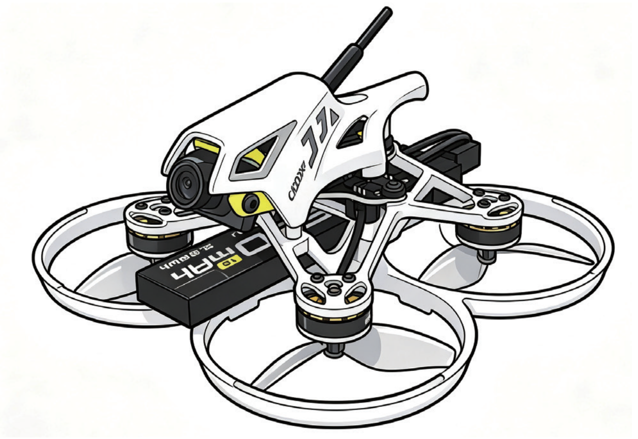
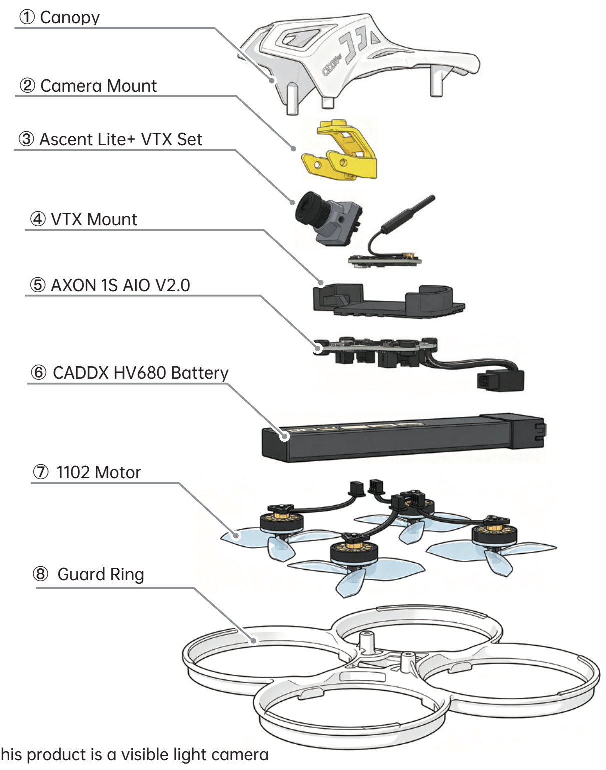
# CURVE MICRO P18

## Quick Start Guide

V1.0



## Part Name


① Canopy
② Camera Mount
③ Ascent Lite+ VTX Set
④ VTX Mount
⑤ AXON 1S AIO V2.0
⑥ CADDX HV680 Battery
⑦ 1102 Motor
⑧ Guard Ring

*This product is a visible light camera

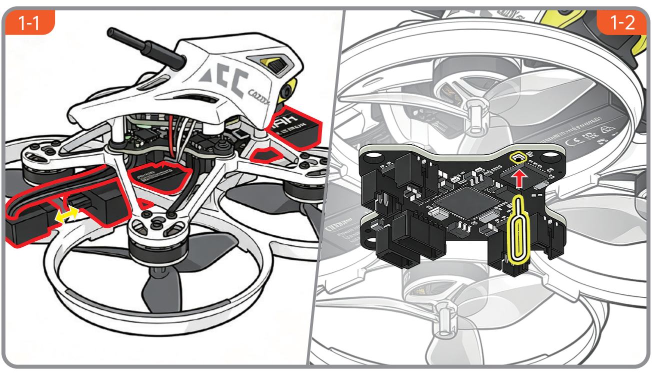
## Transmitter Linking

Curve Micro P18Enter Link Mode:

1. Power on the Curve Micro P18 by connecting a 1S battery to its A30 port.
2. Linking Method:

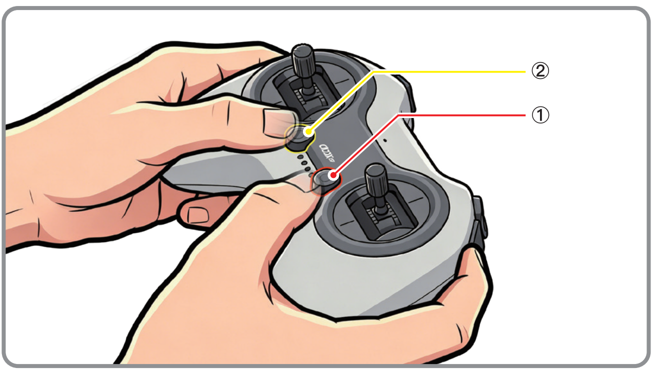
① Plug in and unplug the battery connector three times consecutively, and keep it powered on on the third plug-in within 5 seconds. The built-in ELRS receiver enters linking mode with the blue LED flashing twice repeatedly (See Figure 1-1).

② Press and hold the BOOT button for 2 seconds with a toothpick or safety pin to enter linking mode; the blue LED will flash twice repeatedly after entering linking mode (See Figure 1-2).



Link Transmitter (Take CADDXFPV Alink Transmitter as an example):

1. Press and hold the power button ① of the transmitter. The unit powers on when four indicator lights light up sequentially and stay solid with a "do-re-mi, do-mi" tone prompt.
2. Short-press the bind button ② twice. Four LEDs flash in pairs to enter linkng status. Upon successful linking, the transmitter plays a "do-mi" sound and the flight controller's blue LED remains steadily on.



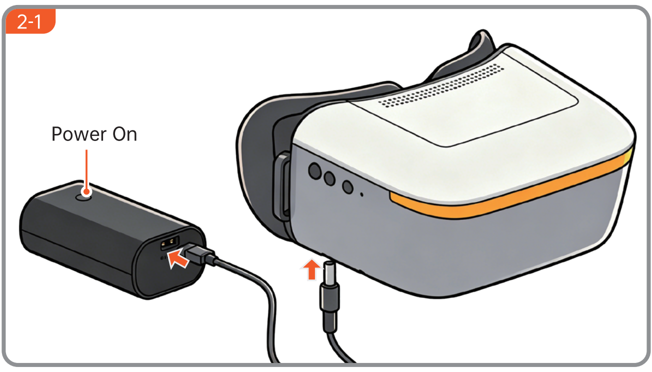
Note: The flight controller has a built-in ELRS 2.4G receiver, compatible with all mainstream ELRS 2.4G transmitters. Its factory firmware version is 2025.12.

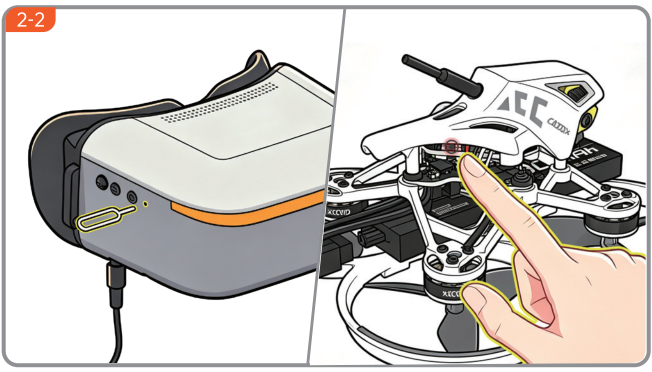
## Connect FPV Goggles

1. Power on the video goggles (see Figure 2-1), and confirm that Curve

Micro P18 is powered on.

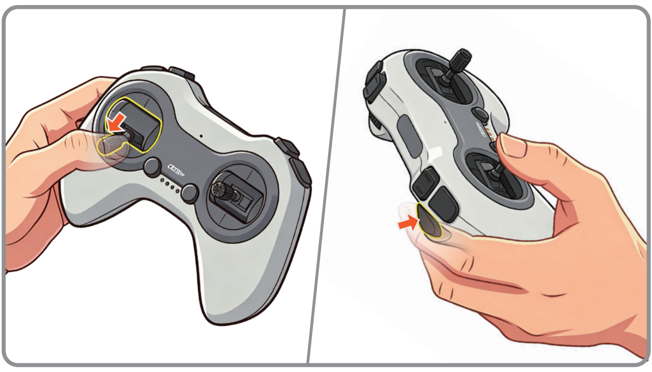
2. After the devices finish booting, press the bind buttons on both the goggles and Ascent Lite+ to enter pairing mode. You can easily bind by pressing the bind area on the goggle head cover.
3. During pairing, the indicator light of Ascent Lite+ turns red, and the goggles emit beeping alerts.
4. When pairing succeeds, the indicator light of Ascent Lite+ stays solid green, and the video feed appears on the goggles.





## Remote Control Unlock Operation

1. Keep the throttle stick at the lowest position.
2. Press the unlock button on the transmitter (SE corresponds to CH5 channel), then push up the throttle to take off.



Note: The video transmitter generates substantial heat. Please start flying promptly after powering on to prevent damage caused by overheating.

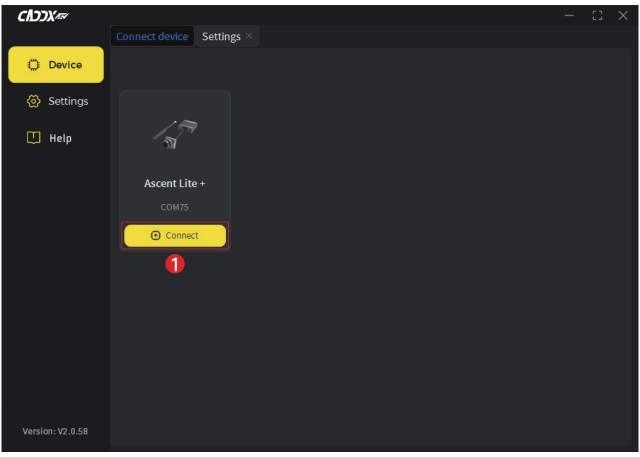
## VTX Firmware Upgrade

Please download the latest upgrade firmware from the official website. Ascent_H_Sky_XX_X_XX.img is the firmware for VTX end upgrade. Do not modify the file name.
For Ascent VTX upgrade, connect the device to your computer via a Type-C USB cable, then launch the Caddx_PC_Tool on your PC. Once the USB connection is established, follow the on-screen prompts to select the Ascent_G_Sky_XX_X_XX.img firmware file and start the upgrade.

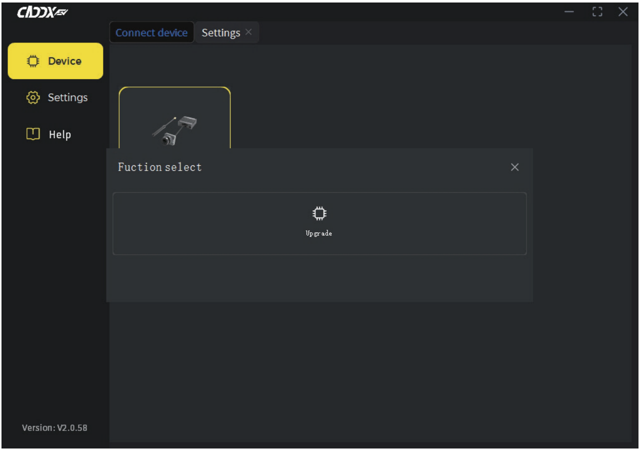
Notes:

1. When connecting the Ascent Lite+ VTX to a computer via a Type-C cable, no external battery power supply is required, as the module will bepowered through the computer's USB port.
2. Do not disconnect the USB cable connected to the computer during the upgrade process. You may unplug the USB cable only after the upgrade is completed successfully.

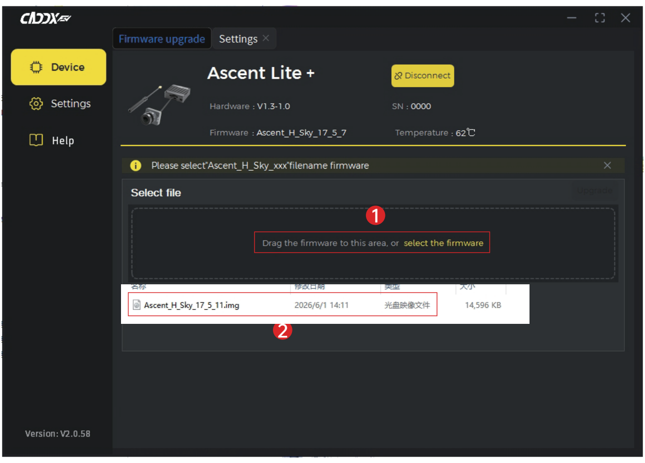
1) Click the Ascent Lite+ connection option.


CADDX
Connect device
Settings
Device
Settings
Help
Ascent Lite +
COM75
Connect
①
Version: V2.0.58

2) Click Select & Connect to open the pop-up menu, then click Upgrade to enter the firmware update interface.


Connect device
Settings
Device
Settings
Help
Fuction select
Upgrade
Version: V2.0.58

3）Select the corresponding firmware version, click Open, and start the upgrade.


Firmware upgrade
Settings
Device
Settings
Help
Disconnect
Upgrade
❶
❷
Version: V2.0.58

Ascent Lite +

Hardware : V1.3-1.0

SN : 0000

Firmware : Ascent_H_Sky_17_5_7

Temperature : 62℃

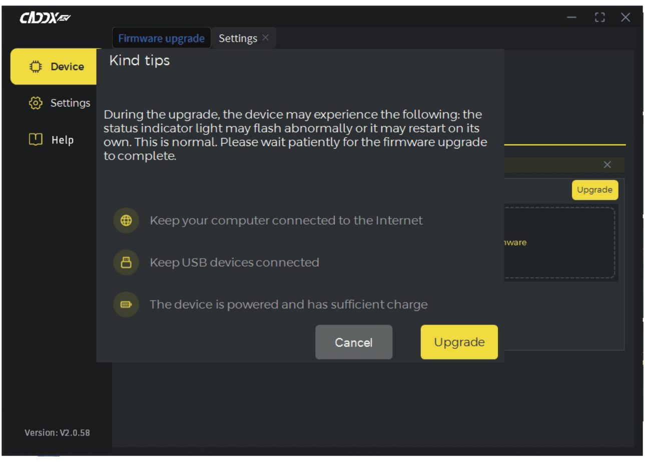
Please select"Ascent_H_Sky_xxx"filename firmware

Select file

Drag the firmware to this area, or select the firmware

| 名称 | 修改日期 | 类型 | 大小 |
|---|---|---|---|
| Ascent_H_Sky_17_5_11.img | 2026/6/1 14:11 | 光盘映像文件 | 14,596 KB |

4）Do not restart or power off the device during the upgrade to avoid failure.

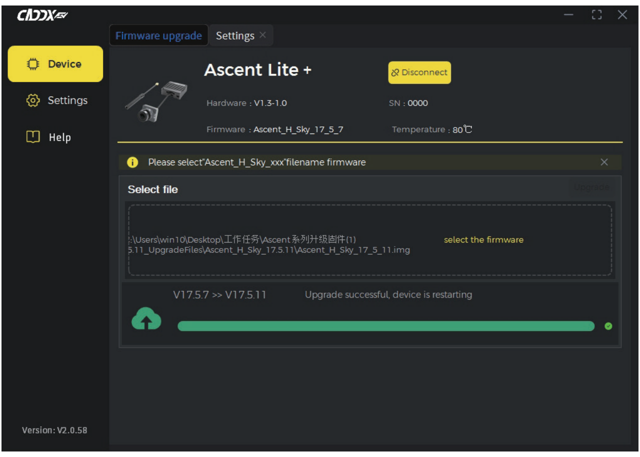

Firmware upgrade
Settings
Device
Settings
Help
Upgrade
Cancel
Upgrade
Version: V2.0.58

Kind tips

During the upgrade, the device may experience the following: the status indicator light may flash abnormally or it may restart on its own. This is normal. Please wait patiently for the firmware upgrade to complete.

- Keep your computer connected to the Internet
- Keep USB devices connected
- The device is powered and has sufficient charge

5）Upgrade completed.


Firmware upgrade
Settings
Device
Settings
Help
Disconnect
Upgrade
select the firmware
Version: V2.0.58

Ascent Lite +

Hardware : V1.3-1.0

SN : 0000

Firmware : Ascent_H_Sky_17_5_7

Temperature : 80℃

Please select"Ascent_H_Sky_xxx"filename firmware

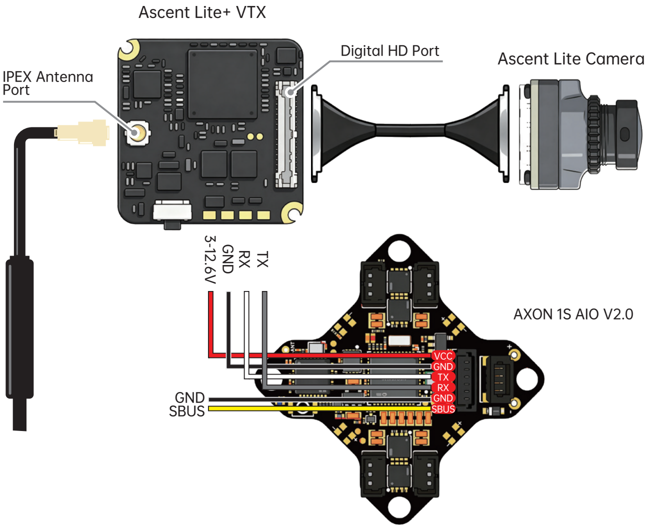
Select file

:\Users\win10\Desktop\工作任务\Ascent系列升级固件(1)
5.11_UpgradeFiles\Ascent_H_Sky_17.5.11\Ascent_H_Sky_17_5_11.img

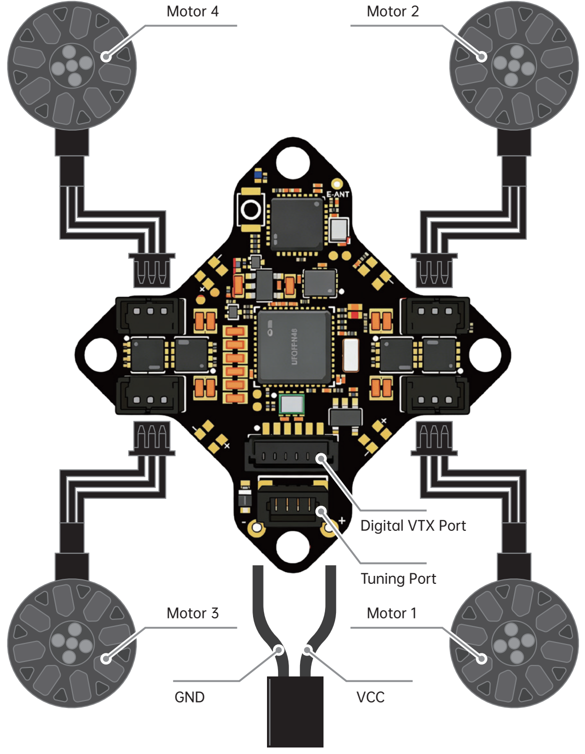
V17.5.7 >> V17.5.11 Upgrade successful, device is restarting

## Connection

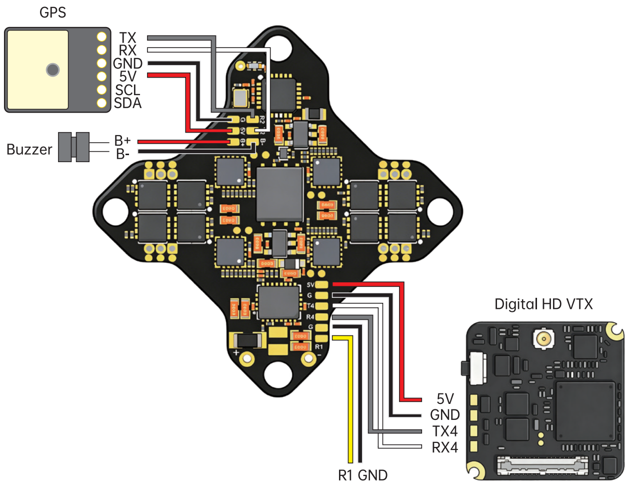
### VTX Connection


Ascent Lite+ VTX
Digital HD Port
Ascent Lite Camera
IPEX Antenna Port
3-12.6V
GND
RX
TX
AXON 1S AIO V2.0
VCC
GND
TX
RX
GND
SBUS
GND
SBUS

### FC Connection


Motor 4
Motor 2
Digital VTX Port
Tuning Port
Motor 3
Motor 1
GND
VCC

FC pad port


GPS
TX
RX
GND
5V
SCL
SDA
Buzzer
B+
B-
Digital HD VTX
5V
GND
TX4
RX4
R1 GND

## Disclaimer on the Use of Unauthorized Third-Party Accessories

To ensure safe operation and stable performance of the device, our company hereby solemnly reminds you:
All commissioning and maintenance operations must be performed with officially certified original connecting wires and connectors. The use of any third-party cables and accessories during commissioning is strictly prohibited. Any equipment failure, data loss, abnormal performance, potential safety hazards and other direct or indirect losses arising from the use of non-official accessories shall be fully borne by the party conducting the irregular operation, and our company shall not be held liable in any way.

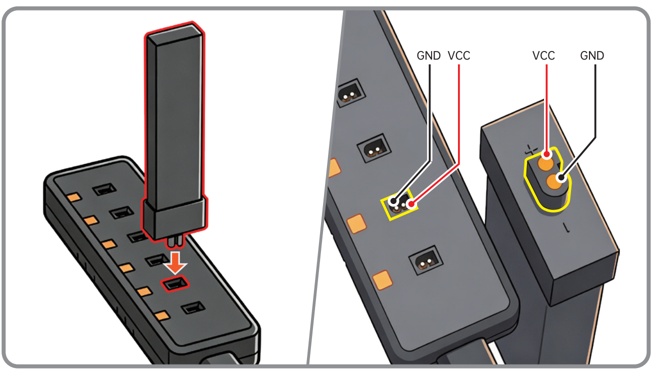
## 6-Channel Charger

### Precautions

1. Always supervise during charging. Disconnect batteries from the charger and power off the unit promptly once charging is finished.
2. A 30W power adapter supporting PD 3.0 together with a dual-head Type-C cable is recommended to power the 6-channel charger.
3. Place the charger on a flat stable surface during use. Keep away from open flame, water and hazardous chemicals to avoid fire and insulation risks.

### Charging Procedure

1. Power the 6-channel charger with a Type-C cable. The orange indicator flashes once powered on.
2. Insert the battery's A30 connector into the charger's matching A30 port; the square terminal is positive and the round terminal is negative.
3. The corresponding orange LED stays solid during charging and turns off automatically when fully charged.
4. A single 550mAh battery takes approximately 30 minutes to finish charging.


GND
VCC
VCC
GND
+
-

## Specifications

| | | | |
|---|---|---|---|
| Model | C0CA-TZ149 | | |
| VTX | Ascent Lite+ | Propeller | HQ 45mm 1.8X1.3X3 |
| FC | Axon 1S AIO V2.0 | Wheelbase | 68mm |
| ESC | 1S 12A | PWR Port | A30 |
| Receiver | ELRS V3.6.3 | Flight Time | 8min |
| Motor | 1102 | Weight | 33g |

| | | | |
|---|---|---|---|
| VTX | Ascent Lite+ | | |
| Comm Freq | 5.730-5.815 GHz | Resolution | 1080P@60/100/120fps, 720P@60/100/120fps |
| Tx Power (EIRP) | 500mW (Max); FCC/SRRC:<27dBm; CE:<14dBm | Ratio | 16:9 |
| Op BW | 5M/ 10M/ 20M/ Auto | FOV | 147° |
| Sensor | 1/2.8 Inch Sensor | Power Input | 3-12.6V |

| | | | |
|---|---|---|---|
| FC | AXON 1S AIO V2.0 | | |
| Processor | STM32G473 | FC Firmware | 2025.12 |
| Gyroscope | ICM42688 /BMI270 | ESC Current | 12A (Continuous);18A (Peak) |
| Blackbox | 16M | ESC Firmware | A-X-5 |
| BEC | 5V3A | Tune Port | SH1.0-4P |
| FC Voltage | 1S | Motor Port | JST1.25-3P |

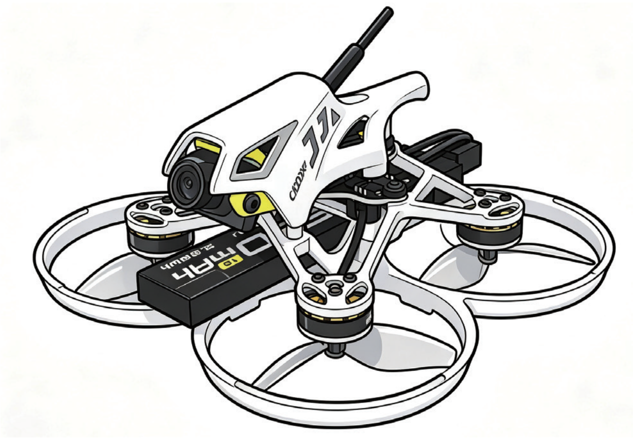
| | | | |
|---|---|---|---|
| Charger | 6-Channel Charger | | |
| FC Protocol | USB PD/BC1.2 | Channel | 6 |
| In Voltage | 5V-12V | Max Input Power | 30w |
| In Port | Type-C USB | Max.Charging Curr | 1A |
| Bat Type | LiHV 4.35V | Dimension | 115*30*14.5mm |

CADDXFPV Technical Support
Email: support@caddxfpv.com

# CURVE MICRO P18

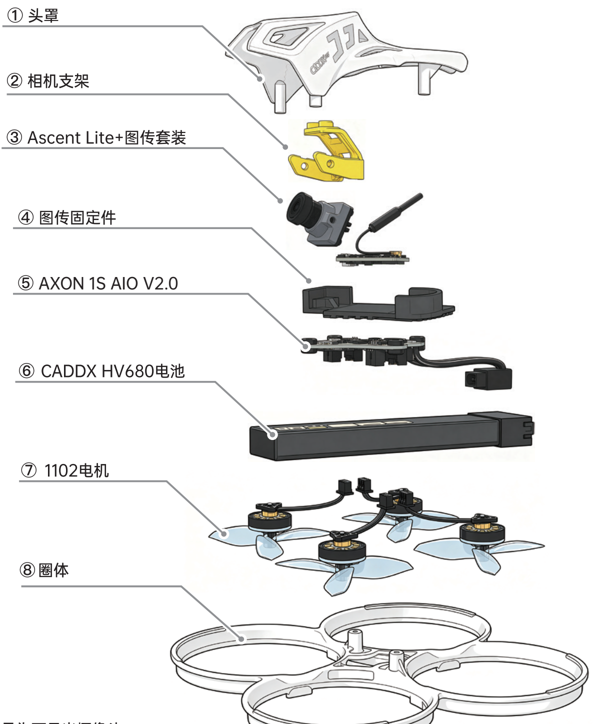
## 快速入门指南

V1.0



*此产品为可见光摄像头

## 部件定义

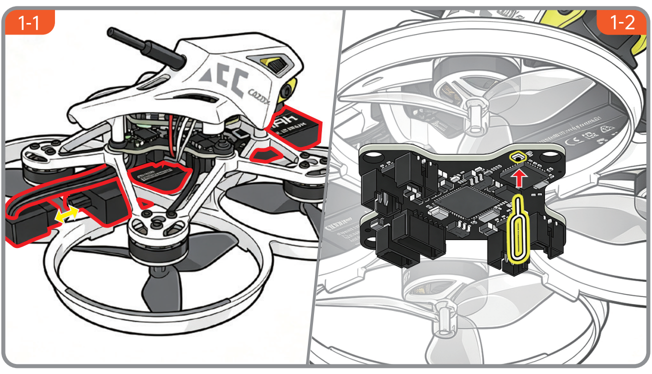

① 头罩
② 相机支架
③ Ascent Lite+图传套装
④ 图传固定件
⑤ AXON 1S AIO V2.0
⑥ CADDX HV680电池
⑦ 1102电机
⑧ 圈体

*此产品为可见光摄像头

## 遥控器对频

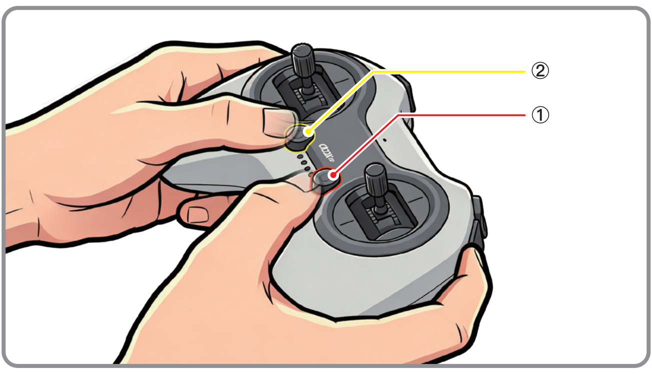
Curve Micro P18进入对频模式：

1. 使用1S电池连接Curve Micro P18的A30接口使飞行器通电；
2. 对频方法：方法一. 电池电源插头连续插拔三次，并保持第三次为开机状态 (完整过程时间不超过5秒)，此时内置ELRS接收机进入对频模式，蓝灯双闪 (如图1-1)；
   方法二. 使用牙签或者别针，长按两秒BOOT按键进入对频模式，进入对频模式后蓝灯双闪 (如图1-2)。



绑定遥控器 (以CADDXFPV Alink遥控器为例):

1. 长按遥控器①电源按钮，待待四灯依次亮起并常亮，发出“do-re-mi，do-mi”时为开机。
2. 短按两次遥控器②对频按键，四灯双闪进入对频状态，对频成功后，遥控器发出“do-mi”，飞控蓝色LED常亮。

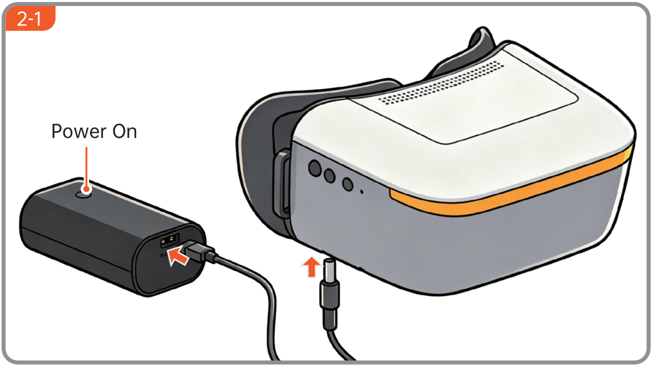


注：飞控内置ELRS2.4G接收机，可兼容市面上任意ELRS2.4G遥控器，出厂固件版本为2025.12。

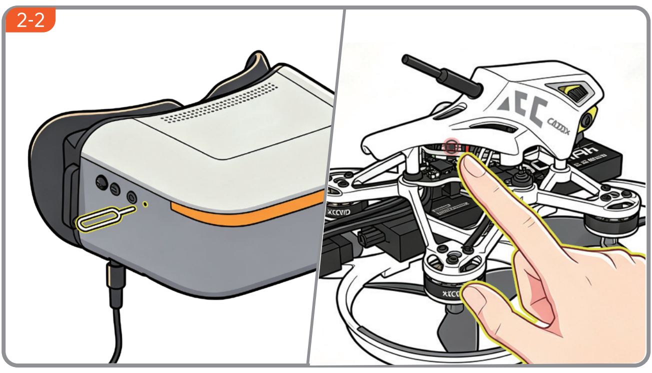
## 连接视频眼镜

1. 视频眼镜接通电源 (如图2-1)，并确认Curve Micro P18为上电状态；
2. 等待设备启动后，分别按下眼镜和Ascent Lite+对频按钮进入配对状态（通过手指按压头罩对频位置可以轻松对频)；
3. 对频状态中，Ascent Lite+指示灯变为红色，眼镜端发出滴滴提示音；
4. 对频成功后，Ascent Lite+指示灯变为绿色常亮，眼睛端显示图传画面。

2-1

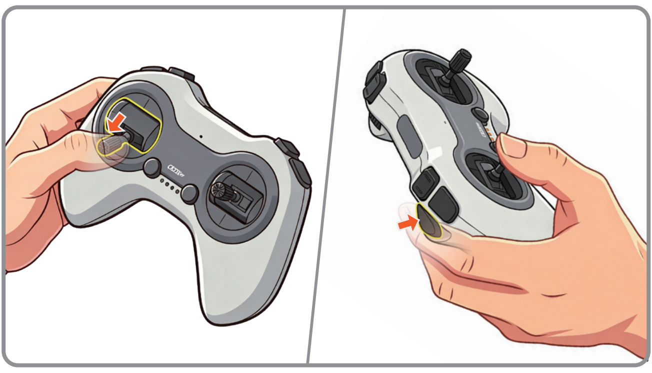


2-2



## 解锁起飞

1. 油门摇杆保持最低位置；
2. 按下遥控器解锁按钮（SE 对应CH5通道），向上推油门即可起飞。



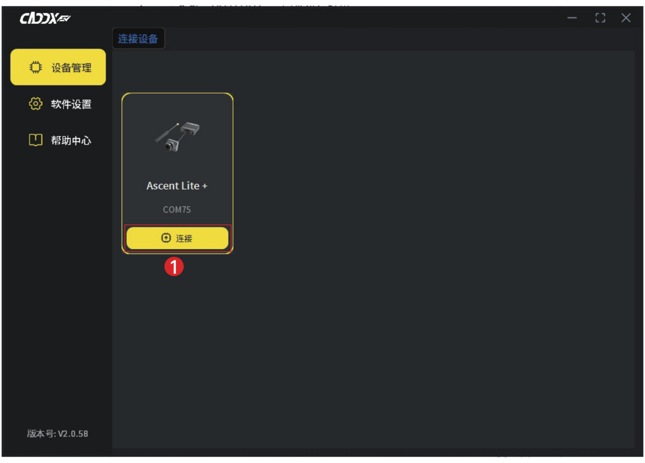
（注意: 因图传发热量较大，请在通电后尽快起飞）

## 图传固件升级

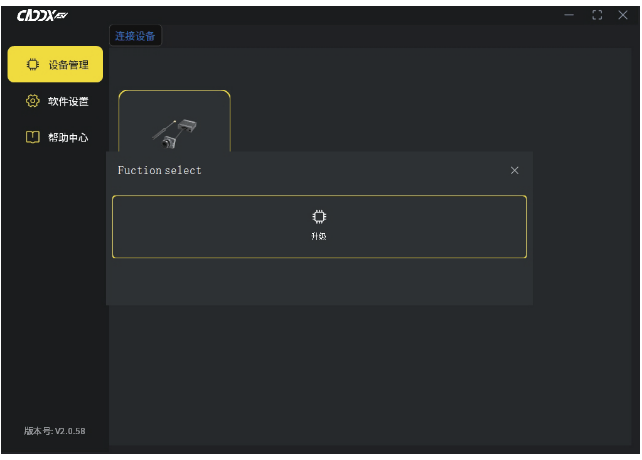
请到官网下载最新升级固件，Ascent_H_Sky_XX_X_XX.img 对应 VTX 端升级固件，注意请勿修改文件名。
Ascent VTX 升级的时候采用 Type-C 的 USB 线连接电脑，然后在电脑上打开 Caddx_PC_Tool 的工具，当连接 USB 线的时候，就可以根据提示，选择Ascent_G_Sky_XX_X_XX.img 固件进行升级。

注意：
1. Ascent Lite+VTX 通过 Type-C连接电脑时，外部无需电池供电，电脑的 USB接口会为模块供电。
2. 升级中请不要拔掉连接电脑的USB线。当升级成功以后再插拔USB线。

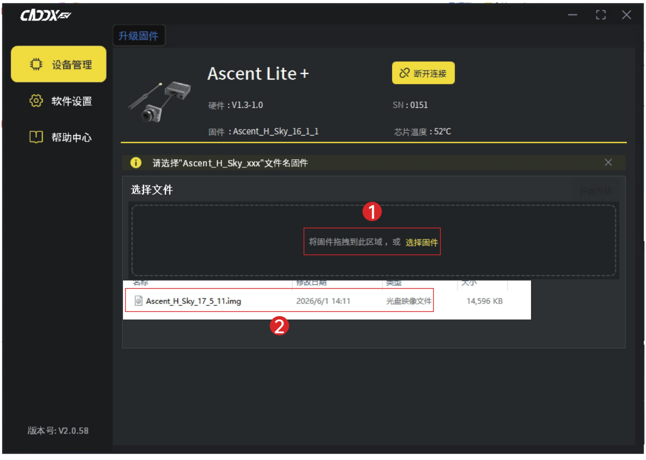
1）点击Ascent Lite+ 连接选项


连接设备
设备管理
软件设置
帮助中心
Ascent Lite +
COM75
连接
❶
版本号: V2.0.58

2）点击选择连接按钮进入弹窗选项，点击升级按钮进入升级固件界面


连接设备
设备管理
软件设置
帮助中心
Fuction select
升级
版本号: V2.0.58

3）选择对应版本固件点击打开并开始进行升级


CADDXFPV
升级固件
设备管理
软件设置
帮助中心
断开连接
❶
❷

Ascent Lite+

硬件：V1.3-1.0

SN：0151

固件：Ascent_H_Sky_16_1_1

芯片温度：52°C

请选择"Ascent_H_Sky_xxx"文件名固件

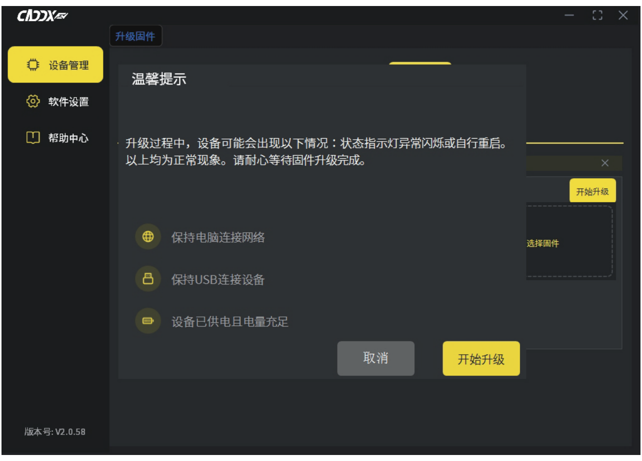
选择文件

将固件拖拽到此区域，或 选择固件

| 名称 | 修改日期 | 类型 | 大小 |
|---|---|---|---|
| Ascent_H_Sky_17_5_11.img | 2026/6/1 14:11 | 光盘映像文件 | 14,596 KB |

版本号: V2.0.58

4）升级过程中请勿重启或关闭电源，避免升级失败


CADDXFPV
升级固件
设备管理
软件设置
帮助中心
开始升级
选择固件
取消
开始升级

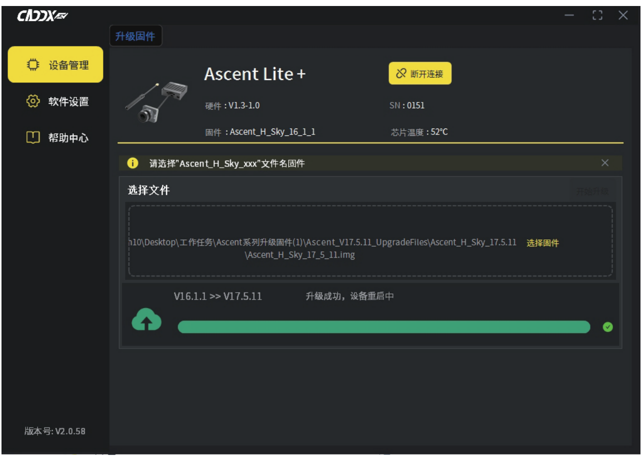
温馨提示

升级过程中，设备可能会出现以下情况：状态指示灯异常闪烁或自行重启。以上均为正常现象。请耐心等待固件升级完成。

- 保持电脑连接网络
- 保持USB连接设备
- 设备已供电且电量充足

版本号: V2.0.58

5）升级完成


CADDXFPV
升级固件
设备管理
软件设置
帮助中心
断开连接
选择固件

Ascent Lite+

硬件：V1.3-1.0

SN：0151

固件：Ascent_H_Sky_16_1_1

芯片温度：52°C

请选择"Ascent_H_Sky_xxx"文件名固件

选择文件

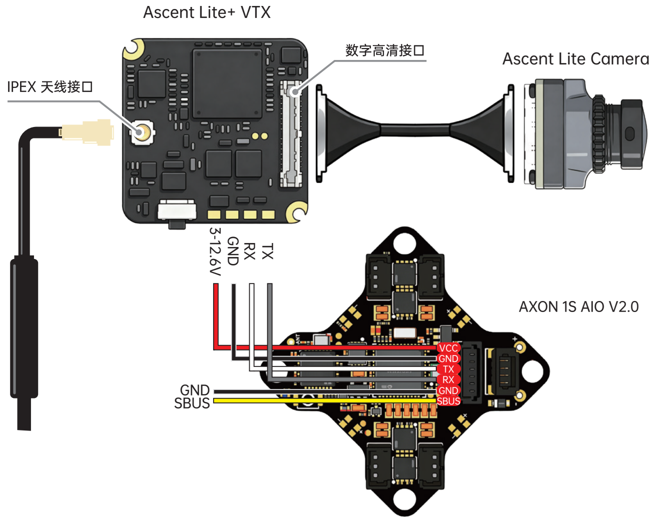
n10\Desktop\工作任务\Ascent系列升级固件(1)\Ascent_V17.5.11_UpgradeFiles\Ascent_H_Sky_17.5.11\Ascent_H_Sky_17_5_11.img

V16.1.1 >> V17.5.11　升级成功，设备重启中

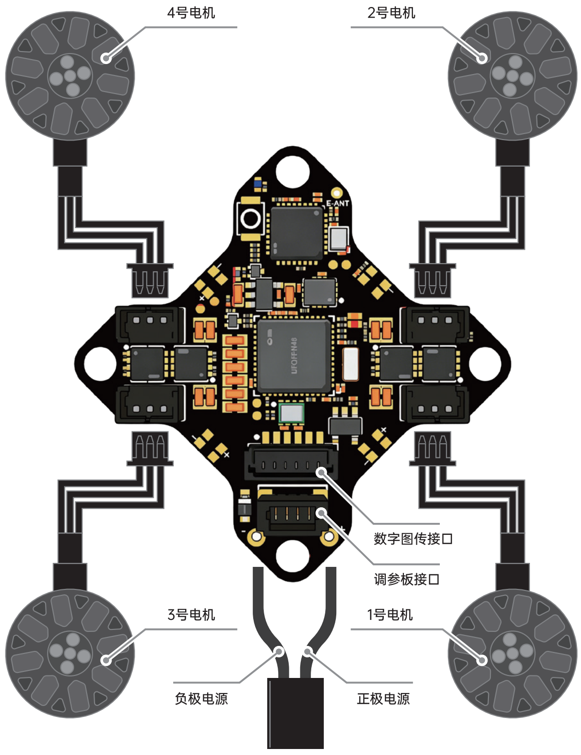
版本号: V2.0.58

## 接线定义

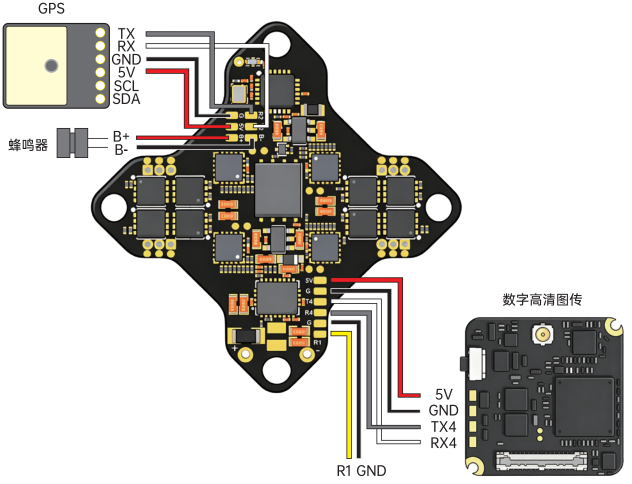
### 图传接线示意


Ascent Lite+ VTX
数字高清接口
Ascent Lite Camera
IPEX 天线接口
3-12.6V
GND
RX
TX
AXON 1S AIO V2.0
VCC
GND
TX
RX
GND
SBUS
GND
SBUS

### 飞控接线示意


4号电机
2号电机
数字图传接口
调参板接口
3号电机
1号电机
负极电源
正极电源

### 飞控焊盘定义


GPS
TX
RX
GND
5V
SCL
SDA
蜂鸣器
B+
B-
数字高清图传
5V
GND
TX4
RX4
R1 GND

## 关于未经授权使用第三方配件的责任声明

为保障设备运行安全与性能稳定，本公司郑重提示：
所有调试及维护操作必须使用经由官方认证的原装连接线与连接器。严禁在调试过程中使用任何第三方线材及配件。使用非官方配件所引发的设备故障、数据丢失、性能异常、安全隐患及其他直接或间接损失，均由违规操作方自行承担全部责任，本公司概不负责。

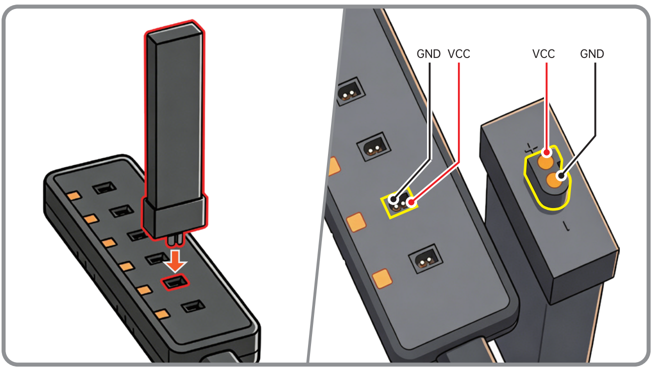
## 6通道充电器

注意事项

1. 充电时需要在有人值守的情况下进行，在不充电时请及时断开电池与充电器连接并关闭电源；
2. 推荐使用30W或其他支持PD 3.0快充协议的电源适配器及双头TYPE-C线为6通道充电器充电；
3. 使用时请平稳放置，并远离火源，水源及其他危险化学物质，注意绝缘防火。
4. 本产品不支持标压电芯 (4.20V) 充电。

充电步骤

1. 使用带有TYPE-C接口充电线给六通道充电器供电，通电后橘黄色指示灯开始闪烁；
2. 将电池的A30接口对准充电器的A30接口插入，正方形端为正极，圆形端为负极；
3. 电池充电过程中，对应端口的橘黄色LED灯常亮，充满后熄灭；
4. 单颗550mAh电池充电时间约为30分钟。


GND
VCC
VCC
GND
+
-

## 参数规格

| | | | |
|---|---|---|---|
| 型号 | C0CA-TZ149 | | |
| 图传 | Ascent Lite+ | 桨叶 | HQ 45mm 1.8X1.3X3 |
| 飞控 | AXON 1S AIO V2.0 | 轴距 | 68mm |
| 电调 | 1S 12A | 电池接口 | A30 |
| 接收机 | ELRS V3.6.3 | 续航 | 8min |
| 电机 | 1102 | 重量 | 33g |

| | | | |
|---|---|---|---|
| 图传规格 | Ascent Lite+ | | |
| 通信频率 | 5.730-5.815 GHz | 分辨率 | 1080P@60/100/120fps, |
| 发射功率 | 500mW (Max); | | 720P@60/100/120fps |
| | FCC/SRRC:<27dBm; CE:<14dBm | 画面比例 | 16:9 |
| 工作带宽 | 5M/ 10M/ 20M/ Auto | 广视角 | 147° |
| 传感器 | 1/2.8 Inch Sensor | 电源输入 | 3-12.6V |

| | | | |
|---|---|---|---|
| 飞控型号 | AXON 1S AIO V2.0 | | |
| 处理器 | STM32G473 | 飞控固件 | 2025.12 |
| 陀螺仪 | ICM42688 /BMI270 | 电调电流 | 12A (持续);18A (峰值) |
| 黑匣子 | 16M | 电调固件 | A-X-5 |
| BEC | 5V3A | 调参端口 | SH1.0-4P |
| 飞控电压 | 1S | 电机端口 | JST1.25-3P |

| | | | |
|---|---|---|---|
| 充电器 | 6通道充电器 | | |
| 快充协议 | USB PD/BC1.2 | 通道 | 6 |
| 输入电压 | 5V-12V | 最大输入功率 | 30w |
| 输入接口 | Type-C USB | 最大充电电流 | 1A |
| 电池类型 | LiHV 4.35V | 尺寸 | 115*30*14.5mm |

CADDXFPV 技术支持
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