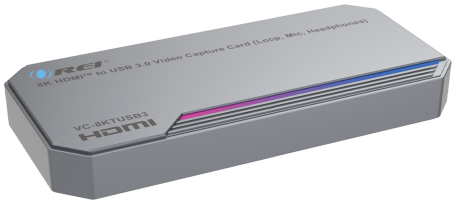

VC-8KTUSB3

8K HDMI™ to USB 3.0 Video Capture Card (Loop, Mic, Headphones)

USER MANUAL

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Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating, or adjusting this product. Keep this manual for future reference.

Important Safety Note – Surge Protection Recommended

This product contains sensitive electronic components that may be damaged by electrical spikes, surges, lightning strikes, or static discharge. To protect and extend the service life of your equipment, we strongly recommend using a surge protection device.

Warranty Registration

Activate your warranty by registering your product at:

→ **www.orei.com/register**

Need Technical Support? We're Here to Help.

Our experienced Technical Support Team is available to answer your questions, offer expert advice, and help troubleshoot any issues to keep your project on track—on time and on budget.

Live Support Hours (US/Canada/Mexico):

Monday–Friday | 9:00 a.m. – 5:00 p.m. Central Time

Contact Us:

Email: info@orei.com

Phone: 877-290-5530

Chat Live: www.orei.com

Send us an instant message—our team typically responds within moments during live support hours.

Introduction

The VC-8KTUSB3 is a high-performance HDMI™ capture device designed for professional recording and streaming applications. It accepts HDMI™ input resolutions up to 8K@60Hz and 4K@144Hz, while delivering uncompressed capture resolutions up to 4K@60fps and 2560×1440@144fps. Featuring an HDMI™ loop-out, microphone input, and 3.5mm line-in and line-out ports, it offers flexible audio and video integration for advanced production setups.

Powered by USB 3.2 Gen 1 with up to 5Gbps bandwidth, the VC-8KTUSB3 ensures smooth, low-latency video transmission. It supports multiple capture formats including YUY2, NV12, I420, and MJPEG, making it suitable for a wide range of workflows. Fully compliant with UVC and UAC standards, the device requires no drivers and offers true plug-and-play operation. It is compatible with Windows 7/10/11, macOS, and Linux, and works seamlessly with popular software such as OBS, Streamlabs, vMix, Zoom, Microsoft Teams, and more.

Features

1. **High-Resolution Video Capture** – Supports input up to 8K@60Hz and capture up to 4K@60fps.
2. **USB 3.2 Gen 1 Interface** – Delivers 5Gbps transfer rates for uncompressed video quality.
3. **Multi-Platform Compatibility** – Works with Windows, Mac, and Linux operating systems.
4. **UVC/UAC Compliant** – Plug-and-play operation without additional drivers.
5. **Advanced Audio Mixing** – Combines HDMI™ digital audio with analog microphone/line-in inputs.
6. **Professional Software Support** – Compatible with OBS, Streamlabs, vMix, and conferencing applications.
7. **HDR Support** – Maintains high dynamic range video quality throughout the capture process.
8. **Multiple Format Support –** YUY2, NV12, I420, and MJPEG capture formats.

Package Contents & Specifications

Package Contents

1.	VC-8KTUSB3	1 pcs
2.	USB Cable	1 pcs
3.	User Manual	1 pcs

Specifications

Technical	
HDMI™ Compliance	HDMI™ 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	48Gbps
USB Bandwidth	5Gbps
Input & Output Video Resolution	Up to 8K@60Hz, 4K@144Hz * Check supported resolutions list on Page 08.
Color Space	RGB, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDMI™ Audio Formats	Maximum Channels: 8 Channels Sampling Rate (kHz): 32, 44.1, 48, 88.2, 96, 176.4, 192 Bitstream: Standard & High-definition
USB Audio Formats	Maximum Channels: 2 Channels Sampling Rate (kHz): 44.1, 48 Bitstream: None
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

Specifications

Connection	
Input	1× IN [HDMI™ Type A, 19-pin female] 1× MIC IN [3.5mm stereo audio jack] 1× LINE IN [3.5mm stereo audio jack]
Output	1× OUT [HDMI™ Type A, 19-pin female] 1× LINE OUT [3.5mm stereo audio jack] 1× USB-C [USB Type C, 12-pin female]
Mechanical	
Housing	Aluminum Enclosure
Color	Silver
Dimensions	L: 151mm / 5.94in W: 70mm / 2.76 in H: 21mm / 0.83in
Weight	233g / 8.22oz
Power Consumption	7.8W (Max)
Power Supply	USB Power Supply
Operating Temperature	32˚F~104˚F / 0˚C~40˚C
Storage Temperature	-4˚F~140˚F / -20˚C~60˚C
Operating Humidity	20%~80% relative humidity, non-condensing
Storage Humidity	10%~90% relative humidity, non-condensing

Specifications

*** All available input/output resolutions:**

HDMI™ Resolutions	640x480p60Hz, 800x600p60Hz, 1024x768p60Hz, 1280x1024p60Hz, 1360x768p60Hz, 1440x900p60Hz, 1440x1050p60Hz, 1600x1200p60Hz, 720x480i59.94Hz(480i59), 720x480p59.94Hz(480p59), 720x576i-50Hz(576i50), 720x576p50Hz(576p50), 1280x720p50Hz(720p50), 1280x720p59.94Hz(720p59), 1280x720p60Hz(720p60), 1920x1080i50Hz(1080i50), 1920x1080i59.94Hz(1080i59), 1920x1080i60Hz(1080i60), 1920x1080p23.98Hz(1080p23), 1920x1080p24Hz(1080p24), 1920x1080p25Hz(1080p25), 1920x1080p29.97Hz(1080p29), 1920x1080p30Hz(1080p30), 1920x1080p50Hz(1080p50), 1920x1080p59.94Hz(1080p59), 1920x1080p60Hz(1080p60), 3840x2160p23.98Hz(2160p23), 3840x2160p24Hz(2160p24), 3840x2160p25Hz(2160p25), 3840x2160p29.97Hz(2160p29), 3840x2160p30Hz(2160p30), 3840x2160p50Hz(2160p50), 3840x2160p59.94Hz(2160p59), 3840x2160p60Hz(2160p60), 3840x2160p100Hz(2160p100), 3840x2160p120Hz(2160p120), 4096x2160p23.98Hz, 4096x2160p24Hz, 4096x2160p25Hz, 4096x2160p29.97Hz, 4096x2160p30Hz, 4096x2160p50Hz, 4096x2160p59.94Hz, 4096x2160p60Hz, 4096x2160p100Hz, 4096x2160p120Hz 5120x2160p50Hz, 5120x2160p60Hz, 7680x4320p23.98Hz, 7680x4320p24Hz, 7680x4320p25Hz, 7680x4320p29.97Hz, 7680x4320p30Hz, 7680x4320p50Hz, 7680x4320p60Hz	
UVC Resolutions	NV12/I420	3840x2160@30 and lower FPS, 2560x1440@60 and lower FPS, 1920x1080@120 and lower FPS, 1280x720@120 and lower FPS, 720x576@50 and lower FPS, 720x480@60 and lower FPS, 640x480@60 and lower FPS
	YUY2	2560x1440@60 and lower FPS, 1920x1080@60 and lower FPS, 1280x720@120 and lower FPS, 720x576@50 and lower FPS, 720x480@60 and lower FPS, 640x480@60 and lower FPS
	MJPG	3840x2160@60 and lower FPS, 2560x1440@120 and lower FPS, 1920x1080@120 and lower FPS, 1280x720@120 and lower FPS, 720x576@50 and lower FPS, 720x480@60 and lower FPS, 640x480@60 and lower FPS

System Requirements

1. Windows computers supporting UVC protocol

MJPEG 4K60:

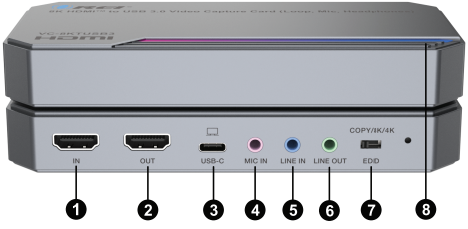
	Desktop Computer	Laptop Computer
CPU	Intel Core i7-10xxx or above	Intel Core i9-9xxx or above
GPU	NVIDIA GeForce GTX 1650 or above	NVIDIA GeForce GTX 1650 or above
RAM	8G (two-channel)	8G (two-channel)

NV12/I420 4K30:

	Desktop Computer	Laptop Computer
CPU	Intel Core i5-6xxx or above	Intel Core i7-7700HQ or above
GPU	NVIDIA GeForce GTX 1060 or above	NVIDIA GeForce GTX 1050Ti or above
RAM	8G (two-channel)	8G (two-channel)

2. Apple MacOS: System Software 10.12 or above

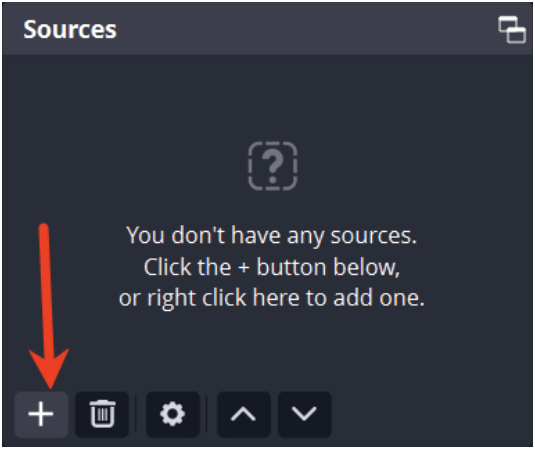
Operation Controls and Functions



No.	Name	Function Description
1.	HDMI IN	Connect to media sources such as gaming computer, gaming console, etc.
2.	HDMI OUT	Connect to a display device such as TV, Monitor, etc.
3.	USB-C	Connect to a computer or laptop for video capture. The computer's USB-C port would power the device.
4.	MIC IN	Connect to an external microphone for audio input.
5.	LINE IN	Connect an external audio device to embed audio into the stream.
6.	LINE OUT	Connect an audio device such as headphone, soundbar, etc.
7.	EDID dial switch	Switch between three EDID settings. **COPY:** Copy video EDID from HDMI loop out port and 2.0CH audio. **8K:** FRL10G_8K_HDR, 2.0CH **4K:** 4K60(444), 2.0CH
8.	Top LED strip	**Blue:** The LED turns blue when the device is powered on. **Red:** The LED turns red when an HDMI signal is detected. **Marquee:** The LED shows a flowing, multi-color strobe effect when the device is communicating normally with the capture software.

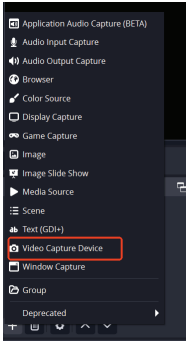
Example: Using OBS (Open Broadcaster Software) on Windows 10 system

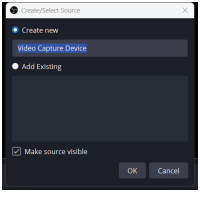
1. Install "**OBS**" application on the computer.
2. Double click "**OBS Studio**" shortcut to launch the software.
3. Click the "**+**" icon, a drop-down menu will appear.

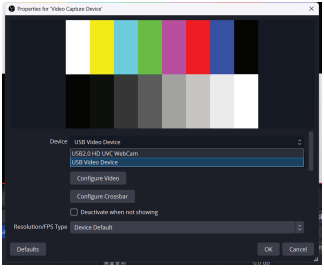


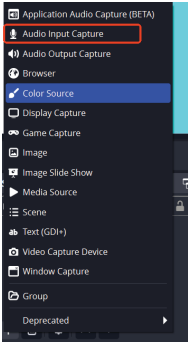
4. Select "**Video Capture Device**" from the interface to create a new video capture source, then configure the properties as required. Next, select "**Audio Input Capture**" to create a new audio source and set its properties.

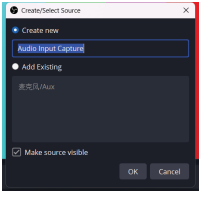
Software Setup

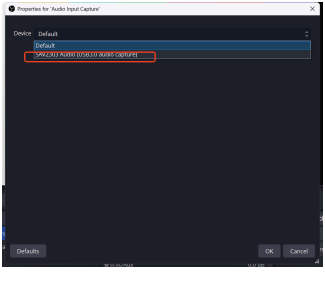




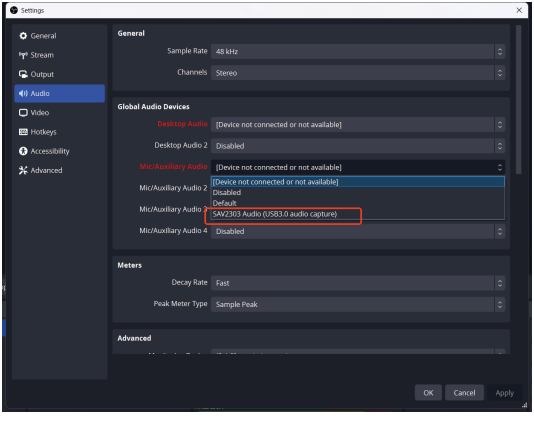






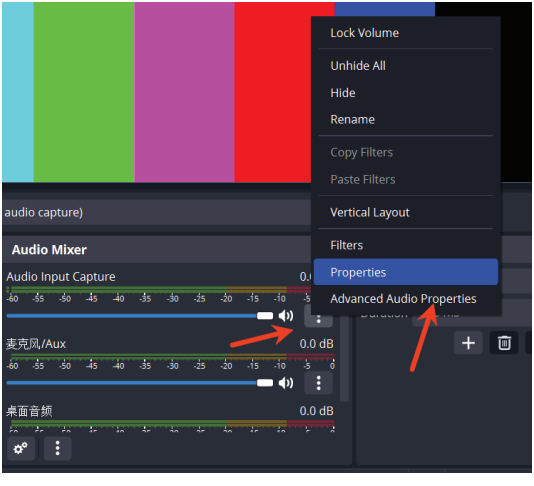


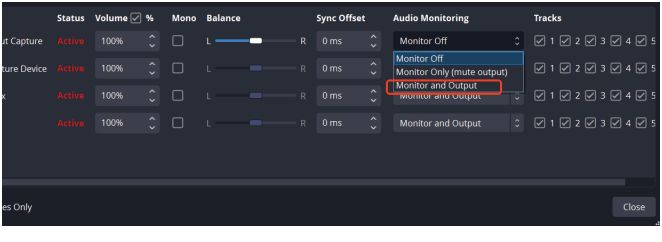
5. Open **Settings** and select the "**Audio**" tab. Choose the appropriate **Sample Rate** and **Mic/Auxiliary Audio Device** then click **Apply** and **OK**. (If your mic is connected to the MIC IN on the capture card, select **USB 3.0 Audio Capture** in the drop-down menu).



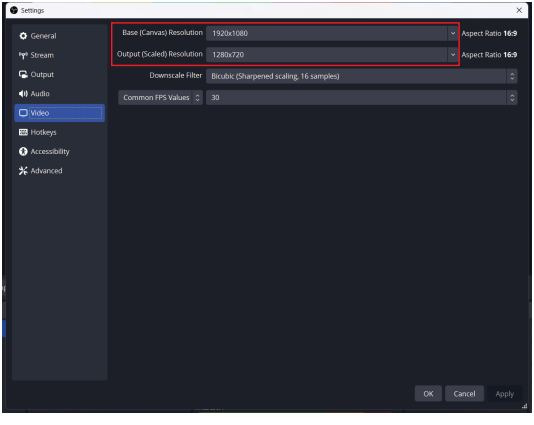
6. Click the **Settings** icon again and select "**Advanced Audio Properties**". In this menu, choose "**Monitor and Output**", then click **Close**.

Software Setup



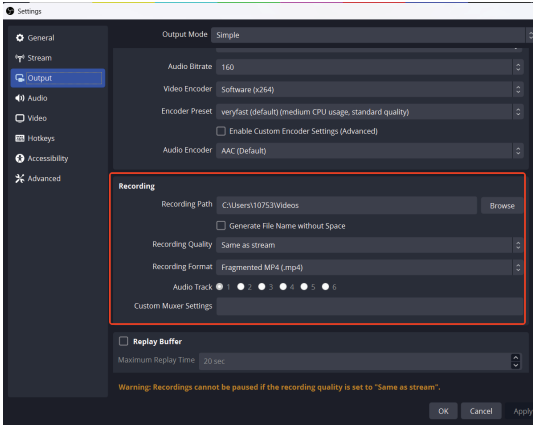


7. In **Settings**, select the "**Video**" tab. Set the **Base Resolution** and **Output Resolution**, then click **Apply** and **OK**.

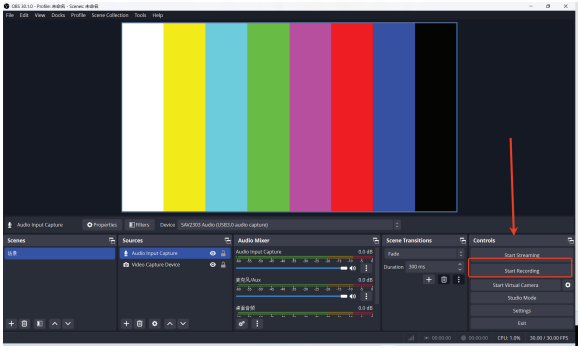


8. In **Settings**, select the "**Output**" tab. Here, choose the recording path for captured video and configure the recording quality, recording format, and other options. Click **Apply** and **OK** to save.

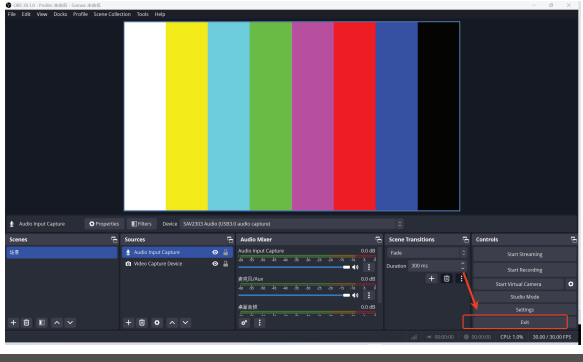
Software Setup



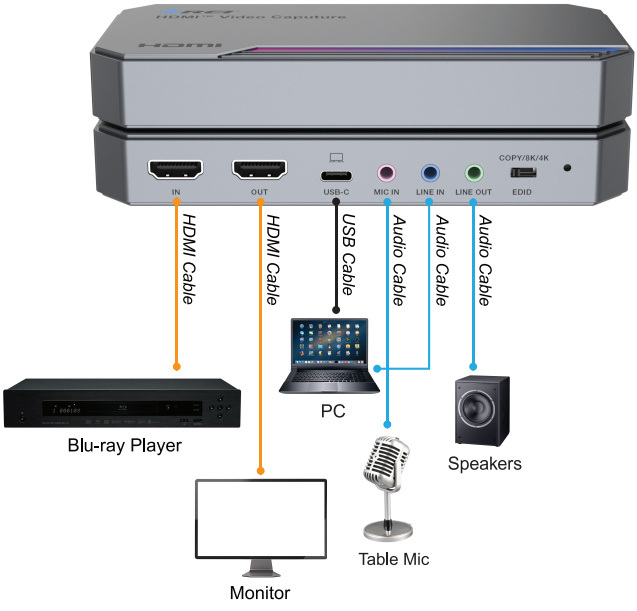
9. After completing all settings, click "**Start Recording**" to begin video capture. Click the same button again to stop recording when needed.



10. Once video capture is completed, click "**Exit**" to close the software.



Application Example



HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

FAQ & Troubleshooting

1. No video signal detected in capture software

- Verify the VC-8KTUSB3 is selected as the video source in the capture software.
- Check that the device is connected to a USB 3.0 / USB 3.2 port (not USB 2.0) on the computer or laptop.
- Try reconnecting the USB cable or using a different USB port.
- Make sure your computer or laptop meets the system requirements mentioned on Page 09.

2. No audio in recording or stream

- Confirm the VC-8KTUSB3 is selected as the audio input device in the capture software.
- Check microphone or line-in connections if using external audio.

3. Audio and video out of sync

- Reduce system CPU load by closing background applications.
- Adjust audio delay/sync settings in your capture software.
- Make sure your computer or laptop meets the system requirements mentioned on Page 09.

4. HDMI loop-out has no display

- Confirm the loop-out monitor supports the required resolution.
- Try lowering the HDMI source resolution to test compatibility.
- Replace HDMI cables with HDMI 2.1 certified cable.
- Adapters such as HDMI to DP / DP to HDMI may not work properly. Try a direct HDMI connection to the display instead.

FAQ & Troubleshooting

Still have some questions?

Our experienced Technical Support Team is here for you to answer your questions, give technical advice or help troubleshoot your project to get you installed on time and on budget. Call, email or chat with us now.

OREI Live Technical Support Hours

US team (US/Canada/Mexico): Monday-Friday, 9 a.m. - 5 p.m. Central Time

Support Email - info@orei.com | **Support Number** - 877-290-5530

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VC-8KTUSB3

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