SEEKER 20-360

20X Optical Zoom Camera with 3-Axis Gimbal

User Manual

V1.0 2019.08

FOXTECH

Packing List

Camera x1
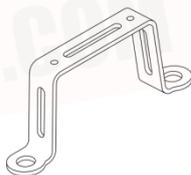
Fixed part x2

Damping ball x4

Specification

Seeker 20-360 supports 20X optical zooming, adopts 1/3" 2.0 Megapixel CMOS sensor, effective pixels is 2.0 Megapixel. It adopts advanced 3-axis stabilization, which can keep the camera steady under any states, like high speed and intense shaking status. SEEKER 20-360 can be applied in many fields: Power line inspection, emergency monitoring, searching, rescue and other fields.

The gimbal also supports 360 degree rotation.

The 3-axis gimbal also has the Intelligent Gimbal Speed Regulation function: has FAST speed and LOW speed modes. Fast speed mode is used for small zooming range, which makes the gimbal control sensitive and quick. LOW speed mode is used for large zooming range, will enable you to target the object more accurately.

This 3-axis gimbal also has one-key back to center function.

SEEKER-20 supports S.BUS control and serial command control.

The video supports HDMI and Network port output also has one-key switching function.
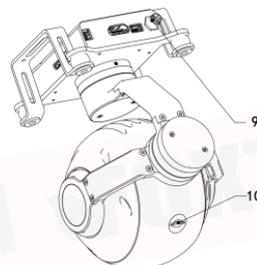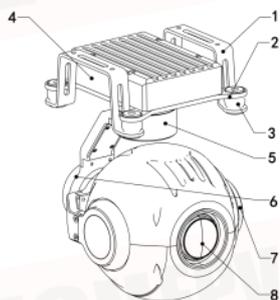
Control box back view

1. Fixed part
4. Control box
7. Pitch axis motor
10. TF card

2. PTZ damping plate
5. Yaw axis motor
8. HD zoom camera

3. Damping ball
6. Roll axis motor
9. Power supply

Outline and Mounting Hole Size Chart
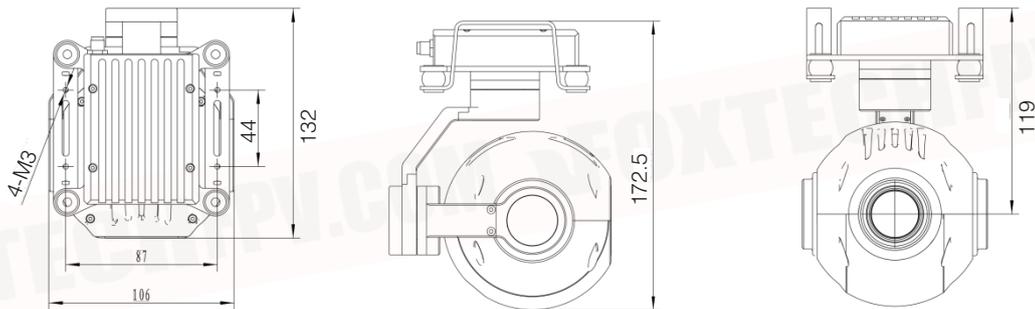
Installation

1. Installation preparation

   a. Supported device types installed

     SEEKER-20 pod must to work with HDMI high-definition image transmission (1080P)/network port HD image transmission.

   b. Support TF card The pod TF memory card does not support hot plugging

     PTZ camera TF card supports up to 64GB. Please use Class10 or UHS-1 for normal video recording.

2. Install pod

   a. Assembled the fixed part, the damping ball and the main body of the SEEKER 20X pod together.

   b. Mounting the assembled pod on the flight platform through a fixed hole.

   c. Install the TF card.

   d. When the DuPont plug of the SBUS port is plugged in, make sure that the side of the DuPont plug exposed terminal does not touch the junction box, for avoiding the touching of the terminal and the metal case by the reverse insertion.

3

3. Network port settings

减震球
固定支架
飞行平台
安装孔
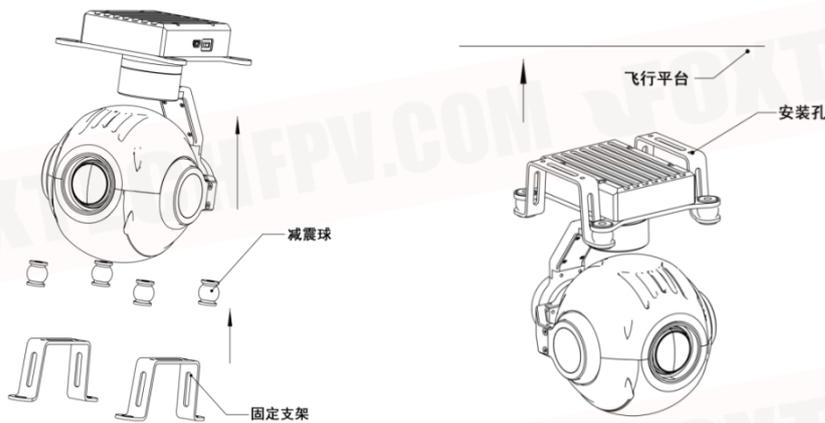
SBUS Channel

Channel	Operation	Function	Notes
RC_CH1	Middle- ->up	Roll Control: image clockwise	Rotating speed is linearly related to the switch position
	middle- ->down	Roll Control: image anticlockwise	
	middle	Roll Control: Pause, stand by	
RC_CH2	middle- ->down	Pitch Control: up	Rotating speed is linearly related to The switch position
	middle- ->up	Pitch Control: down	
	middle	Pitch Control: pause, stand by	
RC_CH3	middle- ->up	Zoom Control: small zoom	Zoom is linearly related to the switch position
	middle >down	Zoom Control: large zoom	
	middle	Zoom Control: Pause, stand by	
RC_CH4	middle- >down	Yaw Control: turn left	Rotate speed is linearly related to the switch
	middle- ->up	Yaw Control: turn right	
	middle	Yaw Control: pause, standby	
RC_CH5	up	Lens straight down	
	middle	Tracking mode	
	down	Gimbals lock mode	
RC_CH6	middle–> up	Taking photo	
	middle–> down	shooting	
	middle	standby	
RC_CH7			
RC_CH8	down	standby	
	down–> up	One key back to center	

Notes

1. Put the control channel position to the middle before turning on the remote control
2. One-key temperature: The RC_CH5 channel change fast from middle to down middle down (within 900ms), and the pod enters the temperature mode. When the pod start again, the temperature is completed.
3. The pod can photograph in the video.
The entire operation of the pod is achieved by the SBUS remote control or serial port.

Warning

1. Ensure that there is no obstruction within the scope of the pod, otherwise the pod not working properly or even burning.
2. SEEKER 20 is a precision device. Do not add hoods, counterweights and other items, otherwise the pod will burn up.
3. Keep the lens clean. The lens is too dirty may cause the focus slowly.
4. Do not operate the interface, especially the TF card interface, after power off.
5. Do not pull out the TF card during taking pictures or recording, otherwise the images may be lost.
6. Do not disassemble or repair by yourself, otherwise you will not be able to enjoy the warranty policy.

Specification

Pod		
Type	Network type	HDMI
Material	Aviation aluminum alloy, nylon	
Size	106 Length 132 width 173 height mm	
Weight	635g	
Power	6S-12S	
Temperature	-5 45	
Control angle roll	-30° 30°	
Control angle pitch	-120° 30°	
Control angle direction	360°unlimited	
Accuracy	±0.01°	
Control signal	SBus Serial communication (one-key switching)	
Save	TF card	
Output interface	GH1.25 interface 4 core HDMI interface one-key switching	
Working mode	Direction lock; Yam following; One button down	

Camera		
focal length	4.7 84.6mm	
Zoom factor	20X optical zoom	
Focusing speed	1S	
Video output format	1080P 25	1080P 60 frame
Video storage format	1080P 25 frame	
sensor	1/3" 2.0Megapixel CMOS	

1. Please close the firewall !

2. Open "Control Panel"　"Network and Sharing Center".
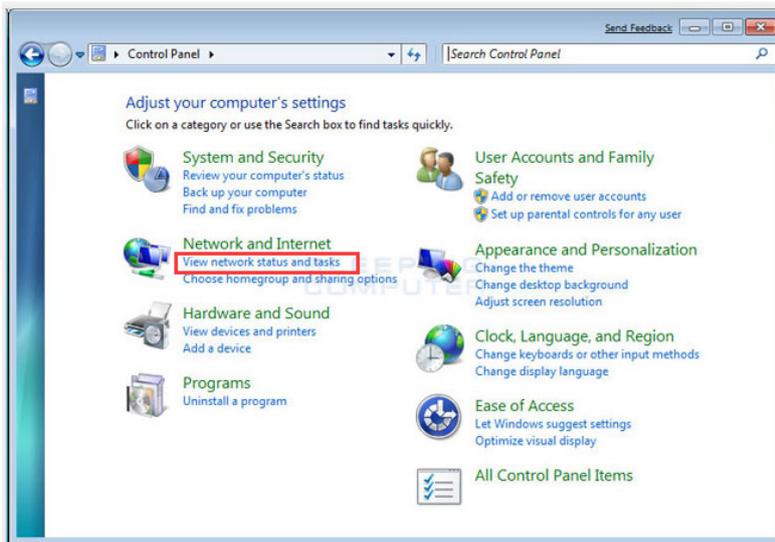
3. Click the "Local Area Connection" icon　"Properties"　double-click "Internet Protocol Version 4 (TCP/IPv4)"
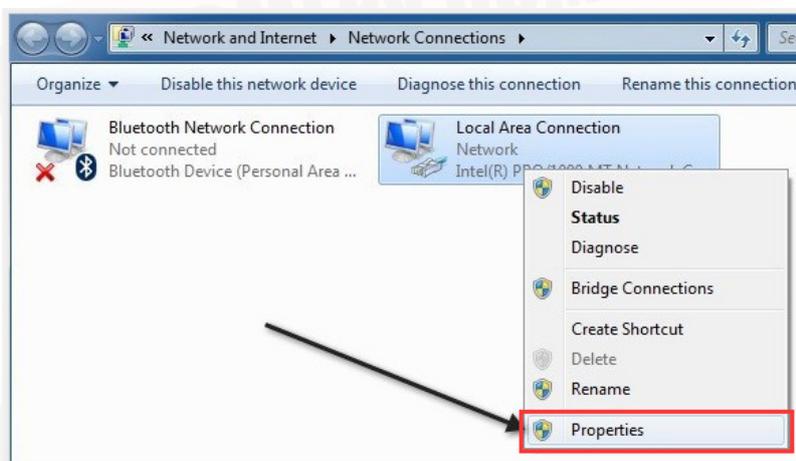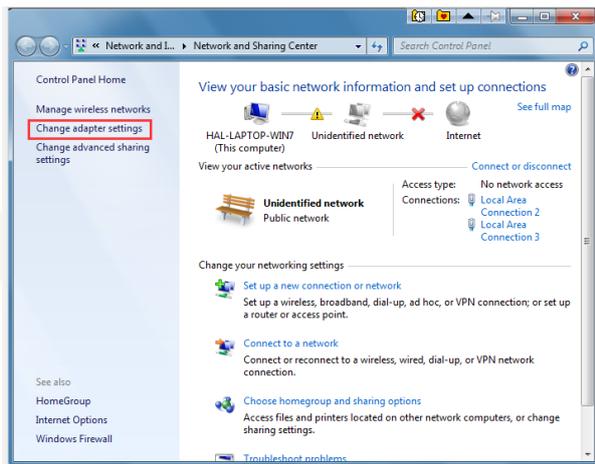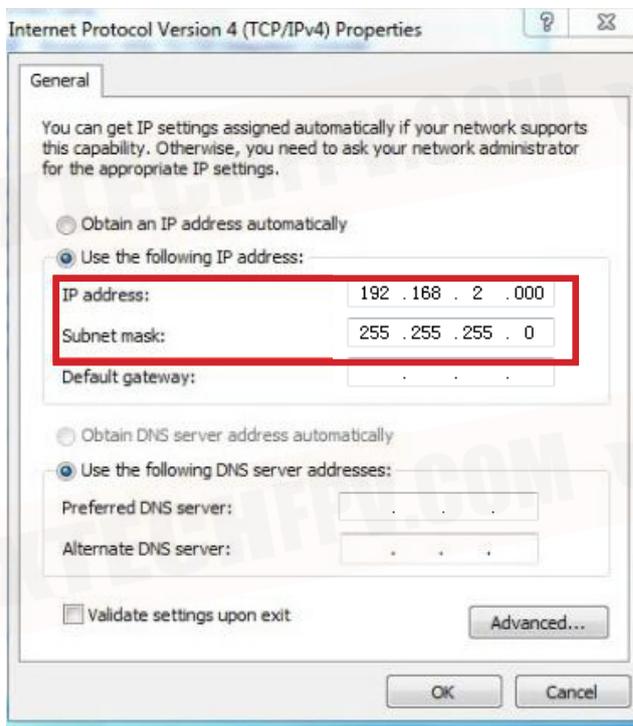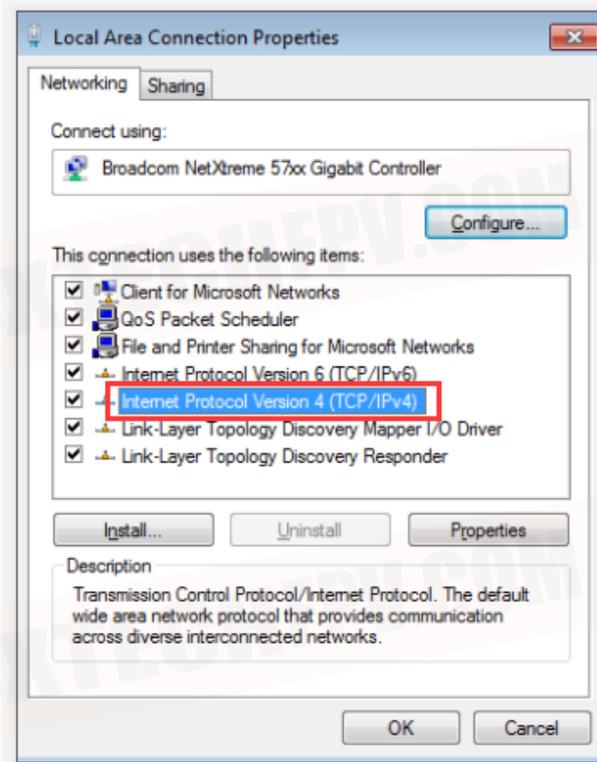
4. Click "OK" button and finish it!

The software of PC side recommends "vlc media player" and "easy player", which can be searched and downloaded online.

Easy player download link: https://github.com/EasyDSS/EasyPlayer/tags

Vlc media player download address: http://www.videolan.org/

Easy player just fill in the IP link of the movement in any address bar +/main (example: 192.168.1.69/main), cancel the "TCP" option, and keep the "hard solution" option. Finally click play.
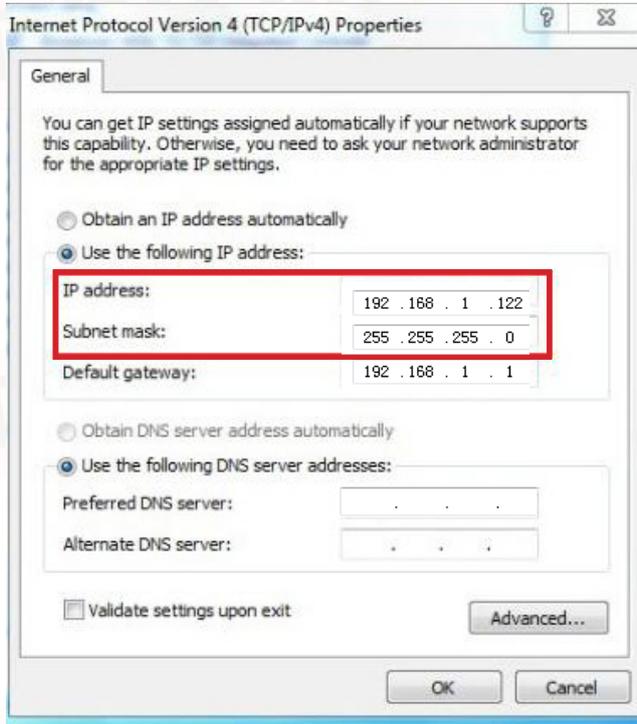
5.Vlc media player

Enter the web URL
(rtsp://192.168.1.69/main)

(The video effect is best when input 300ms,)

Easy player just fill in the IP link of the movement in any address bar +/main (example: 192.168.1.69/main), cancel the "TCP" option, and keep the "hard solution" option. Finally click play.
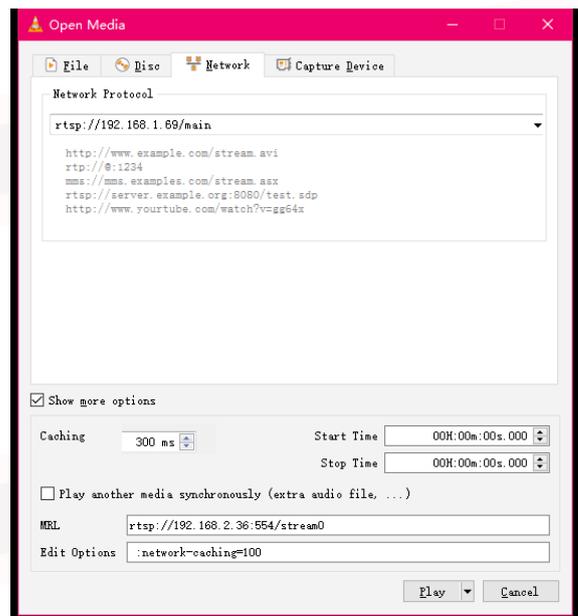
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