RunCam RunCam

RunCam Link Vista Air Unit Lite Module Instruction Manual

Brand: RunCam | Model: RunCam

Product Overview

The RunCam Link Vista Air Unit Lite Module is a compact and lightweight digital FPV video transmission system designed for FPV drones. It offers stable and clear HD video transmission, adjustable output power, and compatibility with various FPV cameras. This module is engineered to minimize weight and size, featuring 20x20mm mounting holes for easy integration into drone frames.
Key features include 720P/60fps footage with excellent low-light performance, low-latency and long-range transmission up to 4 km, and an embedded remote controller receiver for seamless connection with DJI FPV Remote Controllers. It supports up to eight drones flying simultaneously, each with an exclusive channel to reduce interference.

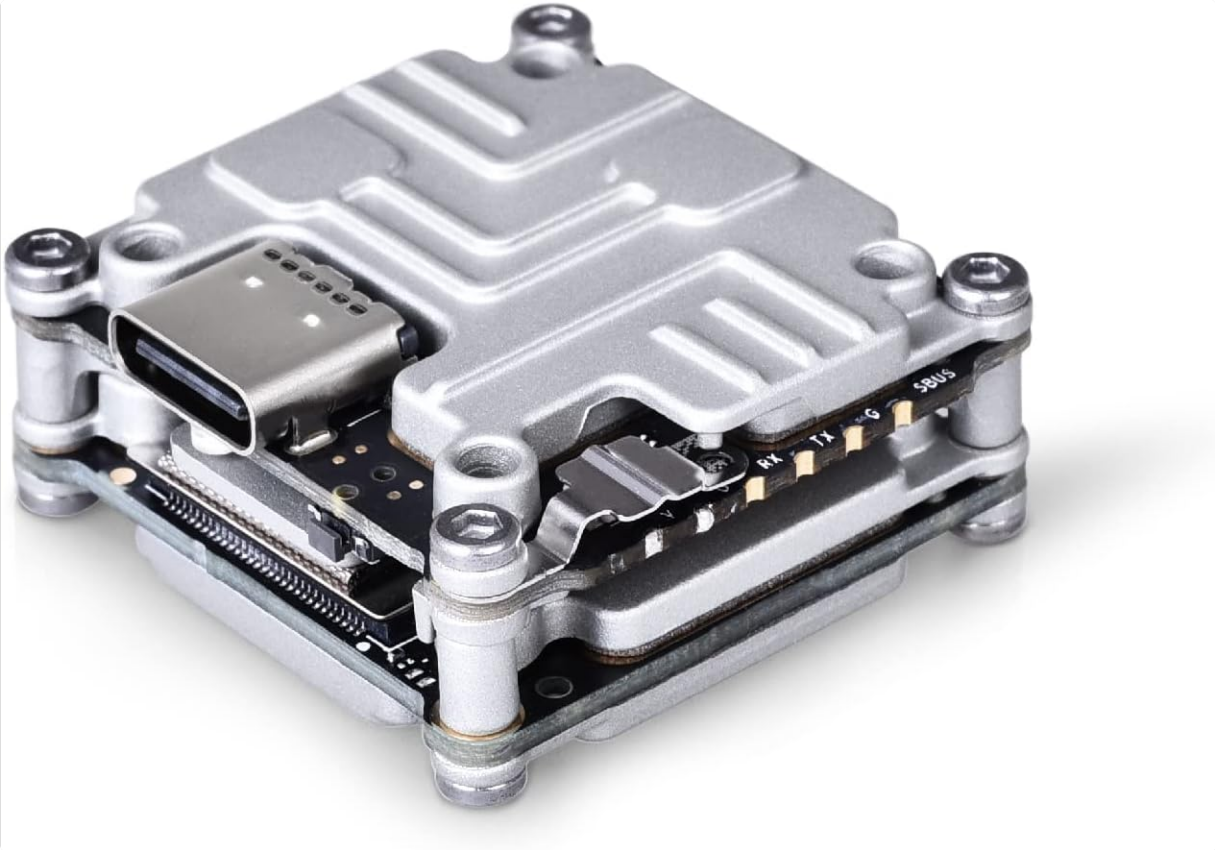


Figure 1: Front view of the RunCam Link Vista Air Unit Lite Module.

Included Components

The RunCam Link Vista Air Unit Lite Module package typically includes the following items:

- 1 x RunCam Link VTX
- 1 x Cable

Figure 2: Product packaging and included components.

Setup and Installation

Follow these steps to set up and install your RunCam Link Vista Air Unit Lite Module:

1. **Module Orientation:** Ensure proper orientation of the module within your drone frame. The module features 20x20mm mounting holes for direct installation.

Figure 3: The module is compatible with 20x20mm and 25.5x25.5mm installation sizes.

2. **Cable Connection:** Connect the provided cable to the module. This cable facilitates connection to your flight controller and camera.

Figure 4: Diagram showing cable connection between the module and camera.

3. **Power Connection:** The module requires an input power of 7.4-26.4V. Connect the power wires to your drone's

power distribution board or flight controller.

4. **Antenna Connection:** Connect the U.FL IPEX3 antenna to the module. Ensure a secure connection for optimal signal transmission.
5. **Activation (if required):** For initial setup or firmware updates, connect the module to a computer via its USB-C port. Follow the instructions provided by RunCam software for activation and configuration.

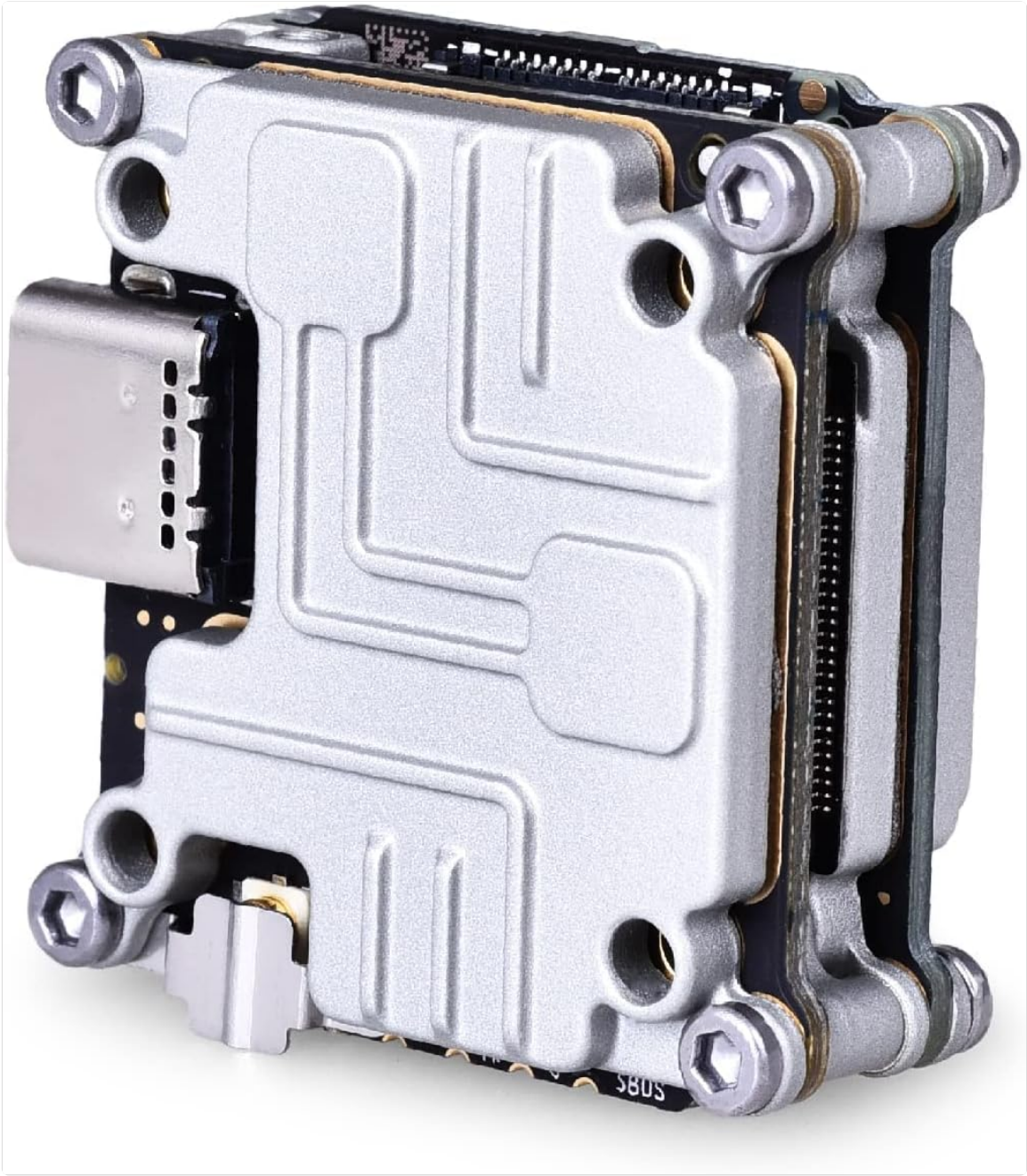


Figure 5: Close-up view of the USB-C port on the module.

6. **Heat Sink:** The heat sink is included by default. Removal of the heat sink eliminates weight, but may cause overheating of the unit. It is recommended not to remove the heat sink. If necessary, please be cautious when flying and once your battery is connected, fly immediately. The airflow will keep the unit cool.

Operation

Once installed and powered, the RunCam Link module provides a digital FPV video feed. It supports various transmission power levels (25mW/200mW/500mW/700mW) and offers low-latency video for responsive control. The embedded DJI remote controller receiver allows for direct connection without additional receivers, simplifying flight preparation.
The system operates on 5.725-5.850GHz frequency and can achieve transmission distances of up to 4 km (FCC/SRRC) or 0.7 km (CE). It supports both Low Latency Mode (720p 120fps) with 21-28ms latency and High Quality Mode (720p 60fps) with 30-40ms latency.

Specifications

Brand	RunCam
Model Name	phoenix
Weight	19g (unit only)
Dimensions	30x29x13mm
Antenna Connector	U.FL
Operating Frequency	5.725-5.850GHz
Transmitter Power (EIRP)	FCC/SRRC/MIC: <30dBm / CE: <14dBm
Max. Transmission Distance	FCC/SRRC: 4km / CE: 0.7km
Min. Latency (end-to-end)	Low Latency Mode (720p 120fps): 21-28ms High Quality Mode (720p 60fps): 30-40ms
I/O Interface	USB-C, Ipex3, 3-in-1 port
Supported Flight Controller System	F3 / F4 / F7
Input Power	7.4-26.4V
Power Output	25mW / 200mW / 500mW / 700mW

Figure 6: The module weighs approximately 18.8 grams.

Maintenance

To ensure the longevity and optimal performance of your RunCam Link Vista Air Unit Lite Module, consider the following maintenance tips:

- Keep the module clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Avoid exposing the module to extreme temperatures or moisture.
- Regularly check all cable connections for looseness or damage.
- Ensure adequate airflow around the module during operation to prevent overheating, especially if the heat sink is removed.

Troubleshooting

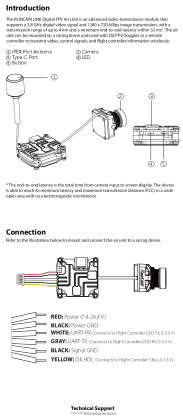
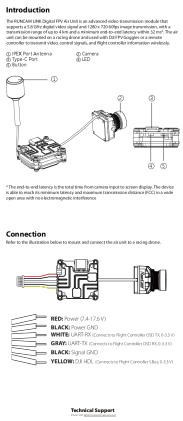
If you encounter issues with your RunCam Link Vista Air Unit Lite Module, try the following troubleshooting steps:

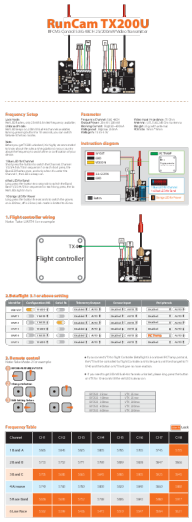
- **No Video Feed:** Check all power and signal connections. Ensure the camera is properly connected and powered. Verify that the module is activated.
- **Poor Video Quality:** Check antenna connection and ensure it is not obstructed. Verify transmission power settings. Ensure there is no significant interference in your flying environment.
- **Overheating:** Ensure the heat sink is properly installed and that there is sufficient airflow around the module. Avoid prolonged operation on the ground without active cooling.
- **Connection Issues with Remote Controller:** Ensure the DJI FPV Remote Controller is properly linked with the Air Unit. Refer to the DJI FPV system manual for linking procedures.

Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the official RunCam website or contact their customer support directly. Keep your proof of purchase for warranty claims.
Note: The solder traces on the GND and BAT solder joints are caused by factory inspection and do not indicate a used product.

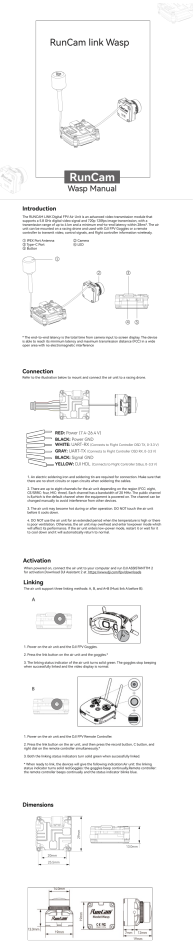
Related Documents - RunCam

	Runcam Link Digital FPV Air Unit: Specifications and Connection Guide Comprehensive guide to the Runcam Link Digital FPV Air Unit, covering its advanced video transmission capabilities, technical specifications, connection diagrams, activation process, and linking methods for FPV drone enthusiasts.
	RunCam LINK Digital FPV Air Unit: Specifications and Manual Comprehensive guide to the RunCam LINK Digital FPV Air Unit, covering its features, connection, activation, linking procedures, and technical specifications for FPV drone enthusiasts.



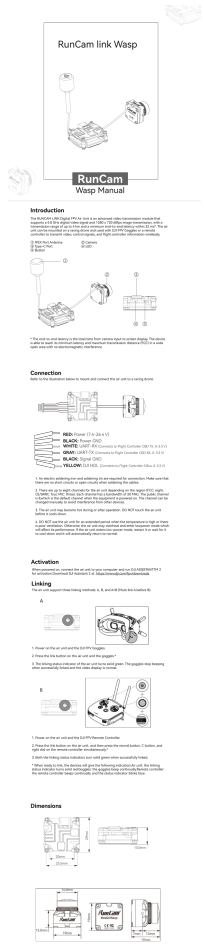
[RunCam TX200U 5.8G 48CH 25/200mW FPV Video Transmitter Manual]

This manual provides detailed instructions for the RunCam TX200U 5.8G 48CH 25/200mW FPV Video Transmitter. It covers frequency setup, parameters, wiring diagrams, Betaflight configuration, remote control operations, and frequency tables for optimal performance in FPV systems.



[RunCam Link Wasp FPV Air Unit Manual]

User manual for the RunCam Link Wasp FPV Air Unit, detailing its features, connections, activation, linking methods, and dimensions. This digital FPV system supports 5.8 GHz digital video transmission with 720p 120fps image quality and a range of up to 4 km.



[RunCam Link Wasp Manual: Installation, Activation, and Linking Guide]

A comprehensive guide to the RunCam Link Wasp digital FPV air unit, covering installation, connection, activation via DJI Assistant 2, and linking procedures with DJI FPV Goggles and remote controllers. Includes technical specifications and dimensions.

[RunCam T1 Manual: Installation, Operation, and Specifications]

Comprehensive user manual for the RunCam T1 FPV camera, covering installation, button and touch screen operations, hardware interfaces, firmware upgrades, and detailed specifications.