

AVer TR320/530, PTZ310/330, and TR310/333 Camera

Streaming with Facebook Live (October 2020)

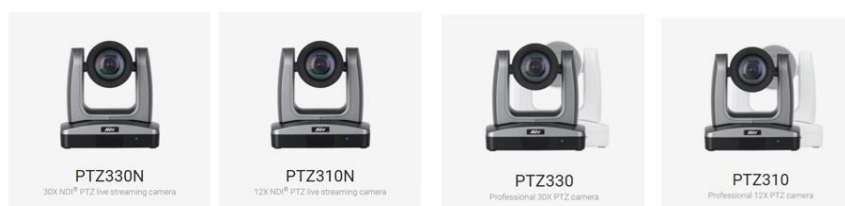
Steps to integrate the AVer TR and PTZ Cameras with Facebook Live

AVer Pro-AV has high quality image Cameras (TR320/530, PTZ310/330, TR310/333) that will integrate with Facebook Live workflows for peak performance and ease of use. We will show the configuration process for both the TR and PTZ Camera lines and Facebook streaming service. There are some pre-requisites for this to happen, see below.

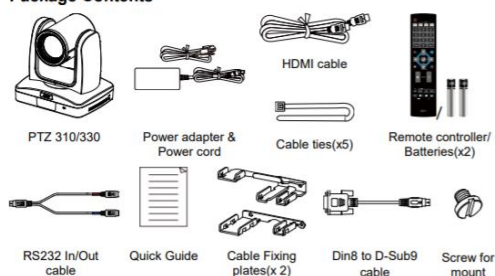
- Chrome Browser, version 79.0.3945.xxx and later.
- Facebook account.
- Windows 10 Pro OS, i7 Processor, 16GB Memory, used in this setup.

PTZ310/330 Camera

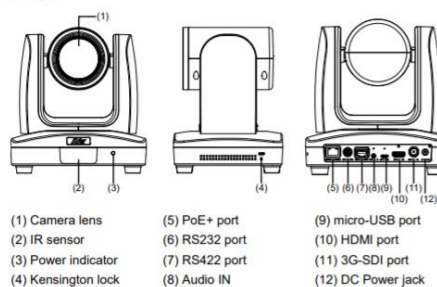
- AVer PTZ330/N Camera and accessories.



Package Contents



Overview

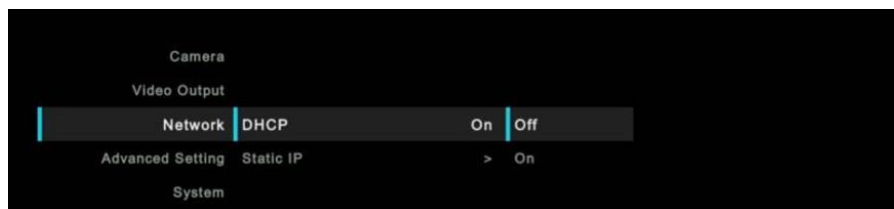


PTZ310/330 Camera RTMP Streaming to Facebook Live

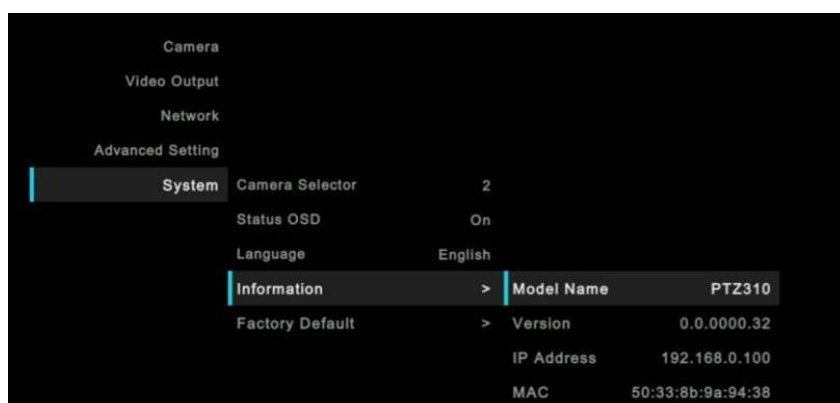
Camera Settings

1. Connect the PTZ310/330 camera via RJ45 Network Cat5E (or better) connection; verify IP address of Camera in order to connect via Web browser. Locate the remote, select the “Menu” icon on the remote and navigate to the “**Network->DHCP->**” setting, verify it is set to DHCP “On” in order to grab an available IP address. If you are reserving IP addresses, verify it is set to “OFF” and that the correct IP address has been set.

Go to **Network > DHCP > On**.



After turning DHCP on, go to **System > Information** to view the IP address.



2. Once you have the IP address setup, type the IP address in your Chrome browser (Setup on same subnet) and you should now see the login to the PTZ330 camera shown below.

Sign in
http://192.168.0.106
Your connection to this site is not private

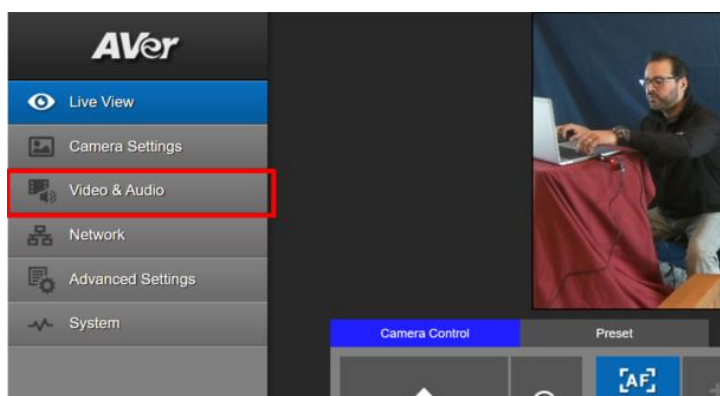
Username

Password

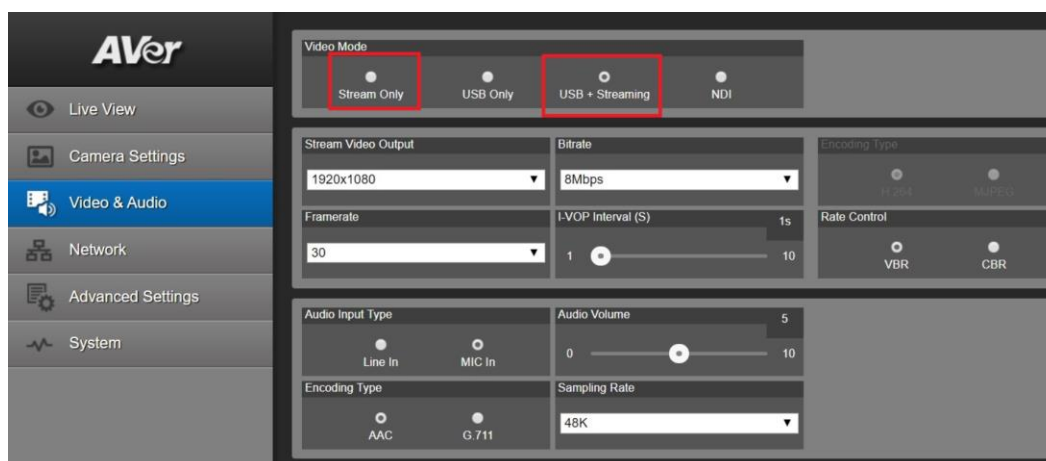
3. The default Username/password is “administrator” or “admin / admin”. ***Note:** If this is the first time accessing the PTZ330 camera via the Web login it will ask you to change the Username/Password.

PTZ310/330 Camera RTMP Streaming to Facebook Live (continued)

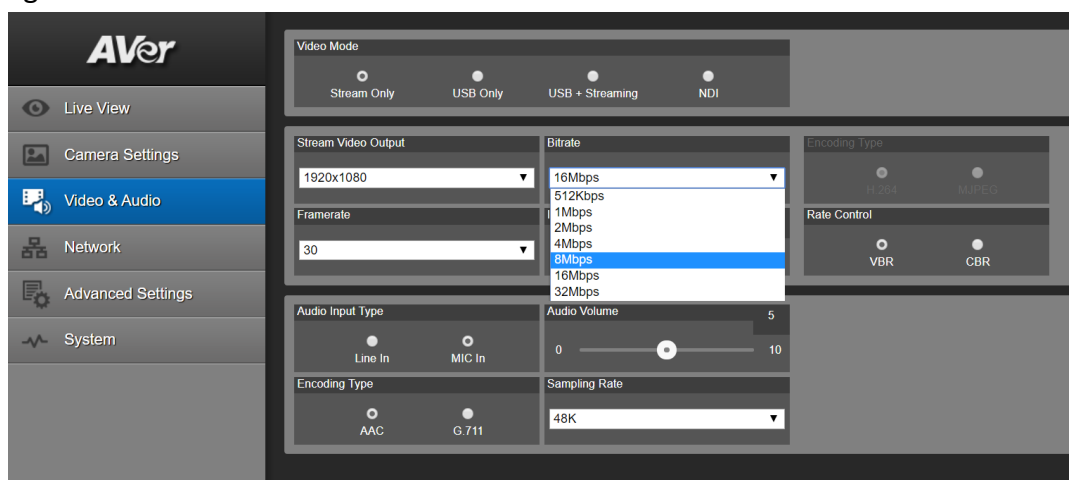
- Next, you should now see the main login screen with a “Live View” of the PTZ Camera.



- Next, after selecting the *Video & Audio* setting, verify that you have either “Stream Only” selected or “USB + Streaming” selected, depending on your setup. Select your Stream Video Output standard, Bitrate, Framerate, Encoding, etc.



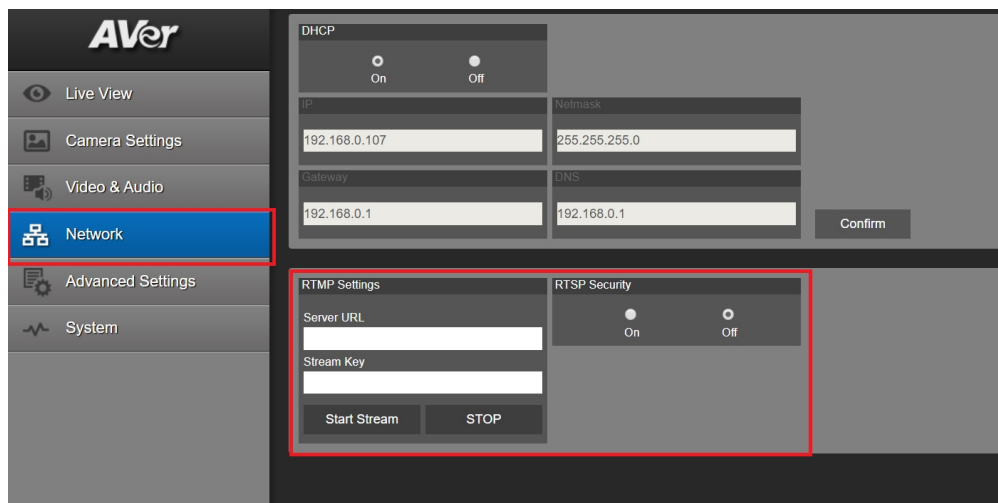
***Note:** Once streaming has started do not change the Stream Video Output on the fly, you will need to “STOP” streaming, change the Stream Video Output, then “Start” the stream again.



***Note:** Some RTMP servers require a minimum bitrate of 2.5Mbps for their environment.

PTZ310/330 Camera RTMP Streaming to Facebook Live (continued)

- Next, select the *Network* setting; this is where you will enter the RTMP *Server URL* and *Stream Key*. *RTSP Security* to either “On” or “Off” depending if you want encryption when using *RTSP*.

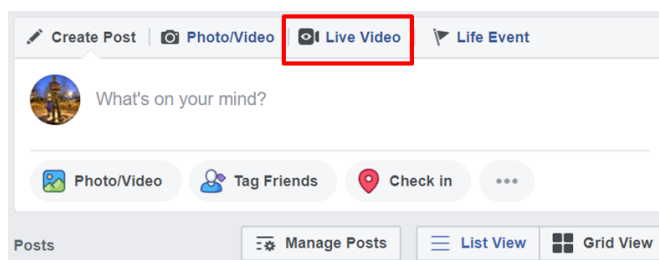


Some recommended settings from Facebook:

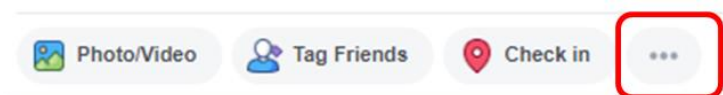
- Recommended max bit rate is 4000 Kbps (4 Mbps).
- Recommended audio bit rate is 96 Kbps or 128 Kbps.
- Max: 1080p (1920x1080) resolution, at 60 frames per second.
- An I-frame (keyframe) must be sent at least every 2 seconds throughout the stream.
- Titles must have fewer than 255 characters or the stream will fail.
- H264 encoded video and AAC encoded audio only.

Facebook Live Settings

- Go to your Facebook account and login and select the “*Live Video*” icon.

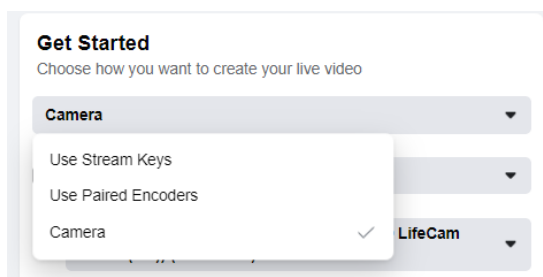


- The *Live Video* selection may also be located in the more (3 dots) section and takes you to Facebook Live Producer.

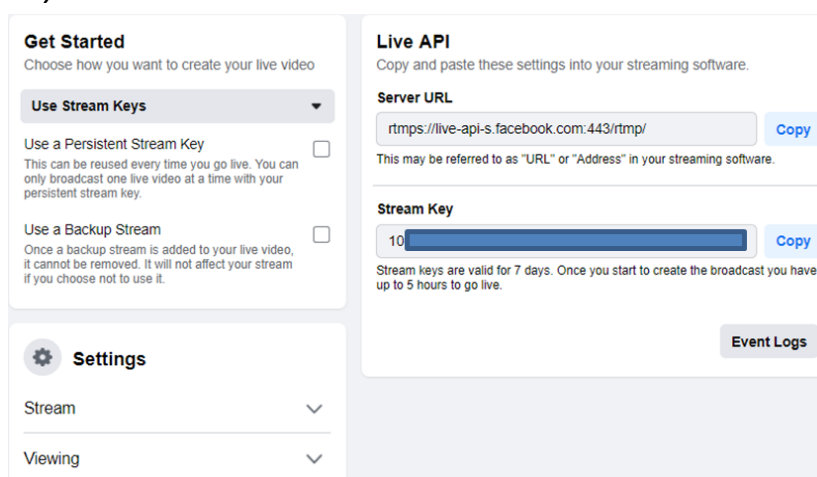


PTZ310/330 Camera RTMP Streaming to Facebook Live (continued)

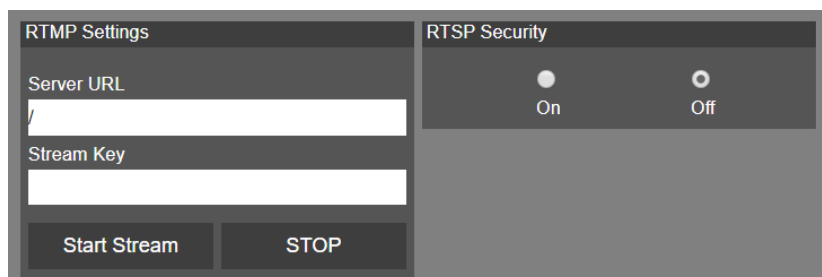
- Next, under the Camera section select *“Use Stream Keys”*.



- Next, this will expand the window with more options and the Live API *Server URL* and *Stream Key* needed for the PTZ camera.



- Next, copy *Server URL* and *Stream Key* information by using the Copy selection.
- Next, go back to the PTZ WebLogin and paste the Facebook URL and Stream Key information to the PTZ Camera RTMP Settings.

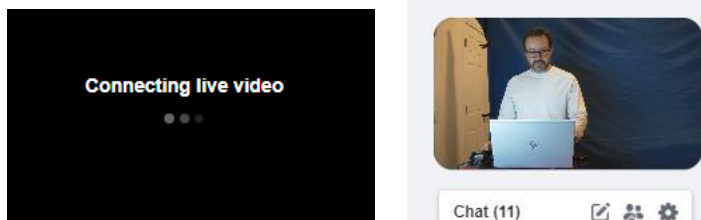


- Next, select *Start Stream*; this will begin the stream to Facebook. You should see a Streaming icon appear to indicate the stream process has started.

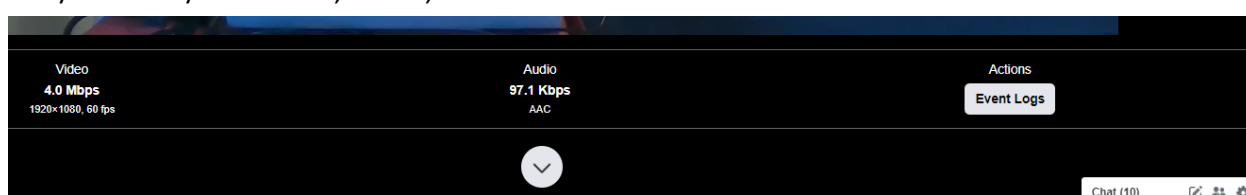


PTZ310/330 Camera RTMP Streaming to Facebook Live (continued)

8. To verify, go to your Facebook account and in the lower right corner, verify the video stream feed from the PTZ330 camera. A message should appear “Connecting live video” and the video should appear within 10-15 seconds. ***Note:** If no message or video is displayed, verify your Network Gateway/DNS settings are correct in the PTZ camera.



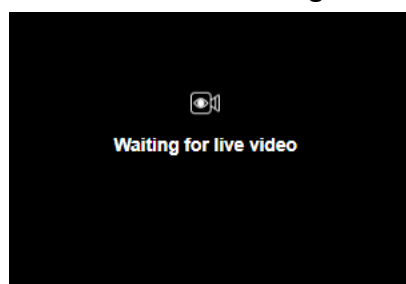
9. Next, scrolling up will show the streaming video with information of the feed; Video bit rate/standard/frame rate, Audio, etc.



10. To end the streaming feed from the PTZ camera, go to the WebLogin and select “STOP”. The video should stop streaming within 5-10 seconds.



11. To verify streaming has stopped, go back to your Facebook account; it should now be displaying a “Black” screen with a message “Waiting for live video”.



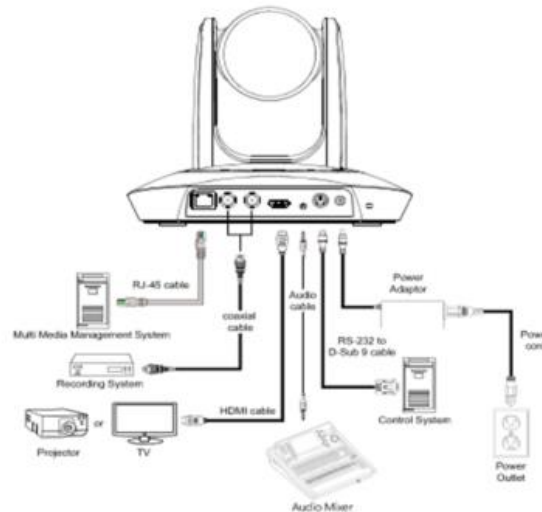
12. This concludes the AVer PTZ310/330 Camera Streaming within the Facebook Live environment.

TR320/530 (Tracking) Camera RTMP Streaming to Facebook Live Camera Settings

Important Camera Setup

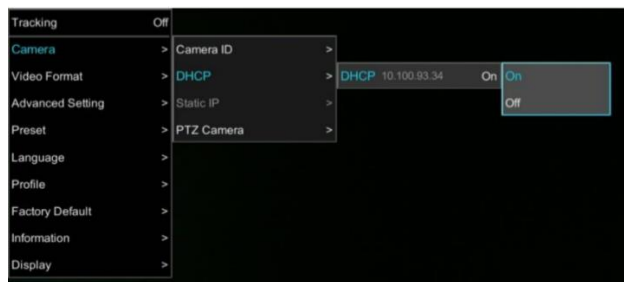
Installation Suggestion:

- Install height: 2~3m (6.56~9.84 feet). 2.4m (7.87 feet) is recommended. If the camera height is too low, tracking may be compromised. Please raise the camera to at least 6.56 feet.
- Distance from podium:
 - TR320: 4~10m (13~33 feet)
 - TR530: 4~15m (13~49 feet)

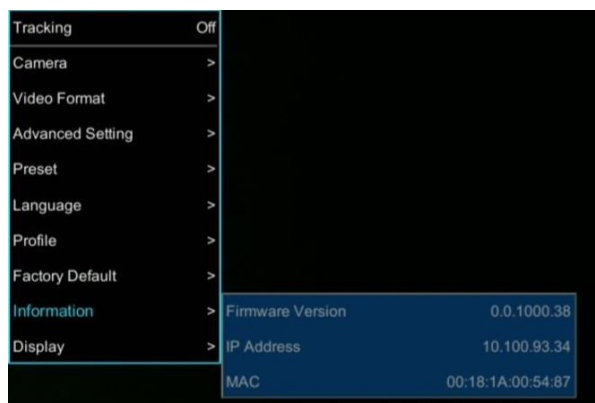


1. Connect the TR530 camera via RJ45 Network Cat5E (or better) cable; verify IP address of Camera in order to connect via Web browser. If IP address is not known, locate the remote, select the “Menu” icon and navigate to the “**Camera>DHCP->**” setting, verify DHCP is set to “On” in order to grab an available IP address. If you are reserving IP addresses, verify it is set to “OFF” and that the correct IP address has been set.

Go to **Camera > DHCP > DHCP >On**.

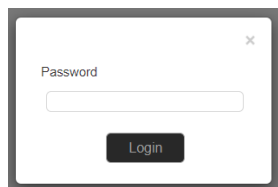


After turning DHCP on, go to **Information** to view the IP address.

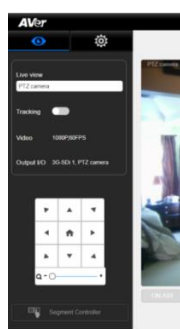



TR320/530 (Tracking) Camera RTMP Streaming to Facebook Live

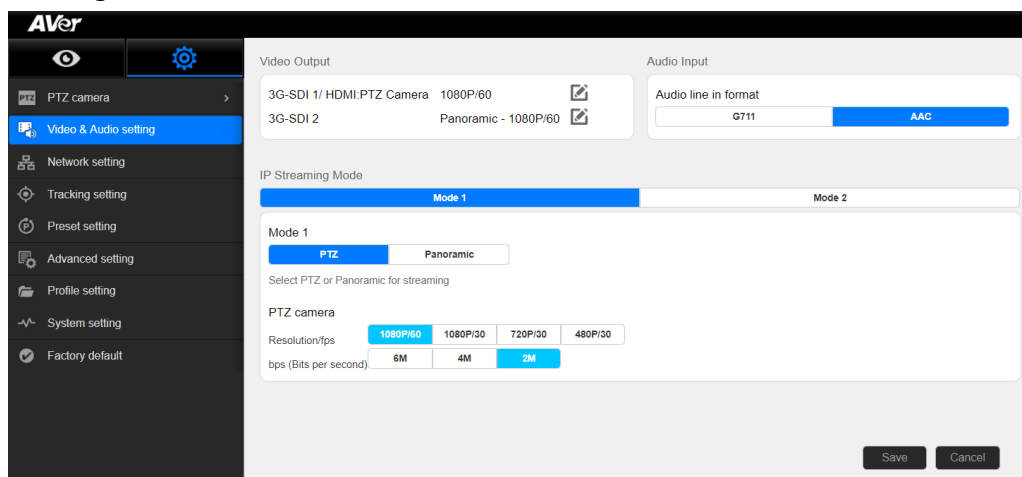
2. Another way to find the Camera IP address (On same Subnet) is to use the AVer IPCam Utility to find the camera. AVer software can be found here:
<https://www.aver.com/download-center>.
3. Once you have the IP address setup, type the IP address in your Chrome browser (Setup on same subnet) and you should now see a login to the TR320/530 camera shown below.



4. The default password is "admin".
5. Next, you should now see the main login screen with a "Live View" of the TR Camera.



6. Next, select the settings gearbox , then select *Video & Audio setting*, this is where you can select Video Output, Audio, and the type of Streaming mode to use and Streaming video standard.



Mode 1: You will use either the PTZ Camera OR Panoramic Camera view for your stream with varying video selections.

Mode 2: There will be 2 simultaneous streams from PTZ and Panoramic views set to (1080p/30) with adjustable **bps** (bits per second) if selected.

TR320/530 (Tracking) Camera RTMP Streaming to Facebook Live

IP Streaming Mode

Mode 1 Mode 2

Mode 2

PTZ camera

Resolution 1080P/30

bps (Bits per second) 6.0M 3.0M 1.5M

Panoramic camera

Resolution/fps 1080P/30

bps (Bits per second) 6.0M 3.0M 1.5M

Save Cancel

7. Next, select *Network Setting*. You should now see the following information displayed.

AVer

PTZ camera

Video & Audio setting

Network setting

Tracking setting

Preset setting

Advanced setting

Profile setting

System setting

Factory default

Network

DHCP enable ☒

IP address 10 . . .

Netmask 255 . 255 . 255 . 0

Gateway 10 . . .

DNS 10 . . .

Apply

RTMP Server (PTZ)

Server URL rtmp://a.rtmp

Stream Key *****

Connect

RTSP (PTZ camera: rtsp://Camera IP 554/live_st1, Panoramic camera: rtsp://Camera IP 8554/live_st2)

Password Confirmation ☐

***Note:** It is a good idea to verify the Gateway/DNS of your network; this is how the camera stream will access the *WWW*.

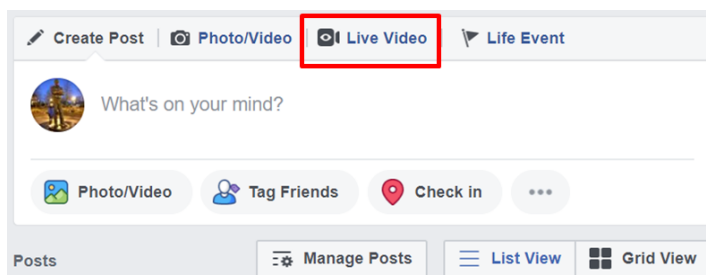
8. Next, notice the *RTMP Server (PTZ) URL* selection, this is where you will “paste” the *URL string* and *Stream Key* from Facebook.

Some recommended settings from Facebook:

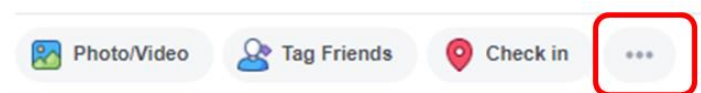
- Recommended max bit rate is 4000 Kbps (4 mbps).
- Recommended audio bit rate is 96 Kbps or 128 Kbps.
- Max: 1080p (1920x1080) resolution, at 60 frames per second.
- An I-frame (keyframe) must be sent at least every 2 seconds throughout the stream.
- Titles must have fewer than 255 characters or the stream will fail.
- H264 encoded video and AAC encoded audio only.

Facebook Live Settings

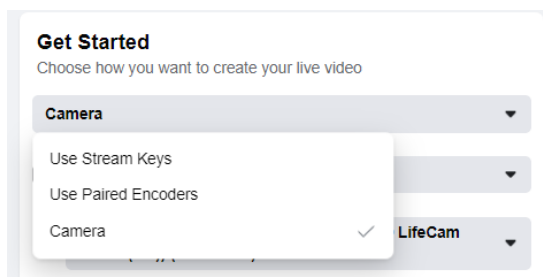
1. Go to your Facebook account and login and select the “Live Video” icon.



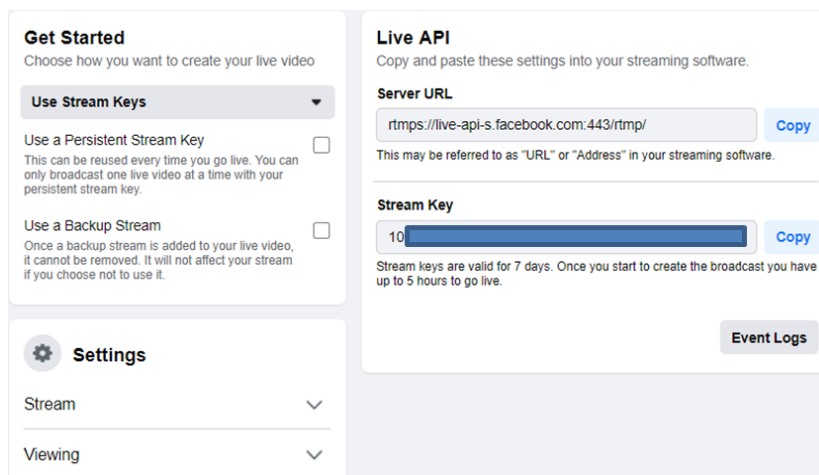
2. The Live Video selection may also be located in the more (3 dots) section and takes you to Facebook Live Producer.



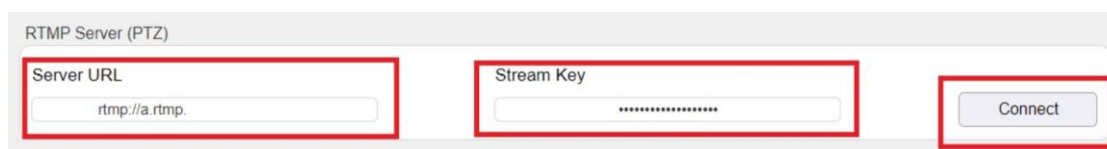
3. Next, under the Camera section select “Use Stream Keys”.



4. Next, this will expand the window with more options and the Live API Server URL and Stream Key needed for the Tracking camera.

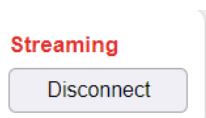


5. Next, copy Server URL and Stream Key information by using the Copy selection.
6. Next, go to the TR Camera WebLogin, Network Setting, and paste the Server URL and Stream Key information into the fields provided.

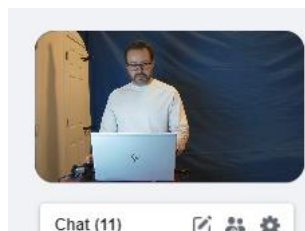
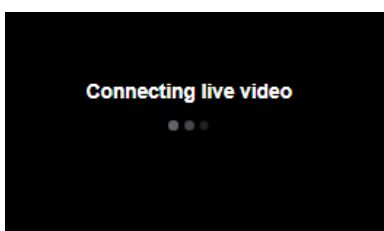


TR320/530 (Tracking) Camera RTMP Streaming to Facebook Live

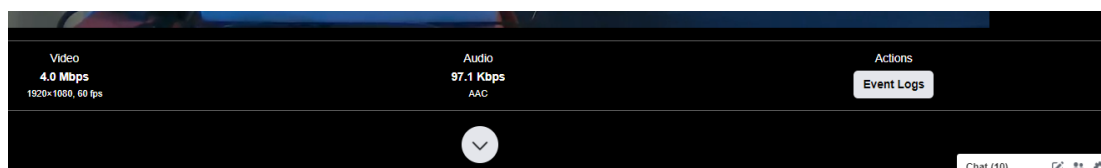
- Next, to begin the Stream from the TR Camera, select *Connect*, you should see a red “Streaming” text appear, to indicate you are now streaming. This is where you would also “Disconnect” the stream.



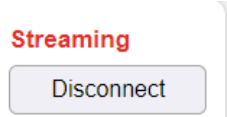
- To verify, go to your Facebook account and in the lower right corner, verify the video stream feed from the TR320/530 camera. A message should appear “Connecting live video” and the video should appear within 10-15 seconds. ***Note:** If no message or video is displayed, verify your Network Gateway/DNS settings are correct in the Tracking camera.



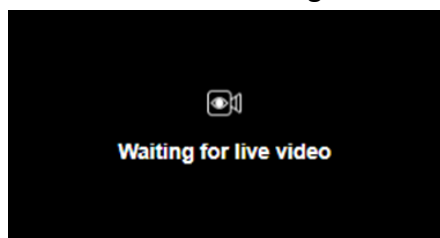
- Next, scrolling up will show the streaming video with information of the feed; Video bit rate/standard/frame rate, Audio, etc.



- To end the streaming feed from the TR camera, go to the WebLogin and select “Disconnect”. The video should stop streaming within 5-10 seconds.



- To verify streaming has stopped, go back to your Facebook account; it should now be displaying a “Black” screen with a message “Waiting for live video”.



- This concludes the AVer TR320/530 Camera Streaming within the Facebook Live environment.

TR310/333 AI Tracking Camera

AVer has (5) NEW TR AI Tracking cameras available, they are the TR310, TR311HN, TR311, TR313, and TR333. These cameras use advanced artificial intelligence (AI) technology to effectively track your speaker or Zone track without a dedicated camera operator. All the cameras have the same Tracking Modes and can be setup to stream via RTMP the same way.

AVer TR310/330 Camera and accessories

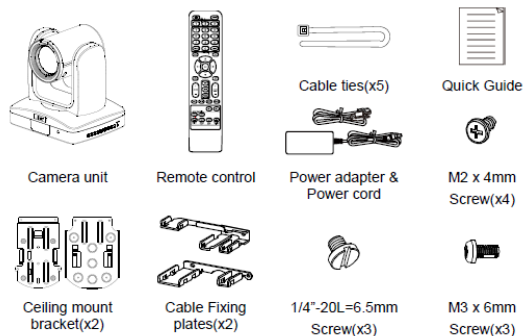
TR311HN

12X NDI® PTZ live streaming camera

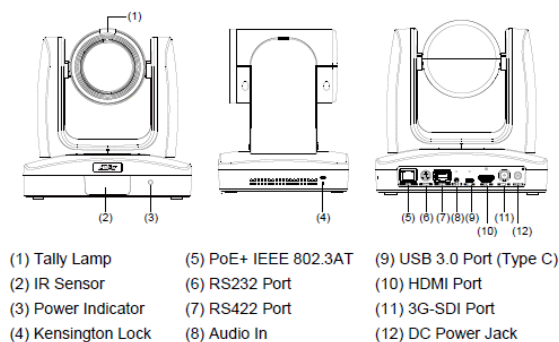
Featuring NEW AI Auto Tracking



Package Contents



Overview



TR310/333 Camera RTMP Streaming to Facebook Live

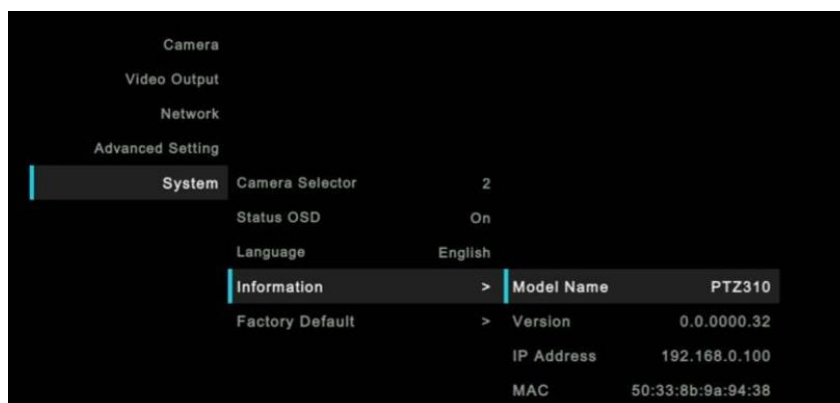
Camera Settings

1. Connect the TR310/333 camera via RJ45 Network Cat5E (or better) connection; verify IP address of Camera in order to connect via Web browser. If IP address is not known, locate the remote, select the “Menu” icon on the remote and navigate to the “**Network->DHCP->**” setting, verify it is set to DHCP “On” in order to grab an available IP address. If you are reserving IP addresses, verify it is set to “OFF” and that the correct IP address has been set.

Go to **Network > DHCP > On**.



After turning DHCP on, go to **System > Information** to view the IP address.



2. Once you have the IP address setup, type the IP address in your Chrome browser (Setup on same subnet) and you should now see the login to the TR310/333 camera shown below.

Sign in
http://192.168.0.106
Your connection to this site is not private

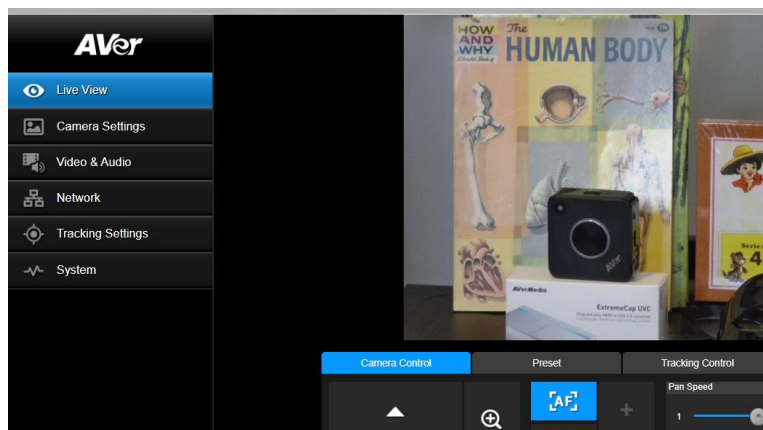
Username

Password

3. The default Username/password is “administrator” or “admin / admin”. ***Note:** If this is the first time accessing the TR310/333 camera via the Web login it will ask you to change the Username/Password.

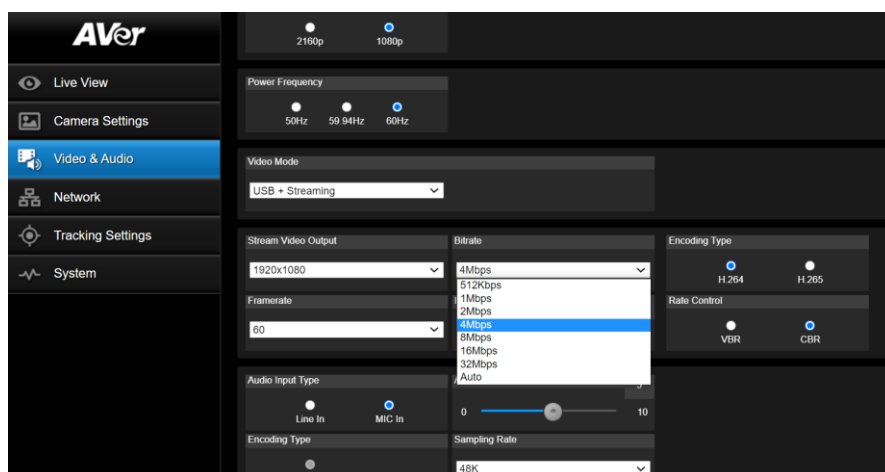
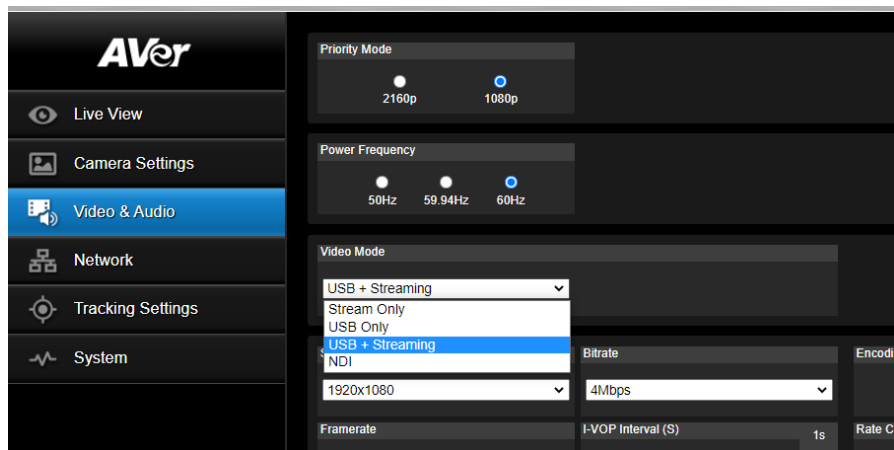
TR310/333 Camera RTMP Streaming to Facebook Live (continued)

- Next, you should now see the main login screen with a “Live View” of the PTZ Camera.



- Next, after selecting the *Video & Audio* setting, verify that you have either “Stream Only” selected or “USB + Streaming” selected, depending on your setup. Select your Stream Video Output standard, Bitrate, Framerate, Encoding, etc.

***NDI Mode:** If NDI is selected, the USB output is disabled, this is by design.

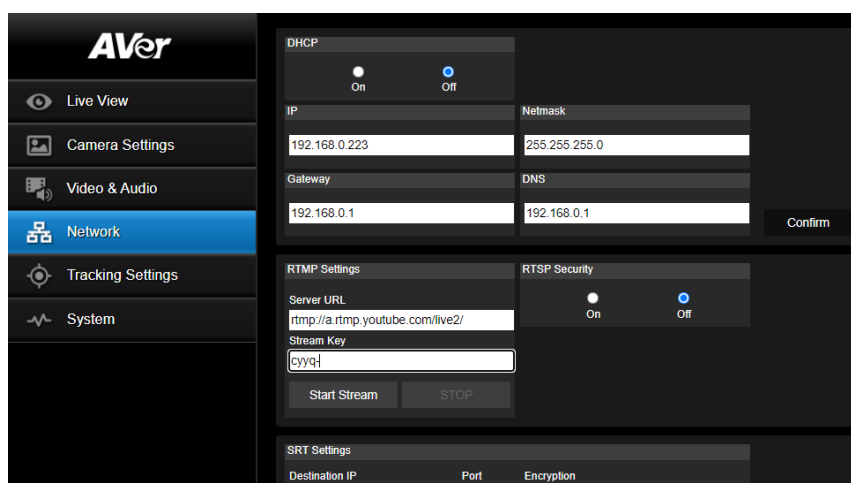


***Note:** Some RTMP servers require a minimum bitrate of 2.5Mbps for their environment.

TR310/330 Camera RTMP Streaming to Facebook Live (continued)

6. Next, select the *Network* setting; this is where you will enter the RTMP Server URL and Stream Key. RTSP Security to either “On” or “Off” depending if you want encryption when using RTSP.

***Note:** Once streaming has started do not change the Stream Video Output on the fly, you will need to “STOP” streaming, change the Stream Video Output, then “Start” the stream again.

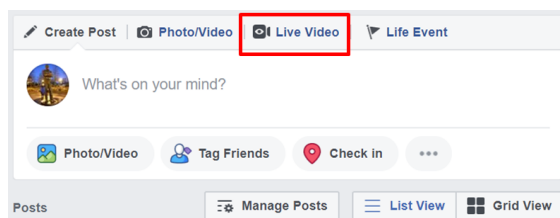


Some recommended settings from Facebook:

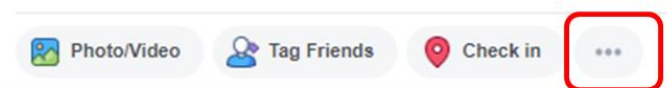
- Recommended max bit rate is 4000 Kbps (4 Mbps).
- Recommended audio bit rate is 96 Kbps or 128 Kbps.
- Max: 1080p (1920x1080) resolution, at 60 frames per second.
- An I-frame (keyframe) must be sent at least every 2 seconds throughout the stream.
- Titles must have fewer than 255 characters or the stream will fail.
- H264 encoded video and AAC encoded audio only.

Facebook Live Settings

7. Go to your Facebook account and login and select the “Live Video” icon.

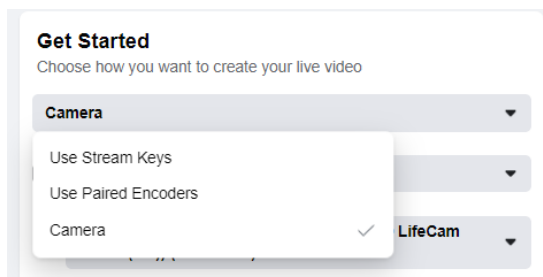


8. The *Live Video* selection may also be located in the more (3 dots) section and takes you to Facebook Live Producer.

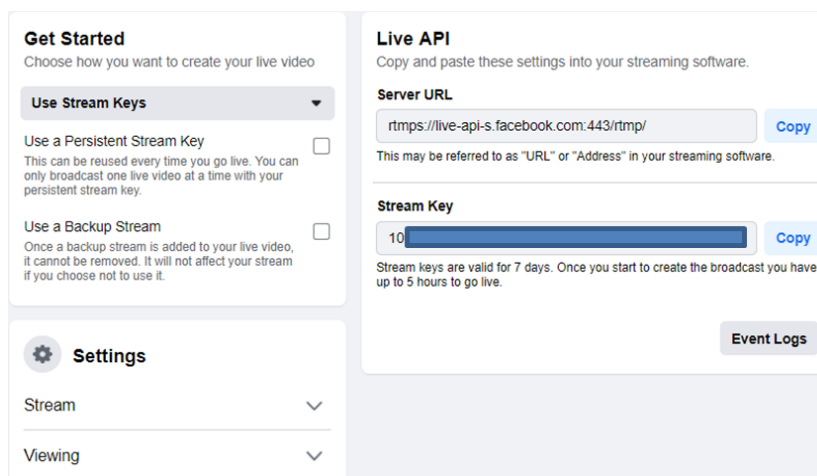


TR310/333 Camera RTMP Streaming to Facebook Live (continued)

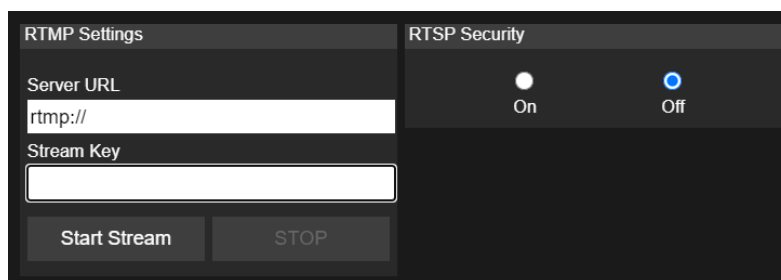
9. Next, under the Camera section select “Use Stream Keys”.



10. Next, this will expand the window with more options and the Live API Server URL and Stream Key needed for the TR camera.



11. Next, copy *Server URL* and *Stream Key* information by using the Copy selection.
12. Next, go back to the TR313 WebLogin and paste the Facebook URL and Stream Key information to the PTZ Camera RTMP Settings.

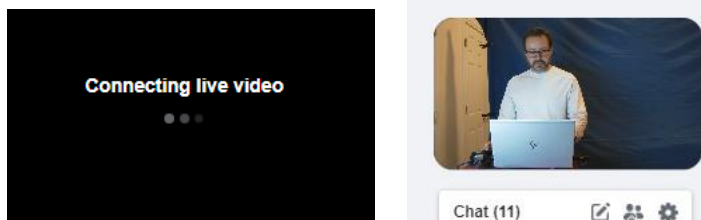


13. Next, select *Start Stream*; this will begin the stream to Facebook. You should see a Streaming icon appear to indicate the stream process has started.

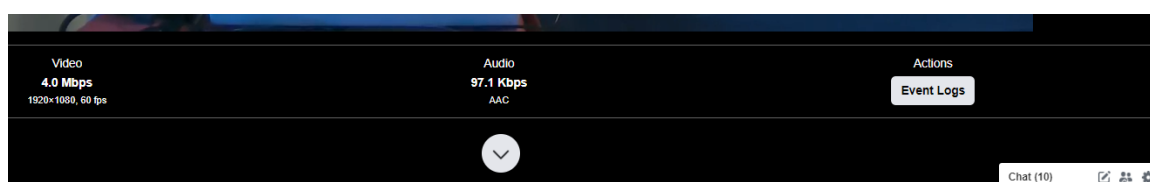


TR310/333 Camera RTMP Streaming to Facebook Live (continued)

14. To verify, go to your Facebook account and in the lower right corner, verify the video stream feed from the TR310/333 camera. A message should appear “Connecting live video” and the video should appear within 10-15 seconds. ***Note:** If no message or video is displayed, verify your Network Gateway/DNS settings are correct in the PTZ camera.



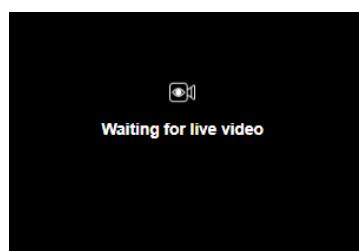
15. Next, scrolling up will show the streaming video with information of the feed; Video bit rate/standard/frame rate, Audio, etc.



16. To end the streaming feed from the TR310/333 camera, go to the WebLogin and select “STOP”. The video should stop streaming within 5-10 seconds.



17. To verify streaming has stopped, go back to your Facebook account; it should now be displaying a “Black” screen with a message “Waiting for live video”.



18. This concludes the AVer TR310/333 AI Tracking Camera Streaming within the Facebook Live environment.

Check the AVer Pro-AV Website for additional support documentation.

<https://www.averusa.com/pro-av/support/>