iFlight Defender 16 HD Version

快速入门指南
Quick Start Guide

iFLIGHT
— Where dreams can fly —

1、 Removing The Battery

2、 Charging The Battery

≥ 25 W
USB PD 👍
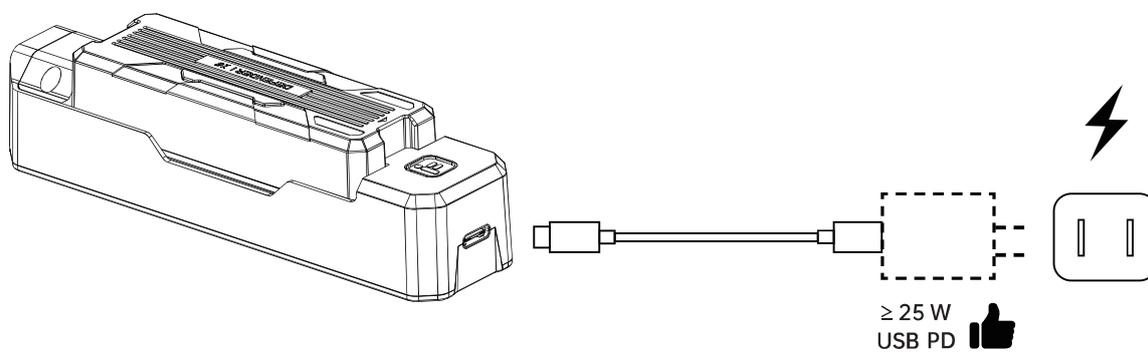
3、 Installing The Battery

Align the battery pin with the pin socket and insert it, aligning it with the head slot. Then press the whole battery down until you hear the click. Ensure the battery is securely installed and connected.
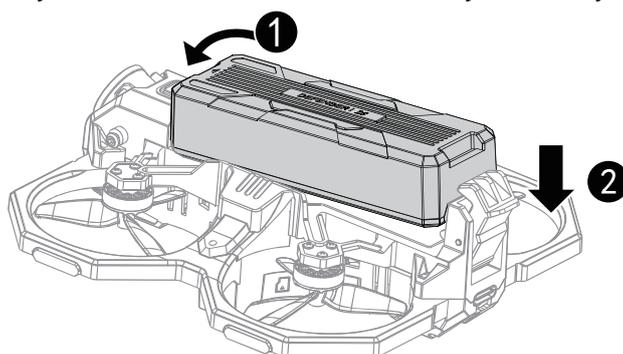
Disclaimer

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、Power Button and LED Adjustment

Power Button
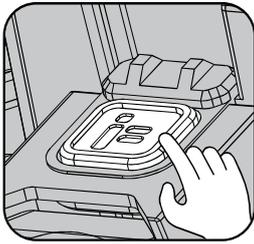
❶ Press the power button once, the status light starts flashing slowly, then press again and hold for three seconds to power the aircraft on.
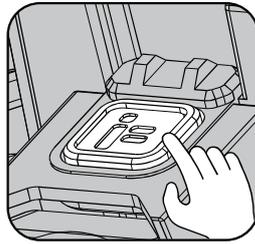
❷ Press the power button once, the status light starts flashing slowly, then press again and hold for three seconds to power the aircraft off.

Battery RGB light adjustment:

RGB Light

Mode:
Breathing
Dynamic
Solid light

Adjust your favorite lighting
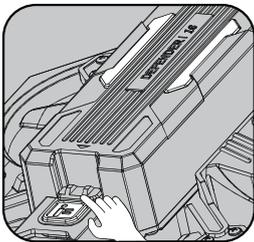
❶ Power on the aircraft, press and hold the power button until the LED turns white. Battery light adjustment mode active.
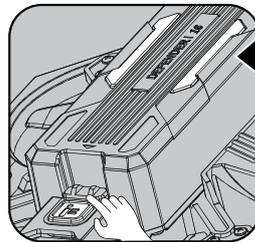
❷ Press the power button once to switch the LED color and mode. After the adjustment is confirmed, wait for 5 seconds to save automatically and exit the light adjustment mode.
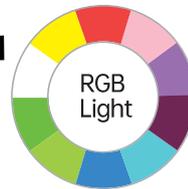
Prop guards RGB light adjustment:

RGB Light

Mode:
Breathing
Dynamic
Solid light

Adjust your favorite lighting
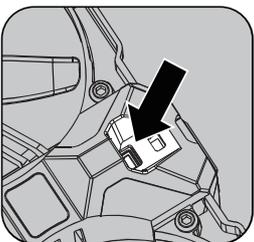
❶ Use the supplied screwdriver to short press the button on the tail to switch the light colour and mode.
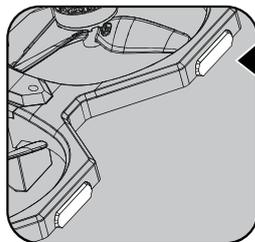
5、Indicator Status Description

Light color and flashing mode	Description
🟢 Solid Green	Approx 70%-100% power
🟡 Solid Yellow	Approx 30%-70% power
🔴 Solid Red	Approx 10%-30% power, low battery alarm

6、Binding the Aircraft and Remote Control
Example: iFlight ExpressLRS 900TX

There are two Binding Procedures for ExpressLRS: Custom Binding Phrase and Traditional

1、Using Custom Binding Phrase
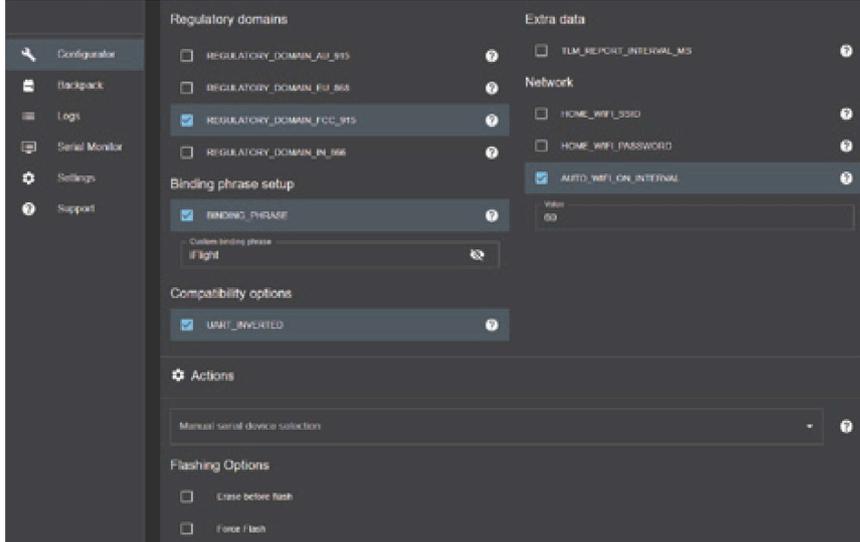
For more specific information please refer to the ELRS quick start tutorial on the official website.

When flashing the latest ELRS firmware for Receiver and Transmitter, 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.

2、Traditional Binding Procedure
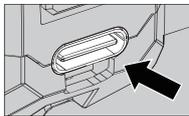
Plug and unplug the USB port for three times
Power on and off the aircraft for three times, or plug and unplug the USB port for 3 times to supply power to the receiver when the aircraft is power off, the blue LED will start to double flash continuously. BIND mode active.

❶ Once you power on the radio, hold the left menu button to the right to enter the MODELSEL page.

❷ Push the right menu button to the right to go to the next page SETUP (2/11)
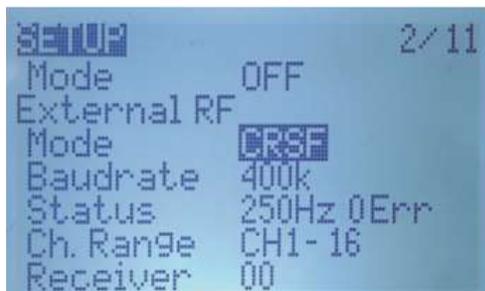
❸ Scroll down to External RF and select CRSF.

❹ Select the ExpressLRS LUA script (latest version installed). Press the right 5-Axis Button to enter.

⑤ Scroll down to Bind, press the right 5-Axis button to enter. BIND mode active.

⑥ Binding screen appears. The blue LED on the receiver will turn to solid blue. Bind was successful.

⚠ Caution:

1. Be quick with this process and set the receiver in binding mode first.
2. After the binding process is completed, it's recommended to re-power receiver and transmitter.
3. The distance of receiver and transmitter should be more than 1m during the process.
4. The receiver firmware version should be consistent with the transmitter firmware version. If you can't bind your hardware, please try to update to the latest firmware.
5. If you can't bind your equipment, please try to reboot and several times if necessary.
6. please note that the Binding Phrase content must be unique. Do not set a simple Binding Phrase, otherwise devices with the same Binding Phrase will be bound within the ELRS signal range.

7、Activation

Defender 16 must be activated before using for the first time. Please power on the Defender 16 and DJI Goggles 2 separately, connect to the USB-C port of the devices and then run DJI Assistant 2 (Consumer Drone Series) to update. Refer to DJI-O3-Air-Unit-User-Manual for details.

8、Binding the Aircraft and Goggles

Before binding the Defender 16 and DJI Goggles 2 please make sure that the firmware of the air unit and the goggles are updated to the latest version.

1. Power on the aircraft and the goggles separately.
2. After power on, press the binding button on the air unit, the status indicator on the air unit blinks red.
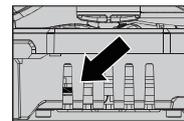
binding button

3. Press the binding button of the goggles, the goggles will start to beep continuously.
4. Make sure the distance between the air unit and the goggles is within 0.5m. Once binding is completed, the status indicator on air unit will turn solid green, the goggles stops beeping, and image transmission can be displayed normally.

9、Pre-Flight Check

1. Make sure the goggles battery, remote control devices, aircraft battery are fully charged.
2. Make sure the propellers are mounted correctly and securely.
3. Make sure the aircraft battery and goggles battery are properly connected and secure.
4. Make sure that there is nothing obstructing the motors and that they are functioning normally.
5. Make sure that the goggles are functioning normally and display the video transmission.
6. Make sure that the goggles antennas are installed securely and the remote controller antenna is lifted.

10、Mode Switch

ARM: ARM/DISARM channel switch for arm and disarm the aircraft, default factory setting is AUX1, low range for arm, high range for disarm. The icon is lit to indicate unlocked, the icon is grey to indicate locked.

▼

ANGLE: Self-level channel switch, used to turn on the self-level flight mode, the default factory setting is AUX 2, this mode remains on throughout the flight. The icon is illuminated to indicate self level mode is on, the icon is grey to indicate non-self-level mode.

▼
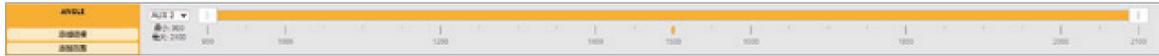
VTX_ON_OFF： Video transmitter power supply switch, used to manually turn off the VTX when idle to safe power and prevent overheating. The default factory setting is AUX8, this mode is always on. To adjust please access the Betaflight Modes tab and define the active or inactive range with the yellow slider.

▼
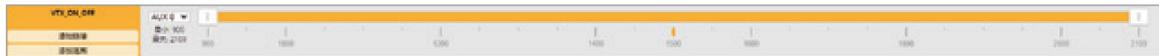
RX2_Inverted: Receiver interface switching function, default factory setting is closed. The R2 mode is in the off state, and the output is CRSF protocol in this mode. The R2i mode is in the on state, and the output is SBUS protocol in this mode.

▼
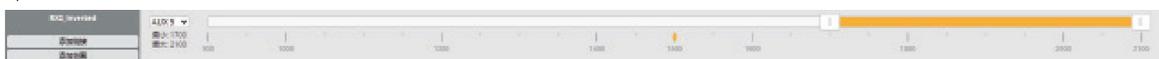
11、Basic Flight Instructions

Basic flight operation instructions   The remote control throttle control method is shown in Mode 2 as an example, as shown below.

Left

Up
▲
▼
Down

◄ ▶

Turn left   Turn right

Right

Head tilts down, aircraft pans forward

Rear tilts down, aircraft pans back
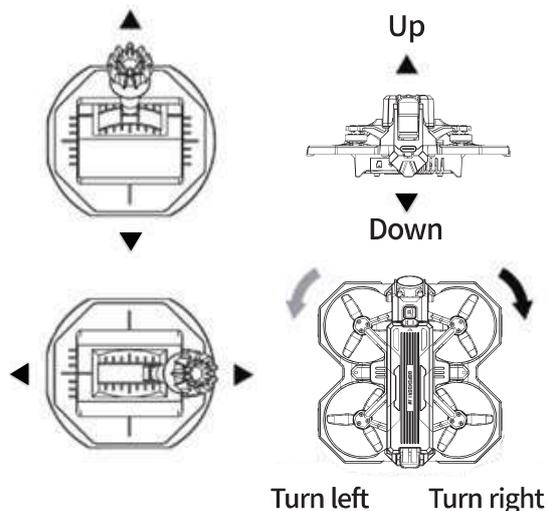
Left side tilted down Aircraft pans to the left   Right side tilted down Aircraft pans to the right
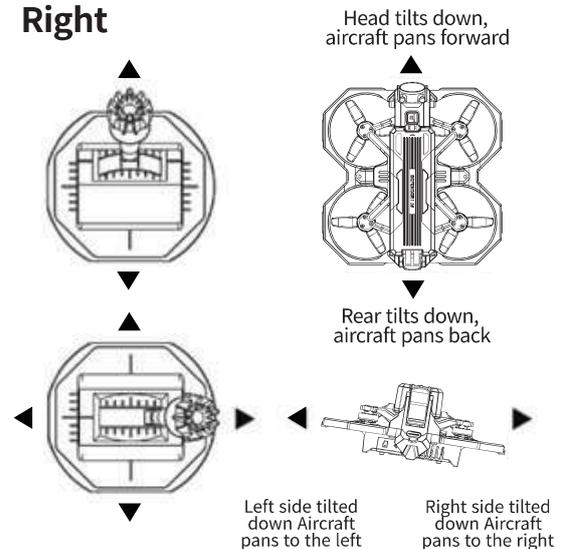
⚠ The diagrams are for illustration purposes only. When control the throttle, do not pull it quickly, but slowly and efficiently.

12、After-Sales Service

https://www.iflight-rc.com

Follow us for more information and support

iFlight InnovationTechnology Ltd.
F5, NO.3 Sheng Hua Rd, Zhong Kai, Huizhou
516006,Guangdong,CHINA

www.iflight-rc.com
0752-3866695