

UC1218-4K

4K HDMI TO USB3.1 Gen 1 BROADCAST-GRADE VIDEO CAPTURE

1.INTRODUCTION

UC1218-4K is aa broadcast-grade real plug and play device to capture uncompressed HDMI signal over USB3.1 Gen1 for graphics capture, live streaming, recording on your laptop, PC. The input HDMI resolution supports up to 4K 60HZ. The device has a 4K HDMI loop-out for monitoring every detail of the original 4K source on an additional monitor. Besides, the device has an HDMI output to monitor the captured video from an HD HDMI monitor.

The device is real plug and play, no need driver, and it is compatible with various systems including Windows, Linux etc. and UVC and UAC compliant. UC1218-4K is your ideal choice for applications like live broadcast, streaming, and professional AV workflows including podcasting, web conferencing, video production and screen capture.



2.FEATURES

- Inputs: 4K HDMI in, Mic/Line in
- Outputs: 4K HDMI loop-out, HDMI out, USB 3.1 Gen1(USB3.0) out, audio out

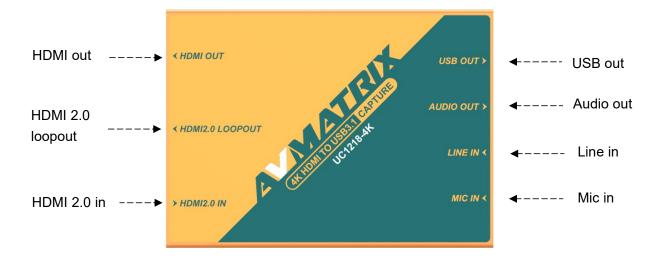
- Automatic input signal detection, up to 4K60Hz
- 4K HDMI input with loop-out and down scaled HD HDMI out.
- Uncompressed video & audio capture, comply with UVC and UAC
- Plug-and-Play, driver free & power free
- Compatible with Windows, Linux, macOS
- Compatible with OBS, ZOOM, Teams, Twitch, Vmix, etc.

3.SPECIFICATIONS

Connections	
	1×HDMI 2.0 in
Video Interface	1×HDMI out, 1×HDMI 2.0 loop-out
	1×USB3.1 Type C(USB 3.1 Gen1, up to 200MB/s)
	1×3.5mm stereo audio(Line in)
Audio interface	1×3.5mm stereo audio(Mic in)
	1×3.5mm stereo audio out
Format	
HDMI 2.0 Input & Loopout Format	Up to 4K60hz, 1440p144hz, 1080p240hz
USB Capture Format	1920×1080, 1680×1050, 1440×900, 1280×1024, 1280×960, 1280×800, 1280×720, 1024×768, 800×600, 720×576, 720×480, 640×480
Audia 8 Video Contura	UVC (USB video class) standard
Audio & Video Capture	UAC (USB audio class) standard
Audio Codec	2-channel, 16 bit PCM, 48kHz, 1536 kbps
Video Color Space	YUY2
Hardware deinterlacing	Support 1080i hardware deinterlacing, clearer and more stable picture
OS and Software Compa	tibility
Supports OS	Windows 7/8/10/11, Linux (Kernel version 2.6.38 and above), macOS (10.8 and above)
Software Compatibility	OBS studio, Skype, ZOOM, Teams, Google Meet, Youtube Live, QuikcTime Player, Face time, etc.
Compatible SDK	DirectShow(Windows), DirectSound(Windows)
General	
Dimensions	104×75.5×19mm
	Net weight: 284g
Weight	Gross Weight: 382g
Power Consumption	4.5W ±10%
Operating Temperature	-20~60°C
Storage Temperature	-30~70°C
Relative Humidity	20~90% RH (no condensation)
Accessory	



4.INTERFACE



5. OPERATION INSTRUCTION

The UC1218-4K 4K HDMI to USB3.1 Video Capture is based on UVC (USB video class) and UAC (USB audio class) standard. No additional drivers need to be installed. After installing in operating system, the relevant video and audio devices will be added. In the Windows Device Manager, for example, will appear new devices:

Under Imaging Devices: UC1218-4K USB Capture

• Under Audio inputs and outputs: UC1218-4K & MIC audio / UC1218-4K & Line audio

6. OUTPUTS

• USB Capture out: Use a third-party software like OBS, Vmix, Zooms, Teams, Potplayer etc. to capture the HDMI input video for live stream events like, game live, broadcast, v-log, remote education, conference, etc. The captured video resolution up to 1080p60.

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• HDMI 2.0 loopout: Loopout the HDMI 2.0 input video and audio

• HDMI out: It is same to the USB captured video and audio.

7. AUDIO

Audio Mixer:

The UC1218-4K capture card has external MIC and Line audio inputs to allow more flexibility in audio configuration.

- a. UC1218-4K & MIC Audio: including HDMI 2.0 audio & MIC audio
- b. UC1218-4K & Line Audio: including HDMI2.0 audio & Line audio
- c. Audio out: Line/PC audio (Line first) + HDMI2.0 audio
- d. HDMI out: HDMI audio
- e. HDMI 2.0 loopout: HDMI2.0 audio

• Audio Out:

The audio out comes from the HDMI 2.0 audio, line in audio and PC audio. The PC audio capture open settings are as follows:

Connect the device via USB, select the sound settings on the computer, then select the sound output, click on the speaker, select the speaker (UC1218-4K & Line audio), the USB output can capture the audio played locally on the computer.



8. Work with OBS & Potplayer

• OBS studio software Settings:

Scene ъ Scenes Т Text (GDI+) ideo Capture Device 4 14 0 Video Capture Device 🗂 Window Capture 面音频 Group -46 Deprecated 克风/Aux

Rename the name of the signal source and click OK.

S Create/Select Source	×
O Create new	
Video Capture Device	
🔵 Add Existing	
Video Capture Device	
🗹 Make source visible	OK Cancel

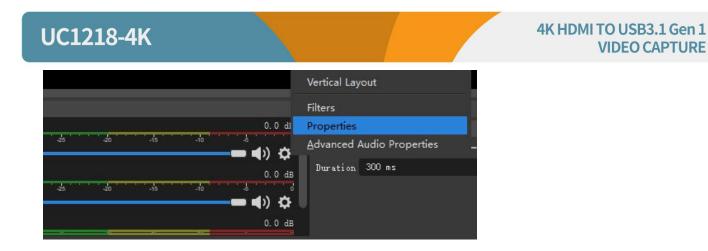
Step2. Right-click "Video Capture Device" and select properties, enter the properties interface, and select the signal source as your device. Users can set other parameter setting in the properties pages and then click OK.

Step1. Open OBS Studio , click "+" and select "Video Capture Device".

UC1218-4	K		
Properties for 'Vide	eo Capture Device'		×
Device	UC1218-4K USB Capture Deactivate Configure Video Configure Crossbar Deactivate when not showing		\$
Resolution/FPS Type	Device Default		0
Resolution			~
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Vides Taries			0
Color Space	Default		0
Color Range	Default		0
Defaults		OK C	ancel
Audio Output Mode	Capture audio only	 	0
	🗹 Use custom audio device		
Audio Device	麦克风阵列(2- WC1218-4K & Line Audio) 麦克风阵列(2- WC1218-4K & Line Audio)		÷
Defaults	线路(NewTek NDI Audio) 麦克风(Realtek High Definition Audio) 麦克风(2- UC1218-4K & MIC Audio)		

Step3. Click on the audio setting icon to setting audio, as shown in the picture. Then enter the properties, and select the device.

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	麦克风/Aux	0.0 JD



Step4. Enter "Advanced Audio properties" can change the setting about the volume, balance, audio monitoring, and Tracks etc.

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Step5. Setting output resolution. (The resolution of HDMI output can be changed with the USB output.)

Settings				\times
🖨 General	Base (Canvas) Resolution	1920x1080	Aspect Ratio 1	6:9
『ዋ [®] Stream	Output (Scaled) Resolution	1280x720	Aspect Ratio 1	16:9
🕒 Output	Downscale Filter	Bicubic (Sharpened scaling, 16 samples)		
(I) Audio	Common FPS Values 💲	30		
🖵 Video				
🕮 Hotkeys				
😚 Accessibility				
⅔ Advanced				

• Potplayer studio software Settings:

Press "Alt+D" will enter the device settings, select the signal source as your device, customize the parameters, then open the device. Users can choose the output resolution in the settings. (The resolution of HDMI output will change according to USB output format).

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Video capture de	vice					
Device:	UC121	8-4K USB Capt	ure			v] [
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Device:	WASA	PI - Default De	vice			v
Input:						v
	Prev	iew audio				