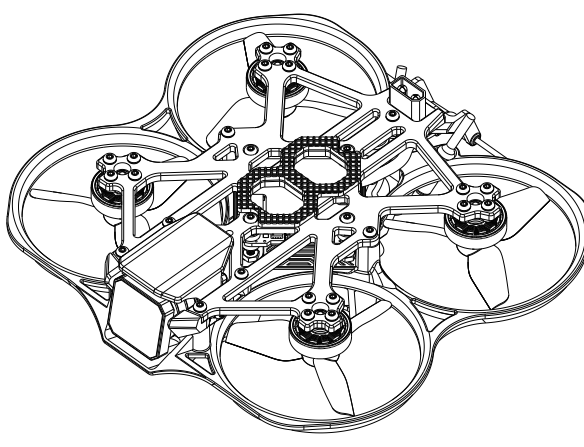
GOFILM 20

QUICKSTART GUIDE

V1.2



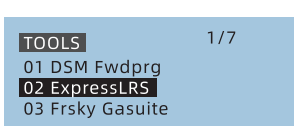
*This product is a visible light camera.

How to bind ELRS 2.4G:

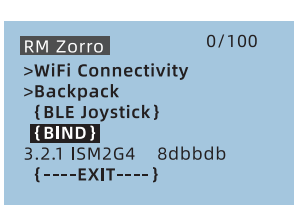
1. The flight controller has a built-in ELRS receiver. Use the battery to quickly power up the Gofilm 20 three times. When the receiver indicator (as shown in Figure 3) turns red and flashes twice quickly, it enters the binding mode.

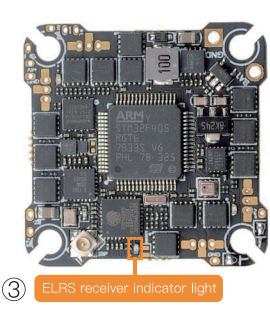
2. Use the ELRS 2.4G protocol remote controller for frequency binding. Take the Radiomaster ZORRO ELRS 2.4G remote controller settings as an example. Perform the remote controller settings according to Figures ① ②. After the frequency binding is successful, the flight control ELRS receiver indicator light will be solid red.

①



②





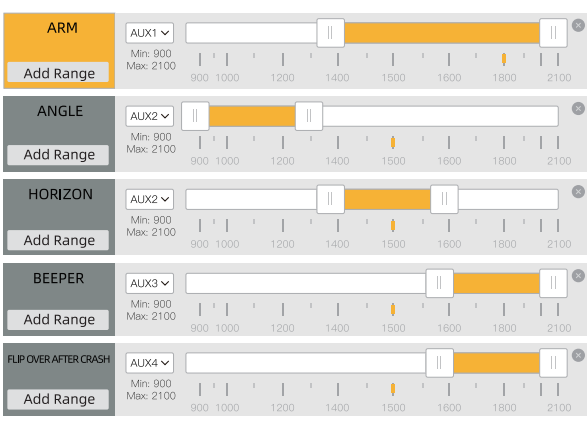
③

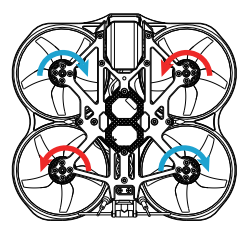
Default firmware version:
ExpressLRS V3.0.1

Note:
Receiver LED status meanings: Red LED solid means bind successful or RC link established; Red LED double-flash means get into bind mode; Red LED flash slowly means no RC signal input from TX module; Red LED continuous flash fast means ExpressLRS wifi enabled; Red LED tri-flash means model mismatch need to change model match from “off” to “on”.

ARM & Mode:

After the binding is successful, use FC to connect to the Betafight, and enter the Modes tab. Try to toggle the corresponding switch for each function, You move the Yellow cursor of the corresponding aux channel of the switch, the corresponding function will be turned on when you move to the set range.





Default motor rotation direction

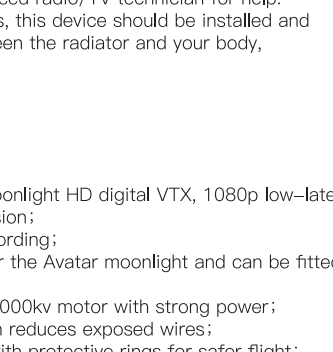
How to bind VTX:

1. Connect the moonlight kit and the power of the goggles.
2. Short press the moonlight kit and goggles linking buttons respectively, when the moonlight kit enters the pairing state The VTX LED turns red, and the goggles end is a DI... DI... DI...
3. After the link is successful, the indicator light on the VTX LED turns solid green, the beeping sound on the goggles stops and the screen is displayed.

For more information on how to use the MOONLIGHT KIT, please scan the QR code to view the electronic manual.

Flight control wiring:





Pre-flight Check:

1. Turn on the transmitter and select the correct mode. Please confirm that the arming switch on the transmitter is in the ”disarmed” position and the throttle is all the way down.
2. Check whether the propeller steering is correct, whether the rotation is smooth, and whether the screws are locked.
3. Check whether the battery power is sufficient. The 4S battery is fully charged at 16.8V.
4. Please confirm the battery is securely attached to the aircraft by the strap. And secure the balance head so that it can’t be struck by the props.
5. Observe whether the take-off environment is safe, whether there are obstacles, and whether it is in a no-fly zone.
6. Verify that you have clean, strong video in your Fpv goggles or screen. if you see interference or you see another pilot feed, resolve this issue before flying.

CAUTION!

- This product is NOT a toy, thus it is not suited for children under 14 years of age. Minors should be accompanied by an adult when operating.
- Warnings listed in the instructions must be read carefully.
- Improper adjustments and operation will result in crashes and damage to the item.
- Experience is required before handling this product.

FCC Warning
- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
- (1) This device should be used away from public areas and should not interfere with public wireless facilities or other wireless devices,
- (2) This device may receive radio interference, which may cause malfunction or damage to the device. It is necessary to stay away from the environment where radio interference occurs.
- Users of modified or cracked versions or unlicensed amateur bands may be subject to penalties for violating local laws or regulations.

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. There is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, it is recommended that you try to correct the interference by one or more of the following measures:
  – Reorient or relocate the receiving antenna.
  – Increase the separation between the device and the receiver.
  – Adjust the transmit power or restart the device.
  – Consult the dealer, manufacturer, or an experienced radio/TV technician for help.
- To maintain compliance with FCC safety guidelines, this device should be installed and operated with a minimum distance of 20 cm between the radiator and your body, Use only the supplied antenna.

Product Information

GOFILM 20 Features	Equipped with Avata moonlight HD digital VTX, 1080p low-latency long-distance transmission; Support 4k60 video recording; Designed specifically for the Avatar moonlight and can be fitted with ND filters; Use high quality 1303 6000kv motor with strong power; Fixed power plug design reduces exposed wires; Use 2-inch propellers with protective rings for safer flight; Flight controller built-in ELRS 2.4G receiver.	
GOFILM 20 Parameter	Name	GOFILM 20
	flight Control	CADX-CADDXF4_AIO_ELRS
	VTX	Moonlight Kit
	Motor Diagonal	94mm
	Motor	1303 6000KV
	Propeller	HQProp T2×2×3
	Weight	115±5g
	Size	133×123×39mm
	Maximum Hover Time	4S650mAh & About 5 min 30s
	Remote Control Receiver	ELRS 2.4G
	Battery Interface	XT30
Flight Control Parameters	MCU	STM32F405RGT6
	GYRO and IMU	ICM42688
	Barometer	BMP280
	ExpressLRS Receiver	ELRS V3.0 UART
	ESC	20A 4-IN-1
	Blackbox	8MBp
	Support Power	2~4S Lipo/Lihv
	Mounting hole Distance	25.5×25.5mm
	Firmware Target	BETAFLIGHTF4
VTX Parameters	Model	Moonlight Kit
	Firmware Name	AvatarMoonlight_Sky_X.X.X
	Communication Frequency	5.725-5.850 GHz
	Transmitter Power (EIRP)	FCC: <30dBm; CE: <14dBm; SRRC: <20dBm; MIC: <25dBm
	I/O Interface	JST1.0*4(power cable); JST0.8*6(USB); microSD Card Slot; IPEX-1
	Sensor	Starlight sensor
	FOV	Max 160°
	Aperture	F2.1
	Shutter	Rolling shutter
	ISO	100-25600
	Recording Resolution	4K@30/60fps; 2.7K@30/60fps; 1080p@100/60fps; 720p@60fps
	Max Mbps	150Mbps
	Video Format	MP4 (H.264)
	3D DNR	Support
	Gyro flow	Support
	Built-in EIS	Support
	Wide Power Input	7.4V-25.2V
	Power Consumption	12V@1.4A, 8V@2.2A
	Memory Card Type	U3 microSD, Max 256G
	camera Size	19.6mm×19mm×24mm
	VTX Size	15.3mm×34.5mm×34.5mm
	VTX Installation hole Distance	20×20mm/25×25mm (M2)
	Weight	38.5g (Antenna not included)
	OSD	Canvas mode
	Latency	Average delay 22ms
	Antenna	2 (IPEX)

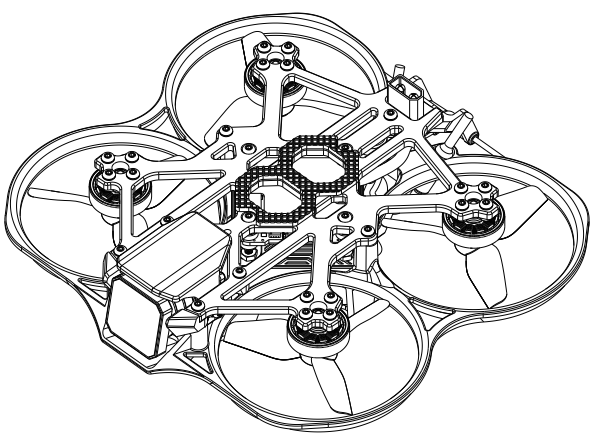
CADDXFPV Support
email: support@caddxfpv.com

This content is subject to change.
Download the latest version from
https://www.caddxfpv.com

GOFILM 20

快速入门指南

V1.2



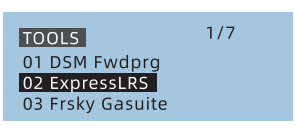
*此产品为可见光摄像头

如何对频 ELRS 2.4G：

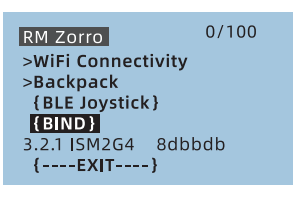
1. 飞控板载 ELRS 2.4G 接收机，使用电池给 GofIlm 20 快速通电 3 次，当接收机指示灯（如图 ③ ）变为红灯快闪两次时为进入对频模式。

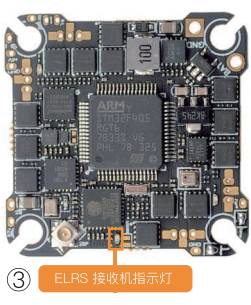
2. 使用 ELRS 2.4G 协议遥控器进行对频，以 Radiomaster ZORRO ELRS 2.4G 遥控器设置为例，根据图 ① ② 进行遥控器设置，对频成功后飞控 ELRS 接收机指示灯为红灯常亮。

①



②





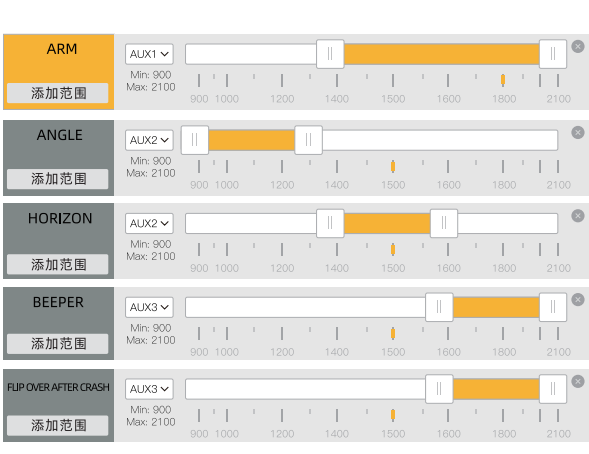
默认固件版本:
ExpressLRS V3.0.1

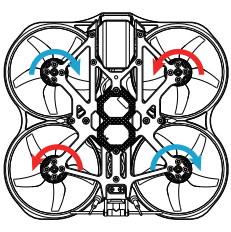
接收机指示灯状态：

红色 LED 常亮表示绑定成功或 RC 链接已建立；红色 LED 双闪表示进入绑定模式；红色 LED 慢闪表示 TX 模块没有 RC 信号输入；红色 LED 连续快速闪烁表示 ExpressLRS wifi 已启用；红色 LED 三闪表示模型不匹配，需要将 Model Match 从“关闭”更改为“打开”。

解锁开关：

对频成功后，连接 Betaflight 地面站，进入模式选项，尝试拨动遥控器各功能开关，当黄色光标移动到设定范围就会开机相对应的功能，设置完成后点击保存。





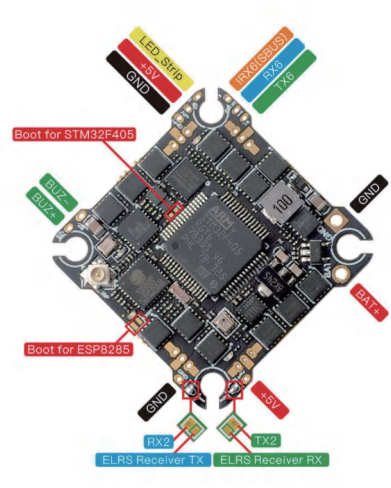
默认电机转向

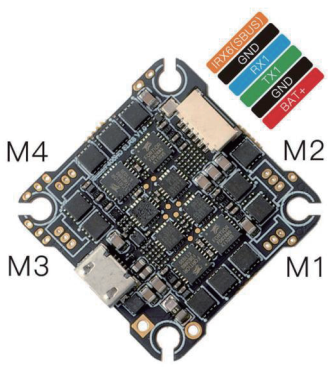
如何对频 VTX：

1. 连接 Moonlight Kit 和眼镜端电源。
2. 等待设备启机后，分别短按 Moonlight Kit 和眼镜端对频按钮，当进入配对状态时， VTX 指示灯变为红色，眼镜端发出滴... 滴... 滴...蜂鸣器提示。
3. 对频成功后，VTX 指示灯变为绿色常亮，眼镜端蜂鸣器停止并显示图传画面。

更多 MOONLIGHT KIT 产品信息请扫描二维码查看电子说明书。

飞控接线定义：





起飞前检查：

1. 请在起飞前遥控器选择正确的模型，将油门位置保持在最低位，将解锁开关处于关闭状态。
2. 检查螺旋桨转向是否正确，转动是否顺畅，螺丝是否锁紧。
3. 检查电池电量是否充足，4S电池满电为16.8V。
4. 检查电池绑带是否将电池固定好，整理好电池平衡头以免被螺旋桨打到。
5. 观察起飞环境是否安全，是否有障碍物以及禁飞地区。
6. 如果是多人 FPV 飞行，请使用不同的无线频道，以免干扰他人或被他人干扰。

注意!

- 本产品由精密部件组成，并非玩具，因此不适合14岁以下的少年或儿童使用，未成年操作时应有成年人陪同。
- 未能以安全的方式操作或维护本产品可能会导致人身伤害或财产损失。
- 本品操作者对其行为全权负责，务必选择合适的环境操作遥控模型，所选环境需远离公共道路、密集人群、电缆、无线电塔等

FCC 警告

- 本设备符合 FCC 规则第 15 部分的规定。操作须遵守以下两个条件：(1) 本设备应远离公共区域使用，不得干扰公共无线设施或其他无线设备；(2) 本设备可能会受到无线电干扰，这可能会导致设备故障或损坏，必须远离发生无线电干扰的环境。
使用修改版或破解版或未经许可的业余频段的用户可能会因违反当地法律或法规而受到处罚。

- 警告：本设备已通过测试，符合 FCC 规则第 15 部分对 B 类数字设备的限制。如果不按照说明进行安装和使用，可能会对无线电通信造成有害干扰。无法保证在特定安装中不会发生干扰。如果本设备确实对无线电或电视接收造成有害干扰（可通过关闭和打开设备来确定），建议您尝试通过以下一种或多种措施来纠正干扰：
– 重新调整或重新放置接收天线。
– 增加设备与接收器之间的距离。
– 调整发射功率或重启设备。
– 咨询经销商、制造商或经验丰富的无线电/电视技术人员寻求帮助。
为了符合 FCC 安全准则，安装和操作此设备时，辐射器和身体之间的距离至少应为 20 厘米，仅使用随附的天线。

参数规格

GOFILM 20 产品特点	搭载 Avatar moonlight 高清数字图传，1080p 低延迟远距离传输，支持 4k60 视频录制； 专为 Avatar moonlight 设计的机架，可以安装 ND 滤镜； 使用高品质 1303 6000kv 电机动力强劲； 机架固定插头设计，减少裸露电线更美观； 使用2英寸螺旋桨搭配保护圈，飞行更安全； 飞控内置 ELRS 2.4G 接收机	
GOFILM 20 参数	型号	GOFILM 20
	飞控	CADX-CADDXF4_AIO_ELRS
	图传	Moonlight Kit
	电机对角距离	94mm
	电机	1303 6000KV
	螺旋桨	HQProp T2×2×3
	重量	115±5g
	尺寸	133×123×39mm
	最长悬停时间	4S650mAh & 约5分30秒
	遥控接收机	ELRS 2.4G
	电池接口	XT30
飞控参数	MCU	STM32F405RGT6
	GYRO and IMU	ICM42688
	Barometer	BMP280
	ExpressLRS receiver	ELRS V3.0 UART
	ESC	20A 4-IN-1
	Blackbox	8MBp
	Support Power	2~4S Lipo/Lihv
	Mounting hole Distance	25.5×25.5mm
	Firmware target	BETAFLIGHTF4
图传参数	图传型号	Moonlight Kit
	固件名字	AvatarMoonlight_Sky_X.X.X
	通信频率	5.725-5.850 GHz
	发射功率 (EIRP)	FCC: <30dBm; CE: <14dBm; SRRC: <20dBm; MIC: <25dBm
	接口	JST1.0*4(电源线); JST0.8*6(USB) microSD 卡槽; IPEX-1
	传感器	星光级传感器
	FOV	Max 160°
	光圈	F2.1
	电子快门	卷帘快门
	ISO	100-25600
	录制分辨率	4K@30/60fps；2.7K@30/60fps； 1080p@100/60fps; 720p@60fps
	最大码率	150Mbps
	视频格式	MP4 (H.264)
	3D 降噪	支持
	陀螺仪数据	支持
	内置电子防抖	支持
	宽电源输入	7.4V-25.2V
	功耗	12V@1.4A, 8V@2.2A
	支持存储卡类型	U3 microSD卡, Max 256 G
	相机尺寸	19.6mm×19mm×24mm
	图传尺寸	15.3mm×34.5mm×34.5mm
	图传安装孔距	20×20mm/25×25mm (M2)
	重量	38.5g (不含天线)
	OSD	Canvas mode
	端到端延时	平均延时 22ms
	天线	2 (IPEX)

CADDXFPV 技术支持
email: support@caddxfpv.com

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