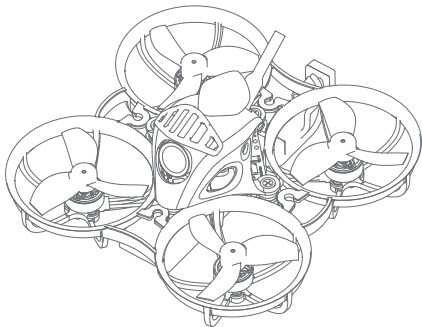




Meteor65 Pro II模拟整机说明书

1. 产品概述

1.1 包装清单

1 * Meteor65 Pro II 无刷整机

4 * GF 1409-3B 桨叶

4 * M1.4*3 机制螺丝

1 * USB Type-C 转接板

1 * SH1.0-4Pin 转接线

3 * 顶盖装饰件

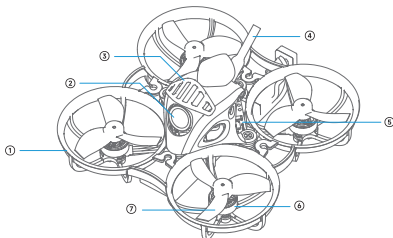
2 * 摄像头支架

1 * 螺丝刀

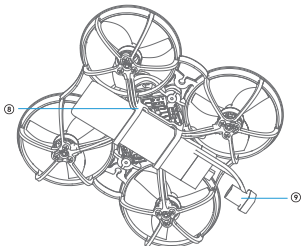
1 * 产品说明书

提示：包装内容随版本不同可能略有差异，具体以实物为准。

1.2 产品外观图



- ① 机架
- ② 摄像头
- ③ 顶盖
- ④ 天线
- ⑤ 飞控
- ⑥ 马达
- ⑦ 桨叶
- ⑧ 电池槽
- ⑨ 电源接口



2. 免责声明

请在使用此产品前，仔细阅读本说明书及注意事项。

如因违反如下使用指南内容，导致产品故障、人员伤害或财产损失等相关事故，BETAFPV及其授权经销商不承担相应责任。

因产品本身或其配件等存在的质量问题导致的损坏，应依据相关法律法规及BETAFPV的质保政策处理。

如您不认可本使用指南的内容，请勿使用此产品，并联系销售方将产品退回。

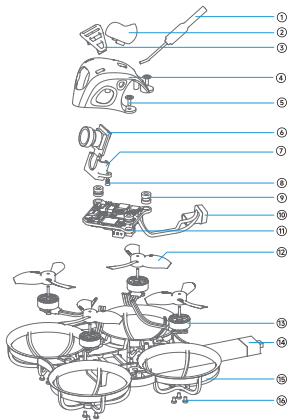
一旦使用本产品，即视为您已理解、认可和接受本文档全部条款和内容。使用者承诺对自己的行为及因此而产生的所有后果负责。使用者承诺仅出于正当目的使用本产品，并且同意本条款及BETAFPV可能制定的任何相关政策或者准则。

此产品的相关文档如有更新，恕不另行通知。请访问 <https://betafpv.com/> 了解最新信息。

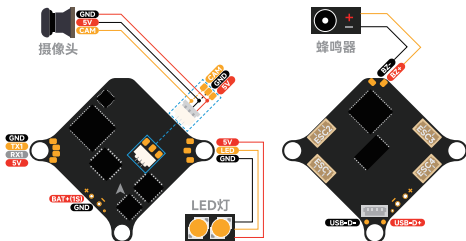
3. 装配指南

3.1 装配图

- ① 1 * 铜管天线
- ② 1 * 骑士冠装饰件
- ③ 1 * 帽檐装饰件
- ④ 1 * Micro顶盖
- ⑤ 3 * M1.4*4平头带垫自攻螺丝
- ⑥ 1 * Air摄像头
- ⑦ 1 * 摄像头固定座
- ⑧ 2 * M1.4*4沉头自攻螺丝
- ⑨ 3 * 减震球
- ⑩ 1 * 电源线
- ⑪ 1 * Matrix 1S无刷飞控 (5IN1)
- ⑫ 4 * 1409-3B桨叶
- ⑬ 4 * 0802电机
- ⑭ 1 * 电池
- ⑮ 1 * Meteor65 Pro II机架
- ⑯ 12 * M1.4*3平头机制螺丝



3.2 接线图



设置模拟图传时，UART2的外设需要设置为图传(TBS SmartAudio)；
对于接收机，请将UART3配置为串行接收机。

标识符	设置/MSP	串行接收机		外设
USB VCP	☒ 115200	☐		已禁用 115200
UART1	☐ 115200	☐		已禁用 115200
UART2	☐ 115200	☐		图传(TBS SmartAudio) 115200
UART3	☐ 115200	☒		已禁用 115200
UART4	☐ 115200	☐		已禁用 115200

CRSF接收机

在Betaflight应用里的“接收机”配置界面中，将接收机模式设置为“串行（通过UART）”，将Serial Receiver Provider设置为“CRSF”。

接收机

串行 (通过 UART)

接收机模式

- 接收机对应的 UART 端口必须启用「串行接收机」(在 端口 选项页)
- 从下拉列表中选择正确的数据格式，如下：

CRSF

Serial Receiver Provider

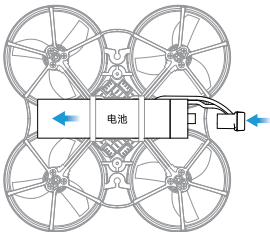
Some Receiver Providers are not supported by current Build Configuration.

* 适用该设置的接收机有：TBS Nano / ELRS Series RX

4. 对频与配置

4.1 电池安装

电池插入飞机底部电池槽，连接飞机电源接口。



4.2 接收机对频（ELRS）

- 飞机快速通断电 3 次，接收机指示灯呈绿色持续双闪，即进入对频模式；
- 遥控器进入对频状态（具体操作请参考对应遥控器的说明书）；
- 接收机指示灯变为绿色常亮，表示对频成功；
- 如果8秒内未成功对频，请重复上述操作。

提示：

- 在对频前，请确保遥控器协议与本整机协议一致，并且已经配置正确了遥控器通道（通道配置可参考“Betaflight设置”部分）；
- 对频成功之后，若重启飞机或者遥控器，将会自动完成连接，无需每次上电重新对频。

4.3 图传对频

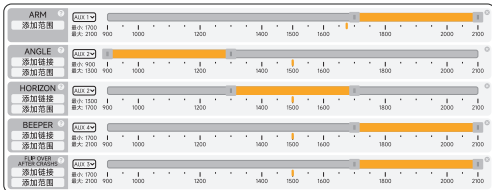
- 飞机上电，眼镜/屏幕开机；
- 眼镜/屏幕端进入对频状态（具体操作请参考对应眼镜/屏幕的说明书），开始搜频或手动设置到飞机对应频点；
- 眼镜/屏幕端显示对应的FPV穿越机画面，表示对频成功。

4.4 Betaflight设置

本产品在出厂时已设置通道映射、开关功能、电机转向、OSD等参数，无需修改即可正常飞行。

通道映射

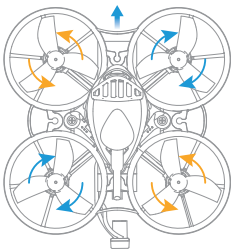
- ARM：解锁/上锁通道开关，用于控制飞机的解锁/上锁；默认出厂设置为AUX1，低位为上锁，高位为解锁
- ANGLE：自稳模式通道开关，默认出厂设置为AUX2的低位
- HORIZON：半自稳模式通道开关，默认出厂设置为AUX2的中位
- AIR MODE：空中模式，出厂默认开启，无需设置AUX开关
- BEEPER：蜂鸣器通道开关，默认出厂设置为AUX4
- FLIP OVER AFTER CRASH：反乌龟通道开关，默认出厂设置为AUX3



提示：若更改设置，需要点击“保存”。

4.5 电机转向及桨叶安装方向

默认电机转向为外转，请按图示方向安装桨叶。



5. 起飞检查

- 检查电机、桨叶安装正确且牢固，无松动、变形或破损等异常状态；
- 检查电池已正确安装至电池槽，与飞机电源接口连接稳固，飞机通电且各指示灯无异常；
- 确认飞机及配套电子设备（如遥控器、FPV眼镜等）电量充足，且与飞机对频或连接正常；
- 飞行时需要遵守当地法律法规，以及BETA FPV给出的相关注意事项和飞行警告。

6. 服务与支持



常见故障排除



BETA FPV技术支持



整机说明书

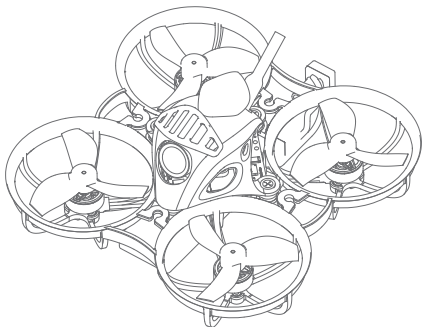
7. 安全指南

7.1 使用注意事项

- 此产品为穿越机，属于多旋翼飞机航空模型，非儿童玩具，不适合14岁以下儿童使用。
- 穿越机需要有一定的基础知识及练习才能控制飞行。因其配备了动力强劲的电机和锋利的桨叶，具有极快的飞行速度，同时具有一定的危险性，请务必熟悉产品的功能之后再进行操作，错误的操作可能会对自身或他人造成严重伤害，或者导致产品损坏和财产损失。
- 请勿使用非BETAFPV提供或建议的部件，必须严格遵守BETAFPV的指南安装和使用产品。本说明书包含安全指南、操作说明和故障排除等重要信息，请保留备用。

7.2 飞行警告

- 恶劣天气下请勿飞行，如大风、雨雪、雷暴、有雾天气等。飞机无防水防尘功能，请注意保护主板，避免浸水短路烧毁。
- 飞行前请先确认当前场所是否开阔、安全，障碍物过多可能会影响遥控和图像信号传输，干扰飞行。远离人群、水面、高压电线、通讯基站、易燃易爆物等，避免在人员密集处飞行。
- 目视飞行时，请保持飞机在视线范围内控制。
- 佩戴FPV眼镜飞行时，请尽可能减少飞机与飞行员之间的障碍物；由于无法观察周围环境，请配备观察员，以便应对突发事件；请尽量保持坐姿飞行，不要随意走动。
- 请勿在非固定平台进行起飞、降落，例如：手掌、行进中的汽车或船只等。
- 切勿接触工作中的桨叶，否则可能受到严重的人身财产损害。
- 飞行时如遭遇意外情况，应立刻操作遥控器使电机停转。
- 飞行时操作油门杆请保持轻缓，避免飞机失控。



Meteor65 Pro II

Brushless Whoop Quadcopter

USER MANUAL

1. Product Overview

1.1 Product List

1 * Meteor65 Pro II Brushless Whoop Quadcopter

4 * Gemfan 1409-3B Propellers

4 * M1.4*3 Machine Screws

1 * USB Type-C Adapter

1 * SH1.0-4Pin Adapter Cable

3 * Canopy Accessories

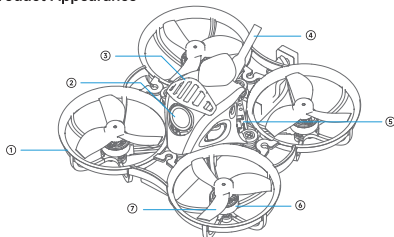
2 * Camera Mounts

1 * Screwdriver

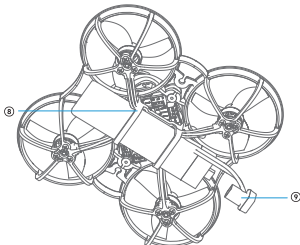
1 * User Manual

Note: Packaging contents may differ by version, please refer to the actual product.

1.2 Product Appearance



- ① Frame
- ② Camera
- ③ Canopy
- ④ Antenna
- ⑤ Flight Controller
- ⑥ Motor
- ⑦ Propellers
- ⑧ Battery Slot
- ⑨ Battery Connector



2. Disclaimer

Please read this manual and all safety precautions carefully before using this product. BETAFPV and its authorized dealers shall not be held liable for any product malfunction, personal injury, or property damage resulting from failure to comply with the guidelines stipulated in this manual.

Any damages caused by inherent quality defects in the product or its accessories shall be handled in accordance with applicable laws, regulations, and BETAFPV's official warranty policy. If you do not agree to the terms of this user guide, please do not use this product and contact your seller immediately for a return.

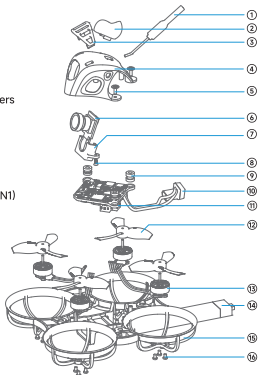
By using this product, you are deemed to have understood, acknowledged, and accepted all terms and conditions herein. Users agree to take full responsibility for their own actions and all consequences arising therefrom. Users agree to use this product only for legitimate purposes and agree to these Terms and Conditions and any relevant policies or guidelines established by BETAFPV.

This product documentation is subject to change without prior notice. Please visit <https://betafpv.com/> for the latest information.

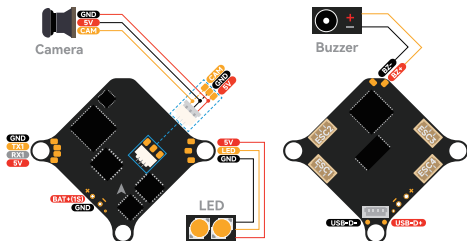
3. Assembly Guide

3.1 Assembly Diagram

- ① 1* Dipole Antenna
- ② 1* Knight Crown Decoration
- ③ 1* Cap Brim Decoration
- ④ 1* Micro Canopy
- ⑤ 3* M1.4*4 Self-Tapping Screws with Washers
- ⑥ 1* Air Camera
- ⑦ 1* Camera Mount
- ⑧ 2* M1.4*4 Self-Tapping Screws
- ⑨ 3* Shock-Absorbing Balls
- ⑩ 1* Power Cable
- ⑪ 1* Matrix 1S Brushless Flight Controller (5IN1)
- ⑫ 4* 1409-3B Propellers
- ⑬ 4* 0802 Brushless Motors
- ⑭ 1* Battery
- ⑮ 1* Meteor65 Pro II Brushless Whoop Frame
- ⑯ 12* M1.4*3 Flat Head Machine Screws



3.2 Wiring Diagram



When setting up analog VTX, set the UART2 peripheral to VTX (TBS SmartAudio). For the receiver, please configure UART3 as Serial Rx.

Identifier	Configuration/MSP	Serial Rx	*****	Peripherals
USB VCP	☒ 115200	☐	*****	Disabled 115200
UART1	☐ 115200	☐	*****	Disabled 115200
UART2	☐ 115200	☐	*****	VTX(TBS SmartAudio) 115200
UART3	☐ 115200	☒	*****	Disabled 115200
UART4	☐ 115200	☐	*****	Disabled 115200

CRSF Protocol RX

In Configuration tab, set "Serial (via UART)" as the Receiver Mode, and set "CRSF" as the Serial Receiver Provider.

Receiver

Serial (via UART)

Receiver Mode

- The UART for the receiver must be set to 'Serial Rx' (in the Ports tab)
- Select the correct data format from the drop-down, below.

CRSF

Serial Receiver Provider

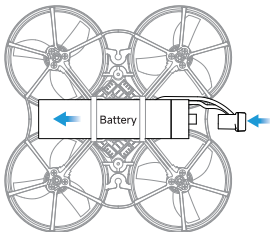
Some Receiver Providers are not supported by current Build Configuration.

* CRSF Protocol RX: TBS Nano / ELRS Series RX

4. Binding and Configuration

4.1 Battery Installation

Insert the battery into the battery slot on the bottom of the quadcopter and connect the power connector.



4.2 Receiver Binding (ELRS)

- Power cycle the quadcopter 3 times rapidly. The receiver LED flashes green twice repeatedly, indicating the receiver enters the binding mode.
- Set your radio transmitter into binding mode (refer to your radio transmitter's manual for specific steps).
- The receiver LED turns solid green, indicating a successful binding.
- If binding is not successful within 8 seconds, please repeat the steps above.

Tips:

- Before binding, ensure that the protocol configured on your radio transmitter matches that of the quadcopter and that the channel settings are configured correctly. (refer to the "Betaflight Settings" section for details).
- Once bound, the quadcopter and radio transmitter will connect automatically upon power-up; re-binding is not required.

4.3 VTX Binding

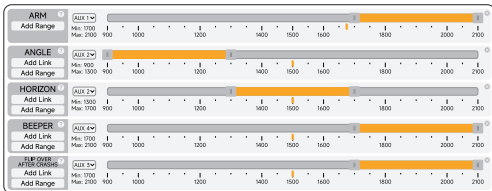
- Power up the quadcopter, then turn on your FPV goggles or monitor.
- Enter binding/search mode on your goggles/monitor (refer to the corresponding user manual). Start the auto-scan or manually tune to the quadcopter's frequency.
- Once the FPV video appears on your goggles/monitor, the VTX connection is successful.

4.4 Betaflight Settings

The Meteor65 Pro II Brushless Whoop Quadcopter is pre-configured with optimized default settings for Channel Mapping, Switch Functions, Motor Direction, and OSD. No further configuration is required before flight.

Channel Mapping

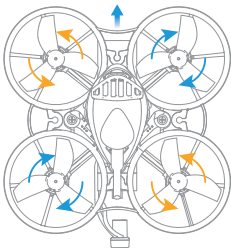
- **ARM:** Arm/disarm switch used to control the arming status of the quadcopter. Factory default: AUX1. (Low position: Disarmed; High position: Armed).
- **ANGLE:** Factory default: AUX2 (Low position).
- **HORIZON:** Factory default: AUX2 (Mid position).
- **AIR MODE:** Enabled by default in the firmware; no AUX settings required.
- **BEEPER:** Buzzer switch. Factory default: AUX4.
- **FLIP OVER AFTER CRASH:** Turtle Mode switch. Allows the quadcopter to flip itself over after a crash. Factory default: AUX3.



Note: If any settings are modified, remember to click "Save" to apply changes.

4.5 Motor Direction & Propeller Installation

The default motor direction is set to Props in(Inward Rotation). Please install the propellers following the diagram below.



5. Pre-flight Check

- Inspect all motors and propellers to ensure they are installed securely. Check for any looseness, deformation, or damage.
- Confirm the battery is securely installed in the battery slot and firmly connected to the battery connector. Ensure the quadcopter powers on normally and all status LEDs are function properly.
- Verify that the quadcopter and all related equipment (radio transmitter, FPV goggles, etc.) are fully charged and that the connection/binding is stable.
- Ensure all flights comply with local laws and regulations, as well as the safety precautions and flight warnings provided by BETA FPV.

6. Service & Support



BETA FPV Technical Support



Quadcopter Manual

7. Safety Guidelines

7.1 Important Notices

- This product is an FPV quadcopter, classified as a multi-rotor model aircraft. It is NOT a toy and is not suitable for children under 14 years of age.
- Operating an FPV quadcopter requires basic technical knowledge and practice. Equipped with high-speed motors and sharp propellers, these quadcopters can reach high speeds and pose significant risks. Please familiarize yourself with all functions before operation. Incorrect operation may result in serious injury to yourself or others, as well as damage to the product or property.
- Do not use components not provided or recommended by BETAFPV. All installation and use must strictly follow BETAFPV guidelines. Please keep this manual for future reference as it contains essential safety, operation, and troubleshooting information.

7.2 Flight Warnings

- Do not fly in adverse conditions, such as high winds, rain, snow, thunderstorms, or heavy fog. This quadcopter is not waterproof or dustproof; avoid water exposure to prevent short circuits and electronic failure.
- Ensure the flight area is open and safe. Excessive obstacles may interfere with radio and video signals. Stay away from crowds, water, high-voltage power lines, communication base stations, and flammable/explosive materials.
- When flying visually, always keep the quadcopter within your line of sight.
- When flying with goggles, minimize obstacles between the quadcopter and the pilot. Since your surrounding awareness is limited, fly with a spotter to handle emergencies. It is highly recommended to remain seated while flying.
- Do not take off or land on non-fixed platforms, such as your palm, or moving vehicles and boats.
- Never touch spinning propellers, as they can cause severe personal injury or property damage.
- In the event of an emergency during flight, immediately disarm the motors via the transmitter.
- Operate the throttle stick gently to maintain stability and avoid sudden, erratic movements.