CAP-502MJH

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

User Manual

rev: 180425
Made in Taiwan

⚠️
Safety and Notice

The **CAP-502MJH** USB 3.0 Full HD Video Capture Device with HDMI 2.0a loopout, Audio & HDR10 to SDR Conversion has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **CAP-502MJH** should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

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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 1080P[3]
- Supports HDR10 to SDR conversion[4]
- 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 Lattency
- 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 furthur 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

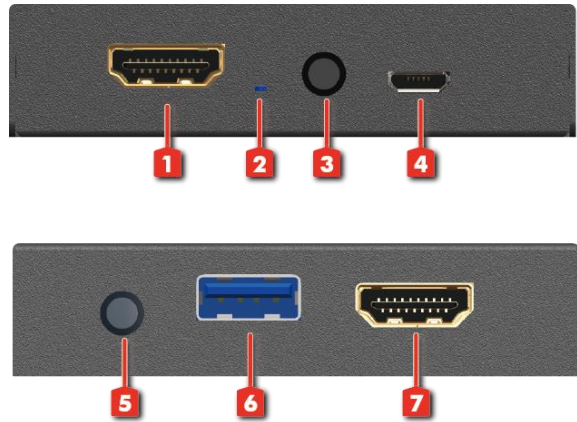4. NOT supports HDR10 plus, HLG, and Dolby Vision to SDR conversion

PACKAGE CONTENTS

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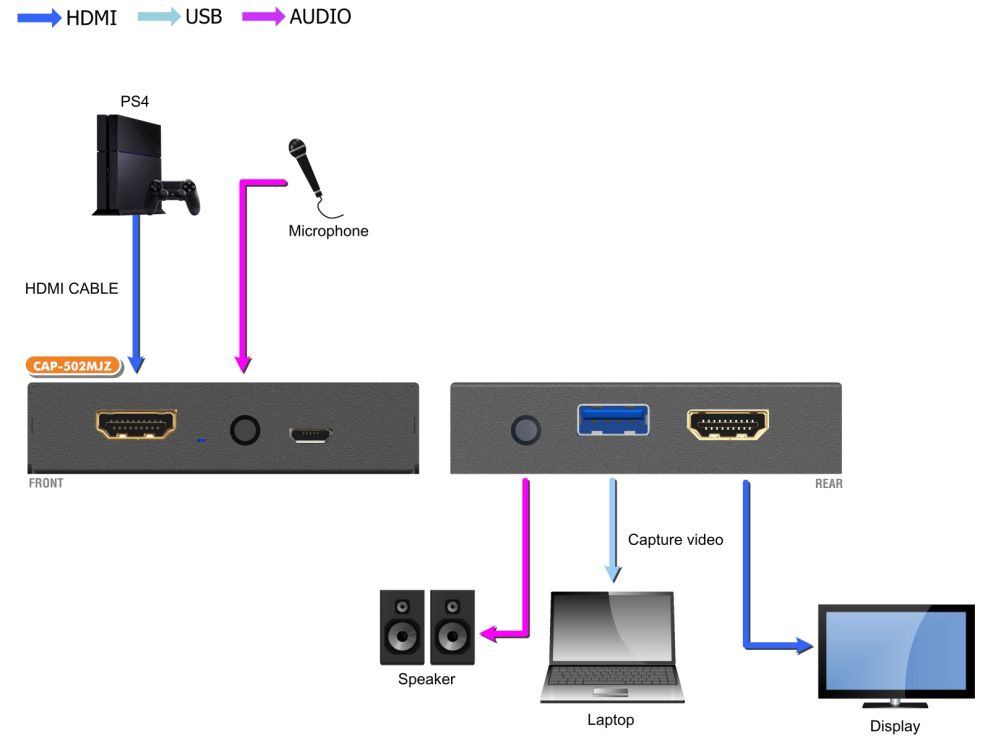- 1x DC 5V wall wart
- 1x User Manual

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		**CAP-502MJH**
Housing		Metal enclosure
Dimensions [L x D x H]	Model	134 x 72 x 17mm [5.3" x 2.8" x 0.7"]
	Package	165 x 111 x 42mm [6.4" x 4.4" x 1.7"]
	Carton	490 x 426 x 352mm [1'6" x 1'4" x 13.8"]
Weight	Model	208g [7.3 oz]
	Package	
Fixedness		Wall-mounting case with screws
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]

Front/Rear Panel

1. **HDMI IN:** Connect to a HDMI source

2. **LED INDICATOR:** Power 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

HDMI   USB   AUDIO

PS4

Microphone

HDMI CABLE

CAP-502MJZ

FRONT

REAR

Capture video

Speaker

Laptop

Display

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

The SELLER warrants the **CAP-502MJH** USB 3.0 Full HD Video Capture Device with HDMI 2.0a loopout, Audio & HDR10 to SDR Conversion 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-502MJH features and specifications is subject to change without further notice.**