

AVer PTZ 310/330 Camera Integration used with vMix

March 2020

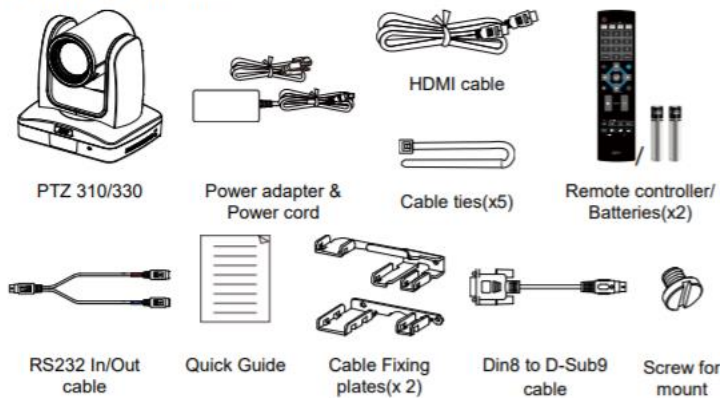
Steps to integrate the AVer PTZ Cameras into the vMix Software

vMix offers different options for mixing video sources, live streaming, Video Delivery Solution, or Webcasting and Live Events.

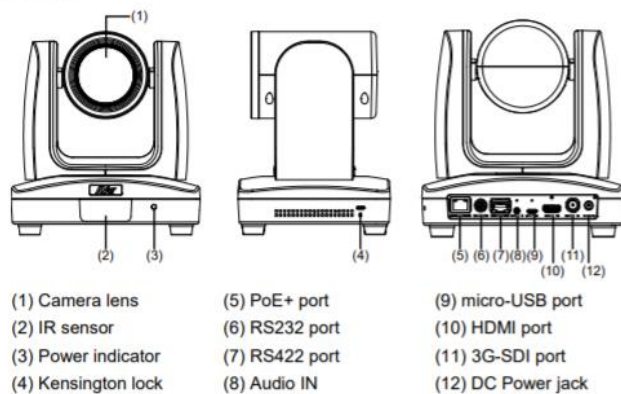
AVer has high quality image Cameras (PTZ310 / PTZ330) that will integrate with these workflows for peak performance and ease of use. We will show the configuration process for the PTZ 330 Camera and the vMix Production Software. There are some pre-requisites for this to happen, see below.

- AVer PTX330/N Camera and accessories.

Package Contents



Overview

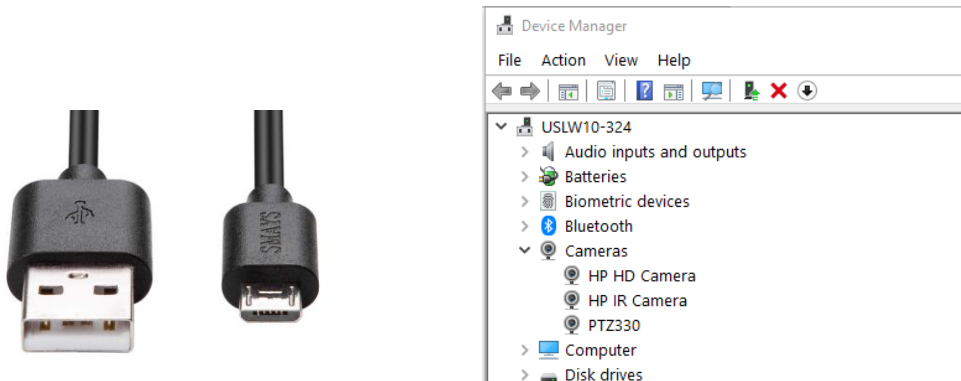


- Chrome Browser, version 79.0.3945.xxx and later.
- vMix 23 Software for Windows, currently version (23.0.0.39), approx. 350MB in size.

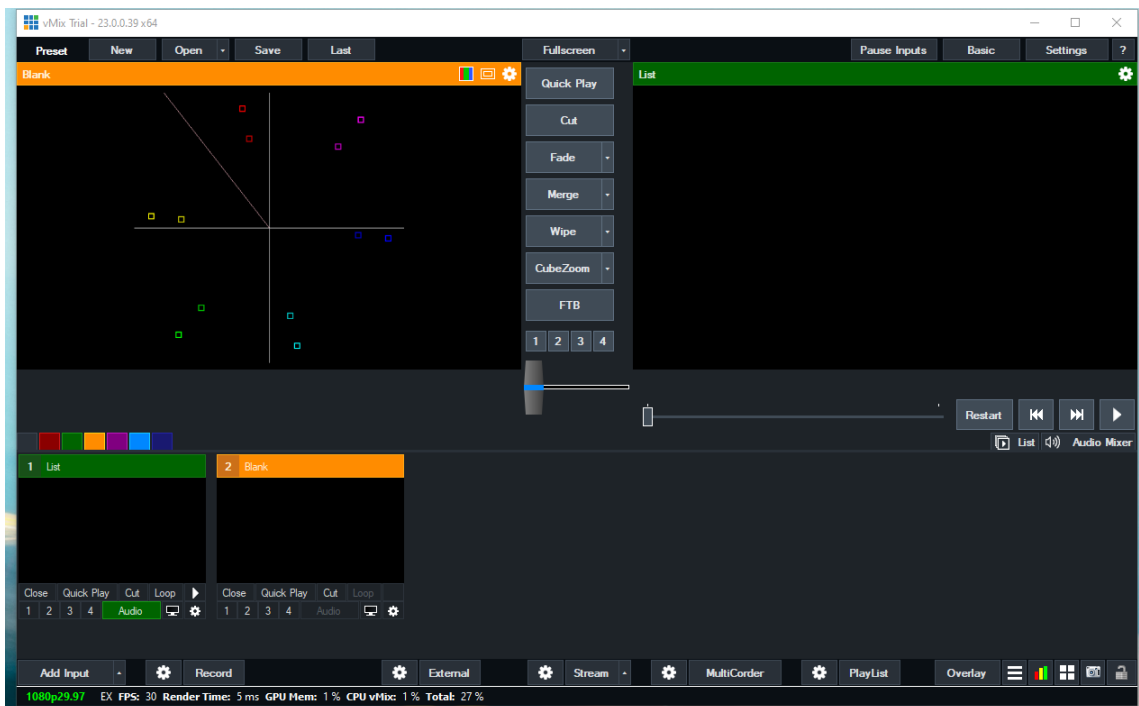
Name	Date modified	Type	Size
Today (2)			
vmix23	2/11/2020 9:37 AM	Application	348,967 KB
AVer Desktop Custom NDI	2/11/2020 9:37 AM	File folder	

- .Net Framework 3.5 installed for VMix Software.
- Windows 10 Pro OS used in this setup.

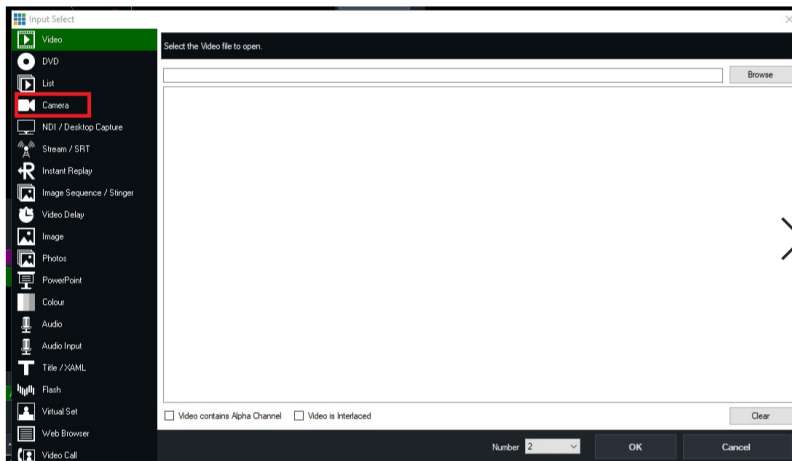
1. If vMix software is not installed, install and follow the prompts.
2. There are 3 main ways to integrate the AVer PTZ camera with vMix, they are:
 - USB Connection
 - NDI (PTZ330N and PTZ310N only)
 - (Streaming) Input and Output
3. **USB Connection:** Connect the AVer PTZ330/N Camera to a USB port on the PC using the USB to Micro-USB cable provided and verify that Windows does see the device in the “Device Manager” window.



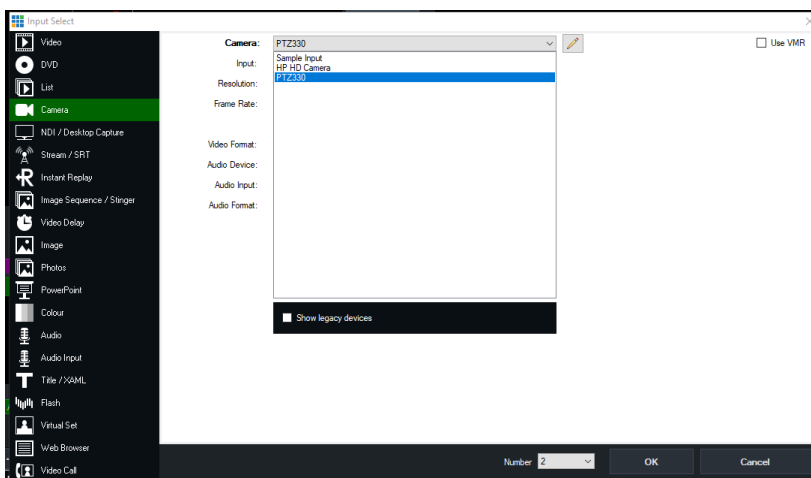
4. Next, open the vMix software and select “Add Input” located on the lower left of display.



5. You should now see the following dialog box.

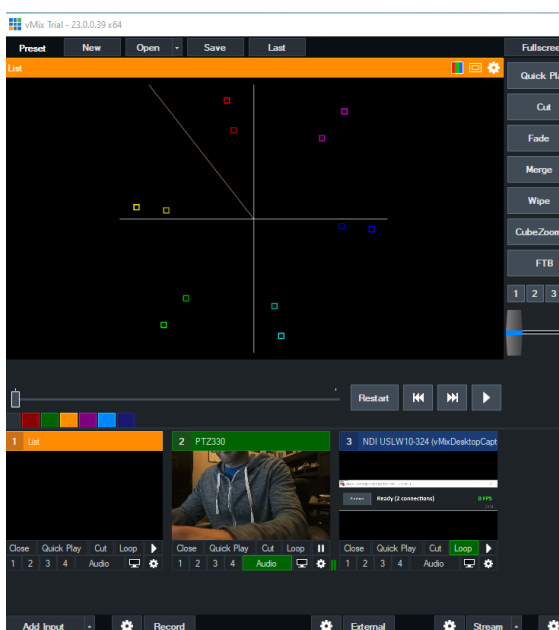


6. Next, select Camera, there will be a drop down menu for Camera selection, select the AVer PTZ330 camera.

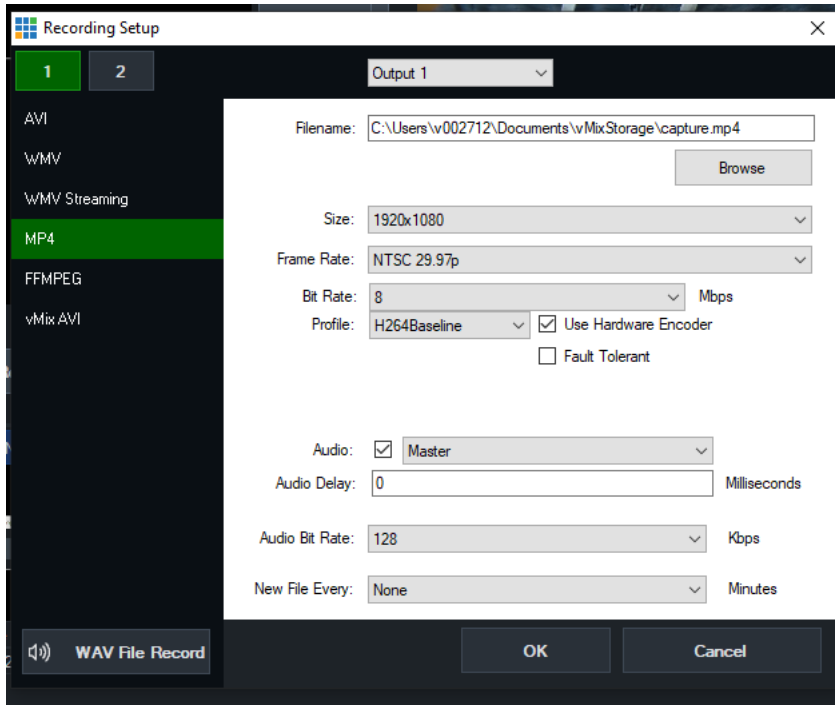
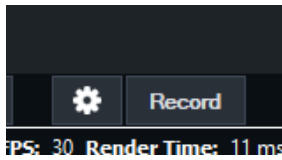


7. Select the Resolution and Frame rate as well as Video Format and Audio, then select “OK” once configured.

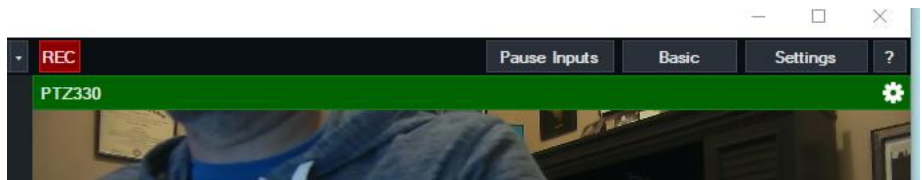
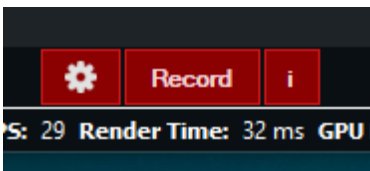
8. You will be brought back to the vMix Main page, you should now see video in the Input display.



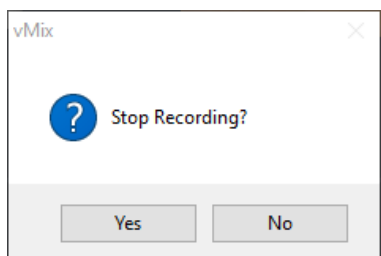
- Next, select the “Settings/Gear” icon next to Record; this will open the selections for the Recording Setup for both Audio and Video.



- Once the selections have been made, select “OK” to confirm.
- When you are ready to Record, select the “Record” button and you should see the “Settings/Record/!” selection turn red, as well as the a red REC icon in the Preview Out.



- Once you are ready to “Stop” recording, select the RECORD button, a pop-up will appear asking if you are ready to “Stop Recording”.



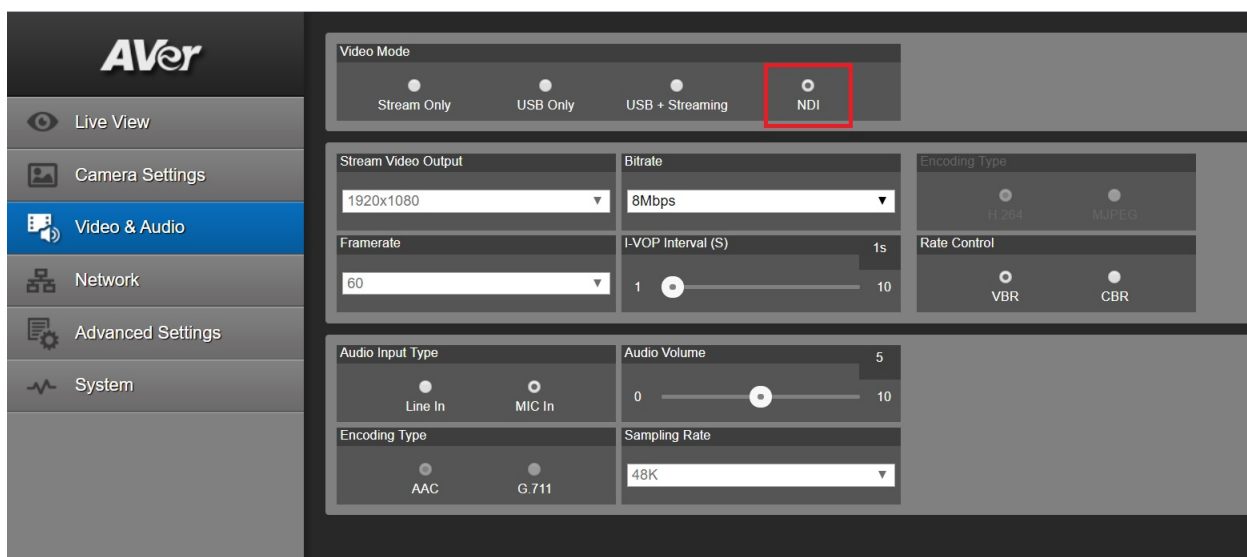
- The recorded media can be found where you had selected the Filename earlier in the “Recording Setup”, typically located in “C:\Users\Rich\Documents\vMixStorage\capture.xxx”.

Network Device Interface (NDI) / Desktop Connection:

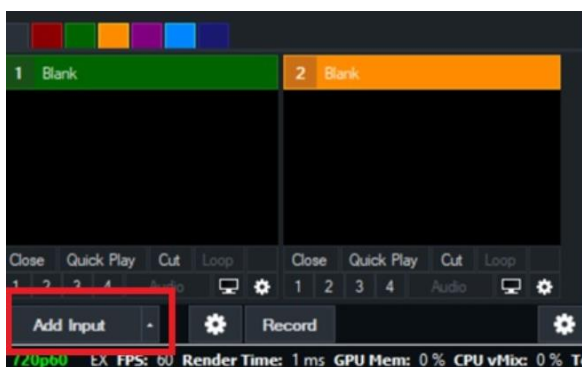
NDI is a high performance standard that allows anyone to use real time, ultra-low latency video on existing IP video networks.

For this configuration the AVer camera will have later firmware installed and is designated as a PTZ330N or PTZ310N, the “N” designates that the camera has the ability to integrate with the NewTek NDI protocol. You can go to <https://www.ndi.tv/> to learn more about NDI or download the NDI Virtual Input application if needed.

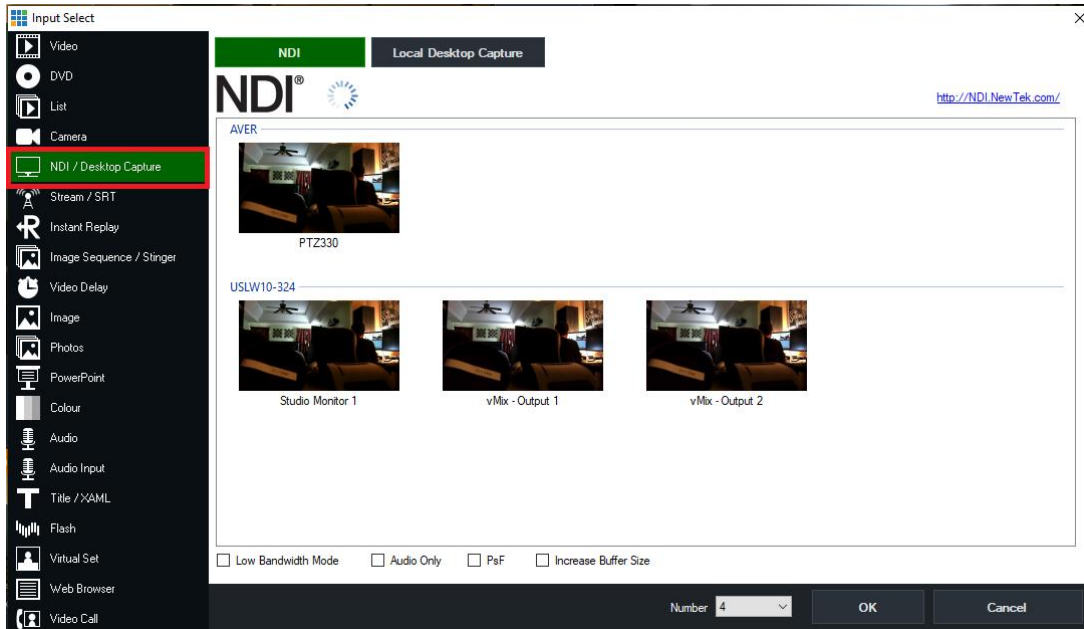
1. First step is to verify that your PTZ330N/310N camera is setup for NDI, use the WebLogin and go to the “Video & Audio” settings, verify that the “NDI” radio button has been selected for Video Mode.
*Note: The camera will need to re-boot when changing to/from NDI video mode.



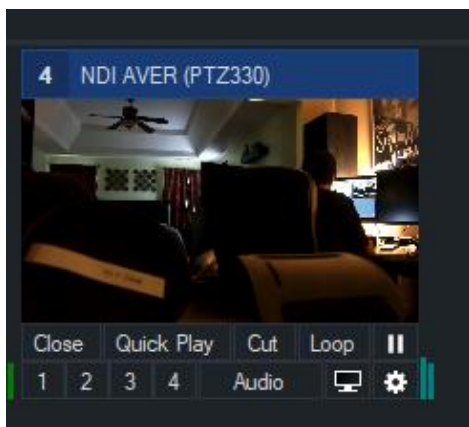
2. Next, go to vMix and select “Add Input”, located in the lower left of the display, it will open the “Input Select” window.



3. Next, select “NDI / Desktop Capture” setting, you should see a selection for AVER-PTZ330 and also the live video camera capture.



4. Next, select the AVER-PTZ330 NDI device and “OK” at the bottom of the screen.
 *Note: The Number field should be assigned/incremented automatically when this happens.
5. You should now have a new NDI AVER video Input assigned to vMix as a source.



STREAMING

RTSP Input to the vMix system

1. Connect the PTZ330 camera via Network RJ45 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.



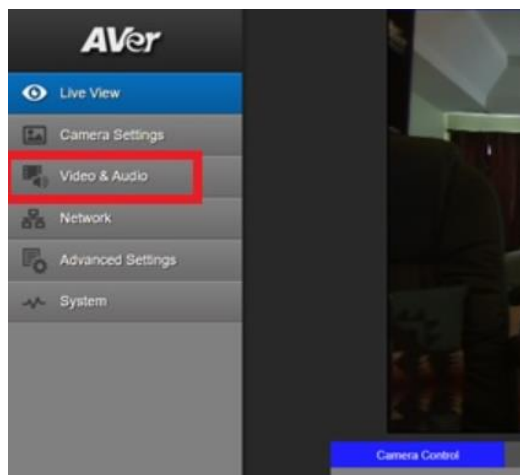
2. Once you have the IP address setup, type the IP address in your Chrome browser (Setup on same subnet) and you should now see the login to the PTZ330 camera shown below.

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

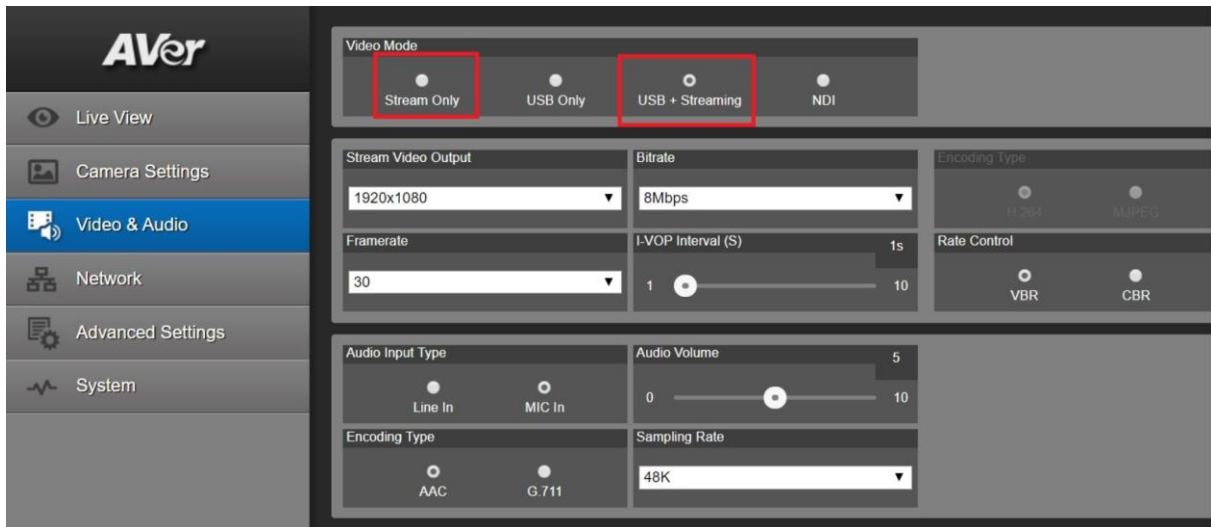
Username

Password

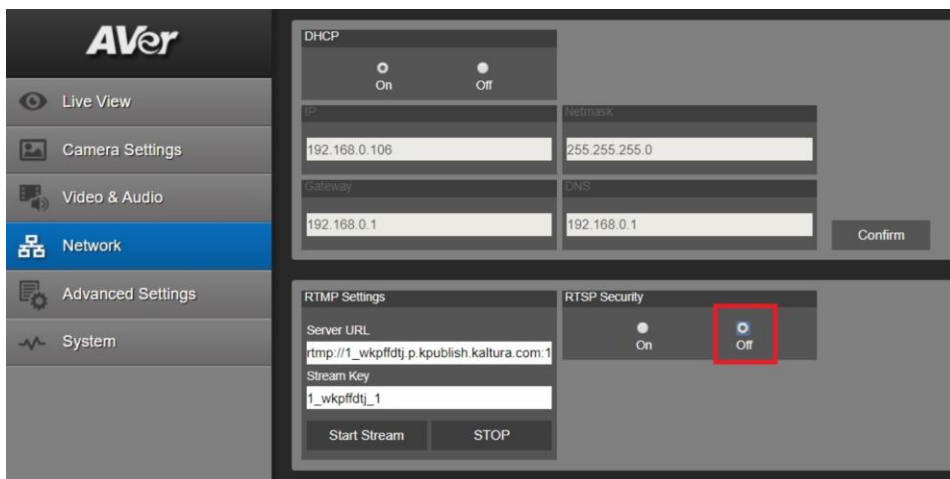
3. The default Username/password is “administrator”. *Note: If this is the first time accessing the PTZ330 camera via the Web login it may ask you to change the Username/Password.
4. Next, you should now see the main login screen with a “Live View” of the PTZ Camera.



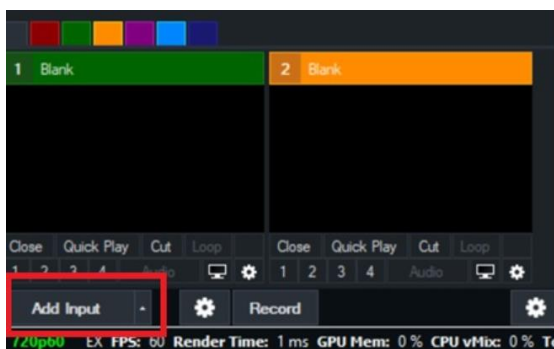
- Next, after selecting the *Video & Audio* setting, verify that you have either “Stream Only” selected or “USB + Streaming” selected. Select your Stream Video Output, Bitrate, Framerate, Encoding, etc.



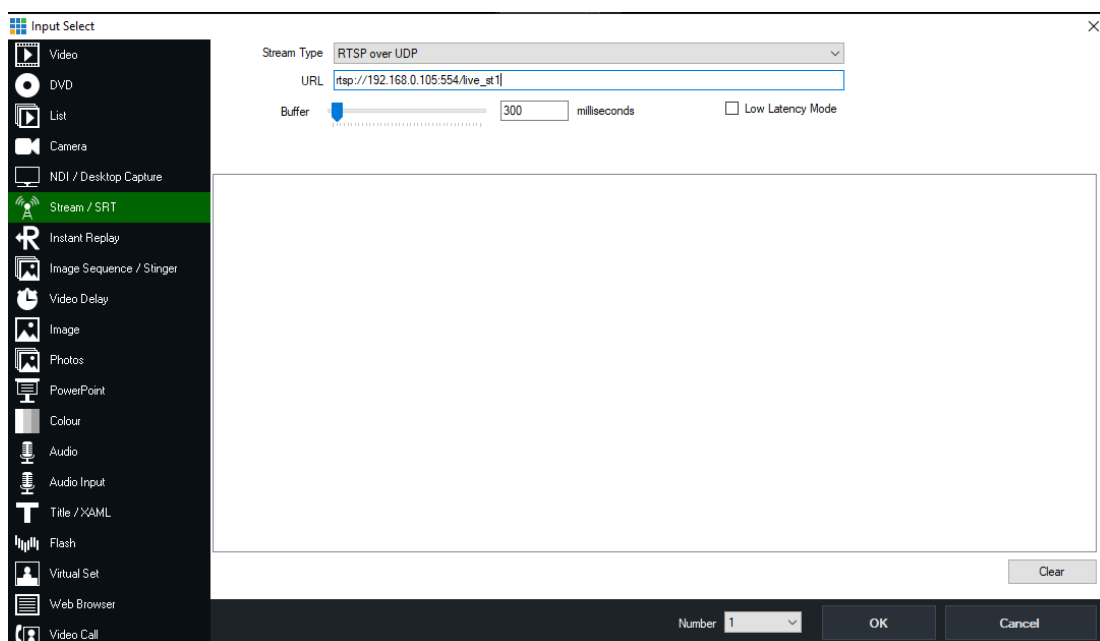
- Next, select the “*Network*” setting, set the “RTSP Security” to “Off”. Once you are finished with Streaming, you can put the RTSP Security back to “On”, ensuring there is nothing being broadcast.



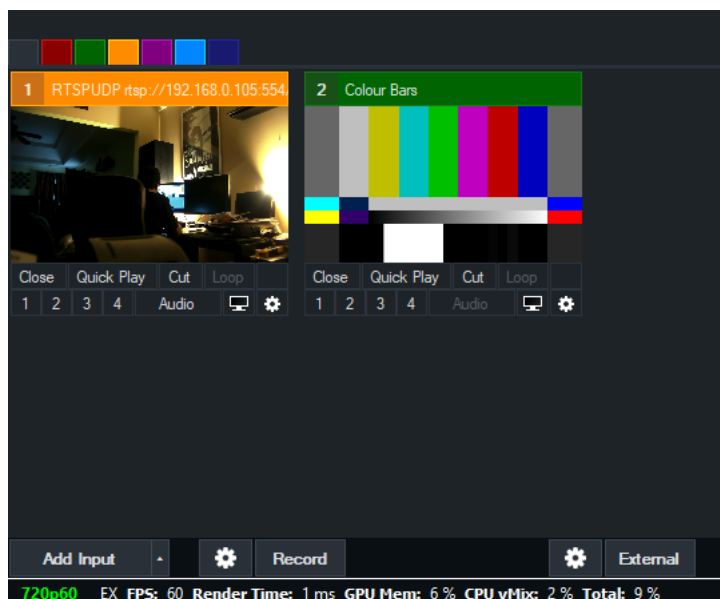
- Next, go to vMix and select “*Add Input*”, located in the lower left of the display, it will open the “*Input Select*” window.



8. Next, select the “Stream / SRT” setting, where the URL setting is type in the following syntax for the PTZ330 RTSP feed,
“rtsp://Camera IP:554/live_st1”, where Camera IP is the actual IP address of the camera.

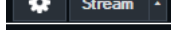


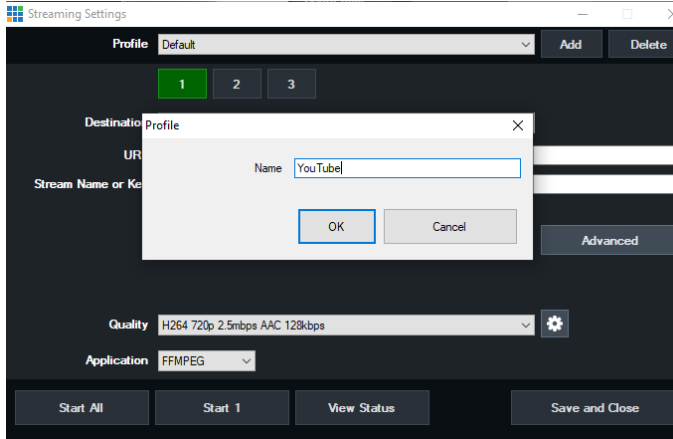
9. Next, select “OK”, you should now be seeing camera video on your vMix display streaming from the PTZ330 camera.



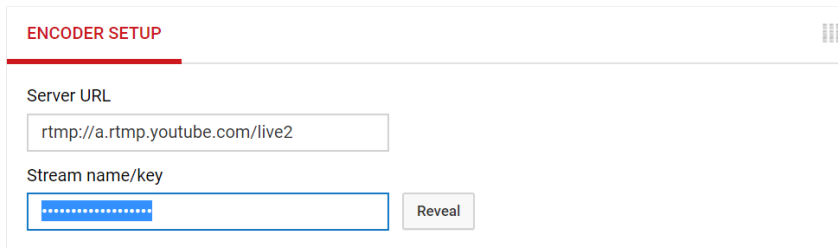
Streaming RTMP Output

To connect to a streaming service like YouTube, Twitch, Facebook, etc., from vMix, do the following steps.

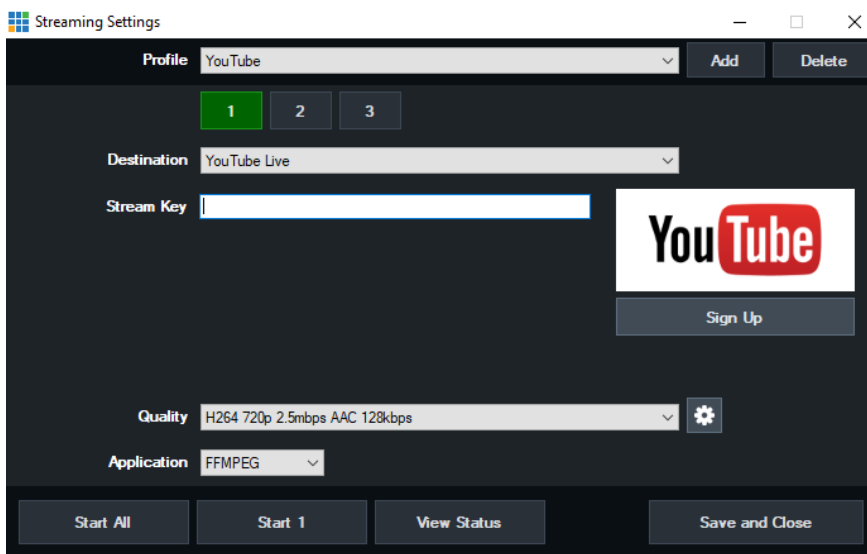
1. In vMix select the gear icon located next to “Stream” . Select “Add” at the top of the window, give it a name, then select “OK”.



2. Next, select the “Destination” you want to stream to, in this example we are using YouTube Live.
3. Next, you will need your YouTube “Stream Key” in order to complete the process, go to your account and find the “Encoder Setup” information, copy the “Stream name/key” information. You may have to switch to “Classic view” to find it quicker.



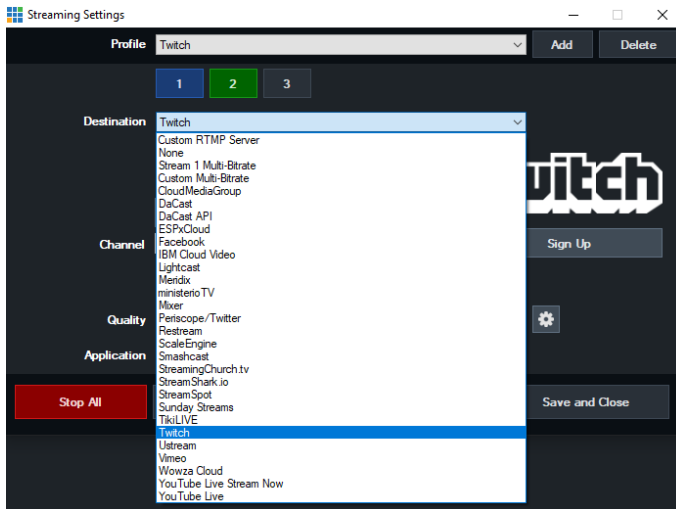
4. Next, go to the vMix Stream Key selection and paste that information into the space provided.



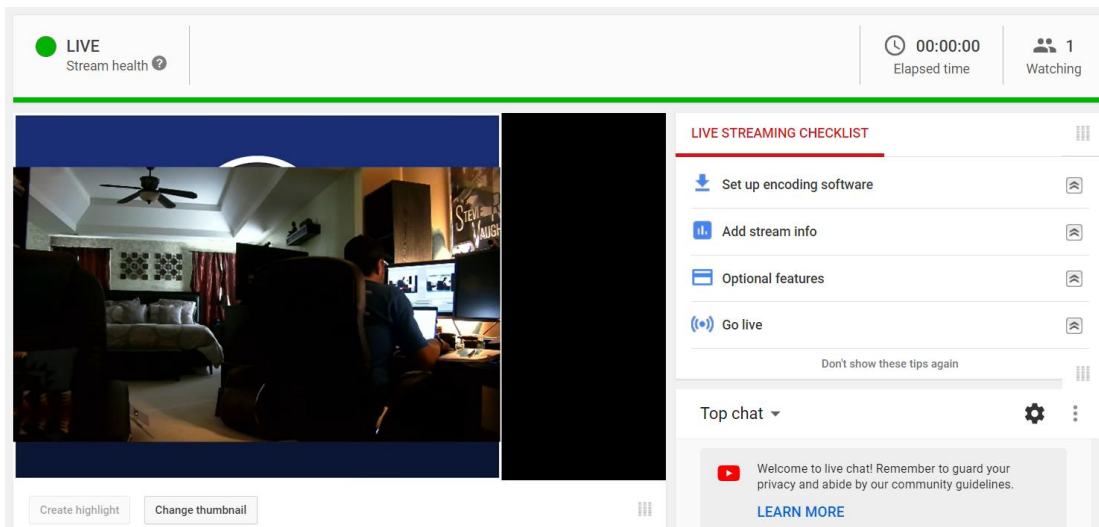
5. Next, select “OK”, then select “Stream” and it should change color, from grey to orange, then red.



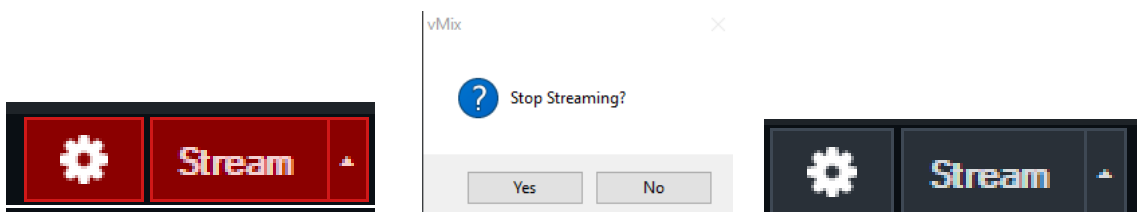
6. You can select more streams like Facebook, StreamingChurch.tv, Twitch, etc. the process would be the same way.



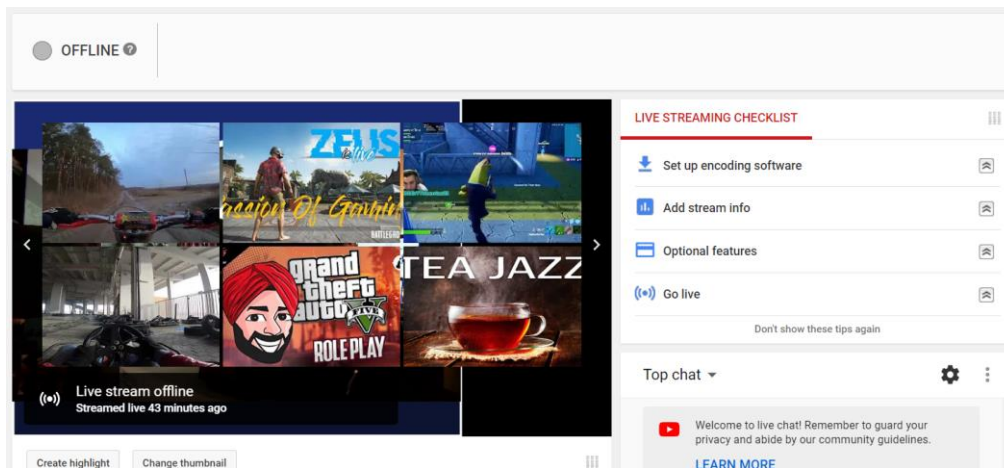
7. To verify, go to your YouTube Live Dashboard and verify the video feed from vMix.



8. To end the streaming feed from vMix, select “Stream”, another window will pop up, select “Yes” to stop streaming, the indicator will turn back to grey.



9. To verify on YouTube, go back to your YouTube Live Dashboard, it should now be displaying “OFFLINE”.



10. This concludes the AVer PTZ310/330 Camera integration within the vMix Software.