![AVer logo](www.aver.com)

AVer TR320/530, TR310 to TR333, and PTZ310/330 Cameras

HDMI/USB with Panopto (October 2020)

**Steps to integrate the Aver TR and PTZ Cameras via HDMI / USB with Panopto**

AVer Pro-AV has high quality image Cameras (TR320/530, TR310/TR333 and PTZ310/330) that will integrate with Panopto workflows for peak performance and ease of use.   We will show the configuration process for both the TR and PTZ Camera lines and Panopto software.

Panopto has an easy to use online video platform solution for video management, recording, live streaming, video search, quizzing, analytics, and more.
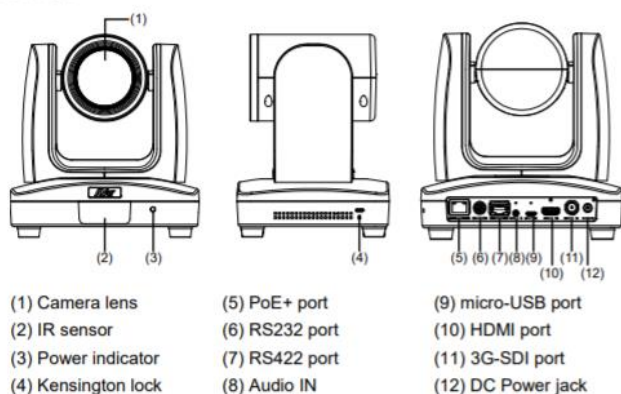
PTZ310/330 Camera

- AVer PTZ330/N Camera and accessories.
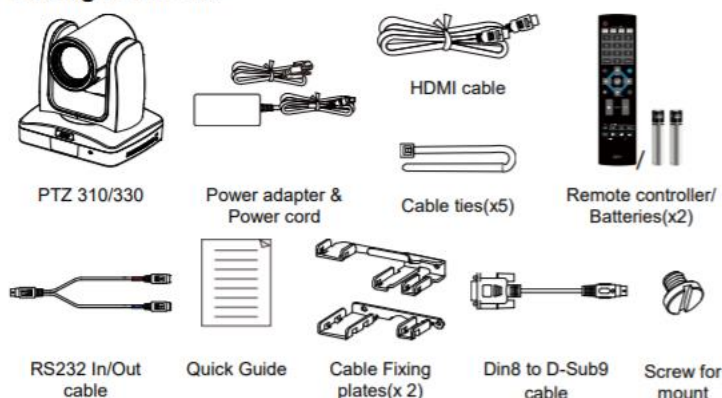
- Chrome Browser, version 79.0.3945.xxx and later.
- Panopto user account.
- Windows 10 Pro OS, i7 Processor, 16GB Memory, used in this setup.

## PTZ Camera Video Output to the Panopto System

1. Type the IP address of the camera in your Chrome browser (Setup on same subnet) and you should now see the login to the PTZ310/330 camera shown below.

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

Username

Password

Sign in   Cancel

2. 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.

3. Next, you should now see the main login screen with a "Live View" of the PTZ Camera.
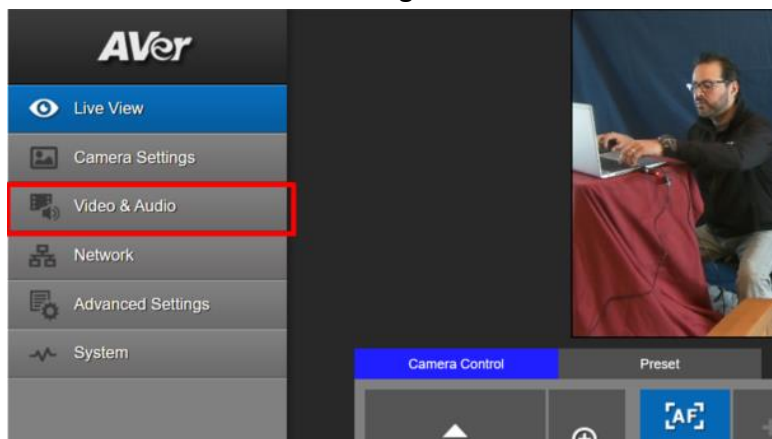
4. Next, after selecting the *Video & Audio* setting, verify the Video Mode you are in.   In this setup you should *NOT* be in NDI and *Stream Only* Video Mode, as it will disable the USB output.
   *Note: Some servers require a minimum bitrate of 2.5Mbps for their environment.

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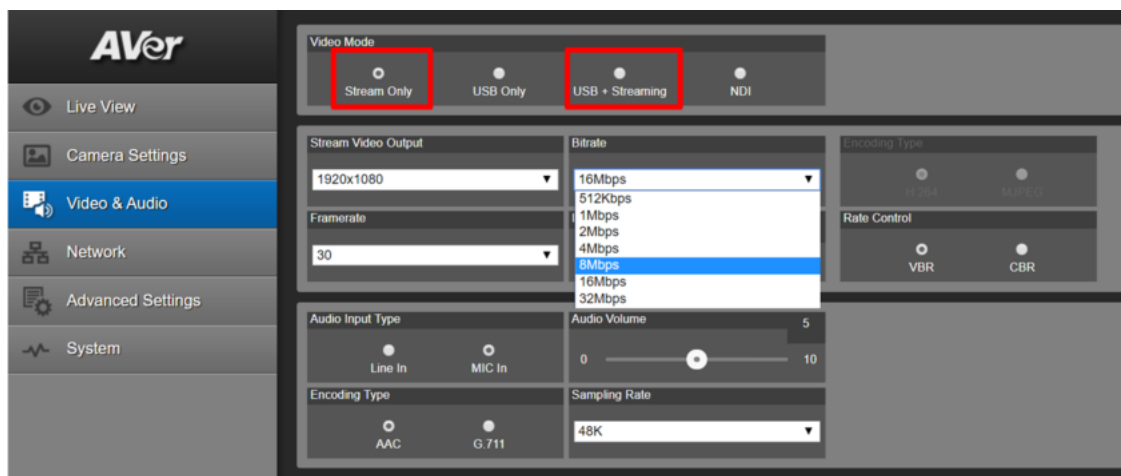
PTZ Camera Video Output to the Panopto System (continued)

The PTZ Camera will have an SDI/HDMI output in ALL modes.

|	Stream Only (Various)	USB Only (Various)	USB + Streaming (Various)	NDI (1080p/60)
SDI Output	✓	✓	✓	✓
HDMI Output	✓	✓	✓	✓
USB Output	x	✓	✓	x
RTSP Output	✓	x	✓	✓

PTZ Camera HDMI/USB connection to Panopto

When connecting the cameras to a Panopto laptop or desktop, the PTZ310/330 provides HDMI, SDI, and USB output.   If you are using a desktop with a video card, they can typically have a direct HDMI input connection with high performance data transfer.

If you are using a laptop to capture video, a portable HDMI to USB dongle like the AVer Media BU110 and BU111 provides a high speed, high quality connection.
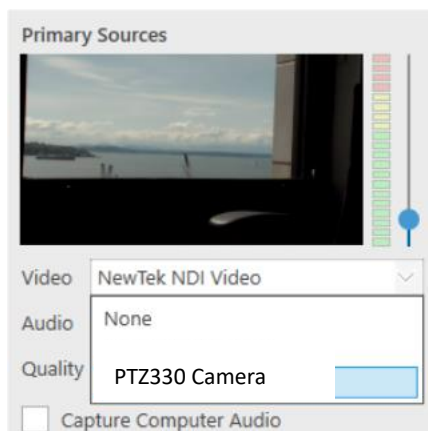
Two Likely Scenarios:
- HDMI or USB direct connection
- HDMI / SDI connection using an AVer Media converter to USB

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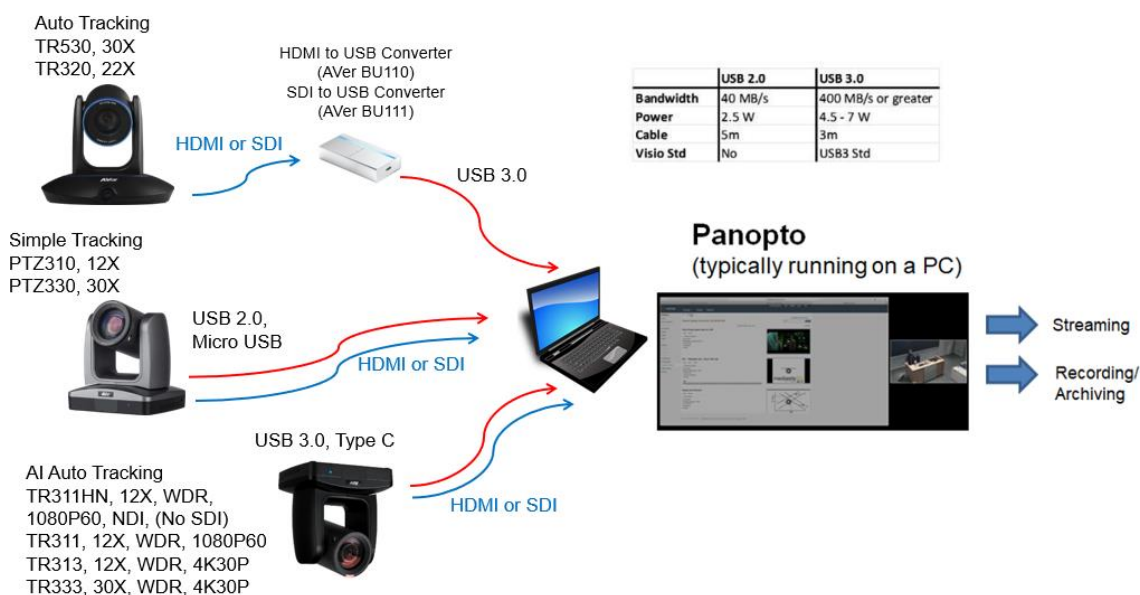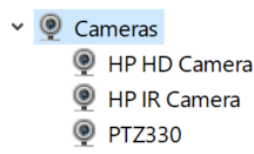
PTZ Camera Video Output to the Panopto System (continued)
Panopto for Windows System Video Input (HDMI / USB)

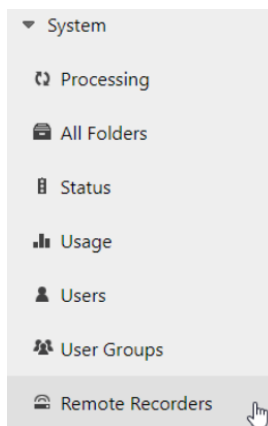1. Go to the Panopto's desktop client; select the PTZ camera source from the list.

2. Next, you should be seeing the NDI video from the PTZ camera. If you don't see any video, in Windows, open Device Manger and verify the PTZ330 is listed under cameras.

Panopto Remote Recording

1. As an Administrator, from the Panopto VCMS select *System -> Remote Recorders.*

2. Next, select the remote recorder you have configured with the PTZ330 Camera input, and choose the configuration.

3. Next, select the PTZ330 Camera source as a Primary or secondary source.   You can also choose to select the Line (PTZ330 Audio) source if you are using the input as an audio source as well.

PTZ Camera Video Output to the Panopto System (continued)

4. You are now able to record into Panopto with your configured PTZ 330 Camera source.

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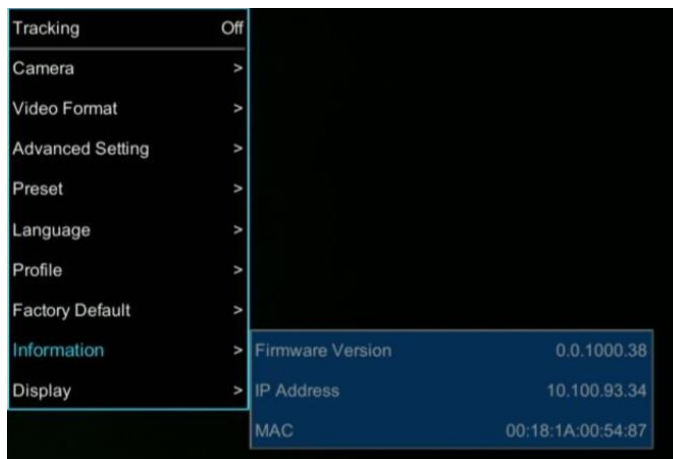## TR320/530 Camera Video Output to the Panopto System

Device Connections
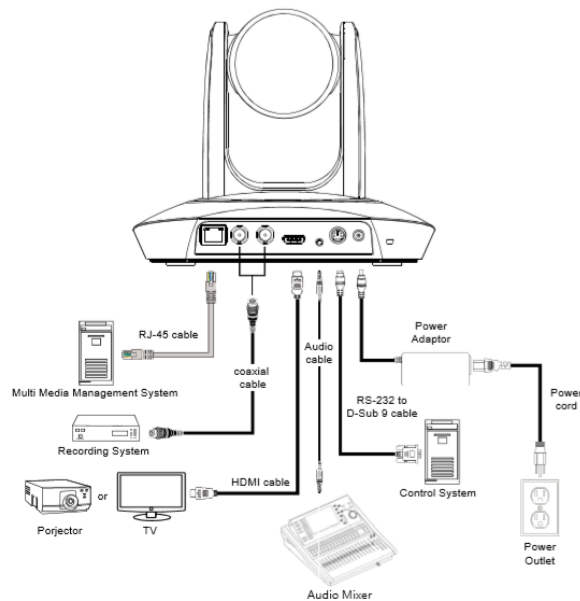
1. Connect the TR530 camera via RJ45 Network Cat5E (or better) cable; verify IP address of Camera in order to connect via Web browser. If IP address is not known, locate the remote, select the "Menu" icon and navigate to the "**Camera->DHCP->**" setting, verify DHCP is set to "On" in order to grab an 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**.
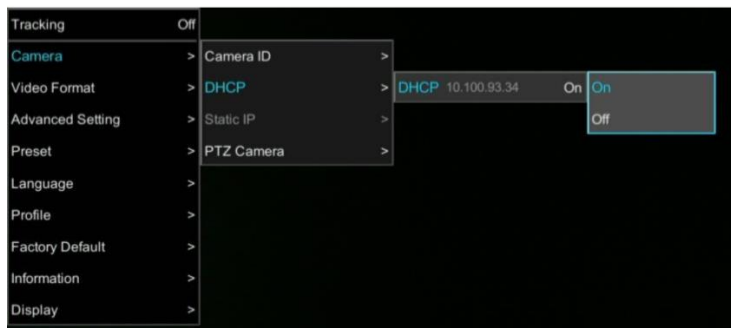
   After turning DHCP on, go to **Information** to view the IP address.

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. Next, 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.
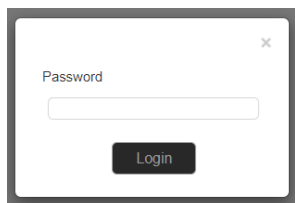
4. The default password is "admin".

5. Next, you should now see the main login screen with a "Live View" of the PTZ Camera.
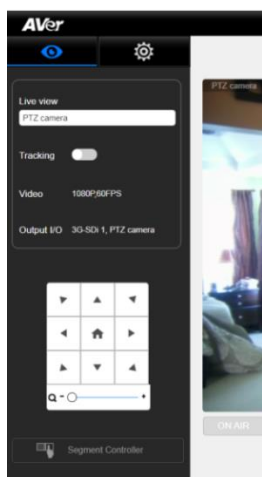
6. Next, select the settings gearbox , then select *Video & Audio setting*, this is where you can select the Video Output of the TR320/530.
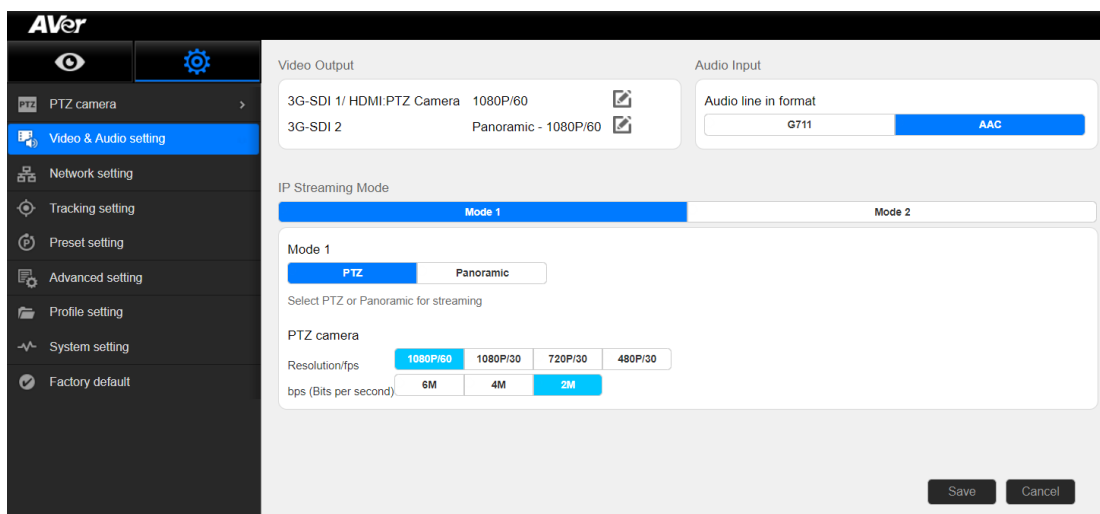
TR320/530 Camera Video Output to the Panopto System (continued)

7. Next, selecting 3G-SDI / HDMI will open the following window, allowing you to choose which video standard or set to Auto.
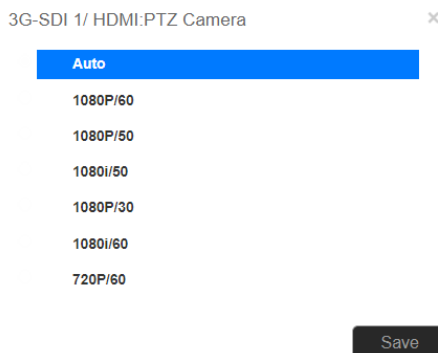

*Note: Only the standards listed are available currently, no 29.97/59.94 type selections.

TR320/530 Camera HDMI/USB connection to Panopto

The PTZ camera does offer USB output, the TR camera does not.   If the PC you are using happens to have an HDMI video capture card, you can direct connect to it.   If there is no HDMI Input and you are using a laptop to capture video, a portable HDMI/SDI to USB dongle like the AVer Media BU110 and BU111 provides a high speed, high quality connection.
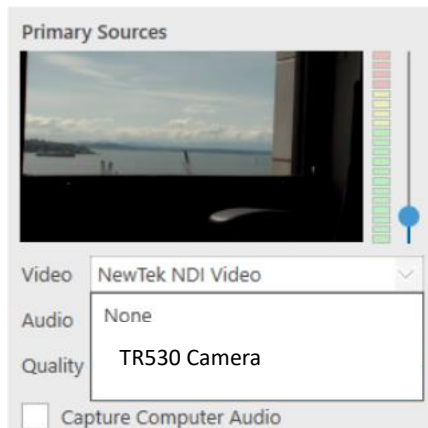
Likely Scenario:

- HDMI / SDI connection using an AVer Media converter to USB.

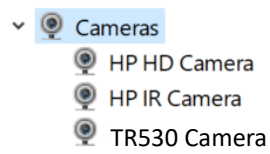AVer Information Inc. Support Guide – AVer Pro-AV Cameras (10/26/2020)
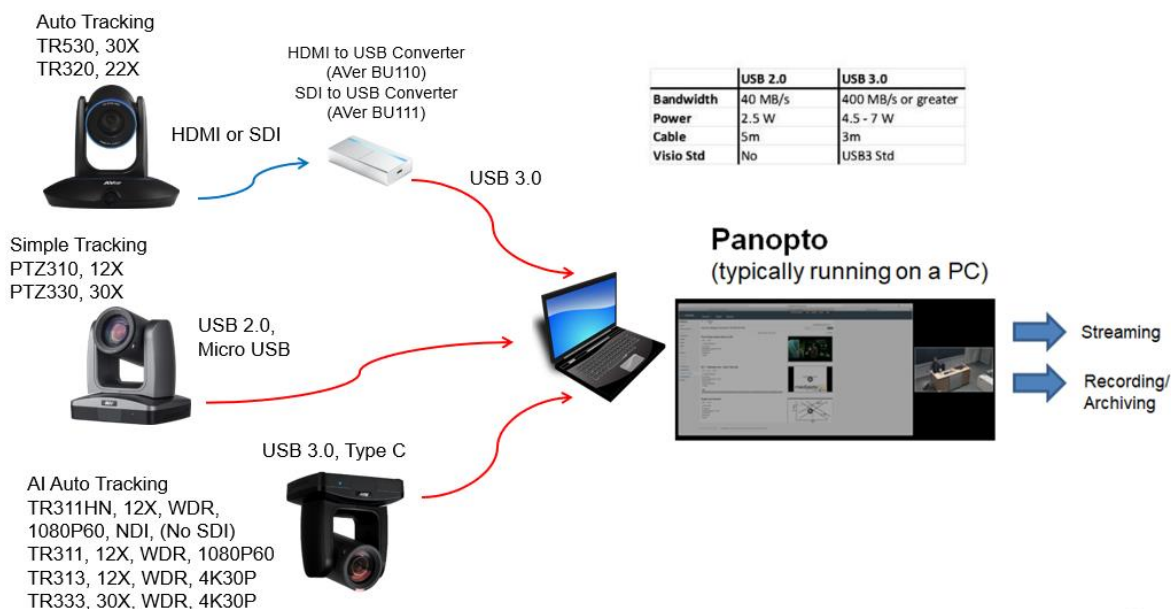
Panopto for Windows System Video Input (HDMI to USB)

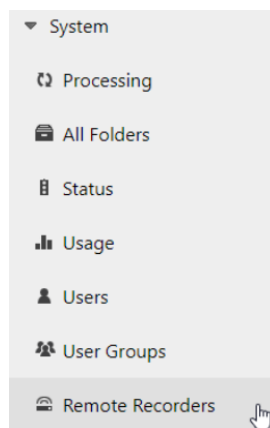3. Go to the Panopto's desktop client; select the TR530 camera source from the list.

4. Next, you should be seeing the USB video from the TR camera. If you don't see any video, open *Device Manger* in Windows and verify the TR530 is listed under cameras.

Panopto Remote Recording

5. As an Administrator, from the Panopto VCMS select *System -> Remote Recorders.*

6. Next, select the remote recorder you have configured with the PTZ330 Camera input, and choose the configuration.
7. Next, select the TR530 Camera source as a Primary or secondary source.   You can also choose to select the Line (TR530 Audio) source if you are using the input as an audio source as well.

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TR320/530 Camera Video Output to the Panopto System

Panopto Remote Recording

8. You are now able to record into Panopto with your configured TR530 Camera video source.

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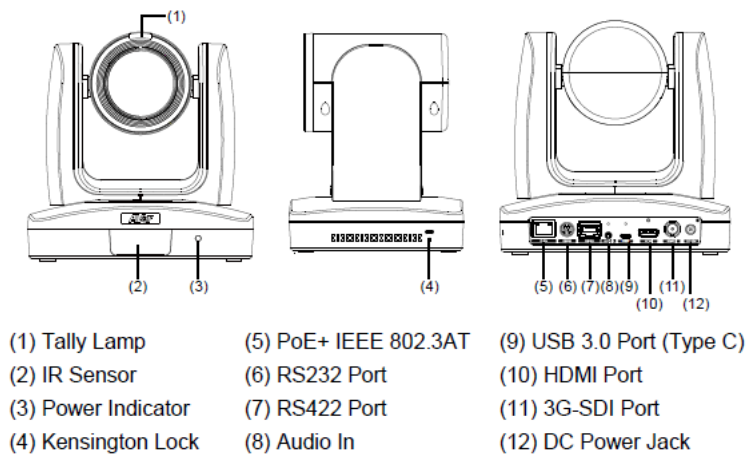## TR310 / TR311HN / TR311 / TR313 / TR333 AI Tracking Camera

The sleekly designed AVer TR311HN AI Auto Tracking Camera is the affordable solution that uses advanced artificial intelligence (AI) technology to effectively track your presenter or shoot a zone with pre-configured Presets without a dedicated camera operator.

- AVer (TR310 to TR333) Camera and accessories.

Package Contents

Camera unit	Remote control	Power adapter & Power cord	Cable ties(x5) / Quick Guide / M2 x 4mm Screw(x4)
Ceiling mount bracket(x2)	Cable Fixing plates(x2)	1/4"-20L=6.5mm Screw(x3)	M3 x 6mm Screw(x3)

Overview

(1) Tally Lamp
(2) IR Sensor
(3) Power Indicator
(4) Kensington Lock
(5) PoE+ IEEE 802.3AT
(6) RS232 Port
(7) RS422 Port
(8) Audio In
(9) USB 3.0 Port (Type C)
(10) HDMI Port
(11) 3G-SDI Port
(12) DC Power Jack

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

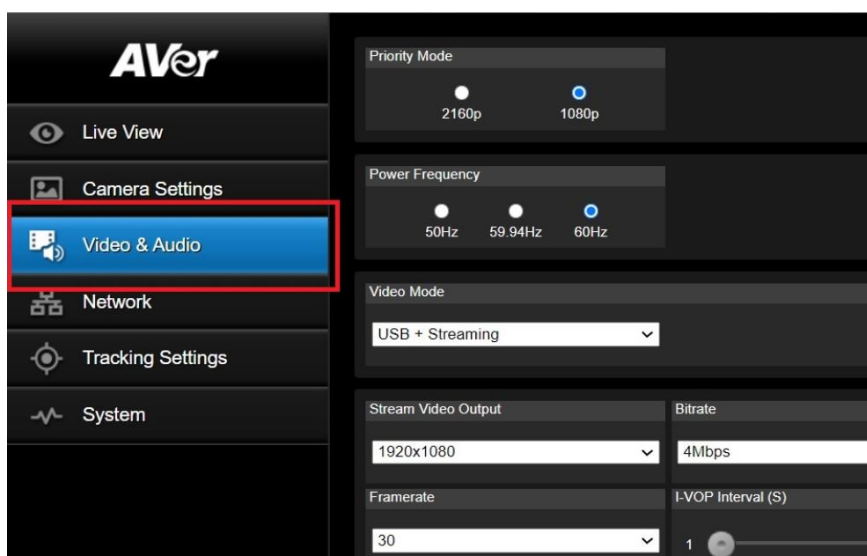# TR313 Camera Video USB Output to the Panopto System

1. Type the IP address of the camera in your Chrome browser (Setup on same subnet) and you should now see the login to the (TR310 to TR333) camera shown below.


2. The default Username/password is "admin / admin".
   *Note: If this is the first time accessing the TR313 camera via the Web login it will ask you to change the Username/Password.

3. Next, you should now see the main login screen with a "Live View" of the PTZ Camera.

4. Next, select the *Video & Audio* setting, verify which Video Mode you are in.   In this setup you should *NOT* be in NDI and *Stream Only* Video Mode, as it will disable the USB output.
   *Note: Some servers require a minimum bitrate of 2.5Mbps for their environment.
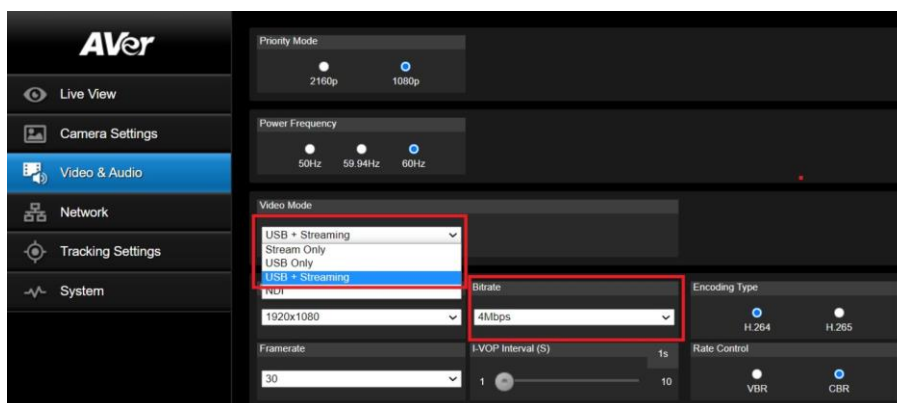
TR Camera Video Output to the Panopto System (continued)

The TR313 Camera will have an SDI/HDMI output in ALL modes.

	Stream Only (Various)	USB Only (Various)	USB + Streaming (Various)	NDI (1080p/60)
SDI Output	✓	✓	✓	✓
HDMI Output	✓	✓	✓	✓
USB Output	✗	✓	✓	✗
RTSP Output	✓	✗	✓	✓

TR310 to TR333 Camera USB connected CaptureShare Software

Aver Information Inc. offers a free software for the NEW TR series of cameras, CaptureShare, that works in Windows and MAC.   It allows you to be able to configure the TR camera for Presenter and Zone Mode Tracking, as well as some of the basic video settings such as Contrast, Saturation, Mirroring, and video output settings while being ONLY connected to the camera via USB.

Once downloaded and installed you will have two modules:

- AverCamera Setting Tool; used if you only need control/configuration of the camera.
- CaptureShare; has additional features, like PiP, annotation, recording, streaming, etc.
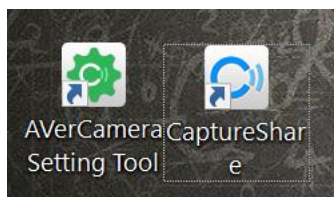
For more detailed information, download the User Manual on the AVer Pro-AV website.

The following is used to setup the TR310/333 camera with CaptureShare.

1. Once CaptureShare is opened, select the Camera carrot and then select the TR313 camera as the source.
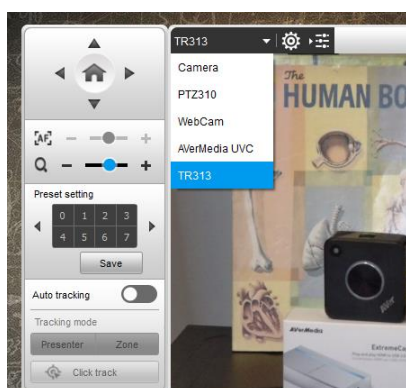

2. Next, you should see video from the camera, and have control via the Up/Down and Left/Right arrows.

## TR310 to TR333 Camera USB connected CaptureShare Software (continued)

3. Use the Up/Down and Left/Right arrows to position the camera to save Preset #1, then select *"Save".* This preset is used when in *Presenter Mode* tracking, if tracking is lost, the camera will automatically go to Preset #1 after 5 seconds.
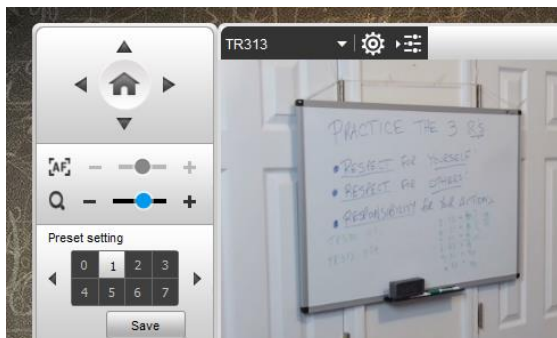
4. Next, save Presets 6, 7, 8, and 9, these presets are used when in *Zone Mode* tracking.

5. You can Enable/Disable Tracking via CaptureShare and the camera remote.
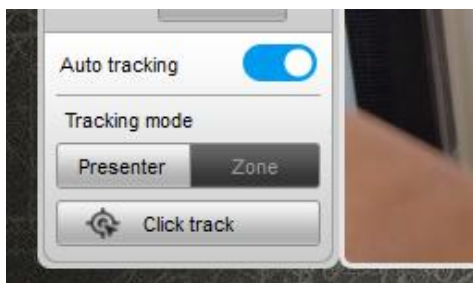
6. You also have the ability to record locally and "stream" out to YouTube/FB/other streaming services once the RTMP Server / RTMP Key are configured.
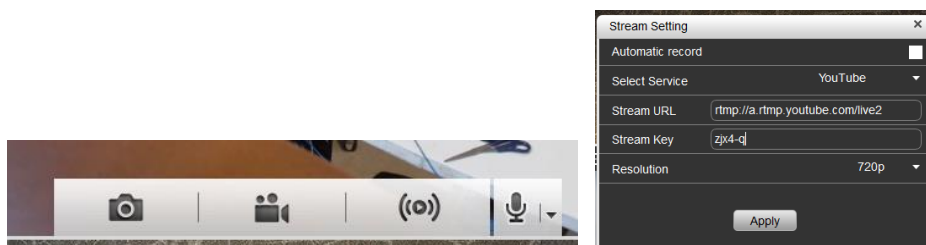
7. Opening the AVerCamera Setting Tool will allow you to setup the camera without the additional tools for Streaming, Recording, etc.

8. This concludes the brief introduction to CaptureShare and the AVerCamera Setting Tool.

TR313 Camera HDMI/USB connection to Panopto

When connecting the cameras to a Panopto laptop or desktop, the (TR310 - TR333) provides HDMI, SDI, and USB output.   If you are using a desktop with a video capture card, they can typically have a direct HDMI input connection with high performance data transfer.

If you are using a laptop to capture video, a portable HDMI to USB dongle like the AVer Media BU110 and BU111 provides a high speed, high quality connection.
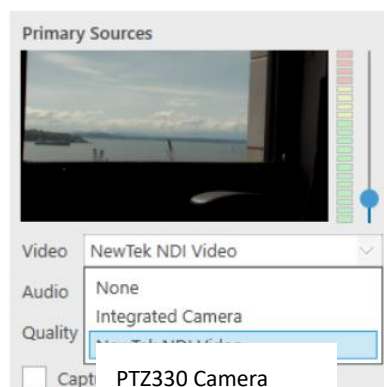
Two Likely Scenarios:

- HDMI or USB direct connection
- HDMI / SDI connection using an AVer Media converter to USB or similar.
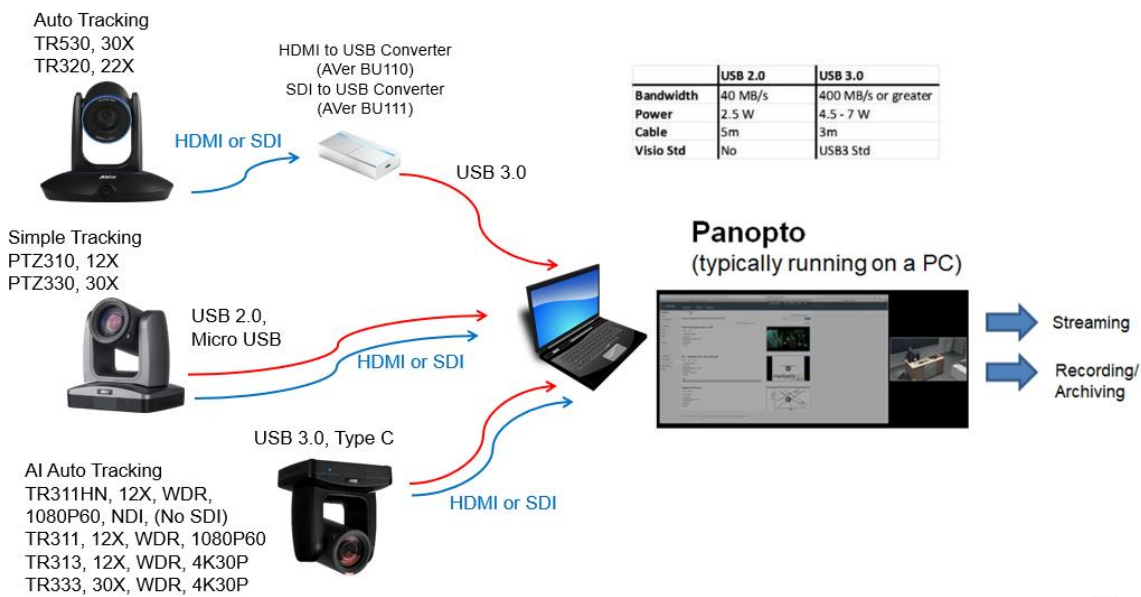
Panopto for Windows System Video Input (HDMI / USB)

1. Go to the Panopto desktop client; select the TR camera source from the list.
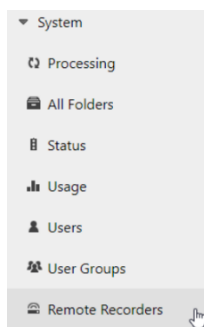
TR Camera Video Output to the Panopto System (continued)

2. Next, you should be seeing the NDI video from the PTZ camera. If you don't see any video, in Windows OS, open Device Manger and verify the TR313 is listed under cameras.


Panopto Remote Recording

1. As an Administrator, from the Panopto VCMS select *System -> Remote Recorders.*

2. Next, select the remote recorder you have configured with the TR313 Camera input, and choose the configuration.

3. Next, select the TR313 Camera source as a Primary or secondary source.   You can also choose to select the Line (TR313 Audio) source if you are using the input as an audio source as well.
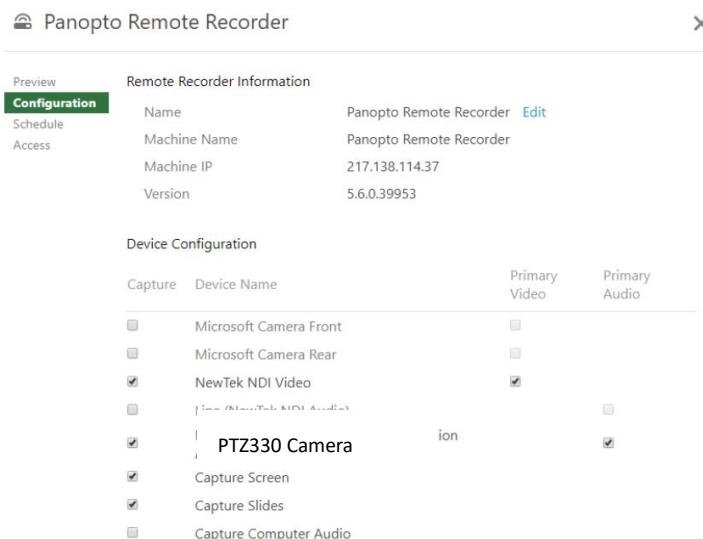
4. You are now able to record into Panopto with your configured TR313 Camera source.

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

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