

VANGREE VC-003

VANGREE VC-003 4K HDMI Video Capture Card User Manual

Model: VC-003

INTRODUCTION

This manual provides detailed instructions for setting up and operating your VANGREE VC-003 4K HDMI Video Capture Card. This device is designed for high-quality video capture and streaming, supporting up to 4K@30Hz input and 1080p@60fps streaming. It is compatible with various gaming consoles and operating systems.

WHAT'S IN THE BOX

- 4K Capture Card
- USB-C Cable (3.3ft)
- HDMI Cable (4.9ft)
- User Manual

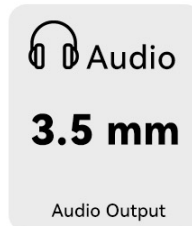
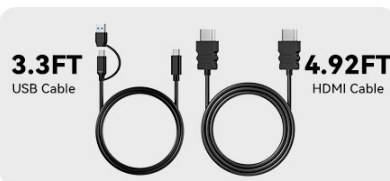
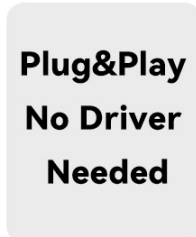
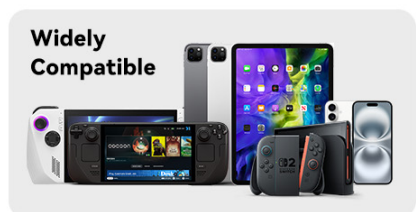
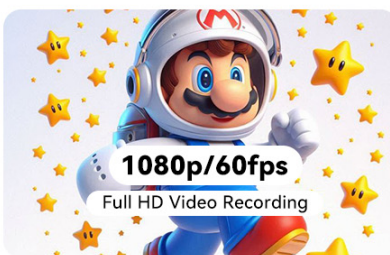


Image: The VANGREE VC-003 capture card, USB-C cable, HDMI cable, and user manual are displayed, illustrating the package contents.

KEY FEATURES

- **4K@30Hz Signal Input & Pass-Through:** Supports HDMI input and pass-through up to 4K@30Hz, with 1080p@60fps streaming via USB-C 3.0.
- **1080p60 High Definition Capture with Scaling:** Records and streams at up to 1080p60 with hardware-accelerated scaling. Accepts 4K@30Hz input.
- **Plug & Play – No Drivers Needed:** Compatible with Windows, macOS, Linux, and Android. Works instantly with OBS Studio, XSplit, and PotPlayer.
- **Ultra-Low Latency:** Engineered for near-zero latency on the pass-through signal for real-time play.
- **YUY2 4:4:4 1080p60 Uncompressed Video:** Captures 1080p60 video in YUY2 (YUV 4:4:4) for full color detail and luma-chroma separation without compression artifacts.

VANGREE Capture Card for Nintendo Switch Live Streaming



Image: An overview of the capture card's features, including input/output resolutions, compatibility, and connectivity options.

SETUP INSTRUCTIONS

Follow these steps to connect and configure your VANGREE VC-003 capture card.

1. Hardware Connection

1. Connect your gaming console (e.g., Nintendo Switch, PS5, Xbox) or other HDMI source to the **HDMI IN** port on the capture card using the provided HDMI cable.
2. Connect your display (monitor, TV) to the **HDMI OUT (Loop Out)** port on the capture card using an HDMI cable. This allows you to play on your main screen with zero latency.
3. Connect the capture card to your computer (laptop/PC) using the provided USB-C cable. The 2-in-1 USB connector supports both USB-A and USB-C ports.
4. (Optional) For audio monitoring, connect headphones or speakers to the **AUDIO OUT** 3.5mm port on the capture card.

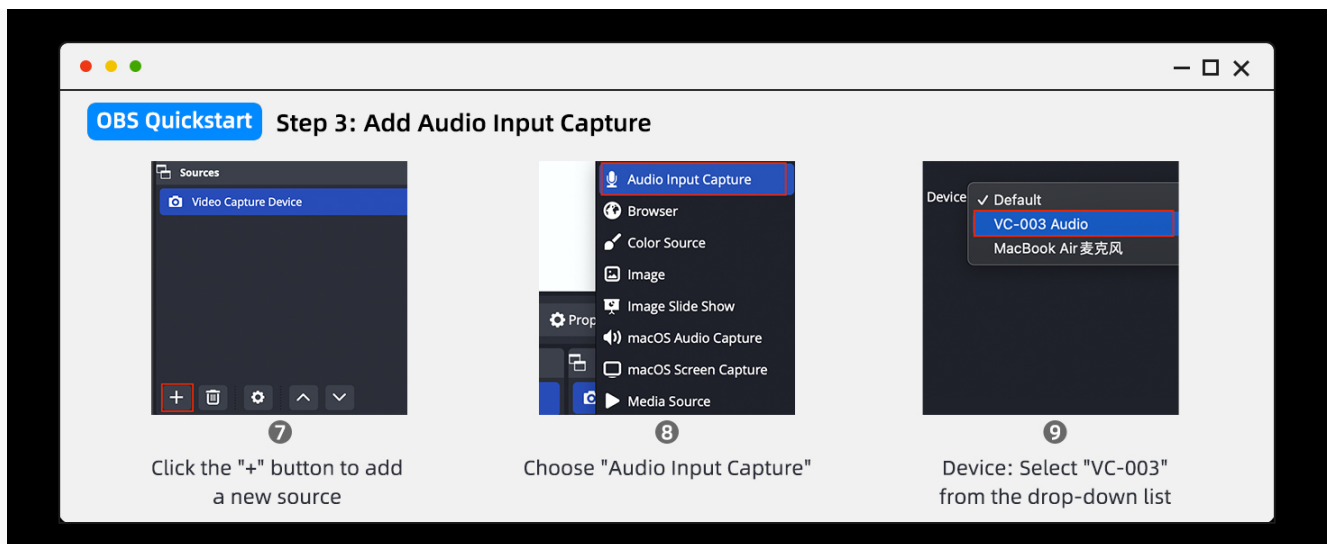


Image: A visual guide to connecting the capture card to a gaming console, monitor, and computer for live streaming and recording.

2. Software Configuration (OBS Studio Example)

The VANGREE VC-003 is plug-and-play, requiring no drivers. For streaming and recording, software like OBS Studio is recommended.

macOS OBS Software Settings

Your browser does not support the video tag.

Video: This video demonstrates how to configure OBS Studio settings on macOS for the VANGREE VC-003 capture card, including enabling microphone, camera, and screen recording permissions, and setting up video and audio input captures.

1. Enable OBS Permissions:

- Go to System Settings > Privacy & Security.
- Under Microphone, enable OBS.
- Under Camera, enable OBS.
- Under Screen Recording, enable OBS.

2. Configure Sound Output:

- Go to System Settings > Sound.
- Under Input, select "VC-003 Audio" as the input device.

3. Add Video Capture Device in OBS:

- In OBS Studio, click the "+" button under "Sources".
- Select "Video Capture Device".
- Name the source (e.g., "VC-003 Video") and click "OK".
- In the properties window, select "VC-003 Video" from the "Device" dropdown.
- Uncheck "Use Preset".
- Set "Resolution" to "1920x1080".
- Set "Frame Rate" to "60".
- Set "Input Format" to "YUY2 - 422YpCbCr8_yuvs".
- Set "Color Space" to "Rec. 709".
- Set "Color Range" to "Limited".
- Click "OK".

Live Streaming & Recording Video

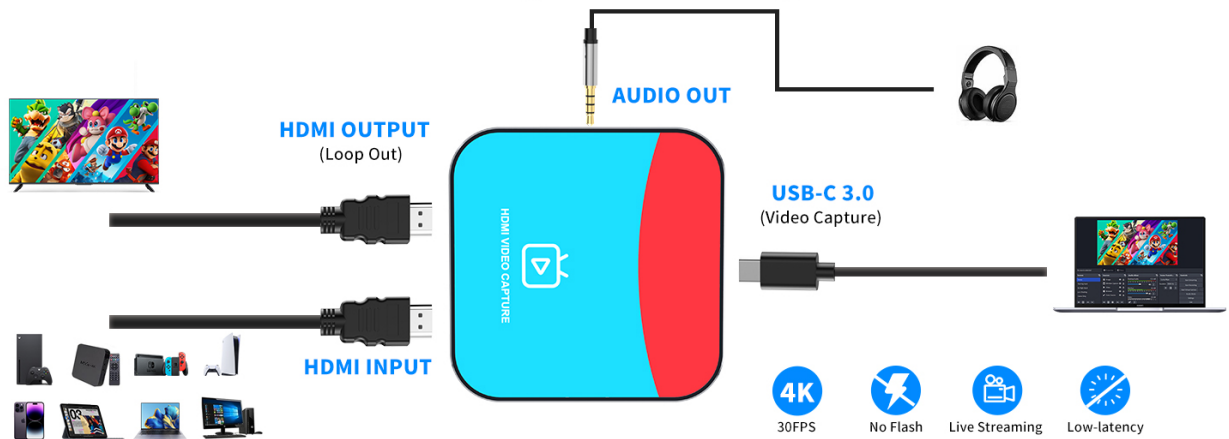


Image: Screenshots guiding users through adding a video capture device and configuring its properties in OBS Studio for optimal performance.

4. Add Audio Input Capture in OBS:

- In OBS Studio, click the "+" button under "Sources".
- Select "Audio Input Capture".
- Name the source (e.g., "VC-003 Audio") and click "OK".
- In the properties window, select "VC-003 Audio" from the "Device" dropdown.
- Click "OK".

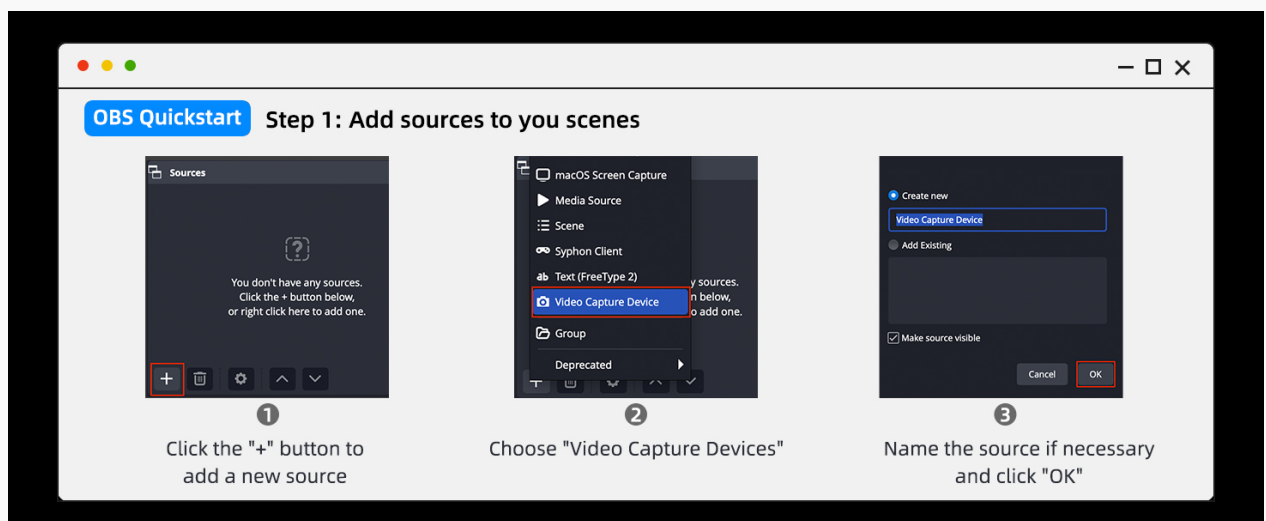


Image: Screenshots guiding users through adding an audio input capture and selecting the VC-003 Audio device in OBS Studio.

5. Adjust Audio Monitoring:

- In the "Audio Mixer" section, click the gear icon next to "Audio Input Capture".
- Select "Advanced Audio Properties".
- For "Audio Input Capture", set "Audio Monitoring" to "Monitor Only (mute output)" if you want to hear the audio through your headphones/speakers without it being outputted to the stream directly from OBS.
- For "Video Capture Device", set "Audio Monitoring" to "Monitor Only (mute output)" or "Monitor and Output" based on your preference.
- Click "Close".

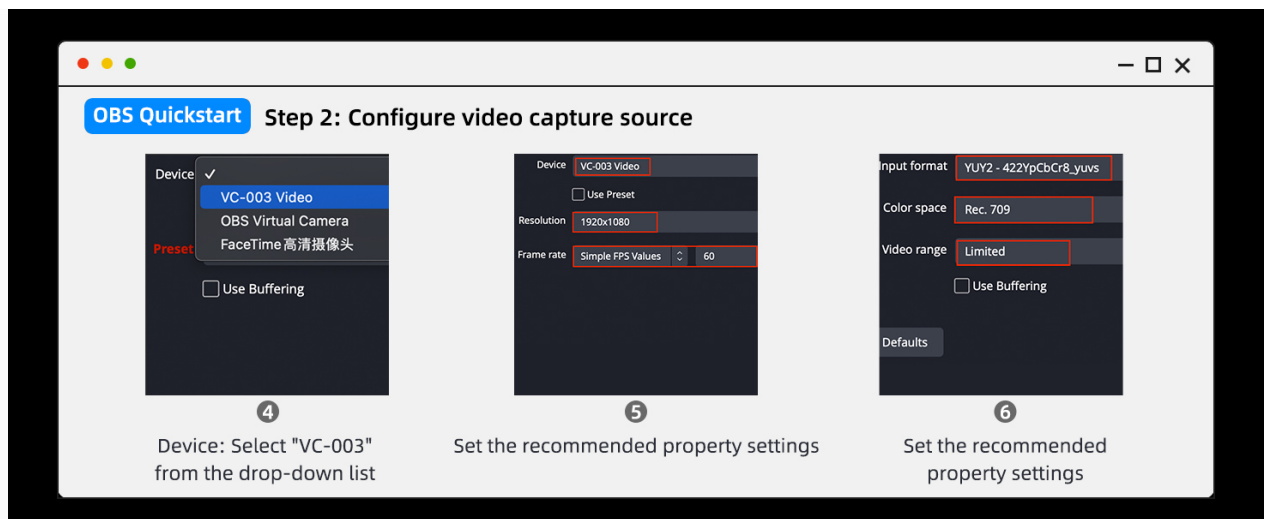


Image: Screenshots demonstrating how to adjust audio monitoring settings in OBS Studio's Advanced Audio Properties for precise audio control.

Windows OBS Software Settings

Your browser does not support the video tag.

Video: This video demonstrates how to configure OBS Studio settings on Windows for the VANGREE VC-003 capture card, including setting up video and audio input captures and adjusting audio monitoring.

1. Add Video Capture Device in OBS:

- In OBS Studio, click the "+" button under "Sources".
- Select "Video Capture Device".
- Name the source (e.g., "VC-003 Video") and click "OK".
- In the properties window, select "VC-003 Video" from the "Device" dropdown.
- Set "Resolution/FPS Type" to "Custom".
- Set "Resolution" to "1920x1080".
- Set "FPS" to "60".
- Set "Video Format" to "YUY2".
- Set "Color Space" to "Rec. 709".
- Set "Color Range" to "Limited".
- Set "Buffering" to "Enable".
- Set "Audio Output Mode" to "Output desktop audio (DirectSound)".
- Click "OK".

2. Add Audio Input Capture in OBS:

- In OBS Studio, click the "+" button under "Sources".
- Select "Audio Input Capture".
- Name the source (e.g., "VC-003 Audio") and click "OK".
- In the properties window, select "VANGREE (2- VC-003 Audio)" from the "Device" dropdown.
- Click "OK".

3. Adjust Audio Monitoring:

- In the "Audio Mixer" section, click the gear icon next to "Audio Input Capture".
- Select "Advanced Audio Properties".
- For "Audio Input Capture", set "Audio Monitoring" to "Monitor Only (mute output)" if you want to hear the

audio through your headphones/speakers without it being outputted to the stream directly from OBS.

- For "Video Capture Device", set "Audio Monitoring" to "Monitor Only (mute output)" or "Monitor and Output" based on your preference.
- Click "Close".

OPERATING INSTRUCTIONS

Once your VANGREE VC-003 capture card is set up with OBS Studio or similar software, you can begin streaming or recording.

Live Streaming

1. Ensure your video and audio sources are correctly configured and visible in OBS Studio.
2. Adjust the layout of your scene in OBS Studio as desired.
3. Click "Start Streaming" in the "Controls" panel of OBS Studio to begin broadcasting to your chosen platform.

Recording Video

1. Ensure your video and audio sources are correctly configured and visible in OBS Studio.
2. In OBS Studio settings, navigate to "Output" and verify your "Recording Path" and "Recording Format" (e.g., MP4).
3. Click "Start Recording" in the "Controls" panel of OBS Studio to begin recording your gameplay or video conference.

Your browser does not support the video tag.

Video: This video demonstrates the low-latency performance of the VANGREE 4K HDMI Video Capture Card while playing a Nintendo Switch game on a laptop, showcasing smooth gameplay and responsiveness.

TROUBLESHOOTING

No Video Signal

- Ensure all HDMI cables are securely connected to the correct "IN" and "OUT" ports on the capture card and your devices.
- Verify that your source device (console) is powered on and outputting video.
- Check OBS Studio settings:
 - Confirm "VC-003 Video" is selected as the device in your "Video Capture Device" source properties.
 - Ensure the resolution and frame rate settings match your source's output or are compatible.
 - Make sure the "Video Capture Device" source is visible (eye icon is not crossed out).

No Audio

- Ensure the HDMI cable carries audio.
- Check OBS Studio settings:
 - Confirm "VC-003 Audio" is selected as the device in your "Audio Input Capture" source properties.
 - In "Advanced Audio Properties", ensure "Audio Monitoring" is set correctly for your "Audio Input Capture" and "Video Capture Device" sources (e.g., "Monitor Only (mute output)" or "Monitor and Output").
 - Verify that the audio levels in the OBS Audio Mixer are not muted or too low.
- For macOS users, ensure OBS has microphone permissions in System Settings > Privacy & Security.

Lag or Choppy Video

- Ensure you are using a USB 3.0 port on your computer for the capture card. USB 2.0 may not provide sufficient bandwidth.
- Check your computer's CPU and GPU usage in OBS Studio (bottom right corner). High usage can cause performance issues.
- In OBS Studio video settings, ensure "Base (Canvas) Resolution" and "Output (Scaled) Resolution" are set to "1920x1080" and "Common FPS Values" to "60".
- Reduce the "Video Bitrate" in OBS Studio "Output" settings if your internet connection or computer hardware is struggling.

SPECIFICATIONS

Feature	Detail
Brand	VANGREE
Model	VC-003
HDMI Input	Up to 4K@30Hz
HDMI Pass-Through	Up to 4K@30Hz
USB-C Capture	Up to 1080p@60fps
Video Format	YUY2 (YUV 4:4:4)
Audio Output	3.5mm Stereo
Hardware Interface	HDMI, USB 3.0, 3.5mm Audio
Operating Systems	Windows, macOS, Linux, Android
Product Dimensions	2.81 x 2.81 x 0.67 inches
Item Weight	9.9 ounces

MAINTENANCE

- Keep the capture card in a dry, cool environment.
- Avoid exposing the device to extreme temperatures or direct sunlight.
- Clean the device with a soft, dry cloth. Do not use liquid cleaners or aerosols.
- Ensure cables are not bent sharply or under strain to prevent damage.

WARRANTY AND SUPPORT

For warranty information and technical support, please visit the official VANGREE website or contact their customer service. Refer to the contact details provided in the product packaging or on the VANGREE brand store.

VANGREE Brand Store: [VANGREE Store on Amazon](#)

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question

and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question