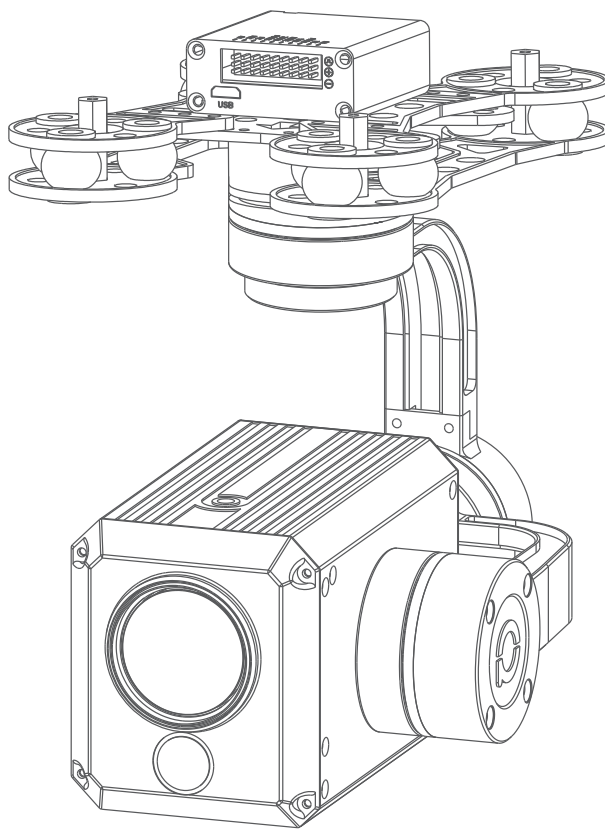




Sky Eye-25HZ

4K Object Tracking Gimbal Camera



Warning and Disclaimer

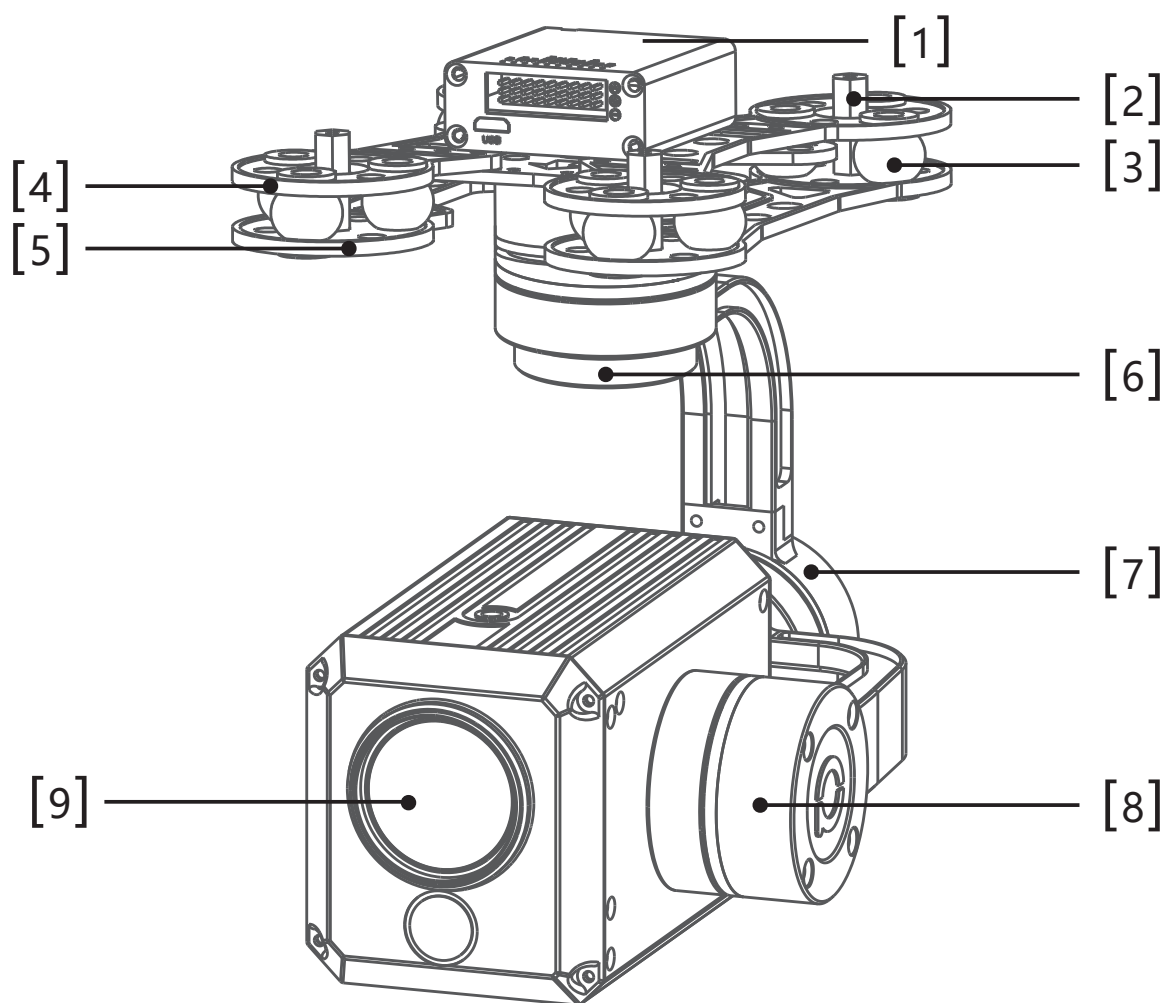
Make sure not to adjust the gimbal or change its mechanical structure by yourself. Be sure to mount the camera to gimbal before power on, and then install the gimbal on the aircraft.

To avoid gimbal performance degradation or damage caused by imbalanced payload, please do not add other peripherals for the gimbal camera (filter, hood, etc.). When in aerial photography, make sure your aircraft flight control system is working at the safe mode.

We strongly recommend that you remove aircraft propellers before doing gimbal configuration. Use extra non-power battery for gimbal. Keep children away from the preset flight region.

Considering that we are not able to control user's specific usage, installation, assembly, modification (including the use of non-specified parts), and improper use. Direct or indirect damage or injury caused by the behavior above, our company will not cover any loss and responsibility.

Gimbal description



[1] Control box

[3] Damping ball

[5] Lower damping board

[7] Roll axis motor

[9] HD zoom camera

[2] Gimbal fixed copper cylinder

[4] Upper damping board

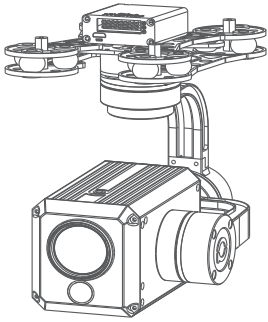
[6] YAW axis motor

[8] Pitch axis motor

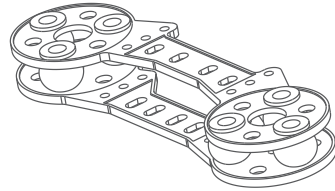


Please make sure that the motor is not stopped by any object during the rotation, if the gimbal is blocked during rotation, please remove the obstruction immediately.

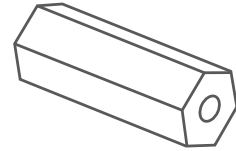
Packing List



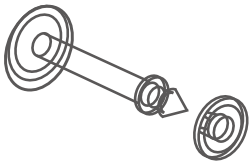
Gimbal camera*1



Damping board*2



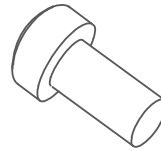
Copper cylinders*4



Anti shedding buckle*4



5mm*12

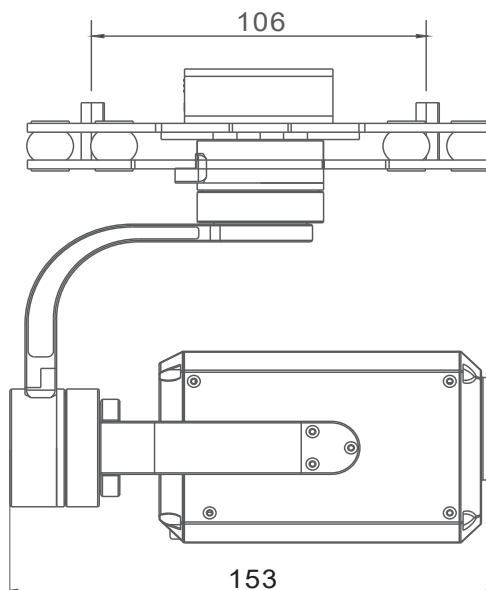
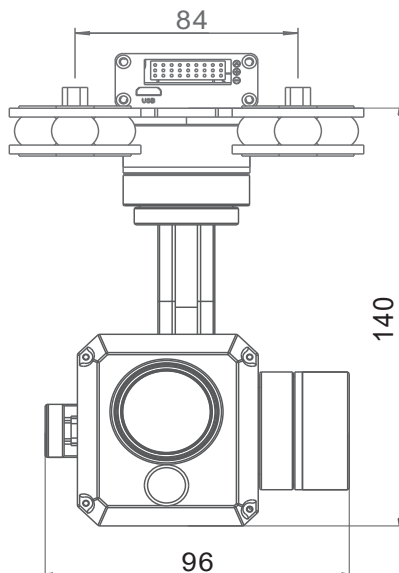


8mm*4

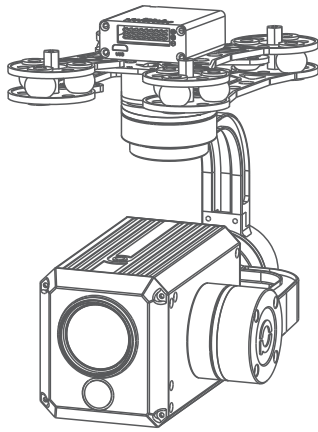
Button head hexagon screw*16

Gimbal Camera Dimension

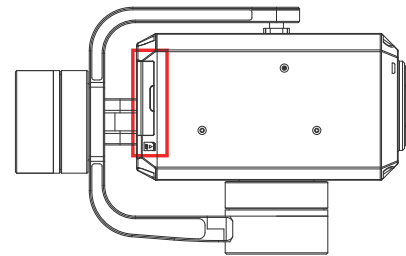
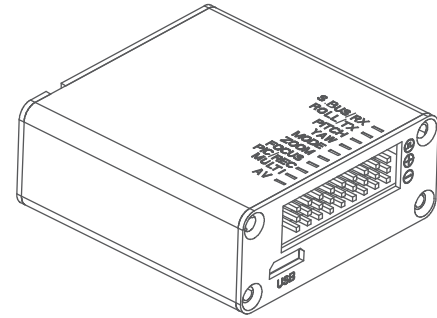
Unit :mm



Connection of Control Box and Wiring Instruction



Control Box position



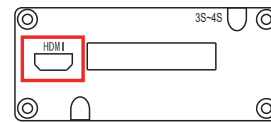
SD card position

1.Insert SD card

SD card: max 128G, class10
FAT32 or exFAT format

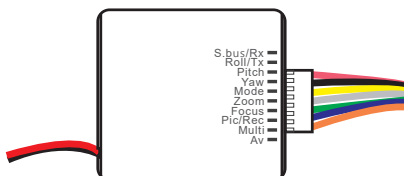
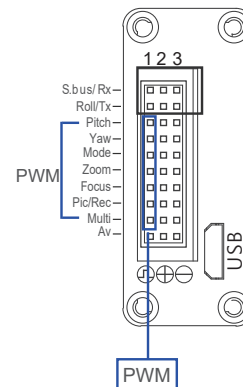
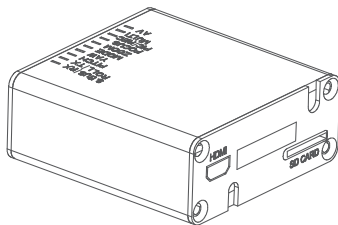
2.connect HDMI to display

HDMI : micro HDMI OUTPUT
1080P 60fps default

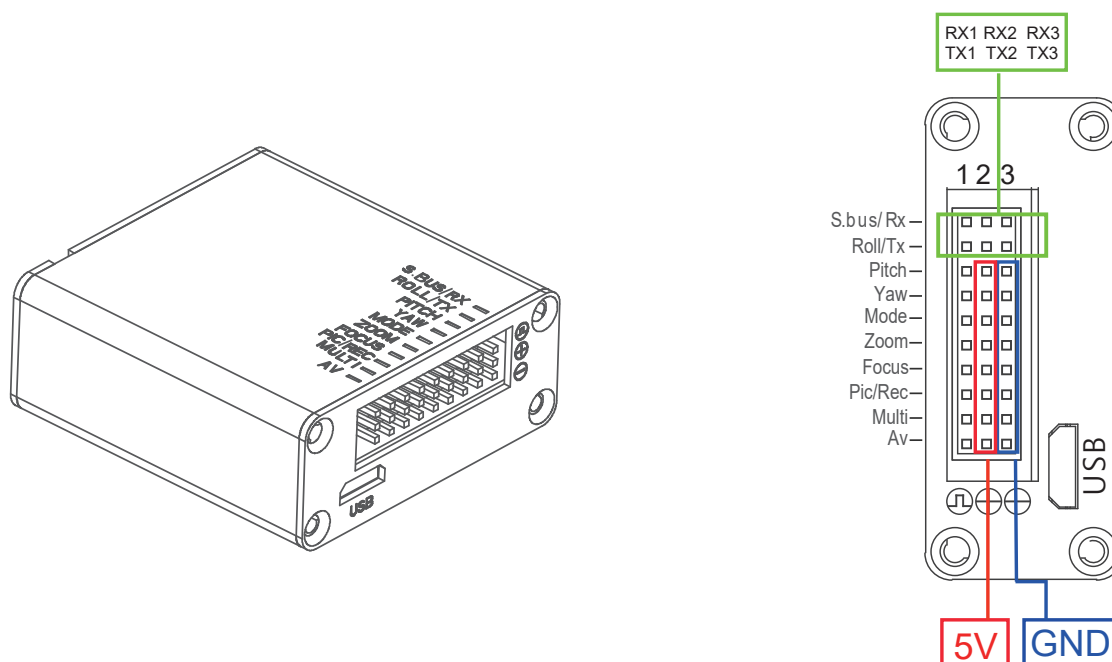


HDMI position

3. Connect the signal line as below



4. Power supply with 12V, red line is positive and black is negative.



Function Description

Gimbal control

- Yaw axis control:speed mode,connect Rocker channel(or 3 gears channel,push gear to middle position to stop)
- Pitch axis control:speed mode,connect Rocker channel(or 3 gears channel,push gear to middle position to stop)
- Mode control:speed mode:connect rocker channel(angle mode,connect knob channel. Please check page 6 to know more about the angle mode setup)

Gimbal is at the highest speed when controlling YAW and PITCH axis if the rocker is at high position.Flip to any other position,gimbal speed will become lower.
Go back to home position: when the "mode" channel is connecting with rocker, then flip the rocker like this: middle-high-middle.

- Multi:Multi function control

Camera control

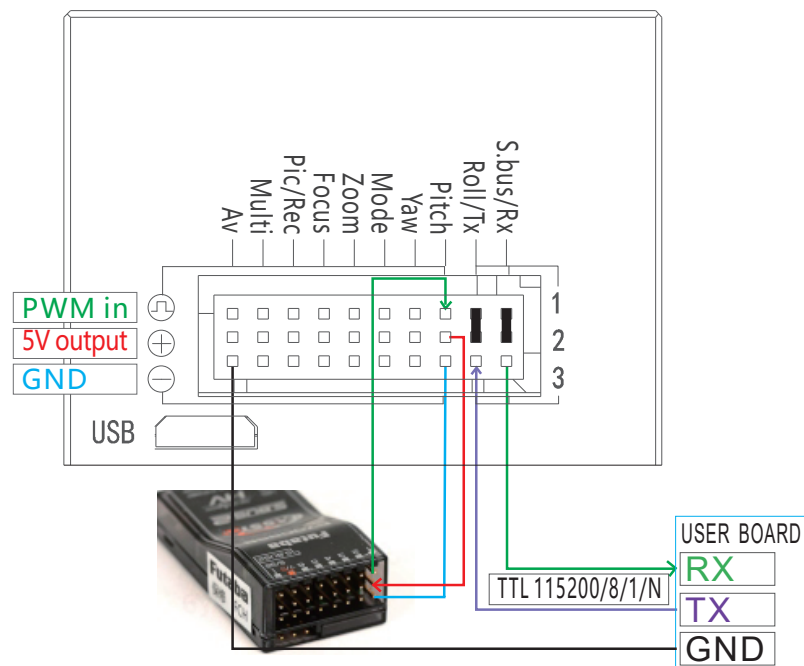
1. Zoom control:connect 3 gears or rocker channel
2. Focus:connect 3 gears or rocker channel for manual focus control.If do not connect any channel,then camera will auto focus after zooming
3. Pic/REC:taking picture/recording,connect 3 gears channel

Flip the gear from middle position to high position,taking picture/recording mode switch

Flip the gear from middle position to low position:

- A:If under recording mode:record start,flip from middle to low again, record stop
- B:If under taking picture mode,start taking picture

Signal functions

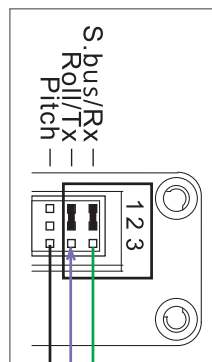
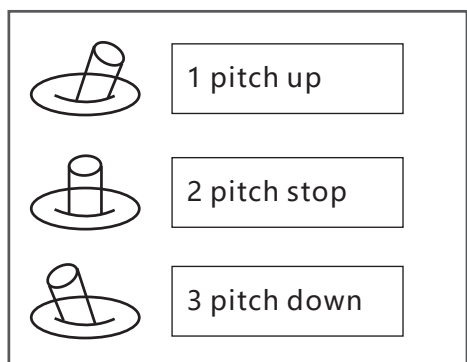


S.bus/Rx: connect to Rx2 for track function.

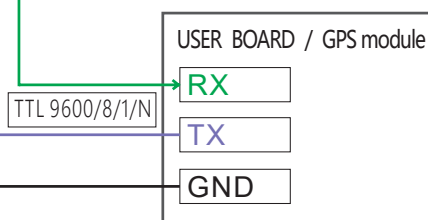
Roll/ Tx: connect to Tx2 for track function.

Pitch: PWM in, pitch control

Pitch: PWM in, pitch control



We have protocol for control the gimbal and camera, please contact our technical support for detail doc.



Yaw: PWM in, Yaw control



1 Yaw right

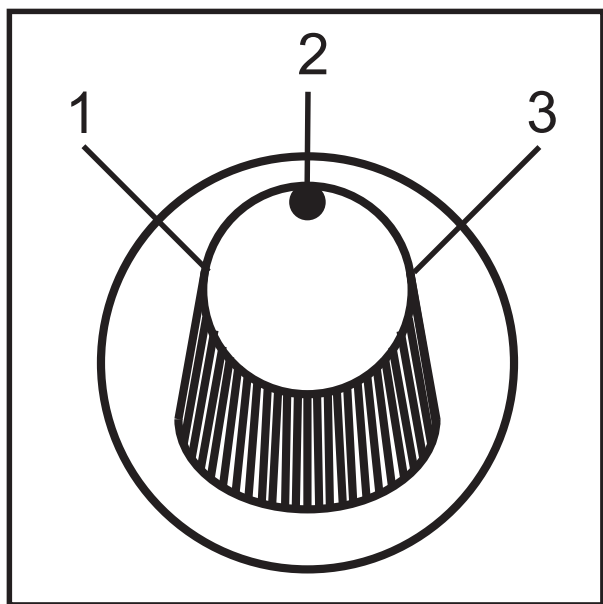


2 Yaw stop



3 Yaw left

Mode: Change the speed / home position

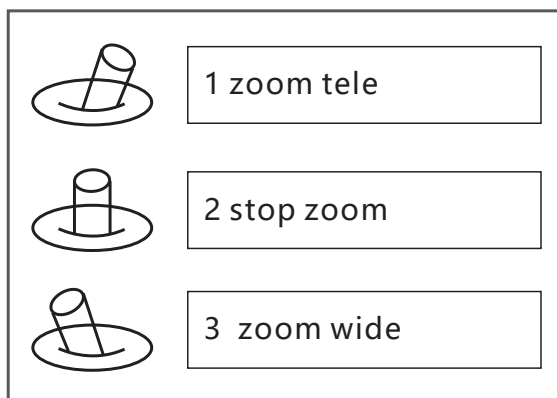
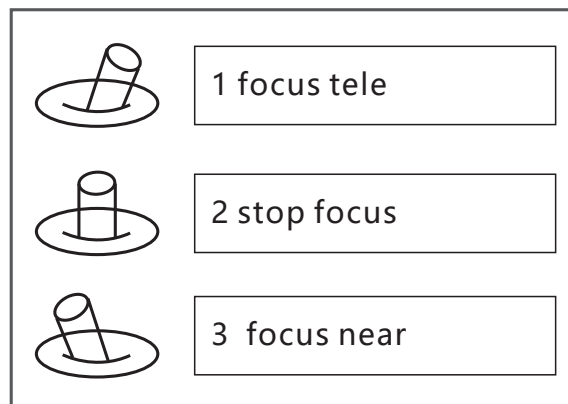
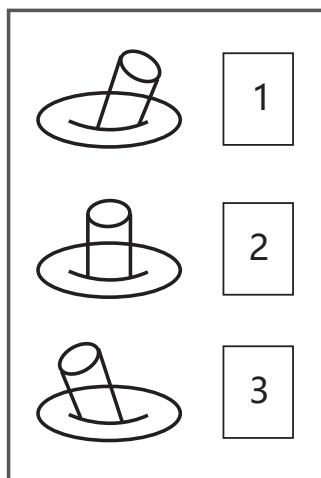


- Position 1: Lowest speed for pitch and yaw.
- Position 2: Middle speed for pitch and yaw.
- Position 3: Highest speed for pitch and yaw.

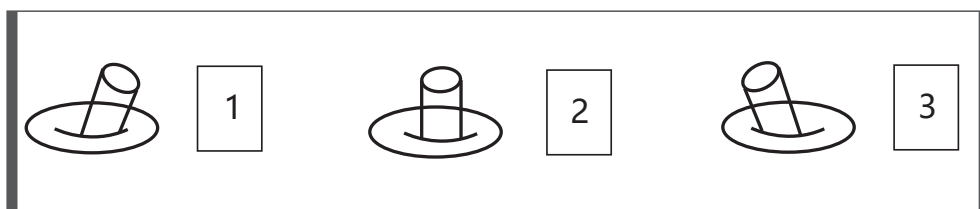
The speed is continuously quickly from 1 to 3.

- One click: Home position.
- Two click: Look down.
- Three click: Yaw not followed by frame.
- Four click: Yaw followed by frame.
- Five click: Restore the factory settings.

(Click = from 2 to 3 and back to 2 quickly)

ZOOM: Zoom the camera**Focus: Focus the camera****Pic/ Rec picture / Start record, stop record**

- **Switch 2 to 1: Camera mode change;**
Picture mode: the number is quantity of photos that SD card can storage;
Record mode: the time is recording time left.
- **Switch 2 to 3: A. take a picture B. Start record / stop record**

Multi: Back up PWM channel for customization**AV: NO AV output.**

25X zoom camera (Panasonic HC-VX980)

Sensor	1/2.3 inch CMOS SENSOR
Still Image Resolution	25.9 Megapixels (16:9)
Recording Resolution	4K: 3840x2160/30p; FHD: 1080/60p
Focal Length	f=4.08-81.6mm(F1.8-F3.6)
Optical Zoom	25X zoom (4K recording mode)
	20X optical zoom(Photo mode)
	40X zoom(FHD recording mode)
FOV	Horizontal: 53.2°(Wide end) ~ 5.65°(Tele end)
	Vertical: 39.8°(wide end) ~ 4.2°(tele end)
	Focus: 66.6°(wide end) ~ 7.2°(tele end)
Video format	MPEG-4
Recording Shutter	1/3 ~1/8000
Photo format	JPEG
Photo Shutter	1/2 ~1/2000

Gimbal system

Input voltage	3S-4S
Rotate range	Pitch: ±90° Roll: ±45° Yaw: ±150°
Angle amount of jitter	Pitch and roll:±0.02° Yaw:±0.03°
Control interface	PWM, S.Bus, serial command, and software control via Ethernet
Working Current	Static current:240mA(@12V) Dynamic current:320mA(@12V)

Mechanical feature

Total weight (gimbal and camera)	782g
Working temperature	-25° ~ +60°