

# DARWIN CineApe 25 USER MANUAL



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## CAUTIONS

Decause the black box function of the target firmware "DARWINF411" is currently not compatible with Betaflight 4.3.0 and 4.3.1 (the black box function is expected to be added to the official version 4.3.2) If you need to use the black box urgently, please upgrade to the 4.4.0 development version or downgrade to 4.3.0\_RC3 and below firmware version.

② The drone only supports the use of 3-4S Lipo batteries. Do not connect batteries above 4S to avoid burning the drone.

③ Must remember not to reverse the battery, otherwise it will burn the drone.

④ After receiving the AIO, first connect to computer on Betaflight software to check whether the gyroscope and accelerometer are detected, and whether the gyroscope attitude is normal.

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

CineApe25 is DarwinFPV's first cinematic whoop FPV drone. The frame is composed of upper and lower carbon plates and a high-strength injection guard, which is very strong and crash-resistant and easy to disassemble. The motor adopts 1504-3600KV long-life motor; we abandoned the traditional AIO solution and adopted the split design of F4+30A stack to reduce the maintenance cost in the future. The accessories adopt mature and stable solutions to maximize the durability and reliability of the drone.

CineApe25 is a very cost-effective whoop FPV drone. It not only solves the worries of beginners about the high risk factors and high threshold of assembly, but also improves the after-sales experience. If you are still struggling with which FPV drone to buy, DarwinFPV CineApe25 may be your best choice !

#### FEATURES

Comes with high-strength one-piece injection-molded propeller guard, which has higher safety, stronger and more durable frame, also reduce the probability of risk, so you have more confidence to fly.

The new ducted aerodynamic design greatly optimizes power efficiency, and with the 1504-3600KV long-endurance motor, the CineApe 25 has a battery life of up to 9mins.

Compared with traditional stacks, we have treated the CineApe 25 stack with glue to protect it, which greatly reduces the risk of damage to the stack due to contact with metal particles, fine sand and gravel, weeds or dewdrops, etc.

The external Type-C parameter adjustment port is convenient for parameter adjustment. It comes with quick-release design only needs to remove 7 screws to separate the top plate and the injection molding guard, which can easily deal with the scene in which accessories need to be replaced urgently.

The stack has built-in barometer and SD card slot, and reserves rich interfaces resource, which is facilitate upgrade and DIY in the future.

### **SPECIFICATIONS**

Brand: DarwinFPV

Model: CineApe 25 Cinematic FPV Drone

Frame Structure: True -X

Wheelbase: 112mm

Dimension: 160mm x 160mm x 43mm

Flight Controller: F411 MPU6500 AT7456E

Reserved Connector: 1x SBUS(RX1 inverter) 2x Uarts(1,2) 2x Soft serial

1x I<sup>2</sup>C 1x RGB 1x Buzzer 1x USER(A15) 1x USB

ESC: BlueJay 3-4S 30A

Camera and VTX Option:

Analog Version : CADDX ANT Analog CAM + 600mW Analog VTX

HD Version : CADDX WALKSNAIL AVATAR MINI 1S

CADDX Nebula PRO NANO

RunCam Falcon Nano

Motor: 1504-3600KV

Propeller: HQProp T63MMX6

Recommend Battery: LiPo 4S 850mAh

Hovering Time: 9mins (4S 850mAh Battery)

Weight: 146g (Without Battery)

Weight: 238g (With 4S 850mAh Lipo Battery)

Weight: 250g (With 4S 850mAh Lipo Battery + RunCam THUMB Camera)

Weight: 311g (With 4S 850mAh Lipo Battery + 4K AIKUCAM NANO Action Camera)

# **PROPELLER INSTRUCTIONS**

DarwinFPV CineApe 25 adopts the backward push design. When installing the propeller, be sure to pay attention to the installation method of the propellers!

**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 Duct T63MMX6 on the No. 2 and No. 3 motors respectively;

Install the two propellers with the words Duct T63RMMX6 on the No. 1 and No. 4 motors respectively;

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



# **SCREWS BOM**

#### Screws BOM

© M2 x 5 Motor Screws x 16 @ M2 x 6 VTX Screws x 3, Roof Screws x 6 @ M2 x 7 Propeller Screws x 8, TPU Parts Screws x 5 @ M2 x 10 Injection Propeller Guards Screws x 3 @ M2 x 16 Bottom Plate Screws x 4 M2 x 18 STACK Screws x 4



### **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.



② Connect to computer by USB-C cable, open the Betaflight 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.



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

Programming: SUCCESSFUL

# IN THE BOX

- 1 x CineApe 25 Cinematic FPV Drone
- 4 x HQProp T63MMX6 propeller (2L2R)
- 2 x battery strap 10x170mm
- 1 x EVA crashproof foam
- 1 x EVA bottom plate shock absorbing pad
- 1 x Spare Screw Kit
- 1 x Sticker
- 1 x Manual

For more information about AIO 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



