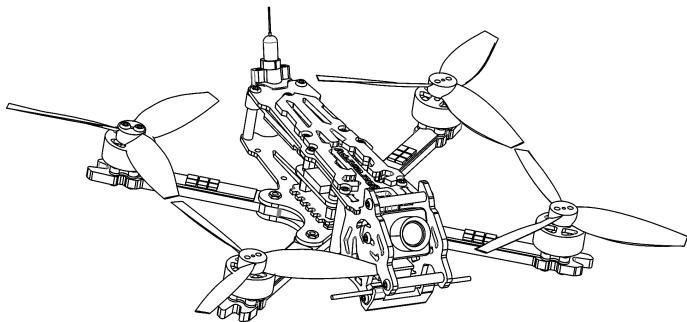




DARWIN BabyApe II 使用说明书



官方淘宝店铺：DarwinFPV 达尔文品牌店

官方售后支持微信：DarwinFPVsupport

制造商：深圳市智航星电子有限公司

地址：广东省深圳市宝安区松白路三联工业区同高厂房 2 栋 2209



官方售后微信二维码

注意事项

- ① 1504-3600KV 电机最高支持 4S 电池；1504-2300KV 电机最高支持 6S 电池。
- ② 切记不得将电池接反，否则会烧坏飞机。
- ③ 如果由于各种原因导致飞控参数异常无法正常使用，可以添加达尔文微信联系客服获取官方参数配置。
- ④ 收到产品后先进入 Betaflight Configurator 查看是否有检测陀螺仪和加速度计，以及陀螺仪姿态是否正常。
- ⑤ 在 Betaflight 中拉动油门，确保四个电机正常转动包括电机转向正确，再装桨试飞；**拉油门时务必卸桨，以免发生重大事故**

确认以上注意事项无任何产品问题即可装桨开始爽飞！

产品概述

DarwinFPV 一直致力于设计高性价比的穿越机，我们虚心接受飞行员的反馈，解决玩家的痛点，把更好的产品带给使用它的每一个人。秉承着这些信念，DarwinFPV 带来了 BabyApe II。

BabyApe II 是一款起飞重量低于 250g 的 3.5 寸微型花飞穿越机，符合大多数国家的标准。相较于 BabyApe I 代，BabyApe II 拥有更强大的配置，采用更加可靠的制造工艺和全新的动力系统，在性能、耐用性和动力上更上一层楼。飞行时间可达 13 分钟，飞行距离 1.5 公里，最高时速 92km/h。

如果您是一名穿越机初学者，且预算有限，那我们非常推荐 BabyApe II。它不仅延续了 BabyApe I 代的经典，还升级了更高的配置，价格涨幅不大，依旧是初学者在合理预算内的最佳选择。

产品特点

- 1、同样的配置相比友商一两千块的价格，BabyApe II 仅售 699 人民币，再次将性价比拉满！
- 2、采用 1504 电机搭配 3.5 寸桨叶，动力强劲，手感细腻丝滑。
- 3、摄像头和飞塔采用灌胶防护处理，有效的防止因接触金属颗粒、细沙碎石、杂草或露珠等而损坏的风险，整个电子系统更加可靠耐用。
- 4、增设了蜂鸣器和更多的 LED 灯，对于新手经常遇到的电池过放、失误炸机找机等场景非常有帮助。
- 5、模拟/数字多版本图传系统供您选择。
- 6、独立的运动相机底座，可搭配裸狗、拇指相机等录制 4K/60 帧飞行时的震撼画面。

产品规格

品牌: DarwinFPV

型号: BabyApe II 3.5 寸花飞穿越机

机架类型: 宽 X

轴距: 156mm

机身尺寸: 126mm x 150mm x 50mm

飞控: F411 MPU6500 AT7456E

预留接口: 1x SBUS (RX1 反向)、2x Uarts(1,2)、
2x Softserial、1x I²C、1x RGB、1x Buzzer、
1x USER(A15)、1x USB

电调: BlueJay 3-6S 30A

摄像头和图传:

模拟版本: DARWIN “水泥” 全防水摄像头 + 600mW 模拟图传

数字版本: RUNCAM LINK 黄蜂高清图传

电机: 4S 版本: 1504-3600KV

6S 版本: 1504-2300KV

螺旋桨: HQProp T3.5x2x3GR-PC

悬停时间: 13 分钟(4S 850mah 电池)

推荐电池: LiPo 4S 650mAh-850mAh

LiPo 6S 500mAh-650mAh

重量: 135.4g(模拟版本)

重量: 224.4g(模拟版本 + 4S 850mAh 电池)

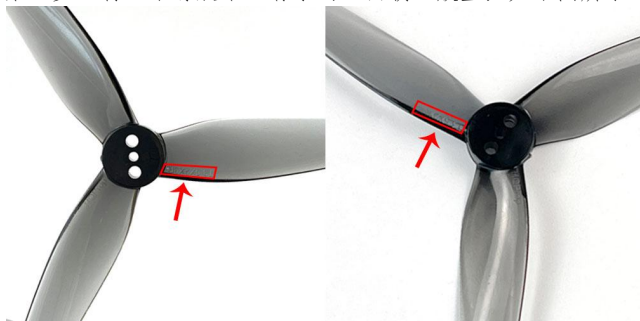
重量: 151.4g(数字版本)

重量: 240.0g(数字版本 + 4S 850mAh 电池)

使用说明

DarwinFPV BabyApe II 的螺旋桨安装方式！

第一步：将四个螺旋桨上有字的一面朝上放置，如下图所示：

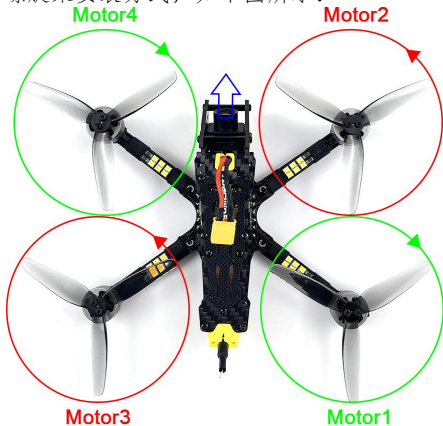


第二步：

将写有 **T3.5X2X3** 字样的两副螺旋桨分别安装在 2 号和 3 号电机上；

将写有 **T3.5X2X3R** 字样的两副螺旋桨分别安装在 1 号和 4 号电机上；

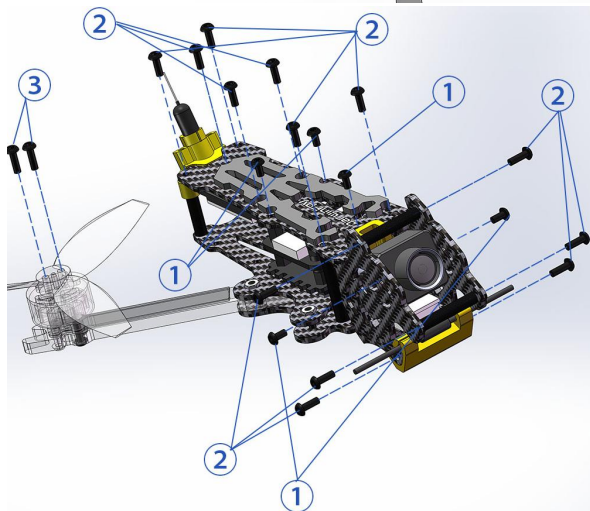
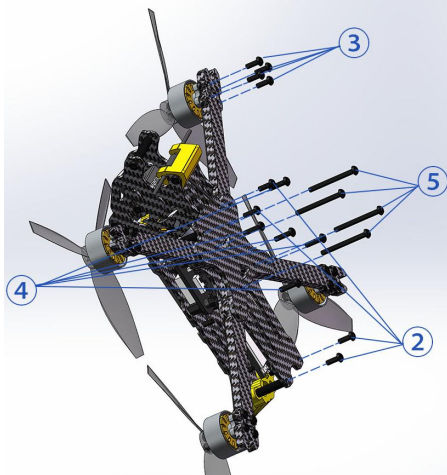
正确的螺旋桨安装方式，如下图所示：



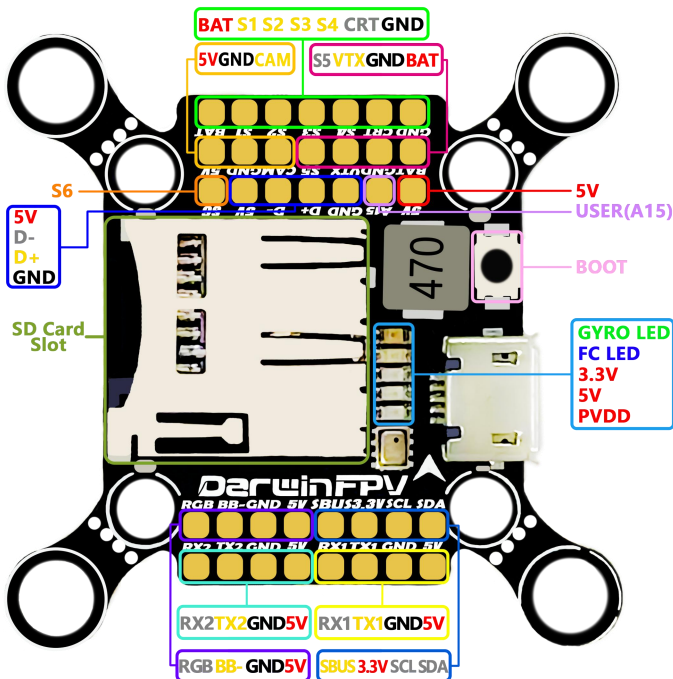
螺丝规格

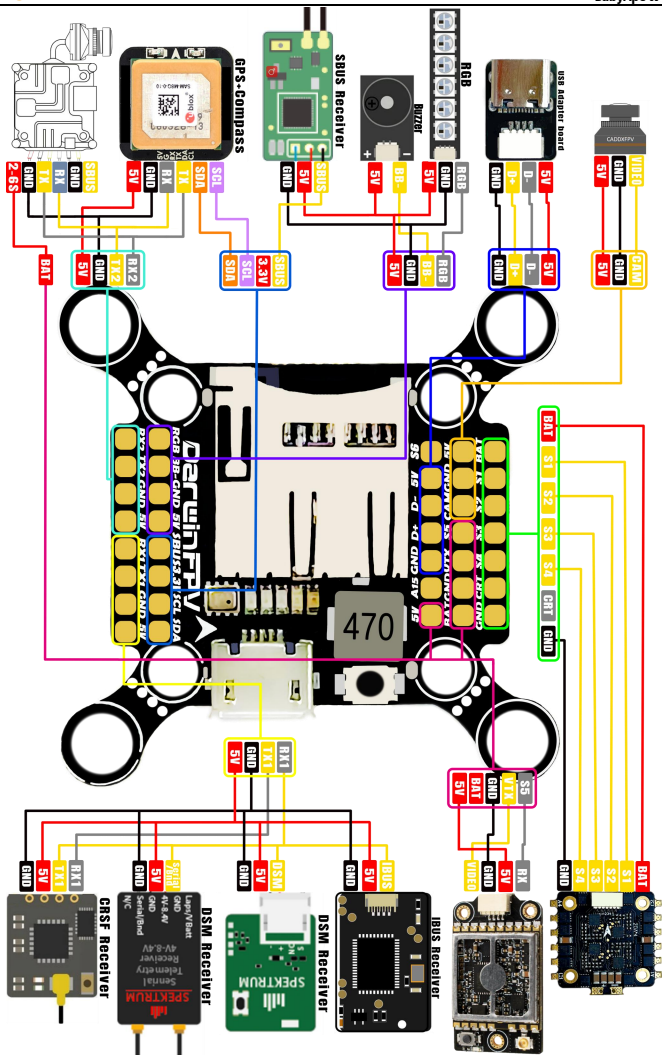
螺丝清单

- ① M2*4 mm (5 个)
- ② M2*6 mm (17 个)
- ③ M2*7 mm (24 个)
- ④ M2*9 mm (5 个)
- ⑤ M2*22 mm (4 个)



飞控接线图



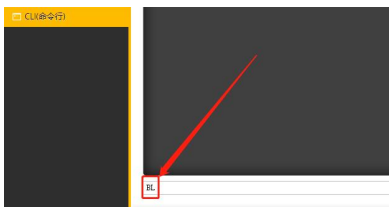


如何进入 DFU 模式

① 按住 Boot 键连接电脑，即可进入 DFU 模式；连接成功后 Betaflight Configurator 的端口处会显示 DFU。

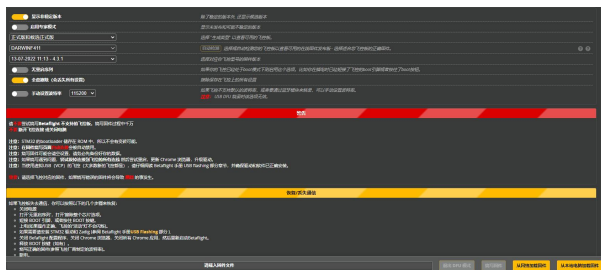


② 将飞控连接到 Betaflight Configurator，在“CLI(命令行)”中输入“BL”（大小写均可）也可进入 DFU 模式。



如何烧录固件

进入 DFU 模式后，选择“DARWINF411”固件和版本后加载固件，然后点击“烧写固件”等待烧写完成即可连接 Betaflight Configurator。



烧写成功后飞控的状态指示灯也会重新亮起



包装清单

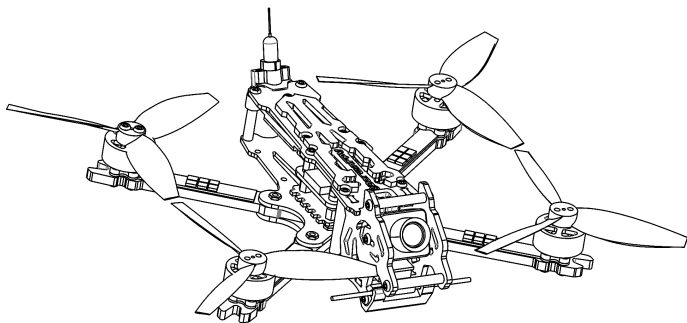
- 1 x BabyApe II 3.5 寸花飞穿越机
- 4 x HQProp T3.5x2x3GR-PC 螺旋桨 (2 正+2 反)
- 2 x 电池扎带 10x170mm
- 2 x EVA 底板减震垫 (厚度: 10 mm)
- 1 x 备用螺丝包
- 1 x 贴纸
- 1 x 说明书

更多有关 AIO 的固件、CLI、配置文件、最新的说明书等及更详细的配置教程，请到 DARWINFPV 官网支持下获取。

DARWINFPV 官网：<https://www.darwinfpv.com>



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)

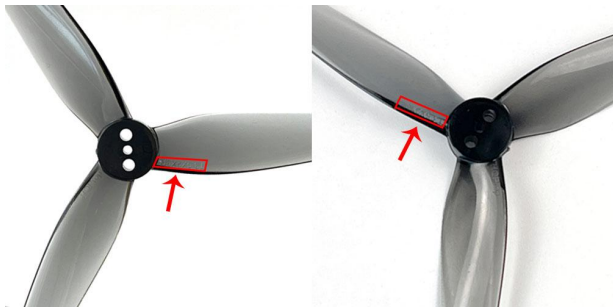
Weight: 151.4g (HD Version)

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:

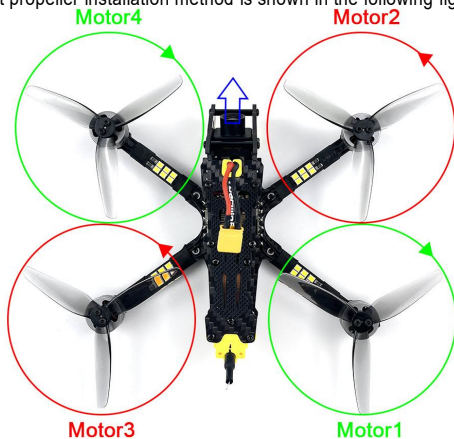


Step 2:

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;

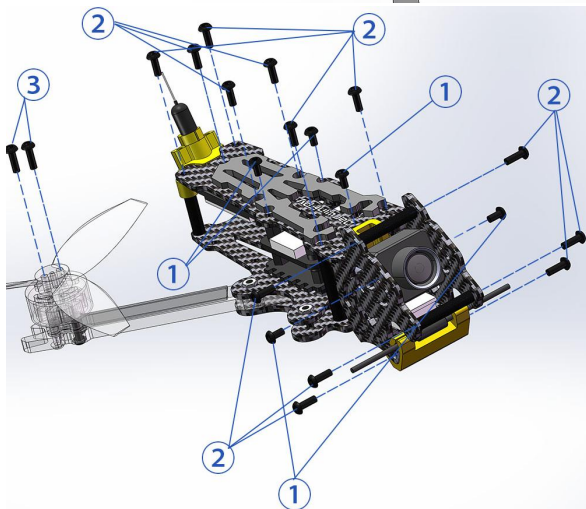
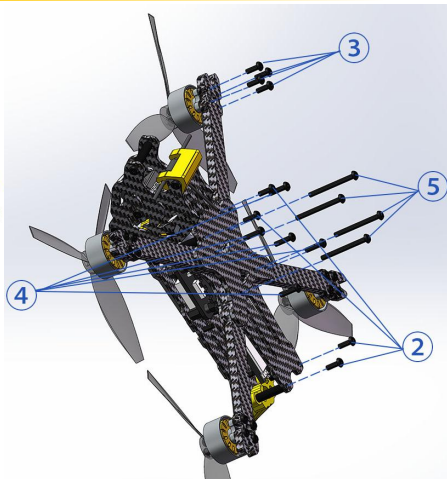
The correct propeller installation method is shown in the following figure:



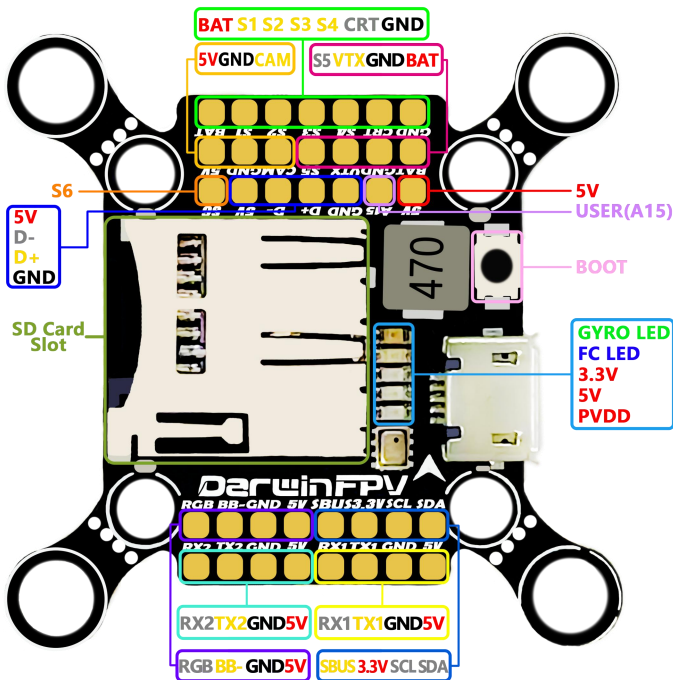
SCREWS BOM

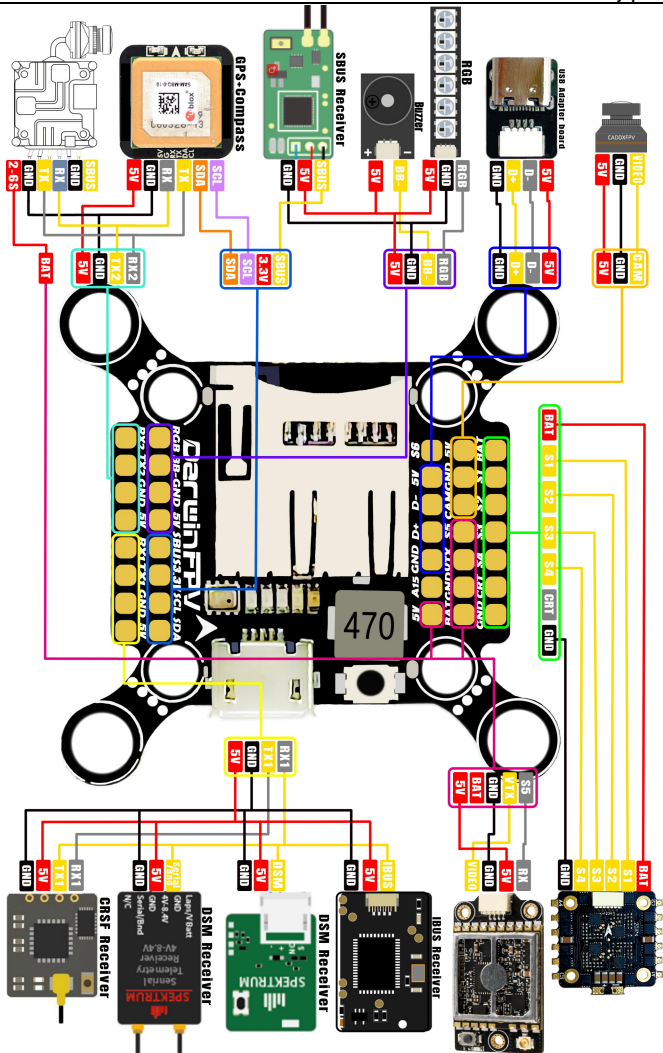
Screw List

- 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



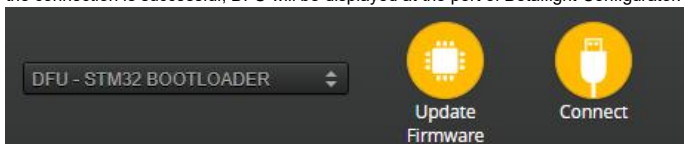
FC WIRING DIAGRAM





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.

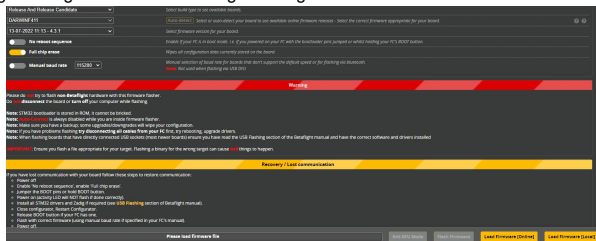


② Connect to computer by USB-C cable, open the Betaflight Configurator software and click connect button - CLI menu, entering "BL" in the menu bar can also enter DFU Mode ("BL" can be uppercase or lowercase).

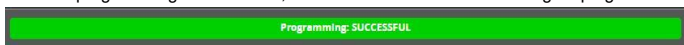


PROGRAMMING FIRMWARE

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



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sales@darwinfpv.com



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