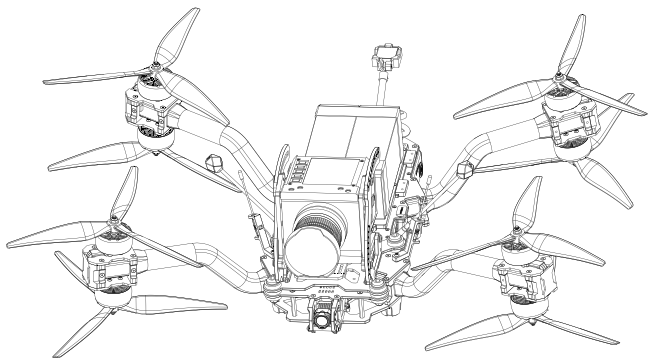


Taurus X8 Pro Max

Quick Start Guide
快速入门指南



目录

Contents

CHS

一、安全概要与免责声明	1
二、产品信息	2
三、飞行眼镜对频指南	3
四、遥控器对频指南	4
五、Betaflight设置	6
六、桨叶安装示意图	7
七、上电检查	8
八、快拆板使用指南	8
九、双电源开关使用指南	9
十、起飞/降落步骤	12
十一、着陆灯	12
十二、GPS救援模式	13
十三、故障排查指南	14

EN

I. Safety Guidelines and Disclaimer	16
II. Overview	17
III. FPV Goggles Binding Instruction	18
IV. Remote Controller Binding Instruction	19
V. Betaflight Setup	21
VI. Propellers Installation Diagram	23
VII. Pre-Flight Check	23
VIII. Quick Release Battery System Instruction	24
IX. Dual Power Switch Instruction	25
X. Takeoff/Landing Procedure	28
XI. Landing Light	29
XII. GPS Rescue Mode	29
XIII. Troubleshooting Guide	31

一、安全概要与免责声明

警告：在使用本产品之前，请您认真阅读此手册以熟悉产品的功能。此手册包含有关安全、操作及维护的说明概要。如未正确遵循手册的操作流程，可能会造成财产损失、产品损坏或造成严重的人身伤害！

安全飞行条款

1. 本产品并非玩具，具有一定的风险性，不适合未满18岁的非专业人士使用。
2. 请放置在儿童触碰范围之外，禁止儿童触碰。
3. 禁止在饮酒、疲劳、或其他精神状态不佳的情况下进行任何操作。
4. 禁止使用飞行器搭载任何违法危险物品。
5. 禁止操控飞行器进入法律法规规定的禁飞区和敏感建筑设施附近。可能包括机场、边境线、主要城市、发电站、水电站、监狱、交通要道、政府大楼及军事设施。
6. 在进行遥控器通道校准、固件升级、参数设置前请关闭动力电源或者取下螺旋桨，防止电机高速旋转。
7. 禁止在有限高度的空域上飞行。
8. 禁止使用本产品进行任何未经授权的监视活动，侵犯他人隐私权的行为。
9. 禁止使用本产品侵犯他人物权。
10. 禁止在人口密集地区使用飞行器，这些地区包括但不限于：市区中心、体育比赛场馆、展会、演唱会、车站及临时举行活动区域。如有拍摄需求，请务必在飞行前向相关部门申请许可证。

免责声明

1. 本产品并非玩具，不适合未满18岁的非专业人士使用。请勿让儿童接触本产品，在有儿童出现的场景操作时请务必特别小心注意。公司产品具有一定的危险性，用户将为使用本产品的一切行为负全部责任，对于直接或者间接使用本产品造成的任何后果均与本公司无任何责任。
2. 请在熟悉本产品的功能、操作流程之后再进行操作。如果未正确操作本产品，您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。本产品较复杂，需要经过一段时间熟悉后才能安全使用，并且需要具备一些基本常识后才能进行操作。如果没有强烈的安全意识，不恰当的操作，可能会导致产品损坏和财产损失，甚至对自身或他人造成严重伤害。
3. 用户在使用本产品过程中，对于造成违法，用户需要承担相关的法律责任。
4. 未授权改装，更换产品部件造成任何后果用户需要承担全部责任。
5. 飞行器人为丢失、人为损坏、由于个人操作失误、或者自然灾害不可抗拒的因素造成人身伤害及财产损失，用户需要承担全部责任。

二、产品信息

1. 飞行器描述

全新推出的 Taurus X8 Pro Max 电影级穿越机为提供高质量、稳定画面而设计,采用 X8 结构提升可靠性,高性能动力系统的加持使得续航大大提升,同时也使得飞行器在搭载最新的 DJI RS 系列云台以及 Komodo、BMPCC、ZCAM 等类似尺寸重量的摄影机时能够游刃有余,旨在为电影摄影师提供更可靠的飞行平台。

产品清单



Taurus X8 Pro Max x1



CW顺时针桨 x4



CCW逆时针桨 x4



天线 x2



防滑垫 x4



Fullsend 电池 x2



配件包 x1



贴纸 x1



安全提示卡 x1



免责声明 x1



折叠起飞垫 x1



GPS 指南 x1

三、飞行眼镜对频指南

注意：在进行调试之前，请务必保持无桨 / 卸桨状态。在确保对频以及 BetaflightTM 调试无误之后再安装桨叶。如果操作不当导致人身伤害，责任自负。请务必谨慎操作，确保安全。

1. 天空端及飞行眼镜激活：Taurus X8 Pro Max 飞行器连接电池，通过 USB-C 接口 [图 1-1] 连接对应设备至电脑并运行 DJI Assistant 2 (消费机系列)² 调参软件进行激活与固件升级详情请参考 DJI-O3-Air-Unit- 用户手册。

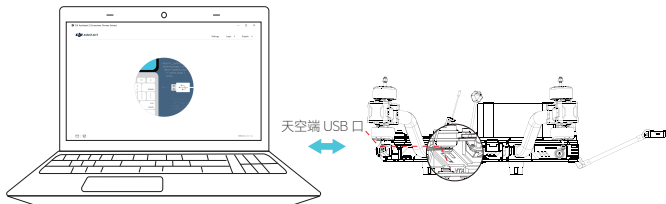


图 1-1

2. 飞行器和飞行眼镜对频(对频前，请确保天空端，飞行眼镜固件已激活更新至最新版本。)

- ① 分别给飞行器与飞行眼镜通电。
- ② 通电后，按下天空端对频按键 [图 1-2]，天空端对频状态指示灯红灯闪烁。
- ③ 按下飞行眼镜的对频按键 [图 1-3]，飞行眼镜响起嘀 ~ 嘀 ~ 的提示音。
- ④ 确保天空端与飞行眼镜距离在 0.5M 以内。对频成功后，天空端对频状态指示灯 [图 1-4] 绿灯常亮，飞行眼镜提示音停止并显示图传画面。完成天空端与飞行眼镜的对频。

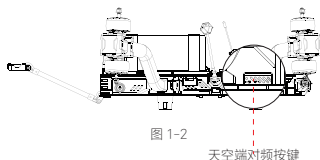


图 1-2

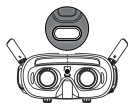


图 1-3



图 1-4

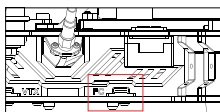
[注意]

- ◆ 请避免在静置或无外部降温设备的环境下长时间使用天空端，否则产品温度过高，将导致图传中断。
- ◆ 为减少发热，天空端开机后默认处于低功耗状态，此时图传性能未达正常规格。飞行器起桨或开始录像后，天空端将自动退出低功耗状态，图传性能恢复正常。请尽快起飞，或确保天空端通风散热。
- ◆ 切勿短接电源及GND线，或在天空端模块上电后插拔线材，否则会导致设备损坏。
- ◆ 使用前需充分了解并遵守当地的法律法规，避免违规使用。
- ◆ 本产品不适合儿童使用。

四、遥控器对频指南

1. ELRS协议：遥控器对频方式+步骤

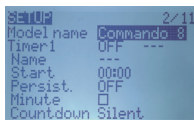
ELRS对频方式一：使用传统方式对频 (以FLIGHT Commando8 连接 ELRS900为例，其他遥控器的具体操作请参考对应遥控器的说明书)



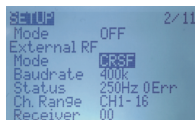
连续插拔USB口三次：连续开机关机三次或者在未开机的状态下，通过飞控USB口给接收机通电，连续插拔USB口三次，接收机蓝灯呈持续双闪，此时接收机进入对频状态，下一步再到遥控器对频。



1. 上电后，通过长按Model setup 按键来到MODELSEL界面



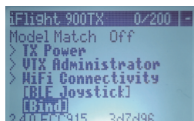
2. 短按Next Page来到SETUP界面



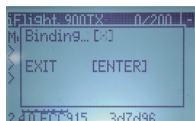
3. 选择并打开External RF的CRSF协议



4. 长按 System Settings 进入到 TOOLS 界面 移动光标至 ExpressLRS 选项长按 Enter 进入下一界面选项



5. 光标移动至【Bind】选项，按下Enter进入对频模式。



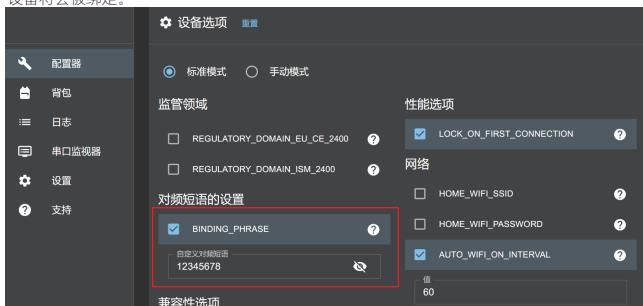
6. 对频完成后，接收机的蓝灯双闪会变成蓝灯常亮状态，此时已对频成功

[注意]

1. 由于ELRS对频速度较快，先使接收机进入对频模式，再让遥控器进入对频模式。
2. 对频完成后，建议给接收机重新上电。
3. 对频时，接收机与遥控器距离要在1m以上。
4. 接收机固件版本与高频头固件版本需保持一致，如遇到无法对频的情况可尝试把接收机和高频头固件升级到最新的固件，再尝试对频。
5. 如遇到无法对频情况，可尝试重启遥控器与接收机。

ELRS对频方式二：绑定短语对频与传统方式对频

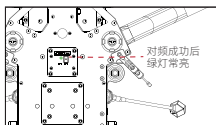
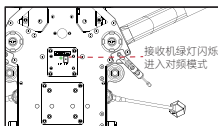
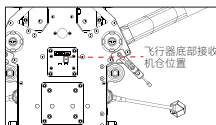
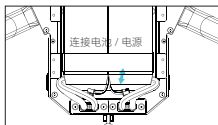
如果你正在刷写接收机与高频头固件，只需要设置好绑定短语即可直接将接收机与高频头绑定，无需使用传统方式对频。在Custom binding phrase中设置你的绑定短语。注意！绑定短语内容必须具有唯一性，不要设置简单的绑定短语，否则在ELRS信号范围内同样绑定短语的设备将会被绑定。



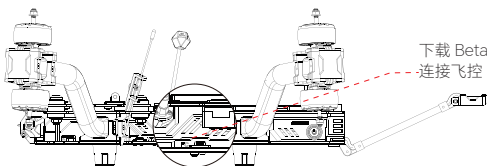
具体操作流程请参考EXPRESSLRS官网中的快速上手教程，或IFLIGHT官方哔哩哔哩账号视频教程。

2.TBS协议：遥控器对频步骤

将飞行器连接电源 / 电池 飞行器正常自检后，用镊子短按一下 TBS 接收机 BOOT 按键，绿灯闪烁表示进入对频模式，黑羊遥控器或黑羊高频头设置页面进入高频头页面，找到【Bind】选项点击确认进入对频，对频成功后 TBS 接收机指示灯为绿灯常亮。



五、Betaflight设置



下载 Betaflight configuration¹ 后
连接飞控 USB

a. 接收机端口/协议

ELRS/TBS接收机：CRSF

标识符	设置/MSP	串行数字接收机	遥测输出
USB VCP	115200	☐	已禁用 AUTO
UART1	115200	☐	已禁用 AUTO
UART2	115200	☒	已禁用 AUTO
UART3	115200	☐	已禁用 AUTO
UART4	115200	☐	已禁用 AUTO
UART6	115200	☐	已禁用 AUTO
UART7	115200	☐	已禁用 AUTO

接收机

串行接收机 (通过 UART)

接收机模式

- 必须将接收机对应的 UART 设置为 "数字串行接收机" (在 端口 页面)
- 从下拉列表中选择正确的数据格式, 如下:

CRSF

串行数字接收机协议

遥测

TELEMETRY 遥测输出

b. 通道映射设置

接收机通道映射: "AETR1234" 美国手-左手油门; "TAER1234" 日本手-右手油门

设置

端口

配置

动力 & 电池

预设

PID 调校

接收机

模式

电机

OSD 屏幕叠加显示

固件 (VTX)

黑盒子

CLI (命令行)

预览

横滚 (A)

俯仰 (E)

方向 (R)

油门 (T)

AUX 1

AUX 2

AUX 3

AUX 4

AUX 5

AUX 6

AUX 7

AUX 8

AUX 9

AUX 10

AUX 11

AUX 12

接收机

串行接收机 (通过 UART)

接收机模式

- 必须将接收机对应的 UART 设置为 "数字串行接收机" (在 端口 页面)
- 从下拉列表中选择正确的数据格式, 如下:

CRSF

串行数字接收机协议

遥测

TELEMETRY 遥测输出

RSSI (接收机信号强度)

RSSI ADC 模拟 RSSI 输入

通道映射

AETR1234

RSSI 通道

舵机低位 阈值

舵机中点

舵机高位 阈值

1050

1500

1900

RC 曲线区间

Yaw 曲线区间

3D 油门曲线

0

0

50

RC 平滑

开启

平滑模式

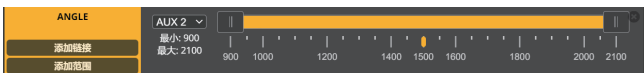
c. 飞行模式设置

飞行器默认出货为自稳，客户也可自行设置其他模式等。

ARM：解锁/上锁通道开关，用于飞行器的解锁与上锁，默认出厂设置为AUX1，低位为上锁，高位为解锁。图标亮起表示解锁，图标呈现灰色表示上锁。

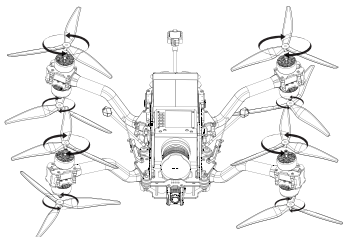


ANGLE：自稳通道开关，用于飞行器开启自稳飞行模式，默认出厂设置为AUX2该模式全程保持开启状态。图标亮起表示开启自稳模式，图标呈现灰色表示非自稳模式。



六、桨叶安装示意图

CW顺时针桨 & CCW逆时针桨，用户需根据桨叶迎风面识别桨叶方向，安装至飞行器。
CW顺时针桨不带字母“R”，CCW逆时针桨带字母“R”。



⚠ 注意

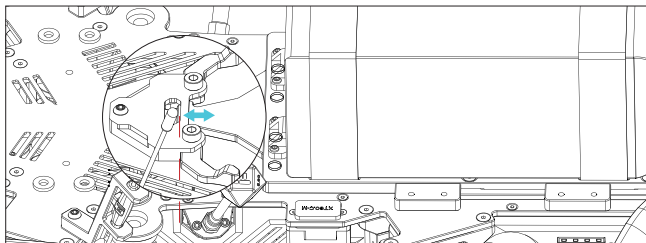
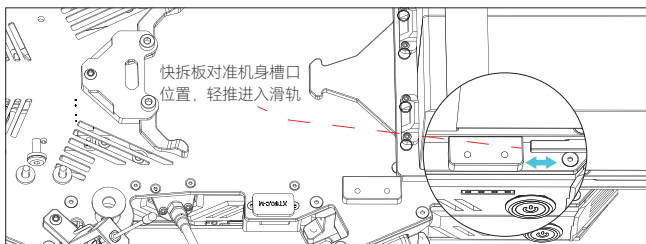
- ◆ 拆装桨叶前，请确保飞行器处于断电状态。
- ◆ 由于桨叶较薄，请小心操作以防意外划伤。
- ◆ 螺旋桨为易损耗品，如有需要，请另行购买。
- ◆ 每次飞行前请检查螺旋桨是否安装正确和紧固。每次飞行前请务必检查各螺旋桨是否完好。如有老化、破损或变形，请更换后再飞行。
- ◆ 请勿贴近旋转的螺旋桨和电机，以免割伤。
- ◆ 本产品不适合儿童使用。

七、上电前检查及注意事项

1. 检查使用的电池电量是否充足且健康，确保电池无明显破损、变形或泄露现象。
2. 确认电池型号与飞行器兼容，电压规格正确（如对于8S电池，应为33.6V左右）。任意两片电芯之间相差不可超过0.1V。
3. 检查电池插头与飞行器电池插座接触良好，无松动、污物或损坏情况。
4. 遥控器开启并已与飞行器正确对频，确认接收机指示灯正常闪烁或显示已连接。
5. 确保电机旋转方向正确，拆卸桨叶后，在地面站的电机页面推动油门确认。
6. 确认螺旋桨安装方向，确定螺丝螺母不会松动。
7. 确保起飞地点空旷无障碍物，远离人群和贵重物品，以防止意外失控造成的损失。
8. 如果是首次飞行或重大升级后，建议先进行地面测试，确认所有功能正常后再进行空中飞行。

八、电池快拆板

快拆板卡入飞行器示意图



— 快拆板前段推入锁止结构内，完成组装

简略使用步骤说明：

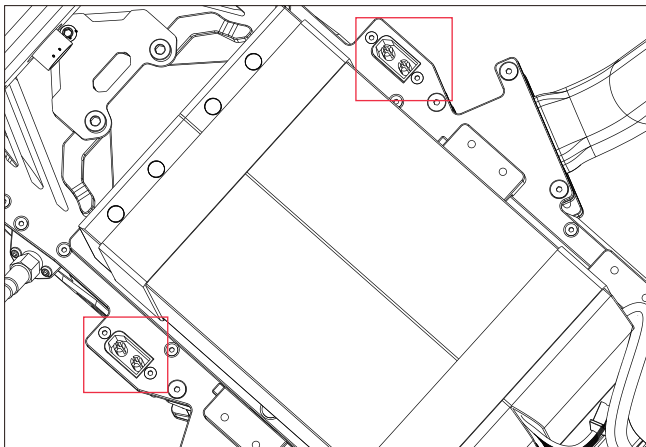
- 1、把两颗电池放置到电池快拆板上，电池非出线端朝前顶住打印件；
- 2、使用两根电池绑带把电池固定牢靠；
- 3、电池快拆板滑槽对准机身槽口位置，轻推进入滑轨；
- 4、电池快拆板前端卡口推入锁止结构内，听到“哒”的一声，完成组装；

注意：在插入电池前需检查电池电压，任意两片电芯之间电压相差不可超过0.1V

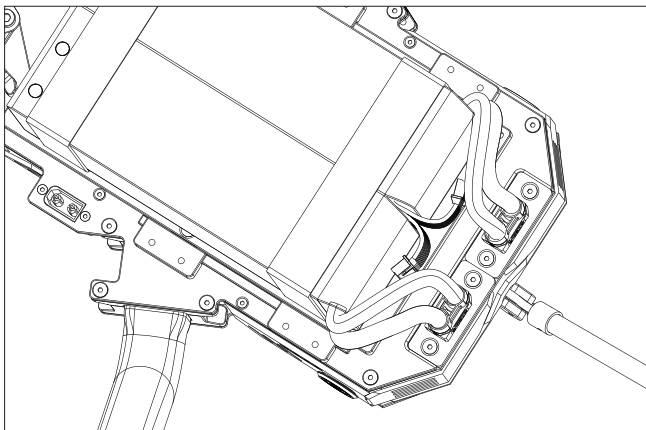
九、双路电源开关

1. 双路电源开关作用：将飞行器电源开关和相机供电开关分离，实现了飞行器与相机的独立供电。这种设计有利于在查看或设置相机时，可以将飞行器电源关闭，从而避免飞行器内部设备过热，以及避免安全隐患。
2. 相机供电开关使用步骤：

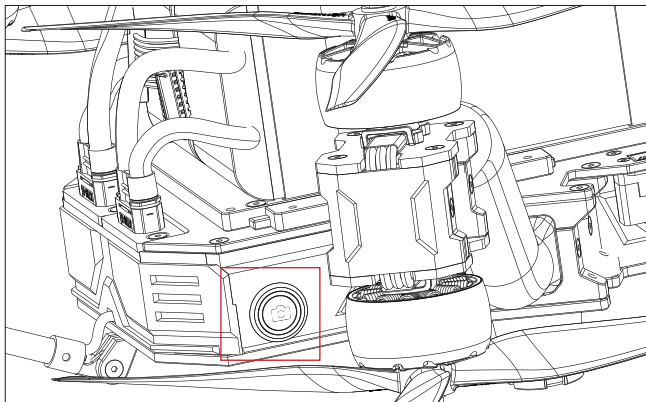
(1) 先给手持云台或相机插上XT60电源线



(2) 电池电源线接上总供电口 (XT90)

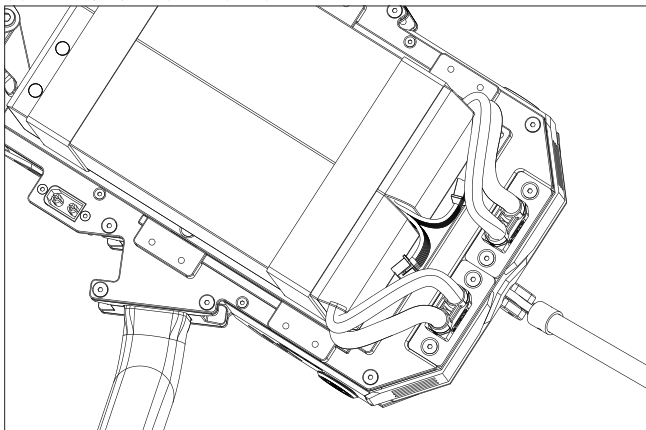


(3) 在机身尾部右侧找到相机BEC电源开关，短按一次，后长按3秒可开启、关闭电源

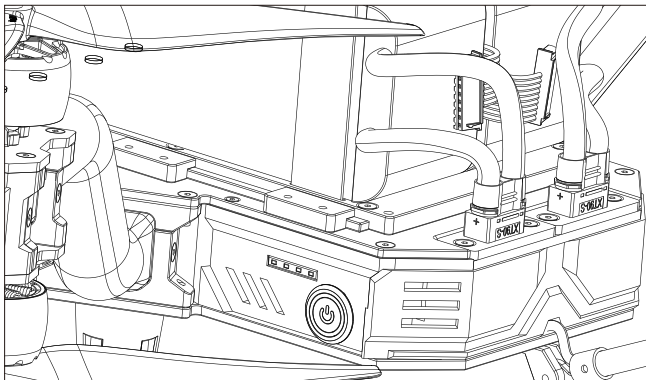


3.电调开关使用步骤:

(1) 电池电源线接上总供电口 (XT90)



(2) 在机身尾部左侧找到电调电源开关，短按一次，后长按3秒可开启、关闭电源（开关旁边有电池电量指示灯，满电为4灯常亮）



十、起飞/降落步骤及注意事项

起飞步骤:

需要目视飞行器同时将油门(throttle)推至最低位置, 然后解锁飞行器, 再慢慢提升油门, 使飞行器离地约10-20厘米。观察飞行器的姿态稳定后, 收油门遥控器上锁。确认飞行器工作正常后再戴上FPV飞行眼镜, 或使用专用监视设备进行飞行, 解锁缓慢提高油门, 使其平稳升空。

降落步骤:

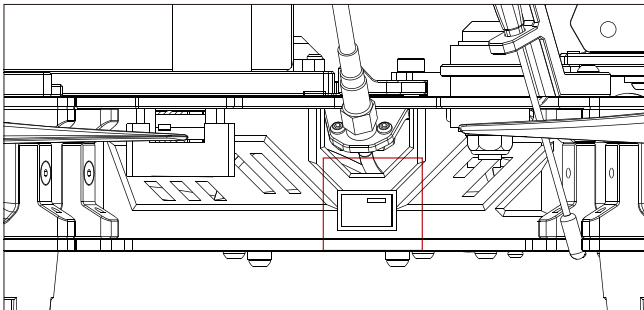
1. 降低高度, 在降落前, 先将飞行器逐渐降低至合适高度, 保持稳定的飞行速度和姿态。
2. 靠近降落点, 控制飞行器慢慢接近预先选好的降落区域, 尽量采用滑翔方式接近, 才能更好控制距离点位。
3. 减小油门, 缓慢减少油门输出, 让飞行器缓慢下沉。
4. 飞行器接触地面或距离地面5-10cm即可上锁, 小心周围环境避免硬着陆损坏。
5. 飞行器降落后, 可通过操作电源开关对飞行器进行关机。

注意事项:

- 电池电量过低, 飞行中可查看飞行眼镜或显示器中的OSD 电池电量显示, 按飞行距离自行判断(越远需提前返航), 电池单片电芯电压在3.7V时就需要注意返航降落。
- 观察四周, 在降落前再次确认周围环境安全, 没有人员或动物进入降落区。
- 降落后地后优先将电池插头拔掉使设备断电, 避免再次误触遥控器开关 再次解锁极其危险。应优先在取下电池前, 确保遥控器上的油门归零并断开与飞行器的连接。

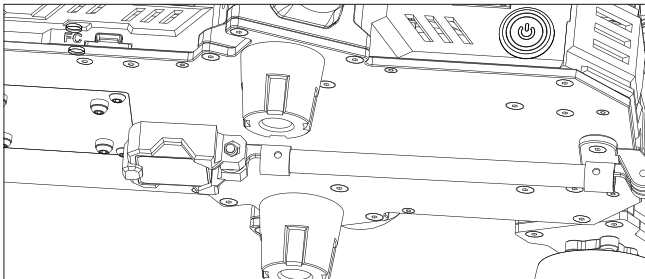
十一、着陆灯

- 1、着陆灯开关位于飞行器中部右侧, 拨动可控制灯光开启、关闭

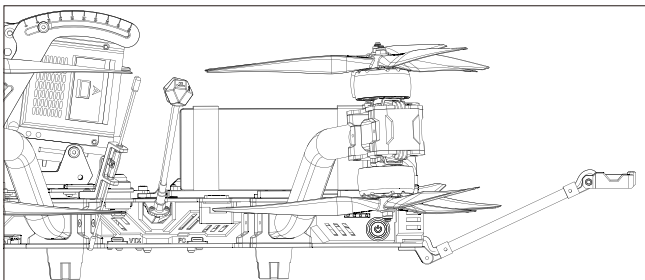


十二、GPS救援模式

1、GPS支架可按图示进行展开与折叠



展开



设置GPS时，请连接飞行器电池，以确保GPS可在Betaflight¹中正常设置。

1. 本飞行器已预装GPS，GPS救援模式请参考《GPS救援模式注意事项》进行设置。

2. 救援触发操作：

① 若飞行器已经自动触发GPS救援，飞回来后想要手动接管仅需拨动左右任意一个摇杆接管，而不是拨打GPS救援开关。

② 当飞行器因手动触发救援开关返航，且飞回到可接管范围时，则需再次操作救援开关以重新接管控制。

若自动触发救援模式后，遥控器接管成功再手动拨动开关，会导致GPS救援再打开，若在没有达到救援条件的时候，会导致上锁掉落。

注：在启用GPS救援模式及开始使用飞行器前，请熟读《GPS救援模式注意事项》中所有注意事项。

十三、故障排查指南

问题	可能原因	解决方案
遥控器打杆，飞行器无反应	接收机协议设置与实际不符	检查接收机协议设置是否和接收机所连接的串口一致
	模式设置有冲突导致解锁失败	检查地面站模式设置是否有重复
	接收机通道预设与遥控器的通道预设不一致	检查并设置使接收机通道映射和遥控器的通道映射一致
	飞行器在倾斜角度下	检查地面站配置页面的最大解锁角度
	油门通道过高	将油门杆拉到最低，或者检查通道序号正不正确
	已配置GPS救援模式但搜星不成功或所需的卫星数量不足	等待GPS定位成功或禁用GPS救援模式

GPS救援模式不触发	飞行距离未超过100m	飞行器飞到100米外后 才能达到触发条件
飞行器起飞即翻滚或 无法起飞	螺旋桨安装错误	检查螺旋桨的安装是 否正确
飞行器起飞后电机存 在异响	螺旋桨松动	拧紧螺旋桨的螺母
	螺旋桨轴心损坏	更换螺旋桨

惠州市翼飞智能科技有限公司

电话: +86752-3866-695

邮箱: support@iflight.com

网址: www.iflight.com

地址: 惠州仲恺高新区陈江街道仲恺六路333号

星河仲恺人工智能产业园B2栋厂房第5-6层




 关注iflight官方账号, 获取更多技术支持

注释:

*1: Betaflight configuration 是飞行器飞控调参软件, 请通过以下地址下载:

<https://betaflight.com/download>

*2: DJI Assistant2(消费机系列)软件支持 DJI 消费无人机系列产品激活与调参, 通过以下地址

下载: <https://www.dji.com/cn/downloads>

I. Safety Guidelines and Disclaimer

Warning: By using this product, you signify that you have read, understand, and accept the terms and conditions of this manual and all instructions. Failure to follow the instructions correctly may result in property damage, product damage, or serious personal injury!

Safety Flight Terms

1. This product is not a toy and carries certain risks. It is not intended for non-professionals under 18 years of age.
2. Keep this product out of reach of children, and do not let children touch it without supervision.
3. Do not operate the product while under the influence of alcohol, fatigue, or other impaired mental states.
4. Do not use the aircraft to carry any illegal or dangerous items.
5. Do not operate the aircraft in no-fly zones or near sensitive buildings and facilities as regulated by law. These may include airports, borders, major cities, power plants, hydroelectric plants, prisons, major roads, government buildings, and military facilities.
6. Before operating the remote controller channel calibration, firmware update, or parameter setting, please turn off the aircraft power or remove the propellers to prevent the motors from rotating at high speed.
7. Do not fly in airspaces with altitude restrictions.
8. Do not use this product for any unauthorized surveillance activities or to infringe on others' privacy rights.
9. Do not use this product to infringe on others' property rights.
10. Do not operate the aircraft in densely populated areas, including but not limited to city centers, sports stadiums, exhibitions, concerts, stations, and temporary event zones. If you need to film in such areas, please obtain permission from the relevant authorities before flying.

Disclaimer

1. This product is a multi-rotor aircraft, equipped with powerful motors and sharp propellers, has fast flight speed, but also has a certain hazard when operating, need to be used with caution.
2. This product is not a toy and requires some basic knowledge to control, so please pay special attention to the warnings and cautions before you start using it. iFlight reserves the right to update this Disclaimer.
3. By using this product, you are deemed to have understood, acknowledged and accepted all of the terms and conditions of this document and you undertake to be responsible for your own actions and all consequences arising therefrom. You undertake to use this product only for legitimate purposes and agree to all of the terms and conditions of this document and any related policies or guidelines that iFlight may establish.
4. The user is responsible for any legal consequences resulting from the use of this product.
5. The user assumes full responsibility for any consequences resulting from unauthorized modifications or part replacements.
6. The user assumes full responsibility for any personal injury or property loss caused by human error, damage due to human factors, personal operational errors, or natural disasters.

II. Overview

1. Description

Introducing Taurus X8 Pro Max, a revolutionary FPV cinelifter that takes professional filmmaking to new heights. With its integrated design and aerodynamic low-wind-resistance structure, Taurus X8 Pro Max features remarkable power and flight time, providing a professional and stable flying equipment for filmmakers. With a payload capacity of 3.5 kg, Taurus X8 Pro Max can easily support carrying heavy cameras such as the RED KOMODO, BMPCC, and ZCAM, even when paired with DJI RS series gimbals for dual operators, providing a reliable flight platform.

2. Packing List



Taurus X8 Pro Max x1



CW Propellers x4



CCW Propellers x4



Antennas x2



Battery Anti-slip
Pads x4



Fullsend Batteries x2



Accessories Kit x1



Sticker x1



Safety Warning
Card x1



Disclaimer x1



Landing Pad x1

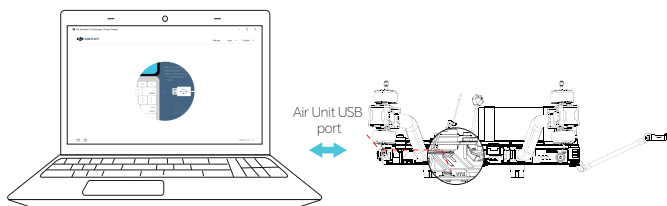


GPS Manual x1

III. FPV Goggles Binding Instruction

Note: Before activation, please make sure the propellers are removed. The propellers can only be installed after the aircraft binding and Betaflight¹ settings are completed. If improper operation results in personal injury, you will be solely responsible for it. Please operate with caution to ensure safety.

1. Air Unit and Goggles Activation: Power on Taurus X8 Pro Max, connect the corresponding device to the computer using the USB-C port and then run DJI Assistant 2 (Consumer Drones Series)² for activation and firmware upgrade. Please refer to the DJI-O3-Air-Unit User Manual for details.



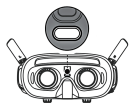
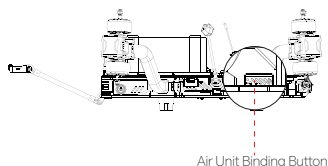
2. Aircraft and Goggles Binding (Make sure that all devices have been updated to the latest firmware versions before binding.)

①Power on the aircraft and the goggles separately.

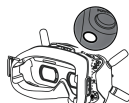
②Press the bind button of the air unit, the binding status indicator of the air unit blinks red.

③Press the bind button of the goggles and the goggles start to beep continually.

④Make sure the distance between the air unit and the goggles is within 0.5 m. Once binding is successful, the binding status indicator of the air unit turns solid green. The goggles stop beeping and the video transmission can be displayed normally.



Goggles Bind Button



Goggles Status indicator light

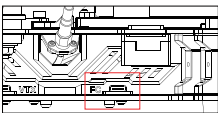
[Note]

- ◆ DO NOT use the air unit for an extended period in high-temperature environments with poor ventilation. This may lead to overheating and loss of image transmission.
- ◆ When the air unit is powered on, it automatically enters the low-power state to avoid overheating, which negatively affects image transmission performance. Once the aircraft takes off or the recording starts, the air unit automatically exits the low-power state and resumes normal image transmission performance. Make sure to take off as soon as possible or the air unit is well ventilated.
- ◆ DO NOT connect the power cable with the power GND cable directly or plug or unplug the cables after the air unit is powered on. Otherwise, the equipment may be damaged.
- ◆ Make sure you fully understand and abide by local laws and regulations before using this product.
- ◆ This product is not intended for children.

IV. Remote Controller Binding Instruction

1. ELRS Protocol: Transmitter Binding Methods

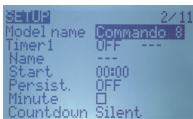
ELRS Binding Method1: Traditional Binding Procedure (Example: iFlight ExpressLRS 900TX)



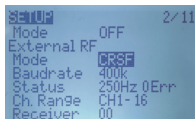
Plug and unplug the USB port for three times: Power on and off the aircraft for 3 times, plug and unplug the USB port for 3 times to supply power to the receiver when the aircraft is power off, the blue LED will start to double flash continuously. Bind mode is active.



1. After powering on, press the Model setup to enter MODELSEL.



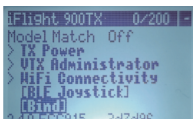
2. Press Next Page to enter the SETUP page.



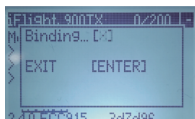
3. Scroll down to External RF and select CRSF.



4. Press System Settings to TOOLS page and select the ExpressLRS. Press to enter.



5. Scroll down to [Bind], press Enter to enter the binding mode. Bind mode active.



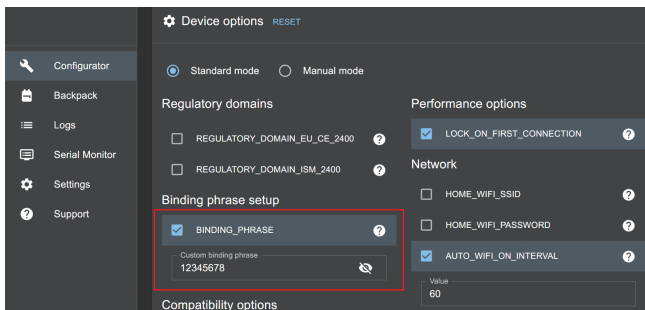
6. After binding, the blue LED on the receiver will turn to solid blue. Binding is successful.

[Note]

1. Be quick with this process and set the receiver in binding mode first.
2. The distance between the receiver and transmitter should be more than 1m during the process.
3. After the binding process is completed, it is recommended to re-power receiver and transmitter.
4. The receiver firmware version should be consistent with the TX module firmware version. If you can't bind your hardware, please try updating to the latest firmware.
5. If you can not bind your equipment, please try to reboot the receiver and transmitter.

ELRS Binding Method 2: Using Custom Binding Phrase

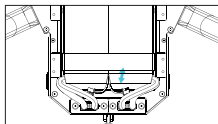
When flashing the latest ELRS firmware for receiver and TX module, just set a unique custom binding phrase to automatically bind all your hardware. Do not set a too simple binding phrase, otherwise other pilot's devices with the same binding phrase might link up as well.



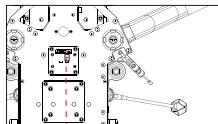
Please refer to the Quick Start Guide on the ExpressLRS official website for specific procedures.

2. TBS Protocol: Transmitter Binding Method

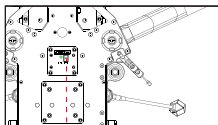
Power on the aircraft and after the aircraft completes self-check, use tweezers to short press the TBS Crossfire receiver BOOT button. If the green light flashes, it means binding mode activates. Enter the TBS Crossfire transmitter or TX module settings page, scroll down to [BIND], press the button to enter. After successful binding, the TBS Crossfire receiver indicator light will turn solid green.



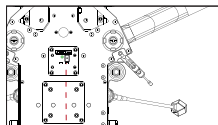
Connect battery/power supply



Receiver slot is located at the bottom of the aircraft

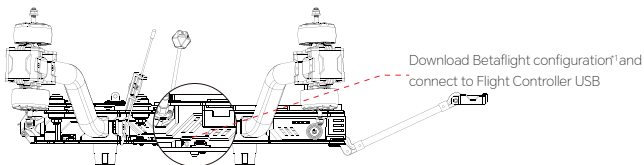


The receiver's green light is flashing indicating binding mode is active



After successful binding, the receiver indicator light will turn solid green

V. Betaflight Setup



a. Receiver Port/Protocol

ELRS/TBS Receiver: CRSF

Identifier	Configurations/MSP	Serial Rx	Telemetry Output
USB VCP	☒ 115200	☐	Disabled ▼ AUTO ▼
UART1	☒ 115200	☐	Disabled ▼ AUTO ▼
UART2	☐ 115200	☒	Disabled ▼ AUTO ▼
UART3	☐ 115200	☐	Disabled ▼ AUTO ▼
UART4	☐ 115200	☐	Disabled ▼ AUTO ▼
UART5	☐ 115200	☐	Disabled ▼ AUTO ▼
UART6	☐ 115200	☐	Disabled ▼ AUTO ▼

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

Telemetry

☒ **TELEMETRY** Telemetry output

b. Channel Map Setting

Receiver Channel Map Setting: "AETR1234" Mode 1 Throttle, "TAER1234" Mode 2 Throttle

c. Mode Switch

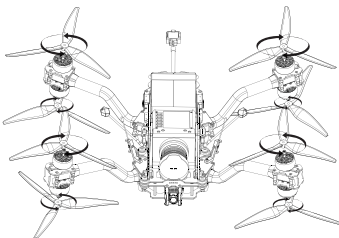
The default mode is Angle, and customers can also switch to other modes.

ARM: ARM/DISARM channel switch for arm and disarm the aircraft, default factory setting is AUX1, low range for disarm, high range for arm, When the icon is lit, it indicates arm. A grey icon indicates disarm.

ANGLE: Angle channel switch is used to turn on the Angle flight mode, the default factory setting is AUX 2, this mode remains on throughout the flight. When the icon is lit, Angle mode is active. A grey icon indicates that angle mode is off.

VI. Propellers Installation Diagram

Identify CW & CCW propellers and install them correctly on the aircraft. CW Propellers without the letter "R", CCW Propellers with the letter "R".



Note

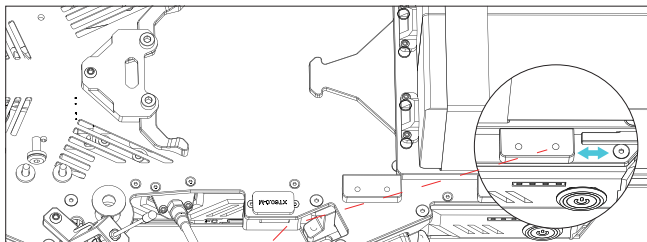
- ◆ Before installing the propellers, please make sure the aircraft is powered off.
- ◆ Handle propellers carefully to avoid accidental cuts.
- ◆ Propellers are consumables; inspect and replace them if worn, damaged, or deformed.
- ◆ Ensure propellers are installed correctly and securely before each flight.
- ◆ Avoid close contact with rotating propellers and motors.
- ◆ This product is not intended for children.

VII. Pre-Flight Check

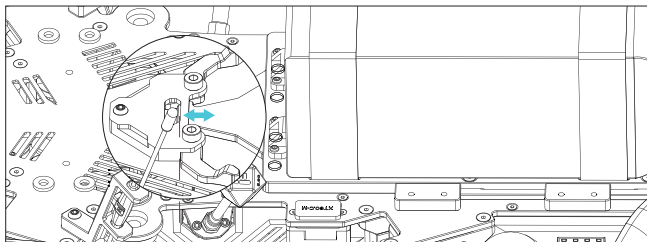
1. Make sure the aircraft batteries are fully charged and there is no obvious damage, deformation or leakage in the battery.
2. Make sure the battery model is compatible with the aircraft and the voltage specification is correct (e.g. for 8S battery, it should be about 33.6V). The voltage difference between any two battery cells shouldn't exceed 0.1V.
3. Make sure the aircraft battery is properly connected and secure, there is no looseness, dirt or damage.
4. Make sure the transmitter is powered on and linked to the aircraft, and make sure the receiver indicator light flashes normally or shows connected.
5. Make sure the motor rotates in the right direction, take off the propellers and connect the aircraft to Betaflight Configurator, then push the throttle to confirm the rotation on the motor page.
6. Make sure propellers are in good condition and mounted onto the motors correctly and securely.
7. Make sure the takeoff area is clear of obstacles, away from crowds and valuable items, to prevent any accidental losses from losing control.
8. If it is the first flight or after a major upgrade, it is recommended to conduct a ground test first to make sure all functions are normal before flying in the air. These preventive inspections can effectively reduce flight accidents caused by negligence and ensure the safe operation of FPV drones.

VIII. Quick Release Battery System Instruction

Diagram showing how to attach the battery quick release plate to the aircraft.



Align the quick release plate with the slot on the frame and gently push it into the rail.



Insert the front section of the quick release plate into the locking structure to complete the assembly.

Installation Instructions:

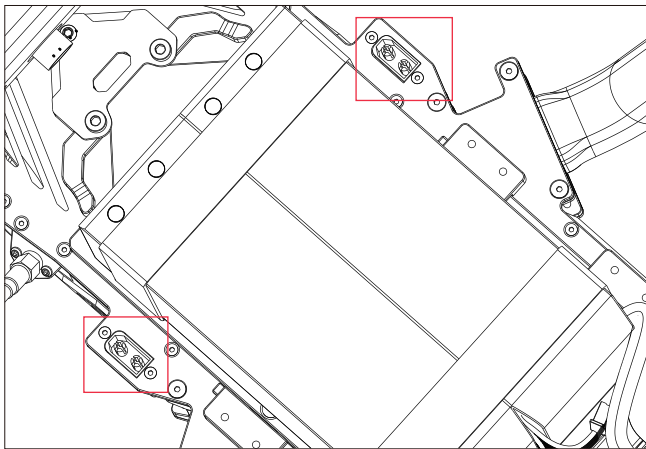
1. Place the two batteries onto the battery quick release plate, with the non-output end of the batteries facing forward against the TPU printed parts.
2. Secure the batteries tightly with two battery straps.
3. Align battery quick release plate groove with aircraft's slot, and gently push it into the slide rail.
4. Push the front latch of the quick release plate into the locking structure. When you hear a "click" the assembly is complete.

Note: Before inserting the battery, please check the battery voltage. The voltage difference between any two cells should not exceed 0.1V.

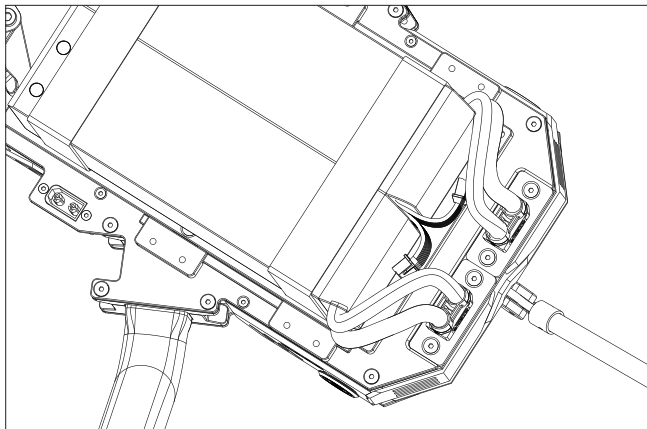
IX. Dual Power Switch Instruction

1. Dual Power Switch Function: The dual power switch separates the power switch for the aircraft and the power switch for the cinema camera, allowing independent power supply to the aircraft and the cinema camera. This design is beneficial for turning off the aircraft's power while viewing or setting up the cinema camera, preventing the internal equipment of the aircraft from overheating and avoiding potential safety hazards.
2. Camera Power Switch Usage Steps:

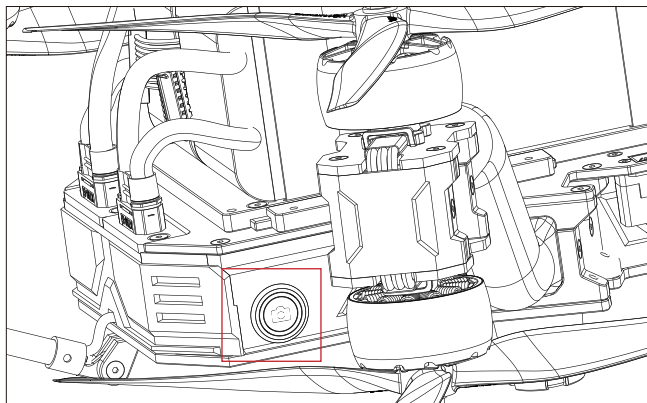
(1) First, plug in the XT60 power cable to the handheld gimbal or cinema camera.



(2) Connect the battery power cable to the main power port(XT90).

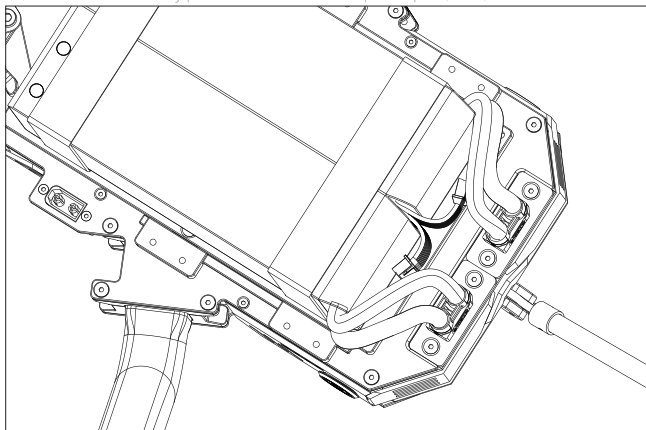


(3) Find the camera BEC power switch on the right side of the aircraft's tail. Short press once, then long press for 3 seconds to turn the power on or off.

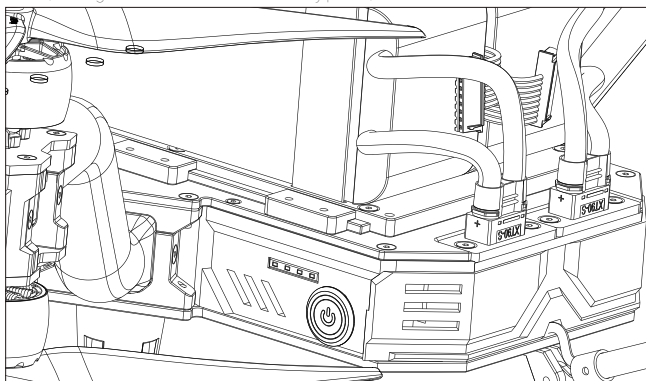


3. ESC Power Switch Usage Steps:

- (1) Connect the battery power cable to the main power port(XT90).



- (2) Find the ESC power switch on the left side of the aircraft's tail. Short press once, then long press for 3 seconds to turn the power on or off (battery power indicator next to the power switch, Four lights on indicate sufficient battery power).



X. Takeoff/Landing Procedure

Takeoff Procedure:

Start by pushing the throttle to the lowest position, then gradually increase it to lift the aircraft approximately 10–20 cm off the ground. Once the aircraft's attitude is stable, throttle down and disarm the remote controller. Put on FPV goggles or face the monitor (such as a handheld monitor), arm the remote controller and slowly increase the throttle to smoothly ascend.

Landing Procedures:

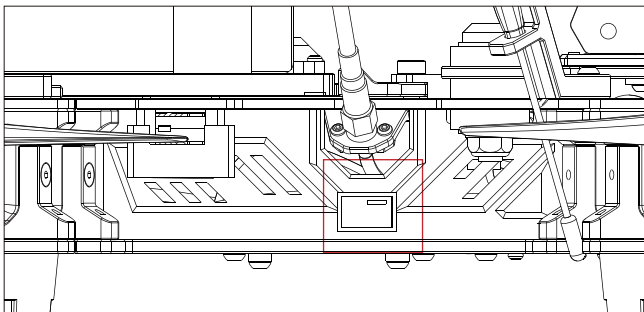
1. Decrease altitude, before landing, gradually lower the aircraft to an appropriate altitude, maintaining a stable flight speed and attitude.
2. Approach landing spot, control the aircraft to slowly approach the pre-selected landing area, preferably using a gliding approach to better control the distance.
3. Reduce throttle, slowly decrease throttle output to allow the aircraft to land slowly.
4. Disarm the aircraft when it touches the ground or is 5–10 cm away from the ground, be careful to avoid hard landings that could cause damage.
5. After the drone lands, it can be powered off by operating the ESC Power Switch.

Precautions:

- Monitor battery level, You can check the remaining battery power by checking the OSD information in the FPV goggles or the monitor during flight. You need to judge the remaining flight time and leave enough redundancy for safe landing. When the voltage of a single battery cell approaches 3.7v, you need to pay attention to return and land. Over-discharge will cause irreversible damage to the battery.
- Observe surroundings, Before landing, double-check the surrounding environment for safety, ensuring no people or animals are in the landing area.
- Disconnect battery, After landing, it is important to first power off the aircraft to avoid accidentally triggering the remote control switch to arm it again, thereby avoiding accidents and personal injury.

XI. Landing Light

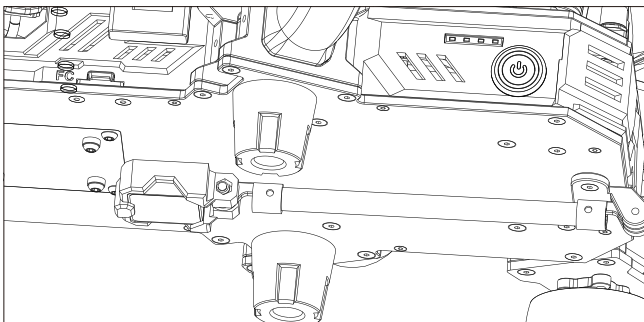
The landing light switch is located on the right side of the aircraft's midsection.



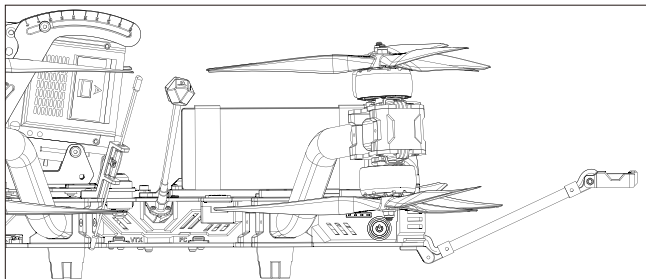
XII. GPS Rescue Mode

1. The GPS mount can be unfolded and folded as shown in the diagram.

Folded



Unfolded



When setting up GPS, please connect the aircraft battery to ensure that GPS can be set up properly in Betaflight¹

1. The GPS is preset on this aircraft. Refer to the [GPS Rescue Mode Precautions] for settings.

2. Rescue Operation:

① If GPS rescue mode is triggered automatically, take control by moving either stick, not by toggling the GPS rescue switch.

② When the drone returns due to the manual activation of the GPS rescue switch and comes back within the controllable range, the rescue switch must be operated again to regain control.

If the GPS rescue mode is automatically triggered and the remote controller successfully takes over, manually toggling the switch will reactivate GPS rescue mode. If the rescue conditions are not met, this will cause the drone to disarm and fall.

Warning: Read all precautions in the [GPS Rescue Mode Precautions] before enabling GPS rescue mode and operating the aircraft.

XIII. Troubleshooting Guide

1. Issue:

GPS Rescue Mode not Triggering.

Possible reason:

Flight distance has not exceeded 100 meters.

Solution:

Fly in a straight line for at least 100 meters past your descent distance, make sure the home arrow is pointing at your direction to confirm GPS functionality.

2. Issue:

Aircraft Rolls Over Immediately on Takeoff or Cannot Take Off.

Possible reason:

Propellers installed incorrectly.

Solution:

Ensure that the propeller direction matches the motor direction.

3. Issue:

Unusual Noise from Motors After Takeoff.

Possible reason:

① Propellers are loose. ② Propeller shaft is damaged

Solution:

① Tighten the propellers. ② Replace the propeller.

4. Issue:

The aircraft does not respond to the remote control stick input.

Possible reason:

① Receiver protocol settings do not match the actual configuration.

② Mode settings conflict causing failure to arm.

③ Receiver channel presets do not match the transmitter channel presets.

④ Aircraft is at a tilted angle.

⑤ Throttle channel is too high.

⑥ GPS rescue mode configured but GPS the acquisition unsuccessful or insufficient satellites.

Solution:

- ① Check if the receiver protocol settings are consistent with the serial port to which the receiver is connected.
- ② Check if there are any conflicts or duplicates in the Betaflight Configurator mode settings.
- ③ Verify and configure receiver channel map setting to match the transmitter channel map setting.
- ④ Check the maximum arming angle setting on the Betaflight Configurator page.
- ⑤ Move the throttle stick to the lowest position or verify if the channel number is correct.
- ⑥ Wait for GPS fix or disable the GPS rescue mode.

Note:

*1: Betaflight is the flight controller software (firmware) used to configure your aircraft. Please download at this link: <https://betaflight.com/download>.

*2: DJI Assistant 2 (Consumer Drones Series) supports the consumer drones series products activation and firmware upgrade. Please download at this link: <https://www.dji.com/avata/downloads>.

IFLIGHT INNOVATION TECHNOLOGY LIMITED

TEL: +86752-3866-695

Email: support@iflight.com

Website: www.iflight.com

ADD: 6th Floor, Building B2, Galaxy IMC, Beixin Road,
Zhongkai Avenue, Huizhou 516006, Guangdong, CHINA



Follow us for more information and support

