iSwitch UVC03K

USB 3.0 4K Ultra HD Video Capture Card

User Manual V2.0



Special Notice

To ensure the best performance of the product and correct using, please read the instructions carefully before connecting, operating, or debugging this product, and keep this manual for reference.

Cannot record 4K image when HDMI input resolution is less than 4K.

The stuttering phenomenon when recording the screen indicates that the computer hardware configuration is too low, please reduce the recording resolution or change to a higher configuration computer.

Introduction

This product can easily mix and record HDMI 4K high-definition video and audio from an external microphone to your computer through third-party acquisition software, or live broadcast through the Internet.

Features

- One HDMI Input, one HDMI Loop Output. Monitoring and recording.
- Use USB 3.0 to record full HD images at high-speed.
- Support most software, such as PotPlayer, VLC, OBS...
- No need to install driver, plug and play.
- Support NV12, YUY2, XRGB/RGB32 video formats.
- Support HDMI 4K/60hz resolution input.
- Support capturing 4K/30Hz resolution.
- High-quality aluminum alloy material.
- Support 3.5mm/TRS microphone input and audio out.
- Support UVC, UAC without any software or settings.

Datasheet

Model	iSwitch UVC03K
Name	USB 3.0 4K Ultra HD Video Capture Card
USB Bandwidth	USB 3.0 300-350MB/s, USB 2.0 40MB/s
Input	HDMI 1x
HDMI Resolution	480i, 480p, 576p, 720p50, 720p60, 1080i50, 1080p60,
	1080p24/25/30/50/60, 4K/60
Frame Rate	25/29.97/30/50/59.94/60fps
Capture audio and	Support UVC and UAC
video	
Support OS	Windows 7, 8, 10 or 11, 64bit; macOS 10.12 version or
	higher; Ubuntu 16.04 LTS 64bit or higher; Android 9.0
	or higher
Support software	OBS, VLC, PotPlayer, Windows media Encoder, Adobe
	Flash Media Live-Encoder, Real Producer Plus, Quick
	Time Broadcaster, Quick Time Player, Wirecast, vMix
	and etc.
Dimension	105x68x25 LWH, mm
Power	max. 25W
Operating Temp.	0-50 degrees C
Storage Temp.	-20 to 70 degrees C
Humidity	5% to 90%

Computer hardware requirements

Configuration	Desktop PC	Laptop PC
CPU	Intel Core i5-6xxx or	Intel Core i7-7700HQ or higher

	higher	
Graphics card	NVIDIA Ge-Force GTX	NVIDIA Ge-Force GTX 1050 or
	1060 or higher	higher
Ram	8G (Dual Channel)	8G (Dual Channel)

Support third-party software

- ♦ OBS Studio (Windows, OS X)
- ♦ Windows media Encoder (Windows)
- ♦ Adobe Flash Media Live-Encoder (Windows, OS X)
- ♦ Real Producer Plus (Windows)
- \diamond VLC (Windows, OS X Linux)
- \diamond Quick Time Broadcaster (OS X)
- \diamond Quick Time player (OS X)
- ♦ Wirecast (Windows, OS X)
- ♦ vMix (Windows)
- \diamond PotPlayer (Windows) and etc

Product Specifications

- HDMI Input and loop-out max. resolution: <u>4k60 4:4:4</u>
- HDMI input max audio sampling rate: PCM48Khz
- USB3.0 Highest bandwidth: <u>3Gbps</u>
- USB2.0 Highest bandwidth: <u>311Mbps</u>
- 3.5mm headphone output power: $32\Omega/50$ MW
- Working Current: <u>5V/0.9A</u>
- Working temperature range:<u>-40°C ~ +85°C</u>
- Working humidity range: <u>90% RH No condensation</u>
- Product size: <u>105x68x25mm</u>
- Material: <u>Aluminum alloy</u>
- Color: <u>Blue and Red</u>
- Net Weight: <u>131g</u>

Interface Introductions



- (1) 3.5mm headset output port.
- (2) 3.5mm microphone input port.
- (3) HDMI Input, connect to HDMI signal such as Computer, Game console, DVD.
- (4) HDMI Output, connect to HDMI display such as TV, Monitor, Projector, etc.
- (5) USB3.0 TYPE-A port, connect to computer.
- (6) Action indicator: Illuminates when capturing.

Connection Diagram



- 1. Connect HDMI IN to computer, game console, DVD.
- 2. Connect Output port of capture card to display devices, such as TV, Monitor, Projector, etc.
- 3. Connect the USB3.0 to computer.

4. Connect 3.5mm to headphones, microphones, and headsets.

How to setup capture in PotPlayer (Windows)

1. Install "PotPlayer" software on the computer.

2. Click upper left corner "PotPlayer" icon→ "Open"→ "Device Settings"→ "Analog TV"



Select "INFOBIT Video Capture" in the Device option.

Select "Capture" in the Type option.

Select "HDMI" in the Input option.

Select suitable capture resolution in the Format option.

Select "WASAPI-HDMI (INFOBIT Audio Capture)" in the Audio Capture Device option.

Click "Open device" to open the capture interface.

Device Settings					×					
Screen Capture	Webcam	Analog TV	Digital TV	DVD/Blu-ra	у					
Video capture										
Devic		v								
Тур	e: Capture	v	Format:	NV12 3840×2	160 3(v					
Inpu	it: HDMI	v	Channel:		2					
Audi	o: Use audic	capture v	Rescan Devi	ces Other	Settings					
Audio capture device Device: WASAPI - HDMI (INFOBIT Audio Capture) v										
Inpu	ıt:				v					
Advanced Settings										
		OK	Cancel		Open device					

3. Click "PotPlayer" \rightarrow "Video" \rightarrow "Video Recording" \rightarrow "Record Video" or use the key "Alt+C" to open the Video recorder page.

Select storage path.

Set video and audio capture settings.

Start to capture video and audio.

Storage									
C:\Users\User\AppData\Roaming\PotPlayerMini64\Capture									
Filename prefix:									
Split files	Every # minutes	O E	very # mb	MB					
Settings									
File Format:	MKV (Recommended)	v	Speed:	1 🛓					
Video Codec:	MPEG-4			v					
Bitrate:	2000 📥 kbps	Use H	Q compres	sion					
Size:	Original v Keep AR of Frame Width								
FPS:	Original v	Use bu	uffering						
Audio Codec:	MP3	v	128 kbps	v					
Sample Rate:	Original	v	Original	v					
Activity									
Filename:									
Rec. time:		File size							
Open Stor	age Folder		Start						
	Close								

How to setup capture in OBS (Windows)

1. Open OBS \rightarrow Click "+" to choose "Video Capture Device"



2. Click "Properties" for Video Capture Device → Device (INFOBIT Video Capture) → Resolution/FPS Type (Custom) → Resolution (1920*1080) → FPS (30pfs) → Video Format (YUY2) → Audio Output Mode (Capture audio only) → Check "Use custom audio device" → Audio Device (INOFIBT Audio Capture) → OK

			Device	INFOBIT Video Capture	
				Deactivate	
				Configure Video	
				Configure Crossbar	
				Deactivate when not showing	
			Resolution/FPS Type	Custom	
			Resolution		
			FPS	Match Output FPS	
			Video Format		
	E Filters	Deacti	Color Space	Default	
			Color Range	Default	
د م .	ources	Daulas	Buffering 🕐	Auto-Detect	
		e Device		Flip Vertically	
				Apply rotation data from camera (if any)	
			r	Use hardware decoding when available	
			Audio Output Mode	Capture audio only	
				Use custom audio device	
ŀ	+ 🔟 ᅌ	^ ~	Defaults	OK	Cancel
					.ps

3. Settings→ Stream→ Select your Live service (YouTube/ Twitch...), input your channel stream key→ OK

Settings						×		
General	Service	YouTube - RTMPS						
۳ ۳ ۹ Stream	Server	Primary YouTube Ingest serv						
G Output		Connect Account (recomme	ended)					
∢ı) Audio								
💭 Video		Use Stream Key (advanced)						
🕮 Hotkeys		Ignore streaming service s	etting recommend	lations				
Accessibility		Maximum Video Bitrate: 51000 Maximum Audio Bitrate: 160 k	0 kbps tbps					
		YouTube Terms of Service Google Privacy Policy Google Third-Party Permission						
							ontrols	2
							Start	Streaming
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					ок с	ancel Apply		al Camera 🔅
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			麦克风/Aux -60 -55 -50 -45		-25 -20 -1	0.0 dB	s	ettings
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					(M) LIVE: 00	:00:00 🚿 REC: 00:0	00:00 CPU: 0.2	2%, 30.00 fps

How to setup capture in OBS (macOS)

 Open your macOS system preferences, select "Sound" → "INFOBIT Audio Capture".

	Output & Input					
Notifications	Output	Output				
Sound	Name	Name				
C Focus	MacBook Pro Microphone		Built-in			
Saraan Tima	Alex's iPhone Microphone		Continuity Camera			
Screen Time	INFOBIT Audio Capture		USB			
(A) Conorol	BlackHole 2ch		Virtual			
General	DeviceName		Virtual			
Appearance	TFFAudio	Virtual				
	Virtual Meeting Audio	Virtual				
Accessibility	lanut laural					
Control Center	Input level					
Siri & Spotlight			?			

2. Open OBS \rightarrow Click "+" to choose "Video Capture Device"

		OBS 25	9.1.3 - Profile: Untitled - Scene	es: Untitled			
		Pre	operties for 'Audio Input Captu	ire'			
	Device						
		Alex's iPhone Microphone					
		INFOBIT Audio Capture					
		BlackHole 2ch					
		MacBook Pro Microphone					
		Virtual Meeting Audio					
		TFFAudio					
		DeviceName					
Audio Input Capture							
Scenes						Controls	
Scene						Start Streaming	
						Start Recording	
						Start Virtual Camera	0
	Defaul	ts			Cancel OK	Studio Mode	
			Mic/Aux			Settings	
+ 🗊 🗉 🦯	1 I I	+ 🗊 🌣 🔺 🗄	o° :			Exit	
				1110 1015-0	0.00.00 # DEC: 00.00.00	CDI 1: 2 104 20 00 Fee	

Click settings under the "Audio Mixer" option → "Advanced Audio Properties" → "Monitor and Output".

		Onnide All	
		Hide	
		Rename	
		Copy Filters	
		Paste Filters	
C Properties 📗 Filters Dev	vice INFOBIT Audio Capture	Vertical Layout	
G Sources	🔒 Audio Mixer	Filters	_ C
👤 🛛 Audio Input Capt 🧿 🔒	Audio Input Capture	0.0 Properties	
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	Q		HT.
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	-60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10):	
	Mic/Aux	0.0 dB	

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(ه	Desktop Audio		0.0 dB						0 ms		Monitor ind Output	√1√2√3√4√5√6
9	Mic/Aux		0.0 dB						0 ms		Monito and Output 0	~1~2~3~4~5~6
	✓ Active Sources Only											
1 Sce	nes		Sources				🔒 Audio Mixer					Controls
Scen	e		👤 Audio In	nput Cap	ot O		Audio Input Cap	ture	1. 1. 1.	0.	.0 dB Fade 🗘	Start Streaming
							40 33 30 45 4	-0 -35		()	Duration 300 ms 🗘	Start Recording
							Desktop Audio			0. is .io	.0 ав т Ц :	Start Virtual Camera
										→ ())		Studio Mode
							Mic/Aux				1.0 dB	Settings
+	Ū 🛛 ^		+ 🗊	٥	^		¢°					Exit
										(e	M LIVE: 00:00:00 M REC: 00:00:00	CPU: 2.4% 30.00 fps

4. Click "Properties" → Select "INFOBIT Video Capture", setup Resolution and Frame rate.

OBS 29.1.3 - Profile: Untitled - Scenes: Untitled			
		Properties for 'Video Capture Device'	
42			
O Properties	Resolution	1280x720	
Sources	Frame rate	Simple FPS Values 0 30 FPS: 30 Frame Interval: 33.3333 ms	
O Video Capture De			
👲 Audio Input Capt			
	Defaults	Cancel	ок

FAQ

1. No Capture

a. Confirm whether the video signal source is transmitted to the iSwitch UVCO3K successfully (if the source is from PC, you can find two display icons in your

display settings; Or connect the loop-out port to a monitor to check whether images are normal displaying).

b. Confirm whether PC has properly recognized the iSwitch UVC03K (In PC's Device Manager, and no exclamation icon is found).

c. If the above-mentioned two methods are normal, suggest customers changing to a USB3.0 Port (not USB 2.0) and test again.

d. Confirm whether all ports are properly connected.

e. Confirm whether setting parameters of the software (OBS, PotPlay...) are correct.

2. Audio Issue

Fail to capture sound.

a. Confirm the iSwitch UVC03K is selected by the audio output device on the signal source PC (right click the audio device on the bottom-right corner of your PC screen, to select "INFOBIT Audio Capture"; Or please connect to the audio loop-out port to check whether audio is normal.

b. Confirm whether PC has properly recognized the iSwitch UVC03K (In PC's Device Manager, and no exclamation icon is found).

c. Confirm whether sound wave line is fluctuating (click the audio icon on the bottom-right corner of computer-recording device, then select our capture card to check)

d. If it still fails to capture audio, please add an audio input capture on OBS then set "Monitor and Input" in the advanced audio settings.

f. If sound is intermittent, please right-click the audio icon on the bottom-right corner of computer-select our capture card in the recording device - right click Advanced Attributes in computer to confirm whether 48KHz is fixed.

3. Image issue

Images captured by OBS is green or with vertical lines.

a. To solve such issue, please update to the newest firmware.

Images from the Loop-out is green or red.

a. This issue is caused by the YUV format is setup as the screen's color space. Please change its color space to RGB format.

Video and audio are delayed.

a. If customers do experience video lag or audio delay, there may be a problem with computer configuration, or two same devices are used which occupies the APP. Please change the audio to fixed 48KHz.

Note

- Does not use HUB or USB extend cable.
- Low computer configuration will cause irregular flickering or black screen in the recording screen.
- For signal processing reasons, you will find that the recorded picture is out of sync with the original picture, which is normal.
- Cannot record 4K resolution when HDMI input resolution is less than 4K.
- Cannot record 4K resolution while connect to USB 2.0 port of computer.

Technical support

Please contact info@infobitav.com for any technical support.