# CAP-502MJ

### **USB 3.0 Full HD Video Capture Device**

### **User Manual**

















The CAP-502MJ USB 3.0 Full HD Video Capture Device has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the CAP-502MJ 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-502MJ USB 3.0 Full HD Video Capture Device provides a professional way to capture HDMI video signals. It adopts USB 3.0 interface, which can realize high-speed transmission. Users can capture Full HD(1080p60) video by this capture device. Besides, CAP-502MJ can capture and display original uncompressed HDMI video with more realistic color rendition. CAP-502MJ 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
- 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 3<sup>rd</sup> 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.

### PACKAGE CONTENTS

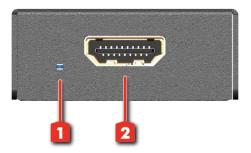
- 1x CAP-502MJ
- 1x USB 3.0 A to A Cable (host to device)
- 1x User Manual

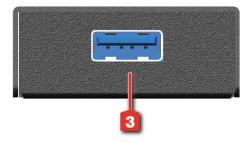
# SPECIFICATIONS

| Model Name                                 |         | CAP-502MJ  |  |  |  |
|--|---------|--|--|--|--|
| 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                                |         | HDMI Embedded Audio  |  |  |  |
| Audio Format                               |         | 2CH 16bit PCM  |  |  |  |
| Recording Mode                             |         | Software Compression   |  |  |  |
| Recording Video<br>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 100 $\Omega$ ; single 50 $\Omega$ ]  |  |  |  |
| Firmware upo                               | late    | Feasible via USB Port  |  |  |  |
| Input                                      |         | 1x HDMI  |  |  |  |
| Output                                     |         | 1x USB   |  |  |  |
| 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  |  |  |  |
|  | Model   | 73 x 42 x 17mm[2.9" x 1.7" x 0.7" ]  |  |  |  |
| Dimensions                                 | Package | 165 x 111 x 42mm [6.4" x 4.4" x 1.7"]  |  |  |  |
| [L x D x H]                                | Carton  | 490 x 426 x 352mm [1'6" x 1'4" x 13.8"]  |  |  |  |
|  | Model   | 80g[2.8 oz]  |  |  |  |
| Weight                                     | Package | 179g[6.3 oz]   |  |  |  |
| Fixedness                                  |         | Wall-mounting case with screws   |  |  |  |
| Power supply                               |         | Via USB  |  |  |  |
| Power consumption                          |         | 2 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

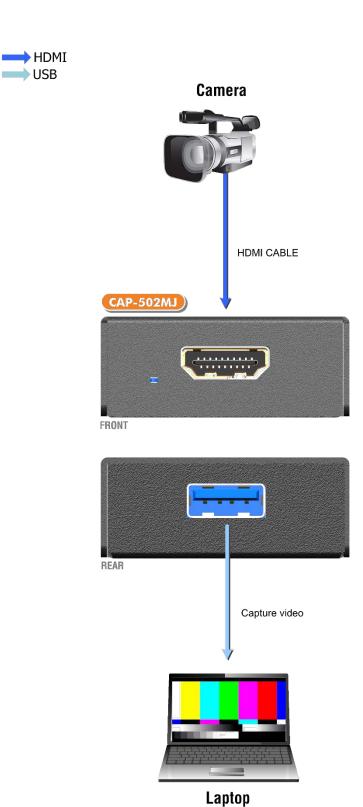
#### **Front/Rear Panel**





- 1. LED INDICATOR: Input signal indicator LED
- 2. HDMI IN: Connect to a HDMI source
- **3. USB OUT:** Connect to a USB host (PC, NB, MAC...)

### **CONNECTION DIAGRAM**



## **USB PIN DEFINITION**



|        | P1    |                   | P2    |
|--------|-------|-------------------|-------|
| VBUS   | 1     | $\longrightarrow$ | 1     |
| D-     | 2     | $\longrightarrow$ | 2     |
| D+     | 3     | <b></b>           | 3     |
| GND    | 4     | $\longrightarrow$ | 4     |
| SSRX-  | 5     | <b></b>           | 5     |
| SSRX+  | 6     | <b></b>           | 6     |
| GND    | 7     | $\longrightarrow$ | 7     |
| SSTX-  | 8     | <b></b>           | 8     |
| SSRX+  | 9     | <b></b>           | 9     |
| Shield | SHELL | $\longrightarrow$ | SHELL |

### LIMITED WARRANTY

The SELLER warrants the **CAP-502MJ USB 3.0 Full HD Video Capture Device** 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-502MJ features and specifications is subject to change without further notice.