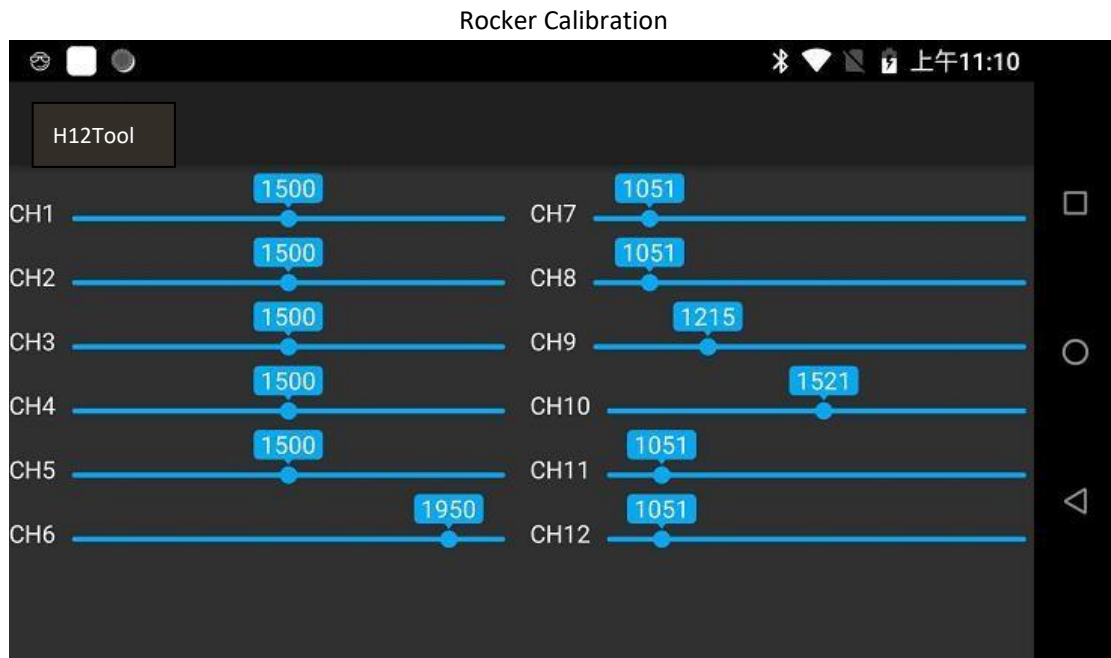（6） View backgroundprocess
（7） Return to the mainpage
（8） Return to the previous step

（1）For switching the handsettings

（2）For checking rubber capacity

（3）Formatchingtheremotecontrollerwithotherreceivers(thematchingmethodis introduced below)

（4） For checking the image returned by thecamera

（5）Intheadvancedoptions,youcanadjustthechannels,upgradetherockerfirmware,check the signal strength, modify the receiver serial port baud rate (password needs to get from the technicians)

Frequency Matching

（1）Whenthereceiverispoweredon,thegreenlightflashesquicklyaftershort-circuitingGNG and MODE KEY. OpentheH12Tool   on the remote controller, click Frequency Matching to start matching. The green light of the receiver will be always on when the match issuccessful.

Quickly power on the receiver 5 times, and start the match mode for the 6th time, the green light flashes. Open the H12Tool on the remote control, click Frequency Matching to start matching. The green light of the receiver is always on after the match issuccessful.

（2）

Rocker Calibration

(1) Put the rocker G, H back to the center, and then turn off he remotecontroller

(2) LongpressDbuttontopoweron,andreleaseDbuttonafterturningonthe remotecontroller

(3) When calibrating the rockers, please check the rubber capacity in the H12Tool and open the auxiliary calibration.

(4) Long press D button to enter the calibration mode, and the remote controller will ring continuously.

(5) Move the right and left rockers to the maximum and minimum value in sequence. Long press D to confirm aftermoving.

(6) Restart the remotecontroller.

Sharing digital:

This function is not currently supported

Common Questions and Solutions

1. Can other APPs be installed on the remotecontroller?

The remote controller terminal permissions are all open, without any special software and limited software installation andunloading.

2. Data transmission cannot beconnected

Check whether it is connected to the remote controller at UDP type, and whether the listening port is 14551. Check whether the baud rate is normal. Check if RX TX is connected reversely (Correct way:connect RX to TX,TX to RX).

3. The remote controller keepsbeeping

When the remote controller is not successfully connected with the receiver, the remote controller will always give a prompt alarm.

4. The remote controller sound is too low to hearclearly

You can find the Sound option in Settings and adjust the sound in the Sound option

5. What else can Type-C port do besides charging?

In addition to charging, Type-C port can also be connected to a computer for file viewing.

6. Theremotecontrollerhasseveralwaystoconnecttothenetwork   It can connect to the network through SIM card orWIFI

三、 Maintenance and Repairment

Long-term storage maintenance

Store the remote controller in a dry and ventilated place, and reduce direct sunlight to prevent the battery from overheating. The recommended temperature range for storage when more than three months is between 22 and 28 degrees Celsius. Never store batteries at temperatures lower than -20 degrees Celsius or higher than 45 degrees Celsius.

四、 Transportation and Storage

To avoid possible injury and loss, be sure to comply with the following:

Since cables and small parts may be dangerous to children, be sure to keep children away from the parts of the remote controller

note

1) Do not immerse the remote controller in water. If it does, please wipe it with a soft dry cloth and turn off the powerimmediately.

2) It is forbidden to mechanically hit, crush, puncture the battery, and it is forbidden to drop the battery;

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.