4K Video Capture Box

Product Specifications

Model: RD-VCB2K

I. Introduction

The 4K Video Capture Box is a 4K30 HDMI audio/video capture device developed by our company, featuring 4 inputs and 1 loop-through output.Its HDMI inputs support video up to 3840x2160@30fps and enable lossless loop-through output. The USB 3.0 output interface (backward compatible with USB 2.0) delivers one MJPEG or YUV video stream. It also supports one headset audio input, one mixer audio input, and one mixed audio output.

This product employs an advanced audio processing solution, offering flexible audio I/O interfaces tailored for gaming livestreaming or video conferencing applications. It supports three-channel mixing from Line In, headset, and HDMI audio sources, outputting via Speaker or USB interfaces. It also supports unencoded YUV video format transmission with uncompressed data for excellent image quality, making it highly suitable for livestreaming and conferencing software like OBS.

Crucially, both MJPEG-encoded and YUV video data streams adhere to the UVC protocol, while audio streams follow the UAC protocol. This enables driver-free operation across Windows, Linux, and macOS devices, delivering true plug-and-play functionality.

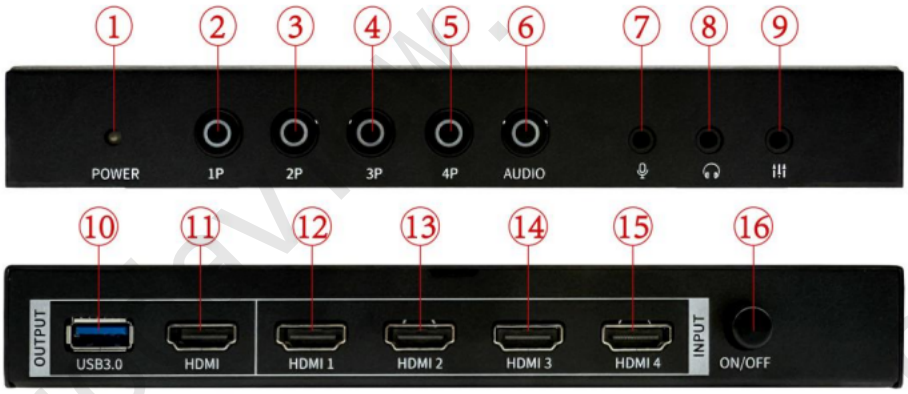
II. Features

1. Equipped with USB 3.0 and HDMI 1.4 interfaces for faster transmission

and more stable video. HDMI supports 4K input and loop-out, while USB supports 1080P resolution capture.

2. Supports simultaneous capture of 4 HDMI feeds with multiple display layouts (Picture-in-Picture, Quad View, Top/Bottom, Left/Right, and custom modes).
3. Enables seamless switching between 4 camera sources without blackouts or lag.
4. Supports YUY2 video format, an uncompressed image format that restores true video quality.
5. Allows microphone audio input to be composited onto the USB capture box's video feed.
6. Enables live streaming by transmitting captured video to major streaming platforms via the internet.
7. Plug-and-play compatibility with Windows/Mac OS/Linux/Android systems; compatible with recording software like OBS/Potplayer.
8. Equipped with multiple high-performance audio/video encoding chips for stable operation, eliminating latency, stuttering, and screen flickering.
10. Ideal for gaming livestreams, e-commerce livestreams, conference recording, educational recording, outdoor recording, medical recording, and other applications.

III. Interface Definition



No.	Interface	Description
1	POWER	Power Indicator
2	1P	1P Single-Screen Display Mode Switch
3	2P	2P Dual-Screen Display Mode Switch
4	3P	3P Triple-Screen Display Mode Switch
5	4P	4P Quad-Screen Display Mode Switch
6	AUDIO	Audio Button
7		Microphone Input
8		Headphone Output
9		Mixer Input
10	USB 3.0	USB Input / USB Power Supply

11	HDMI	HDMI Output
12	HDMI 1	HDMI 1 Input
13	HDMI 2	HDMI 2 Input
14	HDMI 3	HDMI 3 Input
15	HDMI 4	HDMI 4 Input
16	ON/OFF	Power On/Off Switch Button

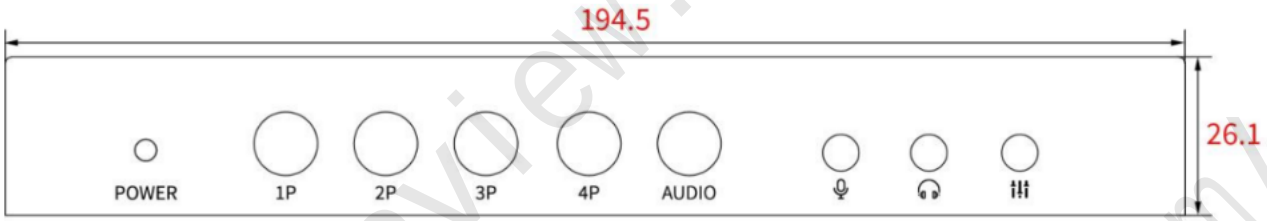
IV. Specifications and Parameters

Product Name	4K HDMI Video Capture Box
Model No.	RD-VCB2K
Input Interface	HDMI IN * 4
Loop Out Interface	HDMI OUT * 1
Capture Interface	USB 3.0
Input Resolution	4K@30Hz
Loop Out Resolution	4K@30Hz

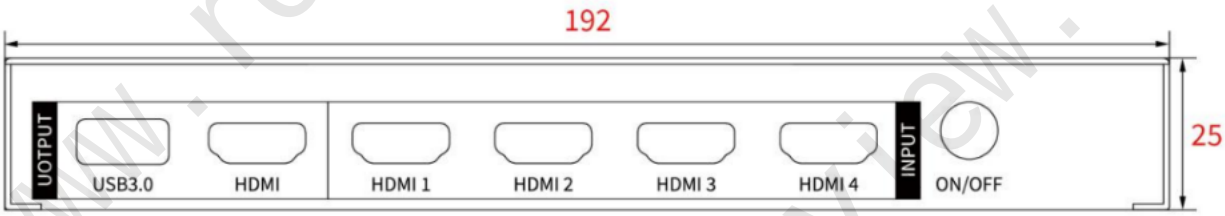
Capture Resolution	1080P 60Hz
Audio Input	3.5mm Audio Input / Microphone Input
Audio Output	3.5mm Audio Output
Power Supply	USB Powered
Driver	Driver-Free for Multiple Systems
Warranty	1 Year
Net Weight	0.5 Kg
Gross Weight	0.7 Kg
Unit Dimensions (L×W×H)	194.5 × 93.3 × 25 mm
Package Dimensions (L×W×H)	250 × 163 × 50 mm
Package List	1 × Main Unit, 1 × USB Cable, 1 × Product Warranty Card

http://www.rodaview.com/

V. Dimensional Drawing



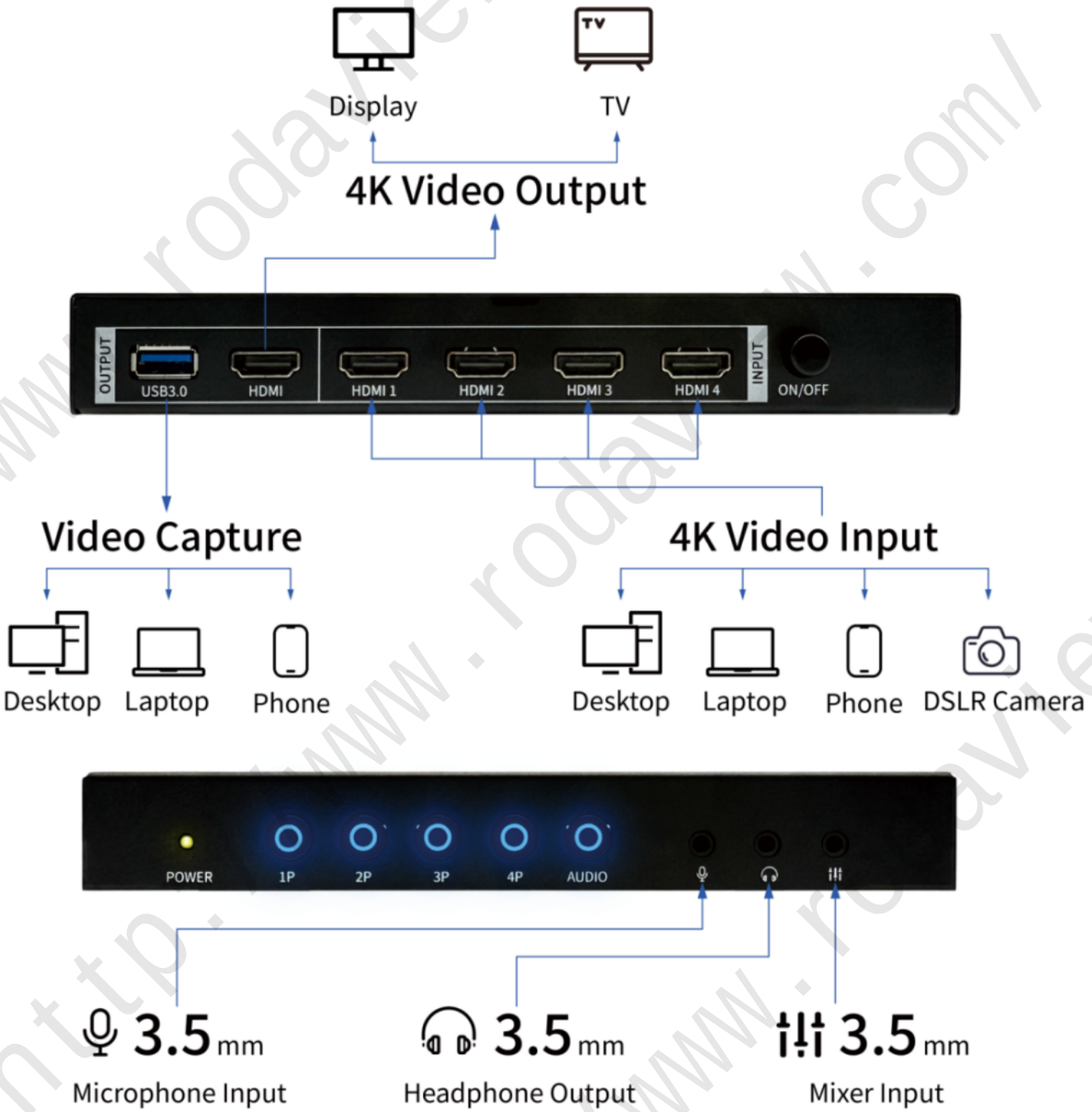
Front panel



Rear panel

Top panel

VI. Connection Diagram



VII. Physical Diagram

Product physical image
Front view
Back view