TROUBLESHOOTING

Our USB device has done comprehensive tests before shipment. Most of the incompatibilities we have experienced are not from the USB capture device itself, but from the sophisticated software and hardware combination of PC or laptop. Please follow the following suggestions to see any helps.

1. OBS is popular USB capture freeware and has excellent compatibility. Please download it and start with OBS if users are not familiar with USB capture device.
   https://obsproject.com/download

2. Due to the complexities of OS and computer hardware, different USB ports on PC or laptop may have different performance or limitation. Please try all USB ports to see if there are any differences.

3. Please must use the USB cable in box. We do not guarantee the overall performance when the USB capture box works with some other USB cables.

4. HDMI cable quality may also play an essential role when capturing. Please be sure of that HDMI cable can do 1080P@60 HDMI signal transmission or better. Try different cables when the device is not able to work as expected.

5. If audio has noise, please adjust sampling frequency setting on PC or laptop. If the default sampling rate is 48000 Hz, please select 44100 Hz and vice versa. The path of setting sampling frequency on windows 10 is: Start → Setting → System → Sound → Device properties → Additional device properties → Advanced

USB PIN DEFINITION

P1   P2

	P1		P2
VBUS	1	←→	1
D-	2	←→	2
D+	3	←→	3
GND	4	←→	4
SSRX-	5	←→	5
SSRX+	6	←→	6
GND	7	←→	7
SSTX-	8	←→	8
SSRX+	9	←→	9
Shield	SHELL	←→	SHELL

WARRANTY

CAP-502MJH

USB 3.0 Full HD Video Capture Device with HDMI 2.0a loopout, Audio & HDR10 to SDR Conversion

User Manual

rev: 200528
Made in Taiwan

INTRODUCTION

The CAP-502MJH USB 3.0 Full HD Video Capture Device with HDMI 2.0a loopout, Audio & HDR10 to SDR Conversion provides a professional way to capture HDMI video signals. It adopts USB 3.0 interface, which can realize high-speed transmission. Besides, the HDMI input and loopout can support up to 4K2K@60. With this device, users can connect to 4K2K@60 source and capture Full HD (1080p60) video. CAP-502MJH also uses large volume image buffer technology which effectively avoids the video tearing. The high sampling rate and high sampling accuracy assure images with high sharpness, rich details, and less color edges. Also, with HDR10 to SDR conversion, PS4/Xbox players can enjoy 4K HDR games on 4K TV and record the real-time 1080p video streams with SDR quality through USB 3.0 at the same time.

FEATURES

- HDMI video and audio streams over USB 3.0
- Supports UVC1.0
- Supports video resolution up to 1080p 60Hz (Video stream over USB 3.0)
- Supports HDMI input & loopout from 640x480 to 4K2K@60 (YUV 4:4:4), interlaced or progressive
- Supports resolution downscaling from 4K2K to 1080P3
- Supports HDR10 to SDR conversion4
- Supports line-in mix with HDMI audio
- Supports HDMI audio extraction
- Auto-detection on video format to ensure plug-play operations
- Recording Video Format: H.264 (Software Compression)
- Works on multiple operating system platforms (Windows 7/8.1/10, Mac and Linux OS)
- Compatible with most 3rd party software such as OBS Studio and AMCap
- Supports USB 3.0 (MJPG/YUY2) and USB 2.0 (MJPG)
- Low Latency
- System Requirements (Recommanded)
  - Windows® 7(SP1) / Windows 8.1 / Windows 10
  - PC: Intel® CoreTM i5-4440 3.10GHz + NVIDIA® GeForce® GTX 660 or higher
  - Laptop: Intel® Core i7-4810MQ + NVIDIA GeForce GTX 870M or higher
  - 4GB RAM or higher

(!)
1. Video quality is apparently related to the capability of computer and software setting.
2. Please use the included USB 3.0 cable in the box to protect the device and avoid further compatible issues.
3. NOT supports
   (1) Resolution downscaling from 4K2K@60 4:2:2 to 1080P
   (2) 4K2K@60 4:2:2 to 4K2K@60 4:2:0
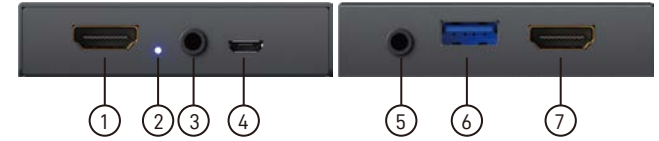4. NOT supports HDR10 plus, HLG, and Dolby Vision to SDR conversion

SPECIFICATIONS

Model Name		CAP-502MJH
Technical		
Role of usage		Video Capture Device
Input Video bandwidth		Single-link 600MHz [18Gbps]
Output Video bandwidth		Up to 350MBps (USB)
Video support(USB)		Up to 1080p60
Video support(Loopout)		Up to 4K2K60
Audio Input		HDMI Embedded Audio & Stereo audio Input
Audio Format		2CH 16bit PCM
Recording Mode		Software Compression
Recording Video Format		YUY2 (USB3.0), MJPG (USB2.0/3.0)
ESD protection		Human body model - ±15kV [air-gap discharge] & ±8kV [contact discharge]
PCB stack-up		6-layer board [impedance control — differential 100Ω; single 50Ω]
Firmware update		Feasible via USB Port
Input		1x HDMI + 1x 3.5mm
Output		1x USB + 1x HDMI +1x 3.5mm
HDMI connector		Type A [19-pin female]
USB connector		USB 3.0 Type A (SuperSpeed USB)
Software compatibility (not complete list)		OBS Studio (Windows, Linux), AMCap (Windows), Potplayer (Windows) , VLC (OS X, Linux), XSplit Boardcast (Windows), Skype (Windows, OS X), Zoom (Windows), Hangout (Windows), TeamViewer (Windows)
OS Support		Windows 7 /8.1 / 10, Mac and Linux OS
Mechanical		
Housing		Metal enclosure
Dimensions [L x W x H]	Model	134 x 72 x 17mm [5.3" x 2.8" x 0.7"]
	Package	230 x 95 x 41mm [9" x 3.7" x 1.6"]
	Carton	500 x 477 x 241mm [1'6" x 1'5" x 9.4 "]
Weight	Model	216g [7.6 oz]
	Package	387g [13.6 oz]
Power supply		5V 2A DC
Power consumption		3 Watts [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

PACKAGE CONTENTS

- 1x CAP-502MJH
- 1x USB 3.0 A to A Cable (host to device)
- 1x DC 5V wall wart
- 1x User Manual

PANEL DESCRIPTIONS

1. HDMI IN: Connect to a HDMI source
2. LED INDICATOR: Input signal indicator LED
3. STEREO AUDIO IN: Connect to analog stereo audio source
4. Micro-USB Port: Connect to the +5V DC power supply unit
5. STEREO AUDIO OUT: Audio extracts from HDMI input
6. USB OUT: Connect to a USB host (PC, NB, MAC…)
7. HDMI LOOPOUT: Connect to a HDMI display

CONNECTION DIAGRAM