

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

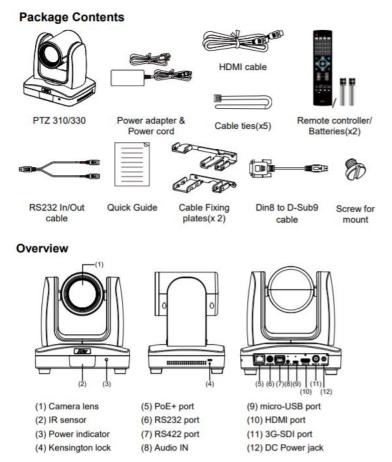
HDMI/USB with Panopto (October 2020)

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.

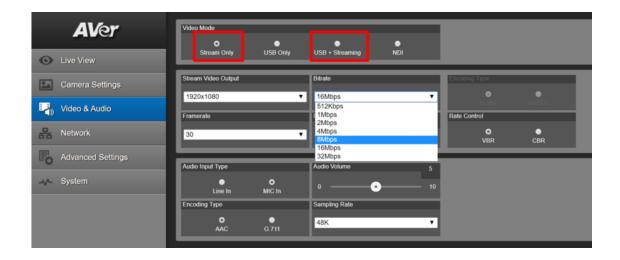
Sign in			
http://192.16 Your connect	8.0.106 ion to this site is not private		
Username	1		
Password			
		Sign in	Cancel

- 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.

AVer		
O Live View		
Camera Settings		
Video & Audio		
Handreich Network		
Advanced Settings		
-w- System	Camera Control	Preset
		A AF

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.



PTZ Camera Video Output to the Panopto System (continued)

	Stream Only (Various)	USB Only (Various)	USB + Streaming (Various)	NDI (1080p/60)
SDI Output	\checkmark	\checkmark	\checkmark	✓
HDMI Output	√	\checkmark	\checkmark	✓
USB Output	x	\checkmark	\checkmark	X
RTSP Output	\checkmark	X	\checkmark	✓

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

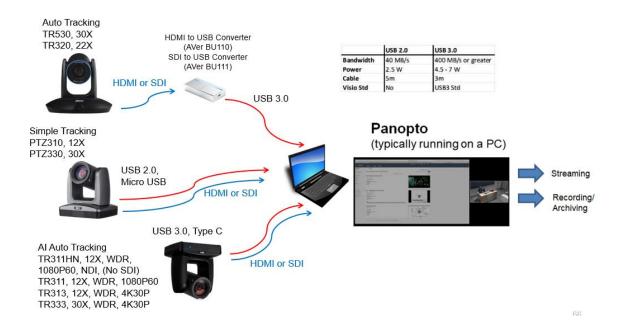
PTZ Camera HDMI/USB connection to Panopto

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:

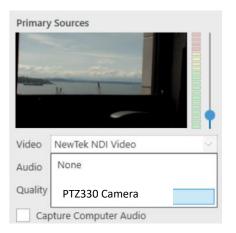
- HDMI or USB direct connection
- HDMI / SDI connection using an AVer Media converter to USB



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.
 - Q Cameras

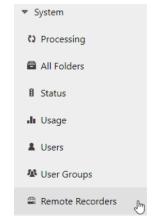
 Q HP HD Camera

 Q HP IR Camera

 Q PTZ330

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.

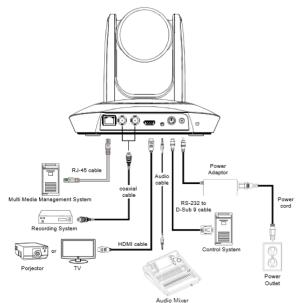
PTZ Camera Video Output to the Panopto System (continued)

Preview	Remote F	Recorder Information				
Configuration Schedule	Name	Pa	nopto Remote Record	der Edit		
Access	Machi	ne Name Pa	nopto Remote Record	der		
	Machi	ne IP 21	217.138.114.37			
	Versio	on 5.6.0.39953				
	Device Co	onfiguration				
	Capture	Device Name		Primary Video	Primary Audio	
		Microsoft Camera Front		Video	Addio	
		Microsoft Camera Pear				
		PTZ330 Camera		(e)		
		Line (NewTek NDI Audio)				
		Microphone Array (Realtek Audio(SST))	High Definition		•	
	•	Capture Screen				
	S					

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

TR320/530 Camera Video Output to the Panopto System

Device Connections



 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.

Tracking	Off				
Camera	>	Camera ID			
Video Format	>	DHCP	> DHCP 1	On Or	
Advanced Setting	>			Off	
Preset	>	PTZ Camera			
Language	>				
Profile	>				
Factory Default	>				
Information	>				
Display	>				

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

Tracking	Off		
Camera	>		
Video Format	>		
Advanced Setting	>		
Preset	>		
Language	>		
Profile	>		
Factory Default	>		
Information	> Fim	nware Version	0.0.1000.38
Display	> IP A	Address	10.100.93.34
	MA	с	00:18:1A:00:54:87

TR320/530 Camera Video Output to the Panopto System (continued)

- 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: <u>https://www.aver.com/downloadcenter</u>.
- 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 **end**, then select *Video & Audio setting*, this is where

AVer Ö \odot Video Output Audio Input 3G-SDI 1/ HDMI:PTZ Camera 1080P/60 Audio line in format PTZ PTZ camera 3G-SDI 2 Panoramic - 1080P/60 G711 AAC Video & Audio setting 몲 Network setting IP Streaming Mode ۲ Tracking setting Mode 2 ø Preset setting Mode 1 nced setting Panoramic elect PTZ or Panoramic for streaming Profile setting PTZ camera n setting 1080P/30 720P/30 480P/30 Resolution/fps Ø Factory default 6M bps (Bits per second)

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.

3G-	SDI 1/ HDMI:PTZ	Z Camera		×
	Auto			
	1080P/60			
	1080P/50			
	1080i/50			
	1080P/30			
	1080i/60			
	720P/60			
				_
			Save	

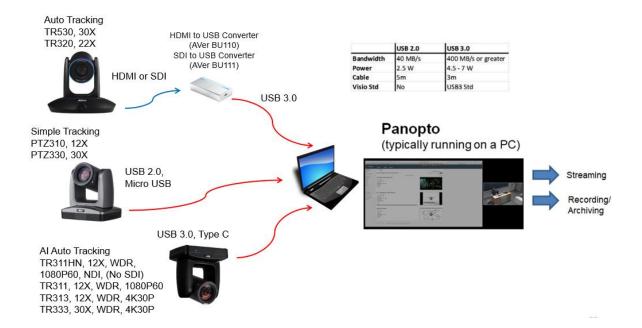
*Note: Only the standards listed are available currently, no 29.97/59.94 type selections.

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.

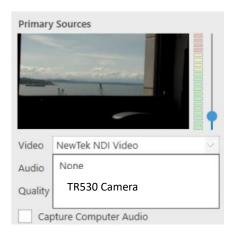
Likely Scenario:

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



Panopto for Windows System Video Input (HDMI to USB)

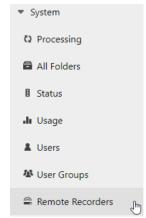
3. Go to the Panopto's desktop client; select the TR530 camera source from the list.



- 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.
 - Q Cameras
 P HD Camera
 HP IR Camera
 TR530 Camera

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.
- 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.

Panopto Remote Recording

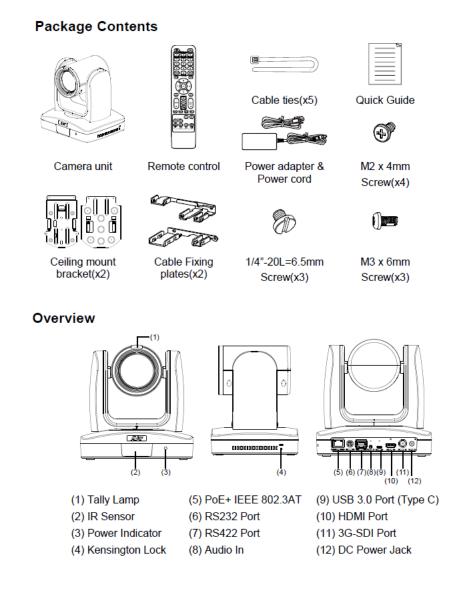
🖴 Panopt	o Remo	te Recorder				>
Preview	Remote F	Recorder Information				
Configuration	Name		Panopto Remote Reco	order Edit		
Schedule Access	Machi	ne Name	Panopto Remote Reco	Panopto Remote Recorder		
	Machi	ne IP	217.138.114.37			
	Versio	n	5.6.0.39953			
	Device Co Capture	onfiguration Device Name		Primary Video	Primary Audio	
		Microsoft Camera Fr	ront			
		Microsoft Camera Re	ear			
	•	TR530 Camera				
		Line (NewTek NDI A	udio)			
	×	Microphone Array (F Audio(SST))	Realtek High Definition			
	1	Capture Screen				
		Capture Slides				
		Capture Computer A	Audio			

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

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.



- 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.

Sign in			
http://192.16 Your connect	8.0.106 tion to this site is not private		
Usemame	1		
Password			
		Sign in	Cancel

- 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.

AV er	Priority Mode	
Live View	O O 2160p 1080p	
Camera Settings	Power Frequency	
Video & Audio	50Hz 59.94Hz 60Hz	
참 Network	Video Mode	
Tracking Settings	USB + Streaming	~
System	Stream Video Output	Bitrate
	1920x1080	✓ 4Mbps
	Framerate	I-VOP Interval (S)
	30	✓ 1

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.

AV er	Priority Mode	
Live View	2160p 1080p	
Camera Settings	Power Frequency	
Video & Audio	50Hz 59.94Hz 60Hz	4
뮴 Network	Video Mode	
• Tracking Settings	USB + Streaming Stream Only USB Only	
-vv- System	USB + Streaming NDI	Encoding Type
	1920x1080 🗸 4Mbps	H.264 H.265
	Framerate I-VOP Interval (S)	1s Rate Control
	30 💙 1 🕥	10 VBR CBR

TR Camera Video Output to the Panopto System (continued)

	Stream Only (Various)	USB Only (Various)	USB + Streaming (Various)	NDI (1080p/60)
SDI Output	1	✓	✓	✓
HDMI Output	\checkmark	✓	\checkmark	✓
USB Output	X	✓	\checkmark	X
RTSP Output	\checkmark	X	\checkmark	\checkmark

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

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.



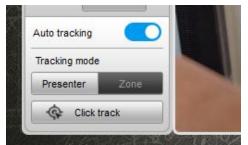
2. Next, you should see video from the camera, and have control via the Up/Down and Left/Right arrows.

TR310 to TR333 Camera USB connected CaptureShare Software (continued)

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.

						Stream Setting		×
						Automatic record		
						Select Service	YouTube	
						Stream URL	rtmp://a.rtmp.youtube.com/live2	
						Stream Key	zjx4-q	
-						Resolution	720p	
	0	ľ	ii (((0))	₽		Apply	
THE PARTY NAMES	A DE ALLER AND A DE ALLER AND A	- 25 Silles	The second second second	SEAS COMPLEX COMPLEX COMPLEX	and manager of the second			

7. Opening the AVerCamera Setting Tool will allow you to setup the camera without the additional tools for Streaming, Recording, etc.

•	
•	
AF]	+
a – • –	+
reset setting	
0 1 2 3	
4 5 6 7	l '
Save	
uto tracking	
racking mode	

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

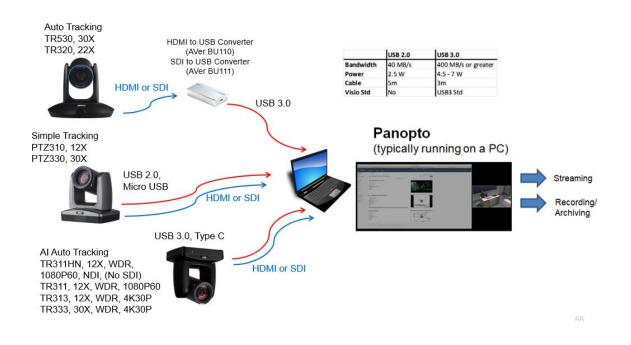
TR313 Camera HDMI/USB connection to Panopto

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.

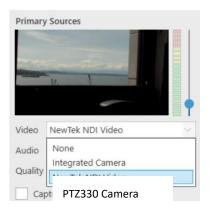
Two Likely Scenarios:

- 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)

- 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.
 - Cameras
 AVer TR313
 AVerMedia ExtremeCap UVC
 HP HD Camera
 HP IR Camera
 PTZ310

Panopto Remote Recording

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

▼ System	
Processing	
All Folders	
🕯 Status	
III Usage	
LUsers	
🕸 User Groups	
Remote Recorders	շՌո

- 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.

Panopto	Remo	te Recorder					×	
Preview	Remote Recorder Information							
Configuration Schedule	Name	Name		Panopto Remote Recorder Edit				
Access	Machi	ne Name	Panopto Remote Recorder					
	Machine IP		217.138.114.37					
	Versio	n	5.6.0.39953					
	Device Configuration							
	Capture	Device Name		Primary Video	Primary Audio			
		Microsoft Camera Front						
		Microsoft Camera Rear						
	•	NewTek NDI Video						
		Les /NewTels NIDI Ared						
		PTZ330 Came	ra	ion				
		Capture Screen						
		Capture Slides						
		Capture Computer Audio						

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/