

## AVer PTZ 310/330 Camera Integration used with Open Broadcaster

# Software (OBS)

## February 2020

### Steps to integrate the Aver PTZ310 and PTZ330 Cameras into the OBS Studio Software

**OBS** offers different options for video recording and live streaming, real time video/audio capturing and mixing.

**AVer** has high quality image Cameras (TR530 / PTZ330) that will integrate with these workflows for peak performance and ease of use. We will show the configuration process for the PTZ 310/330 Camera and the OBS Studio Software. There are some pre-requisites for this to happen, see below.

• AVer PTZ330 Camera and accessories.



- Chrome Browser, version 79.0.3945.xxx and later.
- OBS 24.0.3 (64 bit) Software for Windows, roughly 73MB in size.

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OBS-Studio-24.0.3-Full-Installer-x64	2/6/2020 6:12 PM	Application	73,213 KB
<b>—</b>			

• Windows 10 Pro OS used in this setup.

- 1. If OBS software is not installed, install and follow the prompts.
- 2. There are 3 main ways to integrate the AVer camera with OBS, they are:
  - USB Connection
  - Real Time Streaming Protocol (RTSP)
  - Streaming Output

#### **USB Connection**:

1. Connect the AVer PTZ310/330 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.



	vice manager
File	Action View Help
<hr/>	🗊   📴   🚺 🗊   💻   🧏 🗙 🖲
× ∄	USLW10-324
>	🐗 Audio inputs and outputs
>	🗃 Batteries
>	Biometric devices
>	8 Bluetooth
~	Q Cameras
	👰 HP HD Camera
	P IR Camera
	PTZ330
>	Computer

2. Next, open the OBS software and go to the "Sources" display. Select the "+" to add a source, and then select "Video Capture Device".



3. You should now see the following dialog box, give the Video Source a name and then select "OK".



- 4. Next, you should now be seeing the following window to select the PTZ330 as a device.
- 5. At this point you should have active PTZ330 Camera video. Selecting "Configure Video", will give you some basic controls for Video Processing (Brightness/Contrast/Sat/Sharpness) and Camera Control (Pan/Tilt/Zoom).

	1.	Pro	perties					×
		Vic	leo Proc Amp Camera Co	ontrol				
Device								Auto
			Brightness			_	5	Г
			Contrast			_	2	
	Configure video		Hue	-				
1			Saturation				5	
	Deactivate when not showing		Sharpness				2	
/pe			Gamma	-	L			
solution			White Balance		-		4192	-
-			Backlight Comp	-	-		0	
				-				- <u>-</u>
				Ē.	Powerl ine Freque	ency		•
Space					(Anti Fli	cker)	-	
Range	Default				Default			
		_						
		Audio Mixe			ОК	Cance	ł	Apply

- 6. Once you have setup accordingly, select "OK", then "OK" again to exit the window.
- 7. You will be brought back to the OBS Main page; you should now see Camera video as the PTZ330 USB Source.



## Recording

1. To begin recording the Program out of the OBS software, press the "Start Recording" selection under the "Controls" header.

Controls 6	Controls a
Start Streaming	Start Streaming
Start Recording	Stop Recording
Studio Mode	Studio Mode
Settings	Settings
Exit	Exit

2. To end the recording, select "Stop Recording", by default the video will be recorded to the "Videos" folder of the Windows User logged in.



3. To change the "default" settings, select "Settings" under the "Controls" header, you should see the following window appear. This is where you can change the Recording Path, Recording Format, and Streaming Properties.

Settings			×
General	Output Mode	Simple	
((•)) Stream	Streaming		
A	Streaming		
Output	Video Bitrate	2500 Kbps	Ŷ
- -	Encoder	Software (x264)	
Audio	Audio Bitrate		
Video		Enable Advanced Encoder Settings	
Hotkeys			
3 Advanced	Recording		
Advanced	Recording Path	C:\Users\v002712\Videos Brow	
		Generate File Name without Space	
	Recording Quality	Same as stream	
	Recording Format		
	Custom Muxer Settings		
		Enable Replay Buffer	
	Warning: Recordings cannot be p	aused if the recording quality is set to 'Same as stream'.	
		OK Cancel	

## **RTSP Input to the OBS system**

 Connect the PTZ310/330 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://192.16 Your connect	8.0.106 ion to this site is not pr	ivate		
Username	1			
Password				
			Sign in	Cancel

- 3. The default Username/password is "administrator".
- 4. Next, you should now see the main login screen with a "Live View" of the PTZ Camera.



5. 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, and Framerate.

<b>AV</b> er	Video Mode				
	Stream Only	USB Only	O USB + Streaming		
Live View		•			
Camera Settings	Stream Video Output	Bitrate		Encoding Type	
Uideo & Audio	1280x720	<ul> <li>1Mbps</li> </ul>	•	H,264	MIREG
	Framerate	I-VOP Interval (S)	15	Rate Control	
器 Network	15	• 1 •	10	O VBR	CBR
Advanced Settings					
Sustem	Audio Input Type	Audio Volume	5		
-y- System	Line In MIC	In 0	10		
	Encoding Type	Sampling Rate			
	AAC G.7	16K	•		

6. 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.

AVer	DHCP •
Live View	On Off 1P Netmask
Camera Settings	192.168.0.106 255.255.255.0
Video & Audio	Galeway DNS
品 Network	192.168.0.1 192.168.0.1 Confirm
Advanced Settings	RTMP Settings RTSP Security
System	Server URL tmp://1_wkpffdij.p kpublish kaltura com:1 Stream Key 1_wkpffdij_1 Start Stream STOP

7. Next, go back to the OBS system and select the "+" sign under the "Sources" header, and then select "Media Source".

	Image
	Image Slide Show
	Intel(R) RealSense(TM) 3D Camera GreenScreen
	Media Source
	Scene
Sources 6	Text (GDI+)
Video Capture Device 2 99 🔒	VLC Video Source
Browser O 1	Video Capture Device
	Window Capture
	Group
$+ - \diamond \land \checkmark$	Deprecated

8. Next, select "*Create new*", and give it a name, i.e. "RTSP PTZ330", then select "OK". After selecting "OK", you should see the name given populate into the "Sources" display.



9. Next, *de-select* any of the boxes that are enabled/selected by default, you should now see the following.

Properties for 'RTSP PTZ33	30'		×
	Local File Restart playback when source becomes active		
Network Buffering Input		2 MB	$\sim$
Input Format			
	Use hardware decoding when available Show nothing when playback ends		
YUV Color Range			
	Seekable		
Defaults			

- 10. Next, in the "Input" field, 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.

Properties for 'RTSP PTZ	330'	×
Network Buffering	Local File Restart playback when source becomes active	2 MB 🗘
Input	rtsp://1===================================	
Input Format	Use hardware decoding when available Show nothing when playback ends	
YUV Color Range	Auto	
Defaults		

11. Next, select "OK", you should be seeing camera video on your OBS Preview display streaming from the PTZ330 camera.



## **Streaming Output**

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

1. Select Settings under the "Controls" header, then select "Stream"; you should now be seeing the following window displayed.



2. Next, select the "Service" you want to stream to, in this example we are using YouTube.

3. Next, you will need your "Stream Key" in order to complete the process, for YouTube, 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.

ENCODER SETUP		
Server URL		
rtmp://a.rtmp.youtube.com/live2		
Stream name/key		
	Reveal	

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

Settings			×
~			
General	Service	YouTube / YouTube Gaming	
((*)) Stream	Server	Primary YouTube ingest server	
Output	Stream Key <u>(Link)</u>		Show

5. Next, select "OK", then select "Start Streaming" under the "Controls" header.

	Scene Transitions	Controls #
Controla	0.0 dB Fade 0	Stop Streaming
Contuois		Start Recording
Start Streaming		Studio Mode
	0.0 dB	Settings
Start Recording	-20 -15 -10 -5 0	Exit
Studio Mode	<b>→ → →</b>	
Settings	0.0 dB	
betungs	-20 -15 -10 -5 0	
Exit		E 14 (+ 1040
	Dropped Frames 0 (0.0%) LIVE: 00:00:03 REC: 00:00:00 CPU: 5.4%, 30.00	Tps KD/s: 1946

- 6. Verify that you see "Dropped Frames" displayed, LIVE counter, and "Green status bar" for kb/s has begun. At this point you are now streaming to YouTube.
- 7. To verify, go to your YouTube Live Dashboard and verify the video feed from OBS.



8. To end the streaming feed, select "Stop Streaming" from the "Controls" header, the "Dropped Frames" and "kb/s" information should now be removed from view to indicate streaming has stopped.

Controls	8			Scene Transitions	8
Start Streaming		Fade			
Start Recording Studio Mode		Duration			<b>4</b> -+
			300 ms		
Settings					Ň
Exit					
		0.00.00	DEC: 00:00:00	CDU 1 68/ 20.00 fpc	
	LIVE: U	0:00:00	REC: 00:00:00	CPU: 1.6%, 30.00 fps	

9. To verify on YouTube, go back to your YouTube Live Dashboard, it should now be displaying "Offline".

OFFLINE		
	LIVE STREAMING CHECKLIST	111
	👱 Set up encoding software	*
nation of Grantin	1. Add stream info	*
	Optional features	*
there	((•)) Go live	*
IN FPLAY	Don't show these tips again	
(a) Live stream offline	Top chat 👻	\$ :
Streamed live 43 minutes ago	Welcome to live chat! Remember to guard your	
Create highlight Change thumbnail	LEARN MORE	

10. This concludes the AVer PTZ310/330 Camera integration within the Open Broadcaster Software (OBS).