

MARK5



User Manual & Setup Guide

V1.0

Contents

Summary:	3
Specification:	3
Features:	4
Warranty Policy:	5
PS:	5
DJI Digital FPV System:	6
Bind FrSky R-XSR:.....	7
Bind TBS NanoRX:	8
Bind GEPRC ELRS Receiver	9
Install Betaflight:	10
Install Betaflight:	10
Install Drivers:.....	10
ARM(DJI Transmitter):	11
OpenTX Transmitter:	12
IRC Tramp (Analog):	14
Install Silicone Pad:.....	16
Install Propellers:	17
Pre-flight Check:	18
Include:.....	19
Contact:.....	19

Summary:

GEPRC new generation freestyle drone MARK5. We are proud to say the MARK5 HD quad is the best freestyle quadcopter in the market. It is now launched in three versions: HD AIR UNIT, HD VISTA and Analog.

MARK5 is developed specifically for freestyle with wide X-arm design. Unique shock absorbing structure design, less vibrations and resonance provide a stable operating environment for the electronic system. Aluminum alloy side plates not only look stunning but reduce weight and add more endurance. MARK5 is equipped with GEPRC's latest SPAN F722-HD-BT FC with high performance and lots of ports, supporting Bluetooth wireless connection for easy field tuning. Freshly upgraded SPAN G50A BLHeli_32 4IN1 50A ESC with GEPRC's latest 2107.5 motor, has great explosive power and very fast response speed. The new GEMFAN Freestyle 4S propellers provide delicate and silky smooth flight experience. The MARK5 is shipped with two different 3D printed action cam mounts that can be fitted with GoPro8/9/10, Naked GoPro8, Insta 360 GO2 and Caddx Peanut cameras. After continuous testing and tuning by GEPRC R&D team, we are proud to say, this is yet another GEPRC drone that comes perfectly tuned right out of the box. Just take it out, plug the battery and have fun!

We've been pursuing for lighter weight, better flying experience, and more functionality for all our products!

Specification:

Model: MARK5 Freestyle Quadcopter

FC: SPAN F722-HD-BT FC

ESC: SPAN G50A BLHeli_32 4IN1 50A 4-6S ESC

VTX: AIR UNIT / VISTA / RAD VTX 5.8G 1.6W

Camera: AIR UNIT Camera / Caddx Ratel2

Antenna: Momoda UFL LHCP / Momoda MMCX RHCP

Motor: SPEEDX2 2107.5-1960KV / SPEEDX2 2107.5-2450KV

Propeller: Freestyle 4S

Frame: GEP-MK5

Motor to Motor: 225mm

Weight: 391.5g (MARK5 HD VISTA 6S PNP)

Receiver: PNP、Frsky RXSR、TBS Nano RX、ELRS 915、ELRS 2.4G

Features:

1. Aluminum alloy side plates not only look stunning but reduce weight and add more endurance.
2. Supports Bluetooth wireless connection for easy field tuning.
3. Developed specifically for freestyle with wide X-arm design.
4. The HD version comes with the DJI HD System & the original Air Unit cam.
5. A variety of receiver choices including our brand new ExpressLRS Rx.
6. Freshly upgraded SPAN G50A BLHeli_32 4IN1 50A ESC with GEPRC's latest 2107.5 motor, has great explosive power and very fast response speed.
7. Unique shock absorbing structure design, less vibrations and resonance..
8. Specially designed independent capacitor and buzzer compartment for better performance and shaking reduction.
9. The new GEMFAN Freestyle 4S propellers provide delicate and silky smooth flight experience.
10. Shipped with two different 3D printed action cam mounts that can be fitted with GoPro, Naked GoPro8, Insta 360 GO2 and Caddx Peanut cameras.
11. MARK5 is the most ideal for freestyle flying and bando-bashing resistant.

Warranty Policy:

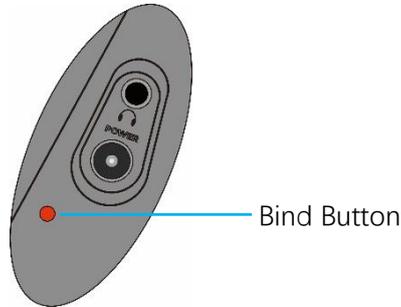
1. If Quadcopter is damaged or unknown issue, please contact GEPRC. We'll do our best to get this taken care of quickly for you.
2. Any impact damage, product liquid damage, high temperature burn or other artificial damage is not covered by warranty.

PS:

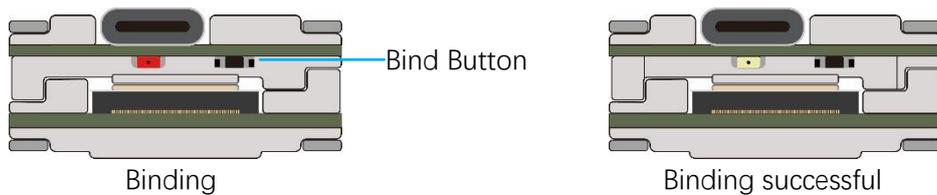
1. All components has been strictly inspected and tested before shipping.
2. If you have any problems, please cooperate with our engineers to figure out solutions. (E-mail: support@geprc.com.)

DJI Digital FPV System:

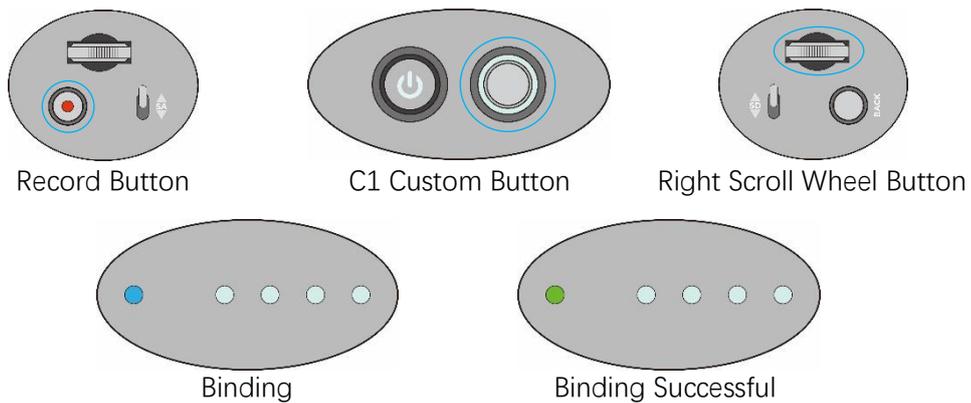
1. Turn the power of the DJI FPV Goggles, DJI FPV Transmitter, and Quadcopter. Press the DJI FPV Goggles bind button twice, and it will beep to indicate the binding state.



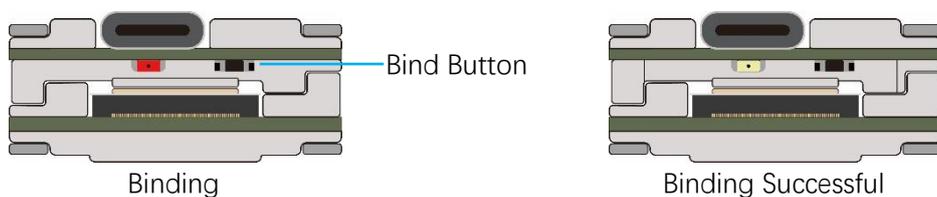
2. Press the VISTA bind button, the indicator light turns red, indicating that it is binding. Then the indicator light turns yellow, means the binding is successful, and the FPV Goggles will display the received picture.



3. Press the **C1 custom button**, **record button** and **right scroll wheel button** of the transmitter, at the same time. The indicator light turns blue, and the transmitter sends a beep indicating that it is binding.

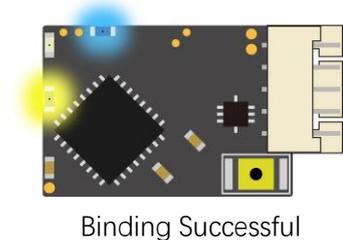
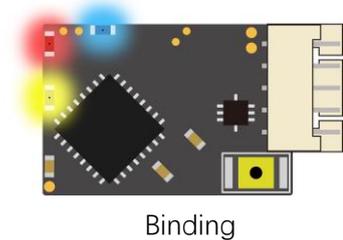
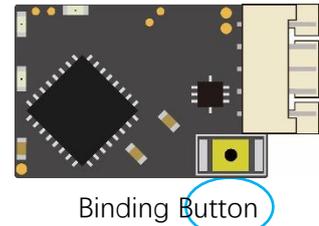


4. Press the VISTA bind button, the indicator light turns red, indicating that it is binding. Then the indicator light turns yellow, means the binding is successful. And the transmitter indicator light turns Green.



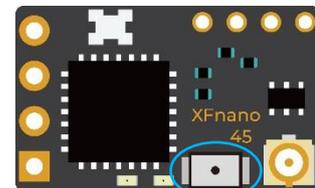
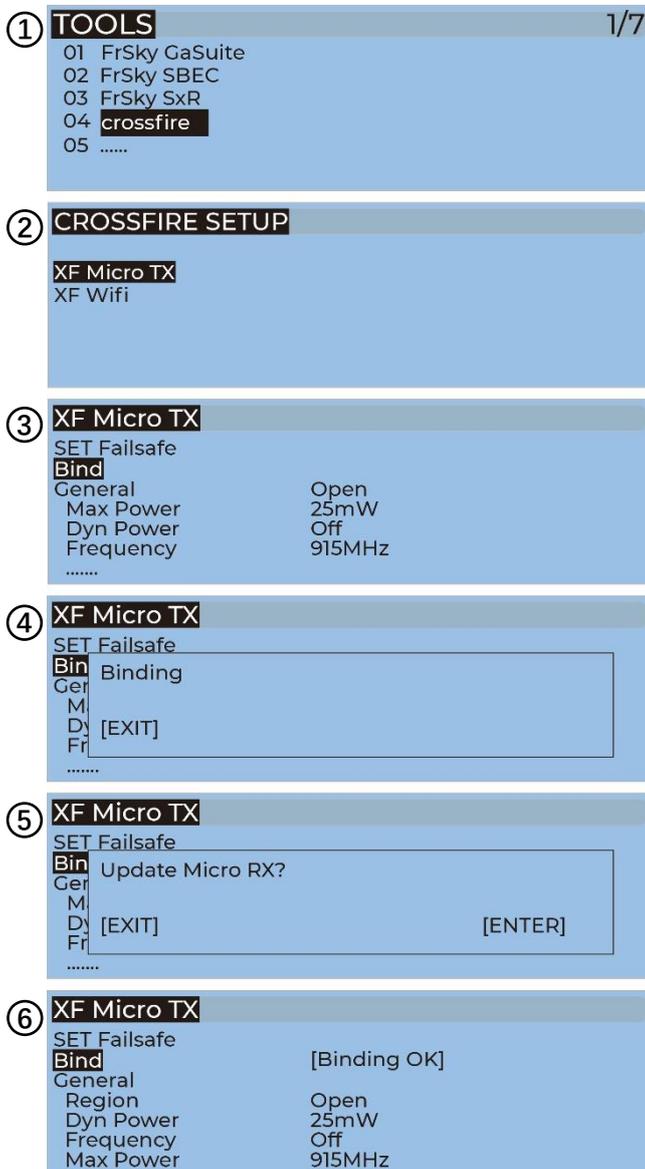
Bind FrSky R-XSR:

1. For Taranis X9D/X9D Plus/X9E and Taranis QX7, turn on the transmitter, go to the MENU – MODEL SETUP – PAGE 2, choose Internal RF, and select BIND to enter the binding state..
2. Turn on the receiver while holding the bind button on the receiver, release the button and the **blue,red,yellow LED** on .
3. When the red light flashes, it indicates that the binding is successful.Turn off the receiver,and then turn on the receiver.The blue light and yellow light of receiver are on, indicating that the link is normal.

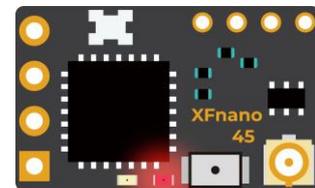


Bind TBS NanoRX:

1. For Taranis X9D/X9D Plus/X9E and Taranis QX7, turn on the transmitter, go to the TOOLS – CROSSFIRE SETUP – XF Micro TX ,and select Bind to enter the binding state..
2. Turn on the receiver while holding the bind button on the receiver, release the button and the green light on flash .and then holding the button for 8 second ,and release. And the green light is off and the red light is flashing, 'update micro RX? ' will appear on the transmitter screen, and select 'ENTER'.
3. Wait for the update to complete, the binding is successful, and the receiver green light is on.



Bind Button



Binding

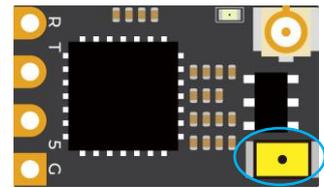


Binding Successful

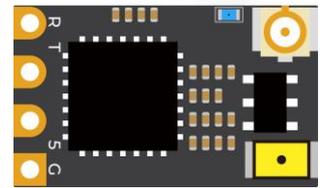
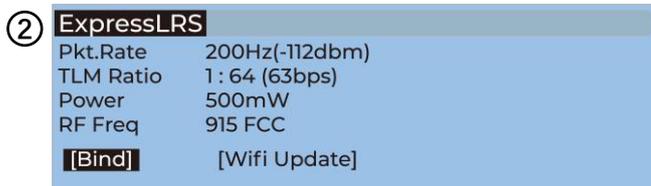
Bind GEPRC ELRS Receiver

GEPRC's ELRS 868MHz, ELRS 915MHz, and ELRS 2.4G receivers have the same binding methods

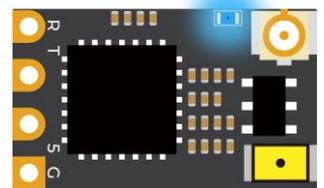
1. Power on and off the receiver three times in a row (with an interval of 1 second), the blue light of the receiver flashes continuously twice, indicating that the receiver has entered the binding state.
2. For Taranis X9D/X9D Plus/X9E and Taranis QX7, turn on the transmitter, go to the TOOLS -ELRS, and select BIND to enter the binding state.
3. Until the blue light of the receiver changes from continuous double flashes to steady light, it means the binding is successful. Turn off and then turn on the power of the receiver, the blue light is always on, indicating that the link is normal.



对频按钮



对频中



对频成功

Install Betaflight:

Install Betaflight:

Although your Quadcopter comes from the factory nearly completely ready to fly, you still need to install betaflight to facilitate your subsequent use of betaflight for debugging.

Installation package download address:

<https://github.com/betaflight/betaflight-configurator/releases>

Enter the web page, pull to the bottom, and select the appropriate installation package to download. EXE suffix is Windows system, DMG suffix is MacOS system, RPM / DEB suffix is Linux system, APK suffix is Android system.

Install Drivers:

If you are on windows, you must install the driver manually. MacOS and Linux do not.

CP210x Drivers:

<https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers>

STM USB VCP Drivers:

<http://www.st.com/en/development-tools/stsw-stm32102.html>

Zadig:

<http://zadig.akeo.ie/>

ARM(DJI Transmitter):

1. With DJI FPV Transmitter, the toggle switch is set at the factory. The corresponding functions of each switch are as follows:

SA→AUX1 (ARM)

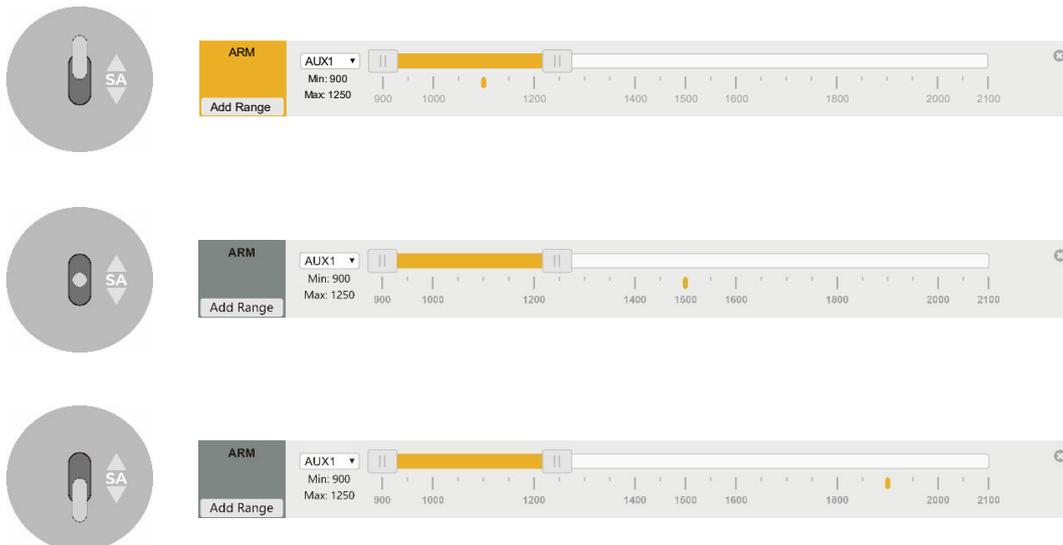
SB→AUX2 (MODES)

SC→AUX3 (BEEPER)

SD→AUX4 (Vacancy)



2. DJI toggle switches are all three sections. If you move the Yellow cursor of the corresponding aux channel of the switch, the corresponding function will be turned on when you move to the set range.



OpenTX Transmitter:

1. The transmitter of openTX system needs to check the AUX channel. For Taranis X9D/X9D Plus/X9E and Taranis Q X7, turn on the transmitter, go to the MENU –MIXS and view the current AUX channel settings.

CH1~CH4 corresponds to four channels of rocker

CH5 (SF) →AUX1 (ARM)

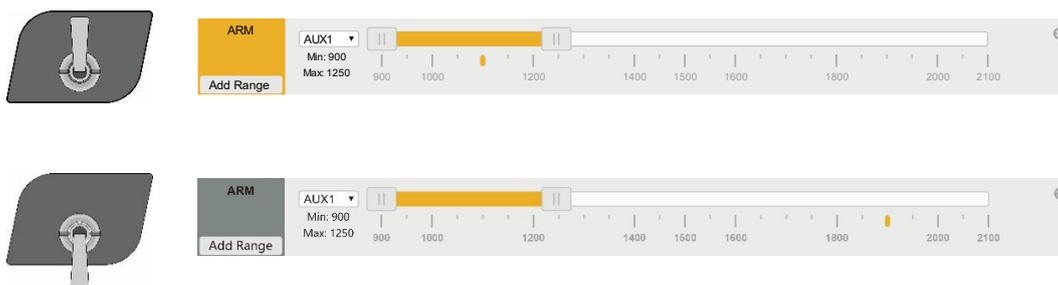
CH6 (SG) →AUX2 (MODES)

CH7 (SA) →AUX3 (BEEPER)

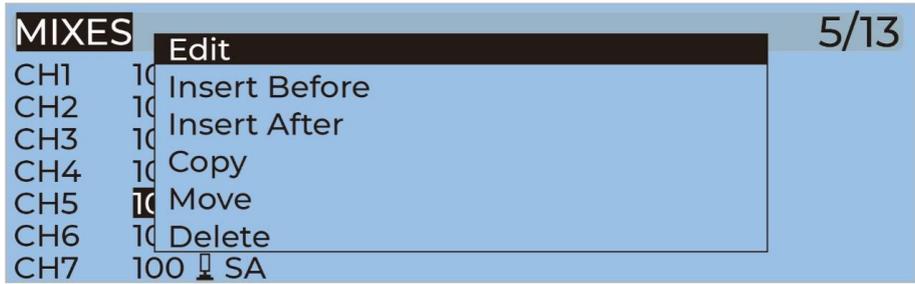
CH8 (Vacancy) →AUX4 (Vacancy)



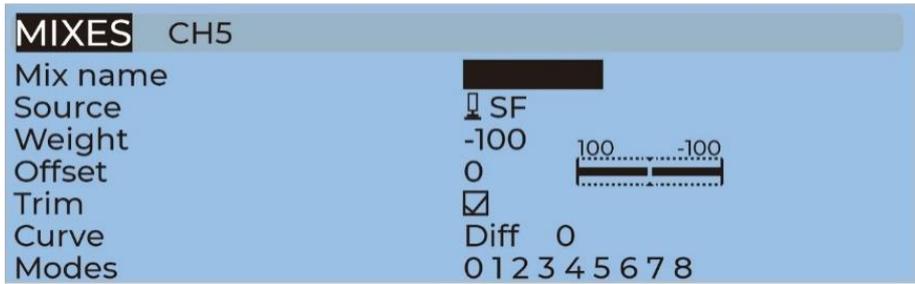
2. FrSky X9D transmitter SF toggle switch are two sections. If you move the Yellow cursor of the corresponding aux channel of the switch, the corresponding function will be turned on when you move to the set range.



3. Use the transmitter wheel to move the cursor to select the AUX channel, and then press and hold the wheel key to edit the channel.

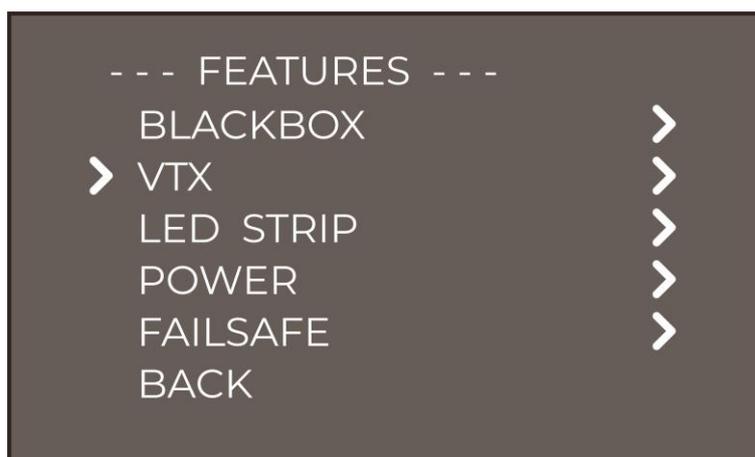
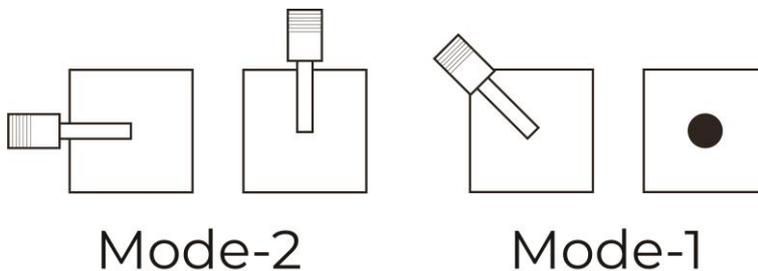


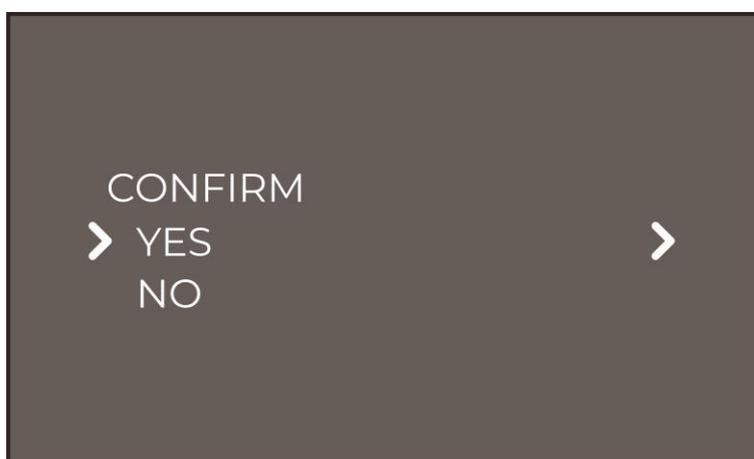
4. You can name the aux channel, or set the toggle switches you want, exit and save it.



IRC Tramp (Analog):

Turn on the transmitter,THR middle,YAW left,PITCH up,enter the OSD menu. The PITCH moves the cursor up and down, and the ELE right to enter the next item. Finally,save and exit.

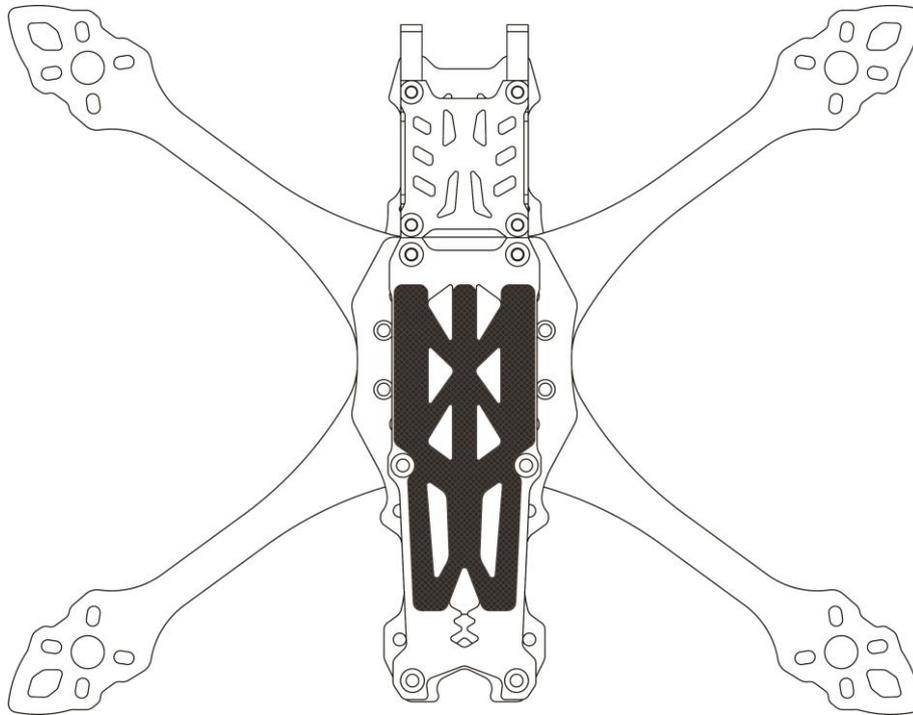




VTX Frequency Table:

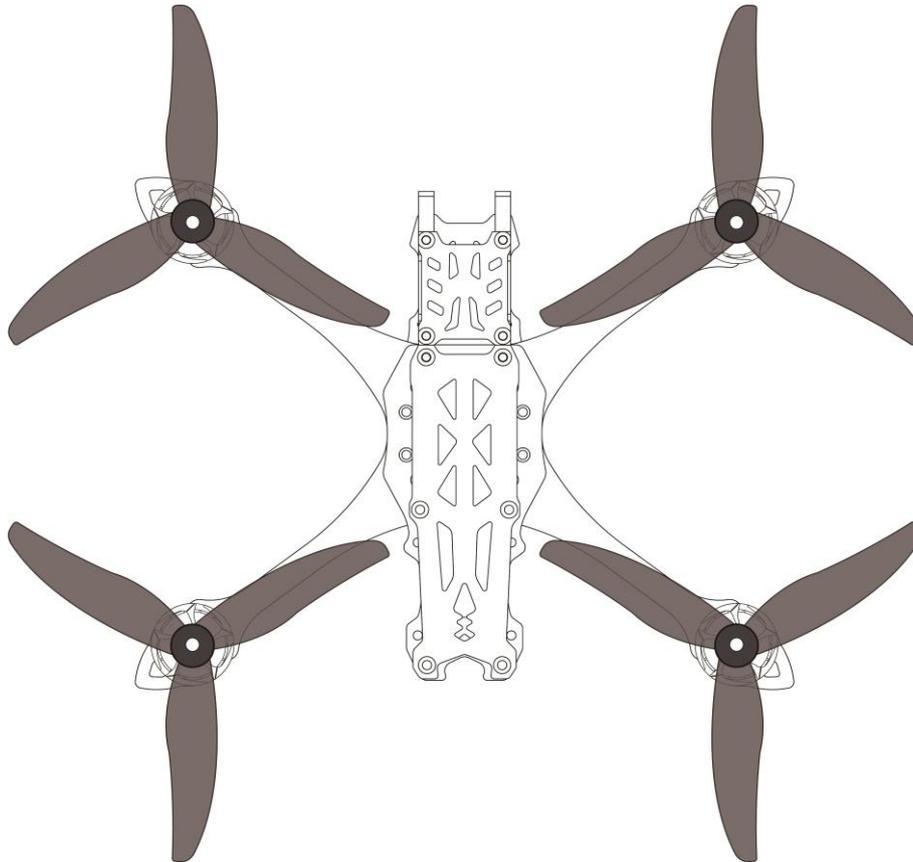
Universal frequency table (BAND)	CH							
	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
1, A (BOSCAM)	5865Mhz	5845M	5825M	5805M	5785M	5765M	5745M	5725M
2, B (BOSCAM)	5733Mhz	5752M	5771M	5790M	5809M	5828M	5847M	5866M
3, E (BOSCAM)	5705Mhz	5685M	5665M	5645M	5885M	5905M	5925M	5945M
4, F (FATSHARK)	5740Mhz	5760M	5780M	5800M	5820M	5840M	5860M	5880M
5, R (RACEBAND)	5658Mhz	5695M	5732M	5769M	5806M	5843M	5880M	5917M

Install Silicone Pad:



Install Propellers:

Although the propeller of MARK5 are installed in the factory, the direction of the propeller should be checked before taking off.



Pre-flight Check:

In many cases, the cause of a Quadcopter crash is not checked before takeoff. For the sake of safety, we suggest that you check before every flight. The steps are as follows:

1. Turn on the transmitter and select the correct mode. Please confirm that the arming switch on the transmitter is in the "disarmed" position and throttle is all the way down;
2. Please perform a physical inspection of the Quadcopter for damage. If there is damage, please repair first;
3. Please confirm the propeller is in the right direction and the propeller nut is locked, otherwise there is a risk of crash;
4. Check LiPo battery voltage. A fully-charged LiPo should be about 4.2 volts per cell, or about 12.6 volts for a 3S, or 16.8 volts for a 4S;
5. Please confirm the battery is securely attached to the aircraft by the strap. And secure the balance lead so that it can't be struck by the props;
6. Please Scan the flight area for any safety issues that might be present, such as people or animals;
7. Verify that you have clean, strong video in your FPV goggles or screen. If you see interference or you see another pilot's feed, resolve this issue before flying;
8. Arm the quadcopter. Listen for the props hitting anything like an antenna or the battery wire;
9. At this stage, take off and enjoy flying.

Note: if you choose to fly close to water, please pay attention to the flight safety. It is difficult to salvage the Quadcopter when it falls into the water, and the water in the Quadcopter is not covered by the warranty.

Include:

- 1 x MARK5 Quadcopter
- 4 x Freestyle 4S propellers (pairs)
- 1 x Battery strap M15x250mm
- 2 x Battery strap M20x220mm
- 1 x Battery strap M20x250mm
- 2 x Battery Silicone Pads
- 1 x Camera cage carbon top plate
- 1 x 3D print mountings combination
- 2 x Action cam mount holder
- 1 x Set of screws
- 1 x Set of screwdrivers
- 1 x Antenna fixed tube
- 1 x OSD menu board (Analog Version)

Contact:

Website: <https://geprc.com/>

