Viewpro

Viewpro Tracking Series Gimbal Camera

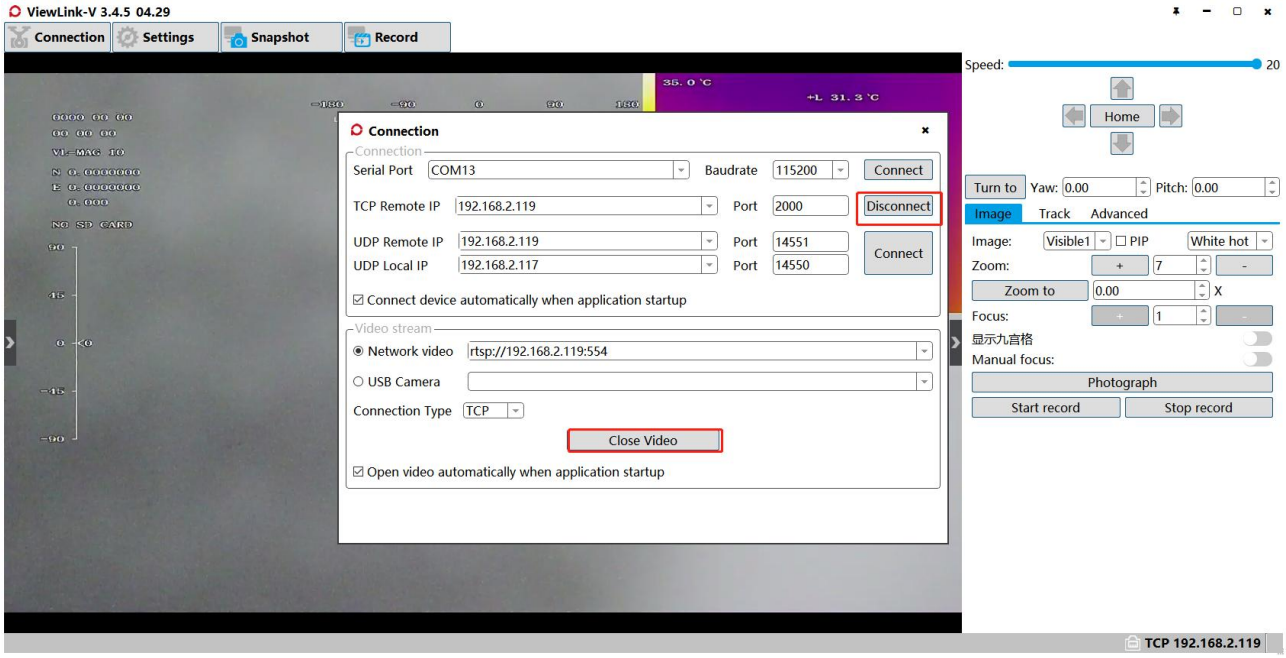
Ethernet Encoding Meta Data Instruction

1. Install “ViewLink-V3.4.5 04.29”

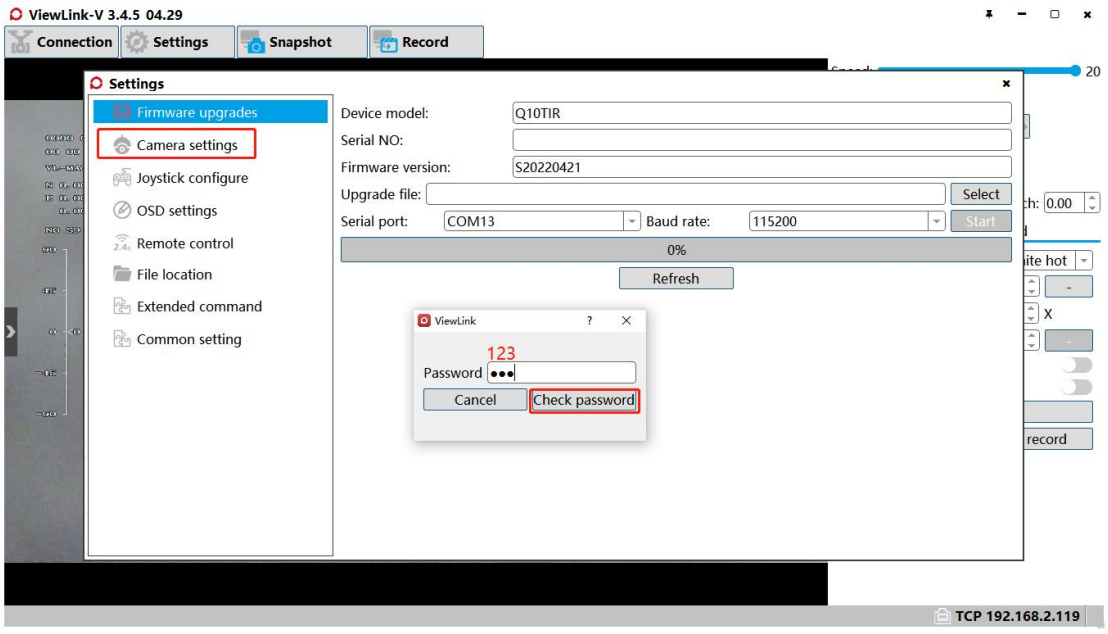
2. Upgrade encode firmware to support meta data version settings

3. Enter ViewLink controlling interface, connect to encoding settings

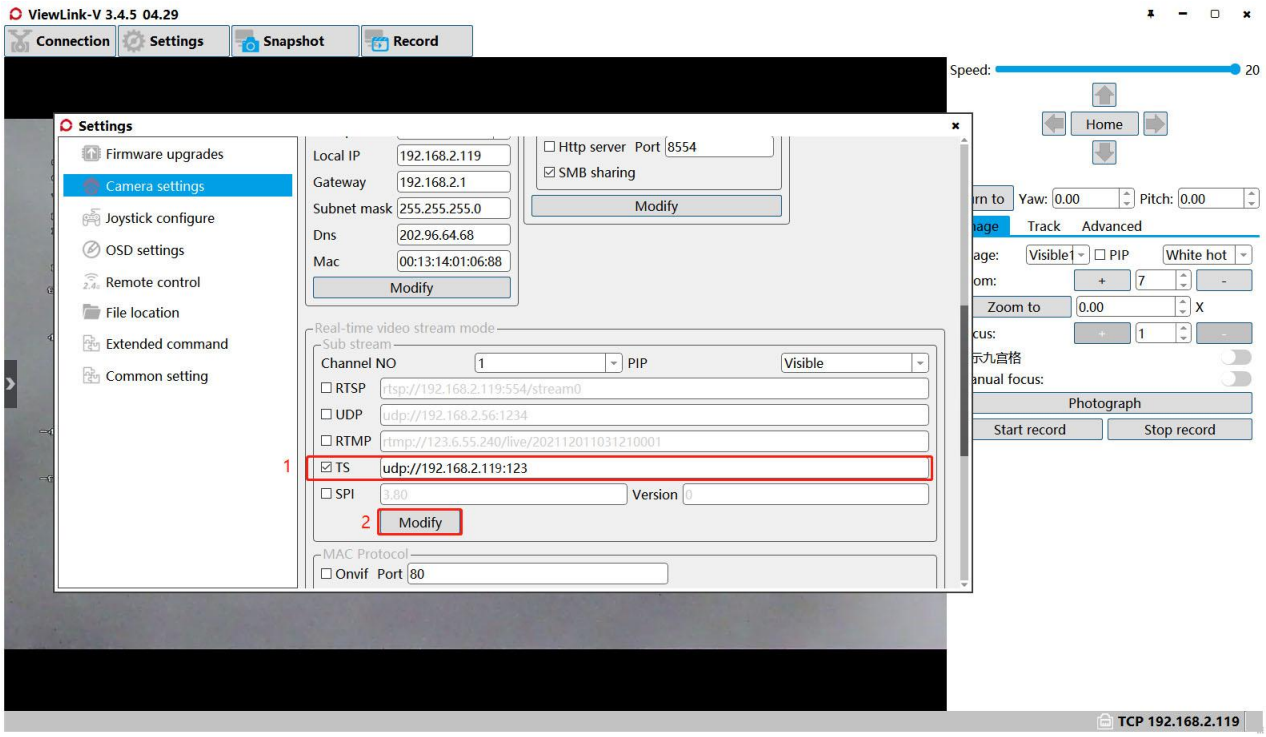
3.1 Example as default settings, IP：rtsp://192.168.2.119:554，connect to TCP control



3.2 Enter “Camera settings”, password “123”



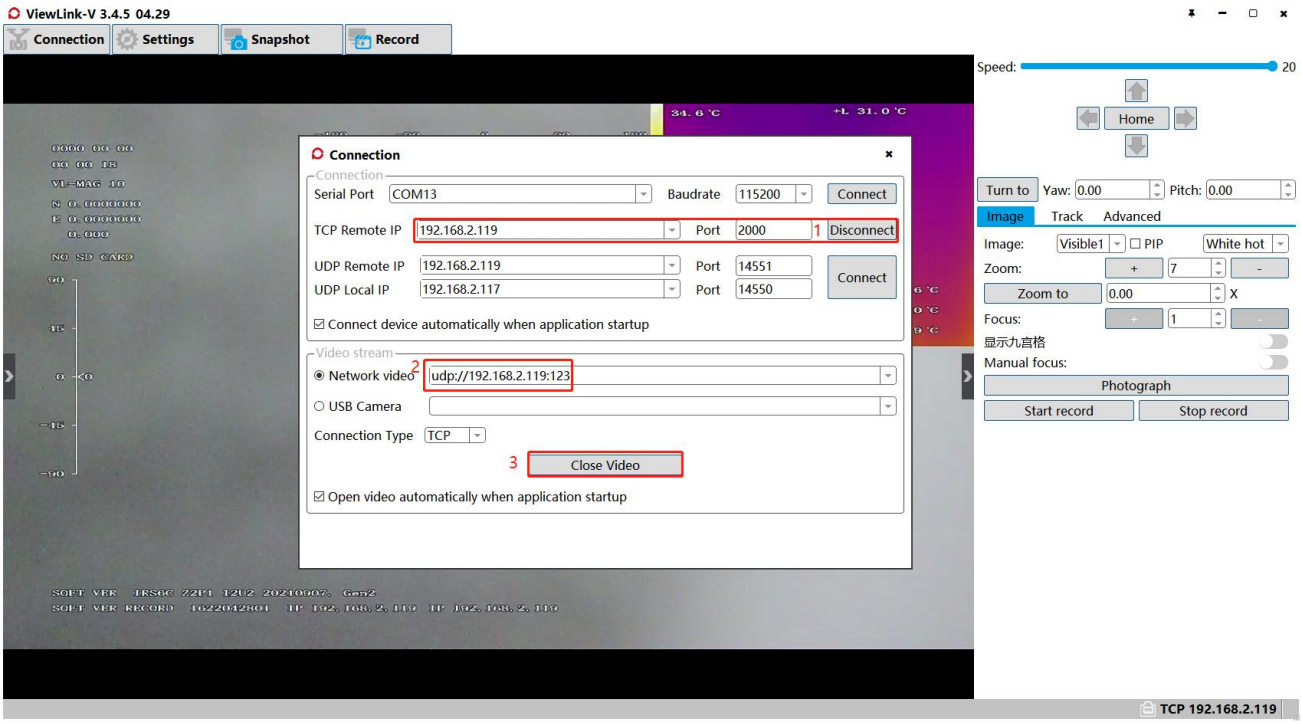
Set “Sub Stream” to “TS” mode (receive terminal 119 and port 123 can be changed as you need)



3.4 Reboot the gimbal

3.5 Connect ethernet on PC，IPv4 settings as below. (Please refer to Viewlink Instruction V3.3.8 for more detailed instruction)

3.6 Change to stream by udp (IP as what you set in step 3.2)



4. Upgrade CONN board firmware via Viewlink TTL or TCP to support meta data write in.

5. Send serial command to turn on KLV commands:
   A. Thermometry version: AA 55 2F 05 FF
   B. Non-thermometry version: AA 55 2F 04 FF

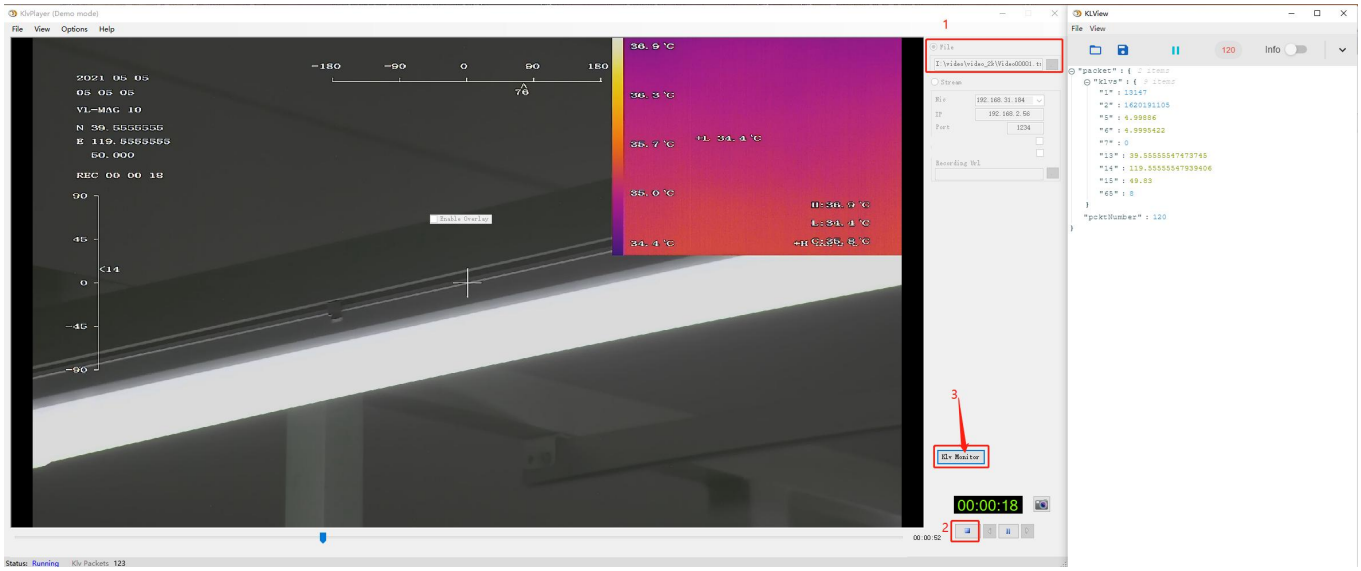
   Turn off KLV commands:
   A. Thermometry version: AA 55 2F 01 FF
   B. Non-thermometry version: AA 55 2F 00 FF

6. You can check meta data in both real time video stream and videos storage in SD card by special video player StanagPlayer.

Test Time and GPS meta data by serial port command:

1. aa 55 40 7f ff (send once)
2. F9 FC 15 FF 05 05 05 05 05 00 00 00 00 88 13 00 00 88 13 00 00 E3 B2 93 17 E3 BA 42

   47 50 C3 00 00 00 00 00 00 00 00 D0 (send with interval 500ms)



Tag	Name	Value	Interpretation	KLV Hex Bytes
2	UNIX Time Stamp	1,231,798,102,000,000 microseconds	Mon Jan 12 2009 22:08:22 (UTC)	02 08 00 04 60 50 58 4E 01 80
5	Platform Heading Angle	0x71C2	159.9744 Degrees	05 02 71 C2
6	Platform Pitch Angle	0xFD3D	-0.4315251 Degrees	06 02 FD 3D
7	Platform Roll Angle	0x08B8	3.405814 Degrees	07 02 08 B8
13	Sensor Latitude	0x5595B66D	60.17682296 Degrees	0D 04 55 95 B6 6D
14	Sensor Longitude	0x5B5360C4	128.42675904 Degrees	0E 04 5B 53 60 C4
15	Sensor True Altitude	0xC221	14190.72 Meters	0F 02 C2 21
16	Sensor Horizontal FOV	oxCD9C	144.5713 Degrees	10 02 CD 9C
17	Sensor Vertical FOV	0xD917	152.6436 Degrees	11 02 D9 17
18	Sensor Rel. Azimuth Angle	0x724A0A20	160.71921147 Degrees	12 04 72 4A 0A 20
19	Sensor Rel. Elevation Angle	0x87F84B86	-168.79232483 Degrees	13 04 87 F8 4B 86
20	Sensor Rel Roll Angle	0x00000000	0.0 Degrees	14 04 00 00 00 00
21	Slant Range	0x03830926	68590.98 Meters	15 04 03 83 09 26
22	Target Width	0x1281	722.8199 Meters	16 02 12 81
23	Frame Center Latitude	0xF101A229	-10.54238863 Degrees	17 04 F1 01 A2 29
24	Frame Center Longitude	0x14BC082B	29.15789012 Degrees	18 04 14 BC 08 2B
25	Frame Center Elevation	0x34F3	3216.037 Meters	19 02 34 F3
65	UAS LDS Version	0x02	MISB Standard 0601.2	41 01 02
1	Checksum	0xC84c	0xC84C	01 02 C8 4C