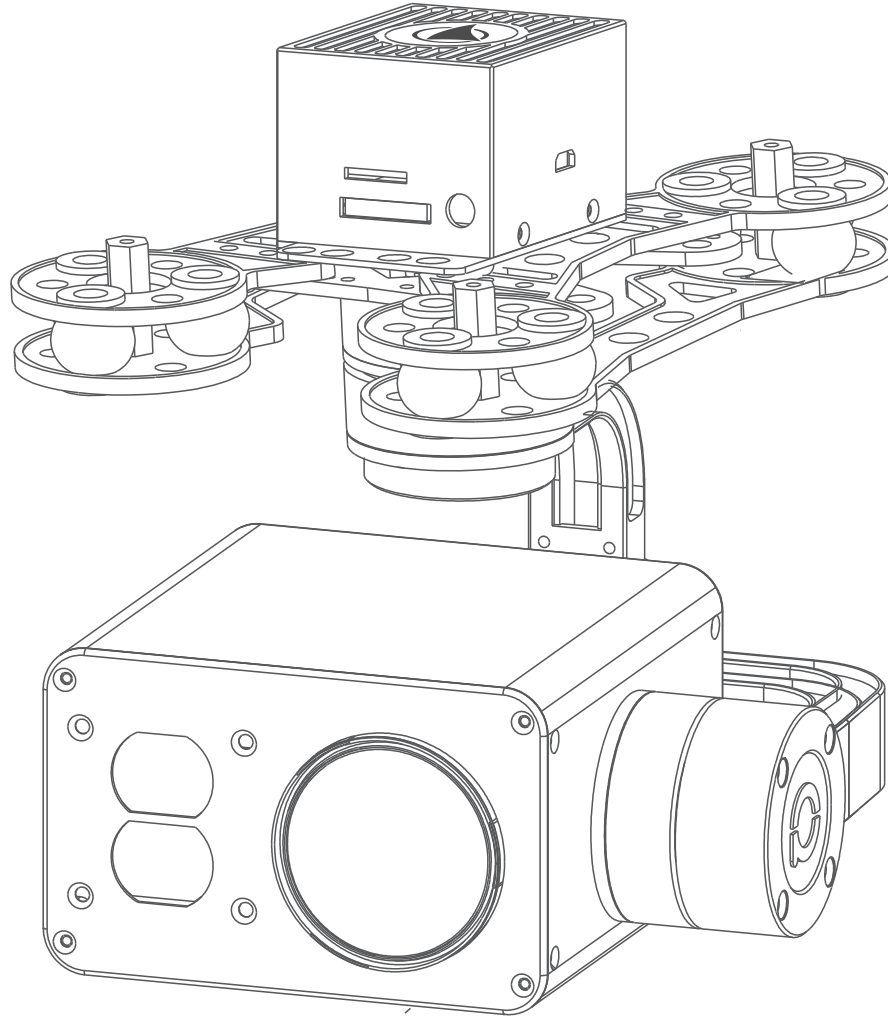


Sky Eye-30HZ-SM

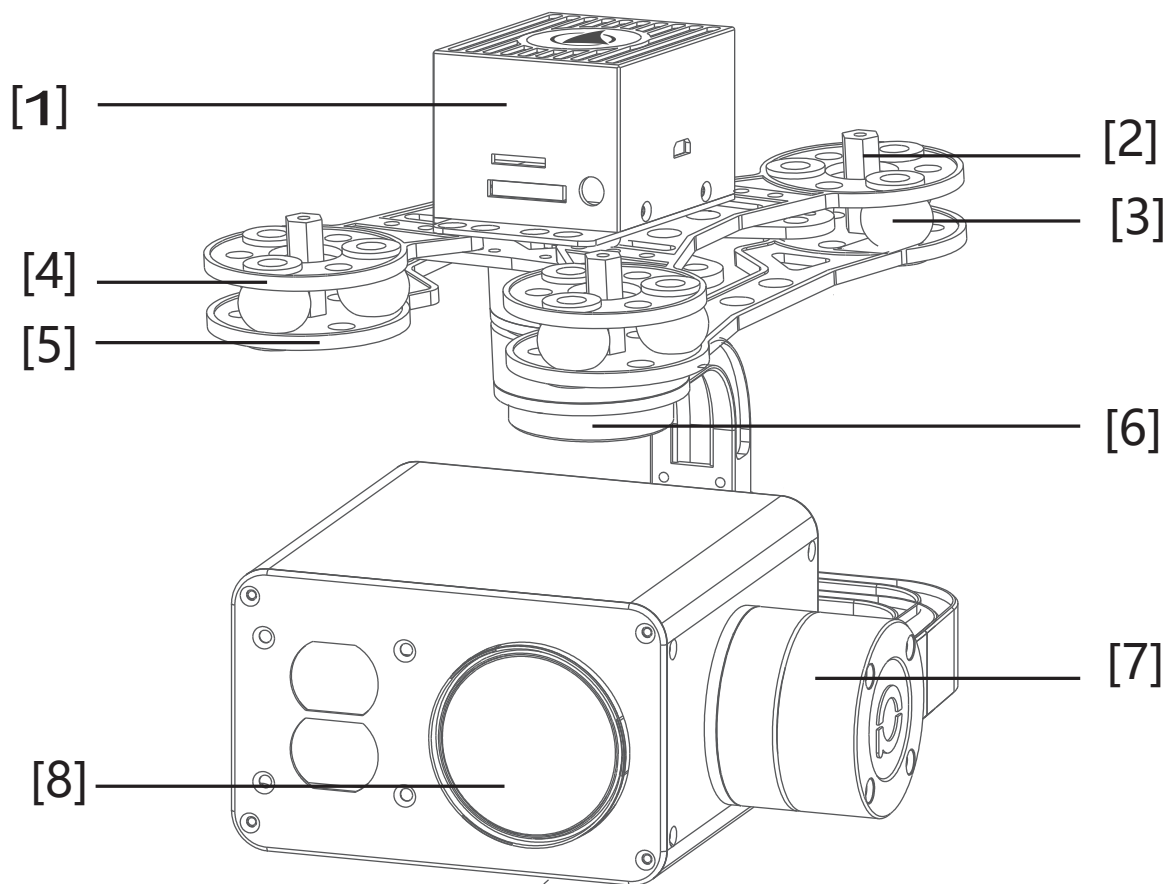
30x Zoom Laser Night Vision Object Tracking Camera Gimbal



Images are for reference only, please subject to the actual product.

Sky Eye-30HZ-SM is a 3-axis high stabilized gimbal with Full HD 1080P 30X optical zoom camera and a set of laser rangefinder, which could be widely used for surveillance, search and rescue applications. Its core capability is able to get the target GPS coordinate and measure the distance between the gimbal and the target. Together with the gimbal control software that comes with gimbal, the 30X drone zoom camera will enable the ground rescue team to locate the target as soon as possible.

Sky Eye-30HZ-SM Overview



[1] Control box

[2] Gimbal fixed copper cylinder

[3] Damping ball

[4] Upper damping board

[5] Lower damping board

[6] YAW axis motor

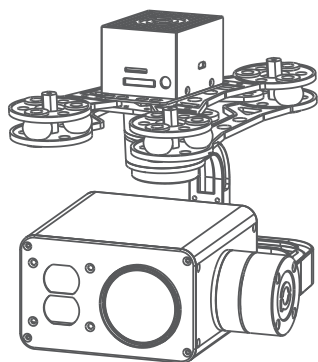
[7] Pitch axis motor

[8] HD zoom camera

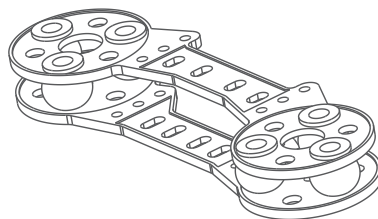


Please make sure that the motor is not stopped by any object during the rotation, if the gimbal is blocked during rotation, please remove the obstruction immediately.

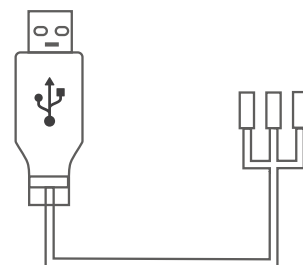
Packing list



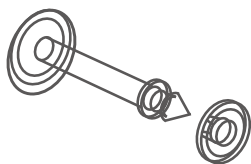
Gimbal camera*1



Damping board*2



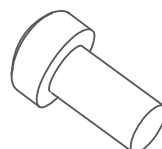
USB to TTL *1



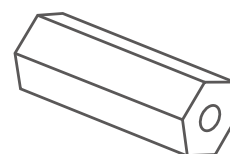
Anti shedding buckle*1



5mm*12

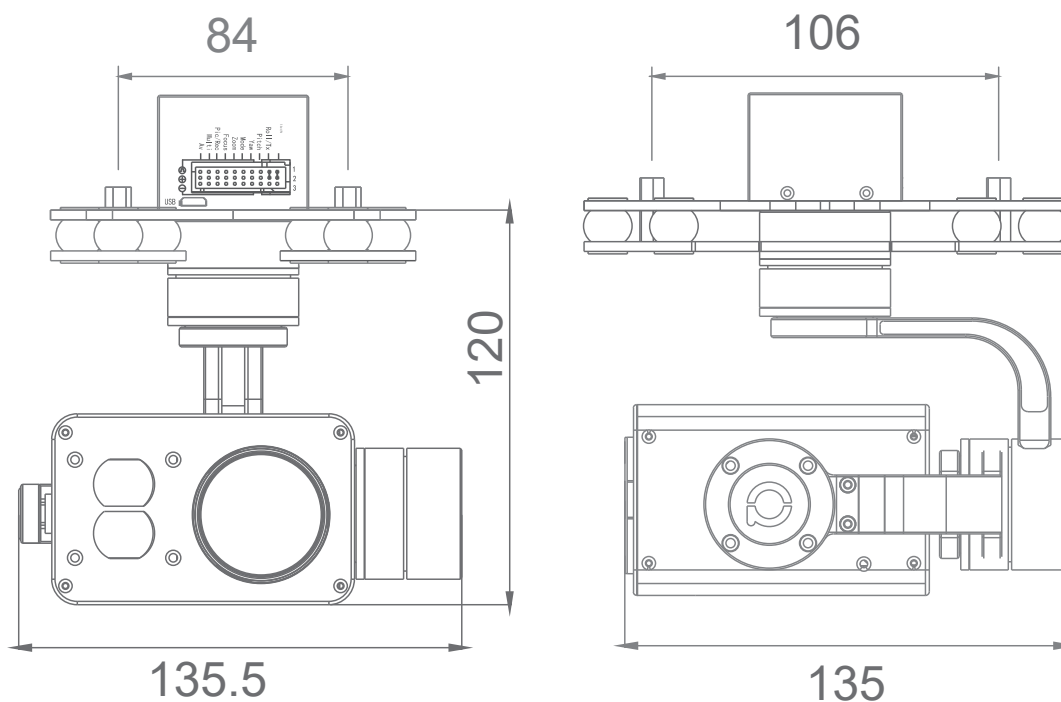


8mm*4



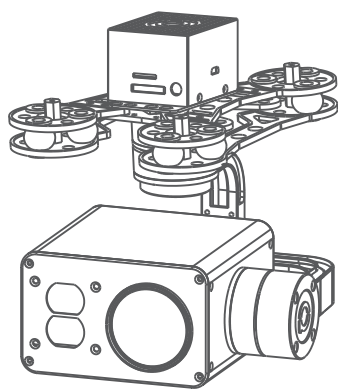
Copper cylinders*4

Gimbal Camera Dimension

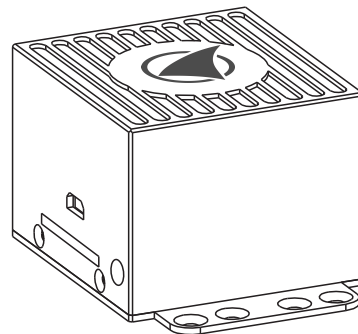


Unit:mm

Connection of Control Box and Wiring Instruction



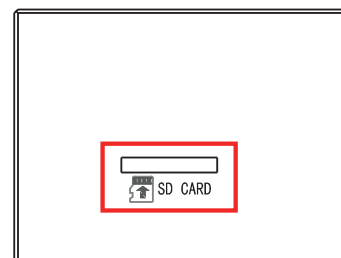
Control Box position



1. Insert SD card

SD card: max 128G, class10

FAT32 or exFAT format

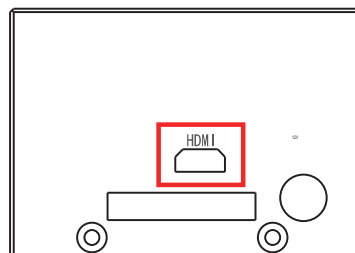


SD card position

2. Connect HDMI to display

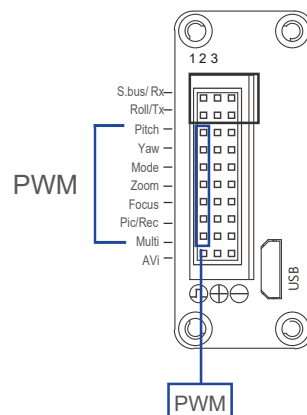
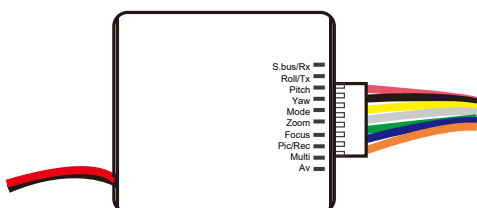
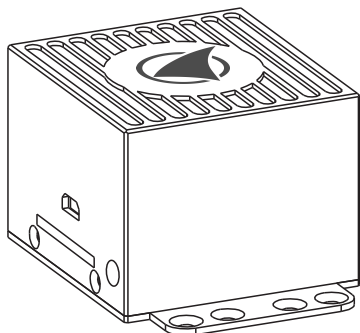
HDMI: micro HDMI OUTPUT

1080P 60fps default

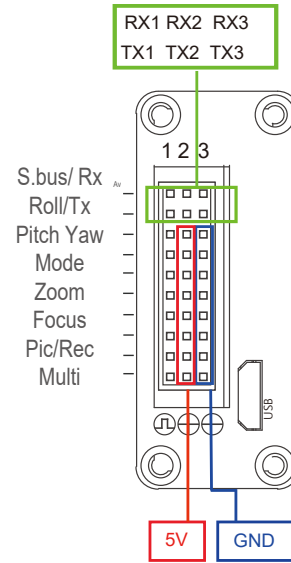
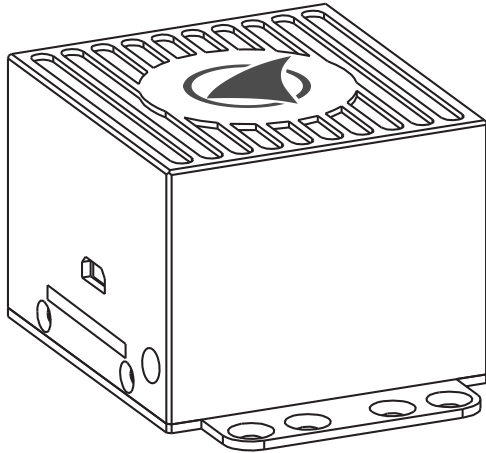


HDMI position

3. Connect the signal line as below

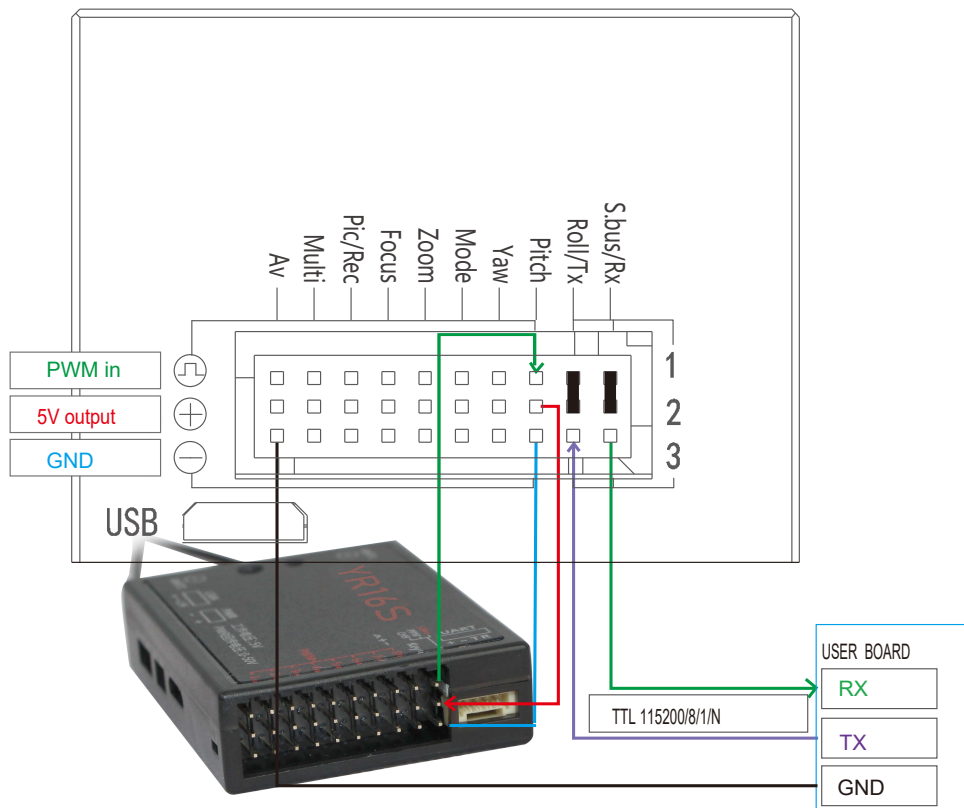


4. Power supply with 12V, red line is positive and black is negative.



Function Description

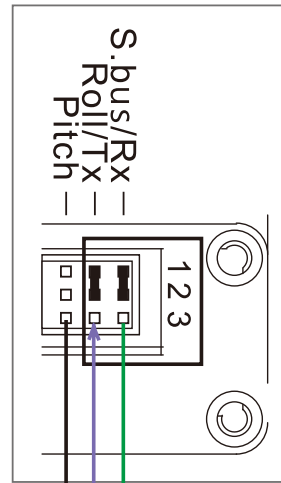
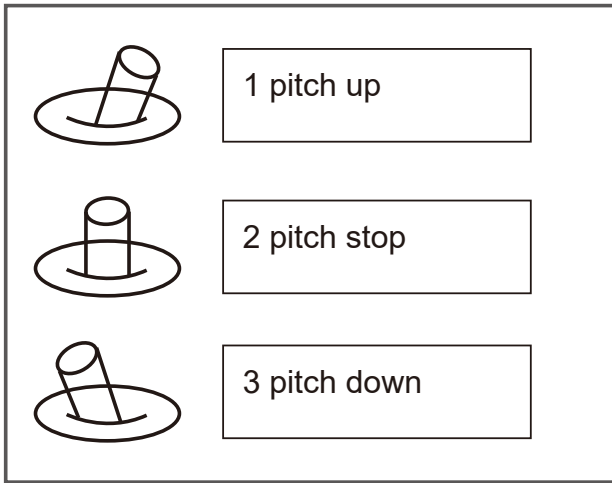
Signal functions



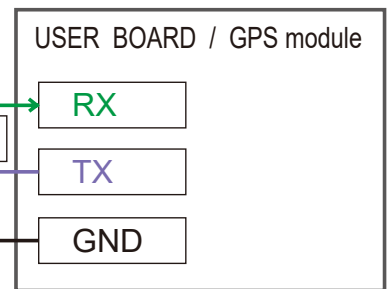
S.bus/Rx: connect to Rx2 for track function.

Roll/ Tx: connect to Tx2 for track function.

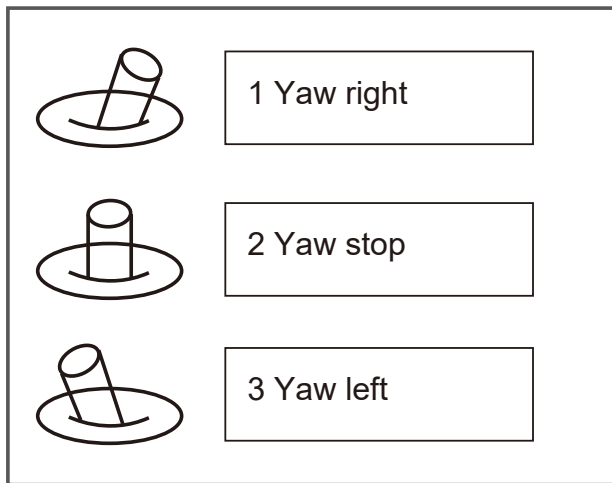
Pitch: PWM in, pitch control



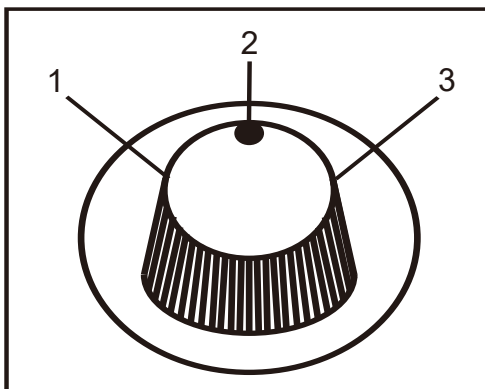
We have protocol for control the gimbal and camera, please contact our technical support for detail doc.



Yaw: PWM in, Yaw control



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.

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




ZOOM: Zoom the camera

	1. Zoom tele
	2. Stop zoom
	3. Zoom wide

Focus: Focus the camera

	1	Switch 2 to 1: IR color white hot, black hot, pseudo color
	2	
	3	Switch 2 to 3: Picture in Picture. EO+IR , IR+EO, EO only, IR only.

Pic /Rec picture / Start record, stop record




	1
	2
	3

Switch 2 to 1: Start record / stop record.

Start record, the OSD display rec hh:mm:ss ;
Stop record, the OSD display STBY.

Switch 2 to 3: take a picture. OSD display 'REC IMG' f
or a second.

Multi: Tracking control

	1
	2
	3

1. Position 1 exit the tracking

Switch 1 to 2: Display the cross cursor. Adjust the object
to the cross cursor.

2. Switch 2 to 3: start tracking. Change the object during tracking

Switch 3 to 2: Display the cross cursor, use Pitch/Yaw to adjust
the cross cursor.

Switch 2 to 3: Start tracking.

AV: NO AV output this model.

30X zoom camera(SONY FCB-EV7520)

Sensor	1/2.8 inch 2.13MP CMOS SENSOR
Video Output	720P/1080P 30FPS Ethernet
Video recorded	720P/1080P 30FPS MP4
Focal length	30X optical focal zoom, 4.3-129mm
Digital zoom	12X (360X with optical zoom)
Wide Dynamic	Up to 105dB
Auto focus	Less than 1S
Low illumination	0.05lux@F1.6
Aperture	Φ 16.0

Laser rangefinder

Range	5~1500 meters
Accuracy	0.5m
Light Beam	905nm pulse laser
Divergent Angle	3 mrad
Laser pulse frequency	1HZ
Power	< 1 mW (safe for eye)
Location Resolving	Latitude and longitude of target

Gimbal system

Input voltage	3S-4S
Rotate range	Pitch: ±90° Roll: ±45° Yaw: unlimited
Angle amount of jitter	Pitch and roll: ±0.02° Yaw: ±0.03°
Control interface	PWM, S.bus, serial command, and Software control
Working Current	Static current: 330mA(@12V) Dynamic current: 450mA(@12V)

Mechanical feature

Total weight (gimbal and camera)	587g
Working temperature	-25° ~ +60°
Angle amount of jitter	Pitch and roll: ±0.02° Yaw: ±0.03°