



UC1218-4KS

HDMI TO USB3.0 4K30 Capture Box

1.Introduction

UC1218-4KS is a broadcast-grade 4K professional and convenient device that captures uncompressed 4K HDMI signals via USB 3.0 for audio and video acquisition, live streaming, and recording on a computer. It supports video capture resolutions up to 4K30 and is compatible with various systems, including Windows and Linux, adhering to UVC and UAC standards. Utilizing an uncompressed RGB 24-bit color format, it accurately reproduces the original colors of the image. The device features plug-and-play, driver-free, and power-free design. UC1218-4KS is an ideal choice for applications in live streaming, gaming, and professional audio and video work.



2.Main Features

- Inputs: 4K HDMI input, Mic/Line audio input
- Outputs: 4K HDMI loop-out, USB 3.0 output, audio output
- Uncompressed 4K30 video and audio capture
- Supported capture video formats: RGB24, P010, YUY2, NV12, I420, MJPG
- Plug-and-play, driver-free, power-free
- Compatible with Windows, Linux, macOS
- Compatible with OBS, ZOOM, Teams, Twitch, Vmix, etc.

3.Specifications

Connections	
Video Interface	1×HDMI 2.0 In 1×HDMI 2.0 Loopout 1×Type C (USB 3.0, Up to 5Gbps)
Audio interface	1×3.5mm stereo audio(Line in) 1×3.5mm audio(Mic in) 1×3.5mm stereo audio out
Format	
HDMI2.0 input & Loopout	Up to 4K60Hz, 2K144Hz, 1080p240Hz
Audio & Video Capture	UVC (USB video class) standard UAC (USB audio class) standard
Audio Codec	2-channel, 16 bit PCM,48kHz,1536kbps
Video Format	RGB24: Up to 2560×1440 p30 P010: Up to 3840×2160 p60 YUY2: Up to 2560×1440 p60 NV12: Up to 3840×2160 p30 I420: Up to 3840×2160 p30 MJPEG: Up to3840×2160 p60
OS and Software Compatibility	
Supports OS	Windows 7/8/10/11, Linux (Kernel version 2.6.38 and above), macOS (10.8 and above)
Software Compatibility	OBS studio, ZOOM, Teams, Google Meet, Youtube Live, QuikcTime Player, Face time, etc.
Compatible SDK	DirectShow(Windows), DirectSound(Windows)
Others	
Dimensions	104×75.5×19mm
Weight	Net: 271g Gross: 403g
Power Consumption	4.5W ±10%
Operating Temperature	-20~60° C
Storage Temperature	-30~70° C
Relative Humidity	20~90% RH (non-condensing)
Accessories	

Accessories	1 × USB 3.0 A to C cable, 0.8m HDMI cable (Optional)
Warranty	3 Years

4. Interfaces



5. Operating Instructions

UC1218-4KS HDMI 2.0 to USB 3.1 video capture device is based on the UVC (USB Video Class) and UAC (USB Audio Class) standards. No additional drivers are required. After installation in the operating system, the relevant video and audio devices will be added. For example, in the Windows Device Manager, new devices will appear.

- Under Imaging Devices: USB 3.0 Capture Video
- Under Audio Inputs and Outputs: Mixer (USB3.0 Capture Audio) / Headphones (2-USB3.0 Capture Audio)

6. Output

- USB Capture Output: Use third-party software such as OBS, Vmix, Zoom, Teams, Potplayer, etc., to capture the HDMI input video for live streaming activities like gaming, broadcasting, Vlog, remote education, and conferences. The captured video resolution can reach up to 4K30.
- HDMI 2.0 Loop-out: Loop out the video and audio from the HDMI 2.0 input.

7. Audio

Audio Mixing:

The UC1218-4KS capture card features external MIC and Line audio inputs, offering more flexible audio configuration.

- a. USB Audio: Includes HDMI 2.0 audio, MIC audio, and Line audio.
- b. Audio Output: Includes HDMI 2.0 audio, MIC audio, Line audio, and PC audio.
- c. HDMI 2.0 Loop-out: HDMI 2.0 audio

Audio Output:

The audio output is sourced from the embedded audio of HDMI 2.0, the audio input from Line In, and the computer's audio.

To enable the computer's audio capture, follow these steps:

Connect the device via USB. On the computer, go to the sound settings. Select the sound output. Click on the speaker icon. Choose "Headphones (2-USB3.0 Capture Audio)".

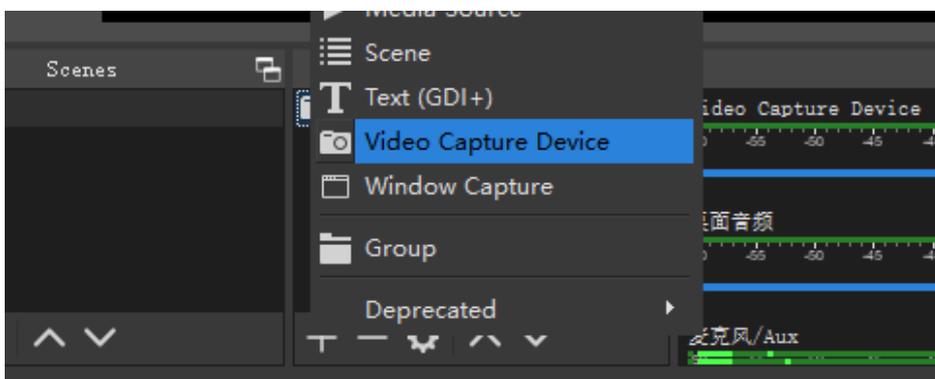
With this setup, the USB output can capture the audio being played locally on the computer.



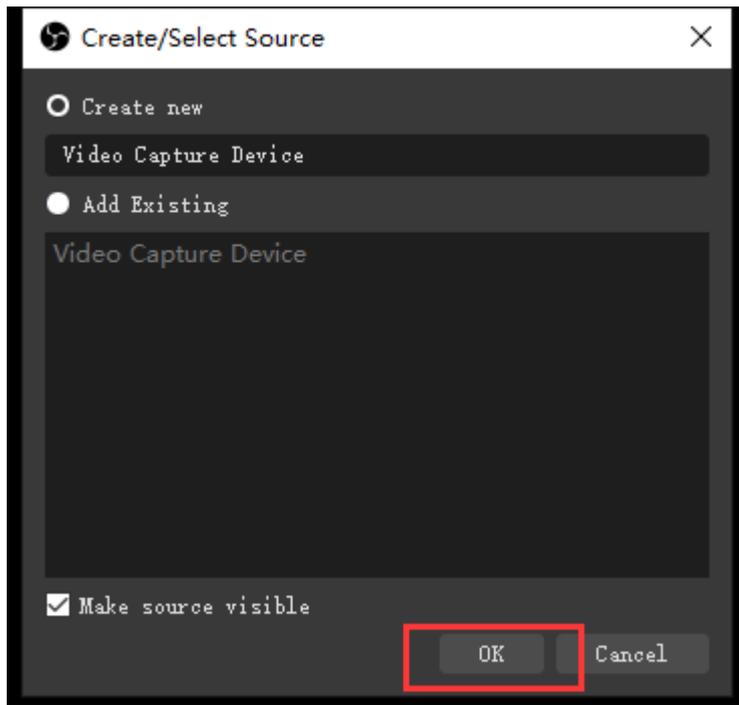
8. Work with OBS & Potplayer

• OBS studio software Settings:

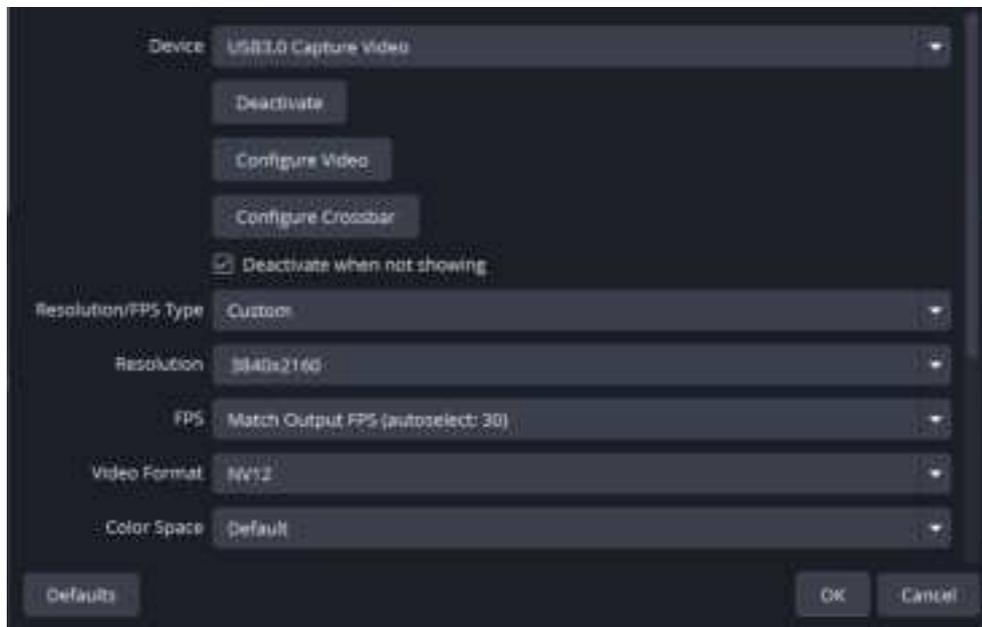
Step1. Open OBS Studio , click "+" and select "Video Capture Device".

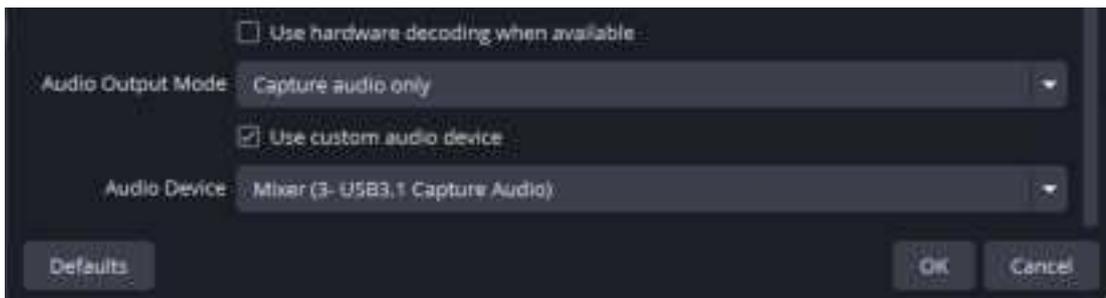


Rename the name of the signal source and click OK.

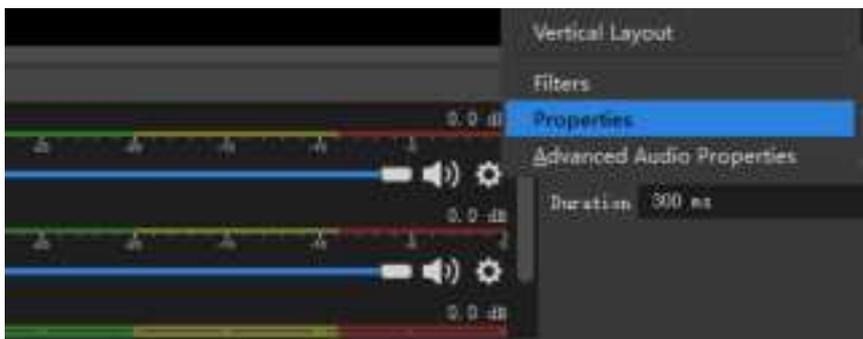
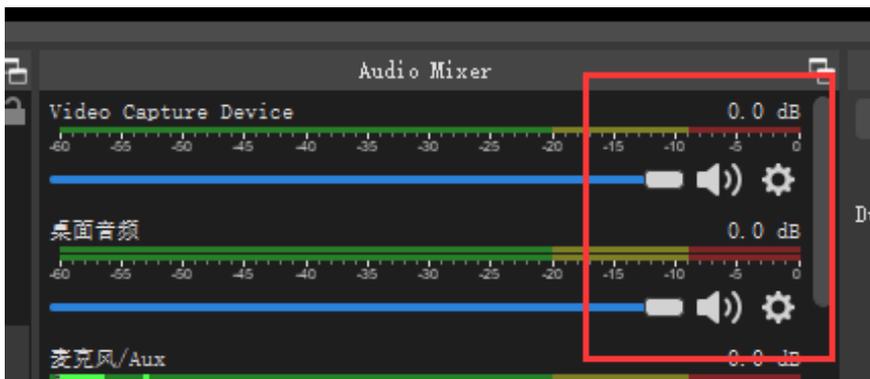


Step2. Right-click "Video Capture Device" and select properties, enter the properties interface, and select the signal source as your device. Users can set other parameter setting in the properties pages and then click OK.

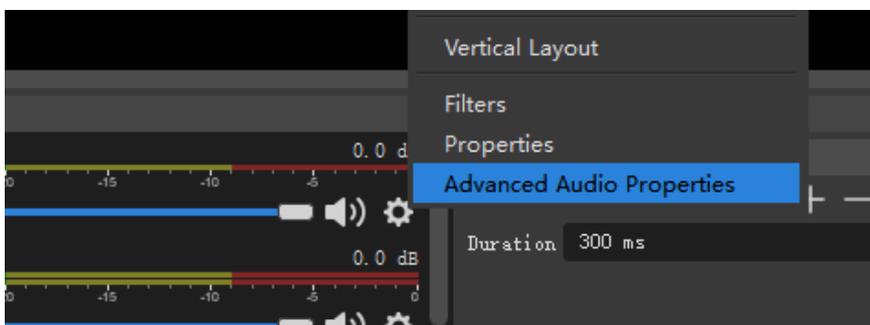




Step3. Click on the audio setting icon to setting audio, as shown in the picture. Then enter the properties, and select the device.

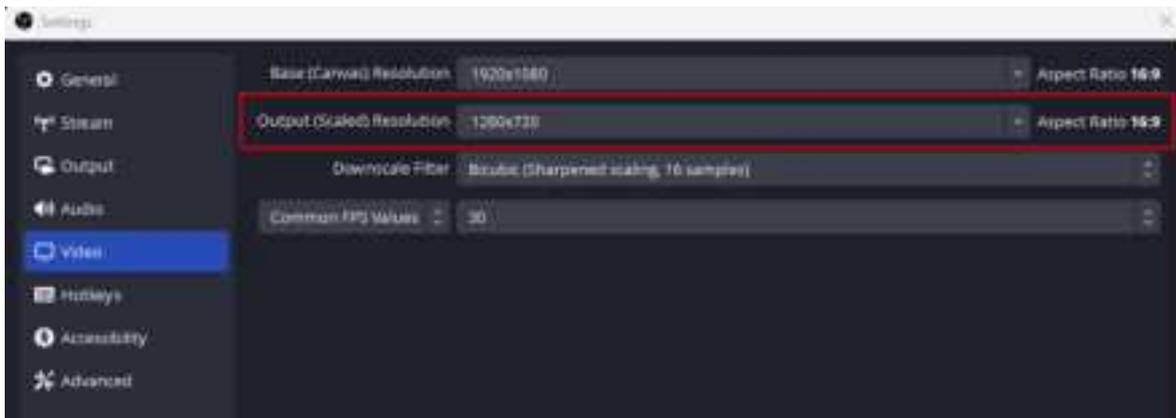


Step4. Enter "Advanced Audio properties" can change the setting about the volume, balance, audio monitoring, and Tracks etc.





Step5: Set the output resolution. (HDMI output resolution will change according to USB output).



- **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.

