# CM-398M CV/SV to PC/HD Scaler Box

**Operation Manual** 



### Disclaimers

The information in this manual has been carefully checked and is believed to be accurate. Cypress Technology assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

Cypress Technology assumes no responsibility for any inaccuracies that may be contained in this document. Cypress also makes no commitment to update or to keep current the information contained in this document.

Cypress Technology reserves the right to make improvements to this document and/or product at any time and without notice.

### Copyright Notice

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or any of its part translated into any language or computer file, in any form or by any means - electronic, mechanical, magnetic, optical, chemical, manual, or otherwise - without express written permission and consent from Cypress Technology.

© Copyright 2010 by Cypress Technology. All Rights Reserved. Version 1.0 September 2010

### Trademark Acknowledgments

All products or service names mentioned in this document may be trademarks of the companies with which they are associated.

### 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

Version No	Date	Summary of Change
V1	20100923	Preliminary Release
V2	20190723	Add Package Contents

# **Table of Contents**

1.	Intro	duction	1		
2.	App	Applications			
3.	Pac	Package Contents			
4.	Syst	System Requirements			
5.	Features				
6.	Spe	cifications	2		
	6.1	Support Timing Chart	2		
7.	Ope	eration 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.	Conn	ection and Installation	6		
0.	Acro	nyms	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
- D-Sub 15pin to 3 RCA adaptor cable
- 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: ± 8kV (air-gap discharge)

± 4kV (contact discharge)

Dimensions (mm)  $162.6(W) \times 64.5(D) \times 33.5(H)$ 

Weight(g) 88

Chassis Material Plastic

Silkscreen Color Black

Operating Temperature 0°C~40°C / 32°F ~ 104°F

Storage temperature  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C} / -4^{\circ}\text{F} \sim 140^{\circ}\text{F}$ 

Relative Humidity 20~90% RH (no condensation)

Power Consumption (W) 2.5W(Max)

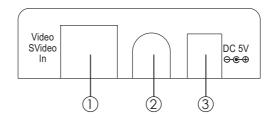
### **6.1 Support Timing Chart**

	Output Resolution			
Input AV	PC	HD Resolution		
System		Component	Component	
		(50Hz CANNOT	(50Hz CAN convert to	
		convert to 60Hz)	60Hz)	
NTSC (60Hz)	XGA/\$XGA/	480p60/720p60/1080p60		
PAL(50Hz)	UXGA @60	576p50/720p50/	480p60/720p60/	
1 AL(30HZ)		1080p50	1080p60	

### 7. Operation Controls and Functions

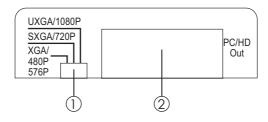
The following sections describe the hardware components of the unit.

### 7.1 Left Side Panel



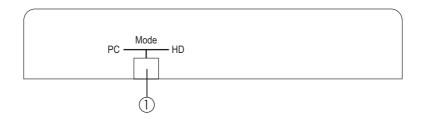
- S-Video input: This slot is where you connect the input source equipment such as digital camcorder or PDAs with S-Video cable for input signal sending.
- ② Composite (CV) input: This slot is where you connect the input source equipment such as personal media player or personal recorder with RCA cable 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



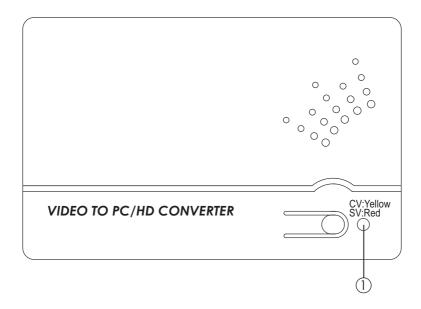
- ① Output resolution switch: This dip switch allows you to set PC/HD output Timing to PC resolution: XGA/SXGA/UXGA or Component resolution: 480p/576p/720p/1080p. Simply push the dip switch to left, middle or right and the output image will display your desire timing. For PC/Composite timing selection 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



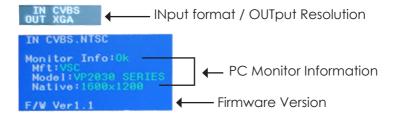
① PC/HD switch: This dip switch allows you to select PC or component HD timing output. Simply slide the dip switch to left or right and the output mode will display your desire selection.

### 7.4 Top Panel

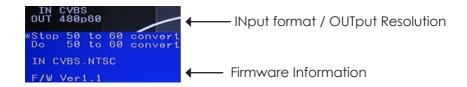


① CV/SV SW & LED: Press this button to switch input source between composite or S-Video. The Led will illuminate in yellow when switch to composite input and red when switch to S-Video input.

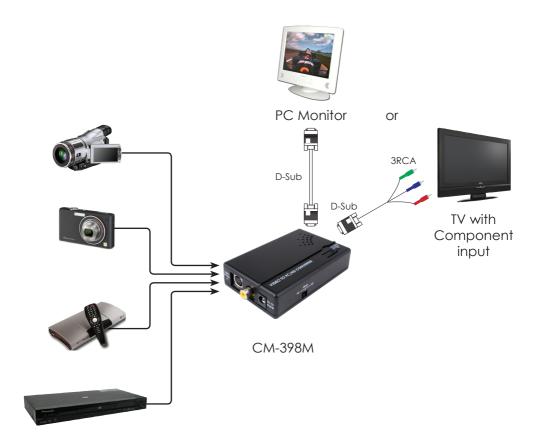
### 8. OSD



- 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 C	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

