# 航拍无人机

## 使用说明书 Operation Manual

V1.0



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飞行安全认识对于您、周围人群与环境的安全非常重要,请务必仔细阅读《使用说明书》。 Please Take proper operation and flight safety guidelines in mind as it is very important for all of us.

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### 重要提示

- 使用本产品前请仔细阅读本说明书,并严格按照说明书操作。
- 请不要自行尝试拆解、改装、维修飞行器、如有需要请联系客服人员。
- 可进入 Enjoy-Fly2 中的 "学院"  $\rightarrow$  "说明书"中下载本说明书的电子文档。
- 本说明书如有更新,恕不另行通知。

### 1. 安全概要

- 恶劣天气下请勿飞行,如大风、下雪、下雨、有雾天气等。
- 请勿在相关法律或规定限制的禁飞区域内飞行。
- 选择开阔、周围无高大建筑物的场所作为飞行场地。大量使用钢筋的建筑物会影响指南针工作,而且会遮挡 GPS 信号、导致飞行器定位效果变差甚至无法定位。
- 本产品采用 5.8GHz 高清图传、应在开阔无遮挡、无电磁干扰的环境飞行。
- 请勿在有高压线、通讯基站或发射塔等区域飞行、以免遥控器受到干扰。
- 飞行器启动后,请远离高速旋转的部件(如螺旋桨、电机等)。
- 飞行时,请时刻让飞行器保持在视线内控制,远离障碍物、人群、水面等。
- 飞行时,如果飞行器在智能定点模式下工作,图传画面卡顿或丢失时,请立即使用自动返航功能让飞行器自行返航。在不知道飞行器位置和周边状况的情况下贸然操作遥控器将大概率导致坠机。
- 请时刻注意飞行器的朝向,遥控器控制的方向总是以机头方向作为前方来执行的。
- 如果不能熟练手动操控飞行器,强烈建议使用一键起飞、降落功能,飞行器将会自动起飞或降落。并 且谨慎操作遥控器摇杆、摇杆的任何轻微动作都会导致飞行器的显著移动,不建议大幅度操作摇杆。
- 当 GPS 受到干扰时,会导致飞行器定位效果变差甚至无法定位,以致飞机不受控制。
- 在海拔4000m以上飞行,由于环境因素导致飞行器电池及动力系统性能下降,飞行性能将会受到影响, 请谨慎飞行。
- 在南北极圈内飞行器无法使用智能定点模式飞行。
- 本产品适用于有操作模型或相关产品经验、且年龄不小于 14 周岁的人群。

### 2. 免责声明与警告

使用飞行器具有一定的安全风险,仅适用于 14 周岁及以上有操作模型或相关产品经验的人群,不适合未 14 岁的人群使用。请勿让儿童接触飞行器,在有儿童出现的场景操作时请务必特别小心注意。使用本产品之前,请仔细阅读本文件,并严格按照说明书操作。本声明对安全使用本产品以及您的合法权益有着重要的影响。

本产品是一款多旋翼飞行器,在电源正常工作及各部件未损坏的情况下将提供轻松自如的飞行体验。本公司保留更新本免责声明的权利。

务必在使用产品之前仔细阅读本文档,了解您的合法权益、责任和安全说明;否则可能带来财产损失、安全事故和人身安全隐患。一旦使用本产品,即视为您已理解、认可和接受本声明全部条款和内容。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,并且同意本条款及本公司可能制定的任何相关政策或者准则。在法律允许的最大范围内,在任何情况下,本公司均不对任何间接性、后果性、惩罚性、偶然性、特殊性或刑罚性的损害,包括因您购买、使用或不能使用本产品而遭受的损失,承担责任(即使本公司已被告知该等损失的可能性亦然)。

某些国家的法律可能会禁止免除担保类条款,因此您在不同的国家的相关权利可能会有所不同。在遵从法律法规的情况下,本公司享有对以上条款的最终解释权。本公司有权在不事先通知的情况下,对本条款进行更新、改版或终止。

### 3. 认识飞行器

飞行器采用主流的轻量化、折叠型设计,在保证飞行性能和使用体验的前提下,无论是使用还是携带上都前所未有地便捷。

飞行器安装了 GPS/GLONASS/BeiDou 三模卫星定位导航系统,飞行更精准、更安全。飞行器配备了 光流定位系统,可在超低空或室内实现稳定飞行和悬停。

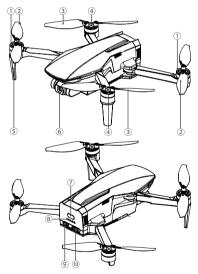
飞行器搭载高精度三轴机械防抖增稳云台,可拍相机可稳定拍摄 4K 高清视频与及 800 万像素照片。在飞行过程中通过调整相机拍摄角度,以获取独特视角与构图,拍摄出与众不同的照片及视频,您将获得更佳的航拍体验。

飞行器采用自主研发的领先飞控制系统,提供智能、稳定、安全的飞行。可实现自动返航,绕点飞行、智能跟随、航点飞行等智能飞行功能。

Enjoy-Fly2 支持安卓和 IOS 操作系统的手机。下载、安装 Enjoy-Fly2 后,通过操控遥控器与 APP,可实现飞行与相机的各种操作与设置。飞行时可在移动设备中显示实时拍摄画面及飞行参数等信息。您可使用"冲天、渐远、螺旋、彗星"等一键短片功能。即能轻松获取独特效果的小视频。

飞行器最大飞行速度为 50km/h、飞行时间最长可达 26 分钟、最长飞行距离达 3000m。

#### 1).部件说明



- ① 正转电机
- ② 正转 (CW) 螺旋桨
- ③反 (CCW) 螺旋桨
- ④ 反转电机
- ⑤ 脚架 (天线)
- ⑥ 云台 / 相机
- ⑦ 飞行器电源开关及状态指示灯
- ⑧ 飞行器电量指示灯
- ⑨ 4G 模块扩展接口
- ① 存储卡槽

#### 注意:

- 1) 使用飞行器前,请仔细阅读《操作指南》,并在 Enjoy-Fly2 App 中"学院"页面观看相关视频,以避免因操作不当而导致财产损失、甚至造成人身伤害。
- 2) 高速旋转的电机和螺旋桨具有危险性,操作者应与飞行器保持安全距离,并使飞行器远离人群、建筑物、树木或其它遮挡物、以避免发生撞击。认识认识您的飞行器。

#### 2).飞行器状态指示灯

飞行器开机后,飞行器尾部电池上的指示灯用于指示当前飞控系统的状态。请参考下表了解指示灯不同的闪灯方式所表示的飞控系统状态。

#### 飞行状态指示灯提示

序号	指示灯状态	含义
1	蓝灯闪烁	遥控器未连接,GPS 未定位
2	蓝灯常亮	遥控器未连接,GPS 已定位
3	绿灯常亮	遥控器已连接,GPS 已定位
4	绿灯闪烁	遥控器已连接,GPS 未定位
5	红蓝交替闪烁	指南针水平旋转校准中
6	红绿交替闪烁	指南针垂直旋转校准中
7	红灯常亮	严重错误
8	红灯闪烁	低电量报警
9	红灯双闪	严重低电量报警
10	绿灯双闪	光流系统已定位
11	蓝绿交替闪烁	指南针干扰过大

### 4. 认识遥控器

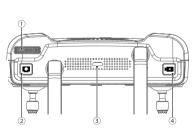
谣控器须与飞行器配套使用。

遥控器内置数字图传系统,连接移动设备后可通过 App 在手机上实时显示高清画面及飞行数据。通过遥控器上的摇杆及各功能按键,可在最大 3000m(FCC 合规版本,无遮挡无干扰环境)通信距离内操控飞行器及相机。

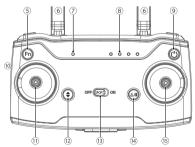
位于遥控器底部的伸缩式可折叠手机支架用于放置手机。摇杆可拆卸、便于包装携带。

遥控器内置 2600mAh 容量的可充电锂电池、工作时间不低于 2.5 小时。

#### 1).部件说明



- ① 云台俯仰控制拔轮:用于操控相机俯仰角度。
- ② 拍照按键:按一下此按键拍一张照片。
- ③USB 接口:用于给谣控器充电。



- ④ **录像按键:**按一下此按键后开始录像,再按一次停止录像。
- ⑤ 相机变焦按键:按住此按键同时拔动① 云台俯仰控制拔轮,将可调整相机变焦量,画面将随之放大或缩小。

- ⑥ 天线: 传输飞行器控制和图像无线信号。
- ② **连接状态指示灯**:未连接到飞行器时亮红灯,连接到飞行器后亮绿灯。
- ⑧ 遥控器电量指示灯:指示电量。
- ⑨ 电源开关按键:短按查看电量;长按2秒开机/关机。
- ⑩ 数据线接口:过数据线连接通手机,与手机互传数据。
- ① 左摇杆:操控飞行器的动作。
- ② 起飞/降落按键:起飞准备完成后长按2~3秒,飞行器自动起飞,起飞后长按2~3秒、飞行器将自动降落。
- ③ SPORT (运动) 模式开关: 当开关在 "OFF" 位置时, 飞行器处于普通模式, "尽行动作比较平稳; 当开关 在 "ON" 位置时, 飞行器进入运动模式, 此时飞行 动作比较灵活, "长行器进入运动模式, 此时飞行
- ④ 返航/暂停按键:飞行过程中,长按此按键2秒以上, 飞行器立即自动返航并降落;在其它任何自动飞行 的模式下(低电返航模式除外),短按此按键,飞 行器络讲入身停罐式。
- ⑤ 右摇杆:操控飞行器的动作。

#### 2). 遥控器指示灯状态说明

遥控器面板上设置了两组 LED 灯,其中左侧的一颗 LED 灯用于指示当前飞行器连接状态,右侧四颗 LED 灯用于指示当前遥控器电量。指示灯的亮灯方式及含义参照下面说明:

#### 连接状态指示灯

序号	指示灯状态	提示音	含义
1	绿灯常亮	无	已经连接到飞行器
2	红灯常亮	无	未连接到飞行器

#### 电量指示灯

序号	指示灯状态	提示音	含义
1	充电过程中,绿灯闪烁	无	充电中
2	充电过程中,绿灯常亮	无	充电完成
3	绿灯常亮	无	遥控器正常工作中
4	绿灯慢闪	B-,B-,B-,···	低电报警,请立即给遥控器充电
5	绿灯常亮	B-B-B-·····	开机闲置超过9分钟,操作遥控器后该提示自动消失

#### 3).摇杆模式

比较常用的遥控器摇杆操控方式有右手油门模式 (Mode 1,即日本手)、左手油门模式 (Mode 2,即美国手)两种。遥控器出厂设置为左手油门模式 (Mode 2,即美国手)。本说明书也以左手油门模式 (Mode 2,即美国手)为例说明遥控器的操控方法。

其操控方法分别如下:

#### (1). 右手油门模式 (Mode 1)



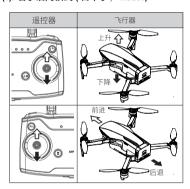
#### (2). 左手油门模式 (Mode 2)

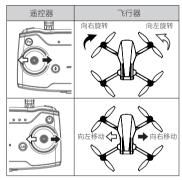


### 4).飞行器的操控方法

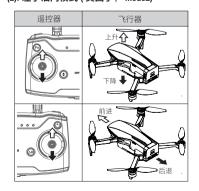
飞行器起飞后,参照下图所示操控飞行器飞行。

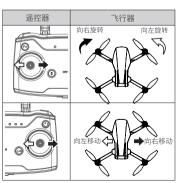
(1). 右手油门模式 (日本手、 Mode1)





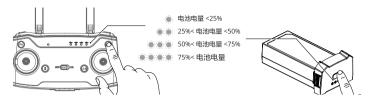
### (2). 左手油门模式 (美国手, Mode2)





### 5. 检查电量

轻按一下开关按键、通过指示灯的点亮状况了解当前电量。



### 6. 充电

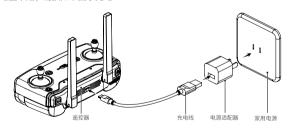
#### 1).给飞行器电池充电

每次使用飞行器电池前,请务确保电池满电。如电量不足,请取出飞行器电池及充电线,参照图示充电:



#### 2).给遥控器充电

如遥控器电量不足,请按如下图示充电:



#### 注意:

- 必须使用官方提供的专用充电器进行充电。
- 飞行结束后飞行器电池温度较高、须等待约半小时让电池冷却后再进行充电。
- 充电过程中,必须在成人监护下进行。不得给儿童使用。充电时必须远离易燃物,充电时监护人请不要离开本产品的监视范围。
- ●用户需自行准备 USB 电源适配器。USB 电源适配器的功率大小决定充电时间长短。

### 7. 下载 Enjoy-Fly2 APP

Enjoy-Fly2 支持 Android 6.0 及以上系统,支持 iOS 10.0 及以上系统。扫描下面的二维码,进入链接下载 APP。

为了获得更好的体验、请务必连接手机并运行 Enjoy-Flv2 后再飞行。

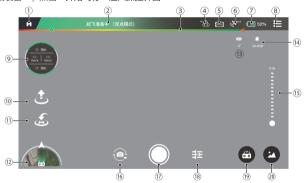
#### 注意:

- 使用 Enjoy-Fly2 前请确保手机电量充足。
- 当您在手机上使用 Enjoy-Fly2 时,请将注意力集中在操控飞行器上,切勿在飞行过程中接听来电、收发短信或使用其他手机功能。
- ●地图界面中使用的地图需从互联网下载。使用该功能前、建议将移动设备接入互联网以缓存地图。
- 在中国大陆地区使用飞行器的用户,需根据中国民用航空局的相关规定完成实名登记,请通过民航局 无人机实名登记系统登记。如需了解更多信息,请访问 https://uas.caac.gov.cn。
- Enjoy-Fly2 会不断优化、迭代、升级 , 并不定时增加新的功能,因此本部分说明的内容可能与 APP 存在差异、具体内容请以 APP 实际界面为准。

### 8. Enjoy-Fly2 界面说明

通过 Enjoy-Fly2 APP,可以实时观看相机拍摄的画面,也可以查看当前飞行器的状态及数据。还可以操控飞行器飞行,以及操控飞行器的相机,控制拍照、摄像以及设置飞行参数。

打开遥控器电源,并用数据线连接手机和遥控器。打开 Enjoy-Fly2 进入 APP 主页,当界面左上角显示"已连接设备",点击"开始飞行"进入操控界面。



- ① 返回首页: 返回上一层。
- ② 飞行状态信息栏:显示飞行器当前的状态。
- ③ 返航进度: 显示飞行器当前低电返航进度。
- ④ 遥控器信号强度:显示飞行器与遥控器之间图传信号的强度。
- ⑤ 手机 GPS 状态:显示当前手机 GPS 的定位精度。
- ⑥ 飞行器 GPS 状态:显示当前飞行器接收的 GPS 星数、定位精度。
- ⑦ 飞行器电池电量:显示飞行器电池当前电量。

- ⑧ 设置:点击图标展开设置菜单:下级菜单有飞行器设置 避障功能设置、遥控器设置、飞行器电池设置及其它设置。
- ⑨ 飞行状态数据:
  - HS: 飞行器水平方向的飞行速度:
  - VS: 飞行器垂直方向的飞行速度:
  - H: 飞行器当前位置与起飞点垂直方向的高度:
  - D: 飞行器当前位置与起飞点水平方向的距离。
- ⑩ 一**键起飞 / 降落**:起飞前显示起飞图标 "**≜**" ,点 击后飞行器自动起飞至 1.2m 高度悬停:

飞行器起飞后显示降落图标"、●、" 点击后飞行器 白动下降着他。

- ① 启动或退出自动返航功能: 返航过程中 占击此图标 飞行器将停止返航、进入悬停状态。。
- ② 综合位置显示:显示地图、飞行器相对于人的方位、 机头方向、手机的方向及位置。
- ③ 相机俯仰角度·显示当前相机的角度。相机水平向 前为0度,相机向下时角度为负值,相机向上时角 度为正值。
- (4) 存储卡容量: 显示飞行器内的存储卡已使用的容量及 总的容量。
- (IS) 相机变焦状态:显示当前相机变焦倍数。

- 16 "拍照/录像"模式:点击此图标。可在拍照和录像 模式之间切换。
- ① "拍照/录像"按钮:在拍照模式下点击此图标即拍摄一张照片;在录像模式下点击此图标即开始录像, 再次点击即停止并保存录像。
- (18) 相机设置:点击此图标展开相机设置菜单。
- ⑨ 一键短片:击图标展开后可选择"冲天、渐远、螺旋、 彗星"等一键短片功能。
- 20 相册:点击此图标打开飞行器所拍摄照片和视频存 放位置。点选图片或视频可以快速分享、下载或管理文

### 9. 准备谣控器

#### 1). 安装採杆、并展开天线

处于收纳状态的遥控器未安装摇杆、使用前需从包装内的配件包中取出摇杆并装到遥控器上。之后展 开谣控器开线。



(1), 安装採杆



(2), 展开天线

#### 2). 安装手机、并连接数据线

品包装内随附了3种规格的数据线、请根据手机接口型号选取合适的数据线连接遥控器与手机。





(2), 连接数据线

#### 注意:

- 在飞行过程中,遥控器天线的指向很重要,直接影响飞行距离及图传影像质量。
- 操控飞行器时,应及时调整遥控器与飞行器之间的方位与距离,以及调整天线位置以确保飞行器总是 位于最佳诵信范围内。

● 当天线与遥控器背面呈 180°或 270°夹角时,且天线平面正对飞行器,可让遥控器与飞行器的信号 质量达到最佳状态。



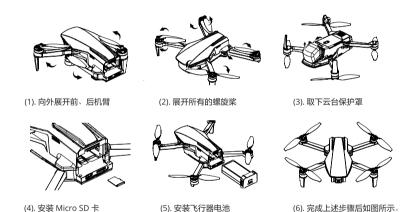






● 相同频段的通信设备会对飞行器造成干扰、飞行时请远离干扰源。准备遥控器。

### 10. 准备飞行器



飞行器出厂时处于收纳状态,请按照以下步骤准备飞行器。

#### 注意:

- 请选用主流品牌的传输速度达到 C10 评级以上的 Micro SD 存储卡。请勿在飞行器电源开启状态下安装或取出存储卡、否则会导致数据存储异常。
- 电池插入时卡扣会发出"咔嗒"的声音,即安装到位。请确保电池安装到位,电池若未安装到位,在 飞行过程中可能导致飞行器空中断电坠落事故。

### 11. 准备飞行

#### 1).启动与连接

- (1) 长按电源开关 2 秒遥控器开关按键, 开启遥控器电源。
- (2) 长按电源开关 2 秒飞行器电池开关按键、开启飞行器。
- (3) 将飞行器静止放于水平位置,待到遥控器连接状态指示灯由红灯变为绿灯,飞行器状态指示灯由蓝灯变成绿灯,表示连接成功。

注意: 开启飞行器电源之前, 确保云台保护置已移除、前后机臂均已展开, 以免影响飞行器自检。

#### 2).激活飞行器并绑定设备

全新的飞行器必须通过 "Enjoy-Fly2 " App 激活。请开启飞行器和遥控器,运行 "Enjoy-Fly2 " 并根据界面提示操作。激活过程中,移动设备需要使用互联网。

#### 3).升级

在激活飞行器与遥控器后,若"Enjoy-Fly2"提示有新固件可升级,推荐用户按照"Enjoy-Fly2"的提示进行升级,以获得更好的体验。

#### 4).GPS 卫星定位信号说明

APP 顶端状态栏右上角如下图所示的飞行器 GPS 状态图标,显示当前飞行器 GPS 连接卫星颗数及信号强度。



当飞行器状态指示灯为绿灯常亮时,表示 GPS 成功定位,此时飞行器可以安全起飞。

当飞行器状态指示灯显示绿灯闪烁时,则表示 GPS 信号弱或没有信号。此时 GPS 未能定位,不建议飞行。当 GPS 未定位时,飞行高度将限定在  $6\,$ 米,此时不具备返航功能,请勿飞出视距。

#### 5).飞行前检查事项

- (1) 谣控器、飞行器电池以及移动设备是否电量充足。
- (2) 所有螺旋桨是否完整无损、是否正确安装。
- (3) 所有机臂以及桨叶是否完全展开。
- (4) 云台保护置是否移除。
- (5) 确保相机镜头清洁。
- (6) 是否安装 Micro SD 存储卡。
- (7) 确保电池安装到位、稳固牢靠。
- (8) 务必使用原厂配件或本公司认证的配件。使用非原厂配件有可能对飞行器的安全使用造成危险。

### 12. 飞行

#### 1).解锁起飞

可以手动操控飞行器或使用一键起降功能开始飞行。

(1) 手动操控遥控器起飞:

如下图所示,分别将左摇杆掰至左下角、右摇杆掰至右下角并保持,直到螺旋桨旋转,飞行器解锁。

然后缓慢向上推动油门、直到飞行器离开地面。









同时拔动左右摇杆解锁飞行器

缓慢推动油门起飞

#### (2) 使用一键起降功能:

长按遥控器上的④ 一键起降按键 2-3 秒,遥控器发出"嘀-嘀-嘀-"声同时,飞行器将自动起飞到约 1.2m 高度悬停。

或者点击 APP 界面上的图标 "**1**",APP 弹出确认对话框,点击"确认"后,飞行器将自动起飞到约 1.2 m 高度悬停。







长按起降按键 2~3 秒

点击起飞图标

#### 注意:起飞过程中,请与飞行器保持安全距离。

#### 2).手动操控飞行

飞行过程中、参照第7页"摇杆的操控方法"部分说明、操控飞行器。

### 3).飞行挡位

飞行中可以使用普通挡或运动挡操控飞行器,切换挡位需通过遥控器上的(\$PORT) 开关切换。 两种挡位的功能分别如下:



拔动 SPORT 开关切换挡位

#### 普通 (Sport OFF) 挡:

使用 GPS 定位、光流定位系统以实现飞行器精确悬停、稳定飞行、智能飞行功能等。GPS 信号良好时,利用 GPS 可精准定位;GPS 信号欠佳,光照等环境条件满足光流系统需求时利用光流系统定位。在普通模式下,最大飞行速度 10m/s。

#### 运动 (Sport ON) 挡:

使用 GPS 模块、光流定位系统,飞行器能实现精确悬停和稳定飞行。当开启运动(Sport)模式后,飞行器操控感度经过调整、最大飞行速度将会提升至 14 m/s。

注意: 当 GPS 卫星信号差或者指南针受干扰、并且不满足视觉定位工作条件时,飞行器将进入定高模式。 在定高模式下,飞行器将会在水平方向产生漂移;并且部分智能飞行功能将无法使用。因此,该模式 下飞行器自身无法实现定点悬停以及自主刹车,应尽快降落到安全位置以避免发生事故。应当尽量避 免在 GPS 卫星信号差以及狭窄空间飞行,以避免进入定高模式,导致飞行事故。

#### 4).智能返航及暂停

飞行器具备自动返航功能、其主要方式分别有:一键返航、低电返航以及失控返航。

飞行器起飞前,当飞行器状态指示灯变为绿灯常亮,及 APP 显示智能定点模式时,将记录飞行器起飞时的位置为返航点。

#### (1). 一键返航

飞行器在智能定点模式下起飞后,长按遥控器上的返航按键"④"或在移动设备 APP 界面左边点击 返航图标 "﴿£",启动智能返航。启动智能返航功能后,遥控器发出"嘀嘀-嘀嘀······"声,飞行器将进入返航模式自动飞回到起飞点降落,返航结束后自动退出返航模式。



长按起降按键 2~3 秒

点击此图标

在返航过程,用户可通过摇杆操控飞行器高度,其调整范围在设定的返航高度和限飞高度之间。在下降过程中,可以推动摇杆操控飞行器、改变着陆位置。

智能返航过程中按一下遥控器的 @ 按键,或点击 APP 操控界面中返航图标可退出返航。退出智能返航后,用户可重新控制飞行器。

#### (2). 低电返航

在飞行过程中,当飞行器电池电量降低到仅够返航时,同时 APP 将出现选择弹窗。此时:

如用户选择"确认",飞行器立即执行返航程序。在返航过程中,用户可点 APP 界面上的返航图标 终止返航。之后飞行器将不再执行低电返航,需用户自行控制飞行器返航:

如用户选择"取消",飞行器将保持当前状态继续飞行,用户可以正常操控飞行器。之后飞行器将不再执行低电返航,需用户自行控制飞行器返航;

如用户不选择, APP 倒计时 10 秒结束后, 飞行器立即执行返航程序。

在返航过程中,用户可通过摆杆调整飞行器高度,其调整范围在当前返航高度与设定的"返航高度设置"之间。在飞行器降落时,用户可操控飞行器躲避障碍物及改变着陆位置。

当飞行器电池电量达到严重低电量时,飞行器状态指示灯变为红灯双闪,飞行器将执行强制降落程序。在飞行器降落时,用户可操控飞行器躲避障碍物及改变着陆位置。

#### (3). 失控返航

飞行过程中,如遥控信号持续中断超过2秒,飞行控制系统将接管飞行器控制权,控制飞行器飞回到记录的返航点。如果在返航过程中遥控信号恢复,飞行器返航过程仍将继续,但用户可通过遥控器暂停键取消返航、重新获取飞行器控制权。

在返航过程,用户可通过摇杆操控飞行器高度,其调整范围在设定的返航高度和限飞高度之间。

#### 注意:

- ●为了确保精准的返航位置,请在开阔平坦(方圆 50m 没大型建筑物,地面方圆 10m 平坦)附近无遮挡的场地,并且在 GPS 已定位(状态指示灯绿灯常亮)后再起飞,返航功能才会生效。若不满足起飞和设置条件、风险须由用户自己承担。
- 使用智能返航功能前、须确保起飞前飞行器已 GPS 定位。
- 进入返航模式后,如当前飞行高度不足 30m,则飞行器会自动上升至 30m 高度进行返航; 如当前飞行高度大于 30m,则飞行器会以当前高度进行返航。飞行器返航过程中不能操控飞行器。请确保返航路线中无障碍,以免发生意外。

- 当 GPS 信号欠佳或 GPS 不工作时 无法返航。
- 如果飞行器未能 GPS 定位,且遥控器信号又持续中断超过 2 秒后,飞行器将不能返航。此时飞行器将慢慢下降直到着陆停桨。
- ●返航高度默认设置为 30m, 限飞高度默认设置为 120m,用户可以根据需要在 APP 的"飞行器设置"页面设置合适参数。

#### 5).操控飞行器降落

当准备飞行时,可以选取如下方式中的任一种操控飞行器降落:

#### (1). 手动操控遥控器降落:

缓慢向下拉动油门摇杆,飞行器将缓慢降落。当飞行器着地后,继续保持油门摇杆在最低位置直至螺 旋桨停止转动。



缓慢降低油门降落

#### (2), 使用一键起降功能:

长按遥控器上的 ④ 一键起降按键 2-3 秒,遥控器发出"嘀-嘀-嘀-"声同时,飞行器将从当前位置垂直降落着地,直至螺旋桨停止转动。

或者点击 APP 界面上的图标 "• ",APP 弹出确认对话框,点击"确认"后,飞行器将从当前位置垂直降落着地,直至螺旋桨停止转动。







长按起降按键 2~3 秒

点击此图标

(3), 自动返航或低电返航及其它智能返航后自动降落。

#### 注意: 降落过程中, 请与飞行器保持安全距离。

#### 6).关闭电源

完成飞行后,请依次关闭飞行器和谣控器的电源。

### 13. 云台控制

三轴增稳云台为相机提供稳定的平台,使得在飞行器高速飞行的状态下,相机也能拍摄出稳定的画面。 您可以通过遥控器上的拔轮控制相机的俯仰角度,其角度转动范围为俯仰-90°至20°。



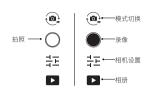
### 14. 拍照 / 录像

您可以用遥控器按键操控拍照、录像、也可以在 APP 上点击图标进行拍照、录像。

#### 1).在移动设备 APP 界面中操作

- (1) 选择工作模式: 点触相机工作模式换图标 "@·" 切换工作模式为拍照或录像。
- (2) 拍照:点击拍照图标"○"进行拍照。
- (3) 录像:点击录像图标"●"开始录像录完后再次点击录像图标"⑥"停止录像并且保存录像到飞行器内存卡中。

提示:移动设备 APP 界面相机视窗有接收到飞行器相机传输的画面 才能实现在 APP 界面操控。



#### 2).用遥控器按键操控拍照或录像

- (1) 拍照:短按遥控器左上角的 @ 按键、遥控器发出"嘀"声,相机拍照并保存到飞行器内存卡中。
- (2) 录像:短按遥控器右上角的 ® 按键,遥控器发出"嘀-嘀"声,相机开始录像。再按一下 ® 按键,遥控器发出"嘀-嘀"声,相机开始录像。再按一下 ® 按键,遥控器发出"嘀-嘀"声,相机停止并且保存视频。

#### 提示:

- 飞行器无存储卡或存储卡出错时,拍摄文件将存储在手机内存卡中,此时录像文件质量一般。
- 关机前请停止录像、否则可能导致文件损坏。
- 录像过程中不能拍照。

### 15. 智能飞行功能

飞行器可自动按照设定的辅助拍摄飞行模式拍摄多种经典航拍运镜。辅助拍摄飞行模式包括渐远模式, 环绕模式,冲天模式,螺旋模式等。

#### 警告:

- 1)请在开阔无遮挡、无障碍物的环境使用智能飞行功能,并时刻注意飞行器路径上是否有人、动物、建筑物等障碍物。
- 2) 始终注意来自飞行器四周的物体并通过手动操作来避免事故(如碰撞)及对飞行器的遮挡。
- 3) 请不要在靠近建筑物、有遮挡等 GNSS 信号不佳的地点使用智能飞行功能,否则可能导致飞行器飞行轨迹不稳定等意外情况发生。
- 4) 用户在使用智能飞行功能时,请务必遵守当地的法律法规对隐私权的规定。

#### ▲ 渐远模式:

在对准目标后,在 App 界面点击开始按钮,飞行器将对着目标,自动进行一边升高,一边远离目标的飞行,达到时间限制或者再次点击渐远按钮,则取消渐远。

#### • 环绕模式:

在对准目标后,在 App 界面点击开始按钮,飞行器将对着目标持续环绕,达到时间限制或者再次点击环绕按钮,则取消环绕。

#### ✓ 冲天模式:

在对准目标后,在 App 界面点击开始按钮,飞行器将对着目标,开始垂直爬升,达到时间限制或者再次点击冲天按钮,则取消冲天模式。

#### ◎ 〉螺旋模式:

在对准目标后,在App界面点击开始按钮、飞行器将对着目标,自动在绕圆同时爬升一边飞行到目标正上方后开始爬升、达到时间限制或者再次点击冲天按钮,则取消螺旋模式。

注意: 飞行器在上述智能飞行过程中,按一下遥控器上的 @ 暂停按键,飞行器将停止巡航并在当前位置悬停待命。

#### 16. 其它说明

#### 1).光流定位系统

飞行器配备了下光流定位系统、为飞行器提供了更好的环境适应能力。

光流定位系统位于机身底部,如下图示机身底部安装了摄像头模块①。光流定位系统通过图像获取飞行器位置信息。



#### 光流定位使用场层

光流定位功能适用于高度为 3m 以下、无 GPS 信号或 GPS 信号欠佳的环境、特别适用于室内飞行。

#### 注意事项:

- 光流定位系统的测量精度容易受光照强度,物体表面纹理情况所影响。在光流定位失效的情况下,光流定位模式会自动切换到定高模式。所以以下场景、务必谨慎使用:
  - (1) 低空(0.5m以下)快速飞行时、光流定位系统可能会无法定位。
  - (2) 纯色表面(例如纯里、纯白、纯红、纯绿)。
  - (3) 有强烈反光或者倒影的表面。
  - (4) 水面或者透明物体表面。
  - (5) 运动物体表面(例如人流上方、大风吹动的灌木或者草从上方)。
  - (6) 光照剧烈快速变化的场景。
  - (7) 特别暗(光照小于 10 lux)或者特别亮(光照大于 10000 lux)的物体表面。
  - (8) 纹理特别稀疏的表面、纹理重复度很高的物体表面(例如颜色相同的小格子砖)。
- 飞行器速度不宜过快、如离地 1m 处时飞行速度不可超过 2m/s、离地 2m 不可超过 5m/s。
- 请确保光流系统的摄像机镜头清晰无污点。
- 光流定位功能使用高度为 3m 以内。
- 由于光流定位功能系统依赖地表图像来获取位移信息,请确保周边环境光源充足,地面纹理丰富。
- 光流定位系统在水面、光线昏暗的环境以及地面无清晰纹理的环境中无法定位。

### 2).更换螺旋桨

飞行器出厂时已安装好螺旋桨。使用过程中如若螺旋桨出现损伤,请按下图示更换。



逆时针方向拧动螺丝,拆下螺旋桨。

装上螺旋桨和螺丝,顺时针方向拧 动螺丝锁紧。

装桨时须确认桨上面的箭头和机臂上 的箭头标识方向一致。

#### 注意事项:

- 螺旋桨及螺丝属于易损消耗品,如有需要,请另行购买配件。
- 相同电机上的螺旋桨务必同时更换,否则可能会产生较大的震动、以致影响飞行性能及成像质量。
- ●更换螺旋桨时,确保安装的螺旋桨与拆下的螺旋桨上面的字符相同(如都是 CW,或都是 CCW),同时确认螺旋桨上箭头标识与机臂上的箭头标识方向一致。若螺旋桨安装错误,飞行器将不能正常飞行并可能导致损伤。
- 拆下的螺丝紧固涂层已破坏,重复使用可能会导致桨叶松动或脱落。更换螺旋桨时务必同时更换螺丝。
- 请使用官方提供的螺旋桨配件。

#### 3).指南针校准

飞行器内置指南针、它能确保飞行器在智能飞行时保持准确的航向。

#### 若有如下任一情景, 请校准飞行器指南针;

- Enjoy-Fly2 APP 或提示校准指南针时;
- 飞行器状态指示灯指示指南针异常时(蓝、绿灯交替闪烁);
- 在悬停时出现绕圈,亦或者飞直线出现偏离航线时,请及时降落进行校准罗盘。

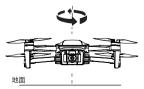
#### 进入校准模式:

移动设备、飞行器与遥控器均在连接状态,在移设备 Enjoy-Fly2 APP 设置中打开指南针校准(路径: 三 > 飞行器设置 > 点击"传感器校准"右边的"校准指南针")。

当 APP 弹出提示语后,请按照提示内容检查当前环境并远离金属物体,然后点击"校准"图标。此时, 飞行器状态指示灯将变为红、蓝灯交替闪烁时,即进入指南针校准模式。此时请根据 APP 提示操作飞行器。

#### 校准指南针

若状态指示灯变为红灯长亮(约6秒左右)即指南针校准失败,请更换位置按上述步骤重新校准。



1) 当 APP 提示水平旋转飞行器后,将飞行器放平放并沿水平方向旋转。当飞行器状态指示变为灯红、绿灯交替闪烁、即完成水平校准:



2) 当 APP 提示垂直旋转飞行器后,将飞行器机头垂直向上并沿水平方向旋转。当飞行器状态指示灯变为绿灯(闪烁或常亮),即完成校准。

#### 注章:

- 更换飞行场地后、务必在首次飞行前校准指南针。
- 使用过程中,如飞行器指示灯为"蓝绿灯交替闪烁"即表示指南针异常,需要校准指南针。
- 校准时请远离有磁场干扰的环境,否则会导致校准失败。
- 请勿在强磁场区域校准、如磁矿、停车场、带有地下钢筋的建筑区域等。
- 校准时、请勿随身携带铁磁物质、如钥匙、手机等。
- 请勿在大块金属附近校准。

#### 4).切换摇杆模式

●切换至左手油门 (Mode 2、即美国手) 模式

在遥控器关机的状态下、先将左摇杆拉至最低位置、再同时按住 @ 和 @ 两个按键打开电源。



当遥控器"嘀"一声响且绿灯常亮即成功切换到左手油门模式。然后松开摇杆和按键,重启遥控器后即可使用。

●切换至右手油门 (Mode1、即日本手) 模式

在遥控器关机的状态下,先将右摇杆拉至最低位置,再同时按住 🗪 和 🕲 两个按键打开电源。



当遥控器"嘀"一声响且绿灯常亮即成功切换到右手油门模式。然后松开摇杆和按键,重启遥控器后即可使用。

#### 5).飞行器与遥控器绑定的说明

套装版产品出厂时无人机已与遥控器绑定、用户开机就可以使用。

如更换了遥控器、或是其他原因飞行器与遥控器未配对绑定、请按照如下步骤完成对频:

- (1) 分别打开飞行器和遥控器电源;
- (2) 使用数据线连接遥控器和手机:
- (3) 打开 Enjoy-Fly2、进入"首页设备→我的→遥控器配对"、点击"遥控器配对"选项;
- (4) 在对话框中点击扫描将显示扫描到的飞行器的名称:
- (5) 请选择飞行器的名称、如"Drone-xxxxxx"、确认无误后点击"确定"并等待:
- (6) 当飞行器状态指示灯变为绿灯慢闪或常亮时、表示遥控器已与飞行器绑定。

### 17. 电池使用须知及储存安全

- 务必在阴凉干燥处存放智能飞行电池。
- 不正确地使用,充电或存储电池可能会导致火灾和人身伤害。务必参照如下安全指引使用电池。

#### 电池使用须知

- (1) 严禁使电池接触任何液体,请勿将电池浸入水中或将其弄湿。切勿在雨中或者潮湿的环境中使用电池。 电池内部接触到水后可能会发生分解反应,引发电池自燃,甚至可能引发爆炸。
- (2) 严禁使用非本公司官方提供的电池。如需更换,请到本公司官网查询相关购买信息。因使用非本公司官方提供的电池而引发的电池事故、飞行故障,本公司概不负责。
- (3) 严禁使用鼓包的、漏液的、包装破损的电池。如有以上情况发生,请联系本公司或者其指定代理商做进一步处理。
- (4) 在将电池安装或者拔出于飞行器之前,请保持电池的电源关闭。请勿在电池电源打开的状态下拔插电池,否则可能损坏电源接口。
- (5) 电池应在环境温度为 -10~45  $^{\circ}$ 之间使用。温度过高 (高于 50C), 会引起电池着火 , 甚至爆炸。温度过低 (低于 -10  $^{\circ}$  ), 电池寿命将会受到严重损害。
- (6) 禁止在强静电或者磁场环境中使用电池。否则,电池保护板将会失灵,从而导致飞行器发生严重故障。
- (7) 禁止以任何方式拆解或用尖利物体刺破电池。否则,将会引起电池着火甚至爆炸。
- (8) 电池内部液体有强腐蚀性,如有泄露,请远离。如果内部液体溅射到人体皮肤或者眼睛,请立即用清水冲洗至少15分钟,并立即就医。
- (9) 电池如从飞行器摔落或受外力撞击,不得再次使用。
- (10)如果电池在飞行器飞行过程中或其它情况下意外坠入水中,请立即拔出电池并将其置于安全的开阔区域,这时应远离电池直至电池完全晾干。晾干的电池不得再次使用,应该废弃并妥善处理。
- (11) 请勿将电池放置干微波炉或压力锅中。
- (12)请勿将电池电芯放置于导电体平面上。
- (13)禁止用导线或其它金属物体致使电池正负极短路。
- (14)请勿撞击电池。请勿在电池或充电器上放置重物。
- (15)如果电池接口有污物,使用于布擦干净。否则会造成接触不良,从而引起能量损耗或无法充电。

#### 电池储存安全与警告。

- (1) 请勿将电池接近明火或者加热器等火源。
- (2) 请将电池放在孩童够不着的地方。
- (3) 请确保电池在室温:25℃左右保存。
- (4) 长期不使用的电池、保存电压请控制在 7.3V~7.7V 之间。
- (5) 长期不使用时,应每两个星期检查一次电池保存状态有无异常,每两个月进行一次充放电激活,以维持电池的活性。

### 18. 规格参数

### 1).飞行器

折叠尺寸 (不含桨) 展开尺寸 (不含桨)	142 x 84 x 57 mm (长×宽×高) 165 x 188 x 59 mm (长×宽×高)	
对角轴距	218 mm	
重量 (含电池、桨)	约 238 g	
最大上升速度	普通模式: 2.5m/s,运动模式: 4m/s,返航模式: 3.5m/s	
最大下降速度	普通模式:2m/s,运动模式:3m/s,返航模式:3m/s	
最大水平飞行速度	普通模式: 8m/s,运动模式: 14m/s,返航模式: 12m/s	
最大飞行海拔高度	4000m	
最长时间	约 26 分钟	
卫星定位模块	GPS/GLONASS 双模	
悬停精度	垂直: ± 0.5 m 水平: 0.3 m (光流定位正常工作时)	
飞行高度	默认 120m,最大 500m ( 须手动更改 APP 设置 )	
工作环境温度	0~40 C	

### 2).光流定位系统

使用环境	表面有丰富纹理,光照条件充足(>10 lux,室内日光灯正常照射环境)
速度测量范围	飞行速度 ≤1.5m/s (高度 2 m, 光照充足)
有效高度范围	0.5~6m

### 3).飞行器电池

容量	2100mAh
电压	7.7V
电池类型	LiPo 2S
能量	16.17Wh
电池整体重量	约 82 g
最大充电功率	35W
充电时间	<2.5 小时 (使用 5V 2A 的电源适配器 )
工作环境温度	0~40°C

### 4).相机

影像传感器	Sensor Sony CMOS
世子人共照	3840×2160 (800万)
照片拍摄模式	单拍,连拍,延时拍摄
录像分辨率	3840×2160 (4K) 15FPS, 2716×1524 (2.7k) 25FPS
视频最大码流	25Mbps
支持文件系统	FAT32
图片格式	JPEG
视频格式	MP4
支持存储卡类型	Micro SD <sup>™</sup> ,最大支持 128GB,传输速度达到 c10 评级的 Micro SD 卡。
工作环境温度	0~40 C

### 5).云台

增稳方式	无刷电机机械增稳
可控转动范围	俯仰: +20°至-90°
可转动范围	俯仰: +35°至-125°,横滚: ±35°,偏航: ±30°
俯仰速度	12°/s(默认),可设置 4°-28°/s)
角度抖动量	±0.01°

### 6).APP/ 图传

移动设备 App	Enjoy-Fly2
实时图传	最大 720P,将根据飞行环境自动切换分辨率
航拍模式	渐远模式,环绕模式,冲天模式,螺旋模式,彗星模式
手机系统版本要求	Android 6.0 及以上,IOS 10.0 及以上
图传距离	最远 3000m ( 受拍摄环境干扰和移动设备性能影响 )

### 7).充电器

输入	5V 2A (推荐使用, 电源适配器的功率决定充电时间)
输出	4.35V 1A×2
额定功率	10W

### 8).遥控器

工作频段	5.8GHz
最大信号有效距离	3000m (FCC 合规版本,无干扰、无遮挡的环境下 )
等效全向辐射功率(EIRP)	< 26 dBm(FCC), < 20 dBm(CE/SRRC/MIC)
工作电流 / 电压	700mA @ 3.7V (与移动设备有关)
电池容量	2600mAh
电池电压	3.7V
电池类型	Li Po 18650 1S
电池能量	9.62 Wh
工作环境温度	0 C ~40 C
移动设备支架	厚度 6.5-8.5 mm,最大长度 80 mm
充电方式	USB
最大充电功率	5W
充电时间	< 2.5 小时 (推荐使用 5V 2A 的电源适配器,其功率决定充电时间)

### 19. 物品清单

使用本产品之前,请检查产品包装内是否包含以下所有物品。若有缺失,请联系本公司或当 地经销商。



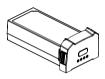




遥控器 x1



平衡充电器 x1



飞行器电池 \*不同配置电池数量不同。



USB 充电线 x1



数据线 x3





L形扳手x1



免责声明 x1



使用说明书 x1

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#### Important

- Please read this manual carefully before using this product, and operate strictly in accordance with the manual.
- Please do not try to disassemble, modify or repair the aircraft by yourself, please contact authorized agent if necessary.
- Finding 'colleague' ' manual' on *Enjoy-Fly2* APP to download the manual .
- This instruction is updated without prior notice.

### 1. Flight environment requirements

- Do not fly the aircraft in bad weather such as high winds, snow, rain, foggy weather, etc.
- Do not fly in the no-fly zone restricted by relevant laws or regulations.
- Choose a wide, open place with no tall buildings surrounded as a flight site. Buildings that
  use a lot of steel bars may affect the compass work and block GPS signals resulting in poor
  positioning or even inability to locate the aircraft.
- This product uses 5.8GHz high-definition image transmission, and should be flown in an open environment without occlusion and electromagnetic interference.
- Do not fly in areas that have high-voltage lines, communication base stations or transmission towers, etc. to avoid signal interference of the remote controller.
- After the aircraft starts, please stay away from high-speed rotating parts (such as propellers, motors, etc.)
- When flying, please keep aircraft in sight, away from obstacles, crowds, water, etc.
- When flying, if the aircraft is working in the GPS mode, and the video transmission screen freezes or is lost, please use the automatic return function immediately to let the aircraft return on its own. If do not know the position of the aircraft and the surrounding conditions, user will have a high probability of crashing the aircraft if operate the remote control rashly.
- Please pay attention to the orientation of the aircraft at all times. The direction controlled by the remote control is always executed with the direction of the nose as the front.
- If not proficient in manually controlling the aircraft, it is strongly recommended to use the one button takeoff and landing function, and the aircraft will automatically take off or land. and operate the joystick of the remote control carefully, any slight movement of the joystick will cause the aircraft to move significantly, and it is not recommended to operate the joystick in a large way.
- And operate the joystick of the remote control carefully, any slight movement of the joystick
  will cause the aircraft to move significantly, and it is not recommended to operate the joystick
  in a large way.
- When the GPS is interfered, the positioning effect of the aircraft will be deteriorated or even impossible to locate, so that the aircraft is out of control.
- When flying above 4000m altitude, the performance of the aircraft battery and power system will be degraded due to environmental factors, thus the flight performance will be affected. Please fly with caution.
- GPS is not available for flight in Arctic circle and Antarctic circle.
- This product is suitable for people who have experience in operating models or related products and are not younger than 14 years old.

### 2. Disclaimer and Warning

- The use of aircraft has certain safety risks, which is only applicable to people aged 14 and above who have experience in operating models or related products, Do not let children touch the aircraft. Please be careful when operating in the scene where children appear. Before using this product, please read this document carefully and operate in strict accordance with the instructions. This statement is applicable to the safe use of this product and legal rights and interests has an important impact.
- This product is a multi-rotor aircraft, which will provide a comfortable flight experience when the power supply works normally and all parts are not damaged, The Company reserves the right to update this disclaimer.
- Be sure to read this document carefully before using the product to understand the legal rights, responsibilities and safety instructions; Otherwise, it may cause property loss, safety accidents and personal safety hazards. Once use this product, users are deemed to have understood, recognized and accepted all terms and contents of this statement. Users promise to be responsible for their actions and all consequences arising therefrom. The user promises to use this product only for legitimate purposes, and agrees to these terms and any relevant policies or guidelines that the company may formulate. To the maximum extent permitted by law, in no event shall the company be liable for any indirect, consequential, punitive, incidental, special or penal damages, including any shall be held liable for any loss suffered by the product (even if the company has been advised of the possibility of such loss).
- The laws of some countries may prohibit the disclaimer of warranty terms, so the rights may vary from country to country. In the case of compliance with laws and regulations, the company reserves the right of final interpretation of the above terms. The company reserves the right to modify this article without prior notice terms are updated, revised or terminated.

### 3. Know the aircraft

Aircraft adopts the mainstream light weight and foldable design. Under the premise of ensuring flight performance and user experience, it is unprecedentedly convenient to use and carry.

Aircraft is equipped with GPS/GLONASS/BeiDou three-mode satellite positioning and navigation system, which makes flying more accurate and safer. The aircraft is equipped with an optical flow positioning system, which can achieve stable flight and hovering at ultra-low altitude or indoors.

Aircraft is equipped with three-axis mechanical anti-shake and stabilized gimbals, which can shoot 4K high-definition videos and 8-megapixel photos stably. During the flight, adjust the shooting angle of the camera to obtain a unique perspective and composition, and take unique photos and videos.,it will get a better aerial photography experience

Aircraft adopts self-developed leading flight control system to provide intelligent, stable and safe flight. It can realize intelligent flight functions such as automatic return, orbital flight, intelligent follow-up, waypoint flight, etc.

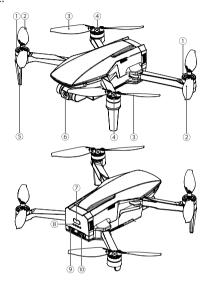
Enjoy-Fly2 supports mobile phones with Android and IOS operating systems. After downloading and installing Enjoy-Fly2, users can realize various operations and settings of flight and camera by controlling The remote control and APP. Information such as real-time shooting pictures and flight

parameters can be displayed on the mobile device during flight. users can easily obtain small videos with unique effects.

Aircraft has a maximum flight speed of 50km/h, a maximum flight time of 26 minutes, and a maximum flight distance of 3000m.

#### 1). Aircraft diagram

#### Note:



- ① CW motor
- 2 CW propeller
- 3 CCW propeller
- (4) CCW motor
- (5) Foot stool
- 6 Gimbal & camera
- ⑦ Flight status indicator light
- 8 Aircraft power indicator
- 9 4G module expansion interface
- 10 Micro SD card slot

- 1. Before using the aircraft, please read the "Operation Guide" carefully, and watch related videos on the "college" page in the Enjoy-Fly2 App to avoid property damage or even personal injury due to improper operation.
- High-speed rotating motors and propellers are dangerous. The operator should keep a safe distance from the aircraft and keep the aircraft away from crowds, buildings, trees or other obstacles to avoid collisions.

### 2). LEDs and status indicator of aircraft

The indicator light on the rear battery of the aircraft is used to indicate the current status of the flight control system during flight.

Please refer to the table below for the status of fight control system indicated by different color of lights.

#### Flight status indicator - LED

0		
No.	Indicator light	Status
1	Flashing blue light	RC and aircraft is not paired, GPS is not located
2	Solid blue light	RC and aircraft is not paired,GPS is located
3	Solid green light	RC and aircraft is paired,GPS is located
4	Flashing green light	RC and aircraft is paired,GPS is not located
5	Red and blue light flashing alternately	Horizontal calibration process
6	Red and green light flashing alternately	Vertical calibration process
7	Solid red light	Serious error
8	Flashing red light	Low battery alarm
9	Red light flashes doubly	Alarm for severe low battery.
10	Green light flashes doubly	Optical flow system is located
11	Blue and green light flashes alternately	Compass data error

### 4. Know the remote control

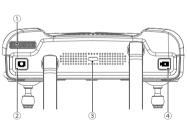
The remote control must be used with the aircraft.

The remote control has a built-in digital image transmission system, and after connecting to a mobile device, the high-definition picture and flight data can be displayed on the mobile phone in real time through the App. Through the joystick and various function buttons on the remote control, the aircraft and camera can be controlled within a communication distance of up to 3000m (FCC compliant version, unobstructed and uninterrupted environment).

The telescopic foldable phone holder located at the bottom of the remote control is used to place the phone. The rocker is detachable for easy packing and carrying.

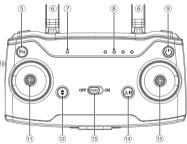
The remote control has a built-in rechargeable lithium battery with a capacity of 2600mAh, and the longest working time is not less than 2.5 hours.

### 1). Remote control diagram





- ② Photo button: Press to take a picture.
- 3 USB port: For charging.
- Wideo button:Press to start/stop recording the video.



- ⑤ Zoom button:Press and hold this button and pull out ① at the same time to adjust the zoom of the camera, and the picture will be enlarged or reduced accordingly.
- Antenna:Transmit aircraft control and image wireless signals.

- ⑦ Connection status indicator:When the green light is always on, the aircraft is connected, and when the red light is always on, the aircraft is not connected.
- (8) Power indicator
- Power switch: Short press: check the battery power, Long press: turn on/off the remote controller.
- 10 Data wire port:Connect the RC and phone.
- (1) Left joystick
- (2) One key takeoff / landing:Press this button

- before takeoff, and the aircraft will takeoff automatically; Press this button after takeoff, and the aircraft will land automatically.
- ③Sport mode switch:When it's off, aircraft is normal speed mode .When it's on, aircraft is high speed mode, please fly carefully.
- RTH / Pause button:Long press over 1.5 seconds, aircraft will start RTH mode,short press this button, aircraft will stop intelligent mode(except low battery return),and hover.
- (15) Right iovstick

### 2). Status indicator of remote control

There are two groups of LEDs on the remote control panel, one LED on the left side is used to indicate the current aircraft connection status, and four LEDs on the right side are used to indicate the current remote control power. The LEDs are illuminated in the following way and their meanings are described below.

#### Connection status indicator -- LED

No.	Indicator light	Sound	Status
1	Solid green light	Not	RC and aircraft is paired.
2	Solid red light	Not	RC and aircraft is not paired.

#### Power indicator -- LED

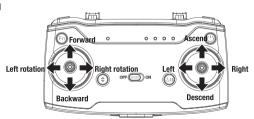
No.	Indicator light	Sound	Status
1	Flashing green light during	Not	Charging.
2	Solid green light during charging	Not	Charging complete.
3	Solid green light	Not	The remote controller is working normally.
4	Green light flashes slowly	B-B-B-·····	Low battery alarm, please charge.
5	Green light flashes doubly	B-B-B-·····	The remote controller is idle for more than 9 minutes after power-on; the prompt disappears automatically once operate.

### 3). Joystick Mode

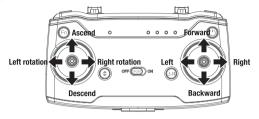
The more commonly used remote control joystick control modes are right-hand throttle mode (Mode 1, i.e. Japanese hand) and left-hand throttle mode (Mode 2, i.e. American hand). The factory setting of the remote control is left-handed throttle mode (Mode 2, i.e. American hand). This manual also takes the left-hand throttle mode (Mode 2, i.e. American hand) as an example to explain the control method of the remote control.

The operation methods are as follows.

#### (1). Mode 1



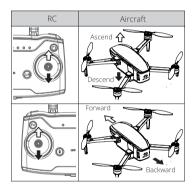
#### (2). Mode 2

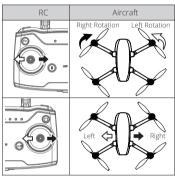


### 4). How to control the aircraft

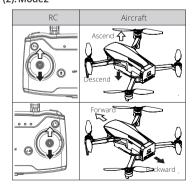
After the aircraft takes off, refer to the following diagram to control the aircraft.

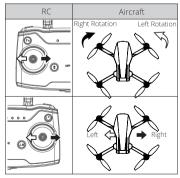
### (1). Mode1





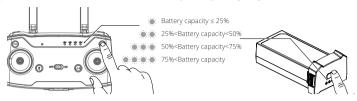
#### (2). Mode2





### 5. Battery life check

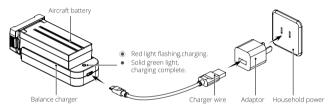
Tap the on/off button to know the current battery level by the lighting status of the indicator.



### 6. Charge

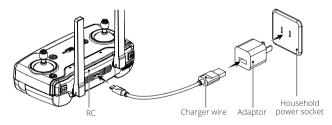
### 1). Charging the aircraft battery

Before each use of the aircraft battery, please ensure that the battery is fully charged. If the battery is low, please remove the battery and charging cable and charge it according to the following diagram.



### 2). Charging the remote control

If the remote control is low on power, please charge it as shown below:



#### Attention:

- The official special charger provided must be used for charging.
- The battery temperature of the aircraft is high after the flight, so must wait about half anhour for the battery to cool down before charging.
- Charging must be done under adult supervision. It must not be used by children. Please keep away from flammable materials when charging.
- Do not leave the monitoring range of this product. The power of the USB power adapter determines the length of charging time.

### 7. Download Enjoy-Fly2 APP

Enjoy-Fly2 supports Android 6.0 and above, and iOS 10.0 and above. Scan the QR code below to enter the link to download the APP.

For better experience, please make sure to connect your phone and run Enjoy-Fly2 before flying.



### Attention:

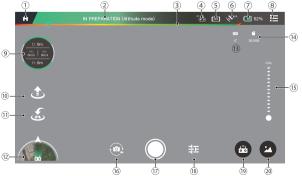
- Please make sure the phone is fully charged before using Enjoy-Fly2.
- When use Enjoy-Fly2 on your phone, please focus on the control of the flying machine.
- Do not answer calls, send or receive text messages or use other phone functions while flying.
- The maps used in the map screen must be downloaded from the Internet. Before using this function, it is recommended to connect your mobile device to the Internet to cache the maps.
- Users who use the aircraft in mainland China need to complete real name registration according to the relevant regulations of the Civil Aviation Administration of China, please register through the CAAC.
- Please register through the CAAC real-name registration system for drones. For more information, please visit https://uas.caac.gov.cn.
- Enjoy-Fly2 will continue to optimize, iterate, upgrade and add new features from time to time, so the contents of this section may differ from the APP.
- Please refer to the actual interface of APP for details. Enjoy-Fly2 interface description.

### 8. Enjoy-Fly2 interface description

Through Enjoy-Fly2 APP, user can watch the images taken by the camera in real time, and user can also check the current status and data of the flying machine. user can also Control the flight, as well as control the camera of the aircraft, control the photo, video and set the flight parameters.

Turn on the power of the remote control and connect the phone and the remote control with the data cable. Open Enjoy-Fly2 to enter the APP homepage, when the upper left corner of the interface

When the top left corner of the interface shows "Connected Device", click "Start Flight" to enter the control interface.Prepare the remote control



- 1) Homepage: back.
- Flight mode and status prompt:Display the current flight status.
- 3 Return Progress:Display the current low power return progress of the vehicle.
- (4) Remote Control Signal: Display the signal of remote control.
- (5) GPS signal of phone: Display the GPS accuracy of phone.
- 6 GPS status: Display the GPS.
- (7) Battery life: Display the current battery life.
- ® General Settings: Click the icon to expand the settings menu, the sub-menu includes aircraft settings, Obstacle avoidance function setting, remote control setting, aircraft battery setting and others set up.
- 9 Aircraft fight status data:

HS:the current horizontal flight speed of the aircraft.

VS: the current vertical flight speed of the aircraft.

- H: the altitude of the aircraft's current position and takeoff point.
- D: the distance between the current position of the aircraft and the take-off point.
- ⑩ One key take-off / landing: Before the aircraft takes off, the take-off icon ★ is displayed. After clicking, the aircraft will automatically takeoff and hover at a height of 1.2 meters. After the aircraft takes off, the landing icon ★ is displayed, and the aircraft automatically descends to the ground after clicking. Will automatically takeoff and hover at a height of 1.2 meters

- ① Start or exit the RTH: In the process of returning, click this icon, and the aircraft will stop returning and enter the hovering position.
- ② Integrated position display: Display the map, the orientation of the aircraft relative to the person,the direction of the nose, the direction and position of the mobile phone.
- (3) Camera Pitch Angle: Displays the current camera angle. camera horizontally forward is 0 degrees, the angle is negative when the camera is down, and the angle is positive when the camera is up.
- (4) SD card capacity: Display the used capacity of SD card in the aircraft and total capacity.
- Camera zoom status: Display the current camera zoom magnification
- Photo/video switch: Click this icon to switch between photo and video modes.

   Photo/video button: click this icon to take a photo in
- Photo/video button: click this icon to take a photo in photo mode; click this icon to start recording in video mode, click again to stop and save the video.
- (8) Camera Settings: Set different parameter of camera.
- (9) One key shoot: Contain 'dronie,rocket,circle,helix,boom erang ' mode.
- ② Album: Open the photo and video storage of the aircraft place. Tap pictures or videos to quickly share, download or manage files.

### 9. Prepare the remote control

### 1). Install the rocker and unfold the antenna

The remote control in the storage state is not installed with the rocker, user need to take out the rocker from the accessory package in the package and install it to the remote control before using. After that, unfold the Open the remote control and open the cable.



(1).Installing the stick



(2).Unfolded Antenna

### 2). Install the phone and connect the data cable.

There are 3 kinds of data cables included in the package, please select the appropriate cable to connect the remote control to the phone according to the phone interface model.





(1).Unfolded Antenna

(2).Connect the data cable

#### Attention:

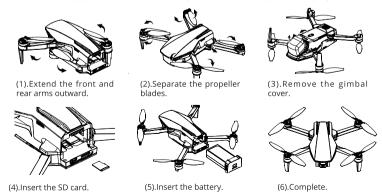
- During the flight, the direction of the remote control antenna is very important, which directly affects the flight distance and the quality of the image transmission.
- When the antenna and the back of the remote controller have an included angle of 180° or 270° and the antenna plane is facing the aircraft, the signal quality of the remote control and the aircraft can reach the best state.



- The antenna position should be adjusted to ensure that the aircraft is always in the best communication range.
- When controlling the aircraft, user should adjust the orientation and distance between the remote control and the aircraft, and adjust the antenna position to ensure that the aircraft is always.
- Communication equipment in the same frequency band will cause interference to the aircraft, please stay away from interference sources when flying.

### 10. Preparing the aircraft

The aircraft is shipped in a stowed condition, please follow the steps below to prepare the aircraft.



**Note:**Ensure that the aircraft is shut down when installing or removing the obstacle avoidance module. Disassembly and assembly of the obstacle avoidance module when the aircraft is started may damage the obstacle avoidance module, resulting in abnormal function.

### 11. Ready to fly

#### 1). Start and connect

- (1) Long press the power switch for 2 seconds to turn on the power of the remote control.
- (2) Long press the power switch for 2 seconds to switch on the aircraft battery switch to turn on the aircraft.
- (3) Put the aircraft still in a horizontal position, wait until the connection status indicator of the remote controller changes from red to green, and the aircraft status indicator changes from blue to green, indicating that the connection is successful.

Note:Before turning on the power of the aircraft, make sure that the gimbal protective cover is removed and the front and rear arms are unfolded, so as not to affect the self-test of the aircraft.

#### 2). Activate the aircraft and bind the device

Brand new aircraft must be activated through the Enjoy-Fly2 App. Please turn on the aircraft and the remote controller, run Enjoy-Fly2 and operate according to the interface prompts. The mobile device requires Internet access during the activation process.

### 3). Upgrade

After activating the aircraft and the remote control, if Enjoy-Fly2 prompts that there is a new firmware upgrade, it is recommended that users follow the Enjoy-Fly2 prompts to upgrade to obtain a better experience

### 4). GPS satellite positioning signal description

The GPS status icon of the aircraft in the upper right corner of the status bar at the top of the APP, as shown in the figure below, displays the current number of satellites connected to the GPS of the aircraft and the signal strength.



When the aircraft status indicator is steady green, it means that the GPS has successfully positioned and the aircraft can take off safely.

When the aircraft status indicator light is blinking green, it means that the GPS signal is weak or there is no signal. At this time, the GPS fails to locate, and it is not recommended to fly. When the GPS is not positioned, the flight altitude will be limited to 6 meters. At this time, there is no return function, please do not fly out of sight.

### 5). Prepare fight inspection

(1) Make sure the remote controller, aircraft battery, and mobile device are fully charged.

- (2) Make sure the propellers intact and installed correctly.
- (3) Make sure that front and rear arms and the blades are fully unfolded.
- (4) Make sure gimbal cover is removed
- (5) Make sure that the camera lens is clean.
- (6) Make sure the micro SD card installed correctly.
- (7) Ensure that the battery is firmly installed.
- (8) Always use original components or accessories certified by the manufacturer. The use of nonoriginal accessories may pose a hazard to the use of the aircraft.
- (9) If there is an obstacle avoidance module, please confirm that the module is installed securely, and the lens is clean and free of dirt

### 12. Operate the aircraft takeoff

#### 1). Unlock to fly

# (1). Manually control the aircraft or use the one-key takeoff and landing function to start flying.

Toggle the left and right joysticks outward as to get the propellers started to rotate. Slowly push the throttle, the aircraft will takeoff.









Toggle the left and right joysticks outward

Slowly push the throttle

#### (2). One-key takeoff

Long press the \$ button for 2 to 3 seconds. When the remote controller beeps steadily, the aircraft will automatically takeoff and ascend to altitude of 1.2 meters and hover.







Long press the button for 2 to 3 seconds

Click this icon

Or Click the '&' on app, then click confrm, the aircraft will automatically takeoff and ascend to altitude of 1.2 meters and hover.

Note:Please make sure the safe distance for operate.

### 2). Operate the aircraft fying

Reference page33 'throttle control stick mode'.

# 3). Flight gear

Control the aircraft with the normal gear or the sport gear, need to switch the gear through the switch on the remote control



#### Sport off

Use GPS positioning, optical flow positioning system to achieve precise hovering, stable flight, intelligent flight functions, etc.

When the GPS signal is good, GPS can be used for precise positioning; when the GPS signal is not good, and the environmental conditions such as lighting meet the requirements of the optical flow system, the optical flow system can be used for positioning. In normal mode, the maximum flying speed is 10m/s.

# Sport on

Using GPS module, optical flow positioning system, the aircraft can achieve precise hovering and stable flight. When the Sport mode is turned on, the control sensitivity of the aircraft will be adjusted, and the maximum flight speed will be increased to  $14\,\text{m/s}$ .

Note: When the GPS satellite signal is poor or the compass is disturbed and does not meet the working conditions of visual positioning, the aircraft will enter the altitude mode. In the altitude mode, the aircraft will drift in the horizontal direction; And some intelligent flight functions will not be available. Therefore, in this mode, the aircraft itself cannot achieve hover and autonomous braking, so it should land to a safe position as soon as possible to avoid accidents. user should try our best to avoid flying in GPS satellite with poor signal and narrow space, so as to avoid entering altitude mode and causing flight accidents.

# 4). RTH and pause

Aircraft has return-to-home (RTH) function, and there are 3 types of RTH: one-key RTH, low battery RTH and lose control RTH.

Before the aircraft takes off, when the aircraft status indicator turns green and the GPS mode is displayed on the app, the current position of the aircraft will be recorded as the return point.

### (1). One-key RTH

When the GPS signal is good (the aircraft status indicator is solid green), the aircraft can return to the return point via the which button on the remote control, and the return process is the same as lose control RTH. The difference is that when the aircraft returns and begins to land, the user can control the aircraft through the joystick to avoid obstacles and change the landing position. After pressing and Short press tuton for more than 2 seconds to exit the return, the user can regain control of the aircraft.

During RTH, user can control altitude of aircraft, adjustment range is between altitude of RTH to limit altitude of aircraft.

#### (2). Low battery RTH

During the flight, when the battery power of the aircraft is low enough to return home, a selection pop-up window will appear in the APP at the same time. At this point: If the user selects "Confirm", the aircraft will immediately execute the return procedure. During the return process, the user can click the return icon on the APP interface Terminate the return flight. After that, the aircraft will no longer perform low-power return, and the user needs to control the return of the aircraft by himself;

If the user selects "Cancel", the aircraft will continue to fly in the current state, and the user can control the aircraft normally. After that, the aircraft will no longer perform low-power return, and the user needs to control the return of the aircraft by himself;

If the user does not choose, the aircraft will immediately execute the return procedure after the 10-second countdown in the APP ends.

During the return process, the user can adjust the altitude of the aircraft through the joystick, and the adjustment range is between the current return altitude and the set "return altitude setting". When the aircraft lands, the user can control the aircraft to avoid obstacles and change the landing position.

When the battery power of the aircraft reaches a serious low level, the status indicator of the aircraft will turn red and double flash, and the aircraft will perform a forced landing procedure.

When the aircraft lands, the user can control the aircraft to avoid obstacles and change the landing position.

#### (3). Lose control RTH

When the GPS signal is good (the aircraft status indicator is solid green), the compass is working normally, and the aircraft successfully records the return point, if the remote control signal continues to be lost for more than 2 seconds, the fight control system will take over the control of the aircraft and control the aircraft to fly back to the last recorded return point. If the signal of the remote controller is restored later during the fight, the return process will continue, but the user can cancel the return and regain the control of the aircraft through the Pause button .

During lose control RTH, user can control altitude of aircraft, adjustment range is between altitude of RTH to limit altitude of aircraft.

- In order to ensure an accurate return position, please use this mode to take off after the GPS
  has been positioned (the status indicator light is always green) in an open and flat area (no
  large buildings within a radius of 50m, and the ground is flat within a radius of 10m). The return
  function will take effect.
- Failure to meet take-off and set-up conditions is at the user's own risk.
- Before using the Smart Return to Home function, make sure the aircraft has been positioned by GPS before takeoff.
- During RTH process, when the aircraft is flying above 30 meters, the aircraft will immediately
  perform the RTH function; when flying below 30 meters, the aircraft will rise to 30 meters
  automatically and then perform the RTH function
- When the GPS signal is poor or the GPS does not work, it is not possible to return.
- If the aircraft fails to locate by GPS, and the remote control signal continues to be interrupted for more than 2 seconds, the aircraft will not be able to return. At this time, the aircraft will slowly descend until it lands and stops propellers.
- The return altitude is set to 30m by default, and the flight limit altitude is set to 120m by default.
   Users can set appropriate parameters on the "Aircraft Settings" page of the APP according to their needs.

# 5). Operate the aircraft landing

Choose any of the following methods to control the aircraft to land:

#### (1). Manually operate the remote control to land:

Slowly pull down the throttle stick, and the aircraft will land slowly. When the aircraft lands, continue to keep the throttle stick at the lowest position until the propeller stops rotating.



Slowly pull down the throttle stick

#### (2). One key land

Press and hold  $\textcircled{\bullet}$  the one-key takeoff and landing button on the remote control for 2-3 seconds, the remote control will make a "beep-beep-beep-" sound, and the aircraft will land vertically from the current position until the propeller stops rotating.

Or click the icon  $ar{oldsymbol{J}}$  on the APP interface, and the APP will pop up a confirmation dialog box. After clicking "OK", the aircraft will land vertically from the current position until the propeller stops rotating.







Long press 2-3seconds

Click this icon

# (3). Automatic landing after automatic return or low power return and other intelligent return.

Note: During landing, please keep a safe distance from the aircraft.

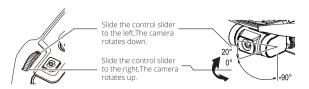
#### 6). Power off

After completing the flight, please turn off the power of the aircraft and the remote control in sequence.

# 13. Gimbal

The three-axis stabilized gimbal provides a stable platform for the camera, so that the camera can take stable pictures even when the aircraft is flying at high speed.

The user can control the tilt angle of the camera through the pull wheel on the remote control, and the angle rotation range is from -90° to 20°.



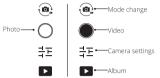
# 14 Photo/video

Users can use the remote control buttons to take pictures and record videos, or click the icon on the APP to take pictures and record videos.

### 1). Operate on app

- (1) Select the working mode: touch the camera working mode change icon' (a) ' to switch the working mode (2) Take a photo: Click the photo icon ' () ' to take a Photo-
- photo. (3) Recording: Click the recording icon ' 

  ' to start
- recording, and then click the recording icon ' again to stop recording and save the recording to the aircraft SD card.



The camera on the APP interface of the mobile device must receive the screen transmitted by the aircraft camera, in order to realize the control on the APP interface.

# 2). Operate on remote control

Take a photo; Short press 📵 the button on the upper left corner of the remote control, the remote control makes a "beep" sound, and the camera takes a photo and saves it to the aircraft SD card.

Video recording: Short press 🖨 the button on the upper right corner of the remote control, the remote control will make a "beep - beep" sound, and the camera will start recording. Press the button again, the remote controller will make a "beep-beep" sound, the camera will stop and save the video.

Note: Please stop recording before shutting down, otherwise the file may be damaged.

When the aircraft has no SD card or the memory card has an error, the shooting files will be stored in the phone's SD card, and the video file quality is normal at this time.

Cannot take pictures during video recording.

# 15. Intelligent flight mode

The aircraft can automatically shoot a variety of classic aerial photography according to the set auxiliary shooting flight mode. Auxiliary shooting flight modes include dronie mode, circle mode, rocket mode, helix mode, etc.

#### Warning:

- Please use the intelligent flight function in an open and unobstructed environment without obstacles, and always pay attention to whether there are people, animals, buildings and other obstacles in the path of the aircraft.
- Always pay attention to objects from around the aircraft and use manual operations to avoid accidents (such as collisions) and obstructions to the aircraft.
- Please do not use the smart flight function near buildings or places with poor GNSS signal, otherwise it may lead to unexpected situations such as unstable flight trajectory of the aircraft.
- When users use the intelligent flight function, please be sure to abide by the local laws and regulations on privacy.

### ↑ Dronie mode:

After locking the target, click the Fade button on the App interface, the aircraft will align with the target, and automatically fly away from the target while rising. When the time limit is reached or click the Fade button again, the Fade will be canceled.

### • Circle mode

After locking the target, click the orbit button on the App interface, and the aircraft will aim at the target and continue to orbit. When the time limit is reached or click the orbit button again, the orbit will be canceled

#### Rocket mode

After locking the target, click the sky button on the App interface, the aircraft will aim at the target, automatically fly directly above the target and start to climb, when the time limit is reached or click the sky button again, the sky mode will be canceled.

# © ੈ Helix mode

After locking the target, click the helix button on the App interface, the aircraft will aim at the target, automatically climb while flying around the circle and then fly to the top of the target, and then start to climb. When the time limit is reached or click the sky button again, the sky mode will be canceled.

Note:During the above-mentioned smart flight process, press the pause button on the remote control, the aircraft will stop cruising and hover at the current position for standby.

### 16. Other instructions

# 1). Optical flow position hold

The aircraft is equipped with optical flow position system, which provides better environmental adaptability.

The optical flow positioning system is located at the bottom of the fuselage. As shown the camera module ①, optical flow positioning system obtains aircraft position information through image.



#### Optical flow position system

The optical flow position system is typically used in indoor environment when GPS is weak or unavailable. It works best when the altitude is less than 3 meters.

#### Note:

- Please pay attention to the flight environment. Optical flow position system only play a safety
  auxiliary role under limited conditions and cannot replace human judgment and control. The
  user should always pay attention to the surrounding environment during the flight, maintain
  the control of the aircraft and be responsible for the control behavior.
- The measurement accuracy of optical flow positioning system is easily affected by light intensity and object surface texture. Therefore, the optical flow position system in the following scenarios cannot work normally, so it must be used with caution.
- 1) Solid color surface (e.g. pure black, pure white, pure red, pure green).
- A surface (such as ice) that has strong reflections or reflections.
- 3) The surface of water or transparent objects.

- The surface of a moving object (e.g. above a stream of people, shrubs or grass blown by a strong wind).
- 5) A scene in which the light changes dramatically and rapidly.
- 6) Object surfaces that are particularly dark (light intensity less than 10 Lux) or particularly bright (light intensity greater than 40000 Lux).
- 7) Material surface with strong absorption or reflection of infrared (such as mirror).
- 8) Surfaces with particularly sparse texture (e.g. electric poles, pipes, etc.).
- The surface of an object with a high degree of texture repetition (such as small checkered bricks
  of the same color).
- 10) Small obstacles (such as branches, wires, etc.).
- Do not block or interfere with the optical flow position system in any way, and ensure that the lens is clear and free of stains.
- Avoid flying in rainy and foggy weather or other scenes with low visibility (visibility less than 100 m).

# 2). Replace the propeller

The propellers are already installed on the aircraft when it leaves the factory. If the propeller is damaged during use, please replace it as shown in the figure.



Turn the screw counterclockwise to remove the propeller.

Install the propeller and screw, turn the screw clockwise to lock.

When installing the propeller, make sure that the arrow on the propeller is in the same direction as the arrow on the arm.

#### Note:

- Propellers are vulnerable consumables. If necessary, please purchase accessories separately.
- The propellers on the same motor must be replaced at the same time, otherwise there may be a large vibration, which will affect the flight performance and image quality.
- When replacing the propeller, make sure that the character on the installed propeller is the same as that of the removed propeller (for example, both are CW or both are CCW). Make sure that the arrow mark on the propeller is in the same direction as the arrow mark on the arm. If the propeller is installed incorrectly, the aircraft will not be able to fly normally and may cause injury.
- Due to the thinness of the propeller, please be careful when installing it to prevent accidental scratches.
- Please use official propeller accessories.

# 3). Compass calibration

The aircraft has a built-in compass, which can ensure that the aircraft maintains an accurate heading during intelligent flight.

### If any of the following situations occur, please calibrate the compass of the aircraft:

• Enjoy-Fly2 APP or when prompted to calibrate the compass;

- When the aircraft status indicator indicates that the compass is abnormal (the blue and green lights flash alternately);
- When hovering in a circle, or flying straight and deviated from the course, please land in time to calibrate the compass.

#### Enter calibration mode

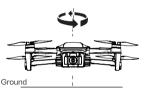
The mobile device, the aircraft and the remote controller are all connected, and the compass calibration is turned on in the Enjoy-Fly2 APP settings of the mobile device (path Aircraft Settings > Click "Calibrate Compass" on the right of "Sensor Calibration").

When the APP pops up a prompt, please follow the prompt to check the current environment and keep away from metal objects, and then click the "Calibrate" icon. at this time,

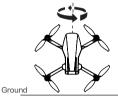
When the aircraft status indicator light turns red and blue and flashes alternately, it enters the compass calibration mode. At this time, please operate the aircraft according to the prompts of the APP.

### Compass calibration

If the status indicator turns red and stays on for about 6 seconds, it means that the compass calibration has failed. Please change the position and follow the above steps to re-calibrate.



1) When the APP prompts to rotate the aircraft horizontally, put the aircraft flat and rotate it horizontally. When the status indicator of the aircraft turns red and green and flashes alternately, the horizontal calibration is completed:



2) When the APP prompts to rotate the aircraft vertically, turn the nose of the aircraft vertically upwards and rotate it horizontally. When the aircraft status indicator turns green (flickering or steady on), the calibration is complete.

### Note:

- After changing the flight site, be sure to calibrate the compass before the first flight.
- During use, if the indicator light of the aircraft is "blue and green lights flashing alternately", it means that the compass is abnormal, and the compass needs to be calibrated.
- Please keep away from the environment with magnetic field interference during calibration, otherwise the calibration will fail.
- Do not calibrate in areas with strong magnetic fields, such as magnetic mines, parking lots, construction areas with underground steel bars, etc.
- When calibrating, please do not carry ferromagnetic materials around, such as keys and mobile phones.
- Do not calibrate near large pieces of metal.

# 4). Switch mode 2 / mode 1

### Switch to left hand throttle (Mode 2, American hand) mode

First pull the left joystick to the lowest position, then press and hold the two buttons at the same time to turn on the power.



When the remote control 'beeps' and the green light is always on, it has successfully switched to the left hand throttle mode. Then release the joystick and buttons, and restart the remote control to use it.

### Switch to right-hand throttle (Mode1, Japanese hand) mode

First pull the right joystick to the lowest position, then press and hold the two buttons at the same time to turn on the power.



When the remote control 'beeps' and the green light is always on, it has successfully switched to the right-hand throttle mode. Then release the joystick and buttons, and restart the remote control to use it.

### 5). Instructions for Binding the Aircraft to the Remote Control

The set version of the drone has been bound to the remote control when it leaves the factory, and the user can use it after turning it on.

If the remote control is replaced, or the aircraft and the remote controller are not paired and bound for other reasons, please follow the steps below to complete the frequency binding:

- (1) Turn on the power of the aircraft and the remote controller respectively;
- (2) Use a data cable to connect the remote control and the mobile phone;
- (3) Open Enjoy-Fly2, enter "Homepage Devices --> My --> Remote Control Pairing", and click the "Remote Control Pairing" option;
- (4) Click Scan in the dialog box to display the name of the scanned aircraft;
- (5) Please select the name of the aircraft, such as "Drone-xxxxxx", click "OK" after confirmation and wait;
- 6) When the aircraft status indicator turns green slowly flashing or steady on, it means the remote control has been bound to the aircraft.

# 17. Battery Usage Instructions and Storage Safety

- Be sure to store the intelligent flight battery in a cool and dry place.
- Improper use, charging or storage of batteries may result in fire and personal injury. Be sure to use the battery according to the following safety guidelines.

#### Notes on battery use:

(1) Do not expose the battery to any liquid, do not immerse the battery in water or get it wet. Do not use the battery in rain or wet environment. When the battery comes into contact with water, it may undergo a decomposition reaction, causing the battery to ignite spontaneously, and may even cause an explosion.

- (2) It is strictly forbidden to use batteries not provided by our company. If user need to replace it, please go to the company's official website for relevant purchase information. Due to the use of non-company. The company is not responsible for battery accidents and flight failures caused by the batteries provided by the company.
- (3) Do not use bulging, leaking or damaged batteries. If the above situation occurs, please contact the company or its designated agent for further processing.
- (4) Before installing or removing the battery from the aircraft, please keep the battery power off. Do not unplug when the battery power is on battery, otherwise the power connector may be damaged.
- (5) The battery should be used at an ambient temperature of -10~45 °C. If the temperature is too high (higher than 50 °C), it will cause the battery to catch fire or even explode, over temperature low (below -10 °C), battery life will be severely compromised.
- (6) Do not use the battery in a strong static or magnetic field environment. Otherwise, the battery protection board will fail, which will lead to serious failure of the aircraft.
- (7) It is forbidden to disassemble or pierce the battery with sharp objects in any way. Otherwise, it will cause the battery to catch fire or even explode.
- (8) The liquid inside the battery is highly corrosive, if there is leakage, please stay away. If the internal liquid splashes on the human skin or eyes, please clean it immediately. Flush with water for at least 15 minutes and seek medical attention immediately.
- (9) If the battery is dropped from the aircraft or subjected to external impact, it cannot be used again.
- (10) If the battery accidentally falls into water during flight or other circumstances, please pull out the battery immediately and place it in a safe open place area, keep away from the battery until the battery is completely dry. Dried batteries should not be reused and should be discarded and disposed of properly.
- (11) Do not place the battery in a microwave or pressure cooker.
- (12) Do not place battery cells on a flat conductor.
- (13) It is forbidden to short-circuit the positive and negative poles of the battery with wires or other metal objects.
- (14) Do not hit the battery. Do not place heavy objects on the battery or charger.
- (15) If there is dirt on the battery interface, wipe it off with a dry cloth. Otherwise, it will cause poor contact, which will cause energy loss or failure to charge.

#### Battery storage safety and warnings:

- (1) Do not put the battery close to fire sources such as open flames or heaters.
- (2) Please keep the battery out of the reach of children.
- (3) Please ensure that the battery is stored at room temperature: around 25  $^\circ$  .
- (4) For batteries that are not used for a long time, please control the storage voltage between 7.3V~7.7V.
- (5) When not in use for a long time, check whether the battery storage status is abnormal every two weeks, and recharge and discharge activation every two months to maintain the activity of the battery.

# 18. Specification

# 1). Aircraft

Size (fold) Size (unfold)	
Wheelbase	218 mm
Weight	238g
Max ascent speed	Normal mode: 2.5m/s, Sport mode: 4m/s, RTH mode: 3.5m/s
Max descent speed	Normal mode: 2m/s, Sport mode: 3m/s, RTH mode: 3m/s
Max speed	Normal mode: 8m/s, Sport mode: 14m/s, RTH mode: 12m/s
Max service ceiling above sea	4000m
Max flight time	26 mins
Satellite positioning systems	GPS / GLONASS
Hover accuracy range	Vertical: +/- 0.5 m Horizonal: ± 0.3 m (Optical flow system works)
Maximum flight height	120m (maximum 500m (need to change setting on app)
Operating temperature range	0~40 C

# 2). Optical flow system

Operating environment	Surface with clear pattern and adequate lighting (lux > 15)
Velocity range	≤1.5 m/s at 6.6 ft (2 m) above ground
Altitude range	0.5~5m

# 3). 3-axis gimbal

Controllable	Pitch: -90° ~20°
Stabilization	Pitch:+35/-125°, Roll: ± 35°, Yaw: ±30°
Pitch speed	12°/s (default), can be set from 4°-28°/s
Angle jitter amount	±0.01°

# 4). Camera

Sensor	Sony CMOS
Image size	3840×2160 (20MP)
Shooting mode	Single shot
Video recording resolution	3840×2160
Maximum video bit	25 Mbps
Supported file systems	FAT32(<=32GB)
Photo	JPEG
Video	MP4
Supported SD cards	Micro SD™ Max capacity:128GB. C10 rating required
Operating temperature range	0~40°C

# 5). Battery

Capacity	2100mAh
Voltage	7.7V
Battery type	LiPo 2S
Energy	16.17Wh
Net weight	82 g
Max charging power	35W
Charge time	<2.5h (with 5V 2A adapter)
Charging temperature range	0~40 C

# 6). APP

Mobile app	Enjoy-Fly2
Live view quality	Maximum 720P, the resolution will be automatically switched according to the environmental conditions
Aerial photography mode	Dronie,rocket,circle,helix
Required operating systems	Andrio 6.0 above, IOS 10.0 above
FPV transmission distance	3000m

# 7). Charger

Input	5 V 2A (recommend)
Output	4.35V 1A×2
Rated power	10W

# 8). Remote controller

Operating frequency	5.8 GHz
Max transmission distance	3000m
Transmitter power (EIRP)	< 26 dBm (FCC) , < 20 dBm (CE/SRRC/MIC)
Operating current / voltage	700mA @ 3.7V
Capacity	2600mAh
Battery capacity (built-in)	3.7V
Battery type	LiPo 18650 1S
Battery power	9.62Wh
Operating temperature range	0~40 C
Supported mobile device size	Thickness supported:6.5-8.5mm
Charge	USB
Maximum charge power	5W
Charge time	< 2.5h(with 5V 2A adapter)

**19. Packing detail**Before using this product, please check whether the product package contains all the following items. If something is missing, please contact our company or authorized dealers.



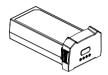
Aircraft x1



Remote controller x1



Balance charger x1



Aircraft battery (The number of batteries varies with different configurations)



USB wire x1



Date wire x3



Propellers x4



Screwdriver x1



Disclaimer and safety guidelines x1



Operation Manual