

CM-398M

CV/SV to PC/HD

Scaler Box

Operation Manual



CM-398M

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• **Trademark Acknowledgments**

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• **Safety Precautions**

Please read all instructions before attempting to unpack or install or operate this equipment, and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

• **Revision History**

<u>Version No</u>	<u>Date</u>	<u>Summary of Change</u>
V1	20100923	Preliminary Release

Table of Contents

1. Introduction.....	1
2. Applications.....	1
3. Package Contents.....	1
4. System Requirements.....	1
5. Features.....	1
6. Specifications.....	2
6.1 Support Timing Chart	2
7. Operation Controls and Functions.....	3
7.1 Left side Panel	3
7.2 Right side Panel	3
7.3 Front Panel	4
7.4 Top Panel	4
8. OSD.....	5
9. Connection and Installation.....	6
10. Acronyms	7

1. Introduction

This economical Video to PC converter box that can convert CV/SV (NTSC or PAL system) to supported PC resolution like XGA to UXGA or HD resolutions of 480p to 1080p. With frame rate conversion feature that allows users to view DVD, VCR or Game sources on the PC monitor, this device also has an On-Screen Display that allows users to easily select their desired output resolution.

2. Applications

- CV/SV signal display on VGA/PC monitor or TV
- STB/Camcorder signal display on PC monitor or TV
- DVD signal display on PC monitor or TV

3. Package Contents

- Video to PC/HD Scaler Box
- Power Adaptor
- Operation Manual

4. System Requirements

Input source equipments such as DVD/Video cassette player and output PC/ VGA monitor component TV (output component TV needs D-Sub-15 to 3RCA cable adaptor) display with connection cables.

5. Features

- Operates in NTSC 3.58MHz and PAL system
- Can scale CV/SV to PC or Component format
- Output resolution:
 - PC resolutions: XGA, SXGA, UXGA
 - Component resolutions: 480p/576p, 720p, 1080p
- 3D (frame based) motion adaptive YNR/CNR noise reduction
- On-Screen Display
- Advance 3D motion adaptive de-interlace
- Automatic 2:2 & 3:2 film mode detection
- 50 to 60 Hz frame rate conversion ensures glitch-free display
- Play video games on your VGA monitors
- High-resolution output picture
- Plug & play- no drive software required

6. Specifications

Input port	1 x CV, 1 x SV
Output port	1 x VGA (Component out needs D-Sub 15 to 3RCA adaptor)
Output Resolution	PC: XGA/SXGA/UXGA Component: 480p/576p/720p/1080p
Power Supply	5VDC/1A (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 4\text{kV}$ (contact discharge)
Dimensions (mm)	64(W) x 112.5(D) x 26(H)
Weight(g)	88
Chassis Material	Plastic
Silkscreen Color	Black
Operating Temperature	0°C~40°C / 32°F ~ 104°F
Storage temperature	-20°C~60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (no condensation)
Power Consumption (W)	2.5W(Max)

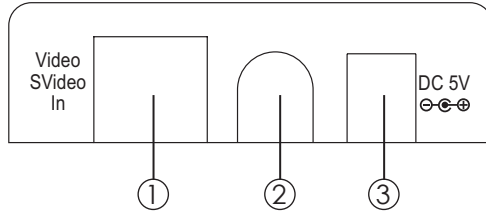
6.1 Support Timing Chart

Input AV System	Output Resolution	
	PC	HD Resolution
		Component (50Hz CANNOT convert to 60Hz)
NTSC(60Hz)	XGA/SXGA/ UXGA @60	480p60/720p60/1080p60
PAL(50Hz)		576p50/720p50/ 1080p50

7. Operation Controls and Functions

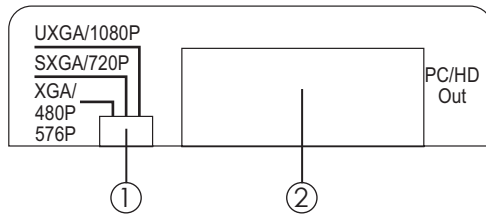
The following sections describe the hardware components of the unit.

7.1 Left Side Panel



- ① S-Video input: This slot is where you connect the input source equipment such as digital camcorder or PDAs with S-Video cable for input signal sending.
- ② Composite (CV) input: This slot is where you connect the input source equipment such as personal media player or personal recorder with RCA cable for input signal sending.
- ③ DC 5V In: This slot is where you plug the 5V DC power supply into the unit and connect the adaptor to an AC wall outlet.

7.2 Right Side Panel



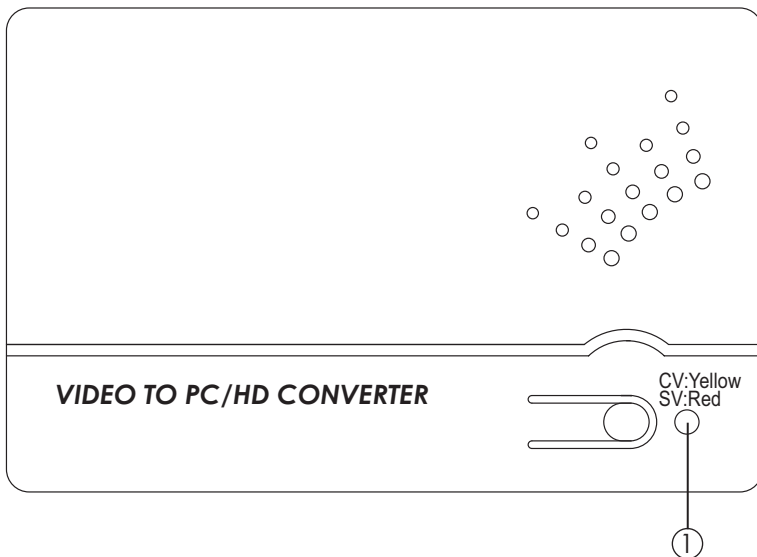
- ① Output resolution switch: This dip switch allows you to set PC/HD output Timing to PC resolution: XGA/SXGA/UXGA or Component resolution: 480p/576p/720p/1080p. Simply push the dip switch to left, middle or right and the output image will display your desire timing. For PC/Composite timing selection please refer to Section 7.3 Front Panel.
- ② PC/HD OUT: This slot is where you connect the output display monitor with D-Sub 15pin cable for image display. When connecting component to TV, using D-Sub 15pin to 3RCA adaptor is required.

7.3 Front Panel



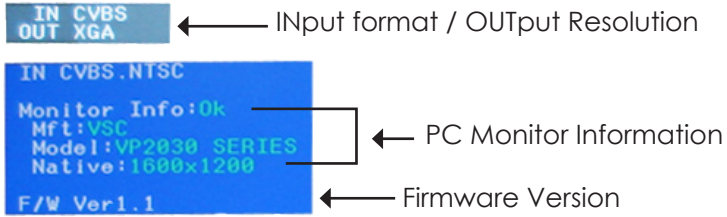
- ① PC/HD switch: This dip switch allows you to select PC or component HD timing output. Simply slide the dip switch to left or right and the output mode will display your desire selection.

7.4 Top Panel

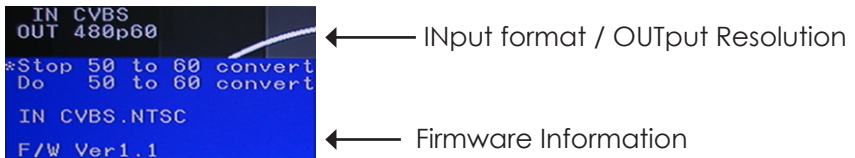


- ① CV/SV SW & LED: Press this button to switch input source between composite or S-Video. The Led will illuminate in yellow when switch to composite input and red when switch to S-Video input.

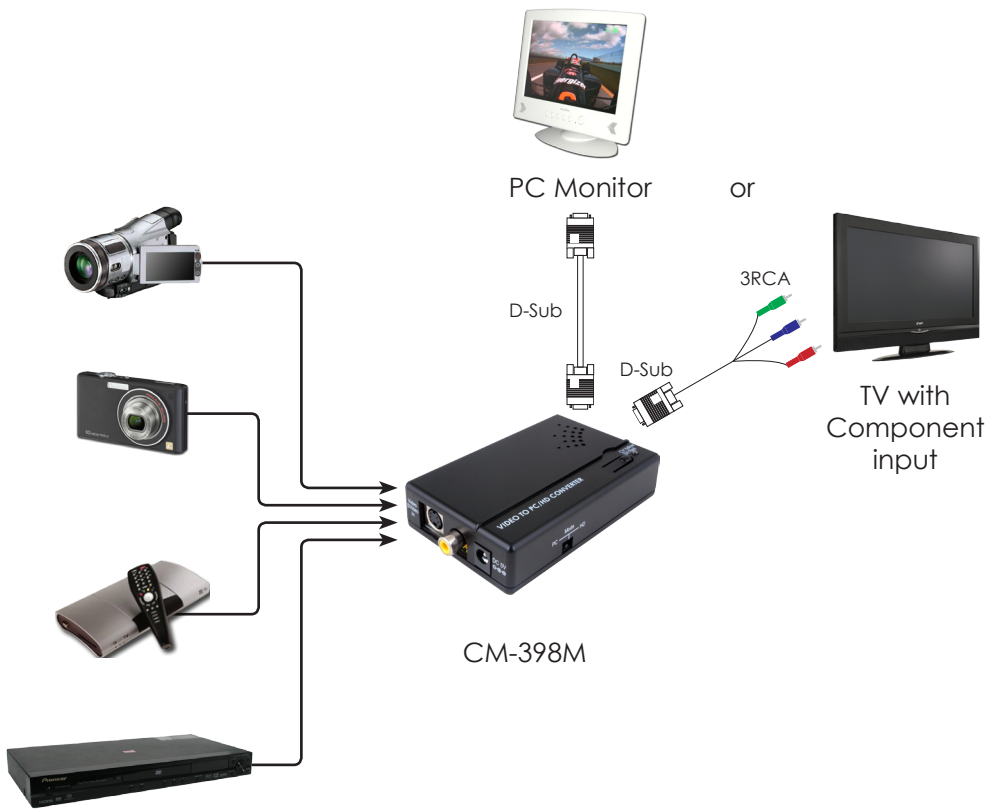
8. OSD



1. Press the top panel's button once to switch in between CV/SV. When input source is disconnected the OSD will show "No Signal".
2. Press the top panel's button for 3 second to bring up OSD menu.
3. When the device is under PC mode the OSD will display input format and output timing, source detection, PC monitor's information and firmware version as to above picture.
4. When the device is under HD mode the OSD will display input format and output timing, frame rate conversion selection, video system and firmware version as show in below picture.



9. Connection and Installation





Acronyms

Acronym	Complete Term
CV	Composite Video
HD	High Definition
NTSC	National Television System Committee
PAL	Phase Alternate Line
PC	Personal computer
STB	Set-Top-Box
SV	S-Video
UXGA	Super eXtended Graphics Array
VGA	Video Graphics Array
XGA	Extended Graphics Array



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