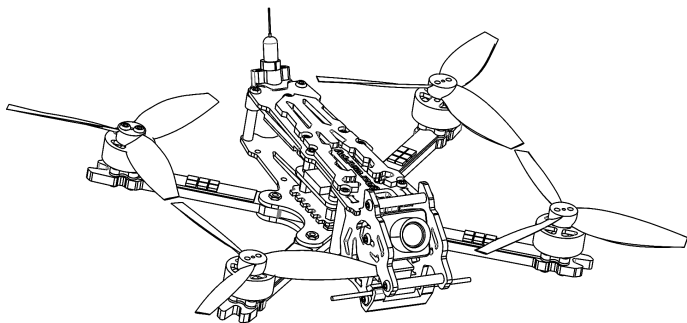




DARWIN BabyApe II USER MANUAL



Instagram: @darwinfpv_official

Facebook: DarwinFPV1

Email: support@darwinfpv.com

Manufacturer:

Room 2209, Building 2, Tonggao Factory, Sanlian Industrial Zone, Songbai Road, Baoan District, Shenzhen, Guangdong

DARWINFPV official website: <https://www.darwinfpv.com>

CAUTIONS

- ① 1504-3600KV motor max supports 4S battery, 1504-2300KV motor max supports 6S battery.
- ② Must remember not to reverse the battery, otherwise it will burn the drone.
- ③ If the FC parameters are abnormal due to various reasons and cannot be used normally, you can go to DarwinFPV official store's support page to obtain the official parameter configuration.
- ④ After receiving the FC, first connect to computer on Betaflight Configurator software to check whether the gyroscope and accelerometer are detected, and whether the gyroscope attitude is normal.
- ⑤ Increase the throttle in Betaflight software to ensure the normal rotation and correct rotation direction of the 4 motors, and then install the propellers to test flight; **Be sure to remove the propellers when pulling the throttle in Betaflight software to avoid accidents.**

After confirming the above precautions, you can install the propellers and start flying.

SUMMARY

DarwinFPV is dedicated to designing cost-effective fpv drones. We humbly accept pilots' feedback, solve players' concerns, and bring better products to everyone who uses it. DarwinFPV brings BabyApe II in accordance with these principles.

BabyApe II is a 3.5-inch miniature freestyle fpv drone with a take-off weight of less than 250g, which meets the standards of most countries. Compared with the first generation of BabyApe, BabyApe II has a more powerful configuration, adopts a more reliable manufacturing process and a new power system, and has a higher level of performance, durability and power. The flight time can reach 13 minutes, the flight distance is 1.5 kilometers, and the maximum speed is 92km/h.

If you are a beginner in fpv drone with limited budget, then we highly recommend BabyApe II. It not only continues the classics of the first generation of BabyApe, but also upgrades to a higher configuration, and the price has not increased much. It is still the best choice for beginners within a reasonable budget.

FEATURES

- 1、Compared with other FPV drone brands on the market, BabyApe II only sells for \$139.99, which once again reflects our cost-effective.
- 2、Using 1504 motors and 3.5-inch propellers, the power is stronger and the response speed is faster.
- 3、The camera and stack adopt glue-pouring protection, which effectively prevents the risk of damage due to contact with metal particles, fine sand, gravel, weeds or dew, and the entire electronic system is more reliable and durable.
- 4、The addition of a buzzer and more LED lights is very helpful for beginners who often encounter scenarios such as over-discharging the battery and finding the drone due to mistakes that cause the drone to fall to the ground abnormally.
- 5、Analog/digital multi-version VTX system for your choice.
- 6、Independent action camera base, which can carry naked gopro, thumb camera, etc. to record shocking pictures during flight at 4K/60 frames.

SPECIFICATIONS

Brand: DarwinFPV

Model: BabyApe II 3.5" Freestyle FPV Drone

Frame Structure: Wide -X

Wheelbase: 156mm

Dimension: 126mm x 150mm x 50mm

Flight Controller: F411 MPU6500 AT7456E

Reserved Connector: 1x SBUS(RX1 inverter) 2x Uarts(1,2) 2x Softserial
1x I²C 1x RGB 1x Buzzer 1x USER(A15) 1x USB

ESC: BlueJay 3-6S 30A

Camera and VTX Option:

Analog Version : Darwin "Cement" Waterproof CAM +600mW Analog VTX

HD Version : RUNCAM LINK Wasp

Motor: 4S Version: 1504-3600KV

6S Version: 1504-2300KV

Propeller: HQProp T3.5x2x3GR-PC

Recommend Battery: LiPo 4S 650mAh-850mAh

LiPo 6S 500mAh-650mAh

Hovering Time: 13mins (4S 850mAh Battery)

Weight: 135.4g (Analog Version)

Weight: 224.4g (Analog Version + 4S 850mAh Lipo Battery)

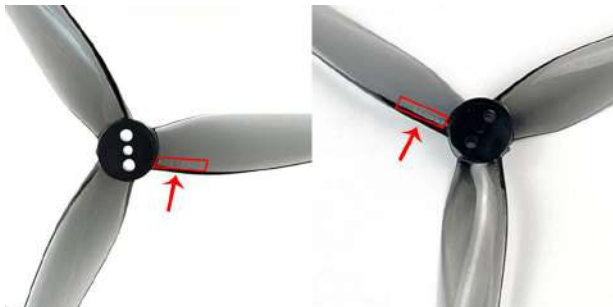
Weight: 151.4g (HD Version)

Weight: 240.0g (HD Version + 4S 850mAh Lipo Battery)

PROPELLER INSTRUCTIONS

DarwinFPV BabyApe II propellers installation!

Step 1: Place the 4 propellers with the words facing up, as shown in the figure below:

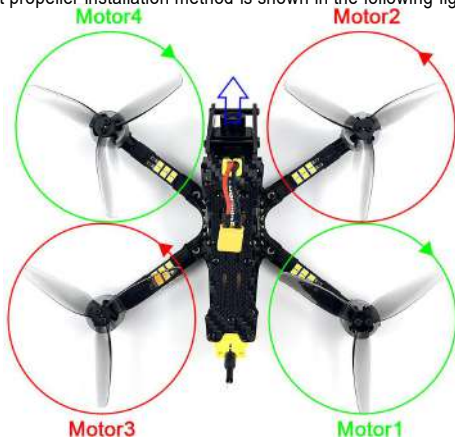


Step 2:

Install the two propellers with the words **T3. 5X2X3** on the No. 2 and No. 3 motors respectively;

Install the two propellers with the words **T3. 5X2X3R** on the No. 1 and No. 4 motors respectively;

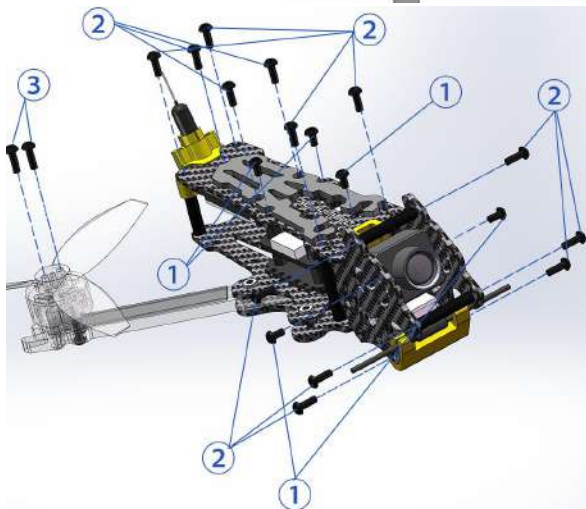
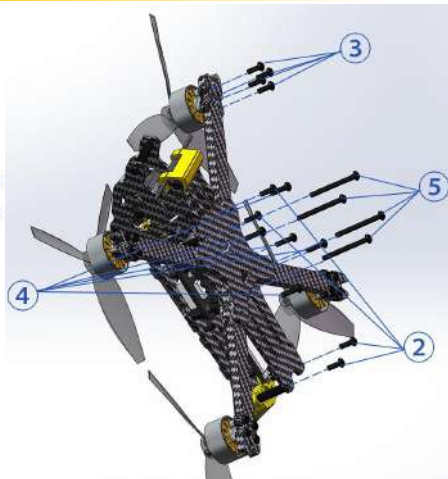
The correct propeller installation method is shown in the following figure:



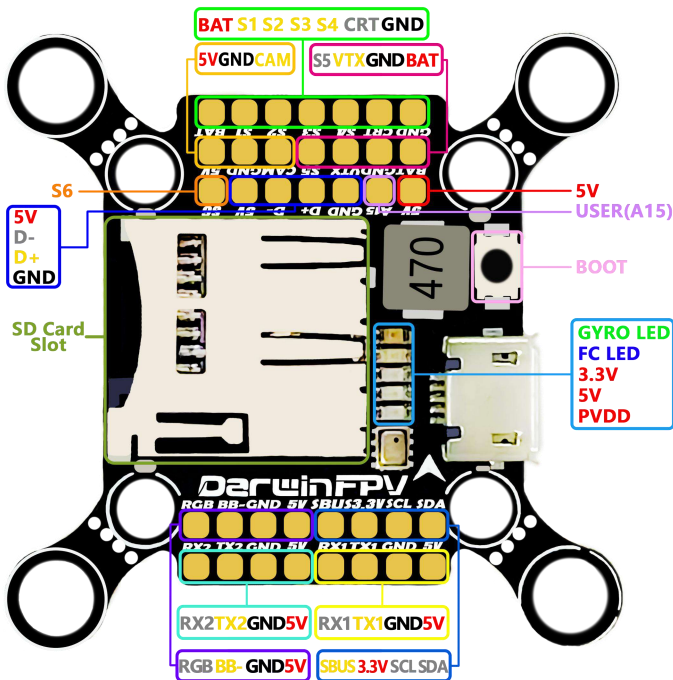
SCREWS BOM

Screw List

- ① M2*4 mm 5pcs
- ② M2*6 mm 17pcs
- ③ M2*7 mm 24pcs
- ④ M2*9 mm 5pcs
- ⑤ M2*22 mm 4pcs

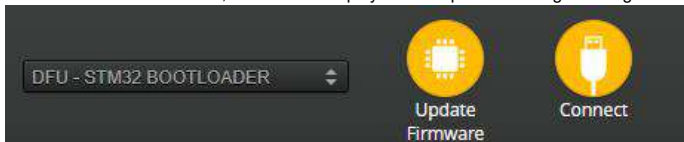


FC WIRING DIAGRAM



HOW TO ENTER DFU MODE

① Press and hold the **Boot** button to connect to the computer to enter DFU mode; after the connection is successful, DFU will be displayed at the port of Betaflight Configurator.



② Connect to computer by USB-C cable, open the Betaflight Configurator software and click connect button - CLI menu, entering "BL" in the menu bar can also enter DFU Mode ("BL" can be uppercase or lowercase).



PROGRAMMING FIRMWARE

After entering the DFU mode, select the "DARWINF411" firmware and version and load the firmware, then click "Program firmware" and wait for the completion of the programming to connect to Betaflight Configurator.



After the programming is successful, the FC status indicator will also light up again.



IN THE BOX

- 1 x DarwinFPV BabyApe II 3.5" Freestyle FPV Drone
- 4 x HQProp T3.5x2x3GR-PC propeller (2L2R)
- 2 x battery strap 10x170mm
- 2 x EVA bottom plate shock absorbing pad (Thickness: 10 mm)
- 1 x Spare Screw Kit
- 1 x Sticker
- 1 x Manual

For more information about FC firmware, CLI, configuration files, the latest manuals etc., and more detailed configuration tutorials, please refer to DarwinFPV official website support menu.

DARWINFPV official website: <https://www.darwinfpv.com>

AFTER-SALES SERVICE

About Refunds: New/unopened/unused products purchased directly from DarwinFPV can be returned unconditionally within 20 workdays, and the customer is responsible for the return shipping cost. If the returned product is lost or opened for use, damaged or missing accessories, it will not be unconditional Refund.

About Warranty: If DarwinFPV determines that the problem is not covered by warranty, we will provide a discount for ordering new product replacement, and do not support free replacement.

Cases not supported by warranty:

1. Drone crash or fire damage due to user operation error.
2. Damage caused by incorrect soldering, improper installation and use.
3. Damage caused by unauthorized modification of circuit and mismatch of battery and charger.
4. Damage due to component aging or drone collision.

CONTACT



support@darwinfpv.com
sales@darwinfpv.com



[@DarwinFPV1](https://www.facebook.com/DarwinFPV1)