# CVMDP-1080P CV/SV to Full HD Mini DisplayPort Scaler

**Operation Manual** 



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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

Version No	Date	Summary of Change
V1	20091029	<b>Preliminary Release</b>

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#### 1. Introduction

This scaler box is designed to display your Composite video/S-Video images on the Mini DisplayPort with better viewing resolutions. It can upscale any Composite video/S-Video's input source into Mini DisplayPort output with widerange resolutions. Additionally, this device can also transfer audio for user to enjoy both HD images and sound consistently.

#### 2. Applications

- Composite video/S-Video to Mini DisplayPort or DisplayPort signal conversion
- Scale Composite video/S-Video signal into Mini DisplayPort support format

#### 3. Package Contents

- CV/SV to Full HD Mini DisplayPort Scaler Box
- Power Adaptor
- Operational Manual

#### 4. System Requirements

Input Composite video/S-Video source equipment(s) and output monitor with input Mini DisplayPort and connection cables.

#### 5. Features

- Scales up Composite video or S-Video to HDTV 1080p format
- Automatic lipsync (audio delay) ensures audio video synchronization
- Input video systems NTSC/PAL
- Supports 8 bits on Mini DisplayPort output up to 6M distance
- HQE (High Quality Image Enhancer) function
- Digital Noise Reduction Minimizes picture noise, reproducing images true to the original
- Block Noise Reduction Effectively minimizes all MPEG noise, Improving the digital quality of HDTV broadcasts in particular, where block noise happens most
- MPEG Noise Reduction Reduces mosquito noise for MPEG video images without losing detail
- Motion adaptive 3D Y/C separation comb filter
- 3D (frame based) motion adaptive noise reduction
- Advanced 3D motion adaptive de-interlace
- Automatic 2:2/3:2 film mode detection
- Composite video / S-Video input selection button
- Automatic resolution selection and individual resolution selection button
- Mini DisplayPort output with RGB color space design

#### 6. Specifications

Input Ports Composite video/S-Video, Audio R/L RCA jack

Output Ports Mini DisplayPort, R/L phone jack

Output Resolution VGA, 480p, 576p, 720p, 1080i and 1080p@50/60

Input signal levels Video at 1 Vp-p,  $75\Omega$ 

Y: 1.0 Vp-p(75Ω) C: 0.286 Vp-p(75Ω) Audio R/L: 0.5Vrms

Video System NTSC, PAL Audio Sampling Rate 48KHz

Power Supply 5VDC/2.6A (US/EU standards, CE/FCC/UL certified) ESD Protection Human body model:  $\pm$  10kV (air-gap discharge)

± 6kV (contact discharge)

Dimensions (mm)  $100(W) \times 157(D) \times 25(H)$ 

Weight(g) 332

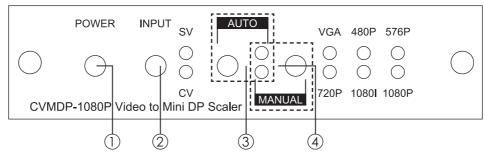
Chassis Material Aluminum
Silkscreen Color Silver
Power Consumption 5W (max)

Operating Temperature  $0^{\circ}\text{C} \sim 40^{\circ}\text{C} / 32^{\circ}\text{F} \sim 104^{\circ}\text{F}$ Storage Temperature  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C} / -4^{\circ}\text{F} \sim 140^{\circ}\text{F}$ Relative Humidity  $20\sim90\%$  RH (no condensation)

#### 7. Operation Controls and Functions

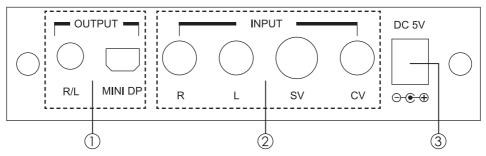
The following sections describe the hardware components of the unit.

#### 7.1 Front Panel



- ① POWER button: Press this button once to power on the unit, press again to power off. This device has last memory's function and will record your last input selection. The factory default is on CV input.
- INPUT selection bottom Yellow LED illuminates when composite video is selected.
   Green LED illuminates when S-Video is selected.
- 3 AUTO selection button: Press this button to set the device in Auto mode and the device will auto detect display 's EDID native resolution and the resolution indicator LED will illuminate.
- MANUAL selection button Press "MANUAL" button to select resolution of the DisplayPort output from VGA to 1080P

#### 7.2 Rear Panel



- (1) MINI DP with R/L OUTPUT These slots are to connect with display monitor that is with mini DisplayPort input and R/L phone jack to a speaker incorporate with connection cables.
  - **Note:** 1. This scaler does not have overscan function however, it may be adjusted by TV.
    - 2. Audio sound will not perform if no input image.
- ② SV/CV/RL INPUT These slots are to connect to source input's S-Video/ Composite video and R/L with S-Video/ Component video cables.
- 3 DC 5V This slot is to connect the 5V DC power adaptor included in the package into the unit and connect the adaptor to an AC wall outlet.

### 8. Connection and Installation



# 9. Output Resolution Chart

Mini DisplayPort output resolution					
VGA	640 X 480	60HZ			
480P	720 X 480	60HZ			
576P	720 X 576	50HZ			
720P	1280 X 720	60HZ / 50HZ			
10801	1920 X 1080	60HZ / 50HZ			
1080P	1920 X1080	60HZ / 50HZ			



# **Acronyms**

Acronym	Complete Term
CV	Composite video
SV	S-Video
HDTV	High-Definition Television
NTSC	National Television System Committee
PAL	Phase Alternating Line
HQE	High Quality Image enhancer
3D	Three-Dimensional



