

# Viewlink Instruction

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## Contents

1. Quick Start.....	1
1.1 Viewlink Installation.....	1
2. Viewlink Connection.....	1
2.1 Viewpro Gimbal and PC Connection.....	1
2.2 Open Viewlink.....	2
2.3 Control Method.....	2
3. PC&IP Settings.....	3
4. Viewlink Settings.....	3
4.1. Firmware Upgrades.....	4
4.2 Camera Settings.....	4
4.3 Device Discovery.....	5
4.4 Joystick Configure.....	5
4.5 OSD Settings.....	6
4.6 Remote Control.....	6
4.7 File Location.....	7
4.8 Extended Command.....	7
5. Viewlink Interface.....	8
5.1 Real time information.....	8
5.2 Fully screen display.....	8
5.3 Funtion Menu.....	9
5.4 Gimbal Navigation.....	9
5.5 Screen Joystik.....	10
5.6 Display Mode.....	11
5.7 Tracking.....	11
6. Funtion Overview.....	12
6.1 Image Menu.....	12
6.2 Tracking Menu.....	12
6.3 Advanced Menu.....	13
6.4 local Snapshot.....	13
6.5 local Record.....	13

7. Overview of Viewpro Gimbal Electrical Inter.....	14
7.1 Viewpro Gimbal Initialization.....	14
7.2 Viewpro Gimbal Control and Video.....	15
8. Failure Recovery.....	15

## 1. Quick Start

This quick start part is suitable for new users who have purchased the Viewpro gimbal camera and use it with Viewlink. If you want to know our complete product model, please visit [www.viewprotech.com](http://www.viewprotech.com).

### 1.1 Viewlink Installation

Viewlink is a User Interface of Shenzhen Viewpro Electronics Co., Ltd. for Viewpro Gimbal Camera. You can download it from Viewpro website: [www.viewprotech.com](http://www.viewprotech.com), or you can contact the dealer to ask for an installation package, and you also can specify the installation path of the Viewlink App on your computer.

## 2. Viewlink Connection

### 2.1 Viewpro Gimbal and PC Connection

Connect the Viewpro gimbal camera to PC (via video transmitter and data link if necessary) with Ethernet and USB to TTL cable, and power it on.

**P.S.:** Your gimbal camera support TCP control. If serial port control is not necessary, no need to connect USB to TTL cable.

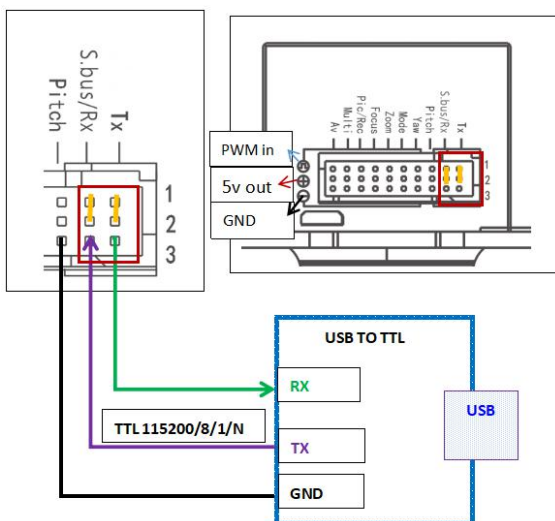
Connection method for **USB to TTL** cable with gimbal and PC

Black wire GND ----- Gimbal GND

Green wire TX ----- RX silk printed on the gimbal controller Z-3D

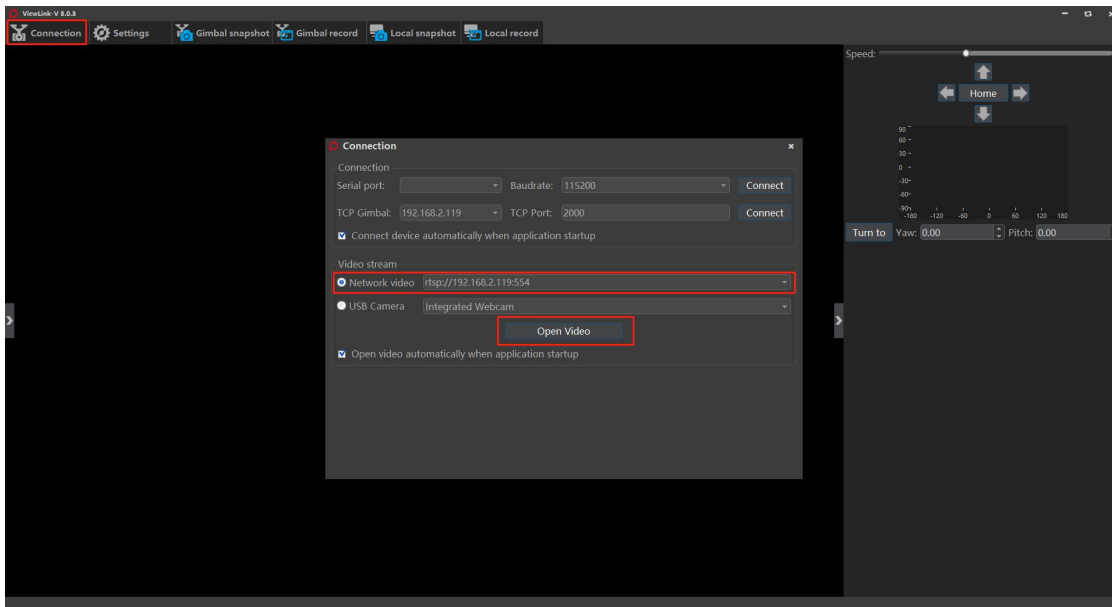
White wire RX -----TX silk printed on the gimbal controller Z-3D

Default baud rate: 115200



## 2.2 Open Viewlink

Open software **Viewlink**. Input IP address such as: **rtsp://192.168.2.119:554** below **Video-Network**, click **“Open Video”** then image appears.



## 2.3 Control Method

1) You can control the gimbal and camera on the Viewlink via Serial port or TCP.

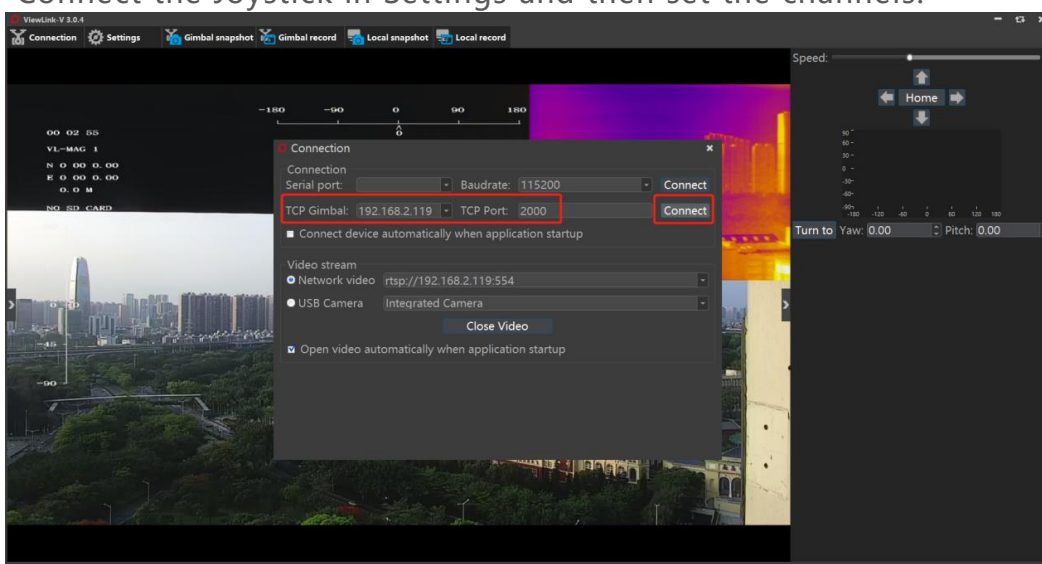
① a. Serial port control: Enter correct COM port and baud rate (Default: 115200) in **Serial port** sector.

b. TCP control: Enter correct gimbal IP in **TCP Gimbal** sector, and "TCP Port" can not be changed—Only applicable to T series Gimbal camera with network port.

② Enter the PI address or select the Serial port COM#, click **“Connect”**

③ Close the Connection interface to start control.

**Note:** \*Under Serial port control or TCP control, you can also use Joystick to control: Connect the Joystick in Settings and then set the channels.



### 3. PC end IP Settings

Set PC end IP to a **same network segment** as gimbal IP (BUT not same IP, means last number could not be the same as camera IP)

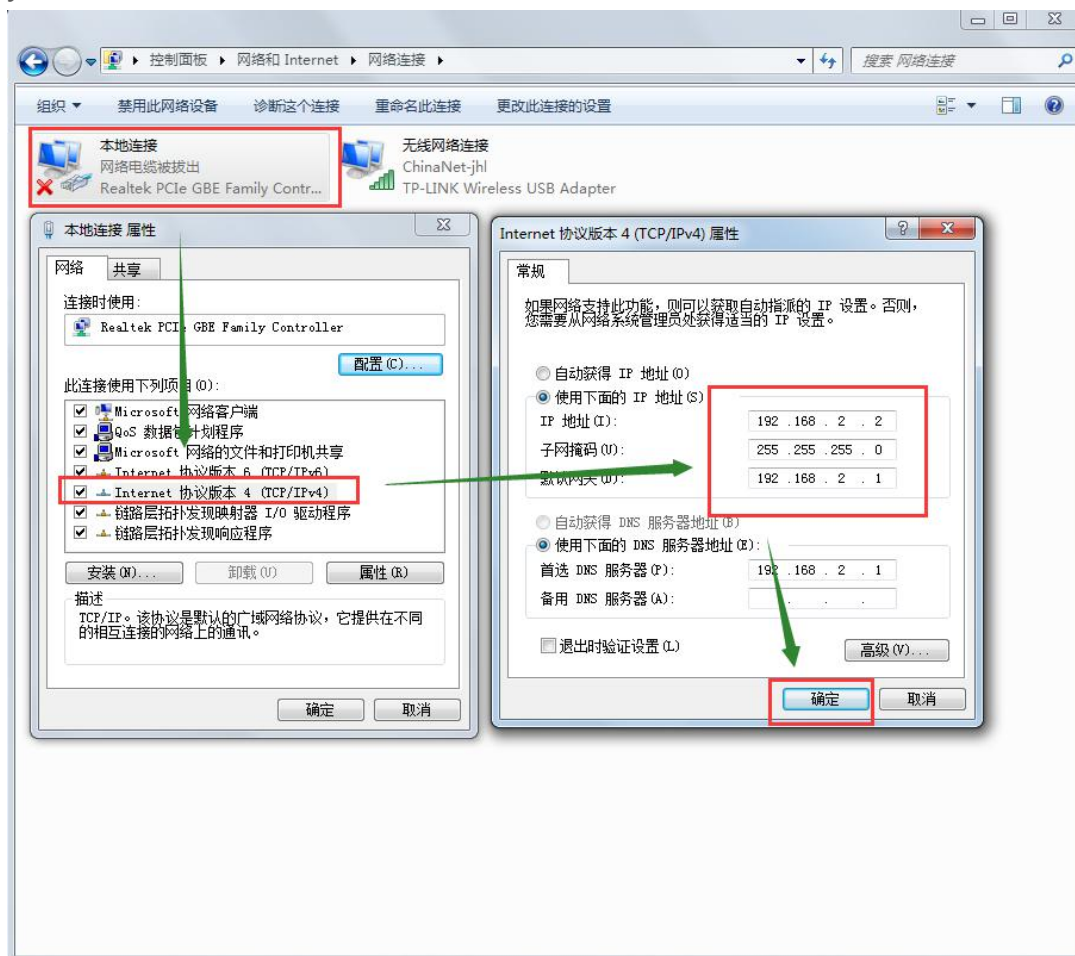
Eg: Gimbal IP address is: 192.168.2.119

PC end: IP address: 192.168.2.2 (Number 2 in red is the network segment)

Subnet mask: 255.255.255.0

Default gateway: 192.168.2.1

Note: The actual IP address of your camera please refer to the sticker on gimbal or ask your dealer.



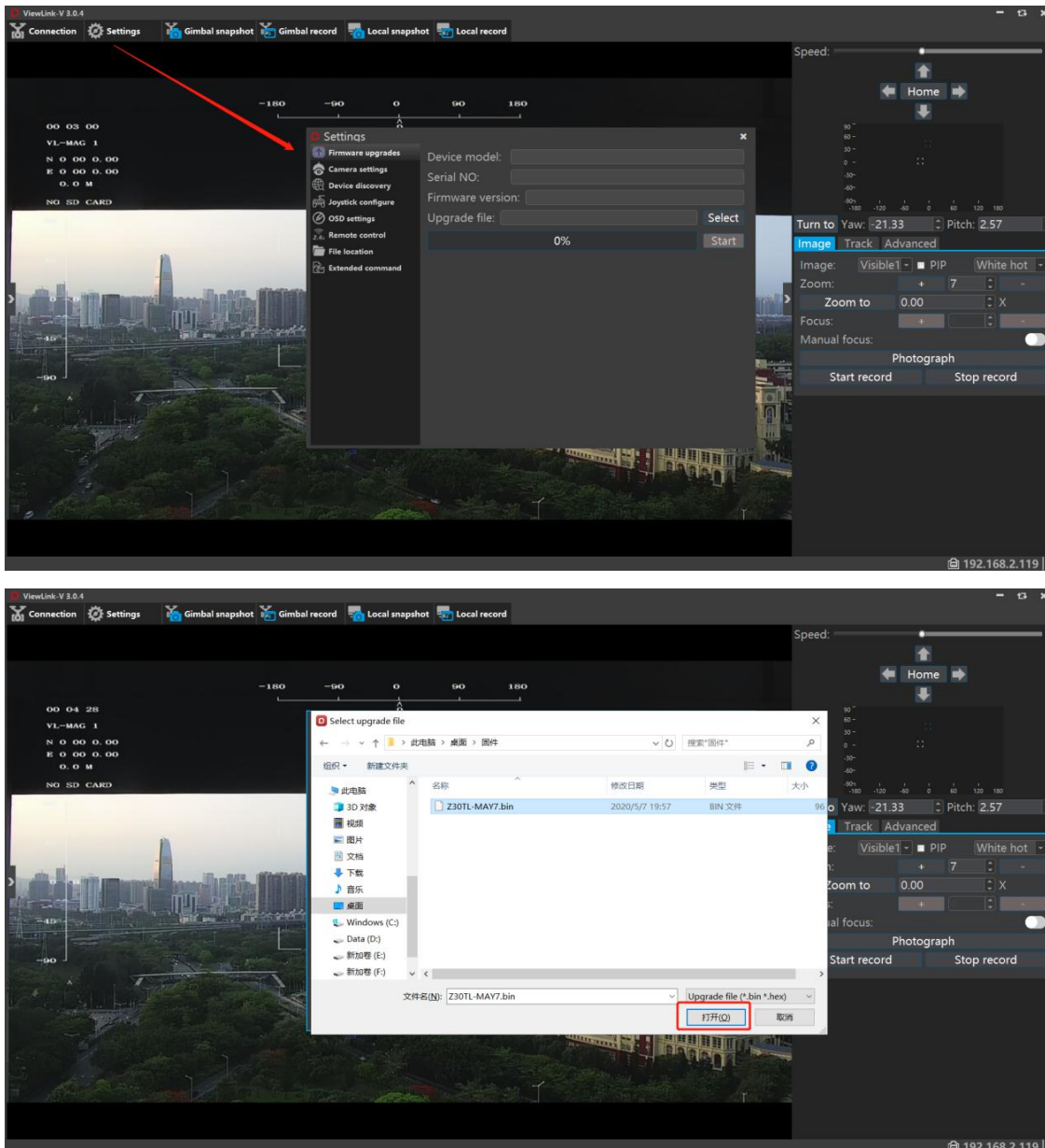
### 4. Viewlink Settings

With Viewlink, you can do settings for the camera directly, parameter configurations, firmware update... connect the serial port to do the settings.

The setting as following can be done when the gimbal camera was connected with Serial port or Gimbal TCP.

## 4.1 Firmware upgrades

Click on **Select** to choose the .bin firmware file, click **Open** and then **Start** to start upgrade. You will see the upgrade progress on the screen.



## 4.2 Camera Settings

Connect with IP output to do camera settings. The interface have connection, device status, video configuration, and IP settings, which are only applicable to T series gimbals camera.

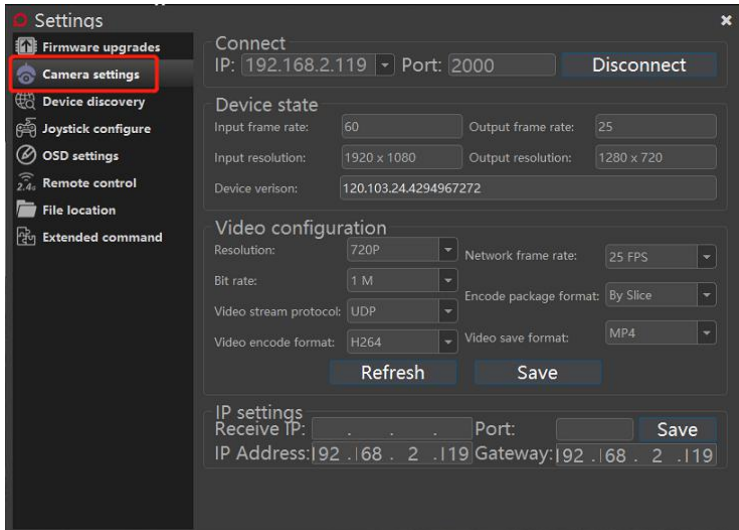
**Connection:** You can set or select the corresponding IP and turned on or off the connection button.

**Device state:** You will see the camera current IP input and output frame rate and

resolutions, device software version from this sector.

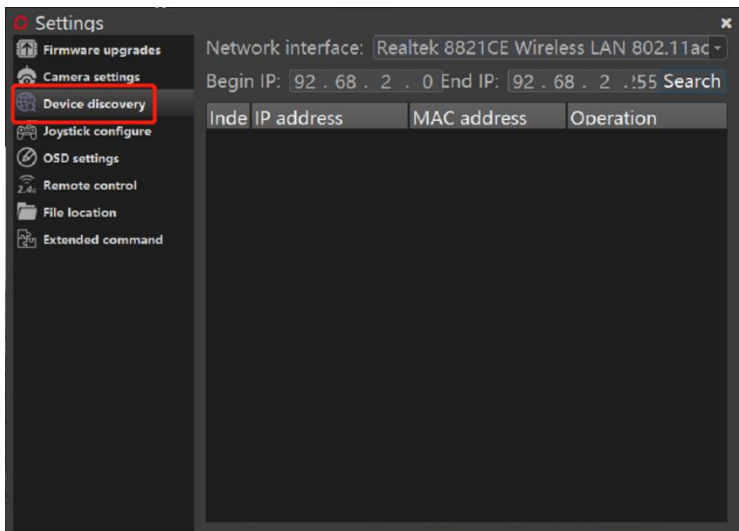
**Video configuration:** You can set the video resolution, frame rate, bit rate, encode package format, video stream protocol type, video save format, video encode format.

**IP settings:** You can change the receive IP address, port, IP address, gateway.



### 4.3 Device discovery

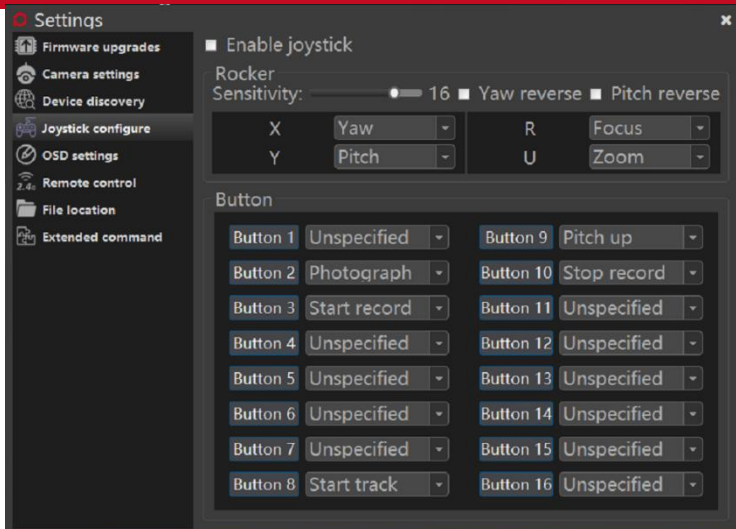
To discover the IP address of the device, you can select the network interface, set/input the begin IP, end IP, and click the "search" button, then the serial number, IP address and MAC address will be displayed at the below frame.



### 4.4 Joystick configure

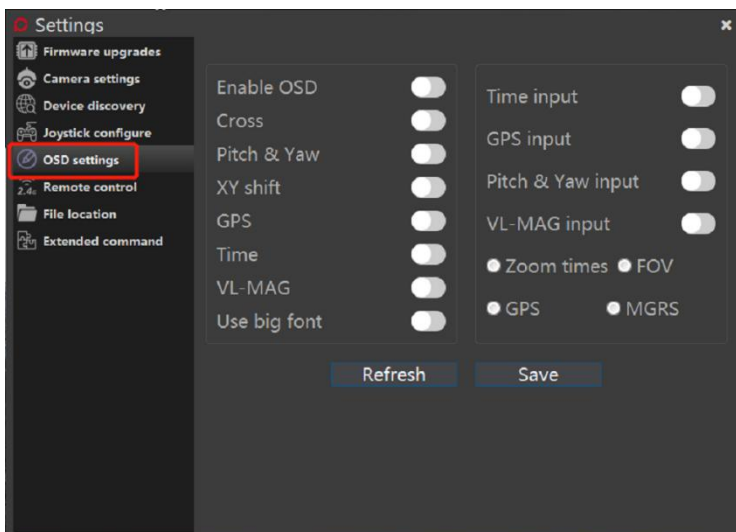
Connect the Joystick to PC, then configure the channels by yourself.





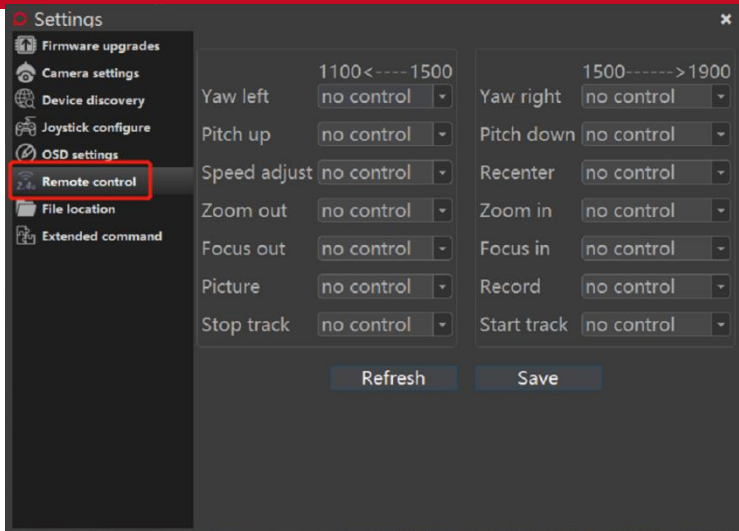
## 4.5 OSD settings

The OSD settings interface include: enable OSD, cross, pitch and yaw, XY shift, GPS, time, VL-MAG, and use big font, VL-MAG input selection button. There also have magnification and FOV optional, as well as GPS and MGRS optional functions. After selecting all the OSD display settings you need, you can click the refresh and save buttons at the bottom. This is only applicable to Viewpro T series gimbals cameras.



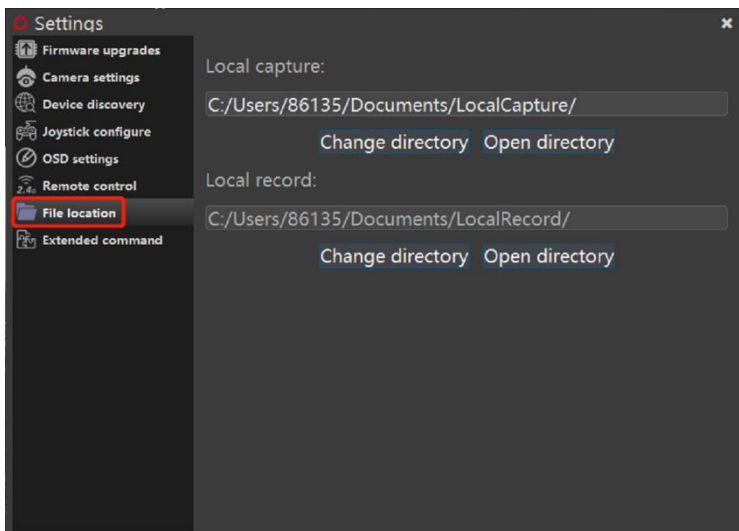
## 4.6 Remote control

Channel settings, you can click the refresh and save buttons after completed the settings.



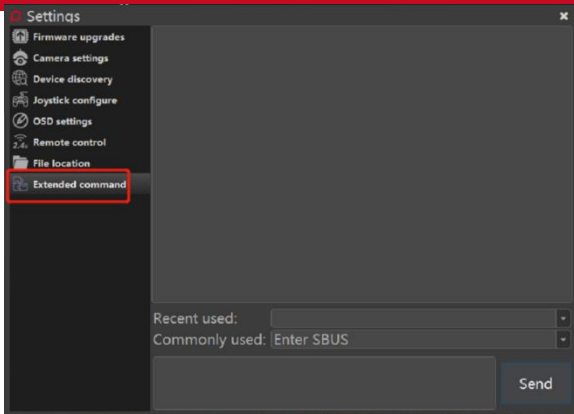
## 4.7 File location

Set the local snapshot and local record file location, you can change the directory and open the selected folder and click the change directory or open directory button.



## 4.8 Extended command

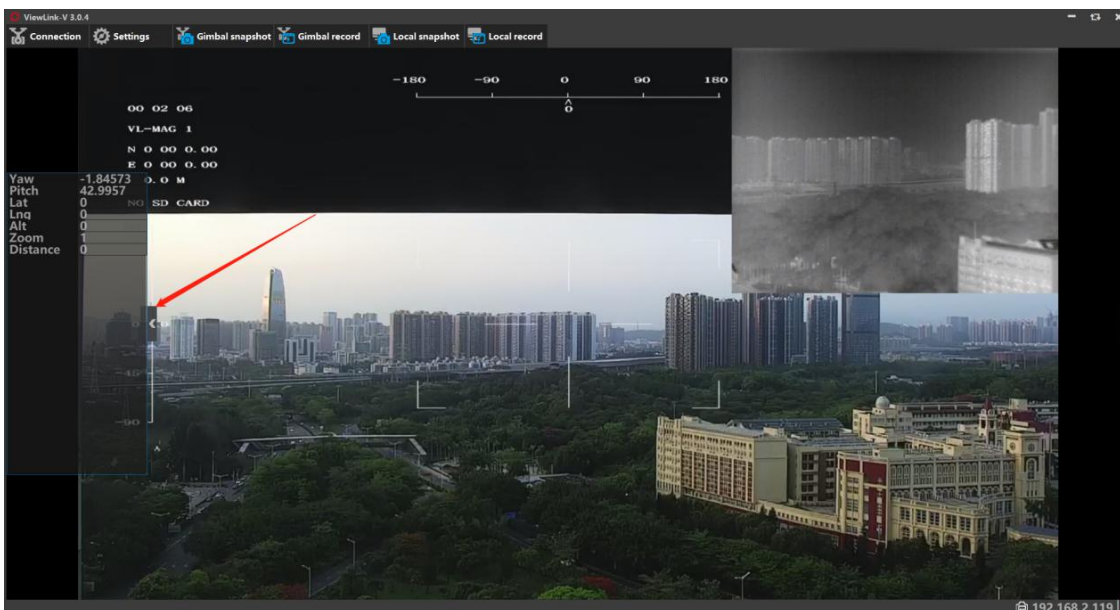
Viewlink can be used as a serial command setting tool. For some functions that Viewlink GUI does not provided, you can send commands to the gimbal and camera directly.



## 5. ViewLink Interface

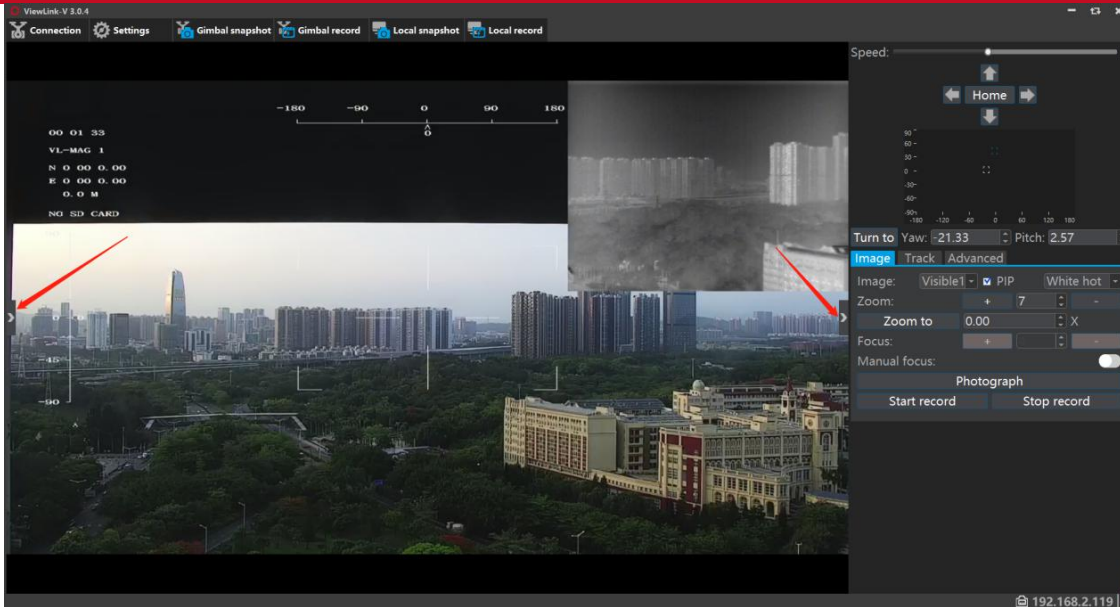
### 5.1 Real time information

Click on the left side arrow button to show real time data, such as yaw angle, pitch angle, latitude, longitude, altitude, zoom, distance, etc. But the picture and videos will not show this information. Just for real time information.



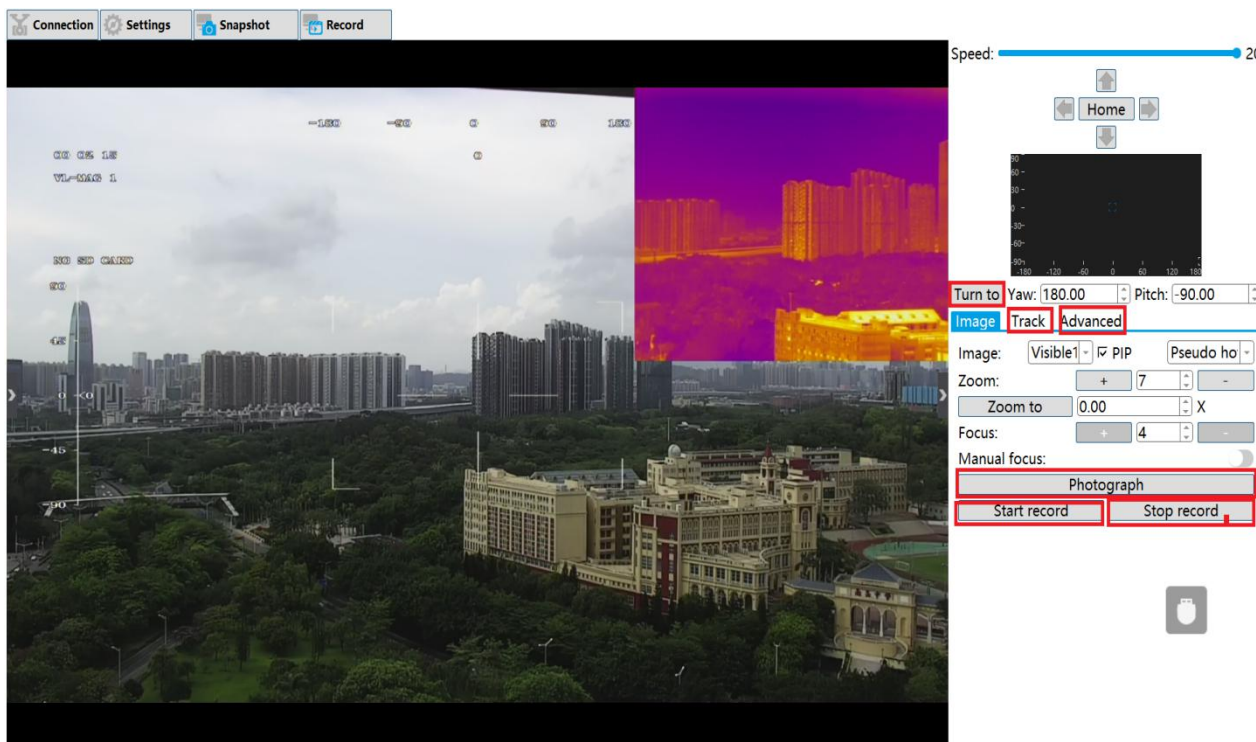
### 5.2 Fully screen display

Click on the left/right side arrow button to show/hide the graphical user interface, click the right side arrow can display video in full screen.



### 5.3 Function Menu

Viewlink will recognize the Viewpro gimbal cameras automatically after connected control method and the control interfaces will be various according to different models with different functions.



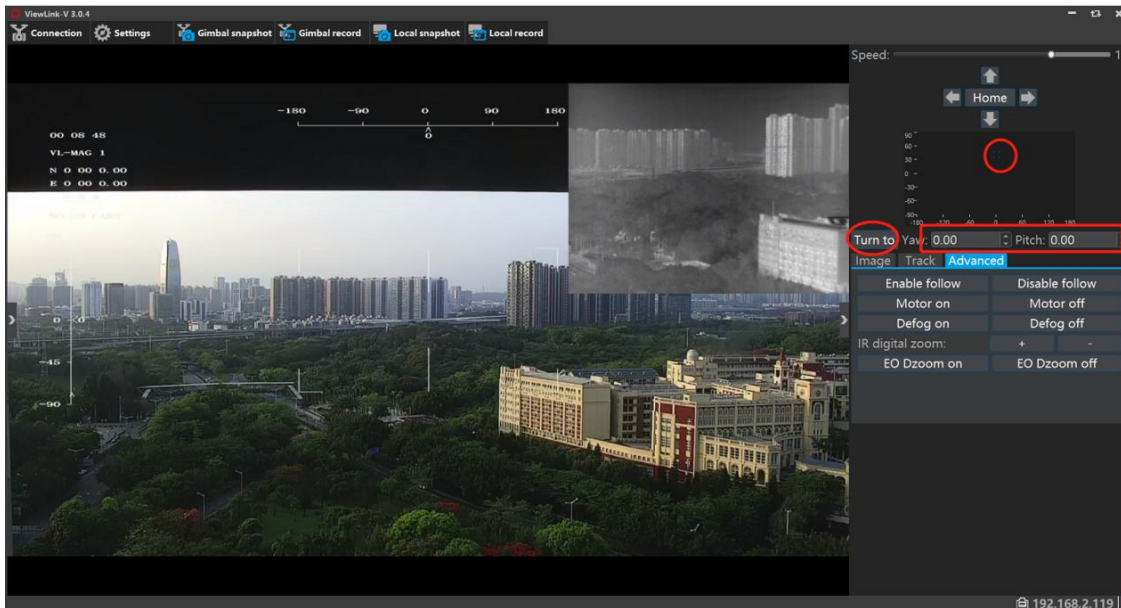
### 5.4 Gimbal Navigation

Choose a coordinate in the small window, or input a certain Yaw and Pitch value, then click on **Turn to**, the gimbal will go to the specified angle directly.

Note: When you trigger the tracking mode, at this time, except the "Home" and "Turn"

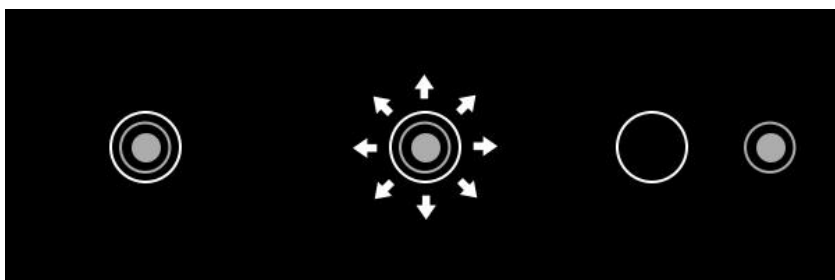
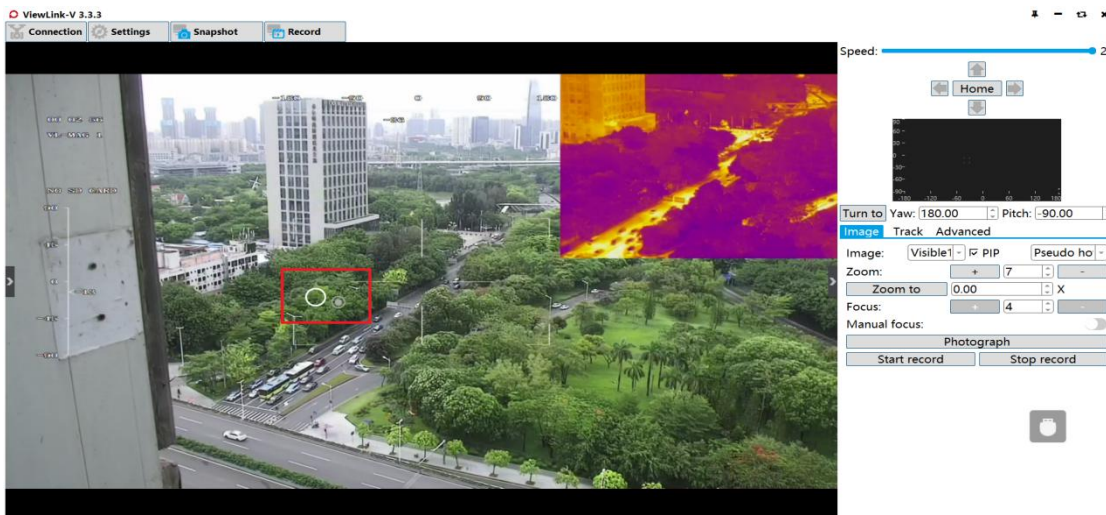


buttons can work, the other buttons for operating directions can not work unless you turn off the tracking mode.



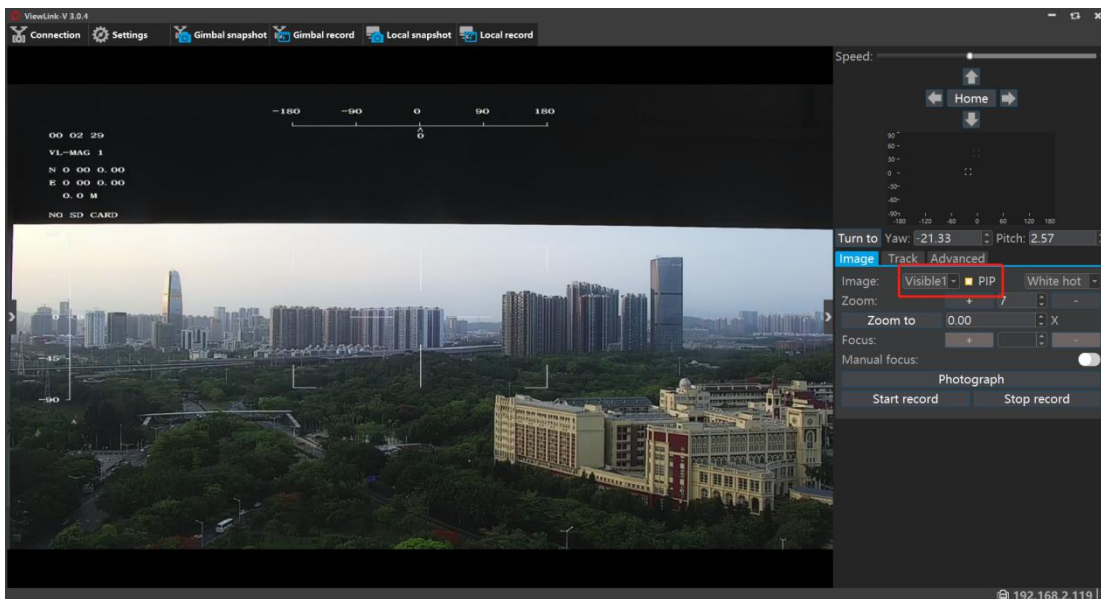
### 5.5 Screen Joystick

Click the mouse on the Viewlink screen, and a small white circle will appear on the screen. Long press can drag the gimbal to the target position directly. If the gimbal in the "Tracking" mode, when double clicked the mouse, the gimbal will start to track the object, and the small white circle does not work at this time.



## 5.6 Display Mode

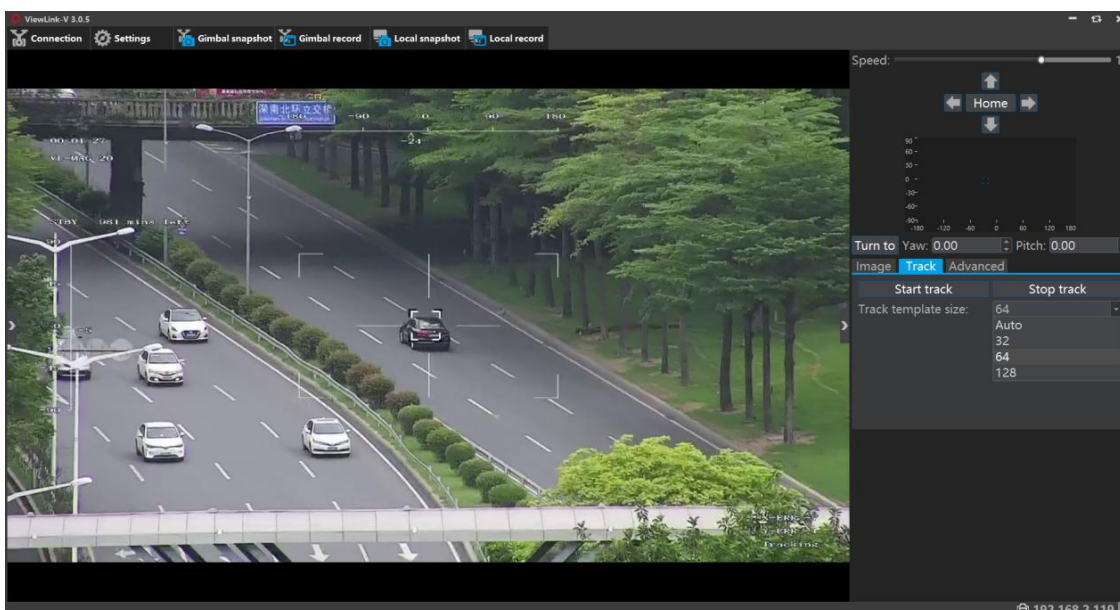
Video switch: to change dual sensor image form (refer to actual camera functions):  
IR+EO or EO+IR (PIP), EO only or IR only, 2K (for cameras with 2 EO + 1 IR)



## 5.7 Tracking

Start track and Stop track: can also double click to start track and right click to cancel track.

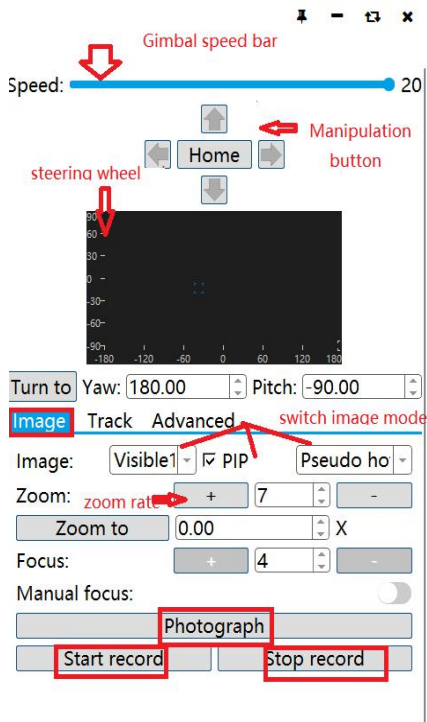
You can choose the track template size according to object size to get more accurate tracking.



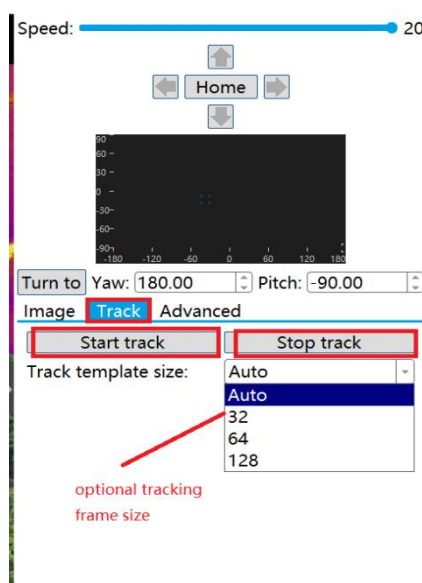
## 6. Function Overview

Viewlink control interfaces will be different according to different models with different functions. Example with Q30TIR for this instruction.

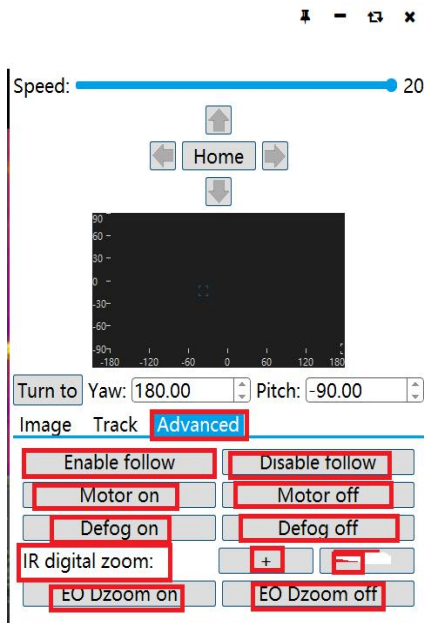
### 6.1 Image Menu (as below picture)



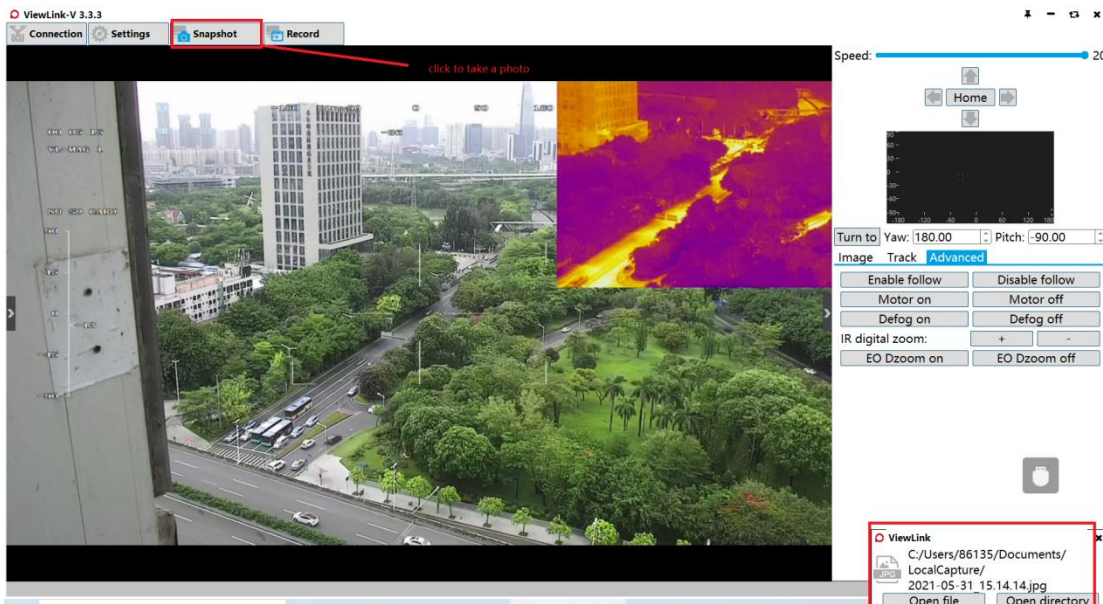
### 6.2 Tracking Menu (as below picture)



## 6.3 Advanced Menu (as below picture)

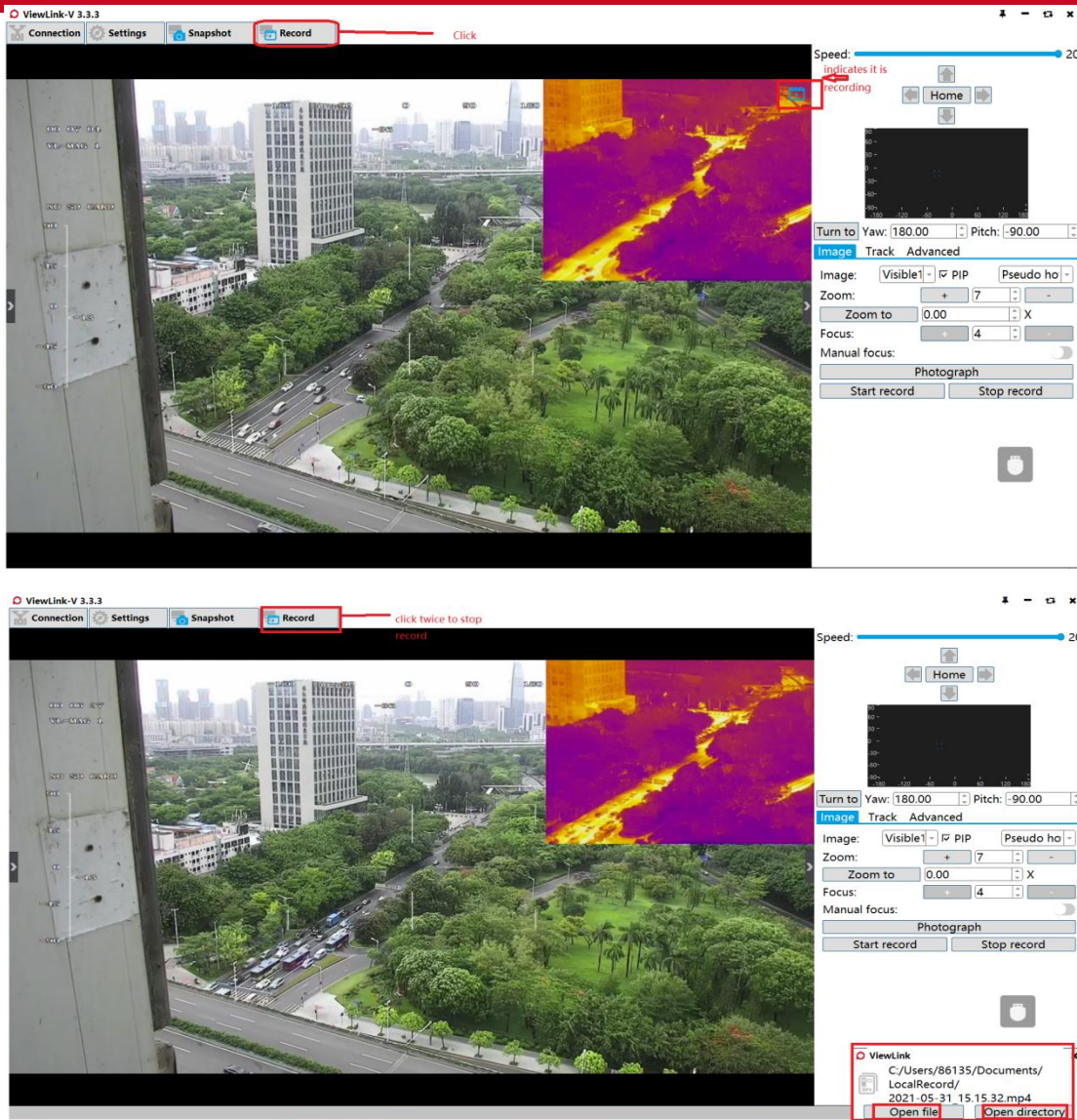


## 6.4 Local Snapshot (as below picture)



## 6.5 Local Record (as below picture)





## 7. Overview of Viewpro Gimbal Electrical Intergation

### 7.1 Viewpro Gimbal Initialization

The gimbal will go to initialization program after power on.

#### ① Initialization Stage

The gimbal will make some small movements to define and obtained the angle offset of the motor from the encoder. During the initial stage, each motor (different types of gimbals have different numbers of motors) will get the initial current, please connect the DC power supply before power on, the input voltage for gimbal is 12~24V, and the gimbal working voltage is 12V, and the power system must be able to provide the necessary current for the gimbal . If the gimbal cannot get enough power, may power off and reset during the initial stage.

## ② Gimbal reset

The gimbal begins to move after initialized, and the camera lens will zoom accordingly until each axis finds the origin index. After reset, the gimbal can receive the command. But there will be no response from the gimbal when control the gimbal on Viewlink before the reset is completed.

## 7.2 Viewpro Gimbal Control and Video

The gimbal can be controlled via Ethernet or TTL serial port. The digital images are obtained via Ethernet and in the integration of the T series gimbal, an IP link between the gimbal and the ground is used to transmit the images and control the gimbal. A bandwidth of 1 Mbps to 4 Mbps is usually required, and higher bandwidth allows the transmission of higher quality video.

# 8. Failure Recovery

## A. Viewlink cannot find the Viewpro gimbal from the network.

If the static IP address of the gimbal camera is not in the subnet of the Viewlink computer, or if the entire network is set with a static IP address ( without DHCP server), and the static or default address of the gimbal is not in the network Subnet. In this case, please connect the gimbal via the UART serial port, and set an appropriate IP address via the TTL tool (please reference the Viewpro gimbal network connection guide), power off the gimbal and try to connect via Ethernet.

## B.ViewLink is connected to the gimbal, but no image on the screen.

(1) Viewpro gimbal without IP output.

In this case, the Viewlink interface will no image on the screen, but the function menu will be displayed on the right side of the interface after the UART is connected.

(2) Viewpro gimbal with IP output.

a) Click "open video" in the Viewlink connection interface.

b) If this does not work, please check the gimbal default IP address whether is match the IP address of the computer or not, and verify the gimbal whether is sending video to your computer.

c) If the gimbal cannot send the video to your computer, please disable all firewalls.

Note: The default IP of the gimbal will be affixed to the gimbal with a small label

