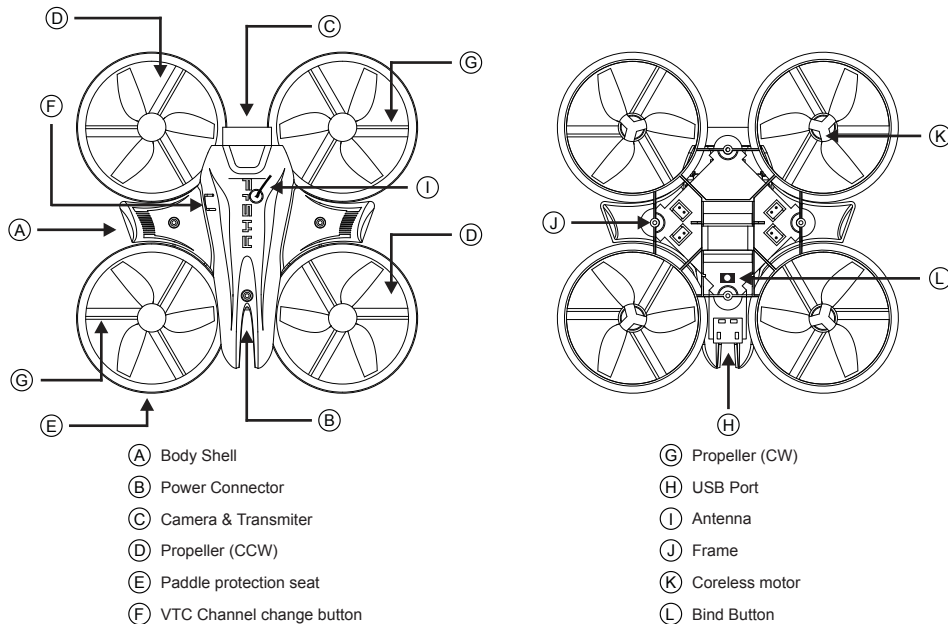## Disclaimer

Thanks for purchasing Apus MQ60 V2 Mini RC Racing Quadcopter. For more information please visit the Apus MQ60 V2 web page at www.frsky-rc.com which is updated regularly. Product information, technical updates and manual corrections will be available on this web page. Frsky reserve the rights to update the disclaimer and upgrades product information on the web. Please read the disclaimer carefully and follow the manual strictly before use. The manufacturer and seller assume no liability for any resulting damage or injury arising from the operation or use of this product.This product is not suitable for people under the age of 18.Adult supervision is highly recommended for kids under the age of 18.

Warning and Safety Notes

- Do not attempt to fly the quadcopter if one or more of propellers are damaged. Flying with damaged propellers is not safe and can make the quadcopter fly uncontrollably.
- Always make sure the propellers are installed correctly and mounting screws are securely tightened.
- Do not use this product in harsh environments(such as winds,rain,lightning,snow,etc)
- Do not use this product in a strong electromagnetic environment.
- Do not overcharge or discharge.
- Do not put the battery into water or fire.

Overview

Ⓐ Body Shell	Ⓖ Propeller (CW)
Ⓑ Power Connector	Ⓗ USB Port
Ⓒ Camera & Transmiter	Ⓘ Antenna
Ⓓ Propeller (CCW)	Ⓙ Frame
Ⓔ Paddle protection seat	Ⓚ Coreless motor
Ⓕ VTC Channel change button	Ⓛ Bind Button

Specifications

- Brand Name: FrSky
- Model name: Apus MQ60 V2
- Wheelbase: 66.5mm
- Weight: 20g (Without battery)
- Size: 84mmx 84mmx58.5mm
- Flight controller integrated with XM receiver
- Firmware version: betaflight_3.3.0_frsky (can be upgraded)
- Motor: 615 coreless
- Prop Size: 31mm 3 blades props
- Camera: NTSC 672X492
- Video Transmitter: 5.8G 26CH 25mW
- Battery: 3.7V 200mAh 25C LiPo battery

Package included

- 1 x Apus MQ60 V2
- 1 x 3.7V 200mAh LiPo battery
- 1x USB charger
- 1x Manual

> Note: While using the USB cable (to adjust the parameters) please do not start the motor, it will burn-out the main board. Please only activate the motors with the battery connected.

Features

- Light weight
- 5 minutes' flying time
- Support 2 binding modes (automatically and manually)
- Solid frame and strong protection for blades
- Fly without adjusting the parameters after binding
- Support the parameter adjustment and the default value recovery

Binding Procedure

A. Automatic Bind:
1. Create a new Quadcopter model. (pls refer to the radio manual)
2. Set Channel 5 as ARM(Unlocking switch) and Channel 6 as the switch of ANGLE/HORIZON Mode under the interface of "MIX" on the transmitter.
3. Turn on the radio ,enter the model. Move the cursor to "Bind",press ENTER button ,the cursor will flash and the speaker will beep to remind you that the RF module has entered the Bind mode.
4. Connect the battery to Apus MQ60 V2, wait for about 3s, the red LED in the Apus MQ60 V2 will flash, indicating the binding process is completed. Exit "Bind " mode and pull the throttle to the lowest place.
5. Power off the Apus MQ60 V2, and Power-on again, if the binding was a success It could able to take off.
B. Manual Bind:
1. Create a new Quadcopter model. (pls refer to radio manual)
2. Set Channel 5 as ARM(Unlocking switch) and Channel 6 as the switch of ANGLE/HORIZON Mode under the interface of "MIX" on the transmitter.
3. Turn on the radio, enter the model. Move the cursor to "Bind", press ENTER button, the cursor will flash and the speaker will beep to remind you that the RF module has entered the Bind mode. Hold the F/S button on the FC, and power the Apus MQ60 V2 at the same time. The red LED will flash, then power off the Apus MQ60 V2.
4. Exit the radio's "Bind " mode and pull the throttle to the lowest position.
5. Power up the MQ60 and if the binding was a success it could able to take off.

> Note: We have flashed the betaflight firmware before shipping.

Operating Instructions About VTX

Changing frequency band and channel
The green LED for Channel ,the red LED for frequency band.
1. Single press Band/Channel button to change channel, green LED will skip one after one accordingly.
2. Hold the Band/Channel button for 2 seconds to change frequency band, red LED will skip one after one accordingly.


Band/Channel Button
Channel Led (Green) CH1-CH8
Band Led (Red) A-F
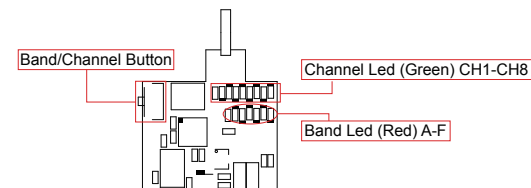
Below is channel table for your kind reference.

CH / Band	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
A	5865	5845	5825	5805	5785	5765	5745	
B	5733	5752	5771	5790	5809	5828	5847	5866
C								
D	5740	5760	5780	5800	5820	5840	5860	
E			5732	5769	5806	5843		
F								

Charge the battery

1. Connect the charger to the USB adaptor
2. Inserting the battery to the charger (To make better use of the battery, it is recommended to charge it at 4.35V)
3. The LED will keep red when the battery is charging and it will go out when the battery is fully charged.
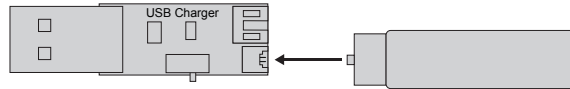
Prepare your Quadcopter

1. Install the propellers
   Fix the clockwise propellers onto the clockwise motors, following the rotation direction that marked on the motors. And then, fix the counterclockwise propellers in the same way. Tighten the propellers manually and make sure the propeller is installed in the proper way and fastened.
2. Install the battery
   Put the battery into the bottom of the body and move it forward-backwards as required for perfect balance.
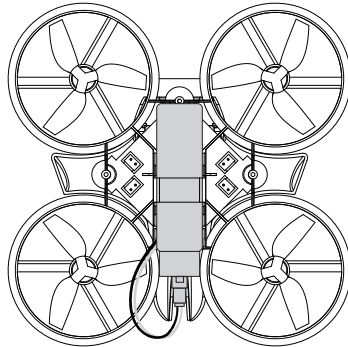
Note: Make sure the battery installed in a suitable place so that the quadccopter has a best balance.

Ready for flight

1. Place the Apus MQ60 V2 in a wide open space, with the rear facing you.Turn on the radio first and power on the Apus MQ60 V2.
2. Put all the switches in the remote controller to the UP position, center all the trim buttons and function buttons and move the throttle to the lowest position.
3. If you have a video receiver (such as a monitor or goggles) please turn on the receiver and view the video transferred by the MQ60.

End of flight

1. Land the aircraft, disarm (lock) the aircraft.
2. First power off the aircraft by unplugging the battery, then turn off the remote controller.
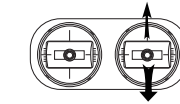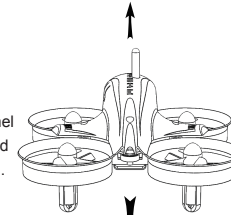3. Finally, remove the battery from the aircraft.

Operation instruction
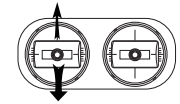
Aircraft posture (◄━ⁱⁱⁱ the direction of head)	Remote Controller control instruction

THROTTLE
Up/down
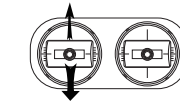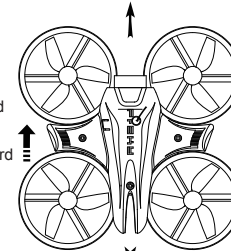The throttle channel controls the up and down of the drone.
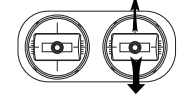
MODE 1 (Throttle stick on the right)　　　MODE2 (Throttle stick on the left)

PITCH
Forward/backward
The pitch channel controls the forward and backward of the drone.
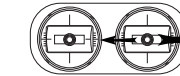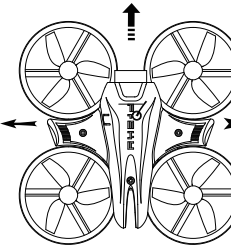
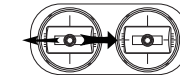MODE 1 (Throttle stick on the right)　　　MODE2 (Throttle stick on the left)
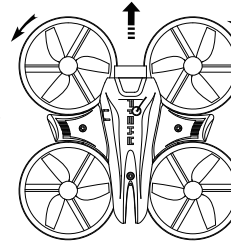
ROLL (lean)
Left/right
The roll channel controls the left or right flight of the drone.

MODE1/MODE2

YAW (turn)
Left/right
The YAW channel controls the left or right rotation of the head of the drone.

MODE1/MODE2

FrSky is continuously adding features and improvements to our products. To get the most from your product, please check the download section of the FrSky website www.frsky-rc.com for the latest update firmware and manuals.