

CAP-502MJZ

USB 3.0 Full HD Video Capture Device
with HDMI 2.0a loopout & Audio

User Manual



Full HD
1080



rev: 180425
Made in Taiwan



Safety and Notice

The **CAP-502MJZ USB 3.0 Full HD Video Capture Device with HDMI 2.0a loopout & Audio** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **CAP-502MJZ** 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-502MJZ USB 3.0 Full HD Video Capture Device with HDMI 2.0a loopout & Audio** 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-502MJZ 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

- 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 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 (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 3.0 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

PACKAGE CONTENTS

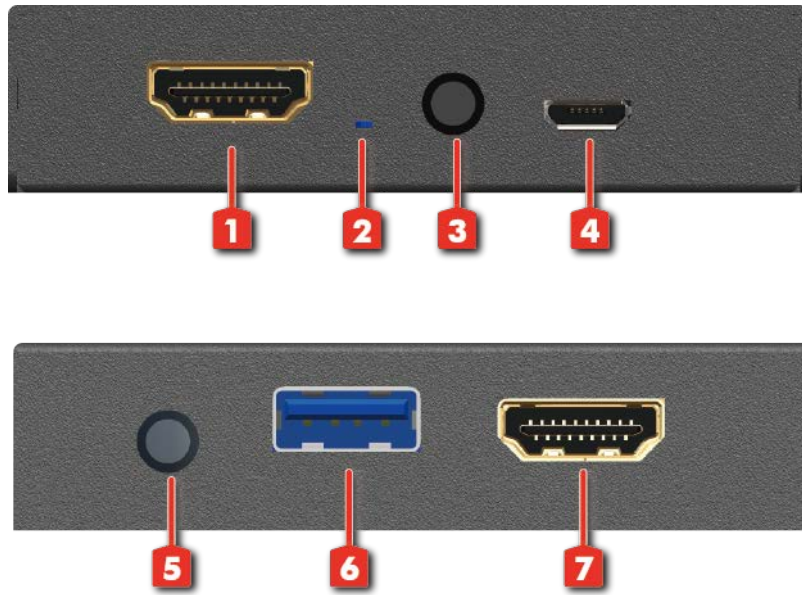
- 1x CAP-502MJZ
- 1x USB 3.0 A to A Cable (host to device)
- 1x DC 5V wall wart
- 1x User Manual

SPECIFICATIONS

Model Name	CAP-502MJZ	
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-502MJ		
Housing	Metal enclosure	
Dimensions [L x D x H]	Model	105 x 68 x 24mmmm [4.1" x 2.7" x 0.9"]
	Package	198 x 137 x 74mm [7.8" x 5.4" x 2.9"]
	Carton	420 x 400 x 300mm [1'4"x 1'3" x 11.8"]
Weight	Model	132g [4.6 oz]
	Package	404g [14.2 oz]
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]	

PANEL DESCRIPTION

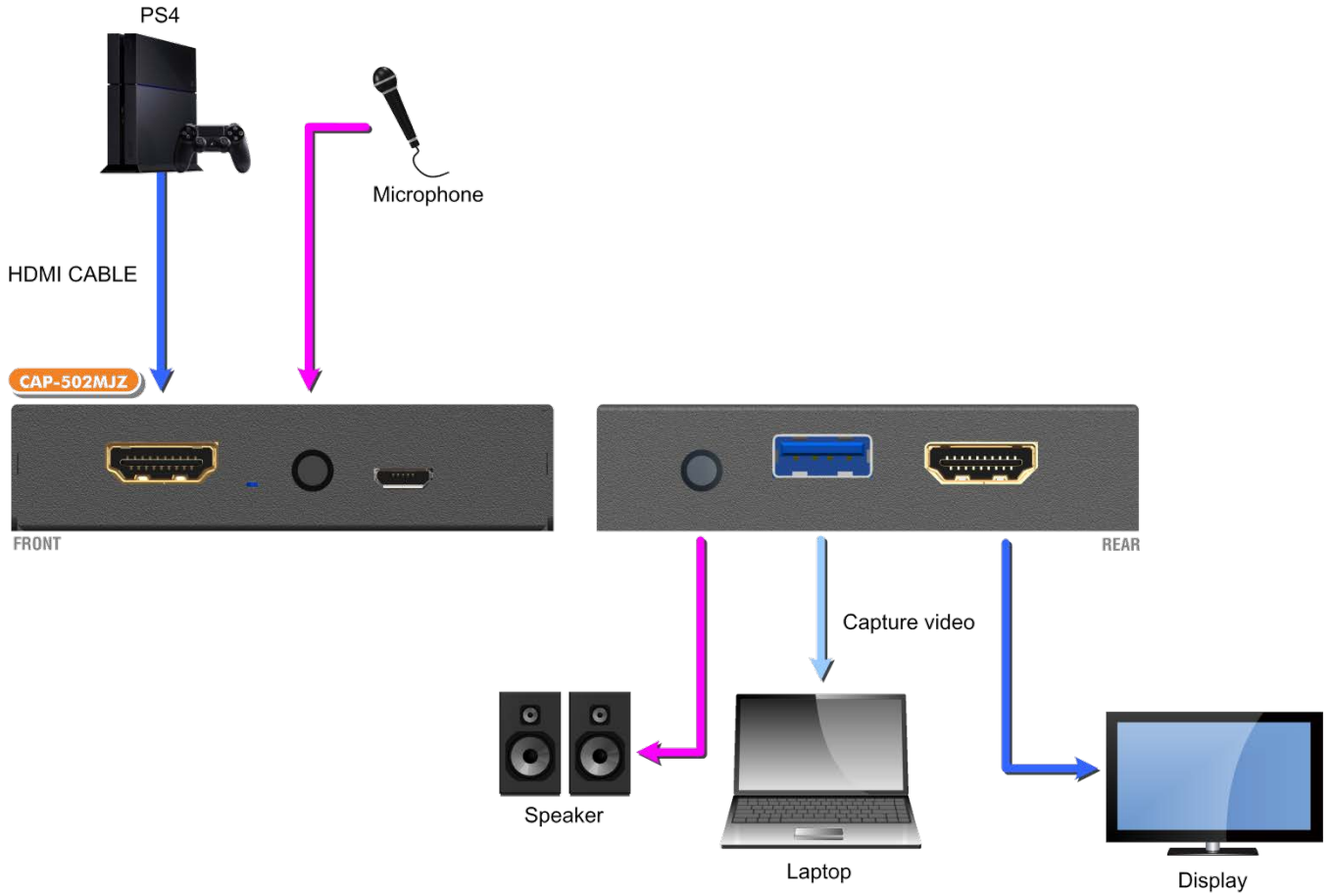
Front/Rear Panel



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

→ HDMI → USB → AUDIO



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

LIMITED WARRANTY

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