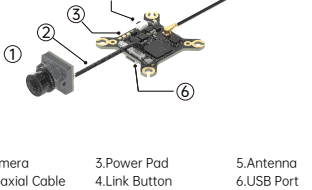


Ascent Lite VTX

Quick Start Guide

V1.1

Introduction



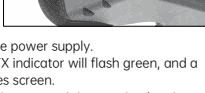
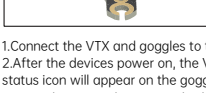
- | | | |
|-----------------|---------------|------------|
| 1.Camera | 3.Power Pad | 5.Antenna |
| 2.Coaxial Cable | 4.Link Button | 6.USB Port |

Connection



- | | |
|--|------------|
| 1. Power in 3V~12.6V | 5. USB-DP |
| 2. Power GND | 6. USB-DN |
| 3. Uart RX(Connects to Flight Controller TX) | 7. USB-GND |
| 4. Uart TX(Connects to Flight Controller RX) | 8. USB-5V |

Linking



- 1.Connect the VTX and goggles to the power supply.
- 2.After the devices power on, the VTX indicator will flash green, and a status icon will appear on the goggles screen.
- 3.Press the pairing buttons on both the VTX and the goggles (as shown in the figure). When entering pairing mode, the VTX indicator turns red, and the goggles emit "beep... beep... beep..." sounds.
- 4.Once pairing is successful, the VTX indicator turns solid green, the beeping stops, and the video transmission image is displayed on the goggles.

Upgrade

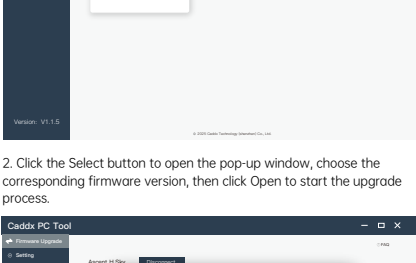
Please visit the official website to download the latest firmware. The file Ascent_H_Sky_XX_X_XX.img corresponds to the VTX firmware. Do not rename the file.

When upgrading the Ascent VTX, connect it to your computer using a Type-C USB cable, and open the Caddx_PC_Tool on your computer. Once the USB connection is established, follow the on-screen instructions to select the Ascent_H_Sky_XX_X_XX.img firmware file and start the upgrade process.

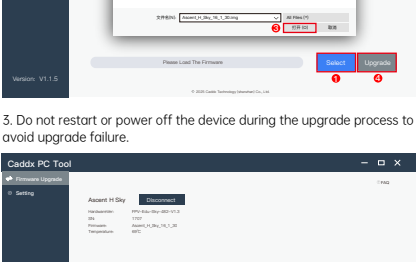
Notes:

- 1.When the Ascent VTX is connected to the computer via Type-C, no external battery is required, the USB port provides power to the module.
- 2.Do not disconnect the USB cable during the upgrade. Disconnect and reconnect it only after the upgrade is successfully completed.

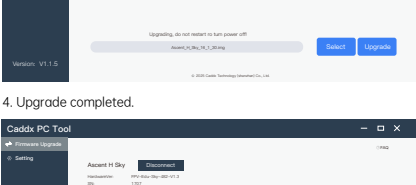
1. Click the Ascent H Sky connection option.



2. Click the Select button to open the pop-up window, choose the corresponding firmware version, then click Open to start the upgrade process.



3. Do not restart or power off the device during the upgrade process to avoid upgrade failure.



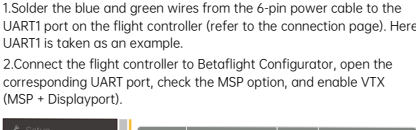
4. Upgrade completed.

FC OSD

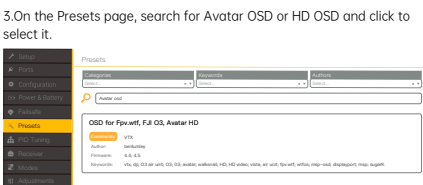
Betaflight 4.5 or later settings

By connecting the VTX serial port to the flight controller, you can access the flight controller's OSD information. Using Betaflight Configurator 10.10.0 with firmware version 4.5.0 as an example, the serial port configuration method is described below.

- 1.Solder the blue and green wires from the 6-pin power cable to the UART1 port on the flight controller (refer to the connection page). Here, UART1 is taken as an example.
- 2.Connect the flight controller to Betaflight Configurator, open the corresponding UART port, check the MSP option, and enable VTX (MSP + Displayport).

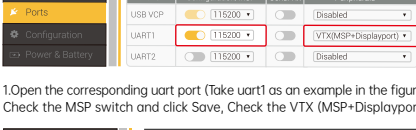


- 3.On the Presets page, search for Avatar OSD or HD OSD and click to select it.

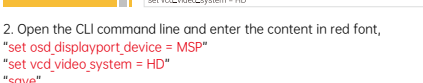


- 4.On the OSD page, configure the information you want to display.

Betaflight 4.4 version



- 1.Open the corresponding uart port (Take uart1 as an example in the figure). Check the MSP switch and click Save, Check the VTX (MSP+Displayport).



2. Open the CLI command line and enter the content in red font, "set vod_video_system = HD"

"set vod_video_system = HD"

"save"

Status indication

VTX Indicator Status	
Link state	Steady red light
upgrade frmware	Red light rapidly flashes
Wireless connection, image output is normal	Steady green light
Wireless not connected	green light rapidly flashes
Wireless connection is normal, image is abnormal	green light slowly flashes

Precautions

1. Before powering on, please install all antennas to avoid damage to components.
2. When the standby mode is turned on, the power is limited to 10mW. Before taking off, you need to unlock the flight control or turn off the standby mode.
3. If you use it with other 5.8GHz devices at the same time, please choose a different channel.
4. If you use the Gyroflow function of the camera, please provide shock absorption for the fixed deck of the camera to avoid the failure of the anti-shake.

Specification

Name	Ascent Lite VTX
Model	WN13-4S09B
FCC IC	2BHG9-WN13-4S09B
Communication Frequency	5.730-5.815 GHz
Transmit Power (EIRP)	FCC/SRRC: < 20dBm; CE: < 14dBm
I/O Interface	JST1.0*4 (Power cord); HSG0.8*5 (USB)
Channels	3
Wide Voltage Input	3V~12.6V
Supported FC Systems	Betaflight; Inav; Fettec; Kiss; ArduPilot
Bitrate	25mbps
OSD	Canvas mode
End-to-End Latency	Average latency35ms
Antenna	1 (Ipx-1)
Operating Bandwidth	5M/ 10M/ 20M/ Auto
Image Sensor	1/2.8 inch
Resolution	1080P/ 60fps, 720P/ 100fps
Ratio	16/ 9
Mounting Hole	25mm
Weight	6g (Antenna not included)
Dimensions	Camera: 12*14*15mm VTX: 30.5*30.5*3.5mm

CADDXFPV Support

email: support@caddxfpv.com

This content is subject to change.Download the latest version from

https://www.caddxfpv.com