Simplecom®

DAC10 HDMI 2.0 to USB 4K/60FPS Video Capture Card

DAC10	User Manual

Simplify Your Life

Features

- True 4K 60FPS HDMI 2.0 to USB video capture card
- Supports video capture or streaming up to 4K@60Hz, 2K@144hz, 1080p@240Hz
- Supports video passthrough up to 4K@60Hz, 2K@144hz, 1080p@240Hz
- 3.5mm microphone jack for commentary input while recording or streaming
- 3.5mm AUX output for monitoring audio from video source
- VRR (Variable Refresh Rate) technology ensures a smooth gaming experience
- USB 3.2 Gen 2 host interface supports data transfer rates up to 10Gbps
- USB-C and USB-A combo cable, convenient for use on different computers
- Compliant with UVC (USB Video Class) and UAC (USB Audio Class)
- Compatible with most mainstream capture software, such as VLC, OBS, etc.
- Ideal for recording or streaming from game consoles, cameras and more
- Powered by USB host, no external power supply required
- Plug and Play, no driver installation is required
- Durable and stylish aluminium alloy housing
- Works with Windows 10 or later, macOS 10.12 or later

Important Note

- Please connect the device to a USB 3.0, USB 3.2 (5Gbps/10Gbps) port on your computer. USB 2.0 ports are not supported.
- To ensure optimal video capture quality, use the original USB-C cable included in the box, or a USB-C cable that supports 5Gbps or 10Gbps data transfer. Some USB-C cables only support USB 2.0 speeds and are not suitable for this device.
- For stable high-resolution video transmission, please use High-Speed HDMI cables with 18Gbps bandwidth. The HDMI cables should be shorter than 3 meters to ensure reliable connection.
- Video recording quality depends not only on resolution and frame rate, but also on the bitrate setting. To achieve good quality video at high resolutions, you'll need to increase the bitrate in software setting accordingly.

System Requirements

- **Minimum PC Requirements for 4K@60Hz (MJPEG format recording):**
  CPU: Intel Core i7 10th Gen or AMD Ryzen7 3000 series
  GPU: Nvidia GeForce GTX 1650 or equivalent Intel/AMD GPU
  RAM: Dual-channel 16GB
- **Minimum PC Requirements for 4K@30Hz Recording:**
  CPU: Intel Core i5 7th Gen or AMD Ryzen5 1000 series
  GPU: Nvidia GeForce GTX 1050Ti or equivalent Intel/AMD GPU
 **RAM:** Dual-channel 8GB

Overview
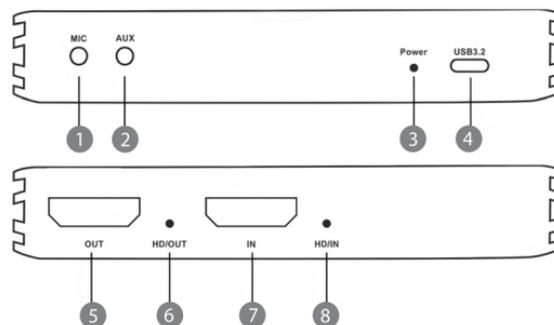
1. **3.5mm Microphone Input** (Add live commentary into the source video)
2. **3.5mm AUX Audio Output** (Real-time monitoring of audio from source video)
3. **Power LED Indicator** (Capture card power status)
4. **USB-C Host Port** (Connects to a computer for video capture data transmission)
5. **HDMI Output Port** (Outputs video from HDMI input for passthrough display)
6. **HDMI Output LED Indicator** (Indicates active HDMI output connection)
7. **HDMI Input Port** (Connects to the video source device e.g., console, camera)
8. **HDMI Input LED Indicator** (Indicates active HDMI input connection)

Software Setting (OBS)

1. OBS (Open Broadcaster Software) is a free, open-source program for streaming and recording. You can download it at *obsproject.com*.
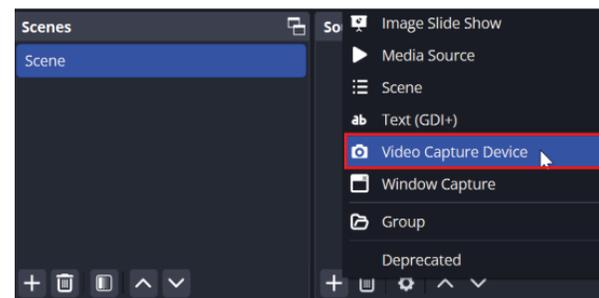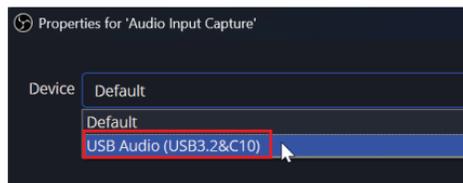

2. Install and launch OBS. In the *"Sources"* panel, click the **"+"** button and select "*Video Capture Device*".
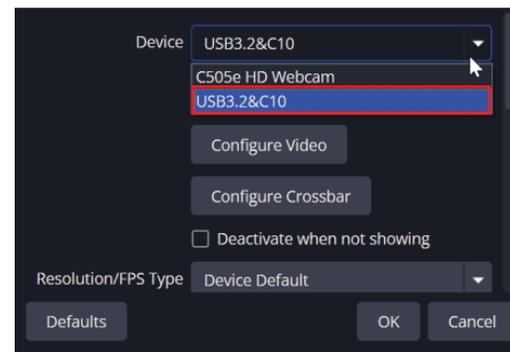
3. In the Device dropdown menu, select *"USB3.2&C10"* as the capture device. To adjust video settings, set Resolution/FPS Type to *"Custom"*.
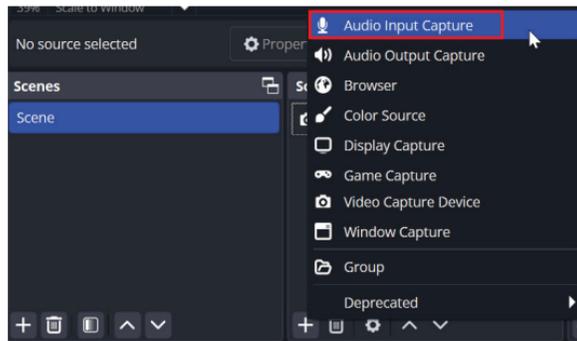
4. To add an audio input, click the **"+"** icon in the **"Sources"** module and select **"Audio Input Capture"**


5. Select **"USB Audio (USB3.2&C10)"** as the audio input device. If you connected a microphone to the capture card, live commentary will be mixed into the recorded video.

Windows Device Manager

This capture device is plug-and-play and does not require any driver installation. It is automatically recognized by Windows as a camera device. You can verify this in Device Manager:

1. In the taskbar search box, type **"Device Manager"** and select it to open.

2. In Device Manager, expand the **"Cameras"** section. You should see a device listed as **"USB3.2&C10"**.
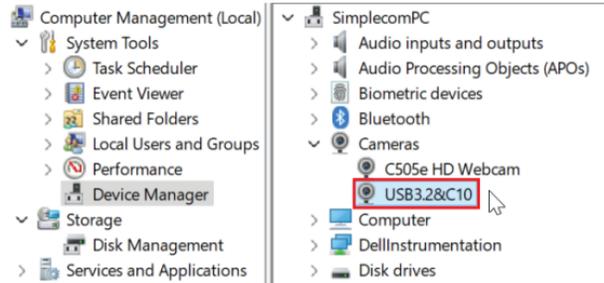
FAQ

Can I use it with a 5Gbps USB port?
Yes, the capture card is compatible with 5Gbps USB ports, but the maximum capture resolution or bitrate may be limited. For high-resolution or high-bitrate video capture, a 10Gbps USB port is recommended.

Do I have to connect a display to the HDMI output on the capture card?
No, connecting a display to the HDMI output is optional. It is only for real-time monitoring of the captured video and does not affect the recording.

Why does the screen connected to the HDMI output show a black screen?
Ensure the monitor or TV connected to the HDMI output supports the same resolution and refresh rate as the video source.

Why does the video freeze after a few minutes of recording?
Make sure you're using the SuperSpeed USB-C cable included with the capture card. If you use a different cable, it must support at least 5Gbps data transfer.

I set the resolution to 4K60FPS, why does the image quality still look poor?
Check the video bitrate setting in your recording software. A higher bitrate improves video quality by using more data, but also increases file size. A lower bitrate reduces file size but can cause blurriness or artifacts. For example, in OBS, the default bitrate is 2500Kbps, which is too low for 4K 60FPS video. Try increasing it to 10000Kbps or higher for better results.

Why is there no sound when recording videos from another PC?
If you're capturing video from another PC, you need to set the default audio output device to "Capture Card" in the Windows Sound settings.

Do I need to install a driver for this capture card?
No driver installation is required, it's plug and play.

How can I tell if it's recognized by my PC?
To verify if it's recognized, Search and open "Device Manager" in Windows, expand the "Cameras" section, and look for "USB3.2&C10". If it's not listed, try unplugging the capture card and connecting it to a different USB port.

Specifications

- **Host Interface:** USB-C USB 3.2 Gen 2 10Gbps (plug and play, UVC)
- **HDMI Input:** HDMI 2.0 (unencrypted), backward compatible
- **HDMI Output (Passthrough):** HDMI 2.0 (HDR10, VRR are supported)
- **Mic Input:** 3.5 mm Line In (3-Pole)
- **AUX Output:** 3.5 mm Line Out (3-Pole)
- **Video Format Support:** MJPEG, YUY2, NV12, I420
- **Resolution and Frame Rate Support by Video Format:**
  MJPEG: up to 4K@60Hz, 2K@144Hz, 1080p@240Hz
  YUY2 (4:2:2): up to 2K@60Hz, 1080p@60Hz
  NV12 (4:2:0): up to 4K@30Hz, 2K@60Hz, 1080p@120Hz
  i420 (4:2:0): up to 4K@30Hz, 2K@60Hz, 1080p@120Hz
- **Audio Format Support:** LPCM
- **HDCP Support:** HDCP2.3 Passthrough
- **Operating temperature range:** -10°C to 55°C
- **Housing Material:** Aluminium alloy
- **Dimensions:** 9.2 x 6.3 x 1.5CM (L x W x H)
- **Weight:** 81g approx.
- **Compatible Recording Software:** OBS, PotPlayer, VLC, vMix etc.
- **Operating System Support:** Windows 10 or later, macOS 10.12 or later

Warranty

1 Year limited Warranty. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

For our assistance with regards to warranty please email to support@simplecom.com.au or create a support ticket at http://www.simplecom.com.au

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