

AVer TR320/530 and PTZ310/330 Cameras HDMI/USB

with Panopto (March 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 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://192.1 Your connec	i8.0.106 tion to this site is not private		
Username	1		
Password			
		Sign in	Cancel

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

AV er		
O Live View		
Camera Settings		
Video & Audio		
Handreich Network		
Advanced Settings		
-v- System	Camera Control	Preset
		A AE A

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.

AV er	Video Mode O	•		•		
O Live View	Stream Only	USB Only	USB + Streaming	NDI		
Camera Settings	Stream Video Output		Bitrate		Encoding Type	
Video & Audio	1920x1080 Framerate	•	16Mbps 512Kbps 1Mbps	•	H 264	MJPEG
뮴 Network	30	•	2Mbps 4Mbps 8Mbps		O VBR	CBR
Advanced Settings	Audio Input Type		32Mbps Audio Volume	5		
-vv- System	Line In	O MIC In	0	• 10		
	Encoding Type		Sampling Rate			
	O AAC	G.711	48K	•		

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	✓	\checkmark	\checkmark	✓
HDMI Output	✓	✓	\checkmark	✓
USB Output	x	\checkmark	\checkmark	X
RTSP Output	\checkmark	x	\checkmark	✓

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



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*.

 System 	
Processing	
All Folders	
Status	
III Usage	
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🕸 User Groups	
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- 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.

🚔 Panopto Remote Recorder

Preview	Remote F	Recorder Information					
Configuration	Name		Panopto Remote Reco	rder Edit			
Access	Machi	ne Name	Panopto Remote Recorder 217.138.114.37				
	Machi	ne IP					
	Versio	n	5.6.0.39953				
	Device Co	onfiguration					
	Capture	Device Name		Primary Video	Primary Audio		
		Microsoft Camera Front Microsoft Camera Paar PTZ330 Camera					
		LINE (NEWTEK NUT AUD	10)				
	~	Microphone Array (Realtek High Definition Audio(SST))					
		Capture Screen					
		Capture Slides					
		Capture Computer Audio					

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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



 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.





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	> Firmware Versio	on 0.0.1000.3
Display	> IP Address	10.100.93.3
	MAC	00:18:1A:00:54:8

- 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/download-center</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.

	×
Password	
Login	

- 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 **even**, then select *Video & Audio setting*, this is where you

can select the Video Output of the TR320/530.

A	Ver										
	0	Ö	Video Output					Audio Input			
PTZ	PTZ camera	>	3G-SDI 1/ HDMI:PT	Z Camera	1080P/60			Audio line in	format		
Р.	Video & Audio setting		3G-SDI 2		Panoramic	- 1080P/60			G711	AAC	
品	Network setting		IP Streaming Mode								
۲	Tracking setting				Mode 1				M	ode 2	
٢	Preset setting		Mode 1								
P	Advanced setting		РТΖ	P	anoramic						
1	Profile setting		Select PTZ or Panoran	nic for strean	ning						
-~-	System setting		PTZ camera	10908/60	10908/20	720P/20	4908/20				
ø	Factory default		Resolution/fps bps (Bits per second)	6M	4M	2M	4801700				
										Save	Cancel

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

3G-SE	DI 1/ HDMI:PTZ 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 selection.

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 Input connection, 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.



Panopto Remote Recording

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

 System
Processing
All Folders
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- 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.

🚔 Panopto Remote Recorder

Preview	Remote F	Recorder Information					
Configuration	Name		Panopto Remote Recorder Edit Panopto Remote Recorder 217.138.114.37				
Access	Machi	ne Name					
	Machi	ne IP					
	Versio	n	5.6.0.39953				
	Device Co	onfiguration					
	Capture	Device Name		Primary Video	Primary Audio		
		Microsoft Camera Front					
		Microsoft Camera Rea	r				
		TR530 Camera		×.			
		Line (NewTek NDI Aud	io)				
		Microphone Array (Realtek High Definition Audio(SST))					
		Capture Screen					
		Capture Slides					
		Capture Computer Audio					

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