

Safety Notes

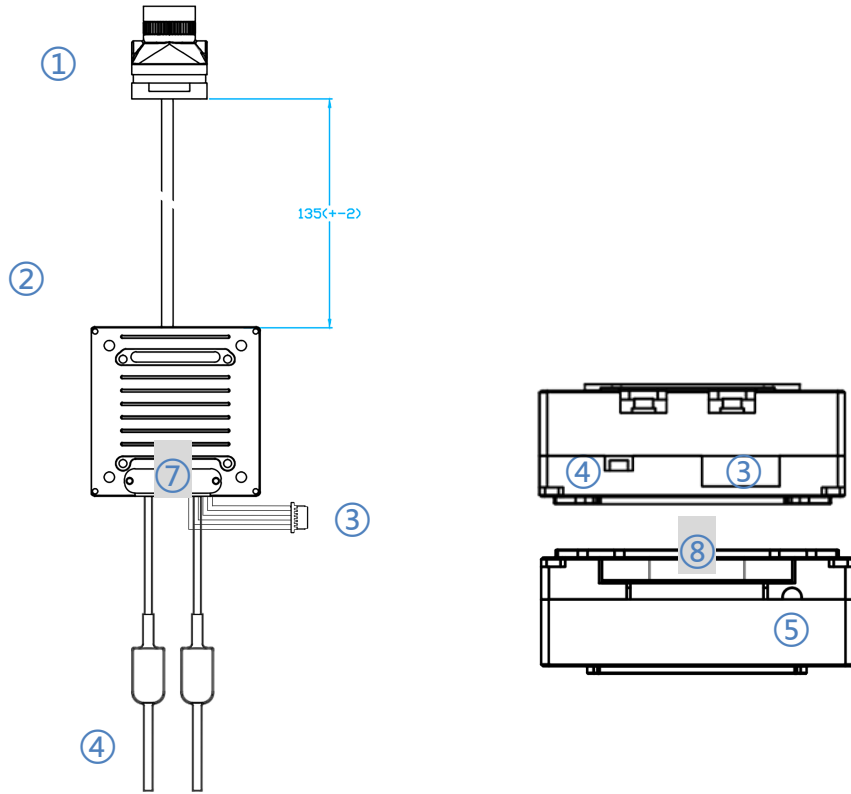
- The sky unit may become hot during use. Do not touch it directly without external cooling.
- Avoid long-term operation without active cooling, as excessive temperature may cause transmission interruption.
- Mount the sky unit in a well-ventilated location on the aircraft. Do not install it inside a sealed or poorly ventilated area.
- Upon startup, the sky unit enters a low-power mode by default to reduce heat. Image transmission performance will return to normal when the motors start or recording begins. Please take off promptly or ensure good airflow.
- Ensure input voltage is within 7.4–26.4 V (2S–6S LiPo). Otherwise, malfunction or permanent damage may occur.
- Do not short-circuit the power and GND wires or plug/unplug cables while powered on.
- Keep antennas uncoiled and unobstructed to maintain communication range.
- Follow the wiring diagram exactly as specified. Incorrect wiring may cause malfunction or damage.
- Keep sufficient distance between electronic components to minimize electromagnetic interference.
- Check that all connections are secure and all parts are functioning properly before use.
- Avoid operating near strong electromagnetic sources or devices using the same frequency band.
- Comply with local laws and regulations regarding transmission power and frequency use.
- **Configure your “Fail-Safe” settings properly: know how your flight controller behaves upon signal loss (e.g., hover, descend, or return-to-home).**
- **Maintain safe distances from people, animals, private property, and public facilities.**
- **Always have a contingency plan: if video or RC signal weakens, return safely or land immediately.**
- **This product is not suitable for children.**

Latest manual:

https://drive.google.com/file/d/1eWA9u-V-sS-WW-hP-p2tEJNy84INwk_b/view?usp=sharing



Component



1. Camera Module

2. Camera Coaxial cable

3. 3in1 Connection Cable

4. Antennas*2(IPEX-1)

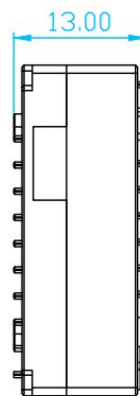
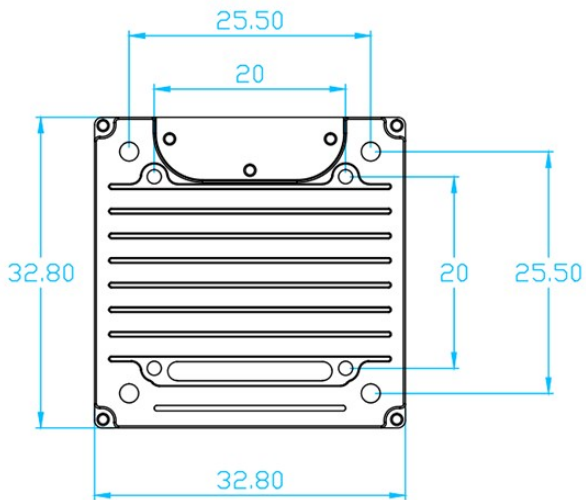
5. Bind Button

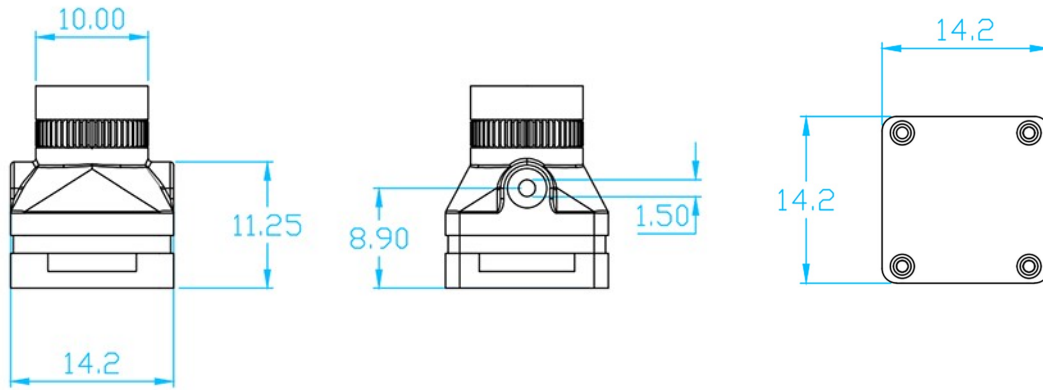
6. Bind Status Indicator

7. Antenna Lock Clip

8. Camera Cable Lock Clip

Dimensions





Installation

Do not bend or apply pressure near the root of the coaxial cable. Improper handling may result in signal loss or degraded image quality.

When idle on the ground, the sky unit's standby time should not exceed 5 minutes in ambient temperature of 25°C. Beyond this, power off to cool down to prevent RF component damage.

Proper thermal design and installation directly affect heat dissipation performance.

Installation Recommendations

Do not operate the modules bare-handed. Install them inside the aircraft body at locations with good airflow (such as near air inlets or outlets).

For Optimal Cooling:

Mount near propellers (within 1 cm) to utilize downdraft for heat dissipation.

- Connect the module to carbon fiber or other non-heating metal parts for heat conduction.
- Do not install in a fully enclosed cavity.

Antenna placement:

- Keep antennas at least 5 cm away from metal or carbon fiber parts and the modules themselves.
- Position the two antennas at 90° for optimal reception.
- Ensure antennas extend beyond the frame and are visible from the front and rear.
- Secure IPEX connectors with provided clips to prevent loosening.

Installation and Wiring

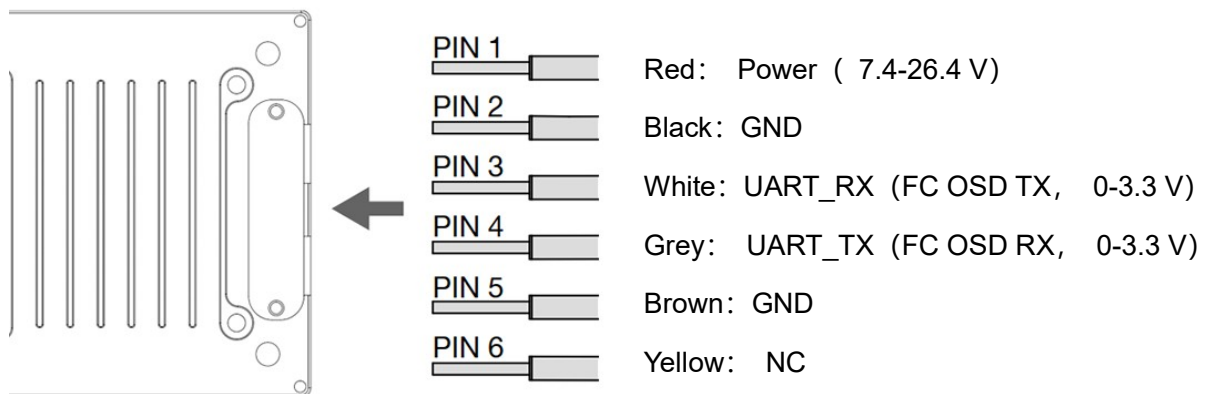
Handle all parts carefully during installation and replacement to avoid damaging components.

Tighten screws gently; do not over tighten.

Connect the 3-in-1 cable according to pin definitions. If soldering, ensure solid joints and avoid shorts.

Keep antennas unobstructed and away from metal or carbon fiber structures (>5 cm).

If powered via BEC, ensure output ≥ 13.5 W (e.g., 9 V / 1.5 A).



Binding

Power on the ground unit first, then the sky unit, keeping them within 0.5 meter .

On the goggles menu, open *Menu > Bind > OK*. Then press the Bind button on the sky unit.

Status LED: Blinking = Binding; Solid = Bound successfully.

Always install antennas before powering either unit.

Setting Transmission Power

Available power levels: 50mW/100mW/300mW /500mW /800mW /1000mW.

Set in *Goggles Menu > Power*.

- Available power levels depend on local regulations.
- When set above 500mW, the sky unit automatically adjusts between the set value and 500mW for optimal link quality.

Setting Channels

The system automatically selects the optimal channel within **5.725–5.850 GHz**.

Some channels may be restricted in certain countries due to regulations. Always comply with local frequency laws.

OSD Mode

Connect the flight controller UART TX (e.g., UART2) to the sky unit UART RX. In *Betaflight Configurator* > *Ports*, enable **MSP + DisplayPort** on the chosen UART, baud rate 115200.

In CLI:

```
set osd_displayport_device = MSP  
set displayport_msp_serial = 1 (use UART TX index - 1)  
save
```

Adjust OSD element layout in Betaflight's OSD settings.