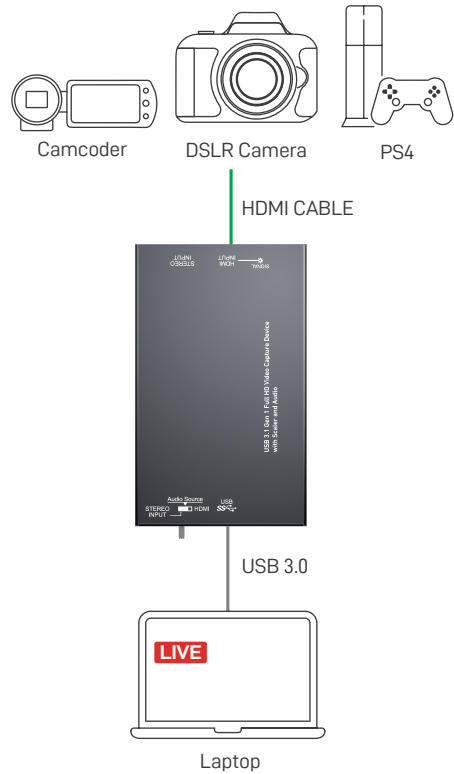


CONNECTION DIAGRAM



USB PIN DEFINITION



	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

The SELLER warrants the CAP-502AS-G USB 3.1 Gen 1 Full HD Video Capture Device with Scaler and Audio to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surges.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables are limited to a 30 day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the CAP-502AS-G features and specifications is subject to change without further notice.

CAP-502AS-G

USB 3.1 Gen 1 Full HD Video Capture Device with Scaler and Audio

User Manual



rev: 200514
Made in Taiwan

INTRODUCTION

The **CAP-502AS-G USB 3.1 Gen 1 Full HD Video Capture Device with Scaler and Audio** provides a professional way to capture HDMI video signals. It adopts USB 3.1 Gen 1 (USB 3.0) interface, which can realize high-speed transmission. Users can capture Full HD (1080p60) video by this capture device. Besides, CAP-502AS-G can capture and display original uncompressed HDMI video with more realistic color rendition. CAP-502AS-G 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.

FEATURES

- Supports HDMI output resolution scaler with audio embedding
- HDMI video and audio streams over USB 3.1 Gen 1
- Supports UVC1.0
- Supports input and output video resolution up to 1080p 60Hz
- 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 3.1 (MJPEG/YUY2) and USB 2.0 (MJPEG)
- Low Latency
- System Requirements (Recommended)
 - Windows® 7(SP1) / Windows 8.1 / Windows 10
 - PC: Intel® Core™ 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 3.1 cable in the box to protect the device and avoid further compatible issues.

PACKAGE CONTENTS

- 1x CAP-502AS-G
- 1x USB 3.1 Gen 1 A to A Cable (host to device)
- 1x User Manual

SPECIFICATIONS

Model Name	CAP-502AS-G
Technical	
Role of usage	Video Capture Device
Input Video bandwidth	150MHz
Output Video bandwidth	Up to 350Mbps (USB)
Video support	Up to 1080p60
Audio Input	SDI Embedded Audio & Stereo audio Input
Audio Format	2 Channel, 44.1 and 48KHz sample rate, up to 16bit PCM
Recording Mode	Software Compression
Recording Video Format	YUY2 (USB3.1 Gen 1), MJPG (USB2.0/3.1 Gen 1)
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
HDMI connector	Type A [19-pin female]
USB connector	USB 3.1 Type A (SuperSpeed USB)
Software compatibility (not complete list)	OBS Studio (Windows, Linux), AMCap (Windows), Potplayer (Windows), Skype (Windows, OS X), 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 102 x 62 x 17mm [4" x 2.4" x 0.6"]
	Package 140 x 113 x 24mm [5.5" x 4.4" x 0.9"]
	Carton 405 x 275 x 255mm [15.5" x 10.8" x 10"]
Weight	Model 144g[5 oz]
	Package 227g[8 oz]
Fixedness	Wall-mounting case with screws
Power supply	Via USB
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]

PANEL DESCRIPTIONS



1. AUDIO SWITCH: [left] Audio from stereo audio in, [right] Audio from HDMI
2. USB OUT: Connect to a USB host (PC, NB, MAC...)
3. LED INDICATOR: Input signal indicator LED
4. HDMI IN: Connect to a HDMI source
5. STEREO AUDIO IN: Connect to analog stereo audio source

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. The USB device supports HDCP mechanism to protect legal content from pirates. If any HDMI input with HDCP protection, OSD will display a message to indicate HDCP existence. No capture will be legally allowed if HDCP is detected. Please use non-HDCP protected HDMI sources or disable HDCP in order to get USB device work. Device like PS4 supports such a feature to turn HDCP off.

3. 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.

4. 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.

5. 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.

6. 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