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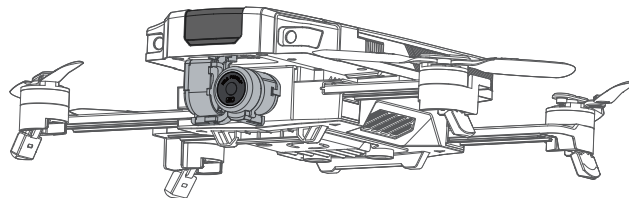
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www.gdu-tech.com



Quick Start Guide 快速操作指南

V1.0 2017.09



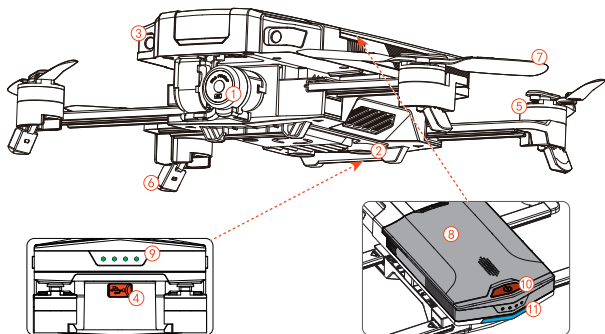
If you have any questions about this document, please call the telephone of GDU after-salecenter (400-040-0266).

如果您对说明书有任何疑问或建议，请拨打官方售后服务中心免费客服电话：400-040-0266



Aircraft

The GDU O₂/ O₂ Plus aircraft features innovative sliding metal arms, and the full-featured controller is quickly stowed under the aircraft making it portable to carry, easy to use. The three-axis stabilized camera can capture 4K videos and 13 megapixel photos and is equipped with advanced digital zoom. The aircraft's sensors support intelligent obstacle avoidance, visual tracking, gesture recognition, and other advanced functionality.



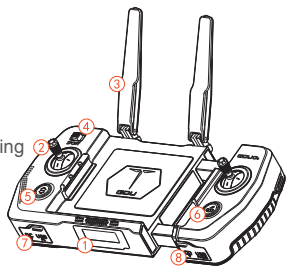
- 1. 3 axis Stabilized Camera
- 2. Downward Vision System
- 3. Forward Vision System
- 4. Data Interface (MicroUSB)
- 5. Motors
- 6. Tripods

- 7. Propellers
- 8. Intelligent Battery
- 9. LED Battery Level Indicator
- 10. Power Button
- 11. Aircraft Status indicator (and orientation) lights

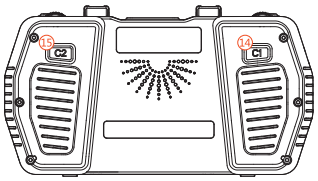
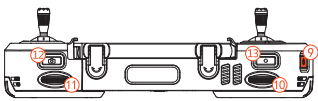
Remote Controller

O₂/O₂Plus remote control is using pulling slide design, making it easy to place mobile devices. It can offer a long-range and real-time data transmission, maximum distance of 1 km for O₂ and 7 km for O₂ Plus. Working time is 1.5 hours.

- 1. LCD Screen
- 2. Control sticks
- 3. Antennas
- 4. Flight Mode Switch
- 5. One-button Take-off/Vertical landing
- 6. RTH Button
- 7. Power Port (Micro USB)
- 8. USB cable Port



(Unfolded Remote Controller)



- 9. Power Button
- 10. Gimbal yaw dial
- 11. Gimbal pitch dial
- 12. Shutter Button
- 13. Record Button
- 14. Customizable Button C1
- 15. Customizable Button C2

★ The remote controller can reach to its maximum transmission distance (FCC standard) in a wide open area with no electro-Magnetic interference, and at height of 120m(400 feet). The maximum flight-time is tested under controlled conditions and may vary depending on environment and flight characteristics.

Specifications

Aircraft

Take-off weight (without cover)	730 g
Take-off weight (with cover)	846 g
Max Ascent Speed	5m/s (Sport mode)
Max Descent Speed	3m/s
Max horizontal speed	15m/s (Sport mode, without wind)
Max flight altitude	3500m (11482 feet)
Max Hovering Time	20 minutes (without wind)
Operating Temperature	0°C to 40°C
Satellite Positioning system	GPS/GLONASS (dual modules)

Gimbal

Controllable range	Pitch: -90°~30° Roll: -30°~30° Yaw: -30°~30°
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Forward Vision System

Sensing range	0.5 to 15 m
Operating Environment	Obstacle avoidance system with clear texture and adequate lighting (lux>15 Common room lights)

Downward Vision System

Velocity Range	≤10m/S (2m above ground, adequate lighting)
Altitude Range	0.3 to 3 m
Hovering range	0.3 to 13 m
Operating Environment	Ground with clear texture and adequate lighting (lux>15 Common room lights)

Camera

Image Sensor	1/3 inch CMOS Effective pixels: 13 Megapixels
Lens	FOV 79.8° , equivalent focal length: 25.5 mm F/2.2
Distortion	<1.5%

ISO Range	Auto 100~1600
Shutter Speed	Auto
Max Photo Resolution	4208×3120
Video Recording Modes	4K: 3840×2160 @ 25 fps
	1080p: 1920×1080 @ 30 fps
	720p: 1280×720 @ 30 fps
Photo format	JPG
Video format	MP4
Built-in storage	O ₂ : 16G
	O ₂ Plus: 32G

Remote Controller

Operating Frequency	O ₂ : 5.8 GHz
	O ₂ Plus: 2.4 GHz
Max Transmission distance	O ₂ : 1 km
	O ₂ Plus: 7 km
Operating Temperature	0~40℃
Battery	1200mAh
Working voltage	7.6 V
Supported Connector Port	Lightning, Micro USB, Type-C

Charger

Voltage	13.05 V
Rated Power	39.15 W

Intelligent Battery

Capacity	4000 mAh
Rated Voltage	11.4 V
Battery Type	LiPo 3S
Energy	45.6 Wh
Net Weight	Approx 283 g
Max charging Power	78 W

Notice:

In order to avoid property loss or personal injury, please read through the following documentation carefully before using the drone for the first time:

Warnings:

- The Quick Start Guide is designed to help the user to perform the first flight. For more flight instruction, please read the User Manual online.
- It is prohibited for those who under 18 to use this product.
- It is prohibited to use this product in heavily populated areas.
- It is prohibited to use this product in legally restricted areas.
- Please put the product out of children's reach.
- It is prohibited to use this product when you are tired, distracted, or under the influence of anything that could impair judgement and control of aircraft. Please fly the drone in open outdoor space during good weather.
- All the images shown in this document are just for reference; subject to our available products for more details.



1. Download the GDU Mini App and Watch the Tutorial Videos

Search for "GDU Mini" on the App Store or Google Play, or scan the QR code to download the app on your mobile device.

Watch the tutorial videos at www.gdu-tech.com or in the GDU Mini App.



GDU Website

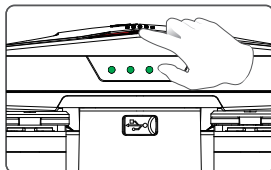


GDU Mini APP

★ GDU Mini APP Minimum Operating System requirement of iOS 8.0 and Android 5.0.

2. Check the Battery Levels:

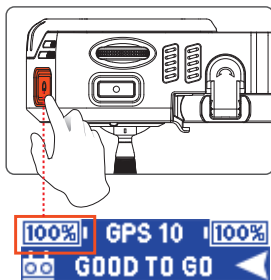
Check the battery levels of aircraft: short press the power button to check the battery level. Press one time first, and then press and hold the power button for another 2 seconds to power on/off the intelligent battery.



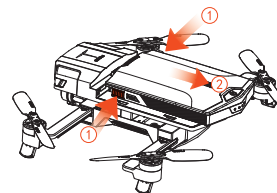
Low ← Battery Level → High



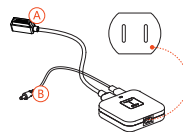
Check the Battery Levels of remote controller: Press and then hold the power button for three seconds to turn on the remote controller. Check the battery level on screen (left side for remote controller; right side for aircraft). Then again press and hold the power button for three seconds to turn off the remote controller.



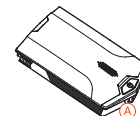
3. Charge the Batteries



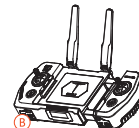
Remove Intelligent Battery



Input voltage: 100-240V



Charge Time: < 2 Hours

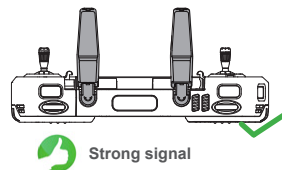


Charge Time: < 2 Hours

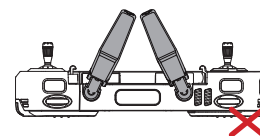
★ Separately charging the battery or remote controller, the charging time shall be within 2 hours. But charging both of them at one time, the charging time should be within 2.5 hours.

4. Prepare the Remote Controller

1) Unfold the Remote Controller Antenna.

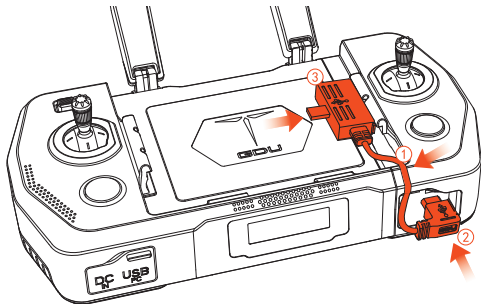


Strong signal

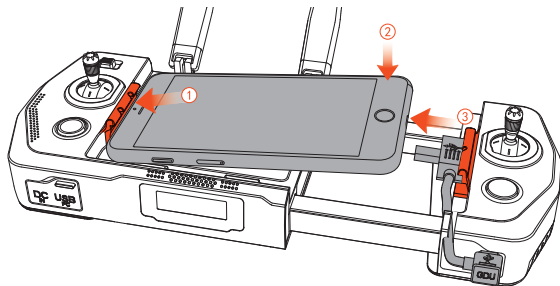


Weak signal

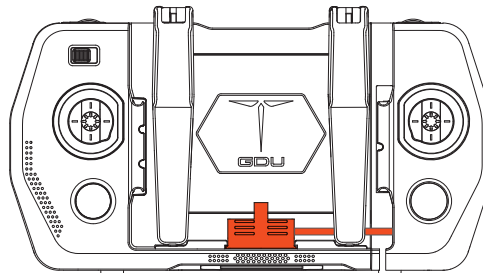
2) Take out the right included cable, and get the smaller end go through the slot first.



3) Position the mobile phone in the appropriate position in the controller and connect the other end of Lightning cable to mobile phone.



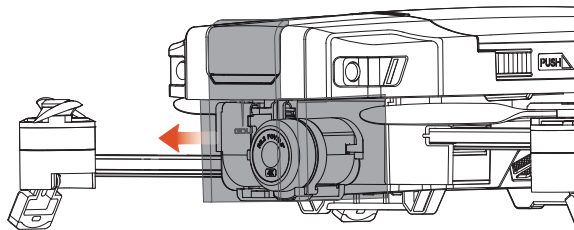
4) After use, remove the mobile phone, and place the connector in the storage position.



5. Prepare the Aircraft

1) Remove the gimbal protective cover.

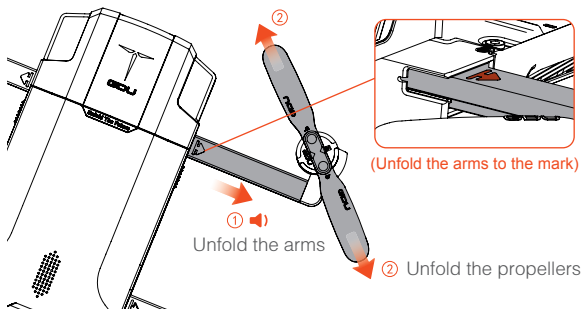
(DAMAGE CAN OCCUR IF POWERED ON WITH COVER IN PLACE)



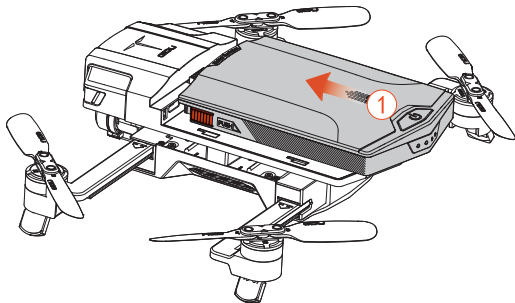
★ The protective cover is used to protect the camera and gimbal. Please make sure the protective cover is removed when you are ready to use the aircraft.

2) Unfold the arms and the propellers.

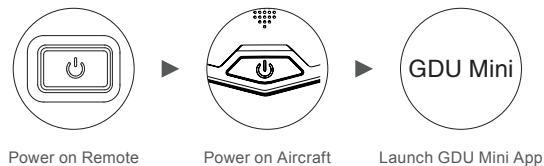
(FAILURE TO UNFOLD PROPELLERS CAN CAUSE DAMAGE TO AIRCRAFT)



3) Install intelligent battery.



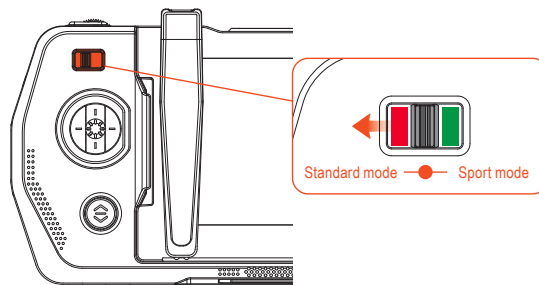
6. Prepare for Takeoff



- ★ Ensure the arms and propellers are unfolded before taking off.
- ★ The GDU O₂ can be controlled by using the Remote Controller or the GDU Mini app. To switch control mode, please restart the aircraft and then select control mode switch and the corresponding device.

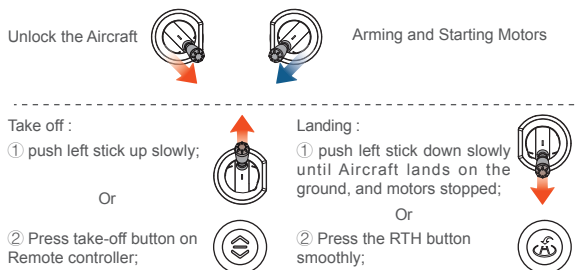
7. Flight

- 1) Switch the flight mode to standard mode.
The default setting of remote control is American mode.



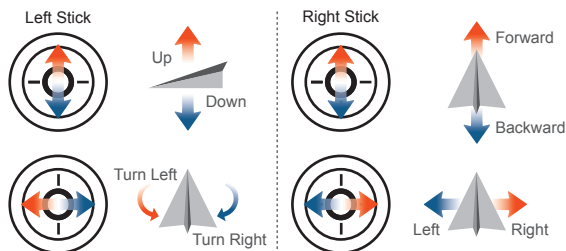
2) Take off: Move the control sticks in the toe-in directions to unlock the aircraft and activate the motors; push left stick up slowly to take off. Or press the AUTO TAKEOFF button on the remote controller.

Landing: push left stick down slowly until the aircraft lands on the ground. Hold a few seconds until the motors stop. Or press the RTH button on the remote controller.



★ Throttle must be held down for 2-3 seconds when manually landing to shut down motors.

The default setting of remote control is American mode(including virtual buttons) . The left stick controls the aircraft's altitude and rotation, while the right stick controls its forward, backward, left and right movements.



8. Controlling flight with GDU Mini app

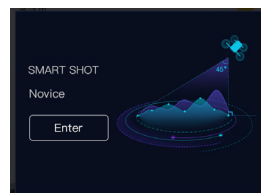


- 1) Power on the aircraft.
- 2) Turn on your mobile device's Wi-Fi, and connect to GDU-02-A-xxx through entering the Wi-Fi Password; 12345678 .
- 3) Launch the GDU Mini app , then click to start shooting into the flight interface.
- 4) Tap One-button Take-off and the aircraft will hover at 1.5 m high. Meanwhile the virtual sticks will show up on the screen, it can control the flight.

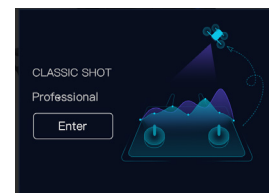
★ The O₂ aircraft is to be controlled by WIFI directly; For other O₂ series aircrafts, controlled by App must through USB cable, connecting with the controller.

9. GDU Mini App Operation Interface

- 1) Shot mode: smart shot and classic shot mode.

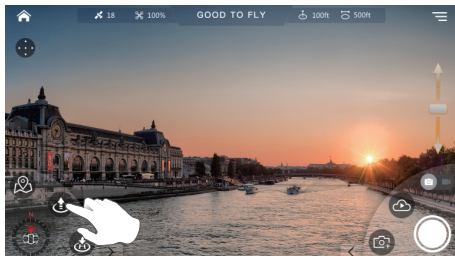


Smart Shot Mode

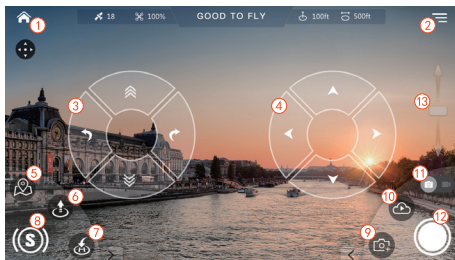


Classic Shot Mode

2) One-button take-off : Tap this button, the aircraft will take-off and hover at 1.5 meters high. Meanwhile the virtual sticks appear on the screen.

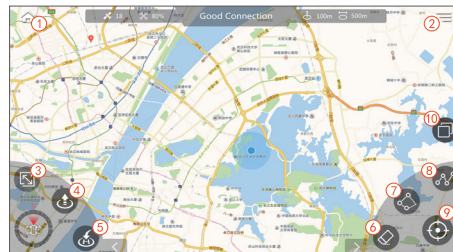


3) Instructions for Smart Mode



- | | | |
|----------------|---|--------------------------|
| 1. Home | 6. One-button Take-off / Vertical Landing | 11. Photo & Video Switch |
| 2. Settings | 7. RTH | 12. Photo/Video Button |
| 3. Left Stick | 8. Intelligent flight function | 13. Pail for pitching |
| 4. Right Stick | 9. Camera Settings | |
| 5. Map | 10. Media in Cloud | |

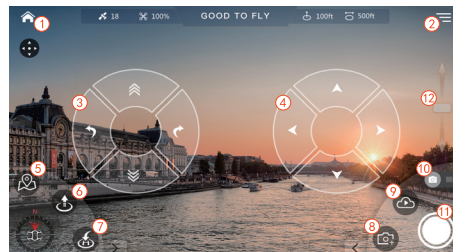
4) MAP



- | | | |
|---|---|---------------------|
| 1. Home | 4. One-button Take-off / Vertical landing | 7. Electronic fence |
| 2. Settings | 5. RTH | 8. Waypoint |
| 3. Route planning / Real-time page exchange | 6. Erase | 9. Current location |
| | | 10. Map Switch |

★ Please watch the tutorial videos on GDU Mini app or GDU official website www.gdu-tech.com so that you can handle the aircraft and use the functions of intelligent following properly.

5) Classic Shot Mode



- | | | |
|----------------|---|--------------------------|
| 1. Home | 5. Map | 9. Media in Cloud |
| 2. Settings | 6. One-button Take-off / Vertical Landing | 10. Photo & Video Switch |
| 3. Left stick | 7. RTH | 11. Photo/Video Button |
| 4. Right stick | 8. Camera settings | 12. Dail for pitching |

9. Fly Safe



Open Areas

Strong GPS signal

Keep Within sight

Height under
120m(400 feet)

- Please fly the drone in wide-open area with good weather and strong GPS signal, and always keep the drone within your sight.
- Keep the height under 120m(400 feet).



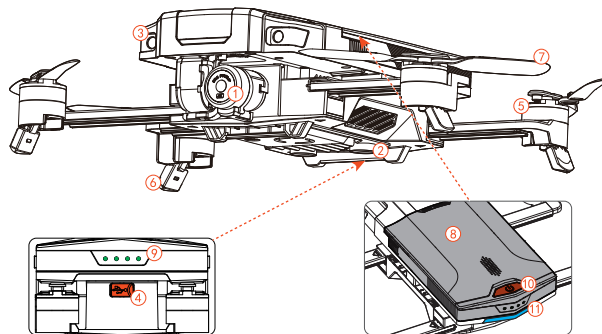
For the safety of you and others around you and the environment, it's very necessary to know No Fly Zone and basic flight guidelines. Please read the Disclaimer carefully.



- Please do not use the product if you're drunk or dizzy or in other poor spirit conditions;
- Please do not fly in public crowd areas;
- Please do not use the aircraft in places which are forbidden by law or authoritative departments.

认识 O₂/O₂ Plus

O₂/O₂ Plus飞行器采用滑道抽拉金属机臂，整机可与遥控器一体化收纳，抽拉折叠，精致便携。三轴云台相机可稳定拍摄 4K 超高清视频与 1300 万像素照片，同时飞行器配备先进的智能视觉系统，可实现智能避障、目标跟随、手势拍摄等功能。



1. 三轴稳增云台相机

2. 下视视觉系统

3. 前视视觉系统

4. 数据接口 (MicroUSB)

5. 电机

6. 脚架

7. 螺旋桨

8. 电池

9. 电池电量指示灯

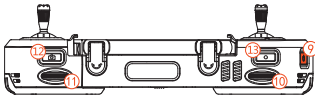
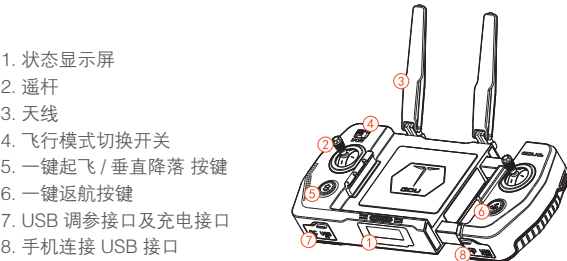
10. 电源开关

11. 飞行器机尾指示灯

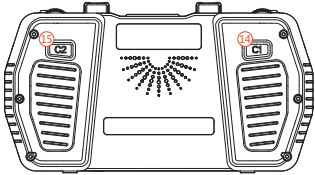
Information is subject to change without notice. Please find the latest version information on GDU official website: <http://www.gdu-tech.com>

遥控器

O₂/O₂ Plus 遥控器采用抽拉式设计，可轻松放置手机。遥控器 O₂ 可在最大 1 千米 /O₂ Plus 可在最大 7 千米通信距离内完成飞行器与相机的各种操作与设置，通过 GDU Mini App 在手机端实时显示高清画面。遥控器工作时间约为 1.5 小时。



(遥控器拉开状态)



★ 在开阔无遮挡、无电磁干扰的环境飞行，并且飞行高度为 120 米左右，在 FCC 标准下遥控器可以达到最大通信距离。最长可工作时间为实验环境下测得。

技术规格

飞行器

起飞重量 (不含网罩)	730 g
起飞重量 (含网罩)	846 g
最大上升速度	5 m/s (运动模式)
最大下降速度	3 m/s
最大水平飞行速度	15 m/s (运动模式, 海平面附近无风环境)
最大飞行海拔高度	3500 m
最长悬停时间	20 分钟 (无风环境)
工作环境温度	0 °C 至 40 °C
卫星定位模块	GPS/GLONASS 双模

云台

可控转动范围	俯仰: -90° ~30° 横滚: -30° ~30° 方位: -30° ~30°
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前视视觉系统

感知范围	0.5 至 15 m;
使用环境	障碍物表面有丰富纹理, 光照条件充足 (>15 lux, 室内日光灯正常照射环境)

下视视觉系统

速度测量范围	飞行速度 ≤ 10m/S (高度 2 米, 光照充足)
高度测量范围	0.3 至 3 m
精确悬停范围	0.3 至 13 m
使用环境	地面有丰富纹理, 光照条件充足 (>15 lux, 室内日光灯正常照射环境)

相机

影像传感器	1/3 英寸 CMOS 有效像素 1300 万
镜头	FOV 79.8° 等效焦距 25.5 mm F/2.2
畸变	<1.5%
ISO 范围	Auto 100~1600

电子快门速度	Auto
照片最大分辨率	4208×3120
	4K; 3840×2160 @ 25 fps
录像分辨率	1080p:1920×1080 @ 30 fps
	720p:1280×720 @ 30 fps
图片格式	JPG
视频格式	MP4
内置储存	O ₂ : 16 G
	O ₂ Plus: 32 G

遥控器

工作频率	O ₂ :5.8 GHz
	O ₂ Plus:2.4 GHz
信号有效距离	O ₂ : 1 km
	O ₂ Plus: 7 km
工作环境温度	0°C ~ 40°C
电 池	1200 mAh
工作电压	7.6 V
接口类型	Lightning、Micro USB、TypeC

充电器

电 压	13.05 V
额定功率	39.15 W

电池

容 量	4000 mAh
额定电压	11.4 V
电池类型	LiPo 3S
能 量	45.6 Wh
电池整体重量	约 283 g
最大充电功率	78 W



注 意

为了避免您的财产损失和人身伤害，请在初次使用产品之前认真阅读以下安全警示！

警示声明：

- 本指南旨在帮助用户完成初次飞行，更多使用体验，请在线阅读《用户手册》。
- 禁止未满 18 周岁的人群使用本产品。
- 禁止在人群密集的公共场地使用本产品。
- 禁止在法律和相关管理单位限制的区域使用本产品。
- 请将本产品放置于儿童可触及的范围之外。
- 请勿在酒后、疲劳或其它精神状态不佳的情况下使用本产品。
- 请在天气良好，环境空旷的室外环境下飞行。
- 示意图仅供参考，外观细节以产品实物为准。

1. 下载 GDU Mini APP 和观看教学视频

请使用手机扫描下方二维码或在各大应用商店下载此 APP。
请在 GDU Mini APP 或官方网站内观看教学视频。



GDU 官方网站



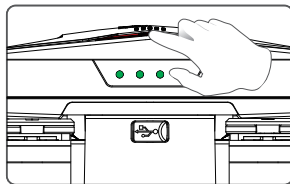
GDU Mini APP

★ GDU Mini APP 要求使用 iOS 8.0 及以上系统或 Android 5.0 及以上版本。

2. 电量检查

飞行器电池电量检查：

短按一次电源开关检查电量。短按 1 次、长按 2 秒开启或关闭飞行器电源。

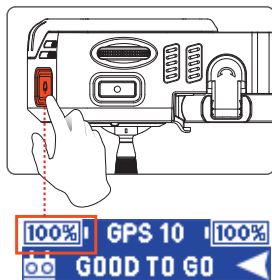


低 ← 电量 → 高

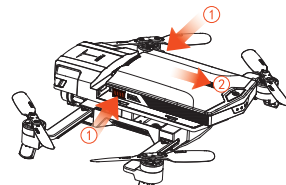


遥控器电量检查：

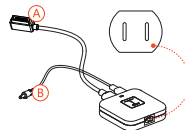
长按 3 秒开启遥控器。在显示屏左边可查看遥控器电量，当飞行器与遥控器连接时显示屏右边可查看飞行器电量。再长按 3 秒关闭遥控器。



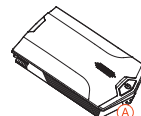
3. 充电



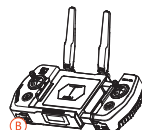
取出飞行器电池



输入电压：100~240V



充电时长：< 2 小时

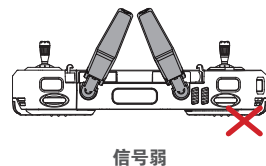
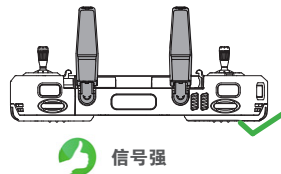


充电时长：< 2 小时

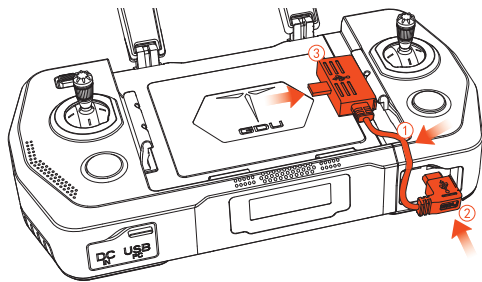
★ 单独对电池或遥控器充电，充电时长在 2 小时以内；同时对电池和遥控器充电，充电时长在 2.5 小时以内。

4. 准备遥控器：

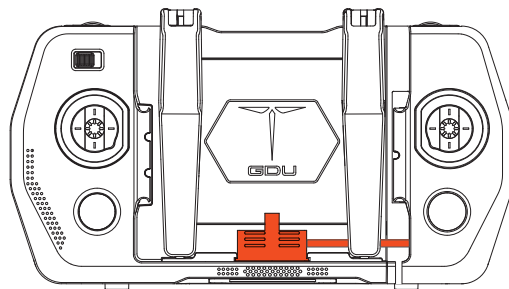
1) 请展开遥控器天线；



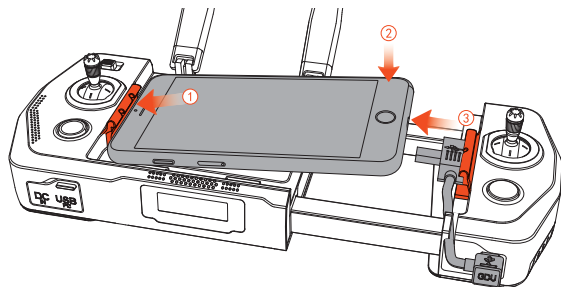
2) 请选择对应的连接线，连接线小头先穿进卡线槽；



4) 使用完后请取下手机，将连接线固定在卡钩中；

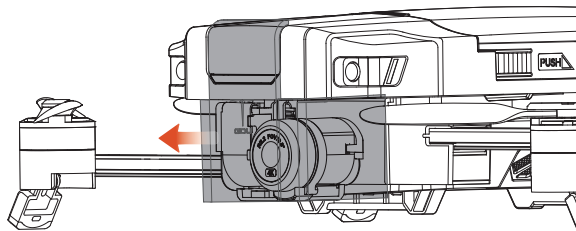


3) 请将手机卡入到合适的位置，连接线另一端连接手机充电接口；



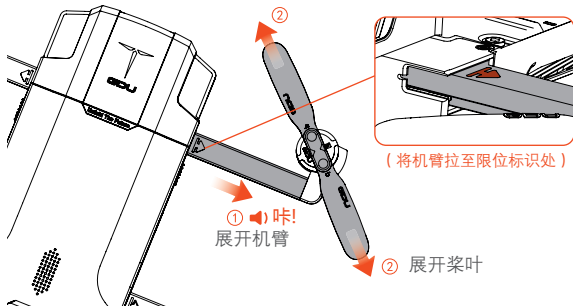
5. 准备飞行器

1) 请取下云台保护罩；

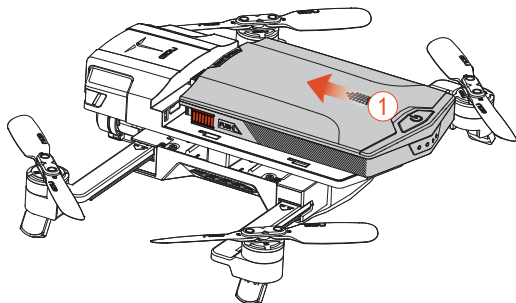


★ 云台保护罩可在携带时保护云台相机，请在使用飞行器时确认云台保护罩是否移除！

2) 拉开机臂到限位标识并展开桨叶和脚架，确保展开后的位置处于几何对称状态；



3) 安装飞行器电池；



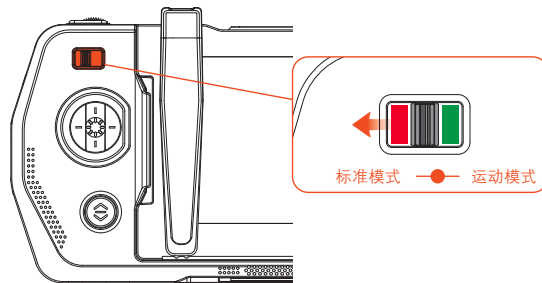
6. 准备飞行



- ★ 请确保首先展开机臂，然后将飞行器桨叶全部展开最后开启飞行器；
- ★ O₂ 支持手机 APP 操控，如需切换操作方式请重启飞行器后再进行选择操作模式和设备；

7. 飞行

1) 将遥控模式切换至标准模式，遥控器出厂默认设置为“美国手”。



2) 起飞: 内八掰杆解锁飞行器, 电机启动; 缓慢向上推动油门杆, 飞行器起飞, 或按遥控器上一键起飞按键。

降落: 向下缓慢拉动油门杆至飞行器落地, 在最低位置保持 2 秒, 电机停转, 或按遥控器上一键返航按键。

解锁动作:
电机启动



起飞:

① 缓慢向上推动油门杆



降落:

① 缓慢向下推动油门杆至飞行器落地, 电机停转



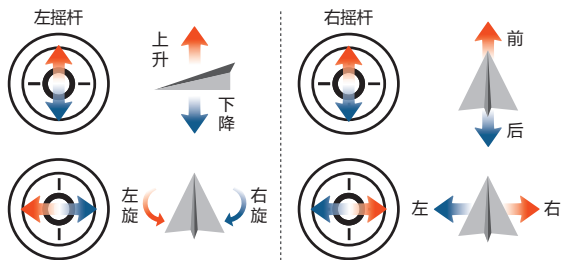
② 按遥控器上一键起飞按键



② 按遥控器上一键返航按键



遥控器出厂默认操作方式 (包含虚拟按键) 均为“美国手”。左侧摇杆控制飞行高度与方向, 右摇杆控制飞行器前进、后退以及左右飞行方向。



8. 使用 GDU MINI APP 控制飞行



- 1) 开启飞行器;
- 2) 手机连接飞行器的 Wi-Fi: GDU-02-A-xxx 密码: 12345678;
- 3) 运行 GDU Mini App 点击开始拍摄进入飞行界面;
- 4) 点击一键起飞, 飞行器起飞悬停在 1.5 米高度, 同时 APP 界面出现虚拟摇杆可控制飞行。

★ 除 O₂ 版可通过 WIFI 直接控制飞行器, 其他版本飞行器都需手机有线连接遥控器才可使用 APP 上的功能。

GDU Mini App 操作界面

- 1) 模式选择: APP 模式分为智能和经典模式;

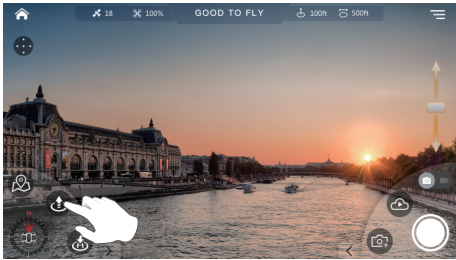


智能模式

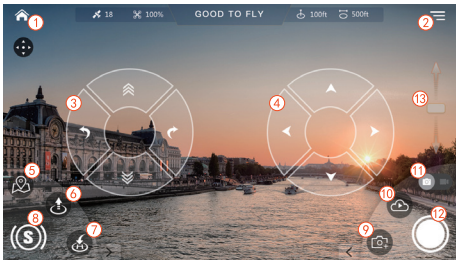


经典模式

2) 一键起飞：点击一键起飞，飞行器起飞至 1.5 米高处悬停，同时界面出现控制摇杆；

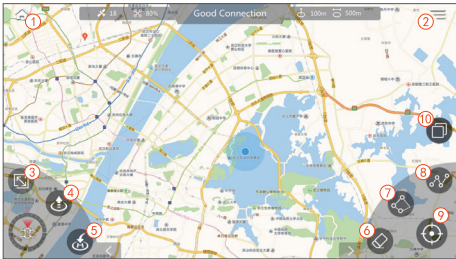


3) 智能模式按键介绍：



- | | | |
|---------|----------------|---------------|
| 1. 首页 | 6. 一键起飞 / 垂直降落 | 11. 拍照、录像切换按键 |
| 2. 设置 | 7. 返航 | 12. 拍照 / 录像按键 |
| 3. 左操作杆 | 8. 智能飞行功能 | 13. 云台俯仰 |
| 4. 右操作杆 | 9. 相机设置 | |
| 5. 地图 | 10. 云媒体 | |

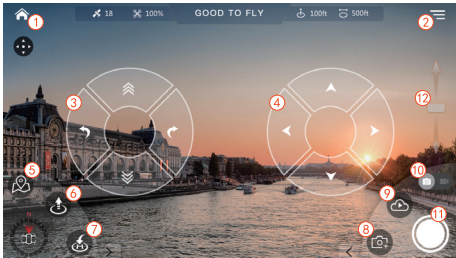
4) 地图：



- | | | |
|------------------|---------|-----------|
| 1. 首页 | 5. 返航 | 9. 定位当前位置 |
| 2. 设置 | 6. 橡皮擦 | 10. 地图切换 |
| 3. 航迹规划 / 实时页面切换 | 7. 电子围栏 | |
| 4. 一键起飞 / 垂直降落 | 8. 航迹规划 | |

★ 请在 GDU Mini App 或 GDU 官方网站观看教学视频以正确使用飞行器操作与智能跟随等功能。

5) 经典模式按键介绍：



- | | | |
|---------|----------------|---------------|
| 1. 首页 | 5. 地图 | 9. 云媒体 |
| 2. 设置 | 6. 一键起飞 / 垂直降落 | 10. 拍照、录像切换按键 |
| 3. 左操作杆 | 7. 返航 | 11. 拍照 / 录像按键 |
| 4. 右操作杆 | 8. 相机设置 | 12. 云台俯仰 |

9. 安全飞行



- 请在天气良好，开阔无遮挡，GPS 信号良好，目视范围内飞行。
- 控制飞行高度低于 120 米。

 禁飞区、飞行安全认识对于您和周围人群与环境的安全非常的重要。
请您仔细阅读《免责声明》



本指引如有更新，恕不另行通知。您可以在 GDU 官方网站查询最新版本信息
<http://www.gdu-tech.com>