





云卓-H30 R30 ☑.4 使用说明书

SKYDROID 云卓

注意

本产品使用以下词条因操作不当可能带来的潜在危险加以分级说明。

注意: 如果不遵循说明进行操作, 可能会导致财产损失和轻微伤害。

注意: 如果不遵循说明进行操作, 可能会导致财产损失、 重大事故和严重伤害。

警告:通过阅读整个用户手册,熟悉产品的功能之后再进行操作。如果没有正确操作本产品可能 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。本产品较为复杂,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。本产品不适合儿 章使用。切勿使用非云卓提供或建议的部件,必须严格遵守云卓的指引来使用产品。

一、概述

1、产品特性

(1) H30 系列采用全新的高通骁龙 660 8 核处理器,搭载安卓 9(64 位)嵌入式系统,采用先进的 SDR 技术,和超级协议栈,让图像更加清晰,延迟更低,距离更远,抗干扰更强,无论是无人机,机 器人,工控设备等都可以应用。

(2) 支持 HDMI(遥控端),双路网口, sensor 接口,双路串口透传,SBUS 等丰富的接口,航拍, 安防,消防,电力,测绘机器人,边防等都可以得心应手,如临现场的体验。

(3)采用IP65级防水防尘和结构,保证不仅仅是手感好,而且耐用。H30采用10.1 寸工业触摸屏+ 阳光可视屏,阳光下依然清查看。屏幕分辨率 1920*1200。支持1080P 高清数字图传。双三频天线信 号互相补充,超强信号,超远距离,配合算法控制和失步跳频算法,大大增加了弱信号通讯能力。内 置双扬声器,三频 800M,1.4G,2.4G, Wifi 2.4 5G。

(4)采用高能量密度的锂离子电池,满电可工作 5 个小时,一贯的荒野求生思维让您对设备的可靠 性毫无牵挂。

(5) H30 支持 HDMI、SIM 卡网口、USB 接口、type-c 接口、RJ45 网口, TF 卡槽, PPM 接口。R30 双路串口透传、双路网口、sbus 等丰富的接口。并支持更多网口的相机、云台、吊舱等视频设备。 提供开发包, SDK 和技术支持,支持视频悬浮,支持主流飞控的地面站,开源飞控的云卓地面站,支 持 QGC 与无线 RTSP 视频流分享。

(6)采用气象硅胶,磨砂橡胶,不锈钢,ABS使得拥有极致的手感的同时,也满足了无人机户外使用的恶劣条件,H30在机身,控制开关,各外设接口处均做防尘保护措施,确保设备在恶劣环境中的 稳定流畅运行。

(7)丰富的地面接口, RJ45 网络接口,远距离连接内网, Type-C 安卓高速 USB 接口, OTG 接口可 接 U 盘,,拓展 TF 卡插槽。

2、主要用途及适用范围

用于遥控操作直升机、固定翼、多旋翼、车、船等进行视频图像传输、数据传输、和操控无人机飞行。

3、品种、规格、 产品参数

	H30遥挂	空器参数	
产品型号	H30	通道数	16
工作电压	4.2V(内置电池)	射频功率	23dBm@CE/FCC
频段	800M/1.4G/2.4G	动态调频	支持跳频
尺寸	346(长)*196.5(宽) *89.4mm(高)	重量	1.5kg
续航时间	5小时	电池	20000mA/H
升级	OTA包/在线升级	充电接口	TYPE-C
运行内存	4G	系统存储内存	64G
应用	直升机、	固定翼、多旋翼	、车船

R30接收机参数			
产品型号	R30	通道数	16
工作电压	7.2V~72V	射频功率	23dBm@CE/FCC
尺寸	76.4(长)*59(宽)* 15(高)mm	重量	65g

4、型号的组成及其代表的意义



序号	注解	序号	注解
1	800M/1.4G/2.4G三种天线	9	麦克风
2	旋钮开关AUX1	10	按键H
3	拨动三档开关SW1	11	R2按键
4	左摇杆X1、Y1	12	R1按键
5	左小摇杆 X3、Y3	13	右小摇杆 X4、Y4
6	L1按键	14	右摇杆 X2、Y2
7	L2按键	15	拨动三档开关 SW2
8	电源键	16	旋钮开关 AUX2





序号	注解	序号	注解
17	HDMI 接口	21	RJ45 网口接口
18	SIM 卡槽	22	TF 卡插口
19	USB 接口	23	PPM 接口
20	TYPE-C 接口	24	挂绳接口







序号	注解	序号	注解
1	串口 0	7	对频键
2	串口 1	8	岡口 0
3	预留口(暂无功能)	9	网口 1
4	电源7.2-72V 输入和SBUS输出	10	外接对频按键接口
5	Type-c 接口	11	天线MMCX接口
6	对频状态指示灯		

5、端口定义图



6、使用环境条件

注意

- A)环境温度:-10℃~+45℃。
- B) 贮存温度: -20℃~+50℃。
- C) 相对湿度: Not exceed 85%。
- D) 大气压力:86kPa~106kPao

E)使用地点不允许有爆炸危险的介质,周围介质中不应含有腐蚀金属和破坏绝缘的气体及导电介质,不允许充满水蒸气及有严重的霉菌存在。

F)使用地点应具有防御雨、雪、风、沙、灰的设施。

7、工作条件

供电方式和注意事项

H30系列地面端内置一体式可充电锂电池,兼容市场标准TYPE-C接口(例如手机、相机等数码产品USB充电器)进行充电。

如在地面端充电时遇到冒烟、有异味、漏夜的情况下时,请勿继续给地面端充电,请移送至本公 司进行维修。

请勿在婴儿触碰区域给本产品进行充电,以免发生触电危险。请勿在超过60°C的环境下对本产品进行充电。

8、安全

警告

初学者请特别注意以下安全事项! 请细读!

- ⊘ 禁止在疲劳、醉酒等身体状态不佳时飞行!
- ⊘ 禁止在下雨、强风等恶劣天气时飞行!
- 禁止在接近高压线、通信基站、有人聚集或者活动的场所飞行!
- 禁止在机场和其他明令禁飞区飞行!
- ⊘ 禁止在人群集中的地方、停车区域或者其他可能造财产损失或者人身伤害的区域操控飞行
- ▲ 模型,飞行前,做好飞行器的设备检测,检查收发系统与飞行器是否正常;
- 请使用有保障的专业充电器为电池充电。
- 本产品天线为脆弱部件,避免受力过度破坏。

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二、使用、操作

1、使用前的准备和检查

注意

- ① 使用前务必先检查遥控器电量是否充足。
- ② 使用前请检查天线是否按要求摆放,已获得最佳效果。
- ③用户应确保自己不在醉酒、药物影响下操作使用。

2、使用方法

语言设置

① 进入系统设置,选择系统->语言和输入法



② 进入语言和输入法后,点击语言->语言可进行语言的切换、添加、删除

4:31	E			周 辛 前
÷	语言偏好设置			Q :
1	中文 (中国) 某些应用可能无法以该语言显示			=
2	English (Canada)			=
+	添加语言			
		状态提示栏		
	WAR	•	•	
	1 2 3	4	5	6
①W ②SII ③电 ④返 ⑤返	IFI 连接标识 Y 手机卡信号标识 量显示 回按键 回主键面按键			

8

⑥后台任务管理

H30 助手介绍

5:55 Z			8	ŶÌ
H30助手				
		手型设置		
		視頻查看		
		舵量查看		
		无线参数配置		
		信号查看		
		高级选项		
	•	•		

①手型设置,对遥控器的摇杆操作方式(手型:美国手,日本手。默认美国手)进行切换,1.读取 2. 设置 3.保存。

②视频查看:可以查看 RTSP 视频(详细在下页介绍)

③检查遥控器各个通道的值是否正常

9:16 🗵	(3) · ♥ 非
H30助手	
CH1	CH9
CH2	CH10 1050
CH3	CH11
CH4	CH12
CH5	CH13
CH6	CH14
CH7	. CH15
CH8	CH16

④无线参数配置。将遥控器与其他接收机进行对频(对频方法在下方介绍:图像连接及设置) ⑤信号查看(查看信号)

⑥高级参数里可调整修改接收机串口波特率、遥控器调参、升级设备、SN、教练模式(开发中)、 无线模块升级(密码999仅限专业人员调试) 对频操作



3:11 🙆	\leftrightarrow
H30助手	
对频状态:已连接	
对频	
选择频段: 1.4G •	→ 频点:可设置范围: (24015-24814,8060-8259,14279-14679),(0-5)
选择频宽: 10M 👻	, 14379
保存	
飞行模式 🌒 🔊	

注意: 遥控器与接收机整套出厂是已经对好频的状态,只需上电等待 20 秒自动对频即可。

①接收机通电,电源灯-红灯常亮。等待 20 秒后,长按接收机 SET 对频键-蓝灯闪烁后松开(更换才需要重新对频接收机遥控器)。

②进入 H30 助手,点击对频,对频状态:对频中。。。对频成功后状态会显示已连接,对频成功(接收机绿灯常亮)

		and the local division of the	-	
视频地址:	rtsp://192.168.144.108:554/stream=0	设置地址		
	R.W		确认	-
	-	•	1000 - 100 - 100	No TFCard

图像连接及设置

网口摄像头网段需要提前设置为 144 网段(192.168.144.XXX)摄像头连接接收机网口 0 或网口 1,引脚定义见本文《一、概述->5.端口定义图》部分。

设置:此设置显示通过天空端的网口来传输图像,显示 C10 三轴云台摄像头(已接 C10 的情况下) rtsp://192.168.144.108:554/stream=0 安装第三方网口吊舱相机需要询问相机厂家要 rtsp 地址。 如何在 H30 遥控器地面站显示数传图传



飞控数传线连接串口 0, 以云卓地面站为列做参考连接数传(H30 助手需要关闭)



云卓地面站:

串口 0: 服务器 IP: 192.168.144.101 服务器端口: 14550 直接点击连接。 串口 1: 服务器 IP: 192.168.144.101 服务器端口: 14551 直接点击连接。 C10 三轴云台连接网口 0 或者网口 1,以云卓地面站为列做参考连接图传

☴ - > 常用设置 - > 其他设置 - > 用户界面 - > 视频窗口

->C10 (显示 C10 画面)

海口部件	
窗口部件首选项	
视频窗口	
地图	
地图提供商 baidu map	
地图卅成苏启起设宁	视频窗口列表
20回床位時間灯 以た 设定选择的地图供应商	C10 🔫
规则航线	🔲 FPV窗口 🗾 C10
启用自适应缩放	
	† at 8.6 m/s → gt: 80 m/s − vt. 8.0 m/s
the second se	
補助线设置	
	Ð
	•
◆ : 近接	No T

->自定义(显示其他摄像头则输入RTSP地址显示) 以H30遥控器QGC地面站为列做参考连接图传(H30助手后台需要关闭)



点击 QGC 中的 Q 系统设置标识进入设置。 ①点击 General(常规) ②将 Source(视频来源)更改为 RTSP Video Stresm ③在 RTSP URL 填入网口相机的 RTSP 地址, C10 三轴云台的图像(需要接 C10)RTSP 地址 rtsp://192.168.144.108:554/stream=0



以 H30 遥控器 QGC 地面站为列做参考连接数传

General	Create New Link (Configuration
Comm Links	Name Q	
Offline Maps	Automatica	Ily Connect on Start
MAVLink	High Latend	су
Console	Туре ТСР	-
Help	Server Address	192.168.144.101
	Port	14550

①点击 Comm Links(通讯连接)①点击 General(常规)

②点击 ADD 添加,将 Type(类型)更改为 TCP,Name 命名。

③串口 0: Server Address(服务器地址)改为 192.168.144.101 Port 监听端口改为 14550 串口 1: Server Address(服务器地址)改为 192.168.144.101 Port 监听端口改为 14551 ④点击 OK 进行保存



如何联网

遥控器可以通过三种方式联网:

- (1) 连接 2.4G 或 5G 的 wifi 联网
- (2) 通过遥控器端的 WAN 口联网
- (3) 插 SIM 卡上网。

如何共享数传、图传



1.共享数传

(1) 遥控器通过网线连接电脑网口。

注意:遥控器地面站必须断开连接!

(2) 打开电脑设置->点击适配器->选择以太网->选择IPV4协议->选择自定义IP地址->按图中的方式 输入->点击确认(见下图)。

← 投票	😰 网络连接	- 🗆 X
☆ 以太网	← → ↑ ▼ ≪ 网络和 Int → 网络连接 442 ★用此网络设备 诊断这个连接	✓ ひ 戸 搜索"网 » 際 ▼ ■ Ø
リーロン 以太网 未连接	WLAN newifi_ODA8_5G, 共享的 Realtek 8821CE Wireless LAN	
相关设置 更改适配器选项 更改高级共享设置	世界内核接接 Albig Bluetooth Device (Personal Ar] ^②
🔋 以太网 應性	× Internet 协议版本 4 (TCP/IPv4) 雇性	×
网络	業規	
连接时使用:	如果网络支持此功能,则可以获取自动推	鎃的 IP 设置。否则,你需要从网
Realtek PCIe GbE Family Controller	格素统管理员处获得造当的 IP 设置。	
配置(C 此连接使用下列项目(O):	·····································	
☑ 聖 Microsoft 网络客户端	● 使用下面的 IP 地址(S); IP 地址(0);	192 . 168 . 144 . 10
 ✓ ΨMicrosoft 网络的文件和打印机共享 ✓ ΨQoS 数据包计划程序 	子网捷码(U):	255 . 255 . 255 . 0
✓ <u>Internet</u> 协议版本 4 (TCP/IPv4) ③ Microsoft 网络适配器多路传送器协议	默认网关(D):	192 . 168 . 144 . 1
 Microsoft LLDP 浙汉派动理序 ☑ ▲ Internet 协议版本 6 (TCP/IPv6) 	○ 自动获得 DNS 服务器地址(图)	
 ✓ ● 範路県拓扑发取順応程序 	> ● 使用下面的 DNS 服务器地址(E):	
安装(N) 卸载(U) 屬性(R)	首选 DNS 服务器(P):	2. 2. 2
描述	备用 DNS 服务器(A):	
传输控制防火/internet 防火。该防火是軟化的厂域网络防火 于在不同的相互连接的网络上通信。	用 □退出时验证设置(L)	⑤
确定	欧洲	确定取消

(3) 打开电脑 Mission Planner, 连接方式选择 TCP



(4) 点击连接后, 输入 IP: 192.168.144.101 输入完成后点击 OK

🚽 remote host			×
nter host name/ip	(ensure remote end	l is already	started)
92.168.144.101			
		0K	Cancel

- (5) 串口 0 端口号选择 14550 输入完成后点击 OK 连接(见下图)
- (6) 串口 1 端口号选择 14551 输入完成后点击 OK 连接

remote Port		×
ater remote port		
4550		
	OK	Cancel

2.共享图传

Ъ.

按上面所述连接好网线,共享数传->设置以太网固定 IP 地址。

下载 VLC 软件来进行显示图像



① 打开电脑 VLC 软件, 在媒体中选择网络串流

媒体(<u>M</u>)	播放(L)	音频(<u>A</u>)	视频(⊻)	字幕(<u>T</u>)	工具(S)	视图(1)	帮助(<u>H</u>)
打开	Ŧ文件(E)		Ct	rl+0			
▶ 打开	F多个文件(0	<u>_</u>)	Ct	rl+Shift+(C		
打开	T文件夹(E)		Ct	rl+F			
🕤 राम	Ŧ光盘(D)	-	Ct	rl+D			
₩ 打开	干网络串流([<u>N</u>)	Ct	rl+N	1		
ゴ 打开	F捕获设备(0	<u>_</u>)	Ct	rl+C			
从身	察站板打开位	2置(L)	Ct	rl+V			
打开	于最近媒体(图	<u>R</u>)			•		
将招	動列表保有	序为文件(E)	Ct	rl+Y			
转扬	英/保存(R).		Ct	rl+R			
(**) 流(<u>(2</u>		Ct	rl+S			
在把	動放列表末端	起出					
子 退出	H(Q)		Ct	rl+Q			

② 在网络 URL 的输入栏中,输入 rtsp://192.168.144.108:554/stream=0 后③点击播放

🛓 打开媒体							×
▶ 文件(星)	📎 光盘(1)	₩网络(1)	🍯 捕获设备 (D)				
网络协议							
请输入网络	URL:						_
rtsp://192	. 168. 144. 108:5	54/stream=0					- 2
http://@: rtp://@: mms://mm rtsp://s http://w	ww.example.com 1234 s.examples.com erver.example.com ww.yourtube.com	/stream.aví /stream.asx org:8080/test.: n/watch?v≖gg64:	idp t				
] 显示更多选项	ξ(<u>M</u>)					-	
				③ 播放	(<u>P</u>) •	取消	(<u>C</u>)

常见问题与解决办法

1、遥控器可以安装其他 APP 吗?

遥控器端权限全开放,没有任何专用软件和限制软件的安装与卸载。

2、使用第三方网口摄像头如何获取 RTSP 地址

网口摄像头网段需要提前设置为144网段(ip192.168.144.XXX, 网关192.168.144.10)摄像头连接接收 机网口 0 或网口 1, 引脚定义见本文《一、概述->5.端口定义图》部分。可以网口摄像头先连接电脑 ,用电脑VLC 先用 144 网段的 RTSP 拉流此 RTSP 地址需和网络摄像厂家询问,在接入接收机。打开 H30 助手,打开视频查看点击设置(虚拟按键),点击视频流地址,输入电脑 VLC 输入的 RTSP 开头 的链接。

3、数传无法连接

飞控数传线连接串口 0, 飞控 RX TX 到接收机需要反接正确接法 RX 接 TX, TX 接 RX。检查地面站是 否是 TCP 的类型去连接遥控器,地址为 192.168.144.101 监听端口是否为 14550。检查波特率是否与 飞控相同。

4、无法共享数传或图传

请检查网线是否有连接到遥控器,以太网是否设置了静态 IP, 网口摄像头网关 192.168.144.10

5、遥控器如何进入快充模式?

必须使用专配的充电器才会进入快充模式,方可进入快充。

三、保养、维修

长期停放时的维护、保养

将遥控器存放于干燥通风处,减少阳光直射以防止电池过热。若需存放超过一个月,必须定期将遥控 器电池充电至70-80%存放,以免造成电池电量耗尽亏电。推荐的存放温度区间为 22 摄氏度至 28 摄 氏度。切勿将电池存在于低于零下 20 摄氏度或高于 45 摄氏度的场所。

四、运输、储存

警告

为避免可能的伤害和损失,务必遵守以下各项:

由于线材和小零件可能对儿童造成危险,所以务必让儿童远离遥控器的部件。

注意

1) 切勿让遥控器浸入水中,若入水,请及时用松软干布擦拭,并立即关闭电源,返回本公司售后。
 2) 禁止机械撞击、碾压、刺穿电池,禁止将电池跌落;

五、售后地址与技术支持

售后或退换货地址:福建省泉州市丰泽科技路育成基地 A 幢 2 楼 收件人: 王先生, 电话: 18876386351 (售后: 寄回请附纸条, 写明联系方式, 回寄地址, 寄回原因等, 方便处理, 否则不予处理。退换货: 寄回请附纸条, 写明联系方式, 退货原因等, 保留出库单, 原包装, 未写明发回原因导致的损失由发 回方自行承担 拒收到付件)

六、其他



QQ群

微信公众号



新浪微博



优酷平台

说明书如有更新, 恕不另行通知, 请持续关注官网www.skydroid.xin

SKYDROID 云卓

泉州云卓科技有限公司 www.skydroid.xin





Skydroid-H30 R30 V1.4 User manual

SKYDROID 云卓

Attention

This product uses the following terms to classify the potential hazards that may be caused by improper operation.

Note: If not follow the instructions, it may cause property damage and minor injuries.

Note: If not follow the instructions, it may cause property damage, major accidents and serious injuries.

Warning: Misuse of this product may result in injury, damage or loss of property. Read the manual carefully before using this product. This item is not a toy. This item is intended for use by professional UAV operators and installers only. Donot use this product if you lack the knowledge and expertise to install and maintain UAV radio equipment. Do not use unapproved or unofficial components with this system. Operators must strictly follow the operation guides set forth in this manual. Skydroid does not accept any liability for the use or misuse of this product.

A. Overview

1、Product Features

(1) The H30 uses the newest Qualcomm Snapdragon 660 8-core processor, equipped with an Android 9 (64bit) embedded system and advanced SDR technology, also with a super protocol stack to make the image clearer, lower latency, longer distance transmission, and stronger anti-interference. Wildly applied for drones, Robots, industrial controlled equipment, etc.

(2) Supports rich interfaces such as HDMI, RJ45, sensor interface, dual serial ports passthrough transmission, SBUS, aerial photography, FPV security, fire protection, power, mapping robot, border control, etc.

(3) Equipped with IP65 waterproof, dust-free structural design, ensuring not only good using feel but also durability.H30 uses 10.1-inch FHD high-brightness IPS LCD screen display, which can be viewed clearly under the sun. The resolution is 1920*1200. Supports 1080P high-definition digital image transmission. The dual-3 frequencies antenna signals complement each other, with super-strong signals and ultra-long transmitting distances, combined with algorithm control and out-of-step frequency hopping algorithms, greatly increasing the ability to communicate with weak signals. So you don't need to worry about the flight distance during flight operations, just explore a wider scenery. Built-in dual speakers, triple frequencies as 800M, 1.4G, 2.4G, WiFi 2.4 & 5G.

(4) Integrated with high energy density lithium ion battery, can work for 5 hours after full charging. The consistent survival thinking in the wilderness allows you to have no concerns about the reliability of our equipment.

(5) H30 supports rich interfaces such as HDMI, SIM card, USB, Type-C, RJ45, PPM and dual serial port passthrough transmission, dual net ports and SBUS for the R30. And supports many brands cameras, pan-tilts, pods and other video equipment. Provide development kit, SDK and technical support, support video suspension, support ground station of mainstream flight control, support QGC and wireless RTSP video stream sharing.

(6) The use of weather silica gel, frosted rubber, stainless steel, and ABS makes the extreme operating feel, and also meets the harsh conditions of outdoor use of drones..H30 is dust-free in the fuselage, control switches, and various peripheral interfaces. Protective measures such as splashing can ensure stable and smooth operation of the equipment in harsh environments.

(7) Rich ground-end interface, RJ45 network interface, long-distance connection to the internal network, Type-C Android high speed USB interface, OTG interface can be connected to U disk and network card, etc., expanded TF card slot.

(8) An independent 2-dimensional gimbal joystick makes the gimbal flying with great facility, like a duck to water.

2、Main purpose and scope of application

It is used to remotely operate helicopters, fixed wings, multi-rotors, vehicles, ships, etc. for video image transmission (optional camera), data transmission, and control drone flight.

3、Specifications

Remote Controller Specification						
Model No.	H30	Channels	16			
Working voltage	4.2v(Battery built-in)	RF Power	23dBm@CE/FCC			
Frequency	800M/1.4G/2.4G	Dynamic FM	supports frequency hopping across frequency bands			
Size	346(L)*196.5(W)* 89.4(H)mm	Weight	1.5kg			
Endurance	5 hours	Battery	20000mA/H			
Update way	APP Update online	Charging port	TYPE-C			
Run memory	4G	Store memory	64G			
Applications	Helicopter, fixed wing, multi-rotor, unmanned vehicle, unmanned boat, etc.					

Receiver Specification						
Model No.	R30	Channels	16			
Working Voltage	7.2V~72V	RF Power	23dBm@CE/FCC			
Size	76.4(L)*59(W)* 15(H)mm	Weight	65g			

4. The composition of the model and its significance



Number	Annotation	Number	Annotation
1	800M/1.4G/2.4G Three working frequencies antenna	9	MIC
2	Knob switch AUX1	10	Key button H
3	Three levers switcher SW1	11	R2 button
4	Left joystick X1、Y1	12	R1 button
5	Small left joystick X3 、Y3	13	Small right joystick X4 、Y4
6	L1 button	14	Right joystick X2、Y2
7	L2 button	15	Three levers switcher SW2
8	Power button	16	Knob switch AUX2





Number	Annotation	Number	Annotation
17	HDMI	21	RJ45
18	SIM card slot	22	TF card slot
19	USB	23	PPM
20	TYPE-C	24	Wrapping connector







Number	Annotation	Number	Annotation
1	Serial port 0	7	Binding key
2	Serial port 1	8	Network port 0
3	Reserved port (unavailable)	9	Network port 1
4	Power supply 7.2~72v input and SBUS	10	External binding key
5	Туре-с	11	MMCX
6	Binding status indicator		

5、Port Definition Diagram



6、Environment conditions

Pay attention

- A) Working temperature:-10°C \sim +55°C.
- B) Storage temperature:- $25^{\circ}C \sim +70^{\circ}C_{\circ}$
- C) Relative humidity:Not exceed 85%。
- D) Atmospheric pressure:86kPa~106kPao
- E) Working environment should not contain explosive material or any corrosive or harmful gas may cause interference in the operation of the product.
- F) Always work under shelter to prevent rain, snow, wind, sand and dust contamination.

7、Working conditions

Power supply and attentions

H30 series uses a built in Li-ion battery. Charging port is compatible with common Type-C (such as cell phone, digital cameras' USB charger).

In case of smoke, heat or unusual smell during charging, please stop charging immediately and return to our company for servicing as soon as possible.

Do not leave the product unattended while charging. Do not leave the product in a place where children can reach. Do not charge when room temperature over 60 $^\circ\!C.$

8、Safety

Warning

Beginners should pay attention for the followings! Please read it carefully!

- Ø DO NOT fly under the influence of substances, or when tired!
- O NOT fly in strong wind and or rainy conditions!
- Ø DO NOT fly close to electric emission towers, communication stations and crowded area!
- O NOT fly nearby airports and other prohibited areas!
- O NOT fly around people or animals, or in any location where possible to damage property.
- ▲ Check equipment before every flight and check whether the transceiver system and the aircraft are normal or not.
- ① Please use certified chargers to charge the batteries.
- ① DO NOT put unnecessary force on antennas, joystick and screen since their weakness.



B. Operation

1、Preparation and pre-checking before use

Pay attention

- ① Check battery level.
- ② Check position of the antenna to get the best performance .
- ③ DO NOT operate under the influence of alcohol or drugs.

2、Operation

Language setting

① Enter system setting, choose your language and input method



O Once entering language and input method choosing, you can add/cancel/choose the language you want



H30 Assistant

2 ● 🙆 ÷♥	ŝ
130Tool	
STICK MODE	
VIDEO VIEWING	
CHANNEL MONITORING	
WIRELESS PARAMETER CONFIGURATION	
SIGNAL	
ADVANCED OPTIONS	
< • B	

①Mode setting: Switch the operating mode of the remote control's joystick (mode type: Mode 1, Mode 2. Default Mode 2), 1. Read 2. Set 3. Save.

②Video viewing: You can view RTSP videos (detailed on the next page)

③Check whether the values of each channel of the remote controller are normal or not

Н30	Tool		
сн1	1500	СН9	1680
с н 2	1500	CHIO	1050
0112	1500	0411	1500
	1500	0412	1500
014 -	1500	0112	1500
	11500	0114	1500
0117	1500	01114	1615)
СН7 —	1500	сні5	1950
сна –		CHI6	

W Wireless parameter configuration. Binding the remote control with other receivers (the binding method is described below: image connection and settings)

⑤Signal viewing (viewing signals)

(In the advanced setting, the receiver's serial port baud rate, remote control parameter adjustment, device upgrade, SN, coaching mode (under development), and wireless module upgrade can be adjusted and modified (password: 999, for professional debugging only)



Binding

Network Network Binding port 0 port 1 interface					-
		Network port 0	Network port 1	Binding interface	

H30Tool
Frequency matching status: Connected FREQUENCY MATCHING
Select frequency band: 1.4G Frequency point-Settable range: (24015-24814,8060-8259,14279-14679),(0-5) Select bandwidth: 10M 14379 SAVE
Flight Mode 🌑

Note: that the complete set of remote controller and receiver is already binding before leaving the factory. You only need to power on and wait for 20 seconds for automatic binding.

①Power on the receiver, the power light - red light is always on. After waiting for 20 seconds, press and hold the receiver SET binding key - the blue light flashes and then release it; Replacement controller or receiver requires a new frequency binding.

②Enter the H30 Assistant APP and click binding. Binding status: on binding... After successful binding, the status will show "Connected" and "Binding succeeded" (the receiver's green light is always on).

	Set addr	ress
Video address:	Set addr rtsp://192.168.144.108:554/stream=0	ess
Video address:	Set addr rtsp://192.168.144.108:554/stream=0 cancel	'ess Confirm
Video address:	Set addr rtsp://192.168.144.108:554/stream=0 Cancel	ess Confirm
Video address:	Set addr rtsp://192.168.144.108:554/stream=0 Cancel	Confirm

Video/Image Connection and Settings

The network segment of the network portal camera needs to be set to 144 network segments (192.168.144.XXX) in advance. The camera connects to the receiver network port 0 or network port 1. For pin definitions, see "I. Overview ->5. Port Definition Diagram" in this article.

Settings: This setting displays the transmission of images through the air unit network port, and displays the C10 three-axis gimbal camera (when C10 is connected)

rtsp://192.168.144.108:554/stream=0 . If want to install a third-party gimbal camera, you need to ask the camera manufacturer for the rtsp address.

How to display telemetry and image transmission on H30's ground station



FC's data cable connects to the serial port 0, take Skydroid tower shows telemetry as an example (H30 Assistant should be quit)



Skydroid tower:

Serial port 0: Server IP: 192.168.144.101 Server port: 14550 Click to connect directly. Serial port 1: Server IP: 192.168.144.101 Server port: 14551 Click to connect directly. C10 three-axis gimbal connects to network port 0 or network port 1, take Skydroid tower showing video/picture transmission as an example.



->Common Settings ->Other Settings ->User Interface ->Video Window ->C10 (Display C10 camera) ->Customization (Input RTSP Address to Display Other Cameras)
 ->C10 (Display C10 camera)

Widgets Widgets Preferences			
Video Preferences			
Maps Maps Providers google map			
Map Provider Preferences Configure the selected map provider	Video List		
Editor Enable zoom to fit Check to enable the ability to zoom when add an item to mission	🗖 FPV window 🛛 🗹 C10		
Vehicle History Create Telemetry Logs While Armed Check to enable the ability to Create Telemetry Loos While Armed. C	Wherwise, Create Leternetry Loas While Connected.		
Localization Unit System			
Auto			
=		\neg	 → as: 0.0 mph → gs: 0.0 mph → vs: 0.0 mph
	Auxiliary line set Show reversing assist line HIDE		
	Auxiliary line set Show crosshar Show reversing assist line HIDE		$\begin{array}{c} \bullet \\ \bullet \\ \bullet \end{array}$

->Customization (Input RTSP Address to Display Other Cameras)

Take QGC in H30 to show video transmission as an example (H30 Assistant should be quit)



Click the Q icon in QGC to enter the settings.

①Click on General

②Change the Source to RTSP Video Stresm

 \Im Fill in the RTSP URL with the RTSP address of the network camera and the image of the C10 three-axis gimbal (which needs to be connected to C10) RTSP address rtsp://192.168.144.108:554/stream=0



Take QGC in H30 to show telemetry as an example



①Click on Comm Links

②Click ADD to change the Type to TCP and name it as Name.

 ③Serial port 0: Server Address changed to 192.168.144.101 Port listening port changed to 14550 Serial port 1: Server Address changed to 192.168.144.101 Port Listening port changed to 14551
 ④Click OK to save



How to connect the internet

The remote control can be connected to the Internet in three ways:

- (1) connected to 5G wifi network
- (2) connected to the RJ45 port of the remote control
- (3) inset a SIM card

How to share internet, video/image transmission and data/telemetry transmission



1.Sharing telemetry

(1) The remote controller is connected to the computer network port through a network cable. **Note:** The remote control ground station should be disconnected!

(2) Open "setting" in the PC, click on the "adapter", select Ethernet, select the IPV4 protocol, select a custom IP address, enter according to the method in the figure, and click "OK".





(3) Open the Mission Planner in computer and select TCP as the connection way.



(4) After clicking on the connection, enter IP: 192.168.144.101, and then click OK.

🖳 remote host	×
Enter host name/ip (ensure remote end is alread	y started)
192. 168. 144. 101	
OK	Cancel
	_

(5) Select 14550 as the port number on serial port 0, and click OK to connect (see the figure below).

(6) Select 14551 as the port number on serial port 1 and click OK.



2.Sharing video/image transmission

Connect the network cable as described above, share telemetry ->set a fixed Ethernet IP address.

Download VLC exe. to show video/image



① Open VLC and choose network streaming

à	VLC media player				-		×
Me	dia Playback Audio Video	Subtitle	Tools	View	Help		
	Open File	Ctrl+C)				
	Open Multiple Files	Ctrl+S	hift+O				
	Open Folder	Ctrl+F					
9	Open Disc	Ctrl+D)				
÷	Open Network Stream	Ctrl+N	I (1				
	Open Capture Device	Ctrl+C					
	Open Location from clipboard	Ctrl+V					
	Open Recent Media		,				
	Save Playlist to File	Ctrl+Y		ies <mark>– E</mark> e			
	Convert / Save	Ctrl+R					
((+))	Stream	Ctrl+S					
	Quit at the end of playlist						
E	Quit	Ctrl+C	2				
►		s				100%	1

② Enter "rtsp://192.168.144.108:554/stream=0" to URL and click "play"

🛓 Open Media — 🗆 🗙	
File Spisc Wetwork Capture Device	
Please enter a network URL:	
rtsp://192.168.144.108:554/stream=0	2
http://www.example.com/stream.avi rtp://%:1234 mnns://nnns.examples.com/stream.asx rtsp://server.example.org:8080/test.sdp http://www.yourtube.com/watch?v=gg64x	
Show more options	

Q & A

1、1.Can the remote control install other apps?

The permissions of the remote control are all open, and there is no special software or restricted software installation and uninstallation.

$2 \, {\ensuremath{\scriptstyle \times}}$ How to obtain RTSP address using a third-party webcam

The network segment of the webcam needs to be set to 144 network segments in advance (ip192.168.144.XXX, gateway 192.168.144.10). The camera connects to the receiver network port 0 or network port 1. For pin definitions, please see "I. Overview ->5. Port Definition Diagram" in this article. You can connect the network camera to the computer first, and use the computer VLC to pull the RTSP of the 144 network segment first. The RTSP address needs to be inquired from the network camera manufacturer before accessing the receiver.

Open the H30 assistant, open the video view, click Settings (virtual key), click the video stream address, and enter the link at the beginning of the RTSP input from the computer VLC.

3、Telemetry cannot be connected

The FC'S data transmission cable connects to the serial port 0, and the correct connection method is RX to TX, TX to RX is required for the flight control RX TX to receiver.

Check whether the ground station APP is a TCP type to connect to the remote controller, and whether the address is 192.168.144.101. and the listening port is 14550. Check whether the baud rate is the same as the flight control.

4. Unable to share telemetry or image transmission

Please check whether the network cable is connected to the remote controller, whether the Ethernet has a static IP address set, and whether the webcam gateway is 192.168.144.10

5、How does the remote control enter the fast charge mode?

dedicated charger to enter the fast charging mode.

C. Maintenance, servicing

Storage for not using certain period

Put H30 in a dry and ventilated area. No direct sun light to prevent harm to the internal li-ion battery. If store it over one months, it is highly recommended to put room temperature between 22°C to 28 °C while need keeping the battery around 70%~80%. DO NOT put it below 20 °C or higher than 45°C.

D. Transportation and storage

Warning

In order to prevent lost or getting hurt, please strictly follow the rules of operation:

Keep small parts or wire away from children can reach. DO NOT let children touch the small parts of the H30.

Attention

- 1) DO NOT put H30 into water. If it does, please switch off the power and dry it at once!
- 2) DO NOT crash the H30 or break the battery is prohibited.

E. Others





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